



Universiteit
Leiden
The Netherlands

Alignment in eastern Neo-Aramaic languages from a typological perspective

Noorlander, P.M.

Citation

Noorlander, P. M. (2018, October 31). *Alignment in eastern Neo-Aramaic languages from a typological perspective*. Retrieved from <https://hdl.handle.net/1887/66714>

Version: Not Applicable (or Unknown)
License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)
Downloaded from: <https://hdl.handle.net/1887/66714>

Note: To cite this publication please use the final published version (if applicable).

ALIGNMENT IN EASTERN NEO-ARAMAIC LANGUAGES FROM A TYPOLOGICAL PERSPECTIVE

Alignment in Eastern Neo-Aramaic Languages from a Typological Perspective

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. C.J.J.M. Stolker,
volgens het besluit van College voor Promoties
te verdedigen op woensdag 31 oktober 2018
klokke 16:15 uur

door

Paulus Melle Noorlander

geboren te Leidschendam
in 1988

Promotor: Prof. dr. H. Gzella

Promotiecommissie: Prof. dr. G. Khan (University of Cambridge)

Prof. dr. G.L.J. Haig (Otto Friedrich Universität Bamberg)

Prof. dr. H.L. Murre-van den Berg

Prof. dr. M.G. Kossmann

Prof. dr. A.M. Lubotsky

Prof. dr. W.F.H. Adelaar

Dr. J. Audring

For my parents

اللهُ مِنْ حَبِّهِ.
مَنْ مَنَ ابْتِجَاهُ ❖

CONTENTS

ACKNOWLEDGEMENTS	xix
LIST OF ABBREVIATIONS	xxi
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
1. INTRODUCTION	1
1.1. The Enigma of Ergativity in Aramaic	1
1.2. Subgrouping of Neo-Aramaic	3
1.2.1. Western and Eastern Neo-Aramaic	4
1.2.1.1. Western Neo-Aramaic	4
1.2.1.2. Eastern Neo-Aramaic	5
1.2.2. Geographic Distribution of North Eastern Neo-Aramaic	6
1.2.2.1. Christian Varieties: Core and Periphery	7
1.2.2.2. Jewish Varieties: The Greater Zab River	8
1.2.2.3. Written Neo-Aramaic	10
1.2.3. Central Neo-Aramaic Dialect Traits	11
1.2.4. Language Contact: Bi- and Multilingualism	13
1.3. Previous Approaches to Alignment in Eastern Neo-Aramaic	14
1.3.1. Early Scholarship: Passive or Possessive	14
1.3.2. Recent Typological Approaches	19
1.4. Goals and Scope of This Work	23
1.5. Sources and Conventions	26
1.6. Outline	28
2. CLAUSE STRUCTURE AND ALIGNMENT TYPOLOGY	31
2.1. Construction Grammar	32
2.2. The Core Functions of Arguments and Basic Alignment Types	34
2.2.1. Grammatical Functions: S, A, P, T and R	35
2.2.2. Pragmatic Functions: Topic and Focus	40
2.2.3. Coding and Behavioral Properties	41
2.2.3.1. Case-Marking	42

2.2.3.2.	Agreement	42
2.2.3.3.	Word Order and Affix Order	46
2.2.3.4.	Behavioral Properties	47
2.2.4.	Intransitive-Transitive Alignment Types	49
2.2.4.1.	Accusative Alignment	50
2.2.4.2.	Ergative Alignment	50
2.2.4.3.	Neutral Alignment	51
2.2.4.4.	Tripartite Alignment	52
2.2.4.5.	Horizontal Alignment	52
2.2.5.	Ditransitive Alignment types	53
2.2.5.1.	Indirective Alignment	54
2.2.5.2.	Secundative Alignment	55
2.2.5.3.	Neutral Alignment	56
2.2.5.4.	Tripartite Alignment	57
2.2.6.	Typological Markedness	57
2.3.	Verb-Related Factors	62
2.3.1.	Split and Fluid Subject-Marking	62
2.3.2.	Tense, Aspect, and Mood	68
2.3.3.	Transitive Semantics	73
2.3.4.	Ditransitive Semantics	76
2.4.	Argument-Related Factors	77
2.4.1.	The Prominence Hierarchy	78
2.4.2.	Differential and Optional Object Marking	80
2.4.3.	Differential and Optional Agent Marking	86
2.4.4.	Person-Based Splits and Role Associations	88
2.5.	Cross-Linguistic Distribution and Combinability	94
2.5.1.	Intransitive-Transitive Alignment Types	94
2.5.2.	Ditransitive Alignment Types and Combinations	97
2.6.	Conclusion	101
3.	CODING PROPERTIES OF EASTERN NEO-ARAMAIC	105

3.1.	Basics of Nominal and Verbal Inflection	106
3.1.1.	Nouns and Independent Pronouns	106
3.1.2.	Verbal Roots	109
3.1.3.	Derivational Stems and Inflectional Bases	110
3.1.4.	Preverbal Tense-Aspect-Mood Marking	112
3.2.	Basic Patterns of Verbal Person Marking	119
3.2.1.	A and P in the Perfective and Agreement Inversion	119
3.2.2.	The Semi-Clitic Nature of the L-Set	122
3.2.3.	Major Alignment Types in the 'Perfective'	124
3.2.3.1.	Ergative ($A \neq S = P$)	125
3.2.3.2.	Accusative ($A = S \neq P$)	127
3.2.3.3.	Neutral ($A = S = P$)	127
3.2.3.4.	Dynamic-Stative ($P = S / S = A$)	129
3.2.4.	The Inflection of Ditransitive Verbs	129
3.3.	Simple Clauses with Full Nominals	132
3.3.1.	Prepositional Marking and Differential Object Marking	133
3.3.2.	Differential Indexing of the P	139
3.3.3.	Remarks on Word Order	142
3.4.	Ditransitive Clauses with (Pro)nominals	144
3.4.1.	Person Role Associations	145
3.4.2.	Pronoun-NP Role Associations	148
3.4.3.	Differential Theme and Recipient-Marking	150
3.5.	Person Marking in Possession	154
3.6.	Summary	158
4.	ALIGNMENT SPLITS IN NENA BASED ON ARGUMENT-RELATED PROPERTIES	159
4.1.	Person Role Restrictions	161
4.1.1.	Person Role Constraints in Transitive Constructions	161
4.1.2.	Dependent and Independent Person Forms	167
4.1.2.1.	Independent Prepositional Series	167
4.1.2.2.	Two Independent Person Forms in Ditransitives	172
4.1.3.	Cliticization and Secondary L ₂ -series	174

4.2.	Differential Object Marking Trans-Zab Jewish Dialects	177
4.2.1.	Accusative Agreement and Prepositional Marking	178
4.2.1.1.	Coherently Accusative Marking	178
4.2.1.2.	Extended Ergative or Marked Nominative?	181
4.2.2.	Neutral (overt) Agreement and Accusative Prepositional Marking	182
4.2.2.1.	Extensive Neutralization	183
4.2.2.2.	Neutral Marking in Ditransitives	186
4.2.3.	Ergative Agreement and Accusative Prepositional Marking	188
4.2.3.1.	Ergative Agreement	189
4.2.3.2.	Accusative Case-Marking and Tripartite Person Marking	191
4.2.3.3.	Combining the Two DOM-Strategies	193
4.2.3.4.	Horizontal Person Marking	196
4.3.	Agent Omission and the Case-Marking of the Agent	196
4.3.1.	Passive-Ergative Continuum	197
4.3.2.	Passive Constructions and Oblique Agents in NENA	202
4.3.2.1.	Impersonal Passive	202
4.3.2.2.	Auxiliary COME and Infinitive	203
4.3.2.3.	Auxiliary BECOME and Resultative Participle	204
4.3.2.4.	Copula BE and Resultative Participle	205
4.3.3.	Lability in South Eastern Trans-Zab Jewish Varieties	206
4.3.4.	Lability in Other Dialects	211
4.3.4.1.	Passive and Anticausative	212
4.3.4.2.	Referential Continuity	214
4.3.4.3.	Differential Object Indexing	216
4.3.4.4.	Impersonal Passive, Ergative, or Something Else?	218
4.3.4.5.	Lability in Dynamic-Static Varieties	219
4.3.5.	Focal Dative Marking of the Agent in non-Trans-Zab Varieties	220
4.3.5.1.	Dative Marking of the Agent	222
4.3.5.2.	Focalization and Zero Marking of the Agent	224

4.3.5.3.	Possible Transitive Interpretations	225
4.4.	Alignment Splits and Multiple Transitive Constructions	228
4.4.1.	System-Internal Neutralization of Object Indexes	229
4.4.2.	Competing Transitive Constructions: The <i>qam-qaṭal</i> -Construction	231
4.4.2.1.	Two Basic Transitive Constructions	231
4.4.2.2.	Possible Motivations	235
4.4.2.3.	Ergativity and Split A-Marking	237
4.4.3.	Ergative Alignment in Peripheral Christian Dialects	240
4.4.3.1.	Fluid s-Marking	240
4.4.3.2.	Multiple Transitive Constructions	241
4.4.3.3.	Possible Motivations	242
4.4.3.4.	Ergativity and Split A-marking	244
4.5.	Summary	246
5.	ALIGNMENT SPLITS IN NENA BASED ON VERB-RELATED PROPERTIES	249
5.1.	Verb-Related Splits in Simple Verbal Forms	250
5.1.1.	Split Subject and Agent-Marking in South Eastern Trans-Zab Jewish Varieties	252
5.1.1.1.	Agentivity or Animacy	257
5.1.1.2.	Degree of Affectedness	259
5.1.1.3.	Aspectual Factors	260
5.1.1.4.	Morphological Factors	261
5.1.1.5.	Complex Predicates	262
5.1.2.	Dynamic-Static Subject-Marking	262
5.1.3.	TAM-Sensitive Alignment Splits	266
5.1.3.1.	Accusative-Neutral Split	266
5.1.3.2.	Ergative-Accusative Split	268
5.1.4.	TAM-Marking through Verbal Person Marking	271
5.2.	Compound Verbal Forms	274
5.2.1.	Perfect and Progressive	275

5.2.2.	Object Person Forms	279
5.2.2.1.	‘Possessive’ suffixes	280
5.2.2.2.	Independent object person form	282
5.2.2.3.	Attached ʔəll-set or ʔəbb-set	282
5.2.3.	Labiality and Dative Marking of the Agent	283
5.2.3.1.	Position of the ‘Copula’	286
5.2.3.2.	Verbalization	286
5.2.3.3.	Objects	287
5.2.3.4.	Dative Agents	289
5.2.4.	Contraction and Secondary E ₂ -series	292
5.2.5.	Compound Verbal forms Modeled on the ‘Imperfective’	295
5.3.	Constructional Splits in Trans-Zab Jewish Dialects	300
5.3.1.	Person Role Constraint	301
5.3.2.	Gender-Conditioned Hierarchical Agreement	302
5.3.3.	Splits and Co-Variation in the Realis Perfect	307
5.3.3.1.	Competing Resultatives	308
5.3.3.2.	Alignment Splits and Gender-Conditioned Ergativity	310
5.3.3.3.	Split Intransitivity	312
5.3.4.	Passive and Ergative in the Realis Perfect	314
5.3.4.1.	The Perfect in West Iranian Dialects	314
5.3.4.2.	Word order and Case-marking	316
5.3.4.3.	Inflectional Base	317
5.3.4.4.	Referential Continuity	317
5.3.4.5.	Differential Object Marking	319
5.3.5.	Alignment Splits in the Compound Perfect	321
5.4.	Historical Perspective: From Resultative to Preterit	328
5.5.	Summary	331
6.	ALIGNMENT SPLITS IN CENTRAL NEO-ARAMAIC	335
6.1.	Alignment in Ṭuroyo	336
6.1.1.	Ergative and Horizontal Person Marking	336

6.1.2.	Ditransitive Person Marking	340
6.1.3.	Ergative and Horizontal Prepositional Marking	345
6.2.	Lability and the <i>qaṭil</i> -Form in Țuroyo	353
6.2.1.	Labile Verbs and the Voice System	353
6.2.1.1.	Phonological Reduction	355
6.2.1.2.	Labile Alternations	356
6.2.1.3.	Ergative and Neuter Verbs	358
6.2.1.4.	Impersonal Labile Alternations	361
6.2.2.	Split and Fluid Subject and Agent-Marking in Țuroyo	363
6.3.	Alignment and Voice in Mlah̄so	368
6.3.1.	Neutral Agreement and Accusative Case-marking	369
6.3.2.	Anticausative and Passive Voice	371
6.3.3.	The Realis Perfect	374
6.4.	Morphological Adaptation of Intransitive Coding	376
6.5.	Summary	379
7.	OVERVIEW AND CONCLUSIONS	383
7.1.	Overview of Major Alignment types	384
7.1.1.	Intransitive/Transitive Alignment Types	384
7.1.1.1.	Ergative Alignment	385
7.1.1.2.	Accusative Alignment	390
7.1.1.3.	Other Basic Alignment Types	392
7.1.2.	Ditransitives and Combinations	395
7.1.3.	Interactions of Prepositional Marking and Agreement	398
7.1.4.	Ergative-like Markedness	403
7.1.5.	Agreement Inversion	408
7.2.	Verb and Aspect-related Scales and Splits	411
7.2.1.	The Tense-Aspect-Mood scale	411
7.2.2.	Split and Fluid Subject Marking	416
7.3.	Lability and Ergativity	419
7.3.1.	Lability, Passive, and Agent omission	419
7.3.2.	Antipassive and Patient Omission	422

7.4.	Argument-Related Scales and Splits	425
7.4.1.	Patient-Related Scales	425
7.4.2.	Agent-Related Scales and Splits in Transitivity Coding	433
7.4.3.	Ditransitive Constructions and the Prominence Scale	438
7.5.	Concluding Remarks and Outlook	440
	REFERENCES	442
	SAMENVATTING	465
	CURRICULUM VITAE	473

ACKNOWLEDGEMENTS

This dissertation would not have been possible without the help and continuous support of others to which I owe a debt of gratitude, although, naturally, I alone am responsible for any shortcomings in the final text. I apologize beforehand for omitting people I accidentally overlooked.

First and foremost, I thank my two paranymphs: my officemate, Benjamin Suchard, and my best friend, Johan Rodenburg, who have probably been closest to me in the entire process over the past years. I am indebted to them for their encouragement, their proofreading of the text, and their helpful comments. I also thank my close friend, Marion van den Berg, and my cousin, Friso Tiesema, for proofreading parts of this thesis.

I am sincerely grateful to my Promotor, Prof. dr. Holger Gzella for his supervision, his moral support, and his stimulating lectures on Semitic languages. Regrettably, the Leiden University promotion regulations prevent me from thanking the members of the dissertation committee.

I thank LUCL's staff and management teams for facilitating an energizing environment to conduct my research. Colleagues and friends I would like to thank specifically are: Ahmad Al-Jallad, Kate Bellamy, Lisa Cheng, Simeon Dekker, Jaap Kamphuis, Alwin Kloekhorst, Fokelien Kootstra, Marijn van Putten, and Xander Vertegaal for showing interest in my work and discussing several topics pertaining to it as well as life as a PhD candidate. A special thank you is due to Martin Baasten for his contagious enthusiasm for Semitics, his passionate teaching, and being a mentor to me both as intellectual and as person. I am grateful also to Margaretha Folmer for her moral support and introducing me to Aramaic.

I owe a great deal to Don Stilo whose encyclopedic knowledge and in-depth discussions especially concerning the Neo-Aramaic speaking area have inspired me over the past few years and have benefited me in many aspects of my research. I am indebted to Hiwa Asadpour, Agnes Korn, Thomas Jügel, and Ergin Öpengin for stimulating discussions on Iranian languages and their alignment typology.

A special thank you belongs to the students who eagerly participated in my classes on Neo-Aramaic languages and Comparative Semitics. I am grateful also to Naures Atto, the Ibrahim family, Edesa Mutlu, and many other *Suryoye* for their patience with me and answering questions regarding *Ṭuroyo*.

Finally, I express my utmost gratitude to my two sisters, Esther and Judith, and my brother, Daan, and his family. Without their love, encouragement and

support, this thesis would never have reached completion. Since no words in print could express my gratitude to my parents, Niek and Hilga, for everything you have done to make this possible, I can only dedicate this work to you, with all my love.

Paul M. Noorlander
Leiden, March 2018

LIST OF ABBREVIATIONS

General abbreviations

A	agent of transitive construction	P	patient of transitive construction
AGR	agreement	pl.	plural
Akk.	Akkadian	PREP	preposition
Ar.	Arabic	PRO	pronoun
CM	case-marking	pron.	pronominal
CNA	Central Neo-Aramaic	PUNC	punctual
def.	definite	R	recipient of a ditransitive construction
DOM	differential object marking	S	subject of intransitive construction
DYN	dynamic	S _A	S aligned with A
fNP	full noun phrase	sb.	somebody
G	goal	sg.	singular
indef.	indefinite	S _P	S aligned with P
INS	instigating	sth.	something
itr.	intransitive	T	theme of ditransitive construction
LOC	locative	TEL	telic
Mn.	Midən (<i>Mədwoyo</i>)	tr.	transitive
Mt.	Midyat (<i>Mədyoyo</i>)	Ṭur.	Ṭuroyo
NENA	North Eastern Neo-Aramaic	U	undergoer
N	noun phrase	V	verb
NP	noun phrase		
O	object		
OBL	(major) oblique (case)		

Glossing abbreviations

ABS	absolutive (case), absolute state	AUX	auxiliary
ACC	accusative	CLF	classifier
ACTZ	actualizer	COP	copula
ADD	additive	DEF	definite
ADJZR	adjectivizer	DEM	demonstrative
ANTIP	antipassive	DEM1	demonstrative particle
ART	article	DIR	direct
ASP	verbal aspectual particle	DOM	differential object marker
		DTR	detransitivizer

DU	dual	LOC	locative
DUR	durative	LOCUT	locutor
EMPH	emphatic state	M	masculine
ERG	ergative	MPL	masculine plural
EXST	existential	MS	masculine singular
F	feminine	NOM	nominative
FIN	finite	NONFS	nonfeminine singular
FOC	focus (marker)	NS	neuter singular
FPL	feminine plural	OBJ	object
FS	feminine singular	OBL	oblique
INC	inclusive	PASS	passive
INST	instrumental	PERS	person marker
IPFV	imperfective	PFPART	perfective particle
LK	linker	PFV	perfective
PERF	perfect	RPP	resultative participle
PL	plural	SBJ	subjunctive
POSS	possessive	SG	singular
POSSM	possessum	SUBJ	subject
POSTP	postposition	SUBR	subordinator
POT	potential		
PPT	perfect/past participle		
PRED	predicate		
PRET	preterit		
PRN	proper noun		
PRO	pronoun		
PROG	progressive		
PRP	preposition		
PRS	present		
PRST	presentative		
PSSM	possessum		
PSSR	possessor		
PST	past		
PTCL	particle		
PTCP	participle		
PUNC	punctual		
PVB	preverb		
RECP	reciprocal		
RFL	reflexive		

Symbols

1	first person
2	second person
3	third person
*	reconstruction
**	incorrect, judged ungrammatical / impossible, non-existent
>	develops into / ranks higher than
<	is derived from / ranks lower than
⊇	entails or is equal to
⊃	entails
/x/	phonemic representation
[x]	phonetic representation
<>	graphic representation
+	suprasegmental pharyngealization
°	preverbal marking omitted
∅	unaspirated/glottalized articulation

LIST OF TABLES

Table 1. <i>Some hallmarks of Jewish NENA dialects</i>	10
Table 2. <i>NENA dialects close to Central and Western Neo-Aramaic</i>	12
Table 3. <i>Sample of dialects that has been studied for this research</i>	29
Table 4. <i>Types of person forms</i>	45
Table 5. <i>Zero vs. overt case coding in the accusative type</i>	59
Table 6. <i>Distribution of zero vs. overt case coding in the ergative type</i>	59
Table 7. <i>Marked intransitive/transitive alignment types</i>	61
Table 8. <i>Marked ditransitive alignment types</i>	61
Table 9. <i>Alignment patterns based on the NP prominence of the P</i>	86
Table 10. <i>Split conditioned by NP prominence in Dyirbal</i>	89
Table 11. <i>Person split in Puma</i>	93
Table 12. <i>Combinations of ditransitive case-marking and agreement</i>	101
Table 13. <i>Declension of nouns and adjectives in ʿTuroyo (Midyat)</i>	106
Table 14. <i>Declension of nouns and adjectives in J. Amidya</i>	106
Table 15. <i>Basic pronominal inventory in ʿTuroyo</i>	108
Table 16. <i>Basic pronominal inventory in J. Zaxo</i>	108
Table 17. <i>Major type of weak verbs</i>	108
Table 18. <i>The Aramaic stem formations in ʿTuroyo</i>	111
Table 19. <i>Simplified overview of the main forms of the verb in NENA</i>	117
Table 20. <i>Simplified overview of the ‘imperfective’ conjugations</i>	118
Table 21. <i>Conjugation of the ‘imperfective’ and ‘perfective’ with object indexes</i>	121

Table 22. <i>Inflection of prepositions in Neo-Aramaic</i>	135
Table 23. <i>Person marking of themes and recipients</i>	148
Table 24. <i>Nominal and pronominal themes and recipients (non-differential)</i>	150
Table 25. <i>Distribution of independent object pronouns</i>	172
Table 26. <i>First/second person forms and case-marking and agreement</i>	192
Table 27. <i>Ergative agreement and accusative case-marking of the P</i>	194
Table 28. <i>Prominence hierarchy and (non-)ergative alignment</i>	195
Table 29. <i>Passive vs. ergative</i>	198
Table 30. <i>Imperfective–perfective parallelism of object marking L-suffixes</i>	230
Table 31. <i>Two types of preterits and DOM in J. Amidya</i>	233
Table 32. <i>Distribution of qam-qaṭal-preterit and qṭil-preterit</i>	235
Table 33. <i>Alignment in the preterit in Christian Koy Sanjaq</i>	239
Table 34. <i>Three types of transitive ‘perfective’ constructions in C. Hertevin</i>	245
Table 35. <i>Patient-like or agent-like marking of the s in J. Sulemaniyya</i>	254
Table 36. <i>Comparison of subject-marking in J. Suleminiyya and J. Urmi</i>	313
Table 37. <i>Irrealis perfect in J. Kerend</i>	325
Table 38. <i>Ergativity in Jewish NENA in the preterit and beyond</i>	327
Table 39. <i>Person-conditioned alignment in Ṭuroyo (Miden)</i>	338
Table 40. <i>Indexing and case-marking of the A and the P</i>	350
Table 41. <i>The Ṭuroyo stem formations</i>	353
Table 42. <i>Patient-like or agent-like marking of the s in Ṭuroyo</i>	363
Table 43. <i>Ṭuroyo stem I subclasses in the ‘perfective’</i>	368
Table 44. <i>The Mlaḥso stem formations</i>	371
Table 45. <i>Splits with accusative case-marking</i>	399
Table 46. <i>Splits with ergative case-marking</i>	399
Table 47. <i>Overview of person splits in the ‘preterit’</i>	427
Table 48. <i>Overview of person and gender-based splits in the ‘perfect’</i>	428

LIST OF FIGURES

Figure 1. <i>The NENA-speaking area</i>	7
Figure 2. <i>Iranian Jewish NENA dialects.</i>	9
Figure 3. <i>Monotransitive alignment schemas</i>	49
Figure 4. <i>Ditransitive alignment schemas</i>	54
Figure 5. <i>Marked nominative and marked absolutive compared</i>	60
Figure 6. <i>Split and fluid subject-marking</i>	63
Figure 7. <i>Alignment split conditioned by TAM in Kurmanji</i>	69
Figure 8. <i>Conceptual space for participant roles</i>	99
Figure 9. <i>Major agreement alignment patterns in Eastern Neo-Aramaic</i>	125
Figure 10. <i>Ditransitive person role associations</i>	145
Figure 11. <i>Ditransitive pronoun-NP role associations</i>	145
Figure 12. <i>Monotransitive person role associations</i>	163

1. INTRODUCTION

"today's morphology is yesterday's syntax"
Talmy Givón (1971: 413)¹

1.1. The Enigma of Ergativity in Aramaic

Although ergativity is a well-known cross-linguistic phenomenon attested in languages such as Eskimo-Aleut, Basque and Caucasian languages, it is extraordinary to find it in a Semitic language. In traditional terms (e.g. Dixon 1994), ergativity is defined as the arrangement where the subject (S) of an intransitive clause (such as *I* in *I died*) and the patient/object (P/O) of a transitive clause (such as *me* in *He killed me*) are treated in the same way yet differently from the agent (A) in the transitive construction (such as *He* in *He killed me*).

An example of ergative alignment can be found in the Aramaic dialect spoken by the Jews from Sulaymaniyah (Kurdish Silêmanî) in North-East Iraq (Khan 2007a:154). This is illustrated by (1) below. In this example, *baxtāke* 'the woman' is cross-referenced by means of the same suffixal person form *-a* in both clauses, but it does not have the same syntactic function. In (a), *baxtāke* is the subject of the intransitive verb *m-y-l* 'die', while, in (b), it is the object of the transitive verb *q-ṭ-l* 'kill'. Moreover, the subject of the transitive verb in (b) is marked with an entirely different suffix, i.e. *-le*. This is an ergative marking of subject and object contrary to the better known accusative (case) systems found in most widely studied European languages such as German and Latin but also in well-known Semitic languages such as Akkadian and Classical Arabic. In these languages, the verb would agree with the subject of both the transitive and intransitive and mark the noun in the nominative case. The object is singled out using the accusative case.

(1) **Jewish dialect of Sulaymaniyah** (NE Iraq; Khan 2007a:154)

a.	<i>baxtāké</i>	<i>mil-a</i>	
	the.woman	die _{PFV} -she	
	'The woman died'		
b.	<i>gorāké</i>	<i>baxtāké</i>	<i>qitl-a-le</i>
	the.man	the.woman	kill _{PFV} -her-he
	'The man killed (lit. her) the woman.'		

¹ Cf. Hoberman (1989:122).

The ergative alignment is encoded by means of verbal agreement (*-a*, *-le*) in Aramaic. Moreover, it is conditioned morphologically by the inflectional base *qṭil-* that is historically a resultative participle (cf. Khan 2007a). It is never manifested in the imperfective present (or past) constructions that do not have this basis.

Indeed, there is a particular transitive construction in the eastern varieties of Aramaic, known as the *qṭil l-* or *šmīf l-* construction, that has been puzzling Semitists for a long time. The example below from the Aramaic dialect spoken by the Jews from Amadiya (Kurdish Amêdî, NW Iraq) may illustrate this. The first suffixal person index *-i* agrees with the object (*ʔanna gure* ‘these men’), while the suffixal index *-la* agrees with the agent.

- (2) *ʔe* *baxta* *šmiʔ-i-la* *ʔanna* *gure*
 DEM:FS woman:FS hearPFV-3PL-3FS DEM:PL man:PL
 ‘The woman heard these men.’ (Hoberman 1983:132)

At face value, this appears to be nothing special. And yet, the same suffixes occur in the corresponding clause in the present tense marking the opposite syntactic function:

- (3) *ʔanna gure* *k-šamʔ-i-la* *ʔe* *baxta*
 DEM:PL man:PL IND-hearIPFV-3PL-3FS DEM:FS woman:FS
 ‘These men hear the woman.’ (based on Hoberman 1983:132)

The first suffix *-i* expresses the agent (*ʔanna gure* ‘these men’) but the second suffix *-la* the object. Students of Semitic languages find this confusing, since the functions of the morphologically identical suffixes are inverted. The construction in example (2) typically expresses the perfective past, while example (3) represents the syntax of imperfective constructions. The main morphological difference between the two is the inflectional base *šmiʔ-* (perfective of *šmī* ‘hear’) against *šamʔ-* (imperfective of *šmī* ‘hear’).

This alternation and inversion of argument encoding is reminiscent of the active and passive voice. Indeed, early grammatical descriptions treat the perfective transitive construction as a passive form with an active sense (for example, Rhétoré 1912:83; Polotsky 1979:208). In a passive, the patient (or undergoer) becomes the subject, the verbal form is modified, and the agent (or actor) is not expressed as the subject. To quote Polotsky (ibid.):

Since the inverse function of the identical suffixes concerns the roles of actor and undergoer and is contingent upon a formal difference between the bases ... it is in these that the cause must be sought. The interchange between the suffixes must be the effect of the bases themselves contrasting with one another in respect of their Voice... we should have to infer that the bases ... express the contrast of Active vs. Passive. The passive character ... provides the key to the whole construction.

Despite this strong language (“we should have to infer”, “the passive character” “provides the key”), recently, such explanations have been abandoned in favor of split ergativity². In such a split, the subject (S) in an intransitive construction is treated the same as either the agent (A) or the patient (P) in the transitive construction depending on grammatical or semantic properties such as imperfective or perfective aspect. Yet, no other hitherto known Semitic language has been convincingly shown to evince ergativity (Waltisberg 2002; Hasselbach 2013:55-65) and most of Aramaic itself unmistakably records a nominative-accusative system for three millennia like many other Semitic languages. If ergative(-like) properties are claimed to have found their way into one of the most unlikely places, this raises fundamental questions. Yet, first we need to ask what are these properties, if they are there at all, and how are we to characterize them? This is precisely what this thesis explores.

1.2. Subgrouping of Neo-Aramaic

Aramaic is a subbranch of the Semitic language family and is closely related to Hebrew and Arabic. It is generally known for being the language of Jesus and of parts of the Old Testament (sections in the books of Daniel and Ezra). It was the official *lingua franca* of ancient West Asia in antiquity. At its height, it encompassed an area stretching from Egypt into Afghanistan. Aramaic is also enshrined as a literary vehicle of Judaism and Christianity. Jewish Babylonian Aramaic, for instance, is a principle language of the Talmud and closely related to modern Aramaic. And most Aramaic literature comes to us through Syriac, the principle language of several Christian churches in the Middle East and beyond. Early translations of the Gospels and the Old Testament were written in Syriac—the standard Syriac Bible version is known as the *Pšitta*. The Aramaic spoken today, called Neo-Aramaic in this work (also known as ‘Neo-Syriac’, ‘Sureth’, ‘Chalde-

² See Section 2.4 for a definition and detailed discussion.

an', or 'Assyrian'³), comprises pockets of an extremely endangered group of minority languages spoken by primarily Jewish and Christian communities originating in the Middle East. The vast majority of speakers are found dispersed around the globe.

Although the internal classification of Neo-Aramic languages is far from problematic and presumably a continuum (see Kim 2008, 2010), certain clusters, respectively, subgroups can be discerned. The dialectology of Neo-Aramaic is further complicated by the speaker's religious affinity (Christian, Jewish, Mandaean, Muslim), partly by register (written vs. spoken language), and by contact with neighboring non-Aramaic languages (see Noorlander 2014). Most speakers have left their traditional territory for political and economical reasons in this or the previous century. Many of these dialects are endangered or have already gone extinct in the worldwide dispersion of speakers.

More complex and non-accusative alignment patterns are mainly found in North Eastern Neo-Aramaic in the western periphery of dialects with Christian affinity and in the eastern periphery of dialects with Jewish affinity. The Trans-Zab Jewish dialects also generally exhibit a predominantly OBJ-V word order (see §3.3.3).

1.2.1. *Western and Eastern Neo-Aramaic*

Scholars generally distinguish between two major groups of modern Aramaic languages (Hoberman 1989:5), namely:

Western Neo-Aramaic (Christian/Muslim, Anti-Lebanon Mountains SW Syria)

Eastern Neo-Aramaic:

Central Neo-Aramaic (Christian, Ṭurʿabdin, SE Turkey, NW Syria)

North Eastern Neo-Aramaic (Jewish/Christian, SE Turkey, N Iraq, NW Iran)

Neo-Mandaic or *South Eastern Neo-Aramaic* (Mandaean, SW Iran)

1.2.1.1. *Western Neo-Aramaic*

The Western group is confined to relatively small communities in Syria. At the end of the previous century, Arnold (1990) mentions a diminishing thousands of speakers that consist mainly of Christians belonging to the Greek Orthodox or

³ This term is not to be confounded with the ancient, extinct Assyrian dialect of Akkadian, a distinct Semitic language.

Greek Catholic Church and for one-third of Muslims in the towns Maṣlula, Baṣṣa and Jubbfadin on the Anti-Lebanon mountain range in Syria near the Lebanon border 60 km north of Damascus. Unfortunately, much has changed since the Syrian Civil War and many have fled the area since. The Western Neo-Aramaic does have traits in common with Eastern Neo-Aramaic, especially Central Neo-Aramaic (see §1.2.2). Since it does not exhibit non-accusative alignment and is typologically closer to pre-modern Aramaic, it will not be discussed in this dissertation.

1.2.1.2. *Eastern Neo-Aramaic*

Eastern Neo-Aramaic (ENA) is an umbrella term for several language groups spoken by Jews, Christians and Mandaean in the Middle East and beyond, generally subdivided into Central Neo-Aramaic, North Eastern Neo-Aramaic and Neo-Mandaic (or South Eastern Neo-Aramaic). Of these three, **Neo-Mandaic** is most poorly documented. It is mainly confined to middle-aged speakers adhering to the Mandaean religion in or from the cities Ahvaz (provincial capital) and Korramshahr in the Iranian province Khuzestan (Häberl 2009). Neo-Mandaic differs in many typological respects from the other Neo-Aramaic languages and, like Western Neo-Aramaic, it is much closer to pre-modern Aramaic. For this reason, it will not be discussed in this monograph.

By far the most diverse group of Eastern Neo-Aramaic, with about 150 dialects (Khan 2011), is **North Eastern Neo-Aramaic** (NENA), spoken by Jewish (J.) and Christian (C.) communities in West and North West Iran (Iranian Kurdistan and Iranian Azerbaijan), North Iraq (Iraqi Kurdistan) north of the river Tigris and in South East Turkey, many of whom have fled the area in the previous century. Although the internal differentiation of NENA is to some extent comparable to that of a language family, it is a common practice to speak of NENA in terms of dialects. They are primarily named after the town where they at least used to be spoken with the additional specification of the religious affiliations of the speakers, since the Jewish and Christian varieties from the same town can differ greatly. Christian speakers generally belong to either the Chaldean Catholic Church (in communion with Rome) or the (Assyrian) Church of the East (independent), both East Syriac traditions of Christianity. Their Neo-Aramaic dialects are also known as Chaldean or Assyrian.

Central Neo-Aramaic (= CNA) comprises Mlaḥsó, once spoken in Lice in the province of Diyarbakır (Jastrow 1994) but now extinct, and Ṭuroyo (Ṭur. also known as *Suryoyo* or *Surayt*), which exhibits slight dialectal variation and is spoken by Christians in or from the area known as Ṭurṣabdin in South East Tur-

key south of the Tigris and Qamishli in North West Syria. They practice mainly West Syriac traditions, primarily belonging to the Syriac Orthodox Church.

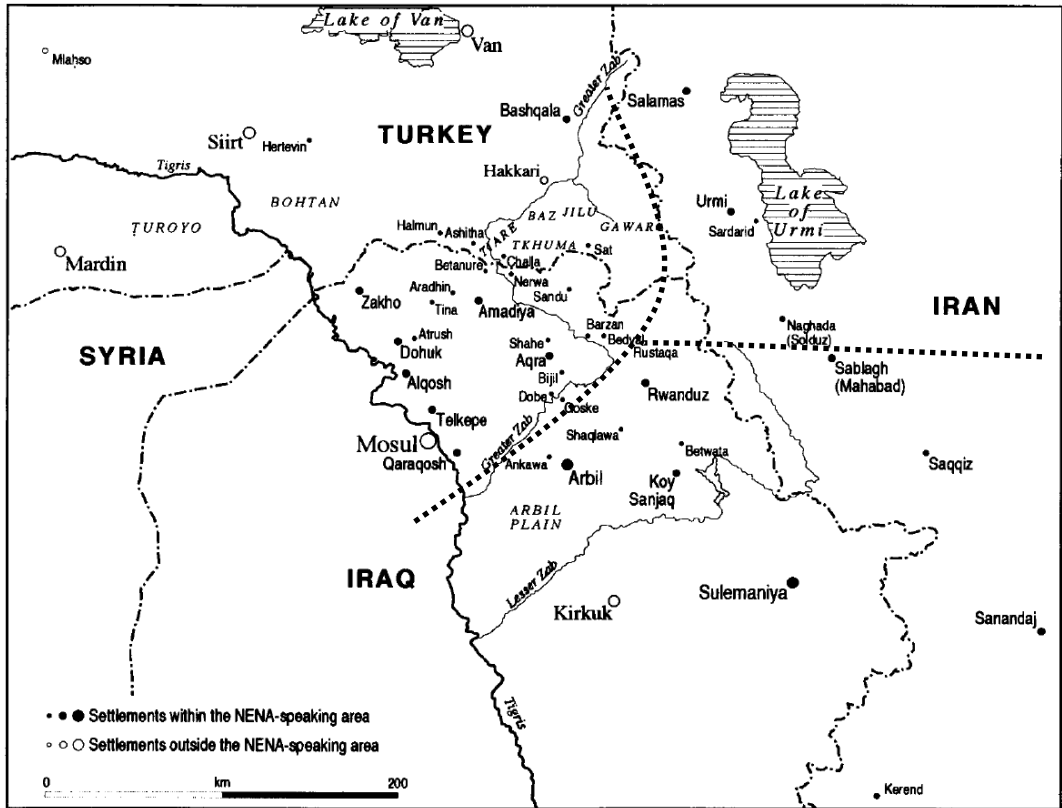
1.2.2. Geographic Distribution of North Eastern Neo-Aramaic

The internal subgrouping of North Eastern Neo-Aramaic (= NENA) is too complex to fully appreciate here but a few remarks are required. NENA is best approached in terms of a dialect continuum⁴. Figure 1 below presents a map of the area and several towns known to have (had) NENA-speaking communities in the previous century. Mainly the Christian varieties in Turkey (e.g. Bohtan, Hertevin) and the Jewish varieties east to the Greater Zab river and in North West Iran reveal complex alignment types not found in the core NENA area. The names of the towns are generally Aramaic and do not necessarily reflect the equivalent in other regional languages.

After the fall of the Ottoman empire, the emergence of new nations such as Iraq, Iran, Syria and Turkey and the beginning of Kurdish struggle for autonomy, the Aramaic speakers found themselves largely in the cross-fire between Kurds and central governments and left their traditional territory. Most of the Jewish community left the region in the 1950s and settled in the young state of Israel. During the First World War most Christians fled Turkey where an ethnic cleansing occurred in 1915. Since the 1960s the Christian community has massively though gradually left for Europe, the US, Canada, Australia and South America. Following the American invasion and occupation of Iraq, the instability in the area reached a catastrophic climax in the turmoils of the Syrian Civil War and Islamic State's (*Daesh's*) reign of terror in Syria and Iraq, until Islamic State was ultimately defeated in the battles of Mosul (July, 2017) and Raqqa (October, 2017). Many Christians chose to return and remain in Iraq, although the material damage is enormous.

Accordingly, NENA dialectology is for a large part a historical reconstruction of once vibrant variation in and before the previous century. Dialects display a staggering degree of diversity on every level. Certain major clusters along the dialect continuum can be distinguished. It is most convenient to approach this in terms of core and periphery. Christian dialects reach further into the west in southeastern Turkey, while Jewish varieties beyond the Greater Zab river scatter further into the east well into western Iran.

⁴ See, for instance, Kim (2008) and Mutzafi (2008b).

Figure 1. *The NENA-speaking area*

Source: Mutzafi 2004a:13. Dotted lines my addition.

1.2.2.1. *Christian Varieties: Core and Periphery*

The core NENA-speaking area is roughly the area north of the Tigris in Northern Iraq, flowing in between the Greater Zab river, stretching into Turkey and Iran. This includes Iraqi towns such as Barwar (Khan 2008a; not indicated on the map), Nerwa, Zaxo, Alqosh, Arbil, and so forth. Turkish Hakkari used to consist of several dense tribe-related clusters including Baz (south to Kara Kuş; Mutzafi 2000) and Jilu (Fox 1997) and near to the Iraqi border the ‘Ashirat’ clan dialects, including Upper and Lower Tyare and Txuma, and the Mount Judi dialects like Bēšpən (Sinha 2000) and Gaznax (Gutman 2015) (both not indicated on the map). The city Van and Bashqala (Başkale) are utmost northern outposts in Turkey directly south of which the Hakkari region. We can further discern the following clusters:

- **Western:** In the western periphery in South East Turkey, one finds a cluster of Christian dialects in and around Hertevin (Turkish Ekindüzü; Jastrow 1988) and Umra (not indicated on the map) in the Siirt province. These typically exhibit a uvular /ħ/ where other dialects have velar /x/ (Talay 2009:44). Other dialects in the western periphery are those in the 'Bohtan' region, such as Bohtan (Fox 2009) and Hassane (Turkish Kösreli, not indicated on the map; Jastrow 1997).
- **Iranian Azerbaijan:** Dialects in Northwest Iran form another cluster such as Salamas (Persian Salmas), Urmi (Persian Orumiya; Khan 2016) and neighboring villages (Younansardaroud 2001) west of lake Urmia.
- **Southern:** Christian communities in the Mosul plain such as Alqosh, Telkepe (Ar. Tall Kayf) and Qaraqosh (Ar. Bakhdida) constitute a southern periphery. Certain Christian varieties in the Iraqi province of Sulemaniyya (Kurdish Silêmanî, Arabic Sulaymaniyyah; Khan 2004a) and Iranian Kurdistan, such as Sanandaj (als known as Senaya, Kurdish Sine; Panoussi 1990), constitute a southeastern periphery.

1.2.2.2. *Jewish Varieties: The Greater Zab River*

With respect to the Jewish varieties, the current of the Greater Zab river in Iraq functions as a natural border separating western dialects such as Amidya (or Amadiya in Arabic, Amêdî in Kurdish) Zaxo and Dohuk/Dohok (Kurdish Dihok) in the Dohuk province of Iraq from the other dialects to the east⁵. These communities generally identify themselves as speakers of *lishana didan* or *d(id)eni* 'our own language'. The Jewish community in Barzan north to the Great Zab also belongs to this group (Mutzafi 2002a), so that the dividing line continues up northeast, even though the Great Zab flows in a curve to the northwest. Figure 2 below displays a map of mainly Iranian Jewish NENA dialects. Table 1 at the end of this subsection displays phonological and pronominal traits of Jewish varieties and illustrates a few Trans-Zab isoglosses (the shaded area).

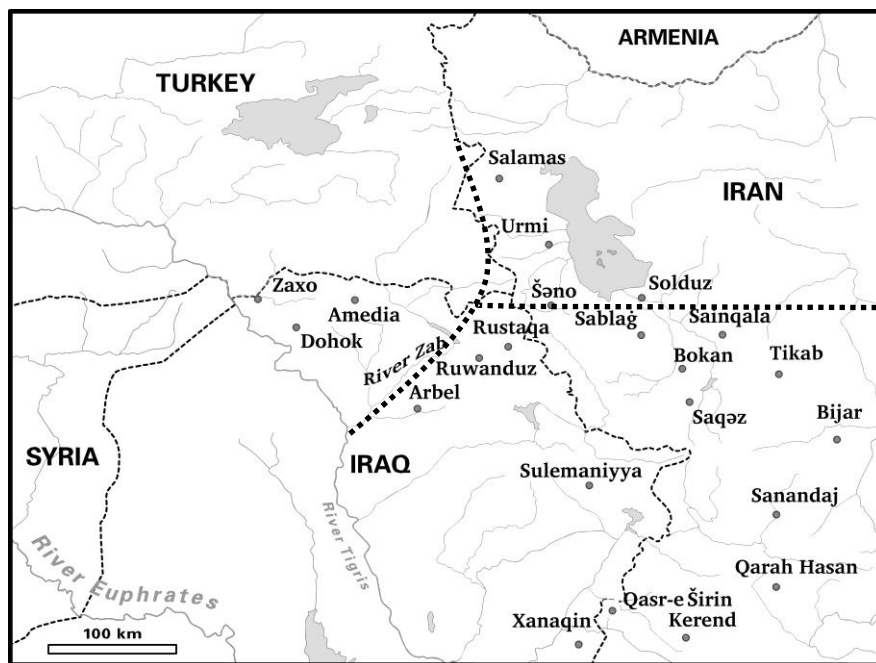
The Jewish dialects to the east of the Greater Zab, including Arbel, Rustaqa and Rwanduz stretching up north to Urmi and Salamas, are accordingly known as Trans-Zab Jewish (Mutzafi 2008b) against Jewish communities that are to the west of the Greater Zab and the settlement Barzan. Mutzafi (2008b) discerns further clusters within this group:

⁵ Much like Northern and Central Kurdish (Noorlander 2014).

- **Western Trans-Zab** cluster in the Arbil region, between the Greater and Lesser Zab rivers;
- **Northern Trans-Zab** cluster in Iranian Azer-baijan including Salamas (Duval 1883), Urmi (Garbel 1965a; Khan 2008b). and Naqada (or Naqadeh; Hopkins 1989b);
- **Southeastern Tras-Zab** subgroup in the Sulemaniyya region and Iranian Kurdistan with Bijar as the easternmost and Kerend as the southernmost Jewish outpost.

The Trans-Zab Jewish dialect bundle, especially the southeastern subgroup, are pertinent to this monograph, since they differ greatly from the core Jewish and Christian varieties, especially in terms of alignment patterns.

Figure 2. *Iranian Jewish NENA dialects.*



Source: Khan 2009:6. Dotted lines my addition.

Table 1. *Some hallmarks of Jewish NENA dialects*

	OPEN	HOUSE	HAND	FESTIVAL	HE, SHE	HIS	HER
Zaxo (NW Iraq)	<i>psx</i>	<i>besa</i>	<i>ʔiza</i>	<i>ʔeza</i>	<i>ʔāwa, ʔāya</i>	<i>-e</i>	<i>-a</i>
Dihok (NW Iraq)	<i>pθx</i>	<i>beθa</i>	<i>ʔiða</i>	<i>ʔeða</i>	<i>ʔāhu, ʔāhi</i>	<i>-e</i>	<i>-a</i>
Betanure (NW Iraq)	<i>pθx</i>	<i>beθa</i>	<i>ʔiða</i>	<i>ʔeða</i>	<i>ʔāwa, ʔāya</i>	<i>-e</i>	<i>-a</i>
Amidya (NW Iraq)	<i>pθx</i>	<i>beθa</i>	<i>ʔida</i>	<i>ʔeda</i>	<i>ʔāwa, ʔāya</i>	<i>-e</i>	<i>-a</i>
Aradhin (NW Iraq)	<i>pθx</i>	<i>beθa</i>	<i>ʔida</i>	<i>ʔeda</i>	<i>ʔāwa, ʔāya</i>	<i>-e</i>	<i>-a</i>
Challa (SE Turkey)	<i>ptx</i>	<i>besa</i>	<i>ʔida</i>	<i>ʔeda</i>	<i>ʔāya, ʔāya</i>	<i>-e</i>	<i>-a</i>
Nerwa (NW Iraq)	(-)	<i>besa</i>	<i>ʔida</i>	<i>ʔeda</i>	(-)	(-)	(-)
Barzan (NW Iraq)	(-)	<i>beya</i>	<i>ʔida</i>	(-)	<i>ʔāwa, ʔāya</i>	<i>-e</i>	<i>-a</i>
Urmi (NW Iran)	<i>plx</i>	<i>belá</i>	<i>ʔilá</i>	<i>ʔelá</i>	<i>ʔo</i>	<i>-éw</i>	<i>-áw</i>
Arbel (NE Iraq)	<i>plx</i>	<i>belá</i>	<i>ʔilá</i>	<i>ʔelá</i>	<i>ʔo</i>	<i>-éu</i>	<i>-áw</i>
Koy Sanjaq (NE Iraq)	<i>plx</i>	<i>belá</i>	<i>ʔilá</i>	<i>ʔelá</i>	<i>ʔo</i>	<i>-éw</i>	<i>-áw</i>
Sanandaj (W Iran)	<i>plx</i>	<i>belá</i>	<i>ʔilá</i>	<i>ʔelá</i>	<i>ʔo</i>	<i>-éw</i>	<i>-áw</i>
Sulemaniyya (NE Iraq)	<i>plx</i>	<i>belá</i>	<i>ʔilá</i>	<i>ʔelá</i>	<i>ʔaw</i>	<i>-éu, -éw</i>	<i>-áw</i>

Notes: The shaded area indicates features belonging to most or all Trans-Zab dialects. (-) indicates not identified. For the sources see section 1.5.

1.2.2.3. Written Neo-Aramaic

NENA dialects are mainly known to us through the documentation of spoken varieties. From the 16th century onwards, speakers across space and time have continually made efforts to commit Neo-Aramaic to writing. Both Jewish and Christian communities in Iraqi Kurdistan developed a written literary tradition during the Ottomon period. A manuscript culture emerged on the basis of of oral literature. This involves Jewish literature written in Hebrew script in Nerwa dated to at least the 16th century (Sabar 1976) and Christian literature, mainly poetry, written in Syriac script in Alqosh dated to at least the 17th century, some of which even earlier (Mengozi 2002a, 2002b). These early written traditions primarily concern Bible translations and commentaries and other types of religious works.

Since the 19th century other written literary varieties have been passed down to us in different forms and under different circumstances. Literary Christian Urmi is a case in point. In the 19th century up to the First World War a written form based on the local dialect of Urmi flourished among Christians inspired by missionary activities from various Christian denominations, producing printed publications of all sorts: not only Bible translations but also hagiography, folktales, school textbooks, periodicals etc. It became the basis for literary developments ever since in Urmi and other Christian communities (Odisho 1988; Murre-van den Berg 1999). In addition, a unique Latin alphabet (called *noviy alfavit*) was developed among Christian speakers of Urmi in the former Soviet

Union in the early 20th century (Polotsky 1961) and was intended to facilitate the publication of various texts, including translations of contemporary Russian literature, but it was never widely accepted. Literacy among speakers increased due to migrations to greater cities. A literary revival arose among educated Christian speakers in Iraqi cities such as Kirkuk, Bağdad and Başra between the 1920s and 1960s. These factors contributed to the koineization of urban Christian varieties, so that an Iraqi *koine* based on literary Urmi emerged (Odisho 1988) which now predominates (alongside the Urmi vernacular) among Assyrian speakers. Although publications among Iraqi and Iranian Jews were also to be found on a smaller scale during these periods, such supradialectal phenomena or levelling of dialectal differences up to koineization are not known for Jewish communities.

1.2.3. Central Neo-Aramaic Dialect Traits

Central Neo-Aramaic (CNA) consists of Mlaḥso (Ml., Diyarbakır province, Jastrow 1994) which is extinct by now and Țuroyo also known as Şurayt⁶ (Țur., Mardin province, Jastrow 1985; Ritter 1990⁷). Nowadays most speakers are to be found in Northern Europe (Sweden, Germany, the Netherlands). Contrary to NENA, a literary tradition did not develop among CNA speakers, although missionary activities did inspire writing on a small scale in the early 19th century (Heinrichs 1990). There have been only recent attempts to commit Țuroyo to writing on a larger scale by means of a Latin-based alphabet among communities in Sweden which has its beginnings in the 1980s.

Mlaḥso and Țuroyo share a few features that distinguish them from NENA (Jastrow 1985: xvii-xviii, xxi-xxiii; Kim 2008:507-508). A salient phonological feature, for example, is the vowel /o/ throughout where NENA would normally have /a/, as in Țur. *ḥmoro*, Ml. *ḥmoró* ‘donkey’ against NENA *xmara*⁸.

NENA in turn has some features that sets it apart from Central Neo-Aramaic such as the first person plural E-suffix *-ax* (against Țur. and Ml. *-ina*). Apart from this, the relationship between Central Neo-Aramaic and the other subgroups is fairly complex. A case in point is the resolution of word initial consonant clusters in monosyllabic words that differs across individual Neo-Aramaic languages (see also Jastrow 1990: 92; Kim 2008: 532). Apart from retaining the cluster (as

⁶ The term ‘Țuroyo’ is practically only found in scholarly literature and most speakers will identify their language with ‘Şurayt’ or ‘Suryoyo’.

⁷ See now also Waltisberg (2016).

⁸ C. Bohtan is an interesting exception, e.g. *xmora* ‘donkey’.

in Ml. *dmo* ‘blood’), two strategies exist to resolve it: either to prepose a prothetic vowel, such as Ṭur. *admo* ‘blood’ or to insert an epenthetic vowel between the two consonants such as the NENA Christian dialect of Hertevin *demma* ‘id.’. Both can be adopted for different nouns and found in one language (cf. C. Hertevin *ebra* ‘son’ and *demma* ‘blood’). The overview below indicates that Central and Western Neo-Aramaic more often opt for the first strategy, while North Eastern Neo-Aramaic more often the second. Similarly, Western Neo-Aramaic and C. Bohtan are closer in their partial /o/-vocalism where NENA otherwise exhibits /a/.

Table 2. *NENA dialects close to Central and Western Neo-Aramaic*

	OPEN	DONKEY	HOUSE	HAND	SON	BLOOD	NAME	YESTERDAY
Western	<i>fθh</i>	<i>ḥmora</i>	<i>payθo</i>	<i>ʔiða</i>	<i>ebra</i>	<i>eðma</i>	<i>ešma</i>	(-)
Ṭuroyo	<i>ftḥ</i>	<i>ḥmoro</i>	<i>bayto</i>	<i>ʔiðo</i>	<i>abro</i>	<i>admo</i>	<i>əšmo</i>	<i>aθmāl</i>
Mlaḥso	<i>psh</i>	<i>ḥmoro</i>	<i>beysa</i>	<i>ʔizó</i>	<i>ebró</i>	<i>dmo</i>	<i>išmó</i>	<i>esmól</i>
C. Hertevin	<i>pṭh</i>	<i>ḥmara</i>	<i>beta</i>	<i>ʔida</i>	<i>ebra</i>	<i>demma</i>	<i>šemma</i>	<i>etmal</i>
C. Bohtan	<i>ptx</i>	<i>xmora</i>	<i>bata</i>	<i>ʔida</i>	<i>abra</i>	<i>damma</i>	<i>šamma</i>	<i>itmal</i>
C. Qaraqosh	<i>pθx</i>	<i>xmara</i>	<i>beθa</i>	<i>ʔiða</i>	<i>əbra</i>	<i>damma</i>	<i>šamma</i>	<i>təmmal</i>

Sources: *Western*: Maḥlula (Arnold 1990), *Ṭuroyo* (Ritter 1979; Jastrow 1992), *Mlaḥso* (Jastrow 1992), *Hertevin* (Jastrow 1998), *Bohtan* (Fox 2009); partly adapted from Kim 2008:523. (-) indicates not identified.

Furthermore, there are features in the verbal system that unite Western and Central Neo-Aramaic against NENA. Examples are the use of a distinct inflectional base **qattīl-* and a morphologically richer voice system (Kim 2008: 532-533). One may compare, for instance, WNA *qayyima* ‘She has risen’ and *dammixa* ‘She has slept’ (Baxḥa, Arnold 1990:104, 74) with Ṭuroyo *qayimo* ‘She rose’ and *damixo* ‘She slept’ and Mlaḥso *qaymo* ‘She has risen’ and *damixo* ‘She has slept’ (against NENA *qim-* and *dmix-* throughout).

Within the dialectal variation of Ṭuroyo, the urban dialect of Midyat (Mt. *Məḍyaḍ*) is particularly divergent from the rural dialects, best-known of which is the dialect of Miden (Mn.) (Jastrow 1985, 1992). This may range from subtle differences in phonology to more drastic distinctions in morphology and morphosyntax. One relevant phonological feature of this urban dialect is the shortening and neutralization of pretonic vowels in open syllables (see Ritter 1990:60-61; Jastrow 1985:xvii-xviii; Kim 2010:236-237). The respective vowel reduction system has important repercussions for verbal inflection (see §3.1.3 and §6.2.1.1). Where Miden has long *i* [i:] and *e* [e:], respectively, *u* [u:] and *o* [o:], these are shortened and neutralized to *ə* [ɪ], respectively, *ũ* [u] in Midyat in

an unstressed open syllable directly before the stressed syllable. Miden in turn has nearly completely merged the short vowel *ũ* with *ə*. Compare the following lexemes:

(4)		‘red’	‘guard’	‘I _F went to sleep’	‘cow’
	Mn.	<i>semoqo</i>	<i>noṭuro</i>	<i>damix-ono</i>	<i>tārto</i>
	Mt.	<i>səmoqo</i>	<i>nūṭuro</i>	<i>daməx-ono</i>	<i>tūrto</i>

1.2.4. **Language Contact: Bi- and Multilingualism**

A study of Neo-Aramaic cannot be completely disentangled from neighboring languages in the area. As a minority speech community, Eastern Neo-Aramaic speakers have been confronted with the daily need of multilingualism. They are by and large at least bilingual and thus, beside their local Aramaic dialects, some of them speak not only local varieties of Arabic (including Syria and Iranian Khuzistan) and Kurdish but also Armenian and Azeri Turkish (e.g. Garbell 1965a; Khan 2016). In addition, influence from official languages can be expected such as Persian in the east, Turkish in the west along with Arabic permeating the area either indirectly as the cultural vehicle of Islam or more directly as the spoken language in the south (cf. Noorlander 2014). Particularly, Kurdish-Aramaic bilingualism has prevailed among Eastern Neo-Aramaic speakers, facilitating the recruitment and deep and lasting integration of Kurdish elements into their Neo-Aramaic speech (Chyet 1995; Noorlander 2014). Despite this evident and complicating areal dimension, we will approach Neo-Aramaic somewhat artificially in isolation and mainly from a solely Aramaic perspective and postpone judgement on questions related to contact with contiguous non-Aramaic languages.

We will focus on the North Eastern Neo-Aramaic and Central Neo-Aramaic subgroups where we find considerable variation in alignment. Since contact with non-Aramaic speakers has been a daily practice for Neo-Aramaic speakers, this alignment variation is presumed also to be relevant for the relationship between Neo-Aramaic and neighboring languages for which further research is required.

1.3. Previous Approaches to Alignment in Eastern Neo-Aramaic

1.3.1. Early Scholarship: Passive or Possessive

Previous synchronic approaches to Eastern Neo-Aramaic alignment have been enveloped in origin debates (see Doron and Khan 2010). Scholars have approached the *qṭil l-* or *šmif l-* construction as illustrated in (2) from the perspective of voice, i.e. a passive⁹, such as *l-ʔemmāh* ‘by her mother’ (5a) below, or the perspective of possession, i.e. predicative possessors (e.g. ‘There is to me a book’ = ‘I have a book’), such as *l-kōn* ‘belonging to you’ (5b) below. The latter has been considered parallel to the development of the auxiliary HAVE (e.g. *haben*, *hebben*, *avoir*, *avvere* etc.) combined with a perfect participle in well-known European languages such as Germanic and Romance (i.e. *I have a letter written* > *I have written a letter*)¹⁰. It was also brought in connection with the parallel *manā kartam* construction in Old Persian (e.g. Kutscher 1969).

(5) **Syriac** (Aramaic, Northwest Semitic)¹¹

- a. *meṭṭol d=mallp-ā=w-āt l-ʔemm-āh*
 because SUBR=taught-3FS=was-3FS DAT-mother:FS-her
 ‘Because she was taught **by her mother**.’ (5th c. Matthew 14:8, *Pšitta*, translating a Greek passive)
- b. *kmā laḥm-īn ʔit l-kōn?*
 how.many bread-MPL EXST DAT-2MPL
 ‘How many loaves do **you_{PL} have?**’ (5th c. Matthew 15:34, *Pšitta*)

Besides the dative preposition *l-*, there are two sets of person forms that are crucial. They occur at least in perfective past constructions similarly to the imperfective present. Their usage differs significantly across Neo-Aramaic languages. This variation is first and foremost morphologically conditioned by a verbal inflectional base *qṭil-* that is historically a resultative participle (Polotsky 1979:208¹²). The distinct prepositional marking patterns also hinge on the use of this verbal form. Historically, verbal inflection comprises the direct reflexes of

⁹ See, for example, Nöldeke (1868:220, 317), Polotsky (1979, 1996), Khan (1999:94-95, 2002a:92), Mengozzi (2002b:43). Cf. Bar-Asher (2008, 2011), Loesov (2012).

¹⁰ See, for example, Kutscher (1969), Hopkins (1989a), Goldenberg (1992), Rubin (2005:30-31); cf. Kirtchuk (2016).

¹¹ For the sake of a uniform transcription of Syriac, I follow Beyer’s transcription of the *Odes of Solomon* in Lattke (2005:XIII–XXXVII).

¹² Haig (2008:9) makes a similar remark regarding Iranian.

active and resultative participial predicates of the apophonic pattern *CāCiC*, such as *kātib*- ‘writing’ and, respectively, *C(a)CiC* such as *k(a)tīb*- ‘written’ in pre-modern Aramaic.

The two sets of person forms that encode agreement have distinct origins. The first set will be termed ‘E-suffixes’ in the present study. It continues diachronically both participial agreement in number and gender and enclitic personal pronouns. The second set, generally termed ‘L-suffixes’, continues diachronically enclitic dative person forms characterized by the originally dative preposition *l*-. We can still observe, to some extent, in Neo-Aramaic, that person markers were added to declined participles through enclitic pronouns. The enclitic pronouns used to be the unmarked dependent variants of pronouns. Being verbal adjectives, the participles used to inflect for gender and number. Comparing Mlaḥso, for example, with Classical Syriac below, we observe that the reflexes of original adjectival endings (ms. -Ø, fs. -o, pl. -i) are indicators of the third person but also feature in the morphological decomposition of the endings of the first person (ms. -Ø-no, fs. -o-no, pl. -i-nā).

(6) Mlaḥso compared with Classical Syriac

Mlaḥso¹³

Classical Syriac

(Jastrow 1994:44)

3MS	<i>doméx-Ø</i>	‘He sleeps’	<i>damek-Ø</i>	‘He is sleeping’
FS	<i>domx-ó</i>	‘She sleeps’	<i>dāmḵ-ā</i>	‘She is sleeping’
PL	<i>domx-í</i>	‘They sleep’	<i>dāmḵ-īn</i>	‘They are sleeping’
1MS	<i>domex-Ø-no</i>	‘I _M sleep’	<i>dāmek-Ø=nā</i>	‘I _M am sleeping’
FS	<i>domx-o-no</i>	‘I _F sleep’	<i>dāmḵ-ā=nā</i>	‘I _F am sleeping’
PL	<i>domx-i-nā</i>	‘We sleep’	<i>dāmḵ-īn=nān</i>	‘We are sleeping’

Yet, synchronically, forms like *doméx-Ø* have lost all characteristics of adjectives in Eastern Neo-Aramaic. A historically stronger link between the preposition *l*- and the L-suffixes as well as its usage as a dative may also be observed in Neo-Aramaic. Synchronically, the L-suffixes are not prepositional in nature and behave like verbal affixes, but they may still be characterized as a type of dative person forms as in other languages that display an alignment split conditioned by tense-aspect such as Georgian and Indo-Iranian (see, for example, Stilo 1981, 2010; Haig 2008).

¹³ Gender distinction is neutralized in the plural of the pronominal system in Eastern Neo-Aramaic.

The historical situation can be briefly illustrated as follows. The active participles *ʔazel* ‘going’ of *ʔzl* ‘go’ in (7a) and *ʔākel-* ‘eating’ of *ʔkl* ‘eat’ in the Syriac example (7b) below inflect like predicative adjectives (e.g. ms. *šappir-∅*, fs. *šappir-ā*, mpl. *šappīr-īn* ‘beautiful’) and take agreement with the subject and agent. The ending *-īn* in (7b), for instance, expresses masculine plural agreement with the agent *kalbē* ‘dogs’. The dative person form *l-hōn* ‘them’ in (7b) expresses the patient. Full nominal objects could also be differentially marked by this preposition *l-*.

(7) **Syriac** (Aramaic, Northwest Semitic)

- a. *l-aykā ʔazel-∅=way-t mār-∅*
 to-where going-3MS=were-2SG master.of:MS-my
 ‘Where were you_{SG} going to, my lord?’ (3rd c. Wright 1871:289.23)
- b. *ʔākl-īn l-hōn kalbē*
 eating-3MPL DAT-3MPL dogs:MPL
 ‘Dogs eat them.’ (3rd c. Drijvers 1964:50.24-25)

Intransitive subject-oriented resultative constructions are treated indistinctly from this. The resultative participle *ʔazil-* of the verb *ʔzl* ‘go’ in example (7c) below takes feminine singular agreement *-ā* with the subject.

- c. *l-aykā ʔazil-ā māraṭ-kōn*
 to-where gone-3FS mistress.of:FS-yourMPL
 ‘Where **is** your_{MPL} mistress **gone** to?’ (3rd c. *Act. Thom.* 262.16)

One should note that several agent-oriented resultative constructions are also found in Syriac (and other Late Aramaic languages)¹⁴. In typology, they are also known as possessive resultatives because these verbs often have a connotation of someone holding an item in close proximity to themselves, a smenatic property of predicative possession (Sassen 2009:15, cf. Heine 1997:38-39)¹⁵. They follow the same morphosyntax as the active participle where the object person

¹⁴ See, for instance, Nöldeke (1904:220, §280), Nöldeke (1875:379-380, §262), Goldenberg (1992:118).

¹⁵ Although scholars widely recognize its primary resultative function, the traditional notion of ‘passive participles with an active sense’ persists in the literature. Such paradoxical circumlocutions rather show the participle is, in fact, not a passive participle but properly a resultative participle conforming to linguistic typology of resultatives, including the typology of agent-oriented resultatives in Nedjalkov and Jaxontov (1988:23), cf. Nedjalkov (2001:932). See also Kirtchuk (2016) who similarly emphasizes that aspect is primary, not voice.

form is marked in the dative. One finds examples like *šqil-īn l-eh kalbē* ‘Dogs are carrying it’ where *šqil-īn l-eh* effectively means ‘they have it taken on’. This is the agent-oriented resultative that developed into a perfect in Western Neo-Aramaic¹⁶, as illustrated below:

(8) **Western Neo-Aramaic** (Maflula)

- a. *mōn šqil-∅ l-ann ḏahb-ō*
 who taken-3MS DOM-DEM:MPL gold-DEF:MPL
 ‘Who has taken the money? (Bergsträsser 1915:13.31)
- b. *šqil-il-le* (*< *šqil-in-le*)
 taken-3MPL-3MS
 ‘They_M have taken it_M.’ (see Arnold 1990:219-202, 223-225)

The original dative agent resultative construction found in Eastern Aramaic is similar to this but with inverted roles. Its emergence ultimately inaugurated completely new constructional splits within Aramaic. The possible breakthrough of non-accusative alignment in the perfective hinges on the development of a new type of perfect (later preterit), based on the resultative participle together with the dative marker *l-*, for example:

(9) **Jewish Babylonian Aramaic** (Talmud, ‘Eruvin 66b(3); Sokoloff 2002:1159a)

- a. <l’ šmy° ly h’ šm’t’>
lā šmīf-ā l-ī hā šmaf-tā
 NEG heard-FS DAT-1SG DEM:FS hearing-FS-EMPH:FS
 ‘I have not received¹⁷ (lit. Me is not heard) this legal tradition.’

The resultative participle *šmīf* of the verb *šm* takes feminine singular agreement with the patient-like argument, but while the dative person form *l-eh* denotes the agent-like argument. Since its first manifestations typically involve experiencer predicates such as *šm* ‘hear’ (cf. Schlesinger 1928:45, § 30; Sokoloff 2002:327b), it seems that it did not mark typical agents from the outset but indirect affectees of which the coding was extended to agents (Bar-Asher 2014; Coghill 2016; cf. Haig 2008 on Iranian) and intransitive verbs (e.g. Van Rompay

¹⁶ But, note, likely also Eastern varieties, see §5.4.

¹⁷ *šmīf l-* typically expresses orally imparted information and, thus, what someone has rumors about, knows by report or understands from an authoritative religious tradition (cf. *šemfā* ‘hearing; sound, report’, Sokoloff 2009:1574).

1999). Vestiges of such *šmiʿ* *l*-constructions already surface in Imperial Aramaic in the 5th century BC and its development into alignment splits is considered by most scholars to be ultimately due to convergence with Iranian¹⁸. One should note that *l*- can also mark possessors, beneficiaries, goals, and recipients, such as *l-rāʿayā* ‘for the shepherd’ below:

- b. <ʿyzy dmsyrn lrwʿh>
 ʿizz-ē di=msīr-īn *l-rāʿayā*
 goat(F)-MPL SUBR=handed.over-3MPL DAT-shepherd:MS
 ‘Goats which are handed over **to a shepherd.**’ (BB 36a(33); Sokoloff 2002:692a-b)

Early grammatical descriptions of Neo-Aramaic can be taken as an example of the original passive analysis of the *šmiʿ* *l*-construction. Nöldeke (1868:317; English translation of original German mine), for instance, indicates that the “preterit is actually a passive expression whose grammatical subject is the apparent object”. Maclean (1895:85) notes “When the object, as it would be in English, (which is really the subject), is feminine, we should expect the participle to agree with it”. The patient-like argument *baxta* ‘women’ in Jewish Amidya clauses like *šmiʿ-a-li baxta* ‘The woman was heard by me = I heard the woman’, then, is only apparently an object in a logical sense, not in a grammatical sense. On this view, the E-set *-a* marks the agreement with the subject and L-suffix *-li* an agent complement. Although the sense is indistinct from the active, the grammatical structure is said to be that of a passive.

In the possessive analysis, however, the status of the E-set and L-set are completely different from the passive one. What denotes the agent-like argument is essentially a predicative possessor, and the patient-like argument a possessee. The L-set marks the possessor similarly to the auxiliary HAVE in Romance and Germanic languages (cf. Hopkins 1989; Rubin 2005). The E-set expresses the agreement with the possessee. Just as English *I have written the book* goes back to *I have the book written*, so would Neo-Aramaic *kθiw-a-li maṣḥaf* meaning ‘I wrote the book’ essentially be composed of a possessive expression and a participle where *-li* is equivalent to the English HAVE-auxiliary *I have* and *kθiw-a* to the English participle *written* agreeing with the possessee *maṣḥaf* ‘book’. Although the possessive meaning is no longer present, the grammatical structure is

¹⁸ See among others Friedrich (1957), Kutscher (1969), Mengozzi (2002b:37-49), Gzella (2004:184-194, 2015:348), Khan (2004b).

said to be akin to that of the predicative possessor in expressions like *xa mashaf ?it-li* ‘I have a book’.

Thus, there has been a strong emphasis on the diachronic origins of the preterit in analyzing the synchronic Eastern Neo-Aramaic data. The passive, possessive and experiencer source constructions have been presented as being mutually exclusive, but I believe this need not be the case. Precisely because of the ambiguous orientations and versatility of resultative participles (Hapslemath 1994; Nedjalkov 2001; cf. Kirtchuck 2016) and the semantics typically subsumed under a dative case (cf. Næss 2007), they can be used in different constructions (as the variation in Eastern Neo-Aramaic clause structure demonstrates). Leaving the origin debates aside, later approaches to Neo-Aramaic alignment are more synchronic, grounded in contemporary person marking and case-marking typology. This is not to deny that the typology of alignment in Neo-Aramaic is a problem that is entrenched in the evolution of the Aramaic verbal system. The inflection of the modern Aramaic verb as given in the beginning has no diachronic basis in the prefix- or suffix-conjugation (e.g. *ta-ktob* ‘She writes’, respectively, *katab-at* ‘She wrote’) as in closely related Semitic languages such as Hebrew and Arabic. Indeed, the essential ingredients of the West Semitic verbal system have been completely replaced by originally non-finite constructions with a concomitant constructional shift at least historically conditioned by aspect and diathesis. This pervasive, rigorous restructuring is without parallel among the modern Semitic languages (Hopkins 2005; Gzella 2015:45). Periphrastic constructions already undergoing increasing grammaticalization in pre-modern Aramaic gave rise to entirely new inflectional paradigms (cf. Noorlander and Stilo 2015). Yet, it is debatable whether ergativity in itself is the decisive trait that makes these Eastern Neo-Aramaic so different from its Semitic relatives.

1.3.2. Recent Typological Approaches

In more recent typological approaches, some question the validity of typological terminology like ‘ergative’ (Hemmauer and Waltisberg 2006) or adopt it only for practical reasons (Jastrow 1996:52-53). Mengozzi (2002b:37-49), Khan (2007a) and Barotto (2015) compare ergative and accusative alignment properties typologically. Hoberman (1989:95-122) gives a generative morphological account of the inverted relationship between (2) and (3). Doron and Khan (2010, 2012) a generative syntactic explanation. While other scholars hesitated to accept a split-ergative analysis, Doron and Khan (2010, 2012) assume the

opposite extreme position and practically analyze all of Eastern Neo-Aramaic (excluding Neo-Mandaic) as a type of split-ergative. Recently, Coghill (2016) and Waltisberg (2016, on Ṭuroyo) studied alignment in Eastern Neo-Aramaic. Their approach is comparable to mine but reached me too late to consider in full detail. I will mention briefly the main differences between my analysis and theirs where relevant.

Mengozzi (2002b:49, 2005) and partly also Barotto (2015) concentrate on fascinating variation in early written sources. The phenomena in Neo-Aramaic are studied in light of a so-called “decay of ergativity”. This is a gradual departure from an originally coherent ergative type to various accusative constructions. The ergative construction in the Eastern varieties is presented as the type that is contrary to its close and distant relatives and has been or is being replaced by accusative constructions. The decay of the ergative type is viewed as a symptom and the deviations from the ergative as antidotes. This finds an echo in Coghill (2016)’s recent work which is even entitled *The rise and fall of ergativity in Aramaic*. My own research, however, will demonstrate that some of the discussed patterns (such as the *qam-qaṭal*-construction and the system in Hertevin) have been wrongly analyzed as being accusative. Moreover, we should be cautious to extrapolate that a coherent ergative pattern used to be the norm for all of Eastern Neo-Aramaic. The synchronic data by itself does not compel us to such a conclusion. Nevertheless, Mengozzi (2002b:46 fn. 147), without going into detail, suggests a few factors that are key to the alignment variation: system-internal pressure from the main inflectional system, morphological disambiguation, the order of A and P (“actant order”), tense-aspect distinctions, and pragmatics. My own more detailed research effectively shows that his apt suggestions are, indeed, important factors, but they do not necessarily promote accusative alignment.

Mengozzi (2002b, 2005) also draws on interesting parallels with developments in Kurdish. For this reason, he uses ‘direct’ for E-suffixes and ‘oblique’ for L-suffixes (cf. Ritter 1990; Pennacchetti 1994; Murre-van den Berg 1999; Noorlander 2017) inspired by Iranian studies. These will not be used in this study, because they may be confused with terms such as oblique arguments (which the L-suffixes need not express at all).

Doron and Khan (2010, 2012) make a major contribution to the study of alignment in NENA. They are the first to present an alignment typology of documentation data aimed to counter generalizations made in generative theory (regarding the functional head of little *v* mostly associated with transitivity). They introduce the helpful concept of agreement inversion (see §3.2.1) and con-

vincingly show that the overall syntax of the Neo-Aramaic dialects is, at least synchronically, accusative and, therefore, incompatible with a passive analysis. They distinguish three subgroups of Neo-Aramaic based on their major morphological alignment pattern in the perfective past: split-s dialects, extended ergative dialects, and dynamic-stative dialects.

The Jewish dialects such as Sulemaniyya that display the ergative pattern exemplified in (1) are called split-s dialects, because the A-like marking of the s is still possible in a few classes of intransitive verbs (e.g. *nwəx-la* ‘It_F barked’ vs. *twir-a* ‘It_F broke’). The coding of s is split based on lexical verbal semantics.

In the dynamic-stative type, the marking of the s differs depending on grammatical aspect. The s is treated similarly to the A in the dynamic aspect but similarly to the P in (result-)stative aspect. Example (10) below illustrates this. The Jewish dialect of Urmi distinguishes between the E-set and L-set in the marking of the s for the same verb: **dmix-a* ‘She has gone to sleep’ (stative) as opposed to **dməx-la* ‘She went to sleep’ (dynamic). The first treats the s like the P, but the latter the s like the A. Khan (2008b:74) argues that this grammatical split is ultimately derived from the lexical split displayed by the split-s dialects.

(10) **J. Urmi** (NW Iran; Khan 2008b)¹⁹

- a. (transitive perfective)
xəzy-a-le ‘He saw **her**.’
see_{PFV}-P:3FS-A:3MS
- b. (intransitive stative)
dmix-a* ‘She** has gone to sleep.’
sleep_{PFV}-S:3FS
- c. (transitive perfective)
xəzy-a-le ‘He saw **her**.’
see_{PFV}-P:3FS-A:3MS
- d. (intransitive dynamic)
dməx-la* ‘She** went to sleep.’
sleep_{PFV}-S:3FS

In the extended ergative, the L-suffixes are used to express both the s and the P, such as *-le* in (11a) and (11b) below contrary to *-a* ‘her’. Doron and Khan’s (2012; cf. Mengozzi 2002b:45, fn. 144) use extended ergative to describe this pattern, primarily because the object-marking E-suffixes are morphologically

¹⁹ The symbol * indicates suprasegmental pharyngealization of the following word.

less marked, the agent-marking L-suffixes may also be dropped (see §4.3), and they believe the agent-marking L-suffixes spread to all intransitive verbs (replacing the original E-set to mark the S, Khan 2008b:74). This has been analyzed as marked nominative by Barotto (2015), a system that will be discussed in §2.2.6.

(11) **J. Amidya** (NW Iraq; Hoberman 1989, Greenblatt 2011)

a. (intransitive)

dmix-le 'He went to sleep.'

sleep_{PFV-S:3FS}

b. (transitive)

qtil-a-le 'He killed her.'

kill_{PFV-P:3FS-A:3MS}

These dialectal distinctions are taken over by Barotto (2015). Yet, Doron and Khan (2012) consider all dialects to display a type of ergativity. The present study will show that is problematic in some respects, especially where the S and A are treated the same as in (11) above (see §4.2.1). A major disadvantage in Doron and Khan (2010, 2012) and Barotto (2015) is the use of case labels such as ERG and ACC for what is called L-suffixes here and NOM and ABS for what corresponds with the E-suffixes in the analysis and glossing of person markers. This leads to confusing and cumbersome combinations of ERG-ACC and even ERG:NOM in verbal forms. In my approach, however, I keep case-marking and agreement separate (see §2.2.3) and only use such designations for nominal morphology. What will be indicated is the grammatical function (S, A, P) the person markers express.

Coghill (2016) is an ambitious treatment of both important historical and contemporary data. Her approach to the synchronic data in both North Eastern and Central Neo-Aramaic is comparable to mine in several respects. She provides an important and detailed study of split subject marking from both a typological and areal perspective. Coghill (2016:73-81) also shows inconclusive tests of syntactic ergativity in NENA. The use of S-suffixes instead of E-suffixes (in Khan's and similar works by other authors) is unhelpful, because the S-suffixes may be confounded with the S argument (which they need not express at all). An important point of disagreement between Coghill (2016) in some respects and mine, however, is that, although I acknowledge its relevance for argument discrimination, I do not consider affix order determinant for alignment, unless it involves a clear distinction between prefixes and suffixes (see §2.2.3.3). This

inevitably leads to rather divergent analyses. Like Mengozzi (2002b, 2005) and Barotto (2015), she also erroneously subsumes several constructional patterns such as the complex agreement system in the Christian dialect of Hertevin under accusative alignment, while I identify several distinct alignment patterns in different contexts, including ergative.

Khan's (2017) most recent treatment of ergativity in NENA differs from Doron and Khan (2012) and Coghill (2016) and closely resembles my own approach. His article reached me after my manuscript was finished and I have reached similar conclusions in my own research independently.

Although Jastrow (1996:52-53) believes no ergative inflection is found in Neo-Aramaic languages, he (1985:120) uses "ergative Flexion" for the L-set against "prädikative Flexion" for the E-set in describing Ṭuroyo and Mlaḥsô. Hemmauer and Waltisberg (2006) argue that the perfective past in Ṭuroyo is only superficially ergative, since they believe certain constructional splits point to an underlying accusative pattern similar to the (imperfective) present. They rightly show that the agreement operates on a similar basis throughout the verbal system. In this thesis, however, I do not differentiate between deep and superficial alignment, although, clearly, alignment is manifested in different ways in syntax and/or morphology. Some properties they discuss belong to what I refer to as 'trigger potential' which is explained in §2.2.3.2. The result is that no alignment pattern is subsumed under another in my approach, as one being more superficial than the other. Waltisberg (2016)'s recent detailed study of the syntax of Ṭuroyo makes an impressive advance in research. Yet, Waltisberg (2016:20, 176) even denies any manifestation of ergativity whatsoever in Ṭuroyo. This is not the conclusion I have reached in my own research (see §6.1.1 and §6.1.3). Waltisberg points out that the inflectional base of certain intransitive verbs (CaCiC- as in *damix-o* 'She fell a sleep') differs from that of transitive verbs (CCiC- as in *ftiḥ-o-la* 'She opened it_F'). Yet, as will become evident, this does not alter the facts about the use sets of person markers that I consider more pertinent to alignment.

1.4. Goals and Scope of This Work

Despite the aforementioned literature on alignment in Eastern Neo-Aramaic, a detailed, systematic overview that takes into account more fine-grained microvariation is still needed. Rather than seeking to explain this in terms of an accusative-ergative dichotomy, this study takes a more sophisticated approach making nuances where appropriate. A comprehensive typological approach also

includes alignment patterns that are less common. The main aim of this thesis, therefore, is to compare the typological microvariation in subject, agent and object coding in intransitive and transitive constructions across and within Eastern Neo-Aramaic languages concentrating on North Eastern Neo-Aramaic and Central Neo-Aramaic. Ditransitive constructions have been studied mostly independently²⁰. In my thesis, I will combine these with the intransitive/transitive alignment patterns and highlight possible correlations.

In addressing this central issue within one language family, a more general goal is to contribute to the typology of argument marking across languages of the world and make Neo-Aramaic not only accessible to Aramaicists or Semitists but also linguists in general. A split between accusative and ergative alignment conditioned by tense and/or aspect is not altogether uncommon in languages of the world. In fact, a similar tense-sensitive alignment split occurs in Iranian languages with which Aramaic has been in contact for at least two millennia²¹, and similar constructional splits occur in Caucasian, Classical Armenian, and Indo-Aryan languages. Notwithstanding its overall contribution to wider research projects, I should emphasize that this study is not intended to investigate linguistic universals or language area features.

A synchronic viewpoint is not completely isolated from language evolution and is also relevant to diachronic studies. Aramaic has been documented for a remarkably long period but little is known about spoken Aramaic before the 16th century. Thus, the modern vernaculars are indispensable for the study of the linguistic evolution of Aramaic (Beyer 1986:54; Hopkins 1989a:413; Jastrow 2008:1). A second significant goal of this synchronic study is to serve as a fruitful starting point for further historical research. As we will see, each dialect may do its own thing and sometimes in the very opposite way of the other. This is a fascinating fact about a language where alignment has otherwise been stable for millennia. The present study argues that much of the variation is independent of ergativity and that the alignment patterns in Eastern Neo-Aramaic need not have sprung from a coherently ergative source construction contrary to what has been widely accepted (but see now also Khan 2017). It analyzes recent documentation data (see next subsection) from both NENA and Central Neo-

²⁰ See Givón (1976), Polotsky (1979), Hoberman (1989:106-110), Murre-van den Berg (1999:211-212), Coghill (2010), and Cohen (2012:144-146). Recently, Waltisberg (2016) for Turoyo.

²¹ See, for instance, Stilo (1981, 2004a), Haig (2001, 2008), Kapeliuk (2004), Khan (2004b, 2007b), Noorlander (2014, 2017), Noorlander and Stilo (2015), Stilo and Noorlander (2015).

Aramaic in a typological perspective to reveal important microvariation and shed light on its history.

By the same token, this dissertation aims to highlight the value of typological linguistics for the study of Semitic languages and attempts to bridge a gap between traditional Semitistic and general descriptive approaches. Chapter 2 comprises a general overview of alignment typology. It presents numerous examples from various languages, including a few illustrative Semitic languages in order to make this chapter as accessible and valuable to Semitists and students of Semitic languages. The incidental benefit of this is that one can easily compare Neo-Aramaic typologically with a few related languages. In this fashion, we can place the phenomena that we will find in a broader typological context. The subsequent chapters deal with the alignment variation and will address the following research questions. These questions direct us through the variation in Eastern Neo-Aramaic and are answered comprehensively by Chapters 2 up to 7.

Firstly, what major alignment types can be discovered and how are they expressed? Chapter 3 is intended as a general introduction to how agreement and prepositional marking are expressed across Neo-Aramaic languages. It concentrates on features shared by all or most varieties by using the imperfective as a frame of reference. Chapter 4 and 5 discuss different alignment types and variations and combinations thereof in North Eastern Neo-Aramaic (NENA). This is compared with Central Neo-Aramaic, another major subgroup belonging to Eastern Neo-Aramaic in Chapter 6. Since Central Neo-Aramaic is much less diverse and NENA displays a diversity reminiscent of a language family, two chapters are devoted to NENA divided by general alignment splits in the perfective past based on argument properties (Chapter 4) and alignment splits based on verb or clause-related properties found in the perfective past, the perfect, and compound verbal forms (Chapter 5).

Secondly, in what way do different coding properties interact? Chapter 3 presents the main verbal morphology, the pronominal inventory and prepositional marking of arguments. Prepositional and verbal argument coding closely correlate in morphological identity and it is interesting to investigate to what extent this also influences coding strategies. Chapter 4 to 6 include sections on the interaction between prepositional marking and agreement. Related to this are the conditions for when arguments, if any, are marked prepositionally and/or marked by verbal agreement. What conditioning factors can be identified relating to grammatical categories such as tense, aspect, mood and referential properties such as animacy, definiteness and persons? These observations

contribute to the cross-linguistic study of such phenomena and our understanding of argument encoding in general.

The last but not less important subquestion is, more generally, in what respect are the alignment types different and similar from one another within Eastern Neo-Aramaic? In approaching this question, it should be remarked that, although this study of the Eastern Neo-Aramaic data contributes to Neo-Aramaic dialectology, the focus is on how alignment patterns can be distinguished in terms of types, not in terms of isoglosses pertaining to dialect groups. This study, therefore, is not intended to be exhaustive in including as many dialects as possible but intends to include as many types of alignment as possible. This also addresses to what extent the alignment patterns could be said to be typical. In other words, how typically ergative is the ergative alignment? How does it differ from or resemble other types?

1.5. Sources and Conventions

In the last few decades, the study of the Neo-Aramaic dialects underwent an explosion in descriptive research. Under Geoffrey Khan's direction, various research teams associated with Cambridge University have carried out fieldwork to describe individual dialects²². Khan himself has written seminal, voluminous grammars (1999, 2002a, 2004a, 2008a, 2008b, 2009) with more still forthcoming. In addition, apart from individual projects²³ and other synoptical descriptions in pertinent articles, the *Semitica Viva* monograph series edited by Otto Jastrow have made significant contributions to the Neo-Aramaic corpus²⁴. Given the decreasing number of speakers of individual dialects, the synchronic description of Neo-Aramaic has been repeatedly considered to be one of "the most urgent tasks of Semitic philology as a whole" (Hopkins 1989a:414; similarly, Khan 2007c:19). Strong appeals of this kind heralded the arrival of the aforementioned grammar sketches and geared up Neo-Aramaic Studies. The increasing documentation of Neo-Aramaic is arguably a milestone in Semitic philology, facilitating access to invaluable linguistic data.

²² Such as Coghill (2003, forthcoming), Greenblatt (2011), Borghero (forthcoming), and Damsma (forthcoming). Note also Rees (2008).

²³ Such as Krotkoff (1982), Hoberman (1989), Rubba (1993), Mengozzi (2002a, 2002b), and Fassberg (2011).

²⁴ Such as Odisho (1988), Jastrow (1988, 1994), Arnold (1990), Macuch (1993), Sinha (2000), Younansardaroud (2000), Sabar (2002), Mutzafi (2004a, 2008a), Talay (2008, 2009), and Häberl (2009).

The various existing grammars, texts, and studies serve as a basis for the data that will be used in this monograph. Since the most typical splits occur in Trans-Zab Jewish dialects, I will draw much on the work by Khan²⁵ whose grammars and especially comparative excursuses offer valuable data and cross-dialectal comparisons (Khan 2008b:2-7, 73-75, 146-148; 2009:5-9, 77-78, 327-329). Native speakers were consulted only in very few cases²⁶. Khan (2011) estimates there are about a 150 dialects. Several of these dialects are still poorly documented. A large number of them are listed in the Online NENA Database (nena.ames.cam.ac.uk) at the University of Cambridge (to which currently still access restrictions apply to scholars outside Cambridge). Some recordings can also be found in the Semitic Sound Archive (SemArch, www.semarch.uni-hd.de) archived by the University of Heidelberg. Table 3 at the end of this section shows which sources were consulted for the concerning dialect.

The number of dialects included in my research is not exhaustive. Apart from the sources mentioned in the table, I also refer to Talay (2008; 2009). This includes a vast amount of data on a dense dialect bundle in SE Turkey and NW Iraq of which the speakers took up residence along the Khabur Valley in Syria. Special attention will be given to representatives of Jewish Trans-Zab varieties in the eastern periphery and Christian dialects in the western periphery. It should be noted that grammatical treatments of Neo-Aramaic dialects generally do not include discussions on alignment typology. Intransitive and transitive constructions are identified, compared and analyzed according to the principles outlined in Chapter 2. The material is also generally presented without morpheme-by-morpheme glossing in the respective source. I have added these to the cited examples following the Leipzig Glossing Rules²⁷. The glossing in examples from non-Semitic languages is taken from the respective source unless indicated otherwise.

The sources also have different conventions for transcriptions and sometimes authors change them through time. For convenience's sake, examples from Neo-Aramaic dialects are made uniform as follows. The variable practices of representing the reduced centralized vowel by means of the letters <i>, <ɨ>,

²⁵ But also, occasionally, Hopkins (1989a), Israeli (1998), Golbenberg (1992), Pennacchietti (1994), and Mengozzi (2002b:36-49).

²⁶ I consulted three adult native speakers of Turoyo, all of them women who immigrated to the Netherlands. One speaker comes from Mzizah (Doğançay, SE Turkey) and also speaks Kurdish, Turkish and Dutch, and two Arabic-Aramaic bilinguals from Qamishli (NE Syria), only one of whom speaks Dutch.

²⁷ www.eva.mpg.de/lingua/resources/glossing-rules.php

<ĩ>, or <ə> are all unified in the single grapheme <ə> ranging in pronunciation between [i] ~ [ə] (~ [u]). The voiceless and voiced interdental fricatives are marked by <θ> and <ð>, respectively, (as against <ʈ>, respectively, <ɖ> in some sources), and the pharyngeal and glottal stop by their symbols of the International Phonetic Alphabet <ʕ> and <ʔ>, respectively, (as against half rings <ʿ> and <ʾ> or single quotation marks). Long vowels, if indicated, are distinguished by a macron, e.g. *ā* (instead of a colon, e.g. *a:*). Moreover, I have taken the liberty to adapt Ritter's (1967-71, 1979, 1990) detailed transcription of Ṭuroyo to the phonological transcription of Jastrow (1992).

The symbol + indicates suprasegmental pharyngealization of the following word or syllable. I have taken the liberty to simplify the detailed transcription of Younansardaroud (2001). Following Khan (2016), the threeway system of emphasis is reduced to a binary one with the symbol + indicating the pharyngealization and a circumflex Ɑ below or above the segment indicating unaspirated/glottalized articulation (e.g. *ṭ* [t] and *p̣* [p] against *t* [t^h] and *p* [p^h]).

Without further specification, stress is on the penultimate syllable. Intonation group boundaries and secondary stress are omitted in citation.

Finally, throughout this dissertation, when a word or phrase is emphasized in quoted examples, the emphasis is always mine unless indicated otherwise.

1.6. Outline

This book is organized as follows. Chapter 2 explains the theoretical preliminaries of alignment and offers a cross-linguistic, comparative basis from which we draw expectations for alignment types and their manifestations.

Chapter 3 shifts the theme to Neo-Aramaic and gradually build up to the complexity of alignment variation treated in the subsequent chapters. It provides a brief overview of the coding properties in NENA and Central Neo-Aramaic. It concentrates on several issues pertaining to the functions and status of the so-called L-suffixes and attempts to provide a uniform account. A considerable part is devoted to the expression of pronouns and agreement (or rather person forms) in transitive and ditransitive constructions of the imperfective aspect. The imperfective constructions are taken as point of departure for the study of argument encoding in other constructions.

Chapter 4 and 5 constitute the lion's share of this dissertation. The form and function of person forms or agreement markers are the central theme, showing constructional splits based on properties of the argument (Chapter 4) or properties of the verb or clause (Chapter 5).

Table 3. *Sample of dialects that has been studied for this research (alphabetical order)*

J./C.	DIALECTS	LOCATION	SOURCES
C.	Alqosh	NW Iraq	(Coghill 2003)
J.	Amidya	NW Iraq	(Hoberman 1989, Greenblatt 2011)
C.	Aradhin	NW Iraq	(Krotkoff 1982)
J.	Aradhin	NW Iraq	(Mutzafi 2002b)
J.	Arbel	NE Iraq	(Khan 1999)
C.	Ashitha	SE Turkey	(Borghero 2006)
C.	Barwar	NW Iraq	(Khan 2008a)
J.	Barzan	NW Iraq	(Mutzafi 2004c)
C.	Baz	SE Turkey	(Mutzafi 2000)
J.	Betanure	NW Iraq	(Mutzafi 2008a)
C.	Bohtan	SE Turkey	(Fox 2009)
J.	Challa	SE Turkey	(Fassberg 2011)
J.	Dihok	NW Iraq	(Sabar 1997, 2002)
C.	Hertevin	SE Turkey	(Jastrow 1988)
C.	Jilu	SE Turkey	(Fox 1997)
C.	Karəmləsh	NW Iraq	(Borghero 2008)
J.	Kerend	W Iran	(Hopkins 1989a, 2002)
C.	Koy Sanjaq	NW Iraq	(Mutzafi 2004b)
J.	Koy Sanjaq	NE Iraq	(Mutzafi 2004a)
C.	Mangesh	NW Iraq	(Sara 1974)
C.	Mlaẖso	SE Turkey	(Jastrow 1994, 1996)
C.	Nerwa	NW Iraq	(Talay 2001)
J.	Nerwa	NW Iraq	(Sabar 1976)
C.	Qaraqosh	NW Iraq	(Khan 2002a)
C.	Salamas	NW Iran	(Polotsky 1991; see now Khan 2016)
C.	Sanandaj	W Iran	(Panoussi 1990; Khan 2009)
J.	Sanandaj	W Iran	(Khan 2009)
J.	Saqqiz	W Iran	(Israeli 1998)
C.	Sardarid	NW Iran	(Younansardaroud 2001)
C.	Sat	SE Turkey	(Mutzafi 2008c)
C.	Sulemaniyya	W Iran	(Khan 2004a)
J.	Sulemaniyya	NE Iraq	(Khan 2004a; including Ḥalabja)
C.	Telkepe	NW Iraq	(Coghill 2010, 2014)
C.	Tisqopa	NW Iraq	(Rubba 1993)
C.	Ṭiyare	SE Turkey	(Talay 2008)

Table 3. (continued)

J./C.	DIALECTS	LOCATION	SOURCES
C.	Ṭuroyo	SE Turkey	(Jastrow 1985, 1992; Ritter 1967-71, 1990)
C.	Urmi	NW Iran	(Marogulov 1976; Murre-van den Berg 1999; but see now Khan 2016)
J.	Urmi	NW Iran	(Garbell 1965a; Khan 2008b)
C.	Zaxo	NW Iraq	(Hoberman 1993)
J.	Zaxo	NW Iraq	(Sabar 2002, Cohen 2012)

It will be argued that, although accusative alignment prevails in the majority of the NENA dialects, the expression of the perfective past (Chapter 4) and perfect and/or resultative (Chapter 5) presents several cases of extraordinary complex agreement patterns in several dialects. Indeed, such transitive constructions will be shown to increase the complexity and possible form variants with respect to the imperfective in virtually all dialects that are discussed. I will demonstrate that all known major alignment patterns are represented in the NENA dialects in some domain of their grammar and some of them in unexpected ways. Nevertheless, since transitive clauses can be expressed so differently, it will not always prove to be easy to capture an alignment type in traditional terms. I will advance arguments for a few possible instances of ergative alignment that were hitherto not analyzed as such²⁸. It should be pointed out that several dialects are selected as representative of a certain type and that generalizations regarding such types remain incomplete until further, more exhaustive dialectal studies.

Chapter 6 compares the findings for NENA with Central Neo-Aramaic. Central Neo-Aramaic closely resembles NENA in many ways but also shows noteworthy differences, particularly in the combinations of agreement and prepositional marking. The richer voice system is an important difference not only with NENA but also within the Central Neo-Aramaic dialects.

Finally, in Chapter 7, the general conclusions are presented in an overview of alignment types in Eastern Neo-Aramaic. The alignment types and related phenomena described for both NENA and Central Neo-Aramaic are compared and placed in their broader typological context.

²⁸ Recently, however, Khan (2017) independently came to a similar conclusion for some of these.

2. CLAUSE STRUCTURE AND ALIGNMENT TYPOLOGY

Alignment typology seeks to capture variation in clause structure by comparing the way arguments are treated in core grammatical functions. Alignment is first and foremost a property of constructions and not of a language as a whole (Comrie 1989:114; cf. Croft 2001:168; Haig 2008). This perspective of form-meaning pairings allows us to capture the complexity and variation within and across languages in terms of core argument groupings. Following a brief introduction to such a constructional approach of grammar (Section 2.1), this chapter will discuss the basic alignment types mainly within the model of Comrie (1989; cf. Dixon 1994) and Andrews (2007) but it will also draw on major typological studies of alignment. Taking this approach, it will outline the following five major distinctions in clause structure:

- (1) **grammatical relations:** subject, object, others
- (2) **grammatical functions:** S, A, P, T, R, OBL
- (3) **pragmatic functions:** topic, comment, focus, others
- (4) **semantic roles:** agent, patient, theme, recipient, experiencer etc.
- (5) **grammatical cases:** nominative, accusative, dative, ergative, etc.

The core grammatical functions S, A, P, T and R are sometimes also termed ‘syntactic roles’ in the literature in order to distinguish them from semantic roles. They are the key (comparative) concepts for the typology of alignment. The term ‘case roles’ will be avoided because of ambiguity with grammatical case declensions. Which of these grammatical functions are treated in the same way in the morphology or syntax determines the alignment type. Strictly speaking, as we will see, they are not fully equivalent to grammatical relations or semantic roles but there is a certain degree of overlap. Constructions and, hence, alignment types can co-vary or be constrained depending on different grammatical factors. Constructional splits are generally conditioned by verb-related properties (Section 2.3.) such as tense and aspect and argument-related properties (Section 2.4.) such as animacy. This chapter concludes with a discussion of larger surveys of alignment in languages across the globe. This provides us with the typological tools needed to capture the microvariation in alignment patterns in Eastern Neo-Aramaic languages.

Functional typologists adopt (sometimes universal) functional explanations for why certain patterns are favored cross-linguistically (e.g. Givón 1979, 1990, 1995, 2001; Foley and Van Valin 1984; Langacker 1987, 1991a-b; Croft 2001). It

is a common assumption among such typologists, for instance, that the cross-linguistic variation is largely not random but due to general cognitive principles and an iconic relationship existing between the speaker's experience and the constructions they choose (e.g. Givón 1985b). What is more in line with speakers' experience is easier to process, and, because they are easier to process, constructions that maximally correspond with speakers' experience are preferred over others. A few of these functional motivations will be reviewed. Yet, there are numerous other factors that contribute to preferences in alignment typology. Apart from language-particular factors, the historical development of the source construction and areal factors concerning replications or transfers from one language to another are pertinent. They may be equally or even more germane to why alignment varies or is manifested in this way in a given language (e.g. Creissels 2008). Bickel (2008), Bickel et al. (2015) and the contributions to the special issue on hierarchies in alignment in *Linguistics* 54/3 (Haude and Witzlack-Makarevich 2016) are examples of recent studies and surveys that argue that functional typological generalizations have been overstated and historical and area-specific factors have more explanatory scope and power. None of the generalizations made in this monograph, therefore, are intended to be taken as universally true (i.e. inferences of universals about human language).

2.1. Construction Grammar

A few scholars (e.g. Doron and Khan 2012) have approached Neo-Aramaic from a generativist perspective of phrase structure. Since this may lead to different interpretations of the data, I should point out that, throughout this monograph, constructions are taken in the broadest and most common sense as form-meaning combinations at all possible levels of abstraction, ranging from word formation patterns to contextual pragmatic inferences of word order. From a constructional perspective (among others, Goldberg 1995; Croft 2001; Booij 2010, 2013), lexical and rule-based components of grammar are part of the same spectrum and can freely interact. On this view, syntactic structure is not an autonomous, complete and closed sentence-generating system but a part of a larger total process of pairing form and meaning. Constructions themselves are viewed as integrated wholes and independent units of grammatical meaning.

To illustrate, consider, for instance, example (6) below, taken from a Neo-Aramaic dialect spoken by the Jews of Koy Sanjaq in NE Iraq:

- (6) *waxt=ile pel-Ø*
 time=it_M.is SBJ:fall-he
 ‘He is about to fall.’ (Mutzafi 2004a:249)

The word *waxt* meaning ‘time’ is combined with the enclitic copula *ile* meaning ‘he/it_M is’ and would independently mean ‘It is time’. The main verb immediately following this is in the subjunctive and inflected for the subject: *pel-Ø* ‘that he fall(s), might fall’. The configuration of these specific word forms constitutes a construction that expresses the proximative. The proximative refers to a state of affairs just prior to the beginning of an event, much like English expressions such as *be about to happen*, *on the verge of*, and *on the point of happening* (Noorlander 2017). This proximative construction cannot be derived immediately from the individual parts, which, in (6), would literally entail ‘It is time (that) he might fall’. It is only the combination of *waxt*, the copula *ile* and the subjunctive that would give this proximative reading.

This approach allows syntactic structures to be both lexically restricted and rule-governed to different degrees. It also recognizes some arbitrariness in linguistic forms, such that even morphology void of content is meaningful in light of the whole (e.g. Booij 2010, 2013). Consider, for example, the following similar proximative construction in the Neo-Aramaic dialects of the Jews of Zakho in NW Iraq. The word form *waxta* combines with a subjunctive and expresses the proximative, e.g. *waxta māyās-Ø* ‘He may die any moment’ (Sabar 2002: 154). In this case, there is no additional copula *ile* as in (6) above but it is the additional final *-a* that makes *waxt* a proximative marker; without it, it would simply mean ‘time’. Moreover, there is no other context where the addition of this vowel would give rise to a proximative meaning²⁹. The element *-a* can, therefore, only make sense considering the construction in its entirety.

A specific grammatical pattern may thus arise in a conflux of divergent processes that may involve more directly or indirectly features such as internal variability, semantic compositionality, structural arrangement, syntactic flexibility, idiomaticity, discourse setting, usage constraints and so on. Form and meaning are, thus, both taken in a broad sense. As constructions are assumed to be holistic and multilayered in nature, any subset of the speakers’ linguistic system

²⁹ It should be noted that the *-a* of *waxta* possibly reflects the Kurmanji (Northern Kurdish) copula *=e* in *wext=e* pronounced /waxt=a/ ‘lit. time=it.is’, which was replicated as a fixed expression *waxta* ‘almost’ into Neo-Aramaic. Nonetheless, the final *-a* in *waxta* does not convey any meaning by itself and is not used as a copula in Neo-Aramaic as it is in Kurdish.

and their social-communicative context may be engaged in constructional variation and innovations. While remaining a considerably complex linguistic unit, speakers can adjust or expand its usage and reshape its architecture, having the full potential of leading a life of its own within a single speech community such as Neo-Aramaic.

The variation of alignment in Neo-Aramaic is inextricably bound to the 'life span' of a specific combination of a particular inflectional base (*q̄til-*) as well as a particular set of person forms or the preposition *l-*. We can study the variation (and evolution) in the syntactic and semantic features of this construction, while its main lexical and morphological properties remain largely the same. This would not be possible in a theory where morphology is only a surface phenomenon. Construction grammar provides a framework that is linked with particular constructional morphology and its usage.

2.2. The Core Functions of Arguments and Basic Alignment Types

Following Comrie (1978, 1984) and Andrews (2007), a distinction will be made between core and non-core arguments. The core grammatical functions labelled S, A and P as well as T and R, which are, respectively, reminiscent of (but not identical to) the notion 'subject' and the semantic roles 'agent', 'patient', 'theme' and 'recipient'. These labels practically represent arguments of similar semantics and morphosyntax in the broad sense rather than the narrow sense. They are adapted to cover language-specific conventional marking of arguments beyond the primary clauses that instantiate them. The core functions A and P are defined by both their semantic and constructional prototypes, so that they, by definition, occur in a primary transitive construction (such as *The cat killed the mouse*). Thus, they are not to be conflated with the agent and patient of a passive voice construction.

These grammatical functions, also known as syntactic roles, can also be assigned pragmatic functions such as topic and comment. In communicating who did what to whom, speakers also make distinctions in the information flow and express what they consider more or less important to the conversation. Andrews (2007) differentiates further between grammatical functions and grammatical relations. Grammatical relations such as 'subject' and 'object' pertain to higher levels of abstraction and rule-based principles of grammar. The 'subject' is a structural, primitive ingredient that accumulates several primary semantic, pragmatic, coding and syntactic properties. The grammatical functions such as the S, A and P can be considered a 'subject', when the significant grammatical

processes of sentence structure specifically apply to them. Such more abstract syntactic properties are commonly known as behavioral-and-control properties against coding strategies such as nominal and verbal morphology. In examining shared and unshared properties, grammatical functions can align or not align with each other. Typologists discern several distinct types of morphological alignment such as accusative and ergative where shared coding properties align specific arguments with the S. In syntactic alignment, the shared behavioral respectively syntactic properties may also point to a particular grouping of the A or P with the S. Such syntactic properties will be largely left out of the discussion and special attention is given to the morphological alignment types.

2.2.1. Grammatical Functions: S, A, P, T and R

Alignment typology presupposes a major classification of verbs in terms of basic combinability with slots to be filled by (pro)nominals called arguments representing the main participants entailed by the clause. Verbal constructions generally comprise up to three core arguments and are classified accordingly as intransitive involving one argument and transitive involving two or more. The latter is further divided into monotransitive and ditransitive constructions. Monotransitive verbs such as ‘break’ involve one argument, the object, in addition to the subject, typically the patient affected by an agent. Ditransitive verbs such as ‘give’ involve two additional arguments, one generally called ‘recipient’ representing the goal, receiver or addressee and the other generally called the ‘theme’ representing the gift.

Typologists generally presuppose a qualitative core of primary transitive verbs. Primary transitive verbs express physical causation such as ‘break’ and ‘kill’, i.e. those verbs where the agent acts in such a way that the patient is most obviously and definitively affected (Tsunoda 1985:387). Following Comrie (1978; 1984) and Andrews (2007), alignment patterns will be described by means of the grammatical functions S, A and P (or O)³⁰. (7) offers a simple definition in terms of semantic properties and the primary syntactic function following Comrie (1984).

(7) Definitions of S, A and P (following Comrie 1984)

³⁰ S, A and P are similar but not necessarily equivalent to S, A and O in Dixon (1994) and Bickel (2011), see Haspelmath (2011a). Compare also X, Y and Z in Lazard (1994, 1998) and A for actor and U for undergoer in Foley and Van Valin (1984).

- S** represents “the single argument of an intransitive predicate” (Comrie 1989:110), such as *He* in (9a) below, and this argument is, therefore, by definition its subject;
- A** stands for the agent, the actor (cf. Latin *agens* ‘one who acts’) in a primary transitive construction such as the subject *I* of the transitive verb ‘kill’ in (9b) below;
- P** is the label for the patient, the undergoing (cf. Latin *patiens* ‘one who undergoes’) or affected participant in a primary transitive construction such as the object *him* of ‘kill’ in (9b).

Subsequent, similar approaches also include accordingly the **R** for the most recipient-like argument and the **T** for the most theme-like argument in ditransitive constructions (e.g. Croft 1990, 2001; Siewierska 2003; Andrews 2007; Haspel-math 2005a)³¹:

(8) **Definitions of T and R**

- T** stands for ‘theme’, the argument which is most like some entity that is transferred from one entity or location to another in a ditransitive construction such as *the book* in (9c) below;
- R** stands for ‘recipient’, the argument that is most like the receiver or ultimate goal of the transfer such as *to me* in (9c) below.

	[S]	[V]		
(9) a.	<i>He</i>	<i>died.</i>		(intransitive)
	SUBJECT			
	[A]	[V]	[P]	
b.	<i>I</i>	<i>killed</i>	<i>him.</i>	(monotransitive)
	AGENT		PATIENT	
	[A]	[V]	[T]	[R]
c.	<i>Jane</i>	<i>gave</i>	<i>the book</i>	<i>to me.</i> (ditransitive)
	AGENT		THEME	RECIPIENT

In a purely lexical sense, transitive verbs would contain an endless number of semantic roles that are realized as their two arguments. If ‘eat’ implies an eater and something or someone eaten, then ‘frighten’ implies a frightener and something or somebody frightened, and ‘know’ implies a knower and so on.

³¹ The **R** corresponds with **G** for ‘goal’ in other functional-typological approaches like Croft (1990:102).

Linguistically, it makes perfect sense to reduce such as semantic roles to a few general grammatical functions, since languages tend to systematize the way they realize arguments (Andrews 2007). In purely semantic terms, the A argument is defined according to what degree it is semantically like a typical agent and P to what extent it is semantically like a typical patient (or unlike a typical agent). Yet, somewhat confusingly, the terms ‘A’ and ‘P’ do not represent the merely semantic, participant roles of ‘agent’ and ‘patient’. A and P stand for primary syntactic functions defined by both their semantic role and grammatical function. In other words, agents and patients are typically associated with but not a necessary condition for specific coding and syntactic properties (Comrie 1989:111).

In this approach, the core grammatical functions (S, A, P, T, R) are not presupposed to operate differently on a deep or surface level of the sentence. Superficial alignment types are not subsumed under a deeper alignment type. There are semantic prototypes associated with primary transitive actions that correlate with the morphological and syntactic properties of a model construction in which they occur³². S, A, and P are neither simply semantic roles nor simply syntactic functions; rather they both have a semantic and constructional basis. S, A and P are functions that minimally occur in the primary, i.e. most typical, transitive clause that also defines them semantically. When A and P are lacking, the clause is not considered transitive.

In Comrie’s view, there are no deep or logical arguments A and P that surface or lexicalize differently in, for example, passivization. In a passive construction like *The woman was hit by the man* represented in (10b) below, the core argument *the woman* is in fact considered to be the S, while *the man* introduced using a *by*-phrase is understood to be oblique (Comrie 1989:114). This means that the A and P only occur in (10a) but not in (10b).

	[A]	[V]	[P]	
(10) a.	<i>The man</i>	<i>hit</i>	<i>the woman.</i>	(active)
	AGENT	TRANSITIVE	PATIENT	
	[S]	[V+PASS]	[OBL]	
b.	<i>The woman</i>	<i>was hit</i>	<i>(by the man).</i>	(passive)
	PATIENT	INTRANSITIVE	AGENT	

³² See Haspelmath (2011a) for a comparison of Comrie’s approach with other approaches toward alignment.

The patient in the P-function of (10a) corresponds the S-function of a passive voice construction, while the agent, if expressed, in the A-function corresponds with the oblique (i.e. non-core) argument (= OBL). I use the term oblique argument here in the same sense as Andrews (2007; cf. Keenan and Comrie 1977:66) to refer to an argument specified by the verb but expressed differently from the core grammatical functions S, A and P. This is different from adjuncts which are always considered oblique but have a more adverbial function (such as *on Monday* in *The woman was hit on Monday*).

This might seem confusing to some readers at first face value, because, from a purely semantic role perspective, *the woman* would still be considered the patient and the oblique argument or prepositional phrase *by the man* expresses the agent. In this model of clause structure, however, a passive construction like (10b) may give insight into the treatment of the S in the language in question or into the semantic identity of agents and patients in a language but it is not considered a key example of how a language treats the A and P.

Conversely, the antipassive is an intransitive construction where the agent is expressed like the S, the patient is omitted or possibly expressed as OBL, and the verb may have a special marker (Comrie 1978:361- 362, Cooreman 1994:50). An illustrative example is given below from Dyirbal, an Australian language. Like the passive, its functions and restrictions differ from language to language but as a construction it is largely uniform. Although semantically transitive, it is morphosyntactically intransitive and, therefore, lacks an A and P. The A of the transitive clause in the Dyirbal example is treated similarly to the S of the verb in the antipassive construction in (11b) The antipassive as such is the mirror image of the passive in making the patient rather than the agent is less salient and the activity more central, respectively, identifiable (e.g. Cooreman 1994).

(11) **Dyirbal** (Australia, North Queensland; Comrie 1978:358, 360, 348, glossing slightly simplified, original source cited therein)

	[P]	[A]	[V]	(active)
	PATIENT	AGENT	TRANSITIVE	
a.	<i>Balam wudʷu</i> fruit-ABS	<i>baŋgul yaɾaŋgu</i> man-ERG	<i>dʷaŋga-nʷu</i> eat-TENSE	
	'The man eats fruit.'			

	[S]	([OBL])	[V+ANTIP]	(antipassive)
	AGENT	PATIENT	INTRANSITIVE	
b.	<i>Bayi yara</i>	<i>(bagum wud^vu-gu)</i>	<i>dʷaŋgay-mari-nʷu</i>	
	man-ABS	fruit-DAT	eat-REFL-TENSE	
	‘The man eats (fruit).’			

Thus, both passive and antipassive are semantically transitive but typically morphosyntactically intransitive. The passive decreases the valency and down-plays the agent to the periphery as omissible (A vs. OBL), while the patient becomes the subject of an intransitive construction (P vs. S). This operation is also commonly known as a type of detransitivization, since the passive comprises an intransitive valence pattern. The reverse is known as transitivity where the valence increases and the verbal construction becomes a transitive valence pattern.

Naturally, languages may categorize verbs and systematize semantic roles differently. S, A and P are grammatical functions meant to be heuristic tools to describe, compare and capture language as well as construction-specific morphosyntactic groupings of arguments that are expressed in a more systematic fashion. Verbs denoting mental causation such as ‘frighten’ and mental states such as ‘see’ and ‘like’ tend to follow the same coding strategies as primary transitives, even though semantically speaking their subject and object are respectively not an agent and patient. In a comparable way, primary ditransitive verbs generally include verbs of physical transfer such as ‘give’, ‘sell’, and ‘bring’ where a giver causes an item to come into possession of an animate receiver and certain verbs of mental transfer such as ‘tell’, ‘show’ and ‘teach’ that, cross-linguistically, tend to follow the same pattern (Malchukov et al. 2010b).

Similarly, languages differ to what degree certain properties are relevant to the agent’s and patient’s involvement in the event are also conventionalized in the grammatical structure. Some languages have specific constructions to express events where the agent acts unintentionally, for example, differently from where the agents acts intentionally (e.g. DeLancey 1984, 1987; Croft 1991:168; Kittilä 2005; Fauconnier 2011b, 2012). Such unintentional interpretations, however, are generally contributed by the anticausative verb with an intransitive valence pattern typically denoting a spontaneous and, thus, uncontrolled event (e.g. Haspelmath 1993a; Kittilä 2005; Shibatani 2006; Fauconnier 2011b, 2012). Moreover, in many cases, the intentionality is not directly relevant to the clause structure of a language (compare English *John broke his leg* where the intentionality is ambiguous; Andrews 2007; Fauconnier 2012:94-100). Similar-

ly, partial or complete affectedness of the patient can be grammatically significant in languages favoring an intransitive construction for the less affected patient (e.g. Hopper and Thompson 1980; Tsunoda 1981, 1985; Dowty 1991) but this is by no means a necessary requirement such as the transitive verb *hit* in English (Andrews 2007).

One should note, however, that the concept for a primary construction appears to apply much less so to constructions in which T and R occur. Languages may not have an obvious primary ditransitive construction at all (Malchukov et al. 2010b:2). Moreover, recently, Haude and Zúñiga (2016) argue that languages may have more than one basic transitive construction depending on discourse-pragmatic factors. Consequently, this makes it difficult to typify such alignment patterns. Also Neo-Aramaic languages, as we will see, make use of several transitive constructions that could be characterized as basic depending on various factors.

In the end, transitive clauses, by definition, include the A and P. When A and P are lacking, the clause is considered intransitive, so that one of the arguments is considered S-like (and/or something else, i.e. OBL). Although the A and P are defined and identified on the basis of primary transitive situation, the functions and morphosyntax correlating with the A and P often include verb classes otherwise not characterized as typically transitive (Comrie 1989:111; Andrews 2007). Languages differ in what respect they allow the syntactic functions A and P to include arguments that do not instantiate the semantic features attributed to an agent and patient. Consequently, the A and P defined by a subclass of verbs can be extended to describe the same conventionalized clause structure of other verbal classes in those languages, although they are semantically distinct from the agent and patient (Comrie *ibid.*).

2.2.2. **Pragmatic Functions: Topic and Focus**

Pragmatically speaking, a sentence contains a main clausal topic referent, i.e. what is being talked about in the discourse. Hence, the remaining elements are called the comment, as they offer information about the topic. This topic referent, once introduced, is familiar to the listener. When topic referents are the same across clauses, we speak in terms of topic continuity. In a sentence such as *Mary is going to bed, because she is tired*, *Mary* is the topic and this is continued by *she* in the next clause, the referent being known/identifiable to the listener through the immediate context. Languages typically express the topic by means of anaphora (such as *she*) and sometimes even by means of topicalization con-

structions, especially in the case of a switch of topic referent (such as the *as for* x-phrase in English, e.g. *As for John—, he, too, is tired*).

Focus, like topic, is another functional category in the information structure analysis of the discourse. Simply put, focus highlights some piece of information that somehow stands out because it is not presupposed but asserted while the remainder expresses what is presupposed to be familiar to the listener (Givón 1979, 1995; Lambrecht 1994). A focal referent is most clearly represented by Mary in cleft constructions like *It is Mary who stole my beer (and not John)*. A focal argument typically expresses unexpected, new information, and may be contrasted with an alternative identity.

2.2.3. Coding and Behavioral Properties

Following the semantic and constructional definition of grammatical functions, we proceed with the manifestation of arguments. This is generally subdivided into coding and behavioral properties in typological studies (after Keenan 1976). Coding properties define the morphological expression of arguments in a language. Behavioral properties (also known as behavior-and-control properties) are (language-specific) syntactic constructions that may be preferred, respectively, disfavored for particular functions (S, A, P etc.) and are relevant to the determination of syntactic alignment types.

This monograph is mainly concerned with coding strategies and, thus, only morphological alignment, as in many languages of the world such syntactic processes are relevant only to the S and A. These coding strategies generally involve (i) and (ii) but also sometimes (iii) below:

- (i) case-marking;
- (ii) agreement
- (iii) word order.

This monograph concentrates on the coding properties in terms of (i) case-marking and (ii) agreement which are further explained below³³. Word order is generally also subsumed under coding properties and can be a contributing factor to argument discrimination in transitive constructions. It may also be

³³ The terminology and accompanying ideas vary in typological literature. Nichols (1986, 1992) distinguishes between head- and dependent-marking respectively, Andrews (2007) between NP-marking and cross-referencing, and more recent typological literature such as Malchukov et al. (2010a) between flagging and indexing.

considered a behavioral property instead (Haspelmath 2010)³⁴, especially when a language has flexible word order and the relative position of arguments primarily hinges on discourse properties rather than role semantics irrespective of ergative or accusative morphology (Givón 1995:255-256). Moreover, various other constituents could affect argument placement in more complex constructions. Indeed, it will be argued in §2.2.5 that word order potentially leads to ambiguity and, hence, will only be considered if the argument's position relative to the verb is distinctive enough (as in, for example, English).

Case-marking and agreement are ultimately functionally equivalent as syntactic role signals and may even overlap (Siewierska and Bakker 2009; Kibrik 2012) but there appear to be differences, even in their relationship to word order. Siewierska and Bakker (2009:296-299) indicate that word order is geared toward information processing in discourse and correlates more strongly with case-marking than with agreement. For instance, arguments placed consistently before the verb (e.g. A-P-V) are more likely to be distinguished through case-marking than those consistently placed at either side of the verb (e.g. A-V-P, P-V-A). The obvious reason that Siewierska and Bakker give for this is that the linearization of arguments in verb-final constructions contributes much less to role discrimination than distinct case-marking.

2.2.3.1. Case-Marking

Case-marking is the morphological indication of grammatical functions by manipulating or adding an affix or adposition to the form of the nominal argument itself. Case-marking (cf. Comrie 2005:398), thus, subsumes not only affixal case declensions (e.g. Arabic NOM *'al-walad-u*, ACC *'al-walad-a*, etc. Latin NOM *dominus*, ACC *domin-um* etc.) but also adpositional marking through, for instance, pre- or postpositions or particles (e.g. Hebrew accusative/differential object marker *'et*, Spanish object marker *a*). Case-marking typically also includes oblique arguments and adjuncts (such as locative and temporal expressions).

2.2.3.2. Agreement

In alignment typology, agreement involves the co-referencing the person, number and/or gender features of an argument in the clause. Agreement is typically though certainly not necessarily confined to core grammatical functions (cf.

³⁴ One may consider, for instance, the potential for word order shifts in interrogative, relative and passive clauses which are syntactic processes typologists subsume under behavioral properties.

Corbett 2006). Corbett (2003, 2006) distinguishes between controller and target. The controller is the element, in our case an nominal coreferent, that determines agreement. The target is the element that determines the form it takes. Haspelmath (2013), following Lazard (1998), prefers the term person indexing, since there is no universally accepted definition of agreement (cf. Siewierska 2004:120). The form, then, is called the agreement marker or index, serving as a target for the controller. Agreement need not be precluded to the S and A in a language. Thus, as shown in (12) below, when we consider the theme *kespā* ‘silver’, the NP itself is the controller and the target is the verb *šdy* ‘throw’ where the person index -y, traditionally known as a pronominal suffix or pronominal copy, agrees with it.

(12) **Syriac** (Northwest Semitic, Aramaic)

[V-A-T]	→	[T]	
<i>šdā-Ø-y</i>		<i>kespā</i>	<i>ḥ-hayklā</i>
threw-3MS-3MS		silver:MS	in-temple:MS
‘He threw said silver into the temple.’ (Matthew 27:5, 5 th c. <i>Pšitta</i>)			

Following Siewierska (2003) and Bickel et al. (2013), agreement or person indexing can be further differentiated by several factors that may lead to discrepancies in alignment. The first question is whether agreement is possible at all, and, if so, in what form and to what extent. Morphologically, the markers are not only compared in terms of phonological form but also in terms of the relative position, respectively, left-to-right order of affixes³⁵ (e.g. the markers are prefixal for the S and A but suffixal for the P). Furthermore, it may be relevant how the arguments align in triggering agreement at all (e.g. only the S and A trigger agreement but never the P) or under specific conditions (e.g. agreement with the S and A is conditioned by word order or agreement with the P argument is conditioned by definiteness)³⁶. This trigger potential of agreement may also be graded in terms of obligatoriness, i.e. if agreement is possible, is it optional or obligatory (see further below):

(13) impossible > optional > obligatory

³⁵ See also Kibrik (2012). However, affix position is confined to clear distinctions between prefixal and suffixal forms in this monograph, since the relative position of dependent person forms that are all prefixal or all suffixal is not clearly significant for alignment, see Subsection 2.2.3.3.

³⁶ Auxiliary and serial verb constructions are also subsumed under agreement.

Person forms, also known as anaphoric pronouns, may be dependent (or bound, i.e. affixal or clitic) or independent (i.e. free). Independent person forms are generally included in nominal marking and are required when dependent equivalents are not available³⁷. Only dependent person forms qualify as agreement markers and can index a coreferential nominal³⁸. Some linguists make a sharp distinction between affix and clitic as subtypes of bound morphology. The distinction is, however, taken to be fuzzy in this monograph, since the categories clitic and affix can lead to ambiguity (cf. Haspelmath 2011b), although, naturally, not all dependent (or bound) morphology will show the same usage patterns. Yet, the terms cannot be avoided altogether for practical reasons as they are, for instance, generally used in the literature (e.g. in Aramaic studies), though without implying a strict categorical demarcation in this monograph.

The difference between pronominal affixes and agreement markers is also not always clear-cut (cf. Corbett 2003). Person forms are not necessarily also anaphoric pronouns. Personal pronouns are by definition referential and definite, while this need not apply to the coreferent of person indexes, respectively, agreement markers (Siewierska 2004:121-127). Moreover, the nominal coreferent is always the same constituent in the clause for grammatical agreement markers, while this is not required for anaphoric pronouns. By the same token, first and second person forms are also distinct from third person forms in being deictic against anaphoric. They are virtually always identifiable; whom they refer to is presupposed, while the third person need not be³⁹.

Siewierska (2004:126) makes the following main distinctions in the typology of person forms depending on the presence, respectively, absence of a controller respectively nominal coreferent for which Haspelmath (2013) introduces new terminology. Table 4 offers an overview of these types. Haspelmath applies the term gramm-index for what is more generally known as a person agreement marker, where the coreferential nominal is obligatorily expressed such as the English verbal ending *-s* that requires a conominal (i.e. ***come-s* for 'He/she/it comes'). He suggests to avoid the term pronominal agreement marker and to use pro-index instead for cases where the coreferent is impossible. For example, unlike Syriac in (12) above, the object index *-hu* in Classical Arabic typically

³⁷ Universal G. in Haspelmath (2013:222).

³⁸ Universals A. and B. in *ibid*.

³⁹ Haspelmath (2013) proposes to reserve the term pronoun for unambiguous noun substitutes such as the English pronouns *this one*, *mine* and *he* which could only be anaphoric/cataphoric to a nominal and the term argument index for, respectively, agreement markers.

lacks a conominal so that one does not say ***ra'ay-tu-hu l-kalba* (lit. saw-I-him the-dog) for 'I saw the dog'. Siewierska uses the term ambiguous agreement marker for when the coreferential nominal is optional (also known as pro-drop). It is either a person or a pronominal agreement marker (e.g. Latin *veni-t* 'He is coming' besides *Marcus veni-t* 'Mark is coming'). Haspelmath (2013:207-208, 211-212) argues that taking such person forms to be ambiguous merely presupposes that the meaning should not be expected to receive double grammatical expression; an assumption which he questions given that it is cross-linguistically not unusual. He considers such person indexes a unique type of their own where both the index and the coreferential nominal constitute the argument (i.e. both *Marcus* and *-t* in *Marcus veni-t*) and proposes the term cross-index instead.

Table 4. *Types of person forms*

AGREEMENT MORPHOLOGY ('TARGET')		COREFERENTIAL NP ('CONTROLLER')
Siewierska (2004)	Haspelmath (2013)	
person agreement marker	gramm-index	obligatory
ambiguous agreement marker	cross-index	optional
pronominal agreement marker	pro-index	impossible

The typology of person forms given in Table 4 also reflects diachronically the following grammaticalization process (Siewierska 1999:231; Haspelmath 2013:222):

(14) pro-index > cross-index > gramm-index.

The shift from pro-index to cross-index is a well-known development found in, for example, Semitic languages (cf. Khan 1988). Independent person forms become increasingly dependent on the host (e.g. the verb) to end up as differential agreement markers via topicalization constructions (cf. Givón 1976; Lehmann 1988). The target becomes increasingly obligatory in more routine-driven grammatical functions as fully integrated person indexes.

- [V-A-P]
d. *ɖarab-a-hu* (transitive)
beat_{PFV-A:3MS-P:3MS}
‘He beat him.’

By contrast, word order is arguably considered relevant in languages like English where the P typically follows the verb but the S and A occupy pre-verbal position as observed in the translation of the examples above. Affixal position for the alignment of the indexes is clearly relevant in the following intransitive and transitive constructions from Chorti (Mayan, Guatemala) taken from Siewierska (2003:343). The coding of the S matches that of the P both in form (*-et*) and position (suffixal). The person marking of the A is distinct in form (*a-* vs. *-et*, *in-* vs. *-en*) as well as position (prefixal vs. suffixal). The indexing patterns ergatively on all accounts.

- (16) **Chorti** (Mayan, Guatemala; Siewierska 2003:343, original source cited therein, glossing adapted)

- [V-S] (intransitive)
a. *wayan-et*
sleep-S:2SG
‘**You**_{SG} slept.’
[A-V-P] (transitive)
b. *in-ira-et*
A:1SG-saw-P:2SG
‘I saw **you**_{SG}.’
c. *a-ira-en*
A:2SG-saw-P:1SG
‘**You**_{SG} saw me.’

2.2.3.4. Behavioral Properties

Behavioral properties are among others the control of reflexives, relativization, interclausal co-referential reduction (sometimes termed equi NP-deletion) and same subject constraints in adverbial clauses such as the complement of modal verbs like ‘can’, ‘want’, ‘begin’, ‘finish’ etc. (e.g. Keenan 1976; Silverstein 1976; Dixon 1979, 1994). The anaphoric deletion of an equivalent NP across clausal chains, for instances, may be a syntactic process peculiar to particular grammatical functions. This is, if applicable in the language, also manifested in the control of verbal agreement of clausally connected verbs. The cross-clausal co-reference of the S and A is the same in accusative syntax. A typical example in

English is offered in (17) below taken from Comrie (1988) where the S and A control anaphoric deletion and not the P. Equivalent NP coreference in complement clauses or conjunctions are the same for the S and A but distinct from the P in accusative syntax. A particular device may be available to signal a switch of reference, for example, independent pronominalization or a full NP, and indicates that the referents are distinct. If the controller of the anaphoric deletion were distinct in the conjoined intransitive clauses, English would highlight this by expressing the subject as an independent pronoun or full NP (i.e. *The man hit the woman and **she/the woman** ran away*).

- (17) a. $\begin{array}{ccc} [S] & & [S=S] \\ \text{The man}_i \text{ came and } [\emptyset_i] \text{ ran away.} \end{array}$
 $\begin{array}{ccc} [A] & & [P] & & [S=A \neq P] \\ \text{The man}_i \text{ hit the woman}_v \text{ and } [\emptyset_i/**_v] \text{ ran away.} \end{array}$

A morphologically ergative construction generally patterns according to accusative syntactic behavior. In a strictly morphological ergative pattern, then, the ergative A fulfills the syntactic behavior that corresponds with the S of intransitive constructions like the nominative (S=A) in an accusative system. It is, however, rare but possible that ergative alignment is found not only in terms of coding but also in terms of behavior, so that it is the S and P that share more behavioral properties against the A (much like the patient in the passive, see Subection 4.3.1). Dyirbal is an oft-cited example of this where the behavioral properties of the P is like that of the S. As illustrated in (18) below, it is the P that controls anaphoric deletion rather than the A. If the A were intended to control the anaphoric deletion, Dyirbal requires an antipassive construction to indicate such a switch where the agent is expressed as the s (Comrie 1988:11).

- (18) **Dyirbal** (Australia, North Queensland; Comrie 1988:10, glossing slightly simplified)

[P]	[A]		[S=P≠A]
<i>Balan dʷugumbil_y</i>	<i>baŋgul yaɾaŋgu_i</i>	<i>balgan</i>	[Ø _y /**i] <i>baninyu</i>
woman-ABS	man-ERG	hit	came

'The man_i hit the woman_y and (she_y/**he_i) came here.'

2.2.4. *Intransitive-Transitive Alignment Types*

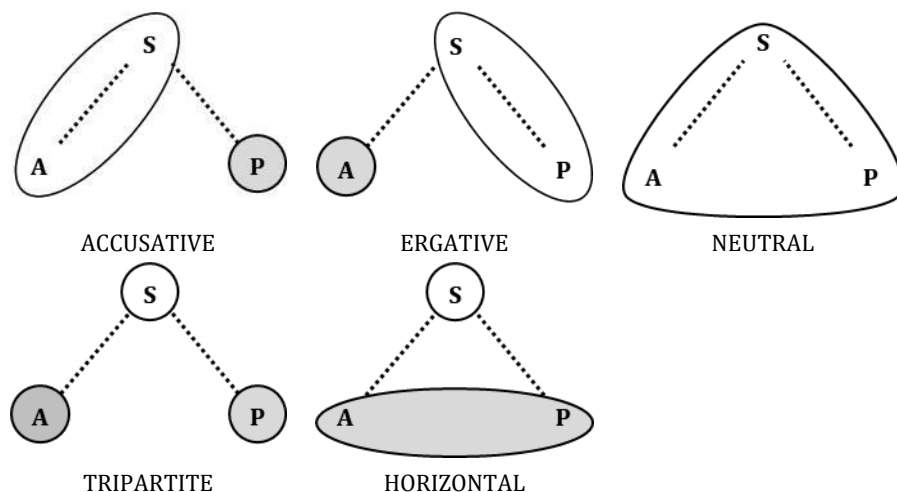
Having outlined the coding properties, we will review the manifestations of alignment. The defining distinction of intransitive-transitive alignment patterns is the grammatical link between the single argument of intransitive constructions and the two arguments of primary transitive constructions (Croft 2012:259). In other words, what defines an alignment type is whether the S is grouped with either the A (S=A) or P (S=P) in its coding (or behavior), if at all. The major types are:

- (i) (A=S≠P) (nominative-)accusative,
- (ii) (A≠S=P) ergative(-absolutive)⁴¹,
- (iii) (A=S=P) neutral and
- (iv) (A≠S≠P) tripartite.

Another minor type that can be distinguished is (v) horizontal alignment where the S is not grouped but the A and P align (S≠A=P).

The alignment patterns we reviewed below can be and generally are represented in linguistics by the following schemas (cf. Comrie 1978:332; Payne 1997:140; Croft 2001:138; Siewierska 2003; Velupillai 2012:239).

Figure 3. *Monotransitive alignment schemas*



⁴¹ It is common for nominative-accusative and ergative-absolutive alignment to be simply labelled according to the case-marker of the isolated argument (accusative for the P, ergative for the A).

2.2.4.1. Accusative Alignment

Firstly, the accusative type, found across many of the world's languages and best-known for the Indo-European languages in Europe, aligns the S with the A and isolates the P (A=S≠P). The Semitic languages that exhibit case declension may serve as an example (see also Hasselbach 2013), such as Akkadian in (19). In terms of case-marking, the nominative case (Akk. sg. *-um*, pl. *-ū*) groups the S and A, whereas the accusative case singles out the P (Akk. *-am*). With respect to agreement, the verb cross-indexes the S and A arguments only. The verbal affix marking of the P is a pro-index. No object index is added in (19b). The S and A, therefore, not only align in terms of morphological marking but also in terms of trigger potential, since nominal P arguments do not trigger indexing to the same degree. The alignment of these constructions as such is accusative throughout.

(19) **Akkadian** (East Semitic, see Huehnergard 1997:6-7, 19-18, 168-169, 98)

- [S←NOM] ← [S-V-S]
- a. ***bīt-um*** *i-mqut-∅* (intransitive)
house-S:NOM:MS S:3-fallPFV-S:SG
'The house collapsed.'
- ↓
- [A←NOM] [P←ACC] [A-V-A] (transitive)
- b. ***ward-ū*** *bīt-am* *i-qqur-ū*
slave-A:NOM:MPL house-P:ACC:MS A:3-destroyPFV-A:MPL
'The slaves destroyed the house.'
- [A-V-A-P]
- c. *ī-qqur-ū-šu* (person indexes)
A:3-destroyPFV-A:MPL-P:3MS
'They_M destroyed it_M.'

2.2.4.2. Ergative Alignment

Whereas the accusative pattern groups the S with the A, the ergative groups the S with the P (A≠S=P). In the following example from Northern Kurdish or Kurmanji, the S and P are formally equivalent but different from A in terms of case-marking and agreement. The first case form (*ez*, *tu*) marks both the S and P and is generally referred to as the absolutive. The second case (*min*, *te*) marks only the A and is termed ergative. The verb consistently expresses equivalent suffixal grammatical agreement with the S and P only. Agreement, therefore, is ergative in both morphological marking and trigger potential.

(20) **Kurmanji** (West Iranian, Turkey; Matras 1997:617-618)

- [S+ABS] ← [V-S]
- a. **ez** **çû-m** (intransitive)
 I:NOM went-1SG
 'I went.'
- b. **tu** **cû-yî**
 you:NOM went-2SG
 'You went.'
- [A+ERG] [P+ABS] ← [V-P]
- c. **te** **ez** **dît-im** (transitive)
 you:OBL I:NOM saw-1SG
 'You saw **me**.'
- d. **min** **tu** **dît-î**
 I:OBL you:NOM saw-2SG
 'I saw **you**.'

2.2.4.3. *Neutral Alignment*

The S, A and P are all treated the same (A=S=P). The following example sentences from English may serve as an illustration:

- (21) a. [S] [V] (intransitive)
 The bride **arriv-ed**
- b. [A] [V] [P] (transitive)
 The groom **kiss-ed** **the bride.**

Distinct morphological marking of the arguments is absent, so that the alignment is neutral in terms of case-marking and agreement. Word order, however, clearly contributes to role discrimination (the P occupies post-verbal position), and, thus, English alignment could be characterized as basically accusative.

Neutral alignment can also manifest itself by non-distinct morphological marking instead of its absence. The neutral type, on the other hand, is sometimes solely understood as the absence of dependent person forms (e.g. Siewierska 2004:52), since the phonologically non-distinct person indexes generally do display a distinct affix position, as exemplified below. The s argument is prefixal, while the A argument is suffixal, even though they are phonologically non-distinct (*dyî*).

- (22) **Reefs** (Papuan, Eastern Outer Islands; Siewierska 2003:343-344, original source cited therein, glossing slightly adapted)

[S-V]

- a. ***dyi-ki-egi*** (intransitive)

S:1DU:INC-ASP-cry

'We cry.'

[P] [V-A]

- b. ***nyenaa ki-bwaki-dyi*** (transitive)

stick

ASP-break-A:1DU:INC

'We broke the stick.'

The relative order of person indexes can even be free in several Bantu languages (e.g. Siewierska 2003:264). As explained in §2.2.3.32.2.5, however, even where the order is fixed, this may lead to ambiguity in determining an alignment pattern. Phonologically non-distinct person forms, therefore, are in principle also treated under neutral alignment here (cf. Siewierska 2003).

2.2.4.4. Tripartite Alignment

Tripartite alignment is the mirror image of the neutral pattern. The S, A and P are each treated differently ($A \neq S \neq P$), as illustrated in the following example from Yazgulyam, a Pamir language. The independent pronouns each enjoy distinct case marking. The first person singular would be *ž-mon* in the object case (Payne 1980:176), yielding *az* for the S, *mon* for the A and *ž-mon* for the P.

- (23) **Yazgulyami** (East Iranian, Pamir; Bickel and Nichols 2009:309, original sources cited therein)

[CASE_I→S] [V]

- a. ***áz=əm mət mad*** (intransitive)

1SG:ABS=1SG

tired

become:PST

'I am tired.'

[CASE_{II}→A] [CASE_{III}→P] [V]

- b. ***mon š-tu wint*** (transitive)

1SG:OBL

ACC-2SG

see:PST

'I saw you.'

2.2.4.5. Horizontal Alignment

Horizontal alignment stands out in isolating the S and grouping the A and P ($S \neq A = P$). It is also known as 'double oblique alignment' after the terminology for case systems in modern Iranian languages where this pattern predominates

(Payne 1980), as illustrated below. The *s* pronoun (*az*) is completely distinct from the *A* and *P* pronouns, while the latter two are the same in the so-called ‘oblique case’ (*mu*). The *s* is also treated differently in triggering indexing via a clitic person form (=um), while the *A* and *P* are not indexed⁴². One should note that the *A-P-V* word order contributes to their role discrimination, the *A* argument coming immediately before the *P* argument.

(24) **Rošani** (East Iranian, Pamir; Payne 1980:156, glossing adapted)

- [ABS:S]-[←S] [V]
a. *az=um tar xār vij* (intransitive)
1SG:ABS=1SG to town be:PERF
‘I’ve been to town.’
[OBL:A] [OBL:P] [V]
b. *mu tā wunt* (transitive)
1SG:OBL 2SG:OBL see:PST
‘I saw you.’
c. *tā mu wunt*
2SG:OBL 1SG:OBL see:PST
‘You saw **me**.’

In some languages, such as Vafsi (Northwestern Iranian, Tati; Stilo 2004b:239-240), the agreement may also be horizontal in terms of trigger potential, since the agreement with the *A* and *P* is largely optional but agreement with the *S* is obligatory.

2.2.5. Ditransitive Alignment types

What characterizes ditransitive alignment patterns is the relationship between the *P* of a monotransitive construction (like the *s*) and the two arguments *T* and *R* of primary ditransitive constructions (like the *A* and *P*, e.g. Croft 1990:101-108; Siewierska 2003; Haspelmath 2005a; Andrews 2007; Malchukov et al. 2010b)⁴³. The major types are:

- (i) (T=P≠R) indirective,
- (ii) (T≠P=R) secundative,

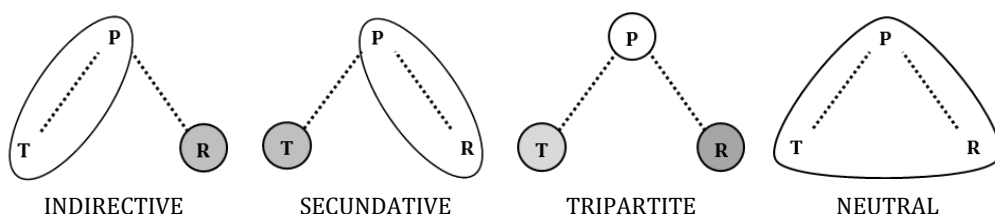
⁴² These clitics also feature in the marking of *A* in other contexts and are extended to clauses like (19b) and (19c) among younger speakers (Payne 1980:158-161).

⁴³ The following discussion in this subsection is based on and closely conforms to the pattern of the literature cited here.

- (iii) (T=P=R) neutral and
- (iv) (T≠P≠R) tripartite.

These four patterns are reviewed below. The fifth theoretically possible type is (v) horizontal alignment where the T and R are grouped and the P is isolated (T=R≠P). Since there is no unambiguous attestation of this pattern (Kittilä 2006:27-28; Malchukov et al. 2010b:6), it will be excluded. The ditransitive alignment patterns are generally represented by the following schemas (compare Figure 3.):

Figure 4. Ditransitive alignment schemas



2.2.5.1. Indirective Alignment

The indirective type (T=P≠R) isolates the R through a (adpositional) indirect object construction while the P and T receive the same coding. The recipient is distinctly marked through the dative, as illustrated by *li-l-mu'allim-i* in (25b) below, or through a distinct set of person indexes, as illustrated by *-rə* in (26b) below. (25) offers an example of an indirective case-marking pattern, the P and T both marked as accusative. (26) offers an example of indirective indexing pattern, the P and T being both zero.

(25) **Modern Standard Arabic** (Central Semitic, Kász 2015:334-336, glossing slightly modified)

	[v] (monotr.)	[P←ACC]	
a.	<i>ḍarab-a</i>	<i>l-walad-u</i>	<i>l-kalb-a</i>
	beatPFV-A:3MS	ART-boyMS-A:NOM	ART-dogMS-P:ACC
	'The boy beat the dog '.		
	[v] (ditransitive)	[T←ACC]	[DAT→R]
b.	<i>'aṭ-at</i>	<i>l-bint-u</i>	<i>l-kitāb-a</i>
	givePFV-A:3FS	DEF-girlFS-A:NOM	ART-bookMS-T:ACC
			<i>li-l-mu'allim-i</i>
			R:for-ART-teacherMS-GEN
	'The girl gave the book to the teacher'.		

(26) **Abkhaz** (Northwest Caucasian, Georgia; Haspelmath 2005a:427, glossing slightly modified, original source cited therein)

a. (monotransitive)

[P] ←	[P-A-V]
<i>A-š°q°-k°à</i>	<i>Ø-z-be-yt'</i>
ART-book-PL	3PL:P-1SG:A-see-FIN
‘I saw the books .’	

b. (ditransitive)

	[R]		[T] ←	[T-R-V]
<i>Sarà</i>	<i>a-x°àč°-k°a</i>	<i>a-š°q°-k°à</i>	<i>Ø-rà-s-to-yt'</i>	
I	DEF-child-PL	ART-book-PL	3PL:T-3PL:R-3PL:A-give-FIN	
‘I gave the books to the children.’				

The indirective pattern is also typical for constructions where dependent person forms are limited to the P and T, so that the R must be expressed independently (Siewierska 2004:60-61). (27) offers an illustrative example of this type from Syriac. Since the verb cannot take additional object indexes, the R is expressed through an independent dative pronoun.

(27) **Syriac** (Northwest Semitic, Aramaic; cf. Muraoka 2005:76-77)

	[V-P]	
a.	<i>q̄tol-ēh</i>	(monotransitive)
	kill:IMPV-P:3FS	
	‘Kill her/it _F !’	
	[V-T]	[DAT→R]
b.	<i>hab-ēh</i>	<i>l-ī</i> (ditransitive)
	give:IMPV-T:3FS	R:DAT-1SG
	‘Give her/it _F to me .’	

2.2.5.2. *Secundative Alignment*

The secundative type (T≠P=R) is the mirror image of the preceding type and is also termed a secondary object construction. The R is grouped with the P (the primary object) but the T is expressed differently through a distinct case-marker or person index. An example of secundative case-marking is found below where the locative expression *ní Yorùbà* represents the theme.

- (30) **Modern Standard Arabic** (Central Semitic; Siewierska 2003:366, transcription and glossing modified, original source cited therein)

[V-T/R]	[A]	[T/R]
'a'ṭā- hu	l-'ustād-u	ʔiyyā-k
gave-3MS	the-teacher-NOM	ACC-2SG

'The teacher gave **him to you** / **you to him**.'

The relative order of dependent person indexes that are identical in form may also be interpreted differently. Siewierska (2003:364) offers the following example from Lomongo. Both object indexes *-m* and *-kaa* could either indicate the T or R regardless of affix shape and order.

- (31) **Lomongo** (Bantu, DR Congo; Siewierska 2003:364, original source cited therein)

a-o-ko-m-kaa
 3SG-PAST-2SG-1SG-give
 'He gave **you to me** / **me to you**.'

2.2.5.4. Tripartite Alignment

An example of ditransitive tripartite alignment is given below. The indexing is distinct for each argument. The suffix *-e* marks the P, the prefix *e-* marks the R, while the T is unmarked.

- (32) **Kanasi** (Trans-New Guinea, Milne Bay area; Siewierska 2003:347, original source cited therein)

	[A]	[V-P-A]	
a.	<i>ne</i>	<i>na-'e-pa</i>	(monotransitive)
	I	eat-2SG:P-1SG:FUT:A	
	'I will eat you.'		
	[T]	[R-V-A]	
b.	<i>kaire</i>	<i>ema</i>	<i>e-ne'e-oa</i> (ditransitive)
	sweet potato	DEM	2SG:R-give-1SG:FUT:A
	'I will give you this sweet potato.'		

2.2.6. Typological Markedness

Traditionally, alignment patterns are further distinguished by overt vs. zero marking (e.g. Dixon 1979, 1994; Croft 1988, 2001:138-146). Various scholars (among them, Tsunoda 1981; Comrie 1989; Lazard 1998) have argued that the

ergative and accusative alignment systems each have their own unmarked case which often has no overt morphological case-marking.

Functional typologists presuppose symmetric or asymmetric functional relationship between form and function. When at least one of the arguments in the transitive counterpart (A, P) is treated similarly to the S, the relation between overt coding and the same treatment as the functionally unmarked S is symmetric for an alignment system where the morphologically and functionally unmarked properties of the form associated with the S also apply to the argument (A, P) it is morphosyntactically grouped with⁴⁴. There are, however, also reverse patterns that lead to asymmetry. These are considered 'marked'.

The unmarked case is expected to be the nominative (S=A) for an accusative case system and the absolutive (S=P) for the ergative counterpart. Functionally, the unmarked case (nominative/absolutive) is used as citation form and more likely to be obligatory and express the topic of equational sentences, while the marked case (accusative/ergative) is more likely to be optional and have various additional functions such as temporal or locative expressions or marking of goals or instruments (Dixon 1994; cf. Handschuh 2015). Formally, if an argument involves zero case coding ($\emptyset$), this is most likely the one grouped with the S (nominative/absolutive), since it is more economical to overtly mark the isolated role (Comrie 1978).

Table 5 offers an example for Classical Arabic and Gə'əz (Classical Ethiopic) which both have an accusative case system. The nominative and accusative may be both equally formally unmarked as displayed for Classical Arabic. The formally unmarked case in Gə'əz is the expected nominative. The reverse would pertain to the marked equivalent. Marked nominative is a distinct subtype of accusative alignment where the P lacks overt coding and is used in citation. Comrie (2005:398) offers an example from Harar Oromo (Cushitic, Ethiopia) which is represented schematically in the last row of Table 5. This would be exactly the reverse in an ergative case system which is displayed in Table 6 illustrated by Tongan (Polynesian, Tonga) and Yup'ik (Eskimo, Alaska). The accusative and ergative alignment types are each other's mirror image in terms of markedness. Marked absolutive is thus far only found in Nias (Malayo-Polynesian, Indonesia) illustrated by the last row in Table 6 where it is the A that lacks overt coding and is used in citation (Handschuh 2015:31).

⁴⁴ One should note that this does not apply to tripartite ($S \neq A \neq P$) or horizontal alignment ($S \neq A = P$).

Table 5. *Zero vs. overt case coding in the accusative type*

	NOMINATIVE (S=A)	ACCUSATIVE (≠P)	GLOSS
Classical Arabic	<i>bayt-un</i>	<i>bayt-an</i>	'a house'
Gə'əz	<i>bet-∅</i>	<i>bet-a</i>	'house'
Harar Oromo	<i>sáree-n</i>	<i>sáree-∅</i>	'dog'

Source: Following Table 4.3 in Croft (2001:139). Harar Oromo data from Comrie (2005:398, original source cited therein).

Table 6. *Distribution of zero vs. overt case coding in the ergative type*

	ABSOLUTE (S=P)	ERGATIVE (≠A)	GLOSS
Tongan	<i>'a he talavou</i>	<i>'e ha talavou</i>	'a young man'
Yup'ik	<i>nuna-∅</i>	<i>nuna-m</i>	'land'
Nias	<i>n-asu</i>	<i>∅-asu</i>	'dog'

Source: Table from Croft (2001:140), slightly adapted, and Nias data from Handschuh (2015:31, emphasis mine, original sources cited therein).

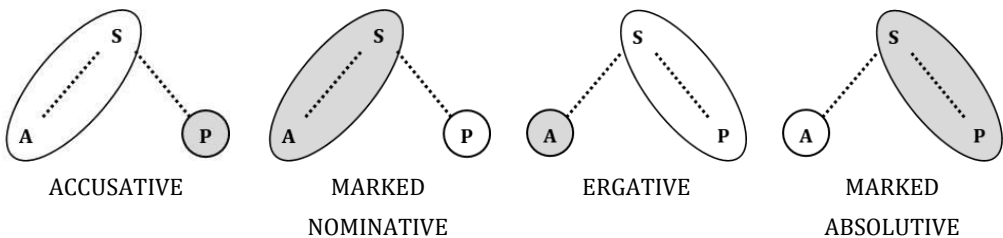
Dixon (1979) introduced the term 'extended ergative' to describe a case-marking system where the case-marker of the A is extended to the S while the P is functionally and morphologically the more default form. Later, Dixon (1994:64) prefers the less confusing label 'marked nominative' instead of 'extended ergative', because the distinction between the S and P is clearly not typical for an ergative system. Moreover, it need not be the case that the P is unmarked, even though a formally ergative case-marker of the A extends to the S. This is, for instance, found in the upper dialect of Waxi, a Pamir language described by Payne (1980:180-181), where not only the special marker of the A extends to the S but the P also has developed a dedicated case marker.

The markedness in the indexing of arguments is defined in terms of trigger potential and possible zero realization (e.g. Dixon 1994:67-68, Croft 1988, 2001:140-141). It is the presence of agreement that correlates with the least marked argument. The P is not overtly expressed in accusative indexing, while the A is not overtly expressed in ergative indexing. In Classical Arabic, for example, full nominal Ps cannot trigger indexing. In Gə'əz, full nominal Ps can trigger indexing but it is conditional, while indexing of S and A is obligatory. Conversely, obligatory indexing of the A but optional marking of the P and S would be marked in the ergative agreement system. In phonological form, the set of indexes that more likely includes zero morphemes is the S and A in the accusative type

and the S and P in the ergative type. Thus, if indexing of the P does occur, zero morphemes would be marked for the accusative grouping, while zero morphemes in the set of agent indexes would be marked in the ergative counterpart.

Figure 5 offers a summary of the major alignment types in terms of markedness so far. One can observe how, strictly in terms of markedness, the P of the marked nominative exhibits the same properties as the P of the ergative and the A of the marked absolutive the same as the A of the accusative (both are outside of the gray area). In this sense, the marked alignment types are neither typically accusative nor ergative. The groupings, however, are clearly identifiable, and, for this reason, it is only logical to subsume ‘marked nominative’ as a subtype under accusative alignment ($A=S \neq P$) and ‘marked absolutive’ under ergative alignment ($A=S \neq P$).

Figure 5. *Marked nominative and marked absolutive compared*



Notes: *The arguments outside of a gray area*

- may display zero coding (case-marking, zero morpheme in agreement affixes)
- have a greater potential to trigger agreement.

Croft (2001:142-146) shows similar coding patterns for the major ditransitive alignment types (indirective and secundative alignment). It is expected that zero or overt coding properties and agreement potential of the patient also apply to the argument (T, R) that it is morphosyntactically grouped with, and not the other way around. For instance, it is considered marked for indirective alignment ($T=P \neq R$) that it is the R that is possibly zero-coded and triggers agreement, while the P and T are overtly coded and do not trigger agreement (i.e. $T=P \neq R$ against $T=P \neq R$). Similarly, one would not expect for secundative alignment ($T \neq P=R$) that it is the T that is zero-coded and triggers agreement, while the P and R are overtly coded and do not trigger agreement (i.e. $T \neq P=R$ against $T \neq P=R$). These unexpected types would be ‘marked primitive’ and ‘marked directive’ (cf. Haspelmath 2005a) but, in fact, only the marked primitive seems to be found thus far where the P and R are zero-coded but the T is overtly coded (Haspelmath 2005a). Moreover, it is unexpected that the possible

zero-coding or a greater trigger potential should apply to the T or R but not to the A and P (Croft 2001:165).

All things considered, zero coding and/or the trigger potential tends to be implicational for the argument grouped with the S (or with the P in ditransitives) which can be formulated as follows:

(33) Implicational distribution of zero vs. overt coding

If the unmarked arguments, i.e. nominative (S+A) or absolutive (S+P), show overt case-marking and can control agreement, the marked arguments, i.e. accusative (P) or ergative (A), will also do so. (after Croft 2001:139-146)

Patterns that go against this tendency or scale are considered typologically marked such as 'marked nominative' and 'marked absolutive' and are rare cross-linguistically. These are given in Table 7. where '0' represent the absence and 'm' the presence of overt marking (following Haspelmath 2005b).

Table 7. *Marked intransitive/transitive alignment types*

	MARKED NOMINATIVE			MARKED ABSOLUTIVE		
	S	A	P	P	S	A
CASE-MARKING	m	m	0	m	m	0
AGREEMENT	0	0	m	0	0	m

It is the argument which is not grouped with the S (the utter left in the scale above) in marked systems that is zero-coded and/or has a greater trigger potential.

The same seems to hold even more strongly so for ditransitive alignment types regarding the P and its morphosyntactic partner (the T or R) for which only the marked primitive type of case-marking seems to exist:

Table 8. *Marked ditransitive alignment types*

	MARKED PRIMITIVE			MARKED DIRECTIVE		
	P	R	T	P	T	R
CASE-MARKING	m	m	0	m	m	0
AGREEMENT	0	0	m	0	0	m

2.3. Verb-Related Factors

When the manifestation of one alignment pattern besides another is conditioned by semantic and/or grammatical properties, we speak in terms of a split. The semantics of the event denoted by the verb or the construction as a whole is a common cross-linguistic conditioning factor of constructional splits. Hence, this is sometimes referred to as “semantic alignment” (Donohue 2008). This may involve a split between intransitive constructions or a split between transitive constructions. The present tense, for instance, may be aligned accusatively, while the past tense is aligned ergatively. When ergative alignment is restricted with respect to the accusative, this is generally called split ergativity (Comrie 1978; Dixon 1979, 1994). Following Haig (2008:9), this terminology is avoided, as “it is not ergativity that is split, but alignment”. Lexical verb classes can be open as opposed to closed, so that one construction is available to all verbs while another is restricted. Event-related properties such as an action as opposed to state and role-related properties such as control and affectedness can be involved in such classifications but this is certainly not always the case. Alignment splits conditioned by clausal properties such as tense, aspect and/or mood (= TAM) have been studied alongside internal splits based on lexical verb semantics (e.g. Tsunoda 1981). Both are subsumed under ‘verb-related factors’ here.

2.3.1. *Split and Fluid Subject-Marking*

The marking of the S and alignment of arguments can vary based on verbal semantics. The S can align with either the A or the P, so that we can speak in terms of an S_A and S_P form.

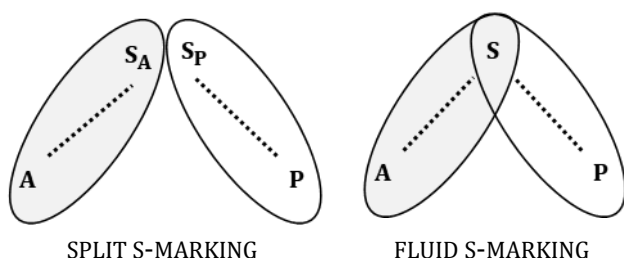
In Guaraní (indigenous American language spoken in Paraguay), for example, the S_A form is limited to verbs that denote an active-dynamic situation such as ‘go’, ‘die’ or ‘sleep’, while the S_P to those that denote a stative situation (like ‘be fast’, ‘be dead’ or ‘be sleepy’). The semantically more transitive verbs groups the S and A. In the following example, the prefix *a-* marks the A as well as the S of dynamic intransitive verbs and the prefix *še-* marks the P as well as the S of stative intransitive verbs.

(34) **Guaraní** (Paraguay, Mithun 1991:511)

TRANSITIVE a. a-gwerú aína A:1SG-bring them ‘I am bringing them now.’ TRANSITIVE b. še-rerahá P:1SG-carry.off ‘It will carry me off.’	INTRANSITIVE c. a-xá (S=A, dynamic) s:1SG-go ‘I go.’ INTRANSITIVE d. še-ropehí (S=P, stative) s:1SG-be.sleepy ‘I am sleepy.’

Dixon (1979, 1994) distinguishes between split subject-marking and fluid subject-marking⁴⁵. The main difference between them is the number of lexemes, respectively, verb classes involved. Split subject-marking confines S_A or S_P forms to specific verb classes depending on semantic prototypes, as in the Guaraní example above. Sometimes there is an open as opposed to a closed verb class, so that one form is more common overall than the other. Fluid subject-marking, however, allows one single verb class to occur in either S_A or S_P forms. In Guaraní, for example, some verbs can occur in either the S_A or S_P form. Mithun (1991:13), for instance, notes that “the verb *kaʔú* means ‘to get drunk’ in the S_A form “but ‘to be a drunkard, to be drunk’” in the S_P form. One should note, therefore, that a language may show both split and fluid subject-marking. Figure 6 displays the two types in form of a schema.

Figure 6. *Split and fluid subject-marking*



Various factors may be involved in split and fluid subject-marking. The type exemplified in Guaraní above is on the basis of aspect and also known as active-stative alignment. A dynamic situation, respectively, action is generally distin-

⁴⁵ This is sometimes also called split intransitivity (e.g. Payne 1997; Andrews 2007; Creissels 2008a).

guished from a stative situation, respectively, inaction by the occurrence of change or not. Activities like ‘walk’ or processes like ‘grow’ are dynamic, since they presuppose a change, while a state like ‘be sleepy’ does not. The opposition between action and inaction of the intransitive situations correlates with the agent as instigator, respectively, initiation phase and patient as endpoint, respectively, result-state phase of a transitive situation (e.g. DeLancey 1981).

Another type of split and fluid subject-marking is known as an agent-patient split (Nichols 1990) where the degree of agentivity or affectedness determines the grouping of the S. If the S is in control and thus instigating like an agent (such as the subject of ‘walk’, ‘swim’ etc.), it shares its coding properties with the A but if it lacks control and is affected like a patient (such as the subject of ‘fall’, ‘die’), it shares these with the P. An example of this is Lakhota, a Native American language in Dakota (Mithun 1991). The person indexes variably align with the A or P depending on control such that a controlled activity like ‘swim’ takes S_A coding but an uncontrolled event like ‘faint’ or ‘die’ takes S_P coding. (There is no overt coding of the third person.)

(35) **Lakhota** (Siouan, Dakota, United States; Mithun 1991:514, emphasis original)

TRANSITIVE		INTRANSITIVE	
a.	<i>wa-ktékte</i> A:1SG-kill ‘I’ll kill him.’	c.	<i>wa-núwe</i> (S=A, controlled) S:1SG-swam ‘I swam, bathed.’
b.	<i>ma-ktékte</i> P:1SG-will.kill ‘He’ll kill me .’	d.	<i>ma-t’é</i> (S=P, uncontrolled) S:1SG-died ‘I fainted, died.’

An example of a split in case-marking is Basque which largely has ergative case-marking. The S of a few intransitive verbs, however, such as ‘boil’ in (36c) takes ergative case-marking and the verb takes transitive coding instead of the expected absolutive such as the S of ‘come’ in (36b) (Creissels 2008a:143).

(36) **Basque** (Creissels 2008a: 143, glossing slightly adapted)

a.	<i>Gizon-ak</i>	<i>ur-a</i>	<i>edan</i>	<i>du</i>
	man-SG:ERG	water-SG:ABS	drink _{PFV}	AUX:PRS:P:3SG:A:3SG
	‘The man has drunk the water.’			
b.	<i>Gizon-a</i>	<i>etorri</i>	<i>da</i>	
	man-SG:ABS	come _{PFV}	AUX:PRS:S:3SG	
	‘The man has come.’			

- c. **Ur-ak** *irakin* *du*
 water-SG:ERG boil_{PfV} AUX:PRS:P:3SG:A3SG
 ‘The water has boiled.’

Split subject marking is more common for agreement than case-marking (Dixon 1994:76; Siewierska 2004:53, 57)⁴⁶.

Semantic factors motivating differences in subject marking often correlate and it is not always clear which semantic feature, be it aspectual or causal, is more significant than others. Croft (2001:162-165, 2012:257-258) classifies intransitive situations according to the hierarchy in (37) below which is mainly characterized by control.

(37) **Hierarchy of A-like or P-like subject coding** (based on Croft 2001:163, 2012:257-258)

MORE LIKELY TO TRIGGER A-LIKE CODING

- ↑ **Controlled activities:** agentive processes such as *run, dance, go out* etc.
- | **Inactive Actions** denoting a position, location such as *sit, hang, stay* etc.
- | **Inherent Properties:** permanent, unchanging attributes such as *be red, tall* etc.
- | **Dispositions:** personal traits such as *be proud, wise, jealous* etc.
- | **Bodily Actions** which can be controlled or uncontrolled such as *cough, sweat* etc.
- | **Inchoatives** (of dispositions or properties) such as *become proud, red* etc.
- | **Uncontrolled Activities** or processes such as *die, slip, grow* etc.
- ↓ **Transitory States** that imply a prior process such as *be sick, tired* etc.

MORE LIKELY TO TRIGGER P-LIKE CODING

Croft contends there is a cross-linguistic tendency for agent-like coding of the S to become more likely for the semantic classes at the upper end with controlled activities such as *dance* at the top and on the other way around for patient-like coding of the S towards the lower end with uncontrolled activities such as *die* and transitory states such as *be sick* at the bottom.

Languages will differ in what respect subject marking is sensitive to agent-like and patient-like features. Control is more central to Croft’s hierarchy than

⁴⁶ Word order alternations also exist. The S_A precedes the verb while the S_P follows the verb in Ambonese (Malay, Donohue 2008:37-38).

affectedness. Arkadiev (2008) argues that languages will tend to outrank either volitionality (respectively, control) or telicity (respectively, change of state) for agentive telic predicates. A telic situation is characterized by a change of state that reaches its natural endpoint or result phase (after Greek *telos* ‘goal, end’), such as *I sat down*, *I went to the market* and the like (Comrie 1976:45). The counterpart is known as atelic. Alignment with the patient for telic verbs could be connected with the patient coinciding with the endpoint of the transitive situation (e.g. DeLancey 1981). In Georgian, for example, telic verbs will align their S with the P and not with the A which indicates that telicity outranks volitionality (Arkadiev 2008).

Moreover, although semantic factors may be discerned in the classification of verbs and split in subject marking, there is ample room for language-specific arbitrariness (e.g. Dixon 1994:74-75; Creissels 2008a:150-151). There appears to be no obvious semantic reason for the S_A coding in Basque, for example. It appears to be a recent, increasingly common shift that is spreading from Western to Eastern Basque (Aldai 2008).

Finally, such split-S systems can be characterized as an independent, coherent alignment type *sui generis* (cf. Mithun 1991). Often, however, languages that exhibit non-accusative alignment will also have a set of verbs that take A-like subject marking within their system. In Basque, for example, when the verb ‘eat’ occurs in an intransitive construction, it may maintain A-like subject coding. The 3sg. is the unmarked form of the verb and, therefore, non-referential in the meaning of ‘Martin ate’, but it indicates that morphosyntactically some transitivity is preserved (Comrie 1978:118):

(38) **Basque** (Comrie 1975:118, 1978:333, 358)

	[ABS→S]		[V]	
a.	<i>Martin</i>		<i>ethorri</i>	<i>da.</i>
	Martin-ABS	came	AUX-3SG:S	
	'Martin came.'			
	[ERG→S(A)]		[V]	
b.	<i>Martin-ek</i>		<i>jan</i>	<i>du.</i>
	Martin-ERG	ate	AUX-3SG:A(-3SG:P)	
	'Martin ate.'			

The dividing line, therefore, between ergative alignment and split s-marking is not always clear. Comrie (2005:399) considers that, when it is only a small

number of verbs that take A-like subject coding, the pattern instantiated by the majority of verbs is the basic alignment (at least for comparative purposes).

Lazard (1998:136-139) calls verbal forms with non-identifiable P-marking like (38b) an anti-impersonal construction. He notes that animal noises or sound emission verbs such as 'bark', more or less controllable bodily responses such as 'sneeze' and 'laugh' and manner of motion verbs such as 'dance' and 'run' are a common exception in taking agent-like coding in languages that otherwise exhibit ergative alignment (cf. Sorace 2000:877). They typically include verbs whose lexical aspect belongs to situations that are called *semelfactive* (Comrie 1976:42) used to distinguish a punctual atelic predicate involving an instantaneous event (happening only once) from an iterative atelic one with a serial meaning (happening in a series). Lazard (1998:139) suggests that such verbs tend to take S_A coding, because they imply a single, instant, manifestation impressing on a perceiver via the senses that is, morphosyntactically, realized in the reduced referentiality of the patient. Control is an ambiguous feature of such instantaneous bodily actions (cf. Sorace 2000:877).

In complex predicates or light verb compound constructions (sometimes also termed phrasal verbs), however, the choice of S_A or S_P is largely determined by the light verb and may be semantically arbitrary (Creissels 2008b). In such light verb constructions, a non-referential dummy nominal element is incorporated in the verbal construction as a single constructional unit. In Vafsi (Tati, Northwestern Iranian; p.c. Stilo), for example, the verb *gen-/kætt-* 'fall' may combine with the NP *rá* 'road' to convey the meaning of 'set off' (lit. 'to road-fall') where the controlling subject takes S_P coding because of the light verb. It takes an ergative subject because of the otherwise transitive light verbs such as *kærd-* 'do' or *da-* 'give', e.g. including less or uncontrollable situations such as *ærxæq kærd-* 'sweat'. Interestingly, some of the verbs in Vafsi that are semantically intransitive but combine with S_A coding belong to semantic fields of the anti-impersonal constructions mentioned by Lazard (1998:139), e.g. *to kærd* 'spit' (lit. spit-do), *sezne da* 'sneeze' (lit. sneeze-give), *guz da* 'fart (noisily)' (lit. fart-give) (Stilo p.c.).

In sum, the grouping of the S argument, especially as manifested through agreement, can vary between an ergative and accusative pattern and align with either the A ($S=A$) or the P ($S=P$). Split subject marking distinguishes lexical classes of verbs, some treating the S like the A, others treating the S like the P. Fluid subject marking allows one lexeme to occur in different constructions where the S aligns with either argument. If a semantic basis can be identified for such split or fluid subject marking, the S_A verbs tend to denote controlled involvement, a

dynamic and atelic situation, and some implicit effect as in semelfactives ('sneeze'). The opposite, *S_P* verbs tend to denote uncontrolled, affected involvement and a stative or telic situation. Lexicalization, however, often obscures these tendencies.

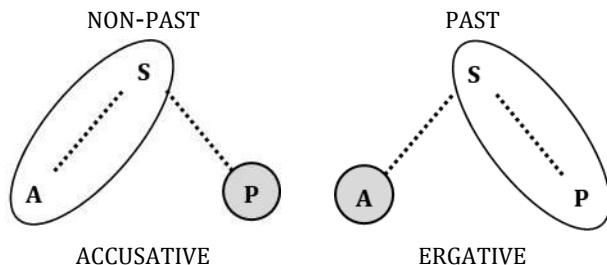
2.3.2. *Tense, Aspect, and Mood*

Alignment may also differ depending on clause-level grammatical information expressing the categories of tense (such as future, present and past), aspect (such as imperfective and perfective) and mood (such as realis vs. irrealis) or modality (such as possibility, necessity etc.) that are often abbreviated to TAM. There are noteworthy cross-linguistic preferences for the grouping of *S* and *A* (*S=A*) in the irrealis, non-past, and/or imperfective constructions against the grouping of the *S* and *P* in the realis, past, and/or perfective constructions. The *S* aligns either with the *P* or the *A* depending on the TAM category expressed by the construction. It is also possible that ditransitive constructions manifest distinct argument coding depending on TAM.

In Kurmanji, or Northern Kurdish, for example, past tense constructions show ergative alignment, while non-past tense constructions show accusative alignment. Example (39) illustrates this split. The verb always agrees (e.g. *-î*) only with the argument in the 'nominative' case (e.g. *tu*); this is the *P* in the past and the *A* in the present. The 'oblique' case (e.g. *min*), in turn, marks the *A* in the past but the *P* in the present. One should also note the consistency of word order in the transitive constructions. The *A* precedes the *P*. The coding properties, by contrast, are inverted. The *S* ergatively aligns with the *P* in the past but accusatively with the *A* in the non-past (present or future). Figure 6 below represents this in a schema.

(39) **Kurmanji** (West Iranian, Turkey; Matras 1997:617-618)

PAST: ERGATIVE (<i>S=P</i>)			PRESENT: ACCUSATIVE (<i>S=A</i>)		
	[A]	[P] ← [V-P]		[A]	[P] [V-A]
a.	<i>min</i>	<i>tu</i>	c.	<i>tu</i>	<i>min</i>
	I:OBL	you:NOM		you:NOM	I:OBL
	'I saw you .'			' You see me.'	
	[S]	[V-S]		[S]	[V-S]
b.	<i>tu</i>	<i>çû-yî</i>	d.	<i>tu</i>	<i>di-ç-î</i>
	you:NOM	went-2SG		you:NOM	PROG-go-2SG
	' You went.'			' You are going.'	

Figure 7. *Alignment split conditioned by TAM in Kurmanji*

The dividing line between accusative and ergative alignment in languages such as Kurmanji is tense: non-past vs. past. In Indo-Aryan languages such as Hindi and Mayan languages such as Chorti, the dividing line is between perfective and imperfective aspect (Dixon 1994:100; cf. Comrie 1978:351-352). Moreover, although such TAM-conditioned splits are commonly between accusative and ergative alignment in the imperfective/non-past and perfective/past, other oppositions are also found. The imperfective in Gujarati, for instance, follows a neutral case-marking pattern against ergative case-marking in the perfective (DeLancey 1981:628-631). Furthermore, it has been claimed for some Cariban languages (Amazonia) that it is rather the imperfective/non-past conditions that favor an ergative pattern (Gildea and de Castro Alves 2010).

Mood is also a category that correlates with accusative or ergative marking and indirectly with tense (such as the future) and possibly aspect (such as proximal). The future/irrealis or imperative/hortative mood favors accusative marking in some languages that manifest a split (Dixon 1994:101). Dixon (*ibid.*) notes that moods such as the imperative focus on a controllable activity which would typically target the A and/or S and, hence, disfavor a grouping of the S with the P. But it may also be the other way around. Ergative alignment, for instance, is found for the future/irrealis and past and perfect in Newari (Tibeto-Burman, Nepal, Givón 1985a:93).

Based on cross-linguistic studies of splits conditioned by TAM, Malchukov (2015) proposes the following correlating scales or hierarchies that can be subsumed under a Tense-Aspect-Mood hierarchy. This hierarchy presupposes that, when a language exhibits a split between ergative and accusative alignment, ergative alignment is more likely to be manifested in constructions involving the features towards the right edge of the scales. The scales are also implicational, so that once the ergative pattern is manifested in constructions belonging to the left edge, it will also tend to do so to the right, and *vice versa* for the accusative.

(40) **Tense-Aspect-Mood hierarchy** (based on Malchukov 2015:287)

ASPECT:	IMPERFECTIVE	>	PERFECTIVE	(> PERFECT > RESULTATIVE)
TENSE:	(FUTURE >) PRESENT	>	PAST	
MOOD:	IMPERATIVE	>	NON-IMPERATIVE	
←-----→				
	ACCUSATIVE		ERGATIVE	
	(S=A)		(S=P)	
	MORE LIKELY		MORE LIKELY	

Some scholars⁴⁷ argue that the features on the left edge entail a viewpoint of the event from the perspective of the agent and the right edge from the perspective of the patient. The perfective aspect, then, entails a viewpoint of the event that is ultimately oriented towards a definite result terminating in and affecting the patient. This readily combines with the past tense, since completeness and completion neatly go hand in hand. Aspect defines where the situation unfolds over time within its temporal structure in a part-whole relationship (Shibatani 2006:220-221). The event is viewed as a complete whole from beginning to end in the perfective aspect but viewed from a specific point or several points of the temporal phase (such as habits) between beginning and end in the imperfective. The perfective past, for instance, expresses complete, bounded events in the past and aligns the S with the P distinct from the accusative alignment in the imperfective past which expresses ongoing or iterated events. Since the manner in which the activity or process unfolds through time is more central to the imperfective aspect, this is mainly dependent on the agent's involvement which would be conventionalized in accusative alignment (e.g. Comrie 1981:69; DeLancey 1982).

Nevertheless, it seems more plausible that this patient-orientation is merely an epiphenomenon of the diachrony. There is no *a priori* reason why perfective past constructions should favor ergative alignment or bias accusative alignment. Indeed, the ergative constructions in tense-aspectual splits are well-known to originate historically in resultative constructions involving an adjectival form of the verb that expresses the state of a patient (e.g. Anderson 1977; Trask 1979; Creissels 2008b; cf. Haig 2008 on Iranian). Interestingly, the aspect scale above represents diachronically the grammaticalization of resultative to perfective past via the perfect (e.g. Bybee and Dahl 1989):

⁴⁷ See inter alia DeLancey (1981), Givón (1984a:156-158), Dixon (1994:100-101), Lazard (1998:214-217) and Næss (2007:118-119).

(41) stative > resultative > perfect > perfective past

It is most likely, then, that the ergative construction in a TAM alignment split is at least in some cases the outcome of a historical development of originally intransitive resultative participial constructions that grammaticalized to and was conventionalized as the main expression of the perfective past. Conversely, in other cases, it is the progressive that is based on an intransitive construction where the S typically marks the agent of an activity in progress. This can further grammaticalize into an accusative pattern besides the predominant ergative alignment in the rest of the language (e.g. Creissels 2008b).

Although the discussion mainly centers on accusative as opposed to ergative alignment, other types of alignment can also be conditioned by TAM. Split subject marking, for example, is TAM-conditioned in some languages. Hindi, for example, exhibits split and fluid subject marking in the perfective and perfect which appears to be semantically mainly conditioned by intention (i.e. “conscious choice”, Butt and King 1991; Mohanan 1994).

(42) **Hindi** (Indo-Aryan, India; Mohanan 1994:71; glossing slightly modified)

[S=P]

- a. *raam giraa*
 Ram-NOM fall-PERF
 ‘Ram fell hard.’

[S=A]

- b. *raam-ne nahaayaa*
 Ram-ERG bathe-PERF
 ‘Ram bathed.’

[S=A/P]

- c. *raam(-ne) jorse cillaayaa*
 Ram(-ERG) loudly shout-PERF
 ‘Ram shouted loudly (deliberately).’

In addition, TAM-conditioned argument coding is not always split between two distinct TAM categories. Georgian, illustrated in (43) below, for instance, has three distinct case-marking patterns depending on tense (Harris 2001). The coding of the A differs in all three series of tenses: ‘nominative’ for the present or future, ‘ergative’ for the aorist (i.e. perfective past) and ‘dative’ for the perfect (i.e. evidential). The ‘dative’ case marks the P in the first series but the ‘nominative’ marks the P in the second and third series. In addition, the third series in-

verts the case-marking pattern of the first: dative A vs. nominative P (against the other way around in I). In addition, although the marking of the S is always the nominative case in series I, it is split in series II and III⁴⁸. The present and related tenses, therefore, manifests accusative alignment while the aorist and perfect exhibit split subject marking or active-stative alignment, each with distinct agent coding. This is consistent with the scales in (40) above, since the accusative pattern is still favored in the non-past tenses.

(43) **Georgian** (Kartvelian, Georgia; Harris 2001:1378-1380, glossing slightly adapted)

	[A]	[P]	[V]	
a. I: NOM-DAT	<i>merab-i</i> Merab-NOM	<i>γvino-s</i> wine-DAT	<i>amoiyebs</i> take.out	(future)
	'Merab will take out wine'			
b. II: ERG-NOM	<i>merab-ma</i> Merab-ERG	<i>γvino-∅</i> wine-NOM	<i>amoiyo</i> take.out	(aorist)
	'Merab took out out wine'			
c. III: DAT-NOM	<i>merab-s</i> Merab-DAT	<i>γvino-∅</i> wine-NOM	<i>amoiyia</i> take.out	(perfect)
	'Merab evidently took out wine'			

Finally, the T and R may also be treated differently depending on TAM. In Mukri Kurdish, for example, TAM is expressed with distinct person forms and attachment patterns for the A and R in the past against the A and R in the present (Öpengin 2013:267-268).

In brief, when a language manifests a split between accusative and ergative (or other non-accusative types of) alignment based on TAM, the semantic properties often seem to be non-past, imperfective, and/or imperative mood for the accusative contrasting with past, perfective, and/or non-imperative for the ergative or split subject marking.

⁴⁸ One subclass of intransitive verbs such as 'grow' takes nominative subjects and thus P-like coding in series II and III while another subclass of verbs such as 'run' takes A-like coding: ergative in II the aorist and dative in III the perfect (Harris 2001; Aldai 2008).

2.3.3. Transitive Semantics

Ever since Hopper and Thompson's (1980) seminal article, typological linguists⁴⁹ have argued that the prototypical transitive semantics of the event as a whole contributes to the preference of more transitive morphosyntax in constructional splits and alternations. The intransitive valence pattern tends to be used for the semantically less transitive situation (e.g. Tsunoda 1981; Hopper and Thompson 1980; Givón 1984a, 1985). One of the agent-like or patient-like arguments is treated more like the S or more like OBL⁵⁰.

Languages have various valence-reducing devices that downgrade the patient (cf. Payne 1997). Alternative constructions such as the antipassive voice that are favored when the effect on the patient is reduced (e.g. Cooreman 1994). Cross-linguistically, the antipassive and comparable constructions are largely uniform in expressing reduced semantic transitivity in marginalizing the effect on the patient (e.g. Hopper and Thompson 1980; Tsunoda 1981). In Samoan, for example, a Polynesian language, a transitive verb such as 'eat' occurs in an intransitive construction in (44b) where the agent is expressed as the S. The patient equivalent to the transitive counterpart in (44d) is expressed as the OBL. The locative-directional case is used to denote a partially affected undergoer (Mosel and Hovdhaugen 1992:108).

(44) **Samoan** (Polynesian, Samoa; Mosel and Hovdhaugen 1992:105, 108, 429, glossing adapted)

	[V]		[S]		
a.	<i>Sā pa'ū</i>	Ø	<i>le teine</i>		(patientive intransitive)
	PST fall	ABS	the girl		
	'The girl fell.'				
	[V]		[S]		
b.	<i>Sā 'ai</i>	Ø	<i>le teine</i>		(patientless antipassive)
	PST eat	ABS	the girl		
	'The girl ate.'				

⁴⁹ See *inter alia* Lakoff (1977), Comrie (1978, 1989), Hopper and Thompson (1980), DeLancey (1984, 1987), Givón (1984a, 1985a), Langacker (1987, 1991a-b), Croft (1990, 1991), Lazard (1998, 2002), de Swart (2006), and Næss (2007).

⁵⁰ A rather extreme view found in the literature is that ergative alignment itself is even conceptually based on transitivity (e.g. Cooreman et al. 1984; Givón 1985a) and its effects, therefore, are predicted to characterize any split between ergative and some other construction (e.g. Givón 1984a:153-163).

- c. [V] [S] [OBL]
- Sā* *'ai* $\emptyset$ *le* *teine* *i* *le* *i'a* (antipassive)
- PST eat ABS the girl LOC the fish
- 'The girl ate some fish.' (lit. The girl ate from the fish)
- d. [V] [A] [P]
- Sā* *'ai* *e* *le* *teine* $\emptyset$ *le* *i'a* (transitive)
- PST eat ERG the girl ABS the fish
- 'The girl ate the fish.'

The affectedness or change of state of the P is arguably the most fundamental feature that contributes to the transitivity overall. When the patient is totally affected, the change of state is completed and the endpoint of the event is clearly delimited and the transitive construction is preferred. When the patient is not totally affected and/or the change of state incomplete, the delimitations become vaguer. The most important of these shared properties can be summed up as follows:

(45) ANTIPASSIVE	ERGATIVE
less transitive	more transitive
imperfective	perfective
partial affectedness of P	complete affectedness of P
atelic	telic
durative	punctual
stative	dynamic

The intransitive construction is favored when the effect on the patient is less salient and the activity is more central. In Hopper and Thompson (1980)'s model, this is the reduction of transitivity.

Samoan two-argument experiencer verbs, for example, show a transitivity alternation that is not only grounded in the affectedness of the patient but also in the lexical aspect. The verb *va'ai* 'see' is atelic and non-punctual in the sense of 'look at' in the intransitive construction in (46a) or telic and punctual in the sense of 'spot' in the transitive construction in (46b) (Mosel and Hovdhaugen 1992:733). A special transitivizer *-a* is added to the verb in the latter sense. Similarly, the verb *faitau* 'read' in (46c) refers to a more durative activity where possibly only part of the letter is being read, while the same verb in (46d) with transitive coding is presented as a single whole where all of the letter is read.

- (46) **Samoa** (Polynesian, Samoa; Hopper and Thompson 1980:270, 272, cf. Tsunoda 1981:416-417; glossing adapted)

			[S]			[OBL]		
a.	<i>Na</i>	<i>va'ai</i>	$\emptyset$	<i>le</i>	<i>tama</i>	<i>i</i>	<i>le</i>	<i>i'a.</i> (atelic, durative)
	PST	see	ABS	the	boy	LOC	the	fish
	'The boy looked at the fish.'							
			[A]			[P]		
b.	<i>Na</i>	<i>va'ai-a</i>	<i>e</i>	<i>le</i>	<i>tama</i>	$\emptyset$	<i>le</i>	<i>i'a.</i> (telic, punctual)
	PST	see-TR	ERG	the	boy	ABS	the	fish
	'The boy spotted the fish.'							
			[S]			[OBL]		
c.	<i>Sā</i>	<i>faitau</i>	$\emptyset$	<i>Ulika i</i>	<i>l=a=na</i>		<i>tusi</i>	(atelic, durative)
	PST	read	ABS	Ulika	LOC	the=POSS=3SG	letter	
	'Ulika read her letter.' (lit. read in her letter)							
			[A]			[P]		
d.	<i>Sā</i>	<i>faitau</i>	<i>e</i>	<i>Ulika</i>	$\emptyset$	<i>le</i>	<i>tusi</i>	(telic, punctual)
	PST	read	ABS	Ulika	ABS	the	letter	
	'Ulika read the letter.' (Mosel and Hovdhaugen 1992:111)							

One should note, however, that there are known counterexamples where the antipassive marks precisely the opposite, a highly individuated and affected patient much like differential object marking (cf. Comrie 1978:362-363). Moreover, the relationship between transitivity and the properties of the agent is even more controversial (e.g. Fauconnier 2011B, 2012). Conscious choice, for example, is reported not only to play a key role in split subject marking but also in split agent marking in Hindi (Mohanan 1994:72-75). The lower the S or A is in agentivity (i.e. control, intention), the more likely it is marked by something other than the ergative case. The human argument in (47a) consciously and deliberately initiates an action like the A in (47c), while something happens to the human argument in (47b) uncontrolled/unintended like the same argument in (47d).

- (47) **Hindi** (Indo-Aryan, India; Mohanan 1994:72, 74; glossing adapted)

a.	<i>us-ne</i>	<i>jaan buuj^hkar</i>	<i>cillaayaa</i>
	he-ERG	deliberately	shout-PERF
	'He shouted deliberately.'		

- b. *vah* *cillaayaa*
 he-NOM shout-PERF
 'He screamed.' (involuntarily)
- c. *ravii-ne* *davaaaii* *paii* *ḡaali* (more transitive coding)
 Ravi-ERG medicine-NOM drink pour-PERF
 'He (deliberately) drank up the medicine.'
- d. *ravii* *davaaaii* *paii* *ḡayaa* (less transitive coding)
 he-NOM medicine-NOM drink go-PERF
 'He (impulsively) drank up the medicine.'

Not all scholars (e.g. Tsunoda 1981) consider the degree of agentivity a significant factor in contributing to transitivity as conceived by Hopper and Thompson (1980; cf. Croft 1984; Malchukov 2006). Studies like Fauconnier (2011a-b, 2012; cf. Kittilä 2005; Shibatani 2006; Fauconnier and Verstraete 2014) have shown, for instance, that the less transitive morphosyntax is ultimately the result of the anticausativization of the verb denoting an uncontrolled event which generally require an oblique agent. In the Hind examples above, for instance, the light (i.e. lexically empty) verb in the complex predicate is modified to an intransitive verb *jaa* 'go' (Mohan 1994:74). In such constructions, it is the light verb that primarily determines the A-like or P-like case-marking and not the transitive semantics (Creissels 2008b).

2.3.4. Ditransitive Semantics

Alternations and splits can be similarly described for ditransitive alignment types (see Malchukov et al. 2010a). Firstly, one verbal lexeme can alternatively occur in two different ditransitive constructions (reminiscent of fluid subject marking). Secondly, distinct ditransitive constructions are often lexically confined to or semantically conditioned by specific verb classes (comparable to split subject marking). Double object constructions or neutral alignment generally have lexical restrictions. Derived ditransitive verbs, however, may be treated differently from basic ditransitive verbs in this respect.

Constructional alternations are so common for ditransitive verbs that a model ditransitive construction generally cannot be identified (Malchukov et al. 2010b:2). The verb 'give' in Modern Standard Arabic, for example, can freely occur in a double object or a prepositional indirect object construction:

(48) **Modern Standard Arabic** (Central Semitic, Kász 2015:334, glossing slightly modified)

a. (double object)

[V]		[R←ACC]	[T←ACC]
'a't-at	l-bint-u	l-mu'allim-a	l-kitāb-a
give _{PFV-A:3FS}	DEF-girl _{FS-A:NOM}	DEF-teacher _{MS-ACC}	DEF-book _{MS-ACC}
'The girl gave the teacher the book'.			

b. (indirective)

[V]		[T←ACC]	[PREP→R]
'a't-at	l-bint-u	l-kitāb-a	li-l-mu'allim-i
give _{PFV-A:3FS}	DEF-girl _{FS-A:NOM}	DEF-book _{MS-T:ACC}	R:for-DEF-teacher _{MS-GEN}
'The girl gave the book to the teacher'.			

Nevertheless, the verb 'give' is arguably the primary ditransitive verb and, for many though not all languages, the double object construction is at least found for this verb (Kittilä 2006). For example, this holds for 'give' in Arabic above but not for 'give' in Syriac (Aramaic, Northwest Semitic).

Double object constructions or neutral alignment are lexically restricted in the majority of languages and derived ditransitive/causative verbs are often confined to it (Malchukov et al. 2010b). They typically also exhibit word order constraints. The recipient, for example, usually precedes the theme, as illustrated for Arabic in (48a). The first or primary object typically outranks the second or secondary one in affectedness and is considered the most salient affectee much like a patient (e.g. Fillmore 1977; Givón 1976, 1984b; Kittilä 2008). The indirective construction in turn generally constitutes a prepositional alternant of the double object construction which rearranges the viewpoint to a process or state directed at a salient affectee.

On the whole, then, the indirective pattern is generally not semantically restricted and the double object construction is usually more open to derived ditransitive (the causatives of monotransitives) than basic ditransitive verbs.

2.4. Argument-Related Factors

While alignment splits based on the verb and role-related and event-related semantics may also involve the coding of the S, referential properties such as animacy and discourse-salience of the NPs generally only pertain to the A and/or P in a relative or absolute sense. First, the prominence hierarchy consisting of several subscales will be introduced. Subsequently, we will discuss some examples of constructional splits based on these properties. The opposition between

zero and overt coding of an NP depending on such properties is generally known as differential argument marking and is mainly associated with a particular grammatical function such as the P (Bossong 1985). Argument salience has been argued to correlate with alignment typology by various functional typologists (e.g. Givón 1976; Croft 1988). Recently, Bickel (2008) and Bickel et al. (2015) have tested the significance of such referential hierarchies for alignment split tendencies in large language databases. They show there is no conclusive evidence that demonstrates the correlation between argument salience and agreement is universally valid. The tendency is explained as side-effects of areal diffusion or linear developments within languages (cf. Gildea and Zúñiga 2016).

2.4.1. The Prominence Hierarchy

The features that determine the inherent and/or discourse salience of a nominal are generally decomposed into the following distinct subscales listed in (49)⁵¹. The terminology differs for the overarching scale that merges these. What is commonly known as “the nominal hierarchy” (Dixon 1994), is variously also referred to as the animacy, agency, empathy, individuation, topicality, and salience scale/hierarchy. Aissen (2003) adopts the more general term “prominence hierarchy” which I will follow here. These features are generally subsumed under a single prominence hierarchy with first and second person pronouns as the highest ranking type and inanimate, non-specific (indefinite) common nouns as the lowest ranking type.

(49) Prominence hierarchy

		MORE PROMINENT		LESS PROMINENT
a.	PERSON:	first, second	> third	
b.	NOMINAL:	pronoun	> full NP: proper/kin	> common
c.	ANIMACY:	human	> animate	> inanimate
d.	REFERENTIAL:	definite	> specific indefinite	> non-specific

What particular pragmatic and/or semantic features of the prominence hierarchy demarcates the marking of an argument differs from language to lan-

⁵¹ See for instance Croft (1990:116, 127), Bossong (1991:160), Siewierska (2004:149). Other categories not listed in (49) may obviously also be involved. Hopper and Thompson (1980:253), for example, also include the properties number (singular vs. plural), countability (count vs. mass) and concreteness (concrete vs. abstract).

guage. Topicalization constructions can also trigger differential marking (Givón 1979; Lazard 2001:878; Lemmolo 2010, 2013). In addition, there is no universal preference for the individual ranking of first and second person (i.e. both $1 > 2$ and $2 < 1$ exist, e.g. Silverstein 1976; Siewierska 2004:150-151). There is a cross-linguistic tendency to distinguish speech act participants, i.e. the (1p.) speaker and/or (2p.) addressee, against non-speech act participants (3p), i.e. somebody other than speaker or addressee (DeLancey 1981:645-646; Dahl 2000)⁵². A basic distinction exists, therefore, between third and non-third person, the latter strictly referring to first and second person here.

The prominence hierarchy has been postulated by functional typologists to make implicational predications regarding case-marking and agreement patterns across languages with reference to several grammatical functions⁵³. Functional typologists often differentiate between arguments that are more topic-worthy than others, i.e. more readily considered salient in the discourse. Such topic-worthy NPs instantiate the higher ranking properties that make them more eligible to be selected as the topic in the transitive clause (e.g. Givón 1979, 1994; Comrie 1989). Given that the A and the R are more often human, the higher ranking properties are associated with the A and R:

(50) Role hierarchies

a.	PROMINENCE:	high	>	low
b.	FUNCTION:	A	>	P
		R	>	T

The lower ranking properties in turn are associated with the P and T, since they are more often inanimate. Thus, the A typically outranks the P and the R typically outranks the T. The zero case-marking and the potential for the overt expression of person agreement would correlate with a higher ranking of A and R as well as a lower ranking of the P and T. In accordance with such scales, then, for example, pronouns favorably occur in the A and R function, while nouns favorably occur in the P and T function (see further below).

⁵² First and second person, if so subsumed under one term, are generally referred to as SAPs after speech act participants. This abbreviation is not used here, since it may lead to confusion with S, A, and P.

⁵³ See Keenan (1976); Silverstein (1976); Givón (1976, 1984,; Comrie (1989), Croft (1984, 1990 1994a); Bossong (1991:160); Aissen (1999, 2003); Haspelmath (2004b, 2007); Næss (2007); among many others.

A functional-communicative motivation for the special marking of higher ranking Ps and Ts offered by functional typologists is that the unexpected candidates would favor morphology to disambiguate them from the more expected candidate with the properties associated with the A and R function. Unexpected Ps are morphosyntactically distinguished from the expected A and overt case-marking tends to be limited to one argument (e.g. Comrie 1975, 1978). Similarly, functional typologists (e.g. Givón 1976; Croft 1988) have argued that argument salience, i.e. what is central to the speech situation and the speakers' experience, enhance the trigger potential for person indexing. Speakers tend to limit person indexing to what they consider the most important referents. This applies to both monotransitive and ditransitive clauses (e.g. Haspelmath 2007). This tends to decline along the prominence hierarchy and the associated syntactic roles. Haspelmath (2004b) explains this tendency on the basis of frequency-driven grammaticalization. The more frequent and more harmonic combinations of argument types and associated roles are more grammaticalized, while disharmonic combinations such as where the T outranks the R are disfavored and, therefore, less grammaticalized.

Recently, Bickel (2008) and Bickel et al. (2015) have tested the significance of such referential hierarchies for alignment splits tendencies in large language databases. Bickel et al. (2015), for instance, show on the basis of survey of 460 case systems across the world that the languages that fit with the aforementioned predictions are common in the macroareas of Eurasia and New-Guinea and Australia but not outside of these areas. Thus, they conclude that such hierarchical effects are prone to areal diffusion. Gildea and Zúñiga (2016) note that these effects can be explained on the basis of their historical source rather than underlying cognitive principles.

2.4.2. Differential and Optional Object Marking

In differential object marking (= DOM) constructions, the marking of the P, T, and R may be sensitive to the prominence hierarchy. Israeli Hebrew, for instance, differentiates between definite and indefinite P arguments. The preposition *et* marks definite Ps such as *sefer* 'book' in (51b) below, while the equivalent indefinite P in (51a) is zero-marked. The definiteness condition, however, does not apply to the A and S, as illustrated in (51c) and (51d).

- (51) **Israeli Hebrew** (Northwest Semitic, Canaanite; Givón 1982:305, 303; glossing slightly modified and stress marking omitted, ex. 1d my addition) (transitive)

	[V+A]		[CM→	P]	
a.	<i>kaniti</i>	(∅)	<i>sefer-xad</i>	<i>etmol</i>	(indef. P)
	bought:1SG		book-one	yesterday	
	'I bought a book yesterday.'				

b.	<i>kaniti</i>	<i>et</i>	<i>ha-sefer</i>	<i>etmol</i>	(def. P)
	bought:1SG	DOM	DEF-book	yesterday	
	'I bought the book yesterday.'				

(intransitive)

	[S]		[V+S]		
c.	<i>ish-xad</i>	<i>ba</i>	<i>hena</i>	<i>etmol</i>	(indef. S)
	man-one	came:3MS	here	yesterday	
	'A man came here yesterday'				

	[S]		[V+S]		
d.	<i>ha-ish</i>	<i>ba</i>	<i>hena</i>	<i>etmol</i>	(def. s)
	DEF-man	came:3MS	here	yesterday	
	'The man came here yesterday.'				

Strictly speaking, neutral alignment (A=S=P) is found for indefinite NPs in Israeli Hebrew, while accusative alignment (A≠S=P) is found for definite NPs. Generally, the pattern with overt marking is taken to be the more basic alignment type (Comrie 2005; Siewierska 2005; Malchukov et al. 2010), so that we would characterize the alignment in Israel Hebrew to be basically accusative. Thus, DOM first and foremost involves a constructional split, not an alignment split *per se*.

Differential marking of the T can coincide with differential marking of the P. In Israel Hebrew, as exemplified below, the preposition *et* differentially marks the theme *matana* 'present' depending on definiteness.

- (52) **Israeli Hebrew** (Northwest Semitic; Hopper and Thompson 1980:256, original source cited therein; glossing slightly modified)

TRANSITIVE

			[(DOM→)T]		[DAT→R]
a.	<i>David</i>	<i>natan</i>	(∅)	<i>matana</i>	<i>lə-rina.</i>
				present	to-Rina
	'David gave a present to Rina.'				

- b. *David natan et-ha-matana la-rina.* (def. T)
 gave:3MS DOM-the-present to-Rina
 ‘David gave **the present** to Rina.’

The preposition *la-* is stable and not sensitive to prominence. Prominence is not relevant to the marking of the R. Thus, whatever conditions the overt against zero marking of the objects, the T and P are always treated alike and distinctly from the R: the alignment remains indirective throughout.

Languages that exhibit differential P-marking need not also differentially mark the T. Overt case-marking typically targets the R or both the T and R (Siewierska and Bakker 2009:300). In fact, cross-linguistically, it is often the dative case that syncretizes both the indirective marking of the R and differential marking of the P (e.g. Bossong 1985, 1991, 1998a). Givón (1976, 1984b) argues that this results from their prototypical semantics. The recipient is typically a human, undergoer (and often definite), while the theme, being a transferable item, is conceived to be non-human. The recipient as such is semantically akin to the human, definite undergoer in transitive constructions which is the P (e.g. Næss 2007). It is, therefore, not surprising that the indirective R-marker and differential P-marker would be morphologically identical (i.e. the dative case). Consequently, the dative marking of both a prominent T and any R would be avoided due to disambiguation of the roles (e.g. Kittilä 2006). Thus, Kittilä (2006:14) concludes that for some languages identical marking of the T and R is avoided, regardless of the animacy of the arguments. The more basic alignment in this constructional split would still be indirective.

An example where the prominence hierarchy overrides role discrimination is Syriac which fuses differential marking of the P and T as well as indirective marking of the R. The differential case-marker of a nominal P argument in Syriac is the dative preposition *l-* ‘to, for’ that indicates goals, recipients, beneficiaries etc. irrespective of prominence, although a recipient will be most often a (definite) animate argument such as *Adday* below:

(53) **Syriac** (Aramaic, Northwest Semitic)

	[DAT→R]		[T]
<i>d=ne-tl-ūn</i>	<i>l-Adday</i>	<i>kespā</i>	<i>ʔu=dahbā</i>
SUBR=3-give-MPL	DAT-PRN	silver:MS	and=gold:MS

‘... that they should give **to Adday** silver and gold.’ (5th c. Cureton 1864:ⲁ.23)

Example (54) below offers an illustration of differential P-marking in Syriac. Compare *haw gaḅrā* ‘that man’ in (54a) and *gaḅrā qūrīnāyā* ‘a Cyrenian man’ in (54b).

(54) **Syriac** (Aramaic, Northwest Semitic)

- [DOM→P]
- a. *ʔeškaḥ-Ø* *l-haw* *gaḅrā* (definite, animate P)
 found-A:3PL DAT-DEM:MS man:MS
 ‘They found **that man**.’ (3rd c. *Sinait.* Luke 8:35)
- [Ø]
- b. *ʔeškaḥ-Ø* *gaḅrā* *qūrīnāy-ā* (indefinite, animate P)
 found-A:3PL man:MS Cyrenian-EMP:MS
 ‘They found **a Cyrenian man**.’ (3rd c. *Sinaiticus* Matthew 27:32)

The basic construction is a prepositional indirect object construction, as exemplified in (53) above. Like the P, the T is also differentially marked by the same preposition *l-* for recipient-theme verbs. When DOM is applied to themes in addition to recipients, both arguments are marked by the dative preposition *l-* as shown in (54c) and (54d) below (cf. Nöldeke 1904:231-232 §289):

- [DOM→T] [DAT→R]
- c. *lā...* *šaddar-Ø* *ʔalāhā* *la-ḅr-eh* *l-ʔālmā...*
 NEG sent-A:3MS/PL god:MS DAT-son:MS-his DAT-world:MS
 ‘(For) God did not sent **his Son to the world** (in order to condemn the world).’ (5th c. *Pšitta* John 3:17)
- d. *...zabbn-ēt* *l-Īhūdā ...* *l-Ḥabbān ...*
 ...sold-A:1SG DAT-PRN DAT-PRN
 ‘I have sold **Judas** (Thomas, my servant,) **to Ḥabbān ...**’ (3rd c. Wright 1871:173.11)

The coding of the T and R is neutralized⁵⁴. And clauses are ambiguous to the role of the object, if either the theme or recipient is left unmentioned (e.g. in ellipsis).

The preposition *l-* is a generalized marker of P, T and R starting with highly prominent arguments of dative case semantics (cf. Croft 2003:168). The mono-

⁵⁴ Different prepositions may be used to indicate the R, however, while the differential marking of P and T is always *l-*. Whether this is might also depend on prominence or other pragmatic or semantic factors, requires further study.

transitive constructional split has been extended to ditransitives, targeting the T function. If the basic alignment is the one where arguments have most overt marking, the case-marking alignment for Syriac ditransitive clauses would be characterized as neutral, not indirective. In Syriac, then, differential object marking does not seem to be motivated by disambiguation, which would be contrary to the traditional discriminatory function of DOM.

Differential argument-marking need not be sensitive to all the subscales of prominence. DOM, for example, solely depends on definiteness, respectively, information structure (i.e. identifiability in the discourse) and covers the whole range from personal pronouns to definite NPs in Hebrew (Givón 1982) and Amharic (Amberber 2005) but excludes indefinite NPs altogether. Indefinite NPs, however, may be identifiable depending on whether the speaker has a specific referent in mind. Differential object marking, for example, also involves such specific indefinites in some languages such as Persian (Lazard 2001:877). Persian, for example, marks both definite and specific indefinites by the postposition *-râ*.

The differential marking can be obligatory or optional. Some languages such as Sinhalese (Indo-Aryan, Sri Lanka; Næss 2004:1196) optionally mark animate NPs, while inanimates are never marked. By the same token, definite NPs may not be obligatorily marked in a language, suggesting that speakers need not bind themselves to a definite reading of the object, if they do not feel such a need. In Classical Syriac, for example, differential marking of definite object NPs is not obligatory. Speakers can increase an argument's identifiability through DOM as they feel required to signal what they, for whatever reason, find salient in the discourse (cf. Khan 1988:139-140; Joosten 1996:45).

Moreover, coding properties that are sensitive to the prominence of the P argument can override other alignment splits. Hindi has a TAM-sensitive alignment split: ergative in the perfective (and the perfect) but accusative in the imperfective (and future). The A is distinguished by the postposition *=ne* in the perfective. The S and indefinite Ps are zero-marked. When, however, the P is definite such as *hār* 'necklace' in (55b) below or animate such as *bacce* 'child' in (55c), it is marked by the postposition *=ko*. Hindi, therefore, shows a tripartite case-marking pattern ($A \neq S \neq P$) with respect to higher ranking NPs, while the ergative case-marking pattern is manifested only for lower ranking NPs.

(55) **Hindi** (Indo-Aryan, India; Mohanan 1994:180, glossing slightly modified, transcription adapted)

- a. *llā=ne hār uṭ^hāyā* (indef. inanimate P)
 lla=ERG necklace-NOM lift-PERF
 'lla lifted up a/the necklace.'
- b. *llā=ne hār=**ko** uṭ^hā-yā* (def. inanimate P)
 lla=ERG necklace=DOM lift-PERF
 'lla lifted up **the** necklace.'
- c. *llā=ne bacce=**ko** uṭ^hā-yā* (animate P)
 lla=ERG child=DOM lift-PERF
 'lla lifted up **the/a** child.'

In Vafsi, salient NPs follow a horizontal pattern (S≠A=P), as illustrated below. The 'direct' case (Ø) not only neutrally subsumes S, A and P in the present but also groups ergatively the S and non-salient Ps in the past. The 'oblique' case (-i) is used for the A of the past tense as well as for salient Ps in all tenses. This morphological identity between A in the past tense and salient Ps is found in some Iranian languages (Bossong 1985). Such differential marking is unexpected from the assumed discriminatory function of differential argument marking.

(56) **Vafsi** (Northwest Iranian, Tati, Iran; Stilo p.c.)

- [S←DIR] [V]
 a. *hæsæn-Ø dæ-kæt-tæ*(direct)
 PRN-DIR PVB-fall:PST-PPT
 'Hasan fell.'
- [A←OBL] [P←DIR] [V]
 b. *tine yey dánæ yú-æ=s dærd-æ* (ergative)
 he:OBL one CLF heifer-DIR=A:3SG:II have:PST-PL
 'He had a heifer.' (Stilo 2004b: B1.2)
- [A←OBL] [P←OBL] [V]
 c. *hæsæn-i mæhmud-i=s bæ-xænd-en-a* (double oblique)
 PRN-OBL PRN-OBL=A:3SG:II PUNC-laugh-CAUS-PST
 'Hasan made Mahmud laugh.'

In both languages, while the ergative and non-ergative pattern are sensitive to TAM, the DOM is used irrespective of TAM. DOM, therefore, supervenes the aspectual domains of the distinct alignment types for less prominent NPs. Thus, it is principally the marking of the A that is TAM-based, while the marking of the P is animacy-based. The marking of the S is not sensitive to either.

Table 9 offers a succinct overview of the patterns that were reviewed in this subsection.

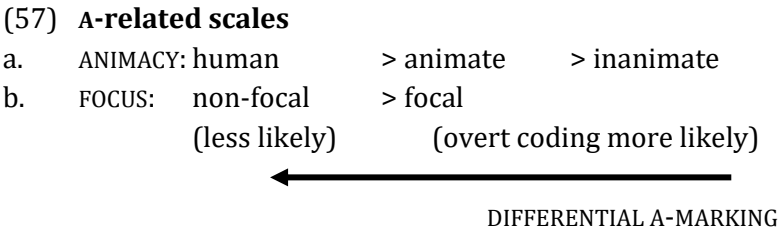
Table 9. *Alignment patterns based on the NP prominence of the P*

A	S	P	
∅	∅	∅/DOM	(<i>neutral-</i>) <i>accusative</i>
ERG	∅	∅/DOM	(<i>ergative-</i>) <i>tripartite</i>
OBL	∅	∅/OBL	(<i>ergative-</i>) <i>horizontal</i>

2.4.3. Differential and Optional Agent Marking

The marking of the A was considered to be stable in the preceding discussion. We continue with the differential marking of the A. The relatively less obvious, respectively, unexpected properties of an NP to occur potentially in the A-function make overt (or distinct) case-marking more likely (e.g. Croft 1988; Comrie 1989:128-130). Its relationship with DOM, however, is controversial and cannot be considered an exact mirror image (see McGregor 2010; Fauconnier 2011a, 2012; Fauconnier and Verstraete 2014). Differential A-marking is presumably a phenomenon *sui generis*. It is confined here to the possible effects of animacy or discourse-salience on the overt case-marking of the A where particularly the absence of case-marking, i.e. zero-coding, is interesting in what otherwise follows an ergative pattern⁵⁵. Some languages, especially Australian languages, do appear to evince such effects of mainly animacy and/or focus. We first discuss how the differential case-marker of the A is employed to contextualize pragmatically the A in the clause.

The factors determining differential, respectively, split A-marking are schematized in (57) below:



⁵⁵ Differential agent marking is sometimes also referred to as differential subject marking. To avoid confusion with the S ('subject'), it is confined to the A here.

Overt (or distinct) coding is more likely for the features to the right edge.

First of all, there appear to be no unambiguous cases where the overt case-marking of full NPs is solely triggered by animacy, that is zero coding for animate agents against overt coding for inanimate agents (Fauconnier 2011a). Other factors may be involved such as different noun classes, respectively, gender that may correlate with animacy distinctions but are ultimately lexically conditioned (cf. Comrie 1989:191) or the relative ranking of arguments in A or P-function (cf. Silverstein 1976:129; Comrie 1978:386-287, see further below). Animacy, thus, may be partially involved in the lexical restrictions on selectable arguments to occur with overt ergative case-marking. Indeed, there are some languages where such case-marking or the possible occurrence in the A function in general appears to depend completely on animacy. In Hindi, for instance, ergative case-marking is possible for highly animate entities such as human beings and less animate entities such as natural forces but apparently impossible for inanimate entities such as 'stone' or 'rock' (Mohan 1994:74-75; cf. Fauconnier 2012:55-58).

Secondly, the distinction in case-marking of the A may be animacy-based. This does not alter the alignment pattern, only the selection of case-marking. An instrumental case is used for A arguments low in animacy against the ergative case for those high in animacy (Fauconnier 2011a, 2012:43-47). Less or inanimate A arguments such as natural forces like 'lightening' are differentiated from highly animate A arguments like 'brother'.

Several languages show a type of differential A-marking that is conditioned by role discrimination, animacy and focus (e.g. Givón 1985a; McGregor 2006, 2010; Fauconnier 2012). The differential case-marker is employed to express the unexpectedness of the A. Neutral alignment, i.e. zero coding, is found for A arguments not in focus, while ergative alignment is found for the focal counterpart. In Warrwa, an Australian aboriginal language, for example, ergative case-marking is optional and not predictable but manifests itself through distinct coding depending on focus and the degree of agentivity (McGregor 2006). Zero-marking of the A is what defocuses it, signaling an expected actor with little impact. Overt case-marking of the A is diffused across an ordinary ergative marker and a focal ergative marking. The first adds no significance to the A, the latter adds salience to the A, highlighting it as being counter to expectation and having an exceptionally powerful impact on the P.

Overt case-marking of agent focus also correlates with animacy. Consider the following example from Umpithamu, an Australian aboriginal language:

(58) **Umpithamu** (Australia, Northern Queensland; Fauconnier 2012:49, original source cited therein)

[A] [V=P]

- a. *Manta eentinti kali-n=iluwa* (animate A)

child small carry-PST=3SG.NOM

‘The child carried it.’

[A←ERG] [V=P]

- b. *Yuma-mpal anthi-ku=ingkuna* (inanimate A)

fire-ERG burn-POT=2SG.GEN

‘The fire will burn you.’

[A←ERG] [V=P]

- c. *Nhunha-mpal watyun=iluwa* (contrastive focal animate A)

other-ERG spear-PST=3SG.NOM

‘Another one speared it.’

In Umpithamu, animate agents are zero-marked and inanimate agents overtly case-marked (Fauconnier 2012:48-49). When they are focal, however, not only inanimate agents but also animate agents may be case-marked (*-mpal*).

Moreover, coding properties of the A argument can override other alignment splits (for example, Nepali, Verbeke 2013a). In Newari, for instance, a Tibeto-Burman language in Nepal, ergative alignment is in principle TAM-conditioned and largely confined to the perfect and perfective past and irreal-is/future (Givón 1985b). The imperfective (i.e. durative/progressive), however, may also manifest ergative case-marking (*-nq*), when the A is focal (ibid. 93- 94).

In conclusion, the marking of the A tends to be specialized for inanimate arguments and/or agent focus. Case-marking of the A serves to contextualize unexpected arguments pragmatically.

2.4.4. **Person-Based Splits and Role Associations**

In split case-marking, the zero-coded argument varies between the A and P. Since differential marking mainly involves the absence or presence of a marker, respectively, the zero or overt coding of an argument conditioned by the NP’s ranking, an alignment split based on these same conditions mainly depends on which arguments exhibit overt case-marking. If at all, the S is typically zero-marked (see §2.2.6). For accusative or ergative alignment, it is typical that only the argument that is not grouped with the S is overtly coded.

In the functional typological approach, what is overtly marked is the higher ranking argument type in the P function but the lower ranking argument in the A

function. A pronoun ranks higher than a common full NP on the nominal hierarchy. And first/second person referents rank higher than third person referents on the person scale. Hence, when there is a split in case-marking based on the referential properties of the NP, the absolute higher ranking arguments have often been said to associate with accusative alignment, while the lower ranking arguments associate with ergative alignment (Silverstein 1976; Silverstein 1976:122-129; Comrie 1978, 1989; Dixon 1995:83-94). Dyirbal, an Australian aboriginal language, is an oft-cited example where non-third person forms follow an accusative pattern, while other (pro)nominals follow an ergative pattern (Dixon 1979:63-64). Table 10 illustrates this split by the glosses ‘we all’ and ‘father’⁵⁶. Similarly, there are languages where the cut-off point is between pronouns and full nominals, pronouns being neutral or accusative and nouns ergative (Comrie 1989:131; Dixon 1994:95-96).

Table 10. *Split conditioned by NP prominence in Dyirbal*

	ACCUSATIVE (S=A)	GLOSS	ERGATIVE (S=P)	GLOSS
A	<i>ɲana</i>	‘we all’	<i>ɲuma-ɲgu</i>	‘father’
S	<i>ɲana</i>		<i>ɲuma</i>	
P	<i>ɲana-na</i>		<i>ɲuma</i>	

Source: *After Dixon 1979:63.*

The trigger potential for agreement can also depend on person. Third person (singular) is typically a null/zero realization especially in the A (and S) role (Siewierska 2004:24, 150-151). It is possible that non-third persons alone trigger agreement, as illustrated for Tangut below.

(59) **Tangut** (Tibeto-Burman, China; DeLancey 1981:631, emphasis original)

[A: 2]
[P: 3]
[V-A: 2]

a.

ni
you

pha
other

ɲgi-mbɪn
wife

ndi-sei-na
choose-2

(A is indexed)

‘You choose another wife.’

⁵⁶ Essentially, only the A and P are affected, while the S is not. One should note that Dyirbal may express actual transitive clauses where both the A and P are marked by ergative and accusative case or both zero-marked (Comrie 1989:131; Croft 2001:309-310),

case-marking of the A, when the A and P are of equal ranking in animacy (Silverstein 1976:129; Comrie 1978:386-387). This is also known as “hierarchical alignment” (Siewierska 2003, 2004:55). Such hierarchy effects have cross-linguistic tendencies for treating clauses differently when either the A or the P is higher in prominence (and balanced rankings as possibilities in between). Witzlack-Makarevich et al. (2016) further distinguish between hierarchical agreement and co-argument sensitivity. In co-argument sensitivity, the properties of another argument determine the marking of a particular grammatical function. The P is, for instance, only marked accusatively, when the A is third person in Ik (a Kuliak language, Nilo-Saharan, Uganda); otherwise it is marked in the nominative. This is somewhat similar to Comrie’s (1975, 1978:380-383) “antiergative” type which he introduced for Finnish and Welsh that are traditionally described as accusative. Comrie (1975) argues that case-marking in ‘antiergative languages’ serves to discriminate arguments, distinguishing the A from the P. In Comrie’s ‘antiergative’ type, it is the full nominal presence of the A that triggers distinct coding and only the P is coded differently. Following previous literature, Witzlack-Makarevich et al. (2016) emphasize, however, that hierarchical agreement and co-argument sensitivity are not instances of a special alignment type but represent the basic alignment types conditioned by particular referential properties. Thus, the systems above would still be characterized as either ergative or accusative depending on the properties of either or both arguments.

Person role inverse constructions, for instance, are, among others, a typical trait of Native American languages and a few Tibeto-Burman languages (e.g. DeLancey 1981). The construction where the A outranks the P is called ‘direct’, while constructions that deviate from this are called ‘inverse’, and this is highlighted by distinct verbal morphology. DeLancey (1981:642) offers the following example from Jyarong, a Tibetan language (spoken in the Sichuan province of China) where ergative case-marking and agreement are conditioned by the highest person reference. The ergative postposition *-kə* occurs only when the A is of lower ranking in person than the P. The alignment is, therefore, split between ergative and neutral depending on the person of the A. When the A is third person, for example, but the P is first person, it is overtly marked, but in the reverse situation, the A is zero-marked. The third person form does not trigger agreement, only the non-third person form (*-ng*). At the same time, the verb agrees with the highest ranking person and takes a special, so-called inverse form (*u-*) to indicate that the patient is associated with the highest ranking person instead of the expected agent, i.e. the P outranks the A in person.

(61) **Jyarong** (Tibeto-Burman, Sichuan, China; DeLancey 1981:642)

-
- a. [A: 1] [P: 3] [V-A: 1] (A > P)
nga mā nasno-ng
 I he scold-1st
 'I will scold him.'
- b. [A: 3] [P: 1] [V-P: 1] (P > A)
mā-kā nga u-nasno-ng
 he-ERG I INV-scold-1st
 'He will scold me.'

Haspelmath (2007), following Zúñiga (2002), argues that, when a language evinces a person role constraint, a more complex construction becomes increasingly more likely for when the P outranks or is equal to the A and the T outranks or is equal to the R contrary to the more frequent pattern of higher ranking A and RS. A ditransitive person role constraint, thus, typically applies to clauses where the T outranks the R in person. For example, Modern Standard Arabic disallows dependent person forms for the R role when the T outranks the R. An independent object person form based on the element *'iyyā-* is used instead. Suffixal object indexes such as *-hu* and *-nī* in (62a) and (62b) are added to the inflected verb. The additional object may be either suffixal (e.g. *-hi*) or independent (*'iyyā-ya*) as shown in (62d) and (62d). Doubled object indexes are possible where the R outranks the T as illustrated in (62c) or where the R and T are balanced. In other contexts, however, the T must be expressed independently. Moreover, the independent pronominal object constructions are ambiguous, when the non-third person referent is expressed independently. Thus, a suffixal first person index (*-nī*) will always be interpreted as the R but never as the T.

(62) **Modern Standard Arabic** (Central Semitic; Fassi Fehri 1988:115-116, glossing and transcription slightly modified, ex. b and h my own additions)

- a. *ntaqad-tu-hu*
 criticized-A:I-P:him
 'I criticized him.'
- b. *ntaqad-ta-nī*
 criticized-A:you-P:me
 'You criticized me.'
- c. *'aṭay-ta-nī-hi* (R > T, dependent)
 gave-A:you-R:me-T:him

- d. 'a'tay-ta-nī 'iyyā-hu (R>T, independent)
gave-A:you-R:me T:ACC-him
'You gave it/him to me.'
- e. 'a'tay-ta-hū-****ni** (T>R, ****dependent**)
gave-A:you- T:him- R:me
- f. 'a'tay-ta-hu 'iyyā-ya (T>R, independent)
gave-A:you-him ACC-me
'You gave **me** to him.' (also 'You gave it/him to me')
- g. 'a'tā-Ø-ka-****ni** (R=T, dependent)
gave-A:he-you-me
- h. 'a'tā-Ø-ka 'iyyā-ya (R=T, independent)
gave-A:he-you T:ACC-me
'He gave **me** to you.' (also 'He gave you to me.')

Recent, cross-linguistic studies by Bickel (2008) and Bickel et al. (2015) indicate, however, that there is no conclusive evidence for these tendencies and that areal diffusion or genetic inheritance most likely account for them. What does appear to hold is that the higher ranking A or the lower ranking P are associated with zero case-marking. With respect to agreement, the same tendencies for accusative and ergative alignment have been argued to hold for person indexing (e.g. Siewierska 2005). Again, accusative alignment is associated with the higher ranking arguments, first/second persons, and ergative with lower ranking person, the third person. There appears to be no correlation between person reference and other alignment types (Siewierska 2004:63). The reverse would be accusative for the third person and ergative for the first/second person. This reverse split also occurs, as evinced by recent surveys such as Bickel (2008) and Bickel et al. (2015). Bickel (2008) offers examples from Kiranti languages (Sino-Tibetan) where it is, for example, the first person (singular) that is ergatively aligned and the third person accusatively (the other persons align neutrally).

Table 11. *Person split in Puma*

	1SG ACCUSATIVE (S=A)	3SG ERGATIVE (S=P)
A	-η (>3), -na (>2)	Ø- (pΛ-, >1)
S	-ηa (non-past), -oη (past)	Ø-
P	-ηa (non-past), -oη (past)	u-, i-

Source: *After Bickel 2008:197.*

Table 11 illustrates this for Puma, a Kiranti language. Bickel et al. (2015) argue that the accusative-ergative splits in accordance with the higher ranking As and lower ranking Ps cannot be considered universally valid, as much of the provided evidence is ambiguous or leaves room for alternative analyses such as areal diffusion. They maintain that the person-based splits are an epiphenomenon (cf. Witzlack-Makarevich 2016).

Finally, while the S typically remains unaffected by such hierarchies, split subject marking (see §2.3.1) can be limited to non-third person forms in languages such as Lakhota (Siouan, Dakota, United States) or to pronouns against full NPs in Koasati (Muskogean, Louisiana, United States; Mithun 1990). Person-conditioned splits can also be confined by TAM. Balochi, a Northwest Iranian language, for example, manifests a person and nominal role-based split in the past (Korn 2009). Some (Eastern) Balochi dialects express ergative agreement with higher ranking full nominal Ps only, an interesting counterexample similarly to Trumai above. Moreover, the higher ranking persons only possibly trigger agreement with the A, which is the reverse of what we expect from the prominence scale.

Thus, while the absolute referential properties, the relative referential properties, the referential and associated role properties, and/or the properties of other arguments may determine a particular grouping of grammatical functions, all of these can be characterized as an alignment split conditioned by specific argument-related factors.

2.5. Cross-Linguistic Distribution and Combinability

The alignment types reviewed in the previous subsections are not equally distributed among languages of the world. Languages also appear to evince preferences as to how an alignment type is manifested (either via case-marking or agreement).

2.5.1. *Intransitive-Transitive Alignment Types*

Cross-linguistic studies such the *World Atlas of Language Structures* (WALS) show that case-marking and verbal person marking are distributed differently for distinct alignment types (e.g. Siewierska 2004, 2005; Comrie 2005; Croft 2012:259; Valipullai 2012:243) which we could represent in the following scales for major alignment patterns for case-marking of full NPs in (63) and

agreement in (64). 'Neutral' is strictly the absence of marking⁵⁷ and the frequency decreases from left to right.

(63) **Case-marking**⁵⁸: neutral (98/190) > accusative (52/190) > ergative (32/190)

(64) **Agreement**: accusative (212/380) > neutral (84/380) > ergative (19/380)

In this survey from WALS, neutral alignment ($A=S=P$) is the most common pattern for case-marking (i.e. the absence thereof) while accusative alignment ($A\neq S=P$) predominates for agreement. Accusative case-marking is found more frequently than the ergative type ($A=S\neq P$) but the difference is small (27% > 16%). Tripartite marking is very rare throughout, but split subject marking in agreement (26/380) and person-based alignment splits (28/380) are slightly more common than the ergative type (Siewierska 2005). In terms of geographical distribution, only ergativity is significantly rarer in Europe and virtually absent in Africa (Comrie 2005:401; Siewierska 2005:407). In these surveys, ergative alignment is more likely to be manifested via case-marking rather than agreement and accusative alignment is most likely to be manifested via agreement.

The higher ranking topic-worthiness of the A is often used as an explanation for its tendency to be grouped with the S in accusative indexing (e.g. Comrie 1989). Topic referents expressed through person forms are mainly found in the S and A-function (e.g. Cooreman et al. 1984; Dixon 1994:54-55). On the other hand, corpus-based studies indicate that the P and S rather than the A are the more likely bearers of new information expressed by full nominals, so that these discourse properties would group the S and the P ergatively (e.g. DuBois 1987).

Agreement itself, however, can also be more refined into phonological form, position and trigger potential and, therefore, evince combinations of alignment types on these levels. Recently, Bickel et al. (2013) showed that, cross-linguistically, there is essentially no strong preference for a particular agreement pattern⁵⁹ in terms of morphological marking alone. Thus, a preference for

⁵⁷ Differential object marking is subsumed under the alignment type where the object is overtly marked.

⁵⁸ This is case-marking of full NPs excluding independent person forms.

⁵⁹ Accusative indexing is still favored slightly (37% against 21% for ergative). Bickel et al. (2013) exclude tripartite alignment from their study but do include horizontal alignment ($S\neq A=P$).

accusative agreement in phonological form does not appear to be supported. Yet, they indicate there is a strong avoidance of the grouping of S and P (or A and P) in terms of what triggers agreement (i.e. the trigger potential). S and A are favorably aligned in this respect. Ergative (and horizontal) alignment, thus, only appears to be strongly disfavored in this latter respect. Moreover, concerning affix order, Siewierska (2004:167) notes that a V-P-A sequence is more commonly combined with accusative (rather than ergative) morphological marking.

Siewierska and Bakker (2009:299-300) observe a cross-linguistic preference for the A argument to be both overtly case-marked and indexed rather than the P argument, if such an overlap exists in transitive constructions. Differential indexing of objects combined with case-marking, then, is an interesting exception. It shifts the morphological markedness in proportion to the P. Amharic, for instance, does not make a distinction in the indexing of the S and A while the indexing of the P remains distinct from the S and A in phonological form for both indefinite and definite NPs. Objects can be marked differentially through both agreement and/or case-marking in Amharic. In example (65) below, the verb *wässäda* ‘took’ agrees with the definite P *borsa-w* ‘his wallet’ through a suffixal object index *-w*. The definite P itself *borsa-w* ‘the wallet’ takes the case-marker *-(i)n*.

(65) **Amharic** (West Semitic, Givon 1979:244; cf. Croft 1990:129; glossing adapted)

	[A] [P(+DOM)]		[V+A(+P)]		
a.	<i>Kassa</i>	<i>borsa</i> (Ø)	<i>wässäd-a</i> (Ø)		(indef. P)
	PRN	wallet	take _{PFV-A:3MS}		
	‘Kassa took a wallet.’				
b.	<i>Kassa</i>	<i>borsa</i>	<i>wässäd-a-w</i>		(pron. P)
	PRN	wallet	take _{PFV-A3MS-P:3MS}		
	‘Kassa took it .’				
c.	<i>Kassa</i>	<i>borsa -w</i>	<i>-in wässäd-a-w</i>		(def. P)
	PRN	wallet -DEF:MS	-DOM take _{PFV-A:3MS-P:3MS}		
	‘Kassa took the wallet .’				

The P differs from the S and A only in trigger potential. S and A arguments are always indexed while the P is indexed only when it is definite.

Distinct coding properties can instantiate the same alignment pattern in a language. The construction can, for instance, be accusative in terms of both indexing and case-marking. Constructions, however, can also consist of a combi-

nation of distinct alignment types through different coding properties. Stilo (p.c.), for instance, explains that Vafsi manifests a horizontal pattern for case-marking but the person indexing may be ergative. A construction can, therefore, contain the mirror image in alignment type for either coding property, having, for instance, ergatively aligned case-marking yet accusatively aligned agreement. Dixon (1979:92, 1994:95-96) claims that ergative cross-referencing can be combined with ergative case-marking but never with accusative case-marking (cf. Comrie 1978:340 who notes it is “rare or nonexistent”). The possible combinations of ergative and accusative coding are given below. Following Dixon (1994:95-96), if the cross-referencing of arguments patterns differently from their case-marking, the cross-referencing will be accusative, and the case-marking ergative, but the other way around does not appear to occur.

(66) Ergative and accusative indexing, respectively, case-marking

DEPENDENT PERSON FORMS	INDEPENDENT PERSON FORMS	FULL NPS
ACC	ACC	ACC
ACC	ACC	ERG
ACC	ERG	ERG
ERG	ERG	ERG
(**)ERG	ERG	ACC
(**)ERG	ACC	ACC

Overall, from a more refined perspective of agreement, ergative agreement is only strongly disfavored in terms of trigger potential. The S and A tend to be grouped accusatively in both triggerering overt agreement. If accusative indexing involves suffixal person forms, the P is more likely to precede the A after the verbal stem (i.e. V-P-A) rather than the reverse.

Ergative alignment seems to be more likely to be manifested via case-marking. Case-marking and indexing can also diverge with respect to alignment. If they do, the indexing is typically accusative and the case-marking ergative; the other way around is strongly disfavored.

2.5.2. Ditransitive Alignment Types and Combinations

Haspelmath’s (2005b:5) sample indicates cross-linguistic preferences for manifestations of ditransitive alignment types:

- (67) **Case-marking**⁶⁰: indirective (58/100) > neutral (45/100) > secundative (6/100)
 (68) **Agreement**: neutral (71/100) > secundative (22/100) > indirective (16/100)

In this survey, neutral agreement and indirective case-marking are the most common, while secundative case-marking is rare. It may be interesting to note that neutral case-marking is less common for the monotransitive alignment types compared with the ditransitive types (compare (63) and (64) above) and the reverse for neutral agreement (Haspelmath 2005b:9).

The ditransitive patterns secundative ($T \neq P = R$) and indirective ($T = P \neq R$) can each combine with either ergative ($A = S \neq P$) and accusative ($A \neq S = P$) alignment cross-linguistically (Croft 2001:146-147; Malchukov et al. 2010b:5), although Siewierska (2004:63) remarks that ergative alignment more readily combines with the indirective type. If a language manifests neutral indexing (i.e. the absence of agreement) for monotransitive clauses, it will also do so for ditransitive clauses (Haspelmath 2005b:6).

A completely tripartite pattern ($S \neq A \neq P \neq T \neq R$) does not appear to be found (Bickel and Nichols 2009:309). An unambiguous instance of horizontal alignment does not appear to be known for ditransitive constructions (Malchukov et al. 2010b:6). A possible major equivalent of horizontal (or double oblique) constructions is found in Vafsi (Northwest Iranian, Iran; Stilo 2010):

- (69) **Vafsi** (West Iranian, Iran; Stilo p.c.)

	[S←DIR]	[V]		
a.	<i>hæsæn-Ø</i>	<i>dæ-kætte</i>	(intransitive)	
	PRN-DIR	PVB-fell		
	'Hasan fell.'			
	[A←OBL]	[P←OBL]	[V]	
b.	<i>hæsæn-i</i>	<i>tæmen=s</i>	<i>bæ-xændena</i>	(monotransitive)
	PRN-OBL	1SG:OBL=A:3SG:II	PUNC-made.laugh	
	'Hasan made me laugh.'			
	[A←OBL]	[T←OBL]	[V]	[R←OBL]
c.	<i>tæmen</i>	<i>kell-i=m</i>	<i>há-da</i>	<i>hæsæn-i</i> (ditransitive)
	1SG:OBL	daughter-OBL=A:1SG:II	PVB-gave	PRN-OBL
	'I gave my daughter to Hassan.'			

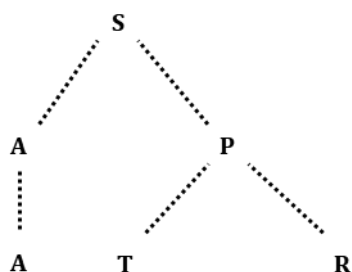
⁶⁰ This is case-marking of full NPs including independent person forms.

The A receives the same case marking as the P, T and R but the S is isolated ($S \neq A = P = T = R$), as exemplified below. The first form in (69a) is known as the ‘direct’ case, the other nominal forms in (69b) and (69c) as the ‘oblique’. All arguments (including themes and recipients) but the subject in (69a) are marked by the ‘oblique’⁶¹.

The cross-linguistic distribution of the various groupings of core arguments in intransitive, monotransitive and ditransitive constructions is said to reflect the conceptual proximity between the participant roles for S, A, P, T and R (Croft 2001:146-147; cf. Malchukov et al. 2010b:5). This is schematized in the following figure after Croft (2001:147)⁶². Figure 8 shows how the alignment patterns are primarily determined by the grouping of the S with the P and/or A and the grouping of the P with the T and/or the R. The other types of groupings that are conceivable and/or extant such as tripartite or horizontal alignment are secondary and more likely to be unstable.

Coding strategies can converge and diverge in ditransitive constructions. Secundative indexing ($P = R \neq T$) is particularly found in languages that exhibit DOM where the differential case-marker of the P is often morphologically identical to marker of the R (Givón 1976:165-166; Siewierska 2004:61).

Figure 8. *Conceptual space for participant roles*



Source: Based on Croft (2001:147).

This is a common feature of languages where only one suffixal object index is available as illustrated for Amharic in (70) below (cf. Moravcsik 1988:104). Two object indexes may also be involved as in Lebanese Arabic illustrated in (71) below.

⁶¹ This alignment pattern only applies to animate NPs.

⁶² Croft's original semantic map (ibid.) predicts that there are languages where also the A of ditransitives is treated differently from the A of monotransitives and this is, in fact, attested but extremely rare (Bickel 2009:307; Wichmann 2010).

- (70) **Amharic** (West Semitic, Ethiopia; Givon 1979:162, glossing adapted)

	[DAT→R]	[T←DOM]	[V+R]
<i>Kassa</i>	<i>lä-Mulu</i>	<i>däbtarocc-u-n</i>	<i>sät't-at</i>
K.	to-M.	notebooks-the-OBJ	gave-R:3FS
'Kassa gave Mulu the notebooks.'			

- (71) **Lebanese Arabic** (Central Semitic, Lebanon; Moravcsik 1988:104, original source cited therein, transcription adapted)

	[V+R]	[T] → [DAT→T]	[DAT→R]
<i>Samīr</i>	<i>baʔat-la</i>	<i>yeh la l walad la</i>	<i>Salma</i>
Samir	send:PAST-her	him to the boy	to Salma
'Samir sent the boy to Salma.'			

The R is preferred over the T when case-marking and indexing are combined (Siewierska and Bakker 2009:299-300). The R typically outranks the T in topicality, animacy and affectedness and is construed as the most salient affectee much like a patient (e.g. Fillmore 1977; Givón 1976, 1984b; Kittilä 2008). Thus, what is identifiable as the most recipient-like argument, will favor both case-marking and indexing like the P, if applicable.

Differential indexing of the R is also typically found in languages where both the T and R are case-marked, as illustrated for Amharic and Lebanese Arabic above. In an indirective construction, however, sole indexing of the T like the P is said to be limited to languages where differential indexing of the P is sensitive to definiteness and case-marking of the P and T is lacking (Givón 1976:165-166). Givón (ibid. referring to Comrie) seems to suggest, therefore, that the following combinations of differential case-marking and person indexing are typically found. Table 12 below offers a simple overview where '0' represents the absence and 'm' the presence of overt coding (following Haspelmath 2005b). Agreement with the R is preferred over T, when all arguments enjoy overt case-marking (second column). Agreement with the T is only preferred over the R, when only the R enjoys overt case-marking (third column). That is, indirective agreement combines with indirective case-marking, while other case-marking patterns favorably combine with secundative agreement (T≠P=R).

Table 12. *Combinations of ditransitive case-marking and agreement preferences*

	R > T			T > R		
	P	T	R	P	T	R
CASE-MARKING	m	m	m	0	0	m
AGREEMENT	m	0	m	m	m	0

Syriac, however, would seem to be a counterexample to these tendencies. Syriac DOM is sensitive to definiteness and is expressed through the dative preposition *l-*. The differential case-marking of the T is always combined with differential indexing of the T in Syriac, as exemplified in (72) below. Syriac verbs only take one object index and most verbs will select an indirective pattern throughout. Only a select few ditransitive verbs of the causal profile ‘A causes R to receive T’ (Blansitt 1984) such as *mly* ‘fill’ index the most recipient-like argument in a double object construction. Otherwise, agreement with the T like the P is always preferred, even though all arguments are case-marked.

(72) **Syriac** (Northwest Semitic, Aramaic; 2nd c. Genesis 37:28)

[V+T] → [DOM→T] [DAT→R]
ʔu=zabbn-ū-y *l-yawseḫ* *l-ʕarbāyē* *ḫ-ʕesrīn* *d-keṣpā*
 and=sold-A:3MPL-T:3MS DAT-PRN DAT-Arab:MPL in-twenty LK=silver:MS
 ‘And they sold **Joseph** to the Arabs with twenty (pieces) of silver.’

Overall, indirective alignment appears to be the more common ditransitive alignment pattern and is most often manifested through case-marking. There is a cross-linguistic tendency of secundative indexing to group the P and R rather than the P and T, and this always involves zero coding of the T. Yet, the indexing of the T may also be preferred over the R in differential object marking.

2.6. Conclusion

Alignment is principally a property of constructions and not *per se* of a language as a whole (Comrie 1989:114; cf. Croft 2001:168; Haig 2008). A constructional approach allows us to capture both cross- and intralinguistic variation in argument marking where the observable morphosyntax is central (without requiring theoretical assumptions regarding deeper phenomena of phrase structure). Linguistic typology generally approaches this from the angle of constructional and semantic types and their development and distribution.

Functional approaches point to communicative and cognitive principles underlying alignment variations. Givón (1984a, cf. Croft 1990)'s role hierarchy, for example, made predictions that the A and R are prototypically more topic-worthy than the P and T. The semantic and pragmatic properties of these functions and their syntactic constraints have been shown to be aptly uniform across languages in several typological studies, so that what is considered less topic-worthy is syntactically also more constrained (Givón 1984a). The cross-linguistic preference of secundative (R=P) over indirective (T=P) person indexing, for instance, is reported to reflect the relative higher ranking of the R over the T (Givón 1976; Croft 1988; Haspelmath 2007). But there are noteworthy counterexamples and not all typologists take this approach. The traditional, functional view has recently been brought into question by typologists who highlight the importance of diachronic evidence. The functional-communicative principles behind alignment variation do not seem to fit with the vast cross-linguistic distribution beyond microareas such as Eurasia and Australia. Functional-communicative principles, then, need not always underlie the phenomena that comply with them, especially when they cannot be advanced on synchronic grounds. Diachronic and areal grounds must be taken seriously.

Semantic bases can be identified for some of the constructional splits. Lexicalization, however, leaves plenty of room for semantic arbitrariness, and grammaticalization for historical incidents. The source construction, for example, may account for a particular constructional split. When a language exhibits a split between accusative and ergative (or other non-accusative types of) alignment based on TAM, for instance, the semantic properties can be non-past, imperfective for the accusative, grouping the S with the A, contrasting with past, perfective for the non-accusative, typically grouping the S with the P. The non-accusative pattern, however, is generally the outcome of a diachronic development from a resultative participle with a patient-orientation that grammaticalized into a perfective past construction.

In the study of an alignment pattern, we focus on the correspondences between S and P or A respectively the P and the T or R. Languages nevertheless tend to show various constructional splits that are constrained by different factors. Firstly, the morphology and syntactic behavior, for example, can diverge. The morphological expression may be ergative, even though the syntax is predominantly accusative, so that the A shares most more behavioral properties with the S, but the P more coding properties with the S.

Secondly, two major coding strategies are to be distinguished. The agreement and case-marking (which also includes adpositional marking) can diverge

between different groupings of grammatical functions. The agreement can be accusative, while the case-marking is ergative. Word order could be considered a coding or behavioral property. When there is an evident preference of an argument in a grammatical function to occur on either side of the verb (pre-verbal vs. post-verbal), an alignment pattern can be discerned.

Thirdly, agreement itself is a complex phenomenon where, apart from the phonological form, the relative position of the agreement markers and the potential to trigger overt expression of grammatical functions can be additional factors to distinguish particular groupings. There seems to be, for instance, a cross-linguistic bias against an ergatively aligned trigger potential.

Finally, intransitive and transitive constructions can lead, as it were, a life of their own. Intransitive constructions can be split or alternate, even beside transitive constructional splits and alternations. In this respect, it is important to distinguish between verb-related and argument-related properties and these may override each other. This can yield complex alignment systems.

Verb-related properties such as lexical aspect and TAM generally do not involve distinct marking of the P. Intransitive constructions can be split or fluid, especially as manifested through agreement, between an ergative and accusative pattern in terms of verbal semantics without any change in the transitive construction. Verb-related intransitive construction splits can additionally be constrained by argument type, such that first/second person subjects are treated differently from third person subjects. Especially the P and often also the R and/or T seem to be more sensitive to the referential properties of the argument such as definiteness, while the marking of the S remains stable. Moreover, it is not uncommon, that the coding of the accusative and ergative are each other's mirror image in TAM-conditioned splits similarly to person- and NP-conditioned splits. The coding of the S remains stable throughout but the coding of the A and P shifts according to TAM or person. One could argue, however, that the distinct coding of the A between the two TAM categories is more crucial than the grouping of P and S in the perfective/past in some languages such as Hindi and Vafsi. The P in the perfective, for instance, may sometimes share identical coding with the P in the imperfective due to DOM which is conditioned by referential properties. Thus, DOM can override verb-related splits. On the otherhand, DOM and person-splits can also penetrate only one TAM construction type, so that argument scales can affect past transitive constructions differently from the present counterparts. This is precisely what we need to bear in mind, when we proceed with the study of Eastern Neo-Aramaic alignment splits.

3. CODING PROPERTIES OF EASTERN NEO-ARAMAIC⁶³

After this typological overview, our focus shifts to Eastern Neo-Aramaic. This chapter concentrates on ‘imperfective’ (*šaməʔ-*) constructions which are largely uniform across dialects and serve as a basis for comparison with ‘perfective’ (*šmiʔ-*) constructions which often show peculiarities, as will be discussed in Chapter 4 to 5 for NENA and Chapter 6 for Central Neo-Aramaic. The agent expressed through L-suffixes in the ‘perfective’ (*šmiʔ-*) will be shown to be functionally equivalent with the A expressed through E-suffixes in the ‘imperfective’ (*šaməʔ-*), and this generally holds *vice versa* for the P, indicating that a passive analysis is false, at least synchronically. The coding properties are central in this chapter, since, in terms of behavioral properties or syntactic alignment, Neo-Aramaic languages have been shown to be uniformly accusative (Hoberman 1989; Doron and Khan 2010, 2012)⁶⁴. All else being equal, the A shares behavioral properties with the S, not the P. This notwithstanding, the next chapters will provide more details indicating that some properties of the ‘perfective’ (*šmiʔ-*) waver between passive-like and ergative-like not applicable to the ‘imperfective’ (*šaməʔ-*) agent.

This chapter will introduce the main coding properties and builds up step by step from verbal morphology to transitive clauses with full NPs. We first discuss the major alignment types found in the perfective past without co-referential nominals (Section 3.2). This is continued by a brief introduction to case-marking and agreement in more complex transitive constructions involving full nominals (Section 3.3) and an examination of the interaction between pronominals and full nominals as well as agreement and case-marking in ditransitive constructions (Section 3.4.). In ditransitive constructions, the marking of the R through L-suffixes may converge across ‘perfective’ and ‘imperfective’. This chapter concludes with a treatment of the use of the L-suffixes in possessor predicates throughout the ‘perfective’ and ‘imperfective’.

⁶³ Our discussion excludes Neo-Mandaic which is otherwise subsumed under Eastern Neo-Aramaic as well (see previous section).

⁶⁴ See now also Coghill (2016:73-81) for inconclusive tests of syntactic ergativity in NENA.

3.1. Basics of Nominal and Verbal Inflection

The discussion of inflectional morphology begins with nominal morphology and person forms and continues with verbal inflection. As in other Semitic languages, the Neo-Aramaic verb has three primary levels of morphological abstraction:

- root, mainly consisting of three radicals, with an associated meaning, such as such as *n-š-q* ‘kiss’;
- stem, formed out of this root through manipulation of the vowel melody as consonantal template and/or additional affixes to distinguish verb classes and different voices such causative and mediopassive;
- inflectional base that selects a paradigm of verbal endings which jointly determine how the verb is conjugated.

3.1.1. Nouns and Independent Pronouns

Nouns are generally declined according to number (singular or plural) and gender (masculine or feminine), as illustrated for Ṭuroyo and J. Amidya below. Nouns are sometimes also inflected for adnominal possession (see below) and definiteness. Prefixal definite articles are used at least in Central Neo-Aramaic, e.g. *u-ḥmoro* ‘the king’, and some NENA dialects may have similar determiners. Case-marking is adpositional in Aramaic, e.g. Ṭuroyo *ʕal-u-ḥmoro* ‘on the ass’ (see §3.3.1).

Table 13. *Declension of nouns and adjectives in Ṭuroyo (Midyat)*

	<i>ḥmor-</i> ‘ass’	<i>ḥmar-</i> ‘jenny ass’	<i>ḥəwor-</i> ‘white’	
	MASCULINE	FEMININE	MASCULINE	FEMININE
SG	<i>ḥmor-o</i>	<i>ḥmar-to</i>	<i>ḥəwor-o</i>	<i>ḥəwar-to</i>
PL	<i>ḥmor-e</i>	<i>ḥmar-yoθo</i>	<i>ḥəwor-e</i>	

Table 14. *Declension of nouns and adjectives in J. Amidya*

	<i>xmar-</i> ‘king’	<i>xmar-</i> ‘queen’	<i>xwar-</i> ‘white’	
	MASCULINE	FEMININE	MASCULINE	FEMININE
SG	<i>xmar-a</i>	<i>xmar-ta</i>	<i>xwar-a</i>	<i>xwar-ta</i>
PL	<i>xmar-e</i>	<i>xmar-yaθa</i>	<i>xwar-e</i>	

Source: Data from Greenblatt (2011).

Eastern Neo-Aramaic (ENA), like Semitic languages in general, distinguishes between dependent and independent person forms. Dependent person forms are attached to a verbal or non-verbal host through affixation or cliticization contrary to a set of independent pronouns. All dependent person forms follow their host as suffixes or enclitics in ENA⁶⁵. This concerns a set of (enclitic) pronouns termed the ‘copula’ and a set of suffixal indexes that attach to non-verbal hosts traditionally termed ‘possessive’ suffixes. Their forms are considerably diverse in Neo-Aramaic at large as well as within dialect groups. Table 15 and Table 16 at the end of this subsection present examples from ʿTuroyo and Jewish Zaxo.

The independent pronouns are generally distinguished by gender only in the second and third person. The third person pronouns are part of a larger system of demonstratives. All demonstratives as such can serve as third person pronouns. These independent pronouns are unmarked for case and mainly denote a clausal topic, and, hence, often the syntactic subject. They occur in isolation and in topicalization or focalization constructions, usually in clause-initial position, e.g. ʿTuroyo *ono əsm-i Xāngir=yo* ‘(As for me—,) my name is Xangir’ (Ritter 1967-71, 73: 56). They are used to express a discourse-salient pronominal argument with less or no integration in the clause and are often combined with focus markers, e.g. ʿTuroyo *ono=ste* ‘Even, also I’. When they are fully integrated in the clause, they usually focalize a pronominal argument, referring back to a person index, e.g. *əsm-i ono Yāḥqo=yo* ‘**MY** name is Jakob’ (ibid. 116:37).

The unmarked dependent person forms are enclitics used in non-verbal clauses called the ‘copula’ that closely correlate with independent pronouns. The term ‘copula’ is misleading, since these enclitic pronouns are used in ditransitive constructions (§3.4) and agreement in verbal constructions with a nominal basis (§5.2.5). The copula is primarily used as the expression of person forms in non-negated present non-verbal clauses, e.g. ʿTuroyo *áydarbo=hat* ‘How are you_{MS}?’, lit. ‘how=you’. They may cliticize and contract with the final vowel of the host when they follow the predicate, e.g. NENA *áxxe=le* < **axxa=ile* ‘He is here’ (J. Amidya; Greenblatt 2011:8). Most of Neo-Aramaic also has negated counterparts which combine with a negation element based on the negator *la* or *le* (ʿTuroyo *lat-*), e.g. *lēwən* ‘I am not’ in NENA *ʔāna hatxa lēwən* ‘I am not like that’ (J. Zaxo; Cohen 2012:44), *latyo* ‘(S)he/it is not’ in ʿTuroyo.

⁶⁵ Prefixal person forms do occur in other Semitic languages. This is a major morphological typological difference between Eastern Neo-Aramaic and its Semitic relatives.

Table 15. *Basic pronominal inventory in ʈuroyo*

	INDEPENDENT	DEPENDENT	
		COPULA (ENCLITIC)	ADNOMINAL (POSSESSIVE)
1SG	<i>ono, ŭno</i>	<i>hárke=no</i> ‘I am here’	<i>bab-i</i> ‘my father’
PL	<i>aḥna, əḥna</i>	<i>hárke=na</i> ‘We are here’	<i>bab-an</i> ‘our father’
2MS	<i>hat, hate</i>	<i>hárke=hat</i> etc.	<i>bab-ŭx</i> etc.
FS	<i>hat, hate</i>	<i>hárke=hat</i>	<i>bab-ax</i>
PL	<i>hatu</i>	<i>hárke=hatu</i>	<i>bab-ay-xu</i>
3MS	<i>hiye, huwe</i>	<i>hárke=yo</i>	<i>bab-a</i>
FS	<i>hiyā</i>	<i>hárke=yo</i>	<i>bab-ay-ye</i>
PL	<i>hənnə, -nək</i>	<i>hárke=ne</i>	<i>bab-i</i>

Source: Data based on Ritter (1990, transcription modified).

Table 16. *Basic pronominal inventory in J. Zaxo*

	INDEPENDENT	DEPENDENT	
		COPULA (GENERALLY ENCLITIC)	ADNOMINAL (POSSESSIVE)
1MS	<i>ʔāna</i>	<i>mani wən</i> ‘Who am I _M ?’	<i>bāb-i</i> ‘my father’
FS		<i>mani wan</i> ‘Who am I _F ’	
PL	<i>ʔaxni</i>	<i>mani wax</i> ‘Who are we?’	<i>bāb-an</i> ‘our father’
2MS	<i>ʔāhət</i>	<i>wət</i> etc.	<i>bāb-ox</i> etc.
FS	<i>ʔāhat</i>	<i>wat</i>	<i>bāb-ax</i>
PL	<i>ʔaxtun</i>	<i>wētun</i>	<i>bāb-ōxun</i>
3MS	<i>ʔāwa</i>	<i>(ī)le</i>	<i>bāb-e</i>
FS	<i>ʔāya</i>	<i>(ī)la</i>	<i>bāb-a</i>
PL	<i>ʔāni</i>	<i>(ī)lu</i>	<i>bāb-ōhun</i>

Source: Data based on Cohen (2012).

Table 17. *Major type of weak verbs*

INITIAL, FIRST		SECOND, MIDDLE, HOL- LOW		THIRD, FINAL	
$R_1 = y$	<i>y-δ-ʔ</i> ‘know’	$R_2 = y$	<i>q-y-m</i> ‘rise’	$R_3 = y$	<i>š-t-y</i> ‘drink’
$R_1 = ʔ$	<i>ʔ-x-l</i> ‘eat’	$R_2 = w$	<i>l-w-š</i> ‘wear’	$R_3 = w$	<i>k-θ-w</i> ‘write’

Other TAM categories such as future, preterit, subjunctive etc. are expressed by the copula verb *hwy* ‘be’ which we will not further discuss here.

The ‘possessive’ suffixes express:

- (i) the possessor complement of a noun phrase, e.g. J. Zaxo *bēs-an* ‘our home’, Ṭur. *bab-i* ‘my father’.
- (ii) the complement of a prepositional phrase, e.g. J. Zaxo *ʔamm-a* ‘with her’, Ṭur. *eb-ax* ‘in you_{FS}’ and
- (iii) chiefly in Central Neo-Aramaic, the complement of an imperative verbal form, e.g. Ṭur. *zbaṭ-a* ‘catch_{SG} her!’.

3.1.2. Verbal Roots

Following nominal inflection, we continue with verbal inflection. Verbal roots are generally composed of three radicals, at least one of which may be lost in the inflection of so-called weak verbs.

First of all, Neo-Aramaic generally maintains the Pan-Semitic characteristics of verbal roots which are composed of a particular set of consonants that function as radicals. There are mainly three radicals per verbal root, indicated as R₁-R₂-R₃ or C₁-C₂-C₃ (where R or C stands for radical consonant). The roots for ‘kiss’, ‘pull’, ‘take’ and ‘kill’, for example, are, respectively, *n-š-q*, *g-r-š*, *š-q-l* and *q-ṭ-l* in Aramaic. These verbs are generally used as ‘dummy’ verbs, i.e. the default descriptive example from which we can deduce how other verbs are inflected. Whereas most verbs are triradical, quite a number of them can also constitute more than three radicals, being, for instance, quadriradical such as *d-l-g-n* ‘tell a lie’ and *g-n-d-r* ‘roll’.

Furthermore, the position and quality of a radical in a particular consonant-vowel template that constitutes a verbal form can affect the way the verb is inflected. Semitists generally distinguish between sound verbs, which regularly retain all radicals in inflection (such as *g-r-š* ‘pull’), and weak verbs, which contain a radical that is somehow lost, primarily the semi-vowels *y* and *w*⁶⁶; though, usually leaving behind some trace in the phonology⁶⁷. Table 17 (on the preced-

⁶⁶ Historically, *w* is the reflex of the spirantized allophone of /b/ in pre-modern Aramaic. The shift from **b* to *w* (e.g. **kṭōbō* > Ṭuroyo *kṭōwo*) gave rise to new weak roots, such as *g-n-w* ‘steal’ (< **g-n-b*), *k-θ-w* ‘write’ (< **k-t-b*), *l-w-š* ‘dress’ (< **l-b-š*), *g-w-r* ‘marry’ (< **g-b-r*). The stop allophone may still be found elsewhere, compare *mzabān* ‘He sells’ (< **mzabbān-*) and *zowān* ‘He buys’ (< **zobān*), both originally formed of the root *z-b-n*.

⁶⁷ Sometimes this can involve two (or more) weak radicals (i.e. doubly weak verbs).

ing page) represents how they are differentiated further by the position of their weakness, respectively, first, second (or hollow), and final weak verbs⁶⁸.

The type of radical is usually specified; for example, *q-y-m* ‘rise’ belongs to the hollow verbs, more specifically the second-/y/ verbs, *k-θ-w* to the final weak verbs, more specifically the final-/w/ and so forth. Verbal roots containing a final resonant are also subsumed under weak verbs in certain Neo-Aramaic languages; for example, final-/r/ verbs. Weak verbs are principally as systematic or predictable as sound verbs. The fact that their triradicalism is partially or completely weakened in their inflectional system sets them apart. They should not to be mistaken for irregular verbs which are inflected differently from both sound and weak verbs; for example, the verb *ʔ-z-l* ‘go’ is often highly irregular in Neo-Aramaic languages.

In a nutshell, verbal roots generally consist of three radical consonants. Regular verbs are either sound or weak. All radicals are retained in the inflection of sound verbs (such as *n-š-q* ‘kiss’). At least one radical is lost in the inflection of weak verbs (such as *q-y-m* ‘rise’), usually leaving a trace behind. Irregular verbs are inflected differently from both of these.

3.1.3. Derivational Stems and Inflectional Bases

The Eastern Neo-Aramaic verbal system mainly distinguishes three conjugations of which the ‘imperfective’ and ‘perfective’ inflectional bases are most important to this dissertation and four stem types of which the basic stem represents the basic and most frequent verbal forms that will occur in our discussion throughout this monograph.

The Eastern Neo-Aramaic verbal system mainly consists of the following forms:

		NENA	Ṭuroyo
FINITE (suffixal inflection)	imperative	<i>qʔol_{SG}, qʔulun_{PL}</i>	<i>qʔal_{SG}, qʔalu_{PL}</i>
	‘imperfective’	<i>qaʔəl-, qaʔl-</i>	<i>qoʔəl-, qūʔl-</i>
	‘perfective’	<i>qʔil</i>	<i>qʔil- or qaʔil-</i>
NON-FINITE	infinitive	<i>qʔala</i>	<i>qʔolo</i>
	resultative	<i>qʔila</i>	<i>qʔilo or qaʔilo</i>
	agent noun	<i>qaʔala, qaʔola</i>	<i>qaʔolo, qoʔulo</i>

⁶⁸ These are traditionally known by the Latin terms *verba infirmae radicalis* in Semitics, and thus *verba primae, mediae or tertiae infirmae (radicalis)*, respectively.

The basic verbal system primarily distinguishes three conjugations the imperative (NENA *q̄tol*, CNA *q̄tal* ‘kill!’), the ‘imperfective’ (NENA *qaṭal-*, CNA *qoṭal-*) and the ‘perfective’ (*q̄til-*) characterized by suffixal person indexes. The ‘imperfective’ base loses the vowel *a* [ɪ] before suffixes beginning with a vowel, yielding *qaṭl-* in NENA. Due to vowel reduction, this yields *q̄ṭl-* < **qoṭl-* in Ṭuroyo. The Central Neo-Aramaic ‘perfective’ has two bases: *q̄til-* and *qaṭil-*. Nominal forms of the verb include at least an action noun or infinitive (*q̄tala* ‘killing’) and verbal adjective or resultative participle (*q̄tila* ‘killed’). Like the perfective, the latter encompasses two consonantal templates in Central Neo-Aramaic: *q̄tilo* and *qaṭilo*. In addition, there are agent nominalizations (e.g. NENA *ganawa* ‘thief’, Ṭur. *ganowo* ‘thief’) that may serve as an active participle or proximative in some varieties (see Noorlander 2017).

Verbal stem formation involves several possible derivation classes. These classes are typical for Aramaic and share cognates with other Semitic languages. Semitists often distinguish a G(round) or B(asic) stem (German *Grundstamm*), D(oubling) stem (German *Doppelungstamm*) and C(ausative) stem⁶⁹. Q(uadriradical) verbs usually follow the patterns of the D-stem. Their equivalent mediopassive or reflexive counterpart are known as the ‘T-stems’ (i.e. Gt-stem, Dt-stem, Ct-stem, Qt-stem)⁷⁰. Table 18 below gives examples of such formations in Ṭuroyo.

Table 18. *The Aramaic stem formations in Ṭuroyo*

ACTIVE		MEDIOPASSIVE	
I: (B)	<i>qoṭal-</i>	I _M : (Bt)	<i>mə-q̄ṭal-</i>
II: (D)	<i>m-zabən-</i>	II _M : (Dt)	<i>mi-zabən-</i>
III: (C)	<i>m-a-dm̄ax-</i>	III _M : (Ct)	<i>mi-t-a-dm̄ax-</i>
IV: (Q)	<i>m-farqəṭ-</i>	IV _M : (Qt)	<i>mi-farqəṭ-</i>

Note: I: *q̄tl* ‘kill’, II: *zbn* ‘sell’, III: *dm̄x* ‘put asleep’, IV: *frqṭ* ‘burst’.

In accordance with Table 18, I will consistently refer to them as stem I, II, III and IV and their corresponding mediopassive as I_M, II_M, III_M and IV_M. There is no common practice in Neo-Aramaic Studies to refer to these verbal formations but

⁶⁹ The first three are traditionally known as (Neo-)P^{al}, (Neo-)Pa^{al} and (Neo-)Ap^{al}, respectively.

⁷⁰ The traditional terms are *ʾEṭp^{al}*, *ʾEṭpa^{al}* and *ʾEṭṭap^{al}*.

the traditional terminology is not suitable for comparing Neo-Aramaic languages⁷¹.

Contrary to Central Neo-Aramaic, NENA dialects do not have mediopassive derivations. The Central Neo-Aramaic classes in Table 18 correspond with the following active forms in NENA dialects (if they are all present):

I:	<i>qaṭal-</i>	'kill'
II:	<i>(m)zabān-</i>	'sell'
III:	<i>madmāx-</i>	'put to sleep'
IV:	<i>(m)barbāz-</i>	'scatter'

Several NENA dialects only have stem III where others would make a distinction between II and III. Notwithstanding the various derivational patterns between the stem formations within a single dialect, it is safe to say that, generally, the verbal derivations referred to as stem II and, most productively, stem III are causatives of the basic stem I, adding an agent to the valence pattern of the basic stem. The root *dmx*, for example, means 'go to sleep' in stem I (*domāx* ~ *damāx*) and 'put to sleep' in stem III (*madmāx*).

Overviews are given at the end of this section. Table 19 is an overview of the inflectional categories of main verb types discussed above. Table 20 displays the template for the main forms and functions of the 'imperfective' conjugation which we discuss in the next subsection.

3.1.4. Preverbal Tense-Aspect-Mood Marking

Eastern Neo-Aramaic distinguishes between two main sets of person indexes in verbal constructions, one of which goes back to enclitic personal pronouns and the other to dative pronouns. The distinct usage of these sets in the 'perfective' is the foundation for the alignment variation in person indexing that will be discussed in subsequent chapters. Concentrating on verbal inflection, a primary distinction will be made between 'imperfective' and 'perfective' inflectional bases: *qaṭal-* (~ CNA *qoṭal*), respectively, *qṭil-* (~ CNA *qṭil-* or *qaṭil-*) for stem I verbs. No standard reference exists in Neo-Aramaic Studies, but 'Present', 'Jussive', or 'Subjunctive' Base is often used for *qaṭal*-bases; conversely, 'Past' or

⁷¹ D-stem, for instance, is derived from German *Doppelungstamm* 'doubling stem' due to the gemination, i.e. lengthening, of the second radical (**mzabbān-*), but such gemination is no longer a characteristic of this formation in most of Neo-Aramaic.

‘Preterit’ for *qtil-* (cf. Häberl 2009; Doron and Khan 2012). The terms ‘imperfective’ and ‘perfective’ adopted here are functionally motivated though principally morphological in nature. The verbal forms based on *qaṭal-* can, for instance, also express perfective aspect when used as narrative present (e.g. Christian Barwar, Khan 2008a: 570), and *qtil-* can also express imperfective aspect when used as resultative (e.g. Khan 2008a:615) or proximative, e.g. *miθ-le* ‘He is about to die’ (Noorlander 2017).

These inflectional bases are the direct reflexes of active, respectively, resultative⁷² participial predicates in pre-modern Aramaic. The verbal predication is traced back to their historically short, indefinite form. The longer, historically definite, counterpart of the resultative participle continues as a verbal adjective termed ‘resultative participle’ here. The resultative participle is derived from the originally definite form of the resultative participle (**qṭilā* > *qṭilo* ~ *qṭila*) that properly joined in the levelling of the original distinction in determination between so-called ‘absolute’ (*qṭil* ‘a killed one’, *malk* ‘a king’) and ‘emphatic’ state (*qṭilā* ‘the killed one’, *malkā* ‘the king’). The first is lost entirely in NENA and Central Neo-Aramaic in favor of the longer forms.

There are two core sets of argument indexes. Set 1 entails the ‘E-suffixes’ and Set 2 constitutes the ‘L-suffixes’⁷³. Set 1 entails the ‘E-suffixes’ and Set 2 constitutes the ‘L-suffixes’⁷⁴. The sets are illustrated below for Ṭuoryo (Central Neo-Aramaic) and J. Amidya (NENA). These are purely meant as neutral morphological designations without the precarious implications of any systematic relationship to the grammatical functions (i.e. S, A, P) or a particular alignment system, as implied by the terminology used in previous literature (see §1.3.2). The sets are illustrated in (1) below for Ṭuoryo (Central Neo-Aramaic) and J. Amidya (NENA).

Set 1 can be decomposed into gender and number coding (m. -Ø, f. -*a* and pl. -*i*) and person and number coding (2sg. -*et*, 2pl. -*tun*, 1sg. -*no*, 1pl. -*na*). The morphological complexity of the first and second E-suffixes separates them from

⁷² It should be noted that this is generally known as a passive participle in traditional Semitics. Since this form is in usage typologically closer to resultative constructions (Nedjalkov 1988, 2001), resultative participle will be used instead, especially in order to avoid cumbersome descriptions such as participles that are passive in form but active in meaning or function.

⁷³ For this choice of terminology, cf. Mutzafi (2004a, 2008a) and Fassberg (2010).

⁷⁴ For this choice of terminology, cf. Mutzafi (2004a, 2008a) and Fassberg (2010).

(1) **Sets of argument indexes**

	ṬUROYO		NENA ([J. Amidya; Greenblatt 2011:88, 91])	
	SET 1	SET 2	SET 1	SET 2
	E-SERIES	L-SERIES	E-SERIES	L-SERIES
1MS	<i>-no</i>		<i>-na, -ena</i>	
FS	<i>-ono</i>	<i>-li</i>	<i>-an, -ana</i>	<i>-li</i>
PL	<i>-inā</i>	<i>-lan</i>	<i>-ax, -axni</i>	<i>-lan, -leni</i>
2MS	<i>-ət, -at</i>	<i>-lūx, -lox</i>	<i>-ət</i>	<i>-lux</i>
FS	<i>-at</i>	<i>-lax, -ləx</i>	<i>-at</i>	<i>-lax</i>
PL	<i>-utu, -itu</i>	<i>-lxu</i>	<i>-etun</i>	<i>-loxun</i>
3MS	<i>-∅</i>	<i>-le</i>	<i>-∅</i>	<i>-le</i>
FS	<i>-o</i>	<i>-lā</i>	<i>-a</i>	<i>-la</i>
PL	<i>-i, -ən⁷⁵</i>	<i>-lle, -lan</i>	<i>-i</i>	<i>-lu, -lohun</i>

the third person which are morphologically more simplex in lacking special person coding, e.g. 3fs. *domx-o* ‘She sleeps’ and *domx-i* ‘They sleep’. Synchronically, the E-suffixes are not enclitics but the ‘copula’ set that is partly morphologically identical (discussed in §3.1.1) fulfill this function, e.g. Ṭuroyo *ono u-malko=no* ‘I am the king’. Similarly, we can observe, to some extent, the prepositional origin of the L-suffixes. They can be decomposed into the characteristic *l-* and an additional possessive suffix, e.g. *l-* + 1sg. *-i*, *l-* + 1pl. *-an* like *bab-i* ‘my father’, *bab-an* ‘our father’ etc. This will not be done here, unless there is a clear warrant to do so (for example, for closer analysis or comparative purposes). Moreover, one should note that the L-suffixes and possessive suffixes are not morphologically identical in every concerning language. In Jewish Saqqiz, for example, 3fs. possessive suffix is *-av* while the corresponding L-suffix is *-la* (Israeli 1998), (see §4.1.3).

The verbal conjugation of the ‘imperfective’ primarily consists of a specific template that serves as base for several TAM distinctions⁷⁶. This is illustrated in (2) below:

⁷⁵ Final-y verbs.

⁷⁶ It should be noted that some preverbal TAM-encoding is also found for other inflectional bases.

(2) **Pattern of the ‘imperfective’**

	TAM	BASE	S/A	P	
	IND	IPV	-E	-L	
J. Amidya	<i>g</i> - ⁷⁷	<i>damx</i> -	-a		‘She (S) sleeps’
(Greenblatt 2011)	<i>k</i> -	<i>qaṭl</i> -	-a-	<i>-le</i>	‘She (A) kills him (P)’
Ṭuroyo	<i>ko</i> -	<i>kūrḫ</i> -	-o		‘She (S) goes around’
(Jastrow 1985)	<i>ko</i> -	<i>qūṭl</i> -	-o-	<i>-le</i>	‘She (A) kills him (P)’

Although these distinctions are considerably complex and dialect-dependent, Table 19 at the end of this section offers a simplified overview. What is common to all Neo-Aramaic languages is the use of the E-series to encode both the S and A and the L-series to encode P for verbal forms based on the imperfective (NENA *qaṭəl-/qaṭl*-, Central *qoṭəl-/qūṭl*-), resulting in the accusative pattern (as inherited from pre-modern Aramaic).

A coreferential nominal is not obligatory, so that these person forms function as cross-indexes, respectively, ambiguous agreement markers (see §1.2.2). Independent pronouns are distinct from the dependent person forms given here and trigger verbal agreement similarly to full NPs (see §3.1.1). Thus, a verbal predicate like *ko-kūrḫ-o* may occur with a subject NP, e.g. *Viktoriya ko-kūrḫ-o* ‘Viktoriya goes around’, an independent pronoun, e.g. *hiye ko-kūrḫ-o* ‘SHE goes around’, or without a co-referent, e.g. *ko-kūrḫ-o* ‘She goes around’ (see further Section 3.3).

This basic template begins with a marker of clause-level grammatical information in which the categories of tense, aspect and mood are fused. The characteristically velar or post-velar preverbal element (*k(o)*-, *k/g*- etc.) encodes the indicative habitual/progressive. Other TAM-markers in NENA are, for example, the prefix *bd*- that generally encodes the future and *qam*- which is marked for the perfective past. The absence of a TAM-marker (i.e. Ø-) is often grammatically significant and expresses the form used in modal (i.e. non-indicative/‘subjunctive’) complements, for example:

(3) **Ṭuroyo** (Miden, SE Turkey; Ritter 1967-71, 115/250)

<i>k-ūbḫ-o</i>	Ø- <i>qūṭl-o</i>	<i>Gorgis</i>	‘She wants to kill Gorgis.’
IND-want _{IPFV} -S:3FS	SBJ-kill _{IPFV} -A:3FS	PRN	

⁷⁷ The preverb *k*- may change to *g*- in NENA under certain phonetic conditions.

The distinction between the indicative marker and modal zero is absent or marginalized to initial weak verbs in several NENA dialects⁷⁸. I will use a ring symbol < ° > to refer to the ‘imperfective’ without specifying its preverbal TAM-marking and translate it in the present for convenience’s sake such that °*damxa* ‘She sleeps’ represents *k-damxa* ‘She sleeps, is sleeping’ (present indicative), *b-damxa* ‘She will sleep’ (future), Ø-*damxa* ‘(that) she may sleep’ (subjunctive) etc. What follows such TAM-markers is a verbal stem that encodes the core meaning of the verbal construction (e.g. *našəq-* kiss_{IPFV}), to which the person indexes (1st set, E-series for S/A) are added. Example (4) offers an illustration of such a paradigm.

(4) **Example paradigm for the ‘imperfective’ (variants in parentheses)**

	Turoyo (SE Turkey, cf. Jastrow 1985; Ritter 1990)		J. Amidya (NW Iraq; Greenblatt 2011)	
1MS	-no	° <i>qoɬal-no</i> ‘I _M kill’ etc.	-ən, -ena	° <i>qaɬl-ən</i> , ° <i>qaɬl-ena</i> ‘I _M kill’ etc.
FS	-ono	° <i>qūɬl-ono</i>	-an(a)	° <i>qáɬl-an(a)</i>
PL	-inā	° <i>qūɬl-inā</i>	-ax(ni)	° <i>qaɬl-ax(ni)</i>
2MS	-ət	° <i>qūɬl-ət</i>	-ət	° <i>qaɬl-ət</i>
FS	-at	° <i>qūɬl-at</i>	-at	° <i>qaɬl-at</i>
PL	-utu	° <i>qūɬl-utu</i>	-etun	° <i>qaɬl-etun</i>
3MS	-Ø	° <i>qoɬəl-Ø</i>	-Ø	° <i>qaɬəl-Ø</i>
FS	-o	° <i>qūɬl-o</i>	-a	° <i>qaɬl-a</i>
PL	-i	° <i>qūɬl-i</i>	-i	° <i>qaɬl-i</i>

The additional 2nd set (L-series) may be added to transitive verbal forms as argument markers of the P, e.g. °*našq-a-li* ‘She kisses me’. Relative anteriority and past tense may be further added by the suffix -*wa*, which is added immediately after the E-suffixes⁷⁹ but before the L-suffixes. A conjugated form like *k-našq-á-wa-li* ‘She used to kiss me’, thus, includes the following template:

TAM	+	BASE	+	E-set	+	PAST	+	L-set	
<i>k-</i>		<i>našq-</i>		<i>-á</i>		<i>-wa</i>		<i>-li</i>	‘She used to kiss me.’
IND-		kiss _{SIPFV} -		-A:3FS		-PST		-P:1SG	

⁷⁸ This also includes the CNA dialect Mlahso (Jastrow 1994).

⁷⁹ Note that in some Turoyo dialects the past convertor is infixed for the first person, e.g. *dəmx-ó-way-no* ‘I used to sleep’, see Chapter 5.

Table 19. *Simplified overview of the main forms of the verb in NENA*

	SOUND			FIRST-ʔ	SECOND-Y	SECOND-W	FINAL-Y
	I <i>q̄t̪i</i>	II <i>šdr</i>	III <i>q̄t̪i</i>	I <i>ʔxl</i>	I <i>qym</i>	I <i>lwš</i>	I <i>xzy</i>
	'kill'	'send'	'have killed'	'eat'	'rise'	'wear'	'see'
INFINITIVE	<i>q̄tala</i>	<i>(m)šadore</i>	<i>maq̄tole</i>	<i>ʔixala</i>	<i>qyama</i>	<i>lwaša</i>	<i>xzaya</i>
RESULTATIVE	FS <i>q̄talta</i>	<i>(m)šudarta</i>	<i>muq̄talta</i>	<i>xelta</i>	<i>qamta</i>	<i>lušta</i>	<i>xzita</i>
	MS <i>q̄t̪ila</i>	<i>(m)šudra</i>	<i>muq̄t̪a</i>	<i>xila</i>	<i>qima</i>	<i>lwiša</i>	<i>xazyɑ</i>
	PL <i>q̄t̪il-</i>	<i>(m)šudri-</i>	<i>muq̄t̪i-</i>	<i>xili-</i>	<i>qimi-</i>	<i>lwiši-</i>	<i>xze(ni)-</i> <i>/xazvi-</i>
	FS <i>q̄t̪ila-</i>	<i>(m)šudra-</i>	<i>muq̄t̪a-</i>	<i>xila-</i>	<i>qima-</i>	<i>lwiša-</i>	<i>xazyɑ-</i>
PERFECTIVE	MS <i>q̄tal-</i>	<i>(m)šodar-</i>	<i>muq̄tal-</i>	<i>xal-</i>	<i>qam-</i>	<i>luš-</i>	<i>xze-</i>
	_V <i>q̄at̪i-</i>	<i>(m)šadr-</i>	<i>maq̄t̪i-</i>	<i>ʔaxl-</i>	<i>qem-</i>	<i>loš-</i>	<i>xazy-</i>
IMPERFECTIVE	_C# <i>q̄at̪al-</i>	<i>(m)šadar-</i>	<i>maq̄tal-</i>	<i>ʔaxal-/xal-</i>	<i>qem-</i>	<i>lawəš-</i> <i>/loš-</i>	<i>xaze-/xaz-</i>
IMPERATIVE	<i>q̄tol</i>	<i>(m)šádar</i>	<i>máq̄tal</i>	<i>xol</i>	<i>qom</i>	<i>loš</i>	<i>xzi/xzaw-</i>

Table 20. *Simplified overview of the ‘imperfective’ conjugations in Eastern Neo-Aramaic*

TAM*	BASE	A	PST	P	BASIC TAM FUNCTION	EXAMPLE	
Ṭuroyo	<i>g(d/ad)-, kt-</i>	<i>qotal-</i>	+ E	(-wa)	L	Future, Habitual	<i>g(ad)-qūṭl-o-li</i> ‘She will kill me’
	<i>k(o)-</i>	<i>qotal-</i>	+ E		L	Present realis	<i>ko-qūṭl-o-li</i> ‘She kills me’
	<i>∅-, d-, t-</i>	<i>qotal-</i>	+ E	(-wa)	L	Subjunctive, Irrealis	<i>d-qūṭl-o-li</i> ‘If she kills me’
NENA	<i>b-/p-/m-(at/d)-, t/d-</i>	<i>qatal-</i>	+ E	(-wa)	L	Future, Past habitual	<i>b-qatl-a-li</i> ‘She will kill me’
	<i>k/g-, kt-, či-, i-, y-*</i>	<i>qatal-</i>	+ E	(-wa)	L	Indicative, Realis	<i>k-qatl-á-wa-li</i> ‘She used to kill me’
	<i>∅-, d-, t-</i>	<i>qatal-</i>	+ E	(-wa)	L	Subjunctive, Irrealis	<i>∅-qatl-a-li</i> ‘that she kills me’
	<i>qam-, k/gam-, tam-</i>	<i>qatal-</i>	+ E	(-wa)	L	Preterit	<i>qam-qatl-a-li</i> ‘She killed me’

Notes: Forms given for stem I. * TAM-markers are highly diverse and dialect-dependent in NENA (Khan 2007d). ** These may be restricted to initial weak verbs or absent, as in C. Ṭiyari (NENA) and Mlahso (CNA).

The Neo-Aramaic particle *wa* is generally referred to as a ‘past convertor’. What applies to the forms without past convertor generally also applies to those with it. Without such an intervening particle, the L-suffixes usually freely assimilate to an immediately preceding resonant, often with compensatory lengthening, e.g. *b-našq-ən* + *-lax* ‘I_M will kiss’ + ‘you_{FS}’ becomes *b-našq-ən-nax*, and frequently also after the second person E-suffixes ending in /t/, e.g. *b-xaz-ət-li* becomes *p-xaz-ət-ti* ‘You_{MS} will see me’.

Thus, the ‘E-set’ generally precedes the past convertor and always the ‘L-set’. TAM-marking is preverbal without affecting the order of person indexes.

3.2. Basic Patterns of Verbal Person Marking

We shall now isolate the verbal morphology in the expression of the perfective past (based on *qṭil-*) in relation to the imperfective tenses (based on *qaṭal-*). We will examine the basic patterns that unfold in the coding of dependent person forms without looking at their use in combination with full NPs or other constituents. The A and P will receive most attention but some remarks will be made concerning the S of intransitive verbal forms and the R and T of ditransitive verbal forms.

3.2.1. A and P in the Perfective and Agreement Inversion

The two sets of person markers are both used in transitive verbal forms but, in the ‘perfective’, each indexes the reverse grammatical function of the ‘imperfective’ discussed in the previous subsection. The ‘perfective’ and ‘imperfective’ are the mirror image of each other in the majority of (mainly Christian) NENA dialects.

The same template and person agreement markers of the ‘imperfective’ are found for the ‘perfective’ (*qṭil-*) but here, ultimately, each dialect can do its own thing. In theory, each set of person forms can be used to encode the grammatical functions S, A or P. In one respect, however, all dialects are alike: The 2nd series (L-set) regularly expresses the A in the perfective past, i.e. the preterit. The L-suffixes attach to the ‘perfective’ inflectional base, often with some reduction on the part of the *i* [i] to *ə* [ɪ] (or, [ɪ] ~ [u]), depending on dialect and/or phonetic context):

(5) **Example paradigm for the preterit** (*nšq* ‘kiss’)

	Ṭuroyo (Miden, SE Turkey, cf. Jastrow 1985)			NENA (J. Amidya, NW Iraq; based on Greenblatt 2011)		
1MS	-li	<i>nšaq-li</i>	‘I kissed’	-li	<i>nšaq-li</i>	‘I kissed’
PL	-lan	<i>nšaq-lan</i>	‘We kissed’	-lan	<i>nšaq-lan</i>	‘We kissed’
2MS	-lūx	<i>nšaq-lūx</i>	etc.	-lox	<i>nšaq-lox</i>	etc.
FS	-lax	<i>nšaq-lax</i>		-lax	<i>nšaq-lax</i>	
PL	-lxu	<i>nšaq-xu</i>		-loxun	<i>nšaq-loxun</i>	
3MS	-le	<i>nšaq-le</i>		-le	<i>nšaq-le</i>	
FS	-lā	<i>nšaq-lā</i>		-la	<i>nšaq-la</i>	
PL	-lle	<i>nšaq-qe</i>		-lu	<i>nšaq-lu</i>	

We will first examine the general usage of the two sets of in the inflection of major perfective transitive clauses. As displayed in (6) below, for both the ‘imperfective’⁸⁰ (e.g. *qaṭəl-*) and ‘perfective’ (e.g. *qṭil-*) inflectional base, the shape and order of the 1st and 2nd set (E- and L-suffixes) are equivalent⁸¹, but their cross-referencing of the agent and patient is reversed. This is obviously reminiscent of an active-passive alternation but should not be confused with it. We will observe that the functions of the person indexes are also inverted which clearly rules out a passive analysis. Transitive clauses manifest a type of “agreement inversion” (Doron and Khan 2012) conditioned by the kind of inflectional base⁸² which may be characterized as follows. The suffixes *-a* and *-le* in (6) can be taken as representatives for the E-, respectively, L-series. While the L-series marks the P in the ‘imperfective’, it marks the A in the perfective, and *vice versa* for the E-series. This agreement inversion generally applies to their entire functional distribution. What holds for the A (E-set) in the ‘imperfective’ will generally also hold for the A (L-set) in the ‘perfective’, and *vice versa* for the P. Nevertheless, the constructions based on *qṭil-* will often comprise a subsystem of their own.

⁸⁰ Generally, however, what applies to the ‘imperfective’ will also apply to the imperative and possibly other innovated inflectional bases which we will leave out of discussion for brevity’s sake.

⁸¹ However, the morphemes are not completely identical for both inflectional bases in all dialects. In certain Khabur dialects (Talay 2008:317- 318) and Christian Urmi (Hoberman (1989:105-106; Khan (2016:384), for instance, the 3pl. E-set (*-e-* vs. *-i-*) differ depending on their usage in the ‘perfective’ or ‘imperfective’ before L-suffixes, respectively, *našq-i-la* ‘They kiss her’ vs. *nšiq-e-la* ‘She kissed them’.

⁸² See also Polotsky (1979:209; 1991:266, 1994:95), Hoberman (1989:96, 113), Mengozzi (2002b:44-5).

(6) **Agreement inversion:**

<i>k-</i>	<i>qaṭəl</i>	<i>-a</i>	<i>-le</i>	<i>kqaṭlale</i>	'She kills him'	(NENA)
<i>ko-</i>	<i>qoṭəl</i>	<i>-a</i>	<i>-le</i>	<i>koqṭlōle</i>		(Ṭuroyo)
	IPFV	A	P			
(TAM-)	BASE	-E	-L			
	PFV	P	A			
	<i>qṭil</i>	<i>-a</i>	<i>-le</i>	<i>qṭilale</i>	'He killed her'	(NENA)
	<i>qṭil</i>	<i>-o</i>	<i>-le</i>	<i>qṭilole</i>		(Ṭuroyo)

This mirroring of the 'imperfective' in 'perfective' transitive constructions could be said to be a typical characteristic of NENA and Central Neo-Aramaic, although it is not attested in every dialect (to the same degree). Table 26 below illustrates the forms for stem I sound verbs in the NENA dialect of Jewish Amidya adapted from Hoberman (1989) and Greenblatt (2011).

Table 21. *Conjugation of the 'imperfective' and 'perfective' with object indexes in Jewish Amidya*

IMPERFECTIVE						PERFECTIVE					
<i>qaṭəl-</i>	E-set	L-set				<i>qṭil-</i>	E-set	L-set			
<i>V</i> _{IPFV}	A	P				<i>V</i> _{PFV}	P	A			
<i>našq-</i>	<i>a</i>	<i>-le</i>	'She	kisses	him'	<i>nšiq-</i>	<i>a</i>	<i>-le</i>	'He	kissed	her'
<i>našəq-</i>	∅	<i>-la</i>	'He	kisses	her'	<i>nšəq-</i>	∅	<i>-la</i>	'She	kissed	him'
<i>našq-</i>	<i>i</i>	<i>-lan</i>	'They	kiss	us'	<i>nšiq-</i>	<i>i</i>	<i>-lan</i>	'We	kissed	them'
<i>našq-</i>	<i>ət</i>	<i>-ti</i>	etc.			<i>nšiq-</i>	<i>ət</i>	<i>-ti</i>	etc.		
<i>našq-</i>	<i>at</i>	<i>-ti</i>				<i>nšiq-</i>	<i>at</i>	<i>-ti</i>			
<i>našq-</i>	<i>átu</i>	<i>-lu</i>				<i>nšiq-</i>	<i>átu</i>	<i>-lu</i>			
<i>našq-</i>	<i>ən</i>	<i>-nax</i>				<i>nšiq-</i>	<i>ən</i>	<i>-nax</i>			
<i>našq-</i>	<i>an</i>	<i>-nux</i>				<i>nšiq-</i>	<i>an</i>	<i>-nux</i>			
<i>našq-</i>	<i>áx</i>	<i>-loxun</i>				<i>nšiq-</i>	<i>áx</i>	<i>-loxun</i>			

Source: Data based on Hoberman (1989) and Greenblatt (2011).

It should be noted that the zero morpheme for the E-set third masculine singular leads to ambiguous forms in the perfective, cf. *nšəq-lan* 'We kissed' and *nšəq-∅-lan* 'We kissed **him**'. Yet, usually the context will make clear whether a 3ms. P argument is in view. This is consistent with the cross-linguistic tendency that the third person is paradigmatically zero (Siewierska 2004:24).

Finally, there can be considerable (dialect-dependent) morphological overlap between 'perfective' and 'imperfective' bases due to vowel reduction

which will be pointed out when relevant. The consonantal template is not changed but only the vowel for final-y verbs; compare ‘perfective’ *xəzy-a-le* ‘He saw her’ and ‘imperfective’ *xazy-a-le* ‘She sees him’, and stem III verbs, cp. ‘perfective’ *mrədx-a-le* ‘He boiled it_F’ and ‘imperfective’ *marədx-a-le* ‘She boils it_M’ (Khan 2004a:89-90). The ‘perfective’ base may sometimes display a slight difference in the vowel template of sound verbs when combined with both E-suffixes and L-suffixes: *nəšq-a-le* instead of *nšiq-a-le*. The so-called *Aufsprenzung* (blasting apart, i.e. breaking up) of the syllable from *nšiq-* to *nišq- ~ nəšq-* before vowels is characteristic for several Jewish NENA dialects and also found for Christian NENA dialects in Turkey, such as C. Beşpən (Sinha 2000:142), and in Țuroyo. In Țuroyo and the NENA dialect C. Hertevin (SE Turkey; Jastrow 1988:38) the ‘perfective’ and ‘imperfective’ bases may even be identical at least for some derived stems, so that a form like *°mħalq-i-le* (stem II) can mean either preterit ‘He threw them’ or subjunctive ‘May they throw it_M’ (see §6.2.1).

Transitive verbal constructions, thus, that are based on the ‘perfective’ and ‘imperfective’ are characterized by an inversion of role indexing, while the sets of person forms are morphologically the same and only the inflectional base differs. The ‘perfective’ and ‘imperfective’ may even be partially or completely morphologically identical in the inflectional base of derived stems and final-y verbs in a few dialects.

3.2.2. *The Semi-Clitic Nature of the L-Set*

The L-series have some morphological peculiarities reminiscent of clitics in comparison to the E-series (Doron and Khan 2012:228). They may be omitted or stacked on verbal forms in certain dialects.

The L-suffixes enjoy an overall semi-mobile status⁸³, unlike other suffixal person forms. They allow elements to intervene between the verbal base and its agreement, which also includes the E-suffixes and the past convertor *-wa-*. (7) offers a comparison (note *nšiq-at-ti* < *nšiq-at-li*).

- (7) *nšiq-at-ti* ‘I kissed you_{FS}.’ : *°našq-at-ti* ‘You_{FS} kiss **me**.’
nšiq-át-wa-li ‘I had kissed you_{FS}.’ : *°našq-át-wa-li* ‘You_{FS} would kiss **me**.’

⁸³ This is a lingering feature of its enclitic origin (Doron and Khan 2012:231) rather than an indication of synchronic enclitic status. Other more clitic-like person forms can attach to more hosts.

In addition, they may generally be omitted. The L-suffixes marking the P in the ‘imperfective’ may be omitted creating a morphologically patientless construction (for whatever purpose), e.g.

- (8) *°ʔaxl-a* ‘She is eating.’
 °ʔaxl-a-wa ‘She used to eat.’

This also applies to the L-suffixes that express the agent in the ‘perfective’. The patient remains expressed by the E-suffixes and the construction becomes agentless reminiscent of the passive:

- (9) *xil-a* ‘She was eaten.’
 xil-a-wa ‘She had been eaten.’

The L-suffixes expressing the patient in the ‘imperfective’ behave in a similar fashion to the L-suffixes expressing the agent in the ‘perfective’. The argument they denote, the patient or agent is left unexpressed. The functional ramifications of this will be discussed in Chapter 4.

In addition, the L-suffixes are different in that they can be duplicated on a verb. We shall call this a double L-set construction:

(10) **Double L-set construction**

Construction where the verb is inflected for two L-suffixes, each marking a distinct grammatical function.

(11) below offers an example of a double L-set construction in the ‘imperfective’. The first L-set marks the theme, the second L-set marks the recipient.

(11) **J. Zaxo** (NW Iraq)

- a. *bə-yāw* *-ən* *-na* *-lox* ‘I_M will give **her** (i.e. my daughter) to
 FUT-give_{IPFV} -A:1MS -T:3FS -R:2MS you_{MS}.’ (Cohen 2012:164)

A double L-set construction may also occur in the ‘perfective’. In (11b) below, the first L-set denotes the agent, the second one the recipient.

- b. *hu-li-lox* ‘I gave **to you**_{MS} (R).’
 give_{PFV}-A:3MS-R:1SG

By contrast, if a verb cannot take more than one L-suffix in a dialect, we shall speak in terms of a double L-set constraint. There is, for example, such a double L-set constraint for most dialects in the ‘imperfective’⁸⁴, so that stacking of L-suffixes is disfavored in the ‘imperfective’, e.g. ***°patx-a-lax-le* ‘She opens **it_M** for **you_{FS}**’.

In a word, in terms of verbal morphology, the L-set can be omitted and even added to another instance thereof, creating a double L-set construction. Other sets of person indexes such as the E-set do not have these properties.

3.2.3. *Major Alignment Types in the ‘Perfective’*

The vast majority of NENA dialects inflect the S like the A through the L-suffixes. Doron and Khan (2012) distinguish three subgroups of Neo-Aramaic based on their major morphological alignment pattern in the ‘perfective’: split-S dialects, ‘extended ergative’ ($A=S \neq P$) and ‘dynamic-stative’ ($S=P/A$) (see §1.3.2). The view argued for in this monograph will differ slightly from theirs. The split-S dialects show various splits, even beyond the S. The boundary between ergative and split S-systems is vague. While it would be somewhat arbitrary to call them ‘ergative’ instead of split-S dialects, I believe they are best characterized as basically ergative in their agreement for comparative purposes, since the split S-marking does not play such a substantial role as in, for instance, the indigenous languages of the Americas mentioned by Mithun (1991) (cf. Comrie 2005:399). The non-ergative pattern in these varieties is, strictly speaking, a matter of case-marking, not agreement (see §4.2.3). The so-called ‘extended ergative’ (Dixon 1979) will be treated as basically accusative here and this will be argued for in greater detail in §4.2.1. The dynamic-stative alignment (reminiscent of active-stative alignment) is characterized by a type of fluid subject-marking conditioned by grammatical aspect (as explained in §5.1.2). For ease of reference, however, I will differentiate another major type in the perfective past which is neutral ($P \neq S=P$), since the ‘dynamic-stative’ varieties are not uniform. Transitive perfective past constructions in ‘dynamic-stative dialects’ manifest either a neutral or accusative pattern. In the discussion of the perfective past, therefore, these dialects will be subsumed under accusative or neutral.

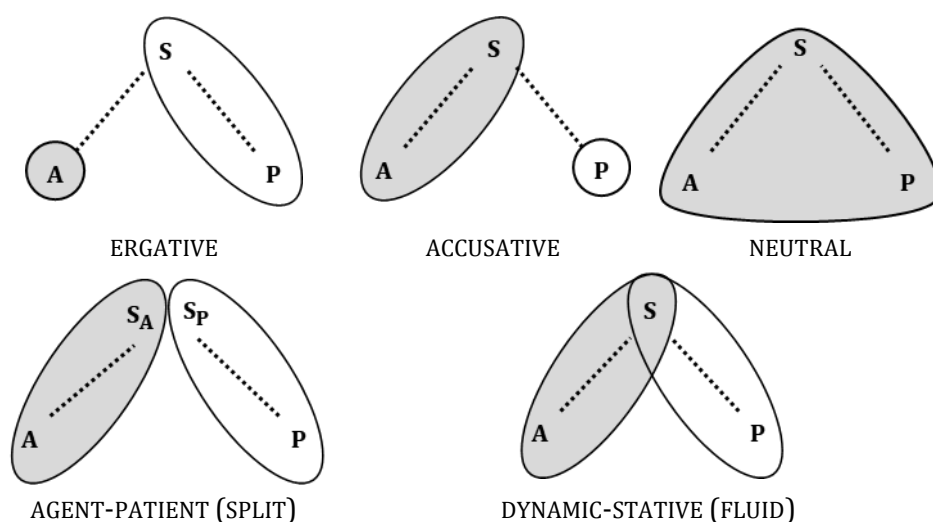
For now, therefore, we distinguish between the following types that are introduced below:

⁸⁴ There are exceptions such as C. Hertevin and J. Zaxo (see §3.2.4).

- ergative;
- accusative;
- neutral, and
- dynamic-stative.

The alignment patterns can be schematized by the following schemas where the gray area represents the L-set and the white area the E-set. In addition, an agent-patient split subject marking is found in ‘ergative dialects’ and an active-stative split is found in all ‘neutral dialects’ but only in a few other dialects.

Figure 9. *Major agreement alignment patterns in Eastern Neo-Aramaic*



3.2.3.1. *Ergative* ($A \neq S = P$)

While the majority of NENA dialects aligns agent and subject-marking through the L-set (see below), a specific group of Jewish dialects employs E-suffixes to mark the subject (see Hopkins 1989a), resulting in an ergative alignment pattern. The person indexing is ergative in encoding the P and S by means of the E-series, but the A by means of the L-series:

(12) **J. Saqqiz** (W Iran; Israeli 1998)

a. (intransitive)

dmix-a 'She went to sleep.'

sleep_{PFV-S:3FS}

- b. (transitive)
nišq-a-le 'He kissed her.'
 kiss_{PFV-P:3FS-A:3MS}

This ergative pattern is thus far only found in Jewish NENA dialects of Iraqi and Iranian Kurdistan. This includes at least the Jewish dialects from and around Sulemaniyya (Khan 2004a) in NE Iraq and the Western Iranian Jewish dialects of which we will mainly examine Sanandaj (Khan 2009), Saqqiz (Israeli 1998) and Kerend (Hopkins 1989a, 2002). We shall refer to these varieties as 'ergative Jewish dialects', although one should note that such labels are made purely for practical reasons. They are properly the South Eastern subgroup within the Trans-Zab Jewish dialect group (see §1.2.2). The Trans-Zab Jewish dialects as a whole exhibit a preference for verb-final (P-V) word order (Doron and Khan 2012; see §3.3.3.). Ergative alignment is also arguably attested in Christian Hertevin (see Subsection 4.4.3) and several Christian and Jewish dialects that use the *qam-qaṭəl*-construction (see Subsection 4.4.2), albeit typologically radically different from the aforementioned Trans-Zab Jewish dialects.

In Central Neo-Aramaic, a similar ergative pattern is found for Ṭuroyo, as illustrated in (13). There is a major subclass of verbs belonging to stem I that takes an alternative 'perfective' base *qaṭil-* against *qṭil-*, e.g. *damix-o* 'She fell asleep' (instead of ***dmix-o*). NENA does not make this morphological distinction. In other respects, its overall typology is similar to the Jewish NENA dialects above.

(13) **Ṭuroyo** (SE Turkey)

- a. (intransitive)
ftih-o 'It_F opened.'
 open_{PFV-S:3FS}
- b. (transitive)
ftih-o-le 'He opened it_F.'
 open_{PFV-P:3FS-A:3MS}

The ergative pattern is not coherent in any variety and always limited in some grammatical respect. Typically for languages with ergative morphology, there is some split s-marking.

3.2.3.2. *Accusative* (A=S≠P)

When the *s* is inflected like the *A* through the *L*-suffixes and only the *P* is marked by the *E*-suffixes, as shown in (14) below, I treat this as accusative alignment. We shall refer to these varieties as ‘accusative dialects’. They compose the core of the NENA-speaking area. Some features though common to NENA dialects, such as the dropping of agent indexes, are unusual within an accusative system⁸⁵ which we will discuss in Section 4.3. In most of such dialects the inverted ‘perfective’ is limited by person and there are alternative coding strategies to express the *P* (and *A*), sometimes leading to non-accusative alignment patterns in themselves (see Sections 4.1 and 4.4).

(14) **J. Amidya** (NW Iraq; Hoberman 1989, Greenblatt 2011)

- a. (intransitive)
dmix-la ‘She went to sleep.’
sleep_{PFV-S:3FS}
- b. (transitive)
nšiq-a-le ‘He kissed her.’
kiSS_{PFV-P:3FS-A:3MS}

3.2.3.3. *Neutral* (A=S=P)

The Jewish dialects of Iranian Azerbaijan such as Urmi and Salamas in the eastern periphery and Turkish Christian dialects in the western periphery such as Bohtan (Fox 2009), Hertevin (Jastrow 1988) and Hassane (Jastrow 1997; Damsma forthcoming) use the *L*-suffixes for all grammatical functions, for example:

(15) **C. Bohtan** (SE Turkey; Fox 2009)

- a. (intransitive)
qəm-li ‘I rose.’
rise_{PFV-S:1SG}
- b. (transitive)
ptáx-li-la ‘I opened it_F.’
open_{PFV-A:1SG-P:3FS}

⁸⁵ Doron and Khan (2012) classify these dialects as ‘extended ergative’ (cf. Dixon 1979). In my opinion, this term is misleading, since in unmarked clauses the *S* and *A* are treated alike and the *P* is treated differently and it is not altogether clear why it should be considered an ergative type and not simply an accusative one, see further §4.2.1.

The transitive construction is a double L-set construction. The L-suffixes are used in a strict order: L-suffixes that mark the patient always follow the L-suffixes that mark the agent such that V-P-A affix arrangements like

- c. *ptəx-li-la* **‘She/it_F opened me.’
 ** open_{PFV-P:1SG-A:3FS}

do not occur but only V-A-P. This pattern also occurs in Central Neo-Aramaic. The dialect of Mlaḥso exhibits this as follows, setting it apart from Țuroyo:

(16) **Mlaḥso** (SE Turkey; Jastrow 1994:82.57, 150.27)

- a. (intransitive)
 dmix-len ‘They went to sleep.’
 sleep_{PFV-S:3PL}
- b. (transitive)
 mobé-len-li ‘They took me.’
 take_{PFV-A:3PL-P:1SG}

We shall refer to these varieties as ‘neutral dialects’, when we discuss the perfective past. Although I prefer to consider the alignment neutral (A=S=P), this may be considered accusative⁸⁶ in typological studies on agreement. As explained in §2.2.3.3, neutral alignment is sometimes confined to the absence of agreement (e.g. Siewierska 2004:52), since the morphologically identical person indexes generally do display a distinct affix position. But the position of affixes seems to me only significant, if the position relative to the verb is distinct for both the A and P (i.e. prefixal vs. suffixal). They are both suffixal here. And, although the relative linear position evidently is determinant for role discrimination, it cannot be unambiguously determined which suffix is grouped with the S: it could arguably be either⁸⁷.

⁸⁶ For this view, see Coghill (2016:64, 90) who subsumes this type under accusative alignment presumably because of the relative position of the set of suffixes that she considers determinant for alignment.

⁸⁷ Depending on to what extent one includes phonological details in identifying an alignment, the morphophonology leads to different interpretations. The final obstruent of the L-suffixes that mark the P may assimilate to the preceding lateral of the L-suffixes that mark the A without compensatory lengthening in some varieties of NENA, e.g. J. Urmi *xzé-lax-**li** > *xzé-lax-**xi** > xzé-lax-**i** ‘You_{FS} saw **me**’ (Khan 2008b:140). This would suggest that the L-suffix marking the P is phonologically distinct from the L-suffix marking the A, indicating accusativity. By contrast, there is no assimilation of obstruents in such contexts in C. Bohtan, e.g. *ptəx-*

3.2.3.4. *Dynamic-Static (P=S/S=A)*

Apart from Hassane, the aforementioned dialects with neutral alignment in the perfective past are further characterized by a fluid type of subject-marking depending on aspect as illustrated below (treated further in §5.1.2 and §6.2.1.4). The S aligns with the A in the perfective aspect (with dynamic action focus) but with the P in the resultative or retrospective aspect (with result state focus). The corresponding transitive construction of the resultative or perfect varies considerably across these dialects.

(17) **J. Urmi** (NW Iran; Garbell 1965; Khan 2008b)

- a. (perfective aligns with the A)
 $+dm\acute{a}x-le^{88}$ 'He went to sleep.'
sleep_{PFV-S:3MS}
- b. (realis perfect aligns with the P)
 $+dmix-\emptyset$ 'He has gone to sleep.'
sleep_{PFV-S:3MS}

Some of the 'accusative dialects' mentioned above also manifest an active-stative type of fluid subject marking. Vestiges of this are found in early scribal idiolects from Jewish and Christian traditions in N Iraq (Sabar 1976, 2002:49; Mengozzi 2002b:38-39; 2005:249-250) and in the Jewish dialects of Koy Sanjaq (NE Iraq; Mutzafi 2004a) and, more productively, Rustaqa (NE Iraq; Khan 2002b).

3.2.4. *The Inflection of Ditransitive Verbs*

Ditransitive verbs can take one or two object indexes. A single object index is ambiguous to their role as either T or R without further context.

In terms of verbal agreement, the verbal indexes that mark patients can also be used to denote either recipients or themes in ditransitive constructions. This applies to either verbal base; compare the object indexes *-la* (L-set) and *-a* (E-set) in the following examples:

lax-le 'You_{FS} opened it_M' (Fox 2009). Instead some agent indexes such as the 3fs. change phonetically such as the 3fs. *ptáx-lo-la* '**She** opened it_F' (< **ptáx-la-le*), which would indicate ergativity. All in all, however, neutral alignment seems to me a more straightforward characterization.

⁸⁸ The symbol + indicates suprasegmental pharyngealization of the following word or syllable.

(18) **Imperfective** (J. Amidya, NW Iraq; Hoberman 1989:102-104, 107-109)

a. (monotransitive)

k-šamʔ-i-la.‘They hear **her** (P).’IND-hear_{IPFV-A:3PL-P:3FS}

b. (ditransitive)

g-yaw-ən-na‘I_M give (to) **her** (T/ R).’IND-give_{IPFV-A:1MS-R/T:3FS}(19) **Perfective** (J. Amidya, NW Iraq; Hoberman *ibid.*)

a. (monotransitive)

šmiʔ-a-lu.‘They heard **her** (P).’hear_{PFV-A:3FS-P:3PL}

b. (ditransitive)

hiw-a-li‘I gave (to) **her** (T/ R).’give_{PFV-R/T:3FS-A:1SG}

The object indexes are, therefore, ambiguous to their role as either T or R without arguments. This applies to L-suffixes in the ‘imperfective’ as much as to the E-suffixes in the ‘perfective’. A ditransitive verb can generally only take one of the objects⁸⁹.

Ditransitive verbs may also take more than one object index and, thus, feature in a double L-set construction. Stacking of L-suffixes, however, is usually not possible in the ‘imperfective’. Forms like ***g-yaw-ən-na-le* ‘I give her (T) to him (R) / him (R) to her (T)’ where the L-suffixes *la* and *le* could theoretically encode either the theme or recipient are by and large disfavored. Exceptions are few. The Jewish dialect of Zaxo (NW Iraq) and the Christian dialect of Hertevin (SE Turkey), for instance, do regularly allow such stacking of L-suffixes in a double object construction for the themes that refer to the third person (see Cohen 2012:163-165). The first L-suffixes always denote the theme, the second one always the recipient:

⁸⁹ Of course, the constructions with ‘give’ above are strictly speaking not ditransitive, since they only express two out of three arguments but we confine ourselves to verbal agreement here.

- (20)
- C. Hertevin**
- (SE Turkey; Jastrow 1988:63)

hal -le -li 'Give **them** to me!'
 give:IMPV -T:3PL -R:1SG

- (21)
- J. Zaxo**
- (NW Iraq; Cohen 2012:164)

bə-yāw -ən -na -lox 'I_M will give **her** (i.e. my daughter) to'
 FUT-give_{IPFV} -A:1MS -T:3FS -R:2MS you_{MS}.'

A double L-set construction is generally used for 'perfective' transitive constructions in dialects with neutral alignment. The L-set that encodes the P in the 'perfective' may also serve to mark the T or R on the verb similarly to the S and A:

- (22)
- Neutral**
- (J. Urmi, NW Iran; based on Khan 2008b)

- a. (intransitive)

**dmix-li* 'I went to sleep.'
 sleep_{PFV-S}:1SG

- b. (monotransitive)

xze-li-le 'I saw **him** (P).'
 see_{PFV-A}:1SG-P:3MS

- c. (ditransitive)

hwəl-li-le 'I gave (to) **him** (T/ R).'
 give_{PFV-A}:1SG-T/R:3MS

The difference between S, A, P, T and R is, therefore, completely neutralized in these dialects in terms of verbal inflection where all are potentially marked by the L-suffixes.

Certain 'accusative dialects' of NENA such as J. Amidya can also avail themselves of a similar construction where the 'perfective' verb is inflected for two L-suffixes as an alternative to an E-suffix encoding the object. This occurs chiefly in 'perfective' ditransitive constructions. The supplementary L-suffix can only be used to encode the R. It can never encode the T or P; compare:

- (23)
- Double L-set**
- (J. Amidya, NW Iraq; Hoberman 1989:108-109)

- a.
- hu-le-li*
- 'He gave
- to me**
- (R).'

give_{PFV-A}:3MS-R:1SG

- b.
- **hu-le-lu*
- 'He gave
- them**
- (T) (to sb).'

give_{PFV-A}:3MS-T:3PL

- c.
- **šmiʔ-lu-li*
- 'They heard
- me**
- (P).'

hear_{PFV-A}:3PL-T:1SG

The second L-suffix is specified for the R⁹⁰. The double L-set construction is, therefore, constrained by the role the second L-suffix refers to. There is a double L-set constraint for the marking of Ps and Ts but not Rs in J. Amidya. The complex interaction that unfolds with monotransitive and intransitive constructions is rather striking, as illustrated below. The A, S, and R may be marked by the L-set. It is not the P or T that aligns with the A and s but the R, as schematized below.

(24) **J. Amidya** (NW Iraq; Hoberman 1989; Greenblatt 2011)

- a. (intransitive)
dmix-li 'I went to sleep.'
 sleep_{PFV-S:1SG}
- b. (monotransitive)
šmi?-a-li 'I heard her (P).'
 hear_{PFV-P:3FS-A:1SG}
- c. (ditransitive)
hu-la-li 'She gave **to me** (R).'
 give_{PFV-A:3MS-R:1SG}
hiw-a-li 'I gave (to) her (T/R).'
 give_{PFV-T/R:3FS-A:1SG}

Thus, the L-set may be used to encode the R in both the 'imperfective' and 'perfective'. 'Imperfective' verbal forms that take one object L-suffix may refer to either the T or R. The same holds for the use of the E-set in 'perfective' verbal forms. In 'imperfective' verbal forms that take more than one object L-suffix, the first refers to a third person theme, the second to a recipient. In 'perfective' verbal forms that take an object L-suffix in addition to an agent L-suffix, the object L-suffix may refer to either the T or R in 'neutral dialects' but it can only refer to the R in 'accusative' dialects.

3.3. Simple Clauses with Full Nominals

After having examined verbal forms without co-referential nominals, we proceed with verbal constructions combined with full NPs. An important feature of such clauses is differential object marking. Differential marking of the P is common to all Neo-Aramaic languages (in fact, all of Aramaic) and is manifested

⁹⁰ This function appears to be part of an archaic layer in NENA that was available alongside marking R by means of the E-series, as the earliest texts witness (16th-17th c.), cf. *mīr-at-ti* 'I told **you**_{MS} (R) besides *mār-rī-lu* 'I told **them** (R)' (Sabar 1976:xxxix, 53.10:16).

through prepositional marking, indexing, or both. Independent pronouns are treated much like full NPs and come in prepositional form. The pronouns based on the dative preposition *l-* are connected with the L-suffixes. Finally, word order will be shown to be independent of alignment type but dependent on dialectology.

3.3.1. Prepositional Marking and Differential Object Marking

Case-marking is adpositional in Aramaic and is used, among others, for prepositional complements, recipients, and prominent object NPs (see also §4.1). The differential case-marker of the P⁹¹ is typically the dative.

The S and A are typically zero-marked. The verb indexes their respective role. The E-suffix *-i* below, for example, functions as cross-index to the preceding S or A referent *qurdaye* ‘Kurds’:

(25) **J. Amidya** (NW Iraq; Greenblatt 2011:268.9, 300.111, 312.30, 292.66)

- [S/A] ← [V+S/A]
- a. *kull-u* *qurday-e* *g-zad?-i-wa* *mən* *ʔilaha*
all-3PL Kurd-M:PL IND-fear_{IPFV-S:3PL-PST} from PRN
‘All the Muslims (lit. Kurds) were afraid of God.’
- b. *qurday-e* *g-əmr-i-wa-le* *šer* *ʔad-din*
 Kurd-M:PL IND-say_{IPFV-A:3PL-PST-R:3MS} PRN PRN
‘Kurds used to call him Sher ad-Din.’

Jewish Amidya is an ‘accusative dialect’. The S and A are similarly cross-indexed by L-suffixes in the ‘perfective’, for example:

- [S/A] ← [V+S/A]
- c. *ʔo* *məšəlmana* *mət-le*
DEM:MS Muslim:MS die_{PFV-S:3MS}
‘The Muslim died.’
- d. *maʕalləm* *mḥuke-le* *ʔat-e*
 teacher:MS tell_{PFV-A:3MS} to-3MS
‘The rabbi told him.’

⁹¹ Traditionally, this is known as the *nota objecti* or *nota accusativi* in Semitics.

All else being equal, this verbal agreement is obligatory and unconditioned for unmarked clauses with a full NP in S or A-function, regardless of their referential properties. Agents, however, do exhibit some peculiarities in constructions based on the ‘perfective’ (*qtil-*). The agent agreement can be absent and/or the agent can be prepositional in certain marked contexts which is not discussed further here (see §4.3 for NENA and §6.1.3 for ʿTuroyo). The coding of the P is conditional in terms of both agreement and case-marking (see further below and the next subsection).

Case-marking manifests itself in Aramaic through the use of adpositions or particles. Prepositional marking of core arguments correlates with less core or non-core arguments (i.e. obliques) and adverbials. The two primary prepositions *l-* ‘to, for; on’ and *b-* ‘in, at; with; through’ that consist of only a single consonant are generally considered prefixal. Prefixal prepositions can be augmented with an inserted vowel in consonantal clusters either after the preposition or before it, giving rise to byforms like *ʔəl-* and *ʔəb-* in varieties of NENA and *el-* and *eb-* in Central Neo-Aramaic. These prepositions are referred to with their allomorph in parenthesis, e.g. (*ʔəl*)/*l-* or (*e*)/*l-*⁹². The reduplicated allomorph *lal-* and dialectal variants thereof is found in some NENA dialects exclusively for pronouns.

Person forms are attached to the respective preposition or particle through the ‘possessive’ suffixes. This is illustrated by the prepositions *l-* and *b-* in J. Zakho and ʿTuroyo in Table 22. One may notice the parallels between independent person forms based on the preposition *l-* and the L-set of dependent person forms⁹³. The relationship is not entirely unproblematic. The two are diachronically related and share certain functional properties that are sometimes even overlapping or complementary (see §4.1.3, §5.2.4). The L-suffixes may also be decomposed into an *l-* with attached possessive suffixes, e.g. Jewish Zaxo 1sg. *l-i*, 2pl. *l-an* etc. Nevertheless, the L-suffixes have a distinct grammatical status from the pronouns based on (*ʔəl*)/*l-* and should not be conflated. *Ceteris paribus*, the L-suffixes are always fully grammaticalized verbal agreement markers and are properly part of the verbal form, functioning as cross-indexes like the E-suffixes. They do not occur in isolation but always attach to a verb. The prepositional pronouns, by contrast, are less grammaticalized and more independent of verbs,

⁹² It is possible the *-Vl-* bases represent a homonymous preposition that goes back to **ʔel(ay)-* ‘to(ward)’ which was lost in Syriac but existed in other Aramaic languages since its beginnings (Jastrow 1903:66a).

⁹³ There are even also ‘B-suffixes’ corresponding with the preposition *b-*, see also §5.2.2.

being used like full NPs. Although I emphasize here that they should not be conflated, the problem is that some dialects do merge them. These ambiguous cases are not discussed here (see §4.1.3 and §5.2.3).

Table 22. *Inflection of prepositions in Neo-Aramaic*

	NENA (J. Zaxo)		Ṭuroyo (Miden)	
	<i>l-</i>	<i>b-</i>	<i>l-</i>	<i>b-</i>
1SG	<i>ʔall-i</i>	<i>ʔabb-i</i>	<i>el-i</i>	<i>eb-i</i>
PL	<i>ʔall-an</i>	<i>ʔabb-an</i>	<i>el-an</i>	<i>eb-an</i>
2MS	<i>ʔall-ox</i>	<i>ʔabb-ox</i>	<i>el-ǝx</i>	<i>eb-ǝx</i>
FS	<i>ʔall-ax</i>	<i>ʔabb-ax</i>	<i>el-ax</i>	<i>eb-ax</i>
PL	<i>ʔall-ōxun</i>	<i>ʔabb-ōxun</i>	<i>el-ay-xu</i>	<i>eb-ay-xu</i>
3MS	<i>ʔall-e</i>	<i>ʔabb-e</i>	<i>el-e</i>	<i>eb-e</i>
FS	<i>ʔall-a</i>	<i>ʔabb-a</i>	<i>el-a</i>	<i>eb-a</i>
PL	<i>ʔall-ōhun</i>	<i>ʔabb-ōhun</i>	<i>el-ay-ye</i>	<i>eb-ay-ye</i>

Source: Cohen (2012) for J. Zaxo data and Jastrow (1992) for Ṭuroyo.

In all Neo-Aramaic languages, there are verbs that specifically take a prepositional complement, especially (*ʔal*)*l-* or (*ʔab*)*b-*. The preposition is not always entirely fixed, even within a single dialect. In J. Zakho, for example, a verb can variably combine with another preposition, compare (26a-b) below, without a noticeable semantic difference. Such complements can convey a less affected object, i.e. a target, goal or source.

(26) **J. Zakho** (NW Iraq; Cohen 2012:159-160)

	[V-S]	[OBL]	[S]
a.	<i>rʔaš-la</i>	<i>ʔall-a</i>	<i>ʔastāz-a</i>
	feel _{PFV-S:3FS}	to-3FS	master-her
	'Her master noticed her .'		
b.	<i>rʔaš-le</i>	<i>ʔabb-i</i>	
	feel _{PFV-S:3MS}	at-1SG	
	'He noticed me .'		

Similarly, recipients will generally be marked through prepositions. The addressee of the verb *ʔmr* 'say, tell', for example, is typically prepositional in Aramaic. The respective preposition will vary significantly across as well as

within dialects including $(\partial l)l$ -, $t(l)a$ -, $ba(q)$ - or $qa(d)$ -. This is illustrated in the following examples from various dialects:

- (27) **Turoyo** (Miden, SE Turkey; Ritter 1967-71, 81/16)

ʔat-tarʔone *mər-re* *l-u-malko*
 the-doorkeepers say_{PFV-A:3PL} DAT-the-king:MS
 ‘The doorkeepers said **to the king**.’

- (28) **C. Ashitha** (SE Turkey; Borghero 2006:372)

mər-ri *ʔəll-a*
 say_{PFV-A:1SG} DAT-3FS
 ‘I told **her**.’

- (29) **J. Amidya** (NW Iraq; Greenblatt 2011:336.5)

mər-ri *ʔəθ-ux*
 say_{PFV-A:1SG} DAT-2MS
 ‘I told **you_{MS}**.’

- (30) **J. Arbel** (NE Iraq; Khan 1999:119)

mir-i *baq-ew*
 say_{PFV-A:1SG} DAT-3MS
 ‘I told **him**.’

- (31) **C. Urmi** (Literary, NW Iran; Murre-van den Berg 1999:301)

mer-ron *qā xākīm* *d-atra*
 say_{PFV-A:3PL} DAT ruler LK-land
 ‘They told **the ruler of the land**.’

When the P is a higher ranking NP, this can trigger case-marking (depending on the dialect). Coghill (2014) notes that, as a coding device, differential case-marking manifests a stronger sensitivity to animacy as well as the presence of determiners (such as demonstrative *aya* below) than differential indexing (see next subsection). The Jewish Salamas differential case-marker *al*- in (32b) signals the object of the following determined noun, *aya lexma* ‘this bread’. It is a preposition that also means ‘on, unto’. Such prepositions are frequently augmented with $-(\partial)d$ or its variant $-(\partial)t$, a linker that is often added before an immediately following vowel. (32c) illustrates how pronominal objects are expressed independently by the same preposition. When a dialect displays differ-

ential case-marking, a set of independent object person forms that is based on the same preposition is usually also available (see §4.1.2).

(32) **J. Salamas** (NW Iran; Duval 1883:120-121.19, 134.32, transcription modified)

- a. ...*aya* *brūna* *kudyöm* (Ø) *lexma* *méndē-Ø-va*
 ...DEM:SG boy:MS every.day bread:MS throw_{IPFV-A:3MS-PST}
 ‘(Where) the boy would throw **bread** every day.’
 [DOM→P]
- b. *ya* *mašíta* *xel-la* *al-at* *aya* *lexma*
 DEM:SG fish:FS eat_{PFV-A:3FS} DOM-LK DEM:SG bread:MS
 ‘The fish ate **the bread**.’
- c. *k-exl-ex* *al-ef*
 IND-eat_{IPFV-A:3FS} DOM-3MS
 ‘We will eat **it**.’

Differential case-marking is also attested for Central Neo-Aramaic. Mlaḥso adopts this strategy for definite NPs, as indicated by *l-* in (33b) below.

(33) **Mlaḥso** (SE Turkey; Jastrow 1994:148.24, 150.26)

- a. (Ø) *ḥamšaḥsár* *ʔezé* *mobe-lan*
 fifteen donkey:PL take_{PFV-A:1PL}
 ‘We took **fifteen goats**.’
- b. *l-a-ʔez-ezan* *men-án* *šid-len*
 DOM-the-donkey:PL-our from-1PL take_{PFV-A:3PL}
 ‘They seized **our goats** from us.’

In Turoyo, closely related to Mlaḥso, the nominal P argument is less often differentially marked, as illustrated below. The P arguments *Gorgis* and *u-səsyō* in (34) below, though high in prominence, are neither indexed (unlike the S and A) nor case-marked (like the S and A).

(34) **Turoyo** (Miden, SE Turkey; Ritter 1967-71, 115/250, 278, transcription modified)

	[V-S]	[V-A]	[P]
a.	<i>k-ūbʕ-o</i>	<i>qūtl-o</i>	<i>Gorgis</i>
	IND-want _{IPFV-S:3FS}	kill _{IPFV-A:3FS}	PRN
	‘She wants to kill Gorgis .’		

- b. [A] ← [V-A] [P]
 Gorgis *q̣ti-le* *u-səsyo*
 PRN kill_{PFV-A:3MS} the-horse:MS
 ‘Gorgis killed the horse.’

Nevertheless, differential case-marking sporadically also occurs in Turoyo. Ritter’s (1967-71) material from the village of Raite contains examples of the following kind⁹⁴:

- (35) **Turoyo** (Raite, SE Turkey; Ritter 1967-71, 107/90)
 g-ḥoze-Ø *l-i-dāvāre*
 FUT-see_{IPFV-A:3MS} DOM-the-breach:FS
 ‘He will find **the breach** (in the wall).’

Many of such prepositions used to differentially mark the patient are somehow derived from a type of goal-marking preposition depending on the dialect, generally the dative case-markers (*ʔəl*)-, *ʔ(l)a-* or *qa-*, for example:

- (36) **J. Koy Sanjaq** (NE Iraq; Mutzafi 2004a:189.15)
 šeraké *dwiq-le* *l-ṣaqubraké*
 lion:MS:DEF seize_{PFV-A:3MS} DOM-mouse:MS:DEF
 ‘The lion caught hold of **the mouse**.’

- (37) **C. Barwar** (NW Iraq; Khan 2008a, A11:1)
 awwa *q̣til-le* *ṭla-ʔarya*
 DEM:MS kill_{PFV-A:3MS} DOM-lion:MS
 ‘He killed **the lion**.’

- (38) **C. Sardarid** (NW Iran; Younansardaroud 2001:205, transcription modified)
 **avva* *purəḵ-lə* *ḵa yala mən mota*
 DEM:MS II:rescue_{PFV-A:3MS} DOM boy:MS from death:MS
 ‘He saved **the boy** from death.’

Cross-linguistically, it is often the coding associated with the dative (recipient) in ditransitive constructions that is grammaticalized to differentially mark the patient, especially first and second person pronouns (e.g. Bossong 1985,

⁹⁴ See now Waltsiberg (2016:186) for more examples. He suggests that animacy does not play a role.

1991, cf. Croft 2003:168; see §2.4.1). Moreover, a prepositional set of pronouns facilitates an independent set of pronouns that, if used as objects, provides the opportunity to express object person forms independently of the verb, allowing for more flexibility so that they can occur freely in post or pre-verbal positions (see further §4.1.2-4.1.3). That is, a set of independent object pronouns becomes available alongside the already existing independent (unmarked) pronouns that generally denote the subject.

On the whole, then, the S and A are zero case-marked, irrespective of prominence. If the P scores high in prominence, it may trigger overt case-marking through prepositions, depending on whether the dialect has conventionalized this coding strategy. The differential object marker is frequently identical to the dative, i.e. the preposition dedicated to the R. Independent pronouns also come in prepositional form and may be used to express the P independently of the verb.

3.3.2. Differential Indexing of the P

Proceeding with differential marking manifested in agreement, Coghill (2014) notes that, as a general tendency, indexing is primarily used to differentially mark topicalized NPs and definite and specific indefinite NPs.

When the P is definite, NENA dialects may opt for differential indexing to highlight this (instead of case-marking). The C. Aradhin verbal form *yāpē-∅-le* in (39a-b), for example, is inflected with an L-suffix *-le* that serves as a cross-index to differentially mark the patient in (39c). Literally, therefore, (39c) means ‘He bakes it_M, his own bread’⁹⁵.

(39) C. Aradhin (NW Iraq; Krotkoff 1982:54)

	[V+P]	→	[P]	
a.	<i>i-yāp-i (∅)</i>		<i>laxma</i>	(indefinite, inanimate P)
	IND-bake _{IPFV-A:3PL}		bread:MS	
	‘They bake bread .’			
b.	<i>yāpē-∅-le</i>			(absent co-nominal P)
	bake _{IPFV-A:3MS-P:3MS}			
	‘He bakes it_M .’			

⁹⁵ Pronouns that differentially index object NPs are a common feature of Semitic languages (Khan 1988).

- c. *yāpē-Ø-le* *laxm-e* *dīy-e* (definite, inanimate P)
 bake_{IPFV-A:3MS-P:3MS} bread-his LK-3MS
 'He bakes (lit. it_M) **his own bread.**'

The functional distribution of the E-suffixes or L-suffixes in the indexing of prominent object NPs is completely mirrored according to agreement inversion, compare (40) for the 'imperfective' and (41) for the 'perfective' below.

(40) **Imperfective base** (J. Amidya, NW Iraq; Hoberman 1989:102-104)

- a. *k-šam?-i* *baxta* (no indexing of the P)
 IND-hear_{IPFV-A:3PL} woman
 'They hear a woman.'
- b. *k-šam?-i-la* (L-set = pronominal P)
 IND-hear_{IPFV-A:3PL-P:3FS}
 'They hear **her.**'
- c. *k-šam?-i-la* *baxta* (L-set indexes definite P)
 IND-hear_{IPFV-A:3PL-P:3FS} woman
 'They hear (lit. her) **the woman.**'

(41) **Perfective base** (J. Amidya, NW Iraq; Hoberman ibid.)

- a. *šme?-lu* *baxta.* (no indexing of the P)
 hear_{PFV-A:3PL} woman
 'They heard a woman.'
- b. *šmi?-a-lu* (E-set = pronominal P)
 hear_{PFV-P:3FS-A:3PL}
 'They heard **her.**'
- c. *šmi?-a-lu* *baxta* (E-set indexes definite P)
 hear_{PFV-P:3FS-A:3PL} woman
 'They heard (lit. her) **the woman.**'

The L-suffix cross-references for the imperfective in (40a-f) what the E-suffix cross-references for the perfective in (41a-f), and *vice versa*. Depending on the base, the L-set or E-set marks the P.

Cross-referencing of objects is also readily found across dialects in topicalization constructions, also in Turoyo. The object can be placed in left-dislocation at the front and is only loosely integrated in the clause to introduce the clausal topic as a "forethought" (Givón 1976). This is indicated by two vertical strokes || in the example below. A cross-index on the verb refers back to it and resumes its

syntactic role. Such a strategy is also used in Ṭuroyo where differential object marking seems to be less strong:

(42) **Ṭuroyo** (Miden, SE Turkey; Ritter 1967-71, 75/323, 81/13)

- [P] ← [V+P]
 a. *u-zlām-ano* || *lo-k-ūδɣ-ína-le*
 the-man-DEM:MS NEG-IND-know_{IPFV-A:1PL-P:3MS}
 ‘This man —, we do not know **him**.’

When the P occupies the unmarked post-verbal position in Ṭuroyo, it is indistinct from differential object marking:

- [V+P] → [P]
 b. *ko-ḥoze-la* Ḥore
 IND-see_{IPFV-A:1PL-P:3MS} PRN
 ‘He sees (lit. **her**) Ḥore.’ (81/13)

NENA dialects may also combine indexing and case-marking in differential object marking, for example:

(43) **J. Arbel** (NE Iraq; Khan 1999:494, Y:37, 37)

- a. (∅) *lixmá* *gol-ix-wa* (∅) (indefinite, inanimate NP)
 bread:MS make_{IPFV-A:1PL-PST}
 ‘We made **bread**.’
 b. *mapé-ni-wā-le* (pronominal)
 bake_{IPFV-A:3PL-PST-P:3MS}
 ‘They baked **it_M**.’
 [DOM→P] ← [V+P]
 c. *ʔil- lixmá* *mapé-ni-wā-le* (definite, animate NP)
 DOM- bread:MS bake_{IPFV-A:3PL-PST-P:3MS}
 ‘They baked (lit. it) **the bread**.’

Both the preposition *ʔil-* and the cross-index *-le* are exploited in the differential marking of *lixmá* ‘bread’ in (43c), using both available strategies to mark a prominent object. Their combination is mainly used in highly salient contexts (Khan 1999:290). Nevertheless, in some dialects, such as Christian Telkepe (NW Iraq; Coghill 2010, 2014), the combination of differential case-marking and indexing is always preferred.

The combined strategy is occasionally also observed even in Țuroyo, for example:

(44) **Țuroyo** (Miden, SE Turkey; Ritter 1967-71: 81/49)

[V+P]	→	[DOM→P]
<i>k-ūδŷ-i-le</i>		<i>l-u-zlām</i>
IND-know _{IPFV} -A:3PL-P:3MS		DOM-the-man:MS

‘They (i.e. those who remained on the king’s gate) know (lit. **him**) **the man**.’

The presence of such case-marking makes the patient argument an integral part of the clause and disambiguates this construction from right-dislocation (cf. Khan 1988:130).

In brief, agreement with the P is conditioned by the NP’s degree of prominence. Differential indexing of the P tends to be used for topicalized, definite and indefinite specific nouns and can be combined with case-marking.

3.3.3. Remarks on Word Order

Only a few rudimentary remarks on word order will suffice for the following reasons. Although word order is part of constructions, it is possibly not a coding but a behavioral (i.e. more syntax-driven) property and usually varies depending on the discourse properties of arguments irrespective of alignment type manifested in agreement or case-marking (see §2.2.2). It may also lead to ambiguity in determining alignment (see §2.2.5). Word order is relatively free and driven by discourse properties (Hoberman 1989:100). It has not been studied in detail in most grammatical descriptions of Neo-Aramaic languages.

There are nevertheless evident dialect-specific preferences in Neo-Aramaic. There is a tendency towards V-P (or Verb-Object) as the unmarked word order in most of Neo-Aramaic such as Jewish Amidya exemplified in (45).

(45) **J. Amidya** (NW Iraq; Hoberman 1983:132)

		[V]		[P]	
a.	<i>ʔe</i>	<i>baxta</i>	<i>k-šamʔ-a-lu</i>	<i>ʔanna</i>	<i>gure</i> (imperfective)
	DEM:FS	woman:FS	IND-hear _{PFV} -3FS-3PL	DEM:PL	man:PL
	‘The woman hears these men .’				
b.	<i>ʔe</i>	<i>baxta</i>	<i>šmiʔ-i-la</i>	<i>ʔanna</i>	<i>gure</i> (perfective)
	DEM:FS	woman:FS	hear _{PFV} -3PL-3FS	DEM:PL	man:PL
	‘The woman heard these men .’				

Since the S and A can be placed before or after the verb, we cannot establish a clear alignment preference in terms of word order. Khan (2002a:427-434), for example, notes for the Christian dialect of Qaraqosh (NW Iraq) pre-verbal position is favored when the referent is semantically and pragmatically more independent of the main narrative. Fronting of the object to pre-verbal position (P-V) is pragmatically more marked (Khan 2002a:440f).

Contrary to the aforementioned V-P-tendency, quite a few dialects, especially the NENA dialects in the eastern periphery, typically employ a P-V arrangement as the unmarked word order throughout. Among them are the dialects that exhibit an ergative pattern in the ‘perfective’ such as Jewish Saqqiz below. The word order is irrespective of TAM category.

(46) **J. Saqqiz** (W Iran; Israeli 1998:186)

	[P]	[V]	
a.	<i>baxt-év</i>	<i>aburw-év</i>	<i>labl-a-le</i> (imperfective)
	woman:FS-his	dignity:MS-his	take _{IPFV-3FS-3MS}
	‘His wife takes away his dignity. ’		
b.	<i>ḥatán</i>	<i>kaldá</i>	<i>nišq-a-le</i> (perfective)
	groom:MS	bride:FS	kiss _{PFV-3FS-3MS}
	‘The bridegroom kissed the bride. ’		

It should be noted that this P-V word order permutation is not triggered by a particular alignment pattern but determined dialectologically. NENA dialects with accusative or neutral alignment in the ‘perfective’ may also have this particular arrangement, such as Jewish Urmi:

(47) **J. Urmi** (NW Iran; Garbell 1965:197)

	[P]	[V]	
	<i>ḥatán</i>	<i>reš-éw</i>	<i>gle-le-le</i> (perfective)
	groom:MS	head:MS-his	reveal _{PFV-A:3MS-P:3MS}
	‘The bridegroom uncovered his head. ’		

Thus, the two main word order tendencies are V-P and P-V where the placement of the P is more significant than the placement of the S or A. Although dialects with ergative alignment in the ‘perfective’ prefer P-V order, this preference is not specific to the ergative alignment but to the concerning dialect bundle. This is borne out by the fact that the same word order preference is found

for ‘imperfective’ clause types, and that related dialects with other alignment types evince the same word order preference.

3.4. Ditransitive Clauses with (Pro)nominals

The more complex interaction of differential object marking strategies occurs in ditransitive clauses. The constructional split found for the P in differential marking is usually also found for the T and rarely includes the R. As in other studies of ditransitives in Neo-Aramaic⁹⁶, a distinction will be made between NP types separating pronouns from full NPs, between first/second and third person pronouns and between definite and indefinite NPs in line with the prominence hierarchy (see §2.4.1). Ditransitive constructions can be categorized in terms of person and pronoun-NP role associations (see Zúñiga 2002; Haspelmath 2004b, 2007) and they will be reviewed as such in for Eastern Neo-Aramaic. We will concentrate on examples for the ‘imperfective’ and reduce the level of abstraction in the glossing in this section for simplicity’s sake. The patterns depend on both the role and type of argument.

There are four major possible combinations of person and associated R or T role. Haspelmath (2007), following Zúñiga (2002), distinguishes the following rankings:

- (i) canonical: R > T.
- (ii) clustering I: both R and T are high;
- (iii) clustering II: both R and T are low;
- (iv) crossing: T > R.

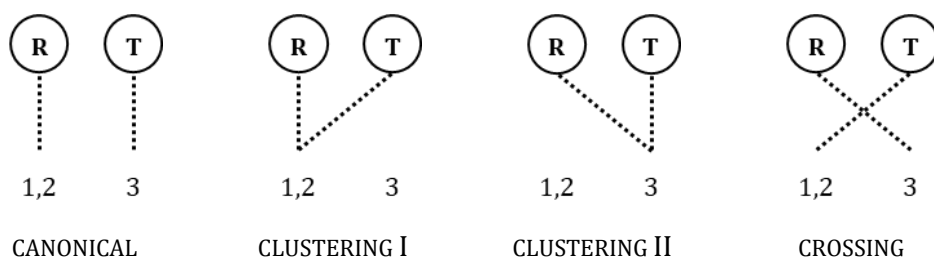
Haspelmath (2007) notes that, when the T outranks the R on the prominence hierarchy and, thus, a crossing association of role and nominal applies, a more complex construction tends to be used. A more complex construction may involve distinct independent rather than dependent expression of the person forms or overt rather than zero case-marking. Indeed, Siewierska (2004:60-61) notes that combinations of two independent pronouns expressing both T and R are cross-linguistically rare. Independent person forms generally do not denote both T and R but typically only the R, when dependent person forms are not available. This is consistent with the relative argument salience. The recipient is

⁹⁶ See Givón (1976), Polotsky (1979), Hoberman (1989:106-110), Murre-van den Berg (1999:211-212), Coghill (2010), and Cohen (2012:144-146). Recently, Waltisberg (2016) for Turoyo.

typically highly animate and definite and independent pronouns by themselves are generally confined to human and definite referents, while the opposite applies to themes.

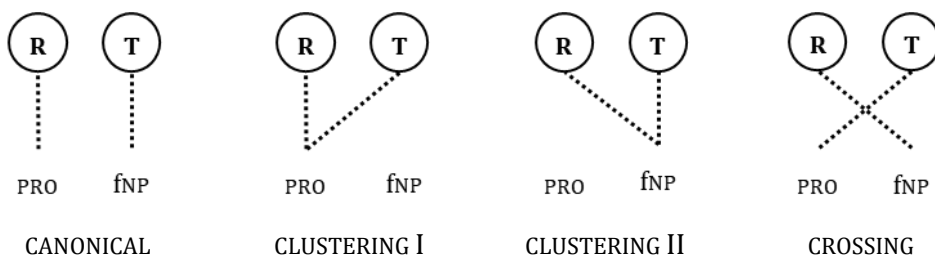
Figure 10 offers illustrative schemas for person role associations and Figure 11 for pronoun-NP associations. The ‘canonical’ type represents a harmonic person role association. The other types are less harmonic (clustering I and II) or disharmonic (crossing).

Figure 10. *Ditransitive person role associations*



Source: Haspelmath (2007).

Figure 11. *Ditransitive pronoun-NP role associations*



Source: Haspelmath (2007).

3.4.1. Person Role Associations

When both the T and R are pronominal, only one of them can be expressed on the verb. This results in two constructions for Haspelmath’s (2004b; 2007) ‘clustering’ pronominal association: an indirect preposition construction where the R is prepositional and one where the T is represented by a special set of person forms. Which one is used may also depend on the person reference.

In the indirect preposition construction ($T=P \neq R$), the verb takes a person index for the T, while the R is prepositional and expressed by a dialect-

dependent preposition. This is illustrated in the examples below. The theme is not person-restricted. In example (49a), for instance, *-lan* ‘us’ refers to a higher ranking theme. In fact, the indirect preposition construction must be used for the crossing association where the T outranks the R in person.

(48) **J. Amidya** (NW Iraq; Hoberman 1989:107-109, 185.3)

	[V+T]	[DAT→R]
a.	<i>g-yawəl-Ø-lu</i>	<i>ʔal-i</i>
	IND-give _{IPFV} -he-them	to-me
	‘He gives them to me.’	
b.	<i>b-yaw-ən-ne</i>	<i>ʔal-ux</i>
	FUT-give _{IPFV} -I:M-him	to-you:MS
	‘I _M will give it_M to you _{MS} .’	

(49) **Ṭuroyo** (SE Turkey; cf. Jastrow 1985:142-143)

	[V+T:1,2,3]	[DAT→R:1,2,3]
a.	<i>gd-ob-ut-lan</i>	<i>alle</i>
	FUT-give _{IPFV} -you:PL-us	to.them
	‘You _{PL} will give us to them.’	
b.	<i>Ø-nūhr-al-le</i> (< *nūhr-ono-le)	<i>el-ax</i>
	SBJ-slaughter _{IPFV} -I:F-him	to-you:FS
	‘I _F will slaughter it_M for you _{FS} .’ (Ritter 1967-71, 76/17)	

In the secundative construction (T≠P=R), the verb indexes the R, and a special series of enclitic person forms marks the T. This is the set otherwise termed ‘enclitic copula’ which is found typically in non-verbal clauses. (This terminology is obviously misleading and this set does not express a copula here.) The construction type is confined to the third person in Neo-Aramaic in general⁹⁷. In J. Amidya, these are 3ms. =*ile* ‘He is’, 3fs. =*ila* ‘She is’ and 3pl. =*ilu* ‘They are’⁹⁸. In Ṭuroyo, these are =*yo* (sg.) ‘(s)he/it is’ and =*ne* (pl.) ‘They are’. They function as a secondary third person forms. The theme indexes are attached immediately to the preceding verbal form such as =*ila* and =*ilu* in (50a) and (50b) and =*ne* and =*yo* in (51a) and (51b) below. They are employed only when the R outranks or is equal to the T on the person hierarchy.

⁹⁷ A similar example was given for Mesopotamian Arabic in §2.4.4.

⁹⁸ Perhaps confusingly, these enclitic person forms look like additional L-suffixes, but they should be kept apart.

(50) **J. Amidya** (NW Iraq; Greenblatt 2011:304.130, 320.11)

[V]	[A]	[R:1,2,3]	= [T:3]

- a. $\emptyset$ -*maxzé* - $\emptyset$ - *wa* -*li* =***la***
 SBJ-show_{IPFV} -they -PST -me =him
 'They would have shown me **it_M**.'

[R]	[T:3]

- b. $\emptyset$ -*maxəzy-án* -*nux* =***ilu***
 SBJ-show_{IPFV}-I:F -you:MS =them
 'I_F will show you_{MS} **them**.'

[R]	= [T:1,2]

- c. ** $\emptyset$ -*maxəzy-án* -*nux* =***iwan***
 SBJ-show_{IPFV}-I:F -you:MS =me:F
 ('I_F will show you_{MS} **me_F**.)

(51) **Turoyo** (SE Turkey; Jastrow 1985:142-43)

[R]	= [T:3]

- a. *g-maḥwé-nan* -*xu* =***ne***
 FUT-show_{IPFV}-I -you:PL =them
 'I_M will show you_{PL} **them**.'

- b. *g-māgawr-át* -*li* =***yo***
 FUT-marry_{IPFV}-you:MS -me =him
 'You_{MS} will marry me **him**.'

[R]	= [T:1,2]

- c. ***g-māgawr-át* -*le* =***no***
 FUT-marry_{IPFV}-you:MS -him =me
 ('You_{MS} will marry him **me**.)

For completeness's sake, the double object construction (T=P=R) is also mentioned here. Rarely, an 'imperfective' verb takes two object suffixes in a double object construction. The first L-set always denotes the theme, the second always the recipient. Both align with the patient, resulting in neutral alignment. Just as the secundative alignment above, this neutral pattern is presumably limited to the third person and may freely alternate with an indirect preposition construction:

(52) **J. Zaxo** (NW Iraq; Cohen 2012:164)

[V]	[A]	[T]	[R]

- a. *bə-yāw* -*án* -*na* -***lox*** 'I_M will give her/it_F **to you_{MS}**.'
 FUT-give_{IPFV} -I_M -her -you_{MS}

- b. *bə-yāw -ən -na ʔal-ox* 'id.'
 FUT-give_{IPFV} -IM -her to-you_{MS}

Thus, we find the following patterns where either pronominal T or R may align with the P:

Table 23. *Person marking of themes and recipients*

(monotransitive)	V-P		
neutral	V-T-R		(R≥T, only third person themes?)
indirective	V-T	DAT→R	(all associations)
secundative	V-R=T		(R≥T, never T>R)

There is no clear-cut person split. The indirective pattern is available to all person role associations but it is necessary for the crossing association (where the T is higher in person). By contrast, the secundative pattern, and presumably also the neutral pattern, is confined to the 'canonical' and clustering third person situation: the T cannot be first or second person and must be third person. Where person role association is less harmonic, the indirective construction is preferred.

3.4.2. *Pronoun-NP Role Associations*

Pronominal arguments combined with nominal arguments follow the same patterns as we observed in the preceding subsection. The verb may take one object suffix referring to either the T or R, and the NP denoting the other role is expressed independently.

In the 'canonical' pronoun-NP association, the R is pronominal and the T is nominal. The nominal theme remains zero-marked such as *pare* 'money' in (53a) and *māsāle* 'story' in (53a) below, where the recipient is an object index marked on the verb. The R is introduced by a preposition such as *ta* in (7b-c) and *(e)l-* in (54b-c) in most ditransitive constructions containing two full NPs without differential marking. The same holds for pronominal Ts combined with a full R in the crossing situation, cp. *ta ʔakoma* 'to the king' in (53b-c) below and *l-u-šulṭono* and *l-u-malko* in (54b) and (54c). (53a) and (54a) are, strictly speaking, double object constructions (much like the English translation). It contains two objects, the primary object being the pronominal recipient marked on the verb and the secondary object being the nominal theme. Both are treated like the P, so that the alignment is neutral for such arguments.

(53) **J. Amidya** (NW Iraq)

- [V+R: PRO] [T: fNP]
 a. *g-yaw-ən-na* *pare* (R > T)
 IND-give_{IPFV}-I_M-her money:PL
 ‘I_M give her money.’ (Hoberman 1989:107)
- [T: fNP] [DAT→R: fNP]
 b. *mšodər-re*⁹⁹ *kθawa* *ta* *ḥakoma* (clustering, full NP)
 II:send_{PFV}-he the-letter:MS to king
 ‘He (i.e. your agha) sent a letter to the king.’ (Greenblatt 2011:292.66)
- [V+T: PRO] [R: fNP]
 c. *qam-yaw-i-le* *ta* *ḥakoma* (T > R)
 PFV-give_{IPFV}-they-him to king
 ‘They gave it_M to the king.’ (Greenblatt 2011:294.74)

(54) **Ṭuroyo** (SE Turkey; Ritter 1976-71, 75/328, 116/8, 56/27)

- [V+R: PRO] [T: fNP]
 a. *gd-oman-n-ux* *māsāle* (R > T)
 FUT-say_{IPFV}-I_M-you_{MS} story:FS
 ‘I will tell you a story.’
- [T: fNP] [DAT→R: fNP]
 b. *mšadal-le*¹⁰⁰ *u-maktub* *l-u-šulṭono* (clustering, full NP)
 II:send_{PFV}-he the-letter:MS to-the-sultan:MS
 ‘He sent the letter to the sultan.’
- [V+T: PRO] [R: fNP]
 c. *gə-mšadr-i-le* *l-u-malko* (T > R)
 PVB-send_{IPFV}-they-it_M to-the-king
 ‘They send it to the king.’

Most ditransitive verbs will occur in these constructions. The double object construction is confined to the canonical association for these verbs where the R is pronominal. There is also a closed class of ditransitive verbs besides derived causatives that do occur in a double object constructions involving two full NP, i.e. the R is nominal. This lexically more restricted construction is given below for the verb *mly* ‘fill’ in Ṭuroyo. Apart from causatives such as ‘feed’ and ‘give

⁹⁹ < *mšodər-* + *-le*.

¹⁰⁰ < *mšādər-* + *-le*.

to drink', ditransitive verbs that occur in this construction are generally 'teach', factitive verbs (*make* T into R, *call* R T), dress (*clothe* R *in/with* T), and similar semantics of filling and covering (Khan 2008a:785-786 on Christian Barwar).

- d. *g-mole-Ø* [R: fNP] [T: fNP] (clustering, full NP)
as-sefoqe *maye*
 PVB-send_{PFV}-he the-container:PL water:PL
 'He fills the containers with water.' (77/101)

In the combination of a pronominal and full nominal argument, then, we observe the following patterns:

Table 24. *Nominal and pronominal themes and recipients (non-differential)*

	PRO	fNP	fNP	
(monotransitive)	V-P			
	V	P		
neutral	V-R	T		(R > T, canonical)
	V	R	T	(clustering, lexically restricted)
indirective	V-T	DAT→R		(T > R, crossing)
	V	T	DAT→R	(clustering full NPs)

In general, a prepositional full nominal recipient is preferred, when the theme is pronominal, while a zero-marked full nominal theme is preferred, when the recipient is pronominal. Where the pronoun-NP association is less harmonic, independent prepositional expression is favored. The double object construction with two full NPs is lexically more restricted.

3.4.3. Differential Theme and Recipient-Marking

Differential object marking constructions for ditransitive verbs are more complex. The preposition used to differentially mark the P is most often morphologically identical with the dative preposition that denotes the R. Agreement is controlled by one argument, since there is only one object index, and this is preferably the T, following an indirective pattern. Only one of the three strategies (i) indexing, (ii) case-marking, or (iii) both is selected per argument.

In the 'canonical' situation, the R is pronominal and expressed through the object L-suffix. When the theme is a definite full NP, however, it may trigger indexing instead. The recipient is expressed independently, for example *tal-i* 'to

me' in (55) below, so that the object L-suffix becomes available to differentially index the theme:

(55) **J. Amidya** (NW Iraq; Hoberman 1989:107-109)

- a. *g-yawāl-Ø-li* **pare** (non-differential)
 IND-give_{IPFV}-he-me money:PL
 'He gives me **money**.'
 [V+T] [DAT→R]
- b. *g-yawāl-Ø-lu* *tal-i* (indirective pronominal)
 FUT-give_{IPFV}-he-them to-me
 'He gives **it** to me.'
 [V+T] [T] [DAT→R]
- c. *g-yawāl-Ø-lu* **pare** *tal-i* (differential indexing of the T)
 IND-give_{IPFV}-he-them money:PL to-me
 'He gives **the money** to me.'

Differential indexing groups the T and P, while the R lacks indexing. In dialects that allow for double L-suffixes, such as Jewish Zakho, the first L-suffix may be used to index the theme, while the second one is a pronominal recipient, for example:

(56) **J. Zaxo** (NW Iraq; Cohen 2012:144-146)

[V	-T	-R]	[T]	
<i>halu</i>	-le	<i>-li</i>	hammas	(double L-suffixes)
IMPV:give	-him	-me	book:MS	
'Give me the book .'				

Differential marking of full NP recipients is occasionally found (cf. Khan 2008a:786 for Christian Barwar). Indirective case-marking of the R is non-differential. In some NENA dialects, however, the recipient can control agreement in addition to case-marking. The object suffix on the verb refers to the recipient¹⁰¹, treating it like the patient but the noun itself is always prepositional

¹⁰¹ I should mention that, at least in Ritter's (1967-71) material, differential cross-referencing of the recipient appears to occur in Turoyo, e.g. *k-omal-Ø-le l-Ḥasan* 'He says **to Ḥasan**' (116/44). The conditions for this and how this varies across dialects requires further study. See now also Waltisberg (2016:195-197) who assumes there is no fundamental difference between the absence or presence of a person index.

such as the addressee *ta malko* of *ʔmr* ‘say’ in the following example from Christian Telkepe. Naturally, the person index is available, because no definite theme is mentioned.

(57) **C. Telkepe** (NW Iraq; Coghill 2014: 355, 356, glossing adapted)

[V+R]	→	[DAT→R]	
<i>kəm-āmer-ø-ə</i>		<i>ta malko</i>	(R is indexed)
PFV-say _{IPFV} -he-him		to king:MS	
‘He said to the king ...’			

Concerning differential object marking, Coghill (2010, 2014) observes that only one of the three strategies (i) indexing, (ii) case-marking, or (iii) both is selected per argument, and that, all else being equal, agreement with themes overrules agreement with recipients (T > R) contrary the expected higher topicworthiness of the recipient (Givón 1976). *Ceteris paribus*, the two coding properties never apply simultaneously for two nominal objects (Hoberman 1989). Thus, if the clause contains two prominent full NPs, indexing of the T is preferred over case-marking of the T. Only the R is overtly case-marked. The following examples from Coghill’s (2014) material on Christian Telkepe (NW Iraq) will illustrate this. Differential P-marking is expressed through both indexing and case-marking. Indexing is only available for the theme (*kθāwə* ‘book’) and case-marking only for the recipient:

(58) **C. Telkepe** (NW Iraq; Coghill 2014: 355, 356)

	[V+P]	→	[DAT→P]	
a.	<i>kəm-šāqəl-ø-lə</i>		<i>ta barāna</i>	
	PFV-take _{IPFV} -he-him		DOM ram:MS	
	‘He took the ram .’			
b.	[V+T]	→	[T]	[DAT→R]
	<i>kəm-kāθu-ø-lə</i>		∅ <i>kθāwə</i>	<i>ta xāθ-e</i>
	PFV-write _{IPFV} -he-him		book:MS	to sister-his
	‘He wrote the book for his sister.’ (available)			

Case-marking or indexing of both is strongly disfavored (Coghill 2014:355). The theme cannot be case-marked, if the recipient is also case-marked:

- c. $[V+T] \longrightarrow [**DAT \rightarrow T] \quad [DAT \rightarrow R]$
kəm-yaw-i-lə ****ta kθāwə ta ǵda-baxtə**
 PFV-give_{IPFV}-they-him DOM book:MS to a:FS-woman:FS
 ‘They gave **the book to a woman.’ (unavailable)

Case-marking, therefore, is disfavored for higher ranking Ts¹⁰². Presumably, the dative marking of both a prominent T and any R would be avoided due to intolerance towards ambiguity (e.g. Kittilä 2006; unlike Syriac, see §2.4.2). At the same time, person indexing is not available for the recipient. The two coding properties, therefore, which would otherwise readily mark the P either on their own or in combination, are diffused over the T and R in ditransitive constructions. This agreement preference (T>R) and case-marking preference (R>T) is typical for languages where definiteness is more fundamental than animacy and where the T is zero case-marked (Givón 1976:165-166; cf. Hoberman 1983; see §2.5.2).

This notwithstanding, these tendencies are not always observed. A recipient may lack case-marking altogether and can be indexed like the P. First of all, the R argument may control agreement, when it undergoes left dislocation to clausal topic position (Givón 1976:165; Hoberman 1989:107-108). Thus, secundative indexing (T≠P=R) overrides the more frequent indirective pattern (T=P≠R), when the recipient is topicalized. Givón (1976:165) suggests that this correlates with the primacy of definiteness over animacy in such agreement systems like NENA in general. Secondly, the absence of case-marking appears to be possible in Christian Urmi, when the theme is not prominent but only the recipient is (see Polotsky 1979). The definite recipient (*haqyatoxun* ‘your story’ in (59) below), is indexed, while the indefinite theme (*šəmma* ‘name’) remains zero-marked¹⁰³:

¹⁰² There are notable exceptions to this, see Subsection 4.2.2.2 where case-marking of both T and R co-occurs in Jewish Urmi.

¹⁰³ It is possible, however, that this is in fact (inspired by) a complex predicate or light verb construction (akin to what is found in contiguous languages such as Persian). The referentiality of the object NP is reduced and it specifies the core lexical meaning of the verb phrase, i.e. ‘to name-give’ = ‘to name’. The most referential object, then, is naturally the recipient.

(59) **C. Urmi** (Literary, NW Iran; Polotsky 1979:218, transcription modified)

[V+R]	[T]	[R]	
<i>hallun-la</i>	<i>šamma</i>	<i>haqyat-oxun</i>	(only R indexed)
give:IMPV:PL-her	name:MS	story:FS-your:PL	
'Give your_{PL} story a name!'			

This still concurs with Givón's (1976) account that the definiteness of the argument is fundamental, and that prepositionally marked Rs do not trigger agreement in the presence of a full nominal T (Hoberman 1989:107, fn. 5).

Finally, only the more recipient-like argument is indexed in a double object construction. Again, the main conditioning factor is definiteness, for example:

(60) **C. Barwar** (NW Iraq; Khan 2008a:786)

	[V+R]	[T]	
a.	<i>maḷ-əx-xa</i>	<i>zuze</i>	(pronominal R)
	fill _{IPFV} -we-her	money:PL	
	'We shall fill it_F with money.'		
	[V+R]	→ [R]	[T]
b.	<i>maḷ-əx-xa</i>	<i>čant-ux</i>	<i>zuze</i> (differential indexing of the R)
	fill _{IPFV} -we-her	bag:FS-your:MS	money
	'We shall fill your_{MS} bag with money.'		

All in all, person indexing seems to be conditioned mainly by definiteness and is preferred for the T over the R. Exceptions to this tendency are few, but in all of them, the R is not overtly case-marked like the P. The general avoidance of (morphologically identical) case-marking of both the T and R seems to be so strong that even in dialects like Christian Telkepe where differential indexing of the P is always combined with case-marking, this is disfavored for the T.

3.5. Person Marking in Possession

A few remarks are given here on the expression of possessors either adnominal-ly or predicatively through a dative preposition and/or L-suffixes. L-suffixes can be used in predicative possession¹⁰⁴. The main observation will be that, like recipients, this usage of the L-suffixes is found across imperfective and perfective

¹⁰⁴ The adnominal possessive suffixes may also be used as object indexes in certain verbal constructions that ultimately have a nominal basis (see §5.2.2.1).

constructions, and that their main dative function is compatible with their use as markers of the A which is specific to the expression of the perfective past.

Adnominal possession is expressed as follows. Nouns can be combined with other nouns in a possessor-possessum annexation construction (much like a genitive case in genitive relationships). The default expression of annexation constructions is where the annexing ‘genitive’ linker =*d* and its dialectal variants cliticizes either to the possessee, e.g. NENA (J. Zaxo) *bēs=at gyane* ‘the house of his own’, or to the possessor, e.g. Ṭuroyo *u-bayto d=u-malko* ‘the house of the king’ (where *u-* is the definite article). Similarly, this linker may be inflected through the ‘possessive’ suffixes, e.g. J. Zaxo *šavana d-ōhun* ‘their shepherd’, often with augmentation, e.g. NENA (J. Zaxo) *d ‘of’ + -i ‘my’ → d-id-i ‘mine’*; compare Ṭuroyo: *u-bayto dīd-i=yo* ‘The house is mine’.

Predicative possession is based on existential clauses introduced by the existential marker *ʔiθ-* ‘there is/are’ and dialectal variants thereof. This particle is marked for negation by the negator *la-*, e.g. *la-yθ-* ‘there is/are not’, and for past tense by the ‘past convertor’ *-wa*, e.g. *ʔiθ-wa* ‘there was/were’. Together with L-suffixes they express predicative possession akin to English *have*. The L-suffix marks the possessor reminiscent of their use as markers of the recipient. The co-referential nominal, however, is usually not prepositional. Thus, (61a) below presents a simple existential predicate. (61b) illustrates the additional L-suffix expressing the possessor or benefactor (i.e. R). In (61c), the possessor NP is zero-marked but the L-suffix agrees with it, indicating its role as the possessor. The possessum is always zero-marked. The final /l/ of the L-suffix and final /t/ of the existential particle may also assimilate, e.g. NENA *ʔit-te* ‘He has’ (J. Arbel, NW Iraq; Khan 1999:121-122). The L-suffixes mark the agreement with the possessor. There is no agreement with the possessee.

(61) J. Zaxo (NW Iraq; adapted from Cohen 2012:80)

	PSSR	PTCL-PSSR	PSSM	
a.		<i>ʔit</i> EXST	<i>xa gānsa</i> a garden	‘There is a garden.’
b.		<i>ʔat-le</i> EXST-him	<i>xa gānsa</i> a garden	‘He has a garden.’
c.	<i>bab-ēni</i> father-our	<i>ʔat-le</i> EXST-him	<i>xa gānsa</i> a garden	‘Our father has a garden.’

Dative case-marking of the possessor appears to be optional in Țuroyo. The L-suffixes always index the possessor, but the possessor may be prepositional, for example *l-u-malk-ano* ‘belonging to the king’:

(62) Țuroyo (ȚIwardo, Ritter 1967-71: 58/3, 57/12)

- a. *u-zlām-ano kāt-way-le arbfi kalōte*
 the-man-DEM:MS EXST-PST-him forty daughter-in-law:PL
 ‘**This man** had (lit. There was to him) forty daughters-in-law.’
- b. *ma kāt-le l-u-malk-ano*
 Q EXST-him DAT-the-king-DEM:MS
 ‘What does **the king** have?’

As this example also evinces, the existential predicate may receive the TAM-marker *k-* in certain varieties. The L-suffixes are similarly added to the other existential bases marked for negation and/or past tense, e.g. NENA *ʔāna l-ít-wā-li waxt* ‘I did not have time’ (J. Arbel, NW Iraq; Khan 1999:121-122)¹⁰⁵.

The verb *hwy* stands in a suppletive relation to these existential markers to express other TAM categories such as the future tense and subjunctive, e.g. *ʔan hāwe rāba* ‘If there is much (of it)’ (C. Aradhin, Krotkoff 1982:82.50). The future tense of predicative possession may be expressed on the same basis, for example in Țuroyo:

- c. *Başuş gt-owe-le abro*
 PRN FUT-beIPFV-him son
 ‘Başuş will have a son.’ (115/309)

In the following example of Țuroyo, the verb *hwy* clearly lacks agreement with the possessee, while the possessor NP is marked by the preposition *l-* and indexed through the L-suffixes:

¹⁰⁵ A related construction based on the existential markers and a set of ‘B-suffixes’ expresses location ‘within’ or ability. B-suffixes are the same as L-suffixes with the only difference being that the /l/ is exchanged for /b/. The B-suffixes correlate with the preposition *b-* ‘in’. They denote containment (‘have inside’), e.g. NENA *tre-beʔe ʔibb-a* (< *ʔit-b-a*) ‘There were two eggs in it’, i.e. ‘It’s got two eggs inside’ (J. Arbel; Khan 1999:122). They can also convey ability followed by the subjunctive (bare ‘imperfective’), e.g. NENA *l-ib-i ʔ-ʔat-en* ‘I_M cannot come’ (C. Hertevin, SE Turkey; Jastrow 1988:55), Țur. *la-yb-i ʔ-oθe-no* ‘id.’.

- (63) **Turoyo** (İlwardo, SE Turkey; Ritter 1967-71, 59/5)

l-u-ḥākəm hawī-Ø-le barθo
 to-the-overlord became_{PFV-it_M}-him daughter:FS
 ‘The overlord got a daughter.’

One finds the same constructions in NENA for L-suffixes alike, for example: *ʔən hāwē-le ḥāl ʔawta* ‘If he has a good situation (i.e. is well off)’ (C. Aradhin, Krotkoff 1982:82.50, 80.38). The possessor controls agreement via the L-suffixes, while the possessee triggers no agreement.

In contexts where the paradigmatically affiliated verb *hwy* is used, the predicate may retain non-referential agreement morphology, often third masculine or feminine singular. This is more evident in the following example where *vi-la* is the 3fs. perfective past form of the verb *hvy* ‘be, become’ in Christian Urmi:

- (64) **C. Urmi** (Literary, NW Iran; Polotsky 1979:211, transcription mine)

vazir vi-la-lə bruna
 vizier:MS became_{PFV-it_F}-him son:MS
 ‘The vizier got a son.’

It should be noted that, unlike the rest of Neo-Aramaic, the predicative possessor is expressed as an independent dative person form in Mlaḥso. The possessee can trigger agreement on the verb *hwy*:

- (65) **Mlaḥso** (SE Turkey; Jastrow 1994:76.19)

- a. *hito el-i ḥosoki* ‘I have a sister.’
 there.is to-me a.sister:FS
 b. *zʕure el-i lo=ve-len* ‘No children were born to me.’
 children to-me not=were_{PFV}-they

How this applies to full nominal possessors in Mlaḥso is not known to me. Jastrow (1994) does not appear to provide examples.

Thus, the role expressed through L-suffixes in the ‘perfective’ is once again functionally equivalent with the role expressed through E-suffixes in the ‘imperfective’. The secondary L-suffix denotes the possessor throughout the system similarly to the R in ditransitives. Moreover, this indicates that no notion of possession, which may once have been there historically, is implied by the first L-suffix in the ‘perfective’ synchronically. On the contrary, *-len* marks the agreement with the possessee in (65b).

In short, the annexing ‘genitive’ particle =*d* links two nominals in a possessor-possessive relationship and may be inflected for person. The set of L-suffixes besides another similar set of B-suffixes is combined with existential particles or the verb *hwy* ‘be’ to express predicative possession. The L-suffixes share a close connection with the dative preposition *l-* ‘to, for’ in the expression of possessors. As a construction, however, predicative possession is treated similarly to verbal constructions. This is borne out by their type of negation and the ‘past convertor’ *-wa*. Possessors constitute a separate special category correlating with recipients across the verbal system. The possessee generally does not trigger agreement; only the possessor via the L-suffixes. And this is irrespective of TAM or inflectional base, so that the L-suffix denoting the recipient-like affectee is even attached to an L-suffix in the ‘perfective’ denoting the role that corresponds with the E-suffix in the ‘imperfective’. The first L-suffixes, however, function as indexes of an impersonal subject in the expression of the perfective past similarly to E-suffixes in the ‘imperfective’.

3.6. Summary

The ‘imperfective’ inflection is largely uniform across NENA and Central Neo-Aramaic dialects. The ‘perfective’ verbal inflection should not be mistaken for a passive or possessive construction synchronically. Due to agreement inversion, the respective E-suffixes and L-suffixes mark the inverted grammatical functions in (di)transitive constructions. L-suffixes can also attach to verbal forms with A-marking L-suffixes in the ‘perfective’ and, possibly though rarely, to verbal forms with T-marking L-suffixes in the ‘imperfective’. The R can be marked by L-suffixes across inflectional systems. By contrast, the ‘perfective’ shows interesting peculiarities, constructional splits, and more complex verbal person marking. This leads to various alignment splits, which we turn to in the next chapters, beginning with NENA and concluding with Central Neo-Aramaic.

4. ALIGNMENT SPLITS IN NENA BASED ON ARGUMENT-RELATED PROPERTIES

Following the grammatical synopsis of Eastern Neo-Aramaic in the preceding chapter, this chapter unravels the entanglement of North Eastern Neo-Aramaic diversity manifested in alignment splits, concentrating on the perfective past constructions based on *q̣til-* and argument-related properties¹⁰⁶.

First of all, it is a common assumption that NENA started out with an ergative alignment pattern akin to the Jewish NENA dialects that is developing toward an accusative pattern under the influence of DOM and its relation to the prominence scale (Mengozi 2005; Khan 2007a; Barotto 2015:237) in accordance with a traditional view that in an alignment split conditioned by the referential properties, lower ranking arguments pattern ergatively but higher ranking ones do not (Silverstein 1976; Dixon 1995:83-94; see §2.4.3). Ergativity is said to be gradually deminished in the increasingly more restricted use of the E-set as dependent person forms in the inverted ‘perfective’ construction. There seems to be a cross-dialectal bias against the coherent grouping of the S and P for first and second person arguments through the E-set, hypothetically:

- (1) ***nšiq-áx-loxun* ‘You_{PL} kissed **us**’
 ***qim-ax* ‘**We** rose’

When and to what extent the E-set is used in the ‘perfective’ is, therefore, one of the main themes in this chapter. In most dialects it is restricted to third person in the P function. The person role split is generally attributed to ergativity (e.g. Mengozzi 2005; Doron and Khan 2012) but Section 4.2. will argue that it is regardless of alignment pattern and rather a constructional split based on person.

It will often prove difficult to group the S, A and P in a complete and/or coherent fashion. In our approach, ergative alignment hinges on the grouping of the S with the P. If there is no such grouping on any level, it makes no sense to speak of ergativity. Alignment typology studies similarities and/or differences, focusing on the relationship between S and P or A. Yet, this relationship is not always symmetric (either synchronically or diachronically). Constraints and

¹⁰⁶ One should note that the perfective past can also be expressed via compound verbal forms based on the resultative participle (*q̣tila*) in NENA dialects. These forms are discussed in the next chapter.

conditions may not be equally relevant to all grammatical functions. Dialects may completely dispose of the E-set or confine it to either the S or the P function. The S, A and P may each lead a life of their own in NENA and this may result in considerable asymmetry. variation and changes, therefore, are strictly based on the interaction of intransitive constructions and transitive constructions through agreement, case-marking, person forms, and system-internal factors which are largely independent of how we classify the entire arrangement as a whole. Restrictions or a decline in the use of a particular set of person indexes, therefore, may but does not necessarily tell us something about ergativity, unless a grouping between S and P is manifested. For example, the E-set may be used as a patient index for all persons (*nšiq-ax-loxun* 'You_{PL} kissed us') in an 'accusative dialect', even though there is no corresponding use as subject indexes (***dmix-ax* 'We (have) slept'). And we will note ways in which ergative alignment is manifested other than the E-set in the inverted 'perfective' construction that are contrary to predictions of the prominence hierarchy. Despite the fascinating microvariation in NENA, there is as of yet no witness to a fully coherent ergative type reported in any grammatical description.

Transitive constructions, then, may be treated very differently from intransitives. Within transitive constructions, NENA generally differentiates between basic transitive 'perfective' constructions with an object index and those without. The construction changes on the presence or absence of verbal person marking denoting the P, especially when it is non-third person. NENA dialects also have distinct coding preferences in terms of case-marking and agreement in such constructions. Case-marking interacts with the independent person forms, while agreement is based on cross-indexes (Subsection 4.2). Full nominals may be treated differently from pronominals. Within pronouns, independent person forms are treated differently from dependent ones and, generally, the third person is distinguished from the first and second. These, then, constitute the main variables we will examine:

- S, A and P (T and R only sporadically);
- case-marking vs. agreement;
- 'imperfective' (*qaṭal-*) vs. 'perfective' (*qṭil-*) constructions;
- intransitive vs. transitive clauses;
- presence vs. absence of object indexes;
- full nominal vs. pronominal;
- independent vs. dependent person form;
- third person vs. first/second person.

Subsections 4.1. and 4.2. mainly deal with P-related factors pertaining to distinct (differential) object marking strategies. Subsection 4.3. concentrates on A-related factors. It also discusses a few verb-related factors regarding labile valency alternations to investigate the coding properties of the agent. The verbal semantic motivations of such splits are treated in greater detail in Chapter 5 (§5.1.1). Subsection 4.4. is a treatment of more complex interacting A and P-related factors in analogy with ‘imperfective’ constructions.

4.1. Person Role Restrictions

Given that higher ranking patients are incompatible with the inverted ‘perfective’ construction, a distinct expression of the P is preferred. Analytic, independent expression of object person forms are preferred over the synthetic, more dependent E-set attached to the verbal base across NENA dialects.

4.1.1. *Person Role Constraints in Transitive Constructions*

The transitive perfective past constructions express various person splits in NENA. It is the E-set used to encode the P in the ‘perfective’ (*qṭil-*) that is restricted in most dialects. There is at least a patient-related person scale peculiar to the ‘perfective’ and the restriction on patient-marking appears to follow a hierarchy from 1,2 > 3ms. > 3pl. > 3fs.

Complete person-marking is found only in a few Christian and Jewish dialects in NW Iraq, such as J. Amidya and J. Aradhin, as well as SE Turkey, such as J. Challa and C. Ashitha, and the Christian dialects in and around Urmi in Iranian Azerbaijan¹⁰⁷. It is also documented in the earliest NENA literature, such as Jewish texts from Nerwa (15th-16th c. NW Iraq; Sabar 1976). In the majority of dialects, however, and especially the Trans-Zab Jewish varieties known so far that exhibit ergative alignment, the E-set is confined to the third person in the ‘perfective’. As illustrated below, only the third person is compatible with the inverted ‘perfective’ construction. The A role, by contrast, which is expressed through the L-set, reveals no such restrictions.

¹⁰⁷ Maclean (1895:135-139) also mentions the Christian dialects of Txuma, Upper Ṭiyari, Shamshdin and Ashitha in SE Turkey and Alqosh in NE Iraq.

(1) **Person-restricted patient-marking in J. Betanure** (NW Iraq; Mutzafi 2008a:85-86)

3MS	<i>nšaq-∅-le</i>	'He kissed him '
FS	<i>nšiq-a-le</i>	her '
PL	<i>nšiq-i-le</i>	them '
1PL	<i>**nšiq-ax-le</i>	us '
2FS	<i>**nšiq-at-te</i>	you_{FS} '
	etc.	

Person constraints occur in all dialects irrespective of alignment. It is always found in dialects that group the S and P (e.g. *dmix-ax* 'We slept' : ***nšiq-ax-lu* 'They kissed **us**') and possibly found in dialects that group the S with the A. Yet, when person indexing is unrestricted, the S always aligns with the A (e.g. *dmāx-lan* 'We slept' : *nšiq-ax-lu* 'They kissed **us**') (cf. Golbenberg 1992:125). Thus, interestingly, what seems to be the case is that the grouping of S and A in the 'perfective' is fruitful ground for unrestricted use of patient indexes.

It is the specific combination of the 'perfective' base *qtil*- and dependent person forms that is disfavored or categorically disallowed¹⁰⁸. There is no such constraint in the same sequence of morphemes attached to the 'imperfective' where these roles follow the opposite order (e.g. *°našq-at-te* 'You_{FS} kiss him'). The restriction minimally targets the first and second person in their P function. Thus, if the P references the highest ranking person, it cannot be marked by means of the E-series and must be marked differently (for instance, independently of the verb) yielding a split in the marking of persons¹⁰⁹.

Since there is no relative hierarchy for first and second person in Neo-Aramaic, it suffices to differentiate third from non-third person. Thus, for our purposes, non-third person reference is fundamental and strongly disfavored or disallowed in 'person-restricted dialects'. In line with this, we shall refer to 'person-restricted dialects' in which the E-set does not mark all persons in the P function in the 'perfective' like J. Betanure above, such that forms like ***nšiq-ax-lu* 'They kissed us' do not occur. We shall refer to 'person-unrestricted dialects' in which the E-set is available for all persons in the P function like J. Amidya.

¹⁰⁸ For a generativist perspective on this person-role constraint in NENA, see Doron and Khan (2012).

¹⁰⁹ See §2.4.3 and §2.4.4 for a typology of such person-based splits.

Transitive constructions can be categorized in terms of person role associations (Zúñiga 2002; Haspelmath 2007; see §2.4.3). This is schematized in the figure below.

Figure 12. *Monotransitive person role associations*



Source: Haspelmath (2007).

In most dialects, the person of the A is insignificant, and therefore, the relative ranking of persons is unimportant (but see below); only the person reference of the P is relevant. Consequently, the E-suffixes just happen to be only in the ‘canonical’ and clustering third person associations where the P is third person.

The person constraint, however, is not always absolute and I believe this is connected with the relative ranking of persons. Person-restricted dialects may still occasionally use the E-suffixes for non-third person reference. In her description of the NENA (Judi) Christian dialect of Beşpən (SE Turkey), Sinha (2000:142) mentions that, apart from the third person forms, only the first masculine singular is attested. In her text sample, she records the following forms with a 1ms. E-suffix marking the object.

(2) **C. Beşpən** (SE Turkey; Sinha 2000: 182.10, 192.65)

- a. *ala hiw-ən-ne=ž danye*
 God:MS give_{PFV}-1MS-3MS=ADD world
 ‘God gave **me**_M the world (i.e. I was born).’
- b. *qəm-lə mət-ən-nehən b-gawəd tarzyuta*
 rise_{PFV}-S:3PL put_{PFV}-1MS-3PL in-inside.of tailoring
 ‘Then they put **me**_M inside the tailor’s workplace.’
- c. *lá- mšoder-ən-nehən l-nawba pləx-li tama*
 NEG II:send_{PFV}-1MS-3PL to-patrol work_{PFV}-S:1SG there
 ‘They didn’t send **me**_M on patrol. I worked there.’

Similarly, the first plural E-suffix is used sporadically in a lower Tıyari dialect (SE Turkey). Talay (2008a:317-318) does not mention this but it is undoubtedly also an exceptional case in an otherwise person-restricted dialect, for example:

(3) **C. Sarspido** (Lower Tıyari, SE Turkey; Talay 2009:142.29)

- a. *siq-la* *axni* *şqil-ix-la* *mən tama*
 go.upPFV-S:3FS we takePFV-1PL-3FS from there
 'She came (and) took **us** away from there.'
- b. *moθ-ix-la* *l-qaşra* *diyy-a*
 bringPFV-1PL-3FS DAT-castle LK-3FS
 'She brought **us** to her castle.'

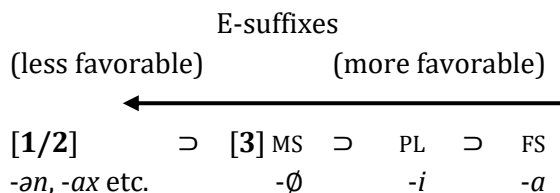
Interestingly, what these sporadic exceptions have in common (and what I believe is not incidental but possibly could be) is the fact that P outranks the A. The Ps are non-third person but the As are third person, i.e. the person role association is crossed. Recently, Khan (2016b:248-249) came to the same conclusion regarding Christian Urmi (NW Iran), given that most of his informants more readily accept *xəzy-ən-ne* 'He saw me' rather than (**) *xəzy-ən-nux* 'You saw me'. These observations indicate that when the P outranks the A in person, the use of the E-series seems to be more acceptable in person-restricted dialects, whereas when both the A and P are non-third person, the construction is avoided altogether. If this is correct, the reference of the A is significant and the relative ranking may have contributed to the conventionalization of the person split in person-restricted dialects. That is, the relative ranking seems to be only relevant for the most potential agents. The first/second persons are most topicworthy and less likely to be selected as Ps (e.g. Silverstein 1976; Haspelmath 2007; cf. Khan 2016b:249) and, being human, attract agent-like properties more so than the third persons. A conflict would result especially when both arguments are at the highest person reference and, thus, maximally topicworthy. On the other hand, the prominence scale does not fully account for this. Role disambiguation *per se* is not crucial, for instance, since, when both A and P are third person and thus potentially ambiguous, the E-set is available (e.g. C. Urmi *xəzy-a-lə* 'He saw her'). Moreover, one would expect that when the P outranks the A in topicworthiness, verbal morphology other than the canonical ranking (A > P) is favored, but this is not the case, the harmonic and disharmonic person role associations have the same coding strategies (e.g. C. Urmi *xəzy-a-li* 'I saw her').

In some dialects, such as Jewish Arbel (NE Iraq; Khan 1999:119), the zero expression of a third masculine singular pronominal object is impossible and

perfective past forms like *grəš-le* can only mean ‘He pulled’, not ***grəš-∅-le* ‘He pulled **him**’. This limits the E-series and its use in patient indexing to the third person feminine singular and plural. Thus, number and gender are involved too. In yet a few other dialects, as we shall see, the E-series is no longer combined with the ‘perfective’ (*qṭil-*). The distinction between 3ms. and non-3ms. is presumably purely morphological. The feminine and plural are not only morphologically marked (*-a*, *-i*) in opposition to the masculine ($\emptyset$) but the zero morpheme of the 3ms. E-series inevitably gives rise to some degree of ambiguity between forms with zero expression of the P and those without any expression of P, e.g. *nšəq(-∅)-li* can mean either ‘I kissed’ or ‘I kissed **him**’.

Moreover, we could tentatively assume a relative hierarchy for person marking tendencies. First of all, if a NENA dialect employs a verbal index from the E-series for non-third person referents it will do so for third person referents but not *vice versa*. That is, a dialect that allows first/second person forms such as *nšiq-ax-le* ‘He kissed **us**’ will also allow third person forms like *nšiq-a-le* ‘He kissed her’ but not the other way around. The same applies to the third masculine singular zero expression. If a NENA dialects marks the 3ms. via a zero morpheme (*nšiq-∅-le* ‘He kissed **him**’), it will also mark the plural and feminine singular (*nšiq-a-le*, *nšiq-i-le*). We can schematize this as follows:

(4) Person hierarchy for E-suffixes to express the P



The E-series is less likely to express the P function from left to right. If the E-series is no longer available up to the 3fs. (*-a*), it will not be found for anything to its left either.

This obviously also interacts with the availability of the E-set as object indexes to other grammatical functions that align with the patient such as the indexing of T and R in ditransitive constructions. In Jewish Amidya, for instance, the E-set is fully available for all such roles in all persons:

(5) **J. Amidya** (person-unrestricted, NW Iraq; Hoberman 1989:107-109)

- a. *šmiʔ-a-lu* (P)
 hear_{PFV}-P:3FS-A:3PL
 'They heard **her**.'
- c. *hiw-i-le* *ʔal-i* (T)
 give_{PFV}-T:3PL-A:3MS DAT-1SG
 'He gave **them** to me.'
- b. *hiw-a-li* *pare* (R)
 give_{PFV}-R:3FS-A:1SG money:PL
 'I gave **her** money.'

If the scale illustrated above is correct, it is likely that it will also apply to restrictions on the marking of the T or R. In another Jewish variety, for instance, the dialect of Urmi, the E-suffixes can mark the R only for 3fs. reference forms like *hiw-a-le* 'He gave **to her**'. They cannot do so for any reference to left of the scale including the 3pl. ***hiw-i-le* 'He gave **to them**' or 3ms. ***hiw-Ø-le* 'He gave **to him**' (Khan 2008b:145). In the same dialect, however, the E-suffixes are available not only for 3fs. but also for 3ms. and 3pl. reference to mark the P and T, e.g. *xəzy-i-le* 'He saw **them**', *xze-Ø-le* 'He saw **him**'. The turning point, then, seems to be the 3fs. and the role that is more restricted is the recipient.

Diachronically, the person split could indicate that first/second person enclitics have not fully grammaticalized to the P function in all NENA dialects, especially when their s-marking function is still present (which would explain why only accusative varieties can be person-unrestricted). The person split may also be connected with the source construction. Historically, the *šmīʔ l-*construction could be used impersonally, especially with dative experiencers, as illustrated below. The feminine ending *-ā* is impersonal, so that *šmīʔ-ā l-an* literally represents 'Us it_F is heard'. Besides *šmīʔ* 'hear', the verbs *ħzy* 'see' and *sbr* 'think, reason' are verbs that frequently occur in dative experiencer resultative constructions and are by far the most in common in Jewish Babylonian (cf. Schlesinger 1928:45, § 30; Sokoloff 2002:327b; Bar-Asher 2014:78; cf. Coghill 2016).

(6) **Syriac** (3rd c. Drijvers 1964:50.4)

- w=aykannā* *da=šmīʔ-ā* *l-ān* *kull-hēn* *ħlīš-ān*
 and=according SUBR=heard-3FS DAT-1PL all-3PL:F strong-FPL
ʔu=qrabṭānāy-ān
 and-warlike-FPL
 'And **as we are informed** (lit. **us, it_F is heard**), they_F (Amazonian women) are all strong and warlike.'

To sum up, only third person patients are compatible with the inverted ‘perfective’ construction in most dialects. There are some indications that the relative ranking of A and P is relevant. Some person-restricted dialects seem to allow for object coding, when the object outranks the agent on the person hierarchy. The use of the E-set to mark the object may even be more restricted to 3pl. and 3fs. or 3fs. only, and may even be completely obsolete, especially in the expression of the R.

4.1.2. *Dependent and Independent Person Forms*

As discussed in §3.3.1, dialects generally have an independent set of prepositional person forms that are generally based on differential object markers. Such independent prepositional person forms may serve as an alternative to dependent person forms, especially the person-restricted E-set¹¹⁰.

I will show that there is a TAM-sensitive split in object person forms due to the person split peculiar to the ‘perfective’. Although the independent object person forms are optional in other clauses, they are necessary in ‘perfective’ constructions to refer to at least the first and second person in person-restricted dialects. This suggests that the wide array of object sets does not have the same status for each inflectional system. The independent object person forms are mainly acceptable in ‘perfective’ constructions and favored as an alternative to the object-marking E-series in some person-restricted dialects. These person forms are often based on the preposition that marks recipients. Since they are generally also used to mark themes, the recipient tends to be marked by a different preposition in order to avoid morphological identity in case-marking. There is no need for this in other clauses, such as the ‘imperfective’, because the L-set expresses pronominal themes and the preposition marking the recipient may freely vary.

4.1.2.1. *Independent Prepositional Series*

Dialects that use independent prepositional pronominal objects as an alternative to the E-set of person forms exhibit the following tendency. When a verbal form does not combine with a set of dependent person forms, an independent

¹¹⁰ This is sometimes referred to as the “intraconjugational” expression of the object against the “extraconjugational” expression (e.g. Pennacchietti 1994; Mengozzi 2002b).

set, preferably the same as the marker of recipients, is selected instead. This results in notable differences between the ‘perfective’ and other constructions.

Generally, unmarked independent personal pronouns may be used to express the P similarly to the S and A. They generally require agreement. (7a) below, for instance, is a rare example where the unmarked P does not trigger agreement, while in (7b) it does.

- (7) **C. Barwar** (NW Iraq, person-restricted; Khan 2008a:881, transcription slightly modified)

	[A]	[P]	[V-A]
a.	<i>ʔana</i>	<i>ʔati</i>	<i>bay-ən</i>
	I	you:SG	want _{IPFV-1MS}
	‘I want you.’		
	[V-A-P]		[P]
b.	<i>qa-t-nabl-an-ne</i>		<i>ʔap-ʔaw</i>
	to-SUBR-take _{IPFV-1MS-3MS}		ADD-he
	‘so that I take also <u>him</u> .’		

This agreement with independent unmarked pronouns generally also holds for the P-marking E-set in dialects that use them, e.g. *axni šqil-ix-la* ‘She took **us**’ (C. Sarspido, Lower Tiyari, SE Turkey; Talay 2009:142.29).

Nevertheless, in other dialects, prepositions may also serve as the basis for independent object pronouns distinct from the unmarked pendants above, such as the preposition (*ʔəl*)- in J. Arbel:

- (8) **J. Arbel** (NW Iraq, person-restricted; Khan 1999:334)

	[P]	[V-A]
a.	<i>ʔəll-əx=iš</i>	<i>gazy-a</i>
	DAT-2MS=ADD	kill _{IPFV-3FS}
	‘that she sees you also.’	
	[P]	[V-A-P]
b.	<i>ʔəll-án</i>	<i>qaṭl-i-lan</i>
	DAT-1PL	kill _{IPFV-3PL-1PL}
	‘that they kill (also) us .’	

These prepositional person forms are used particularly in combination with the ‘perfective’, as illustrated below. They are often the same as the dative such as (9) (*ʔəl*)- or (10) *ka(d)*- ‘to, for’ but unusual prepositions like (11) (*ʔəb*)- ‘in, at; with; against’ also occur. These can be extended with *d*- or the independent pos-

sessive pronominal base *did-* or *diyy-* depending on the dialect, e.g. *ka-diy-+ux* in (10b).

(9) **J. Koy Sanjaq** (NE Iraq, person-restricted; Mutzafi 2004a:189.15)

- a. *šeraké dwiq-le l-šaqraké*
 lion:MS:DEF seizePFV-A:3MS DAT-mouse:MS:DEF
 ‘The lion caught hold of **the mouse**.’
- b. *ššir-e=ll-ew*¹¹¹
 squeezePFV-A:3MS=DAT-3MS
 ‘He squeezed **him**.’

(10) **C. Sardarid** (NW Iran, person-restricted; Younansardaroud 2001:205, 232.4, transcription modified)

- a. *+avva purək-lə ka yala mən mota*
 DEM:MS II:rescuePFV-A:3MS DAT boy:MS from death:MS
 ‘He saved **the boy** from death.’
- b. *may xzi-lə ka-diy-+ux ju pəlxana?*
 who seePFV-A:3MS DAT-LK-2MS in work
 ‘Who saw **you**_{MS} during work?’

(11) **C. Gaznax** (SE Turkey, person-unrestricted; Gutman 2015:315, glossing adapted)

- nšiq-li biy-ux*
 kissPFV-A:1SG against-2MS
 ‘I kissed **you**_{MS}.’

NENA dialects generally do not distinguish in form between independent third person and non-third person forms, they are all based on the same preposition. Thus, both person types may be prepositional. At the same time, nouns are generally case-marked in the same way as pronouns, as given in examples (9) and (10). This does not apply *vice versa*. If pronominal Ps can be case-marked, this need not apply to full nominal Ps, e.g. *biy-ux* in Christian Gaznax in (11) above. Case-marking patterns in NENA, therefore, seem to be consistent with the prominence hierarchy. Case-marking of the patient becomes more likely to the left-edge of the prominence hierarchy starting with non-third person forms:

¹¹¹ Out of *ššir-le ʔəll-ew*, see next subsection on cliticization.

(12) 1,2 PRO > 3 PRO > fNP

In addition, one should note that the analytic expression of pronominal objects as such allows the pronouns to occupy positions independently of verbal inflection like nouns. Pre-verbal position, then, factors in the selection of independent object pronouns, since they provide a pronominal equivalent of full nominals in P-V word order in, for instance, the Jewish dialects of Iranian Azerbaijan like Urmi that have this preference. Example (13) illustrates how Jewish Urmi regularly aligns independent pronominal object with full nominal objects. Placement after the verb is equally possible for both of these.

(13) **J. Urmi** (NW Iran; Khan 2008b:448, 300)

- a. *əl-+yalé* *dah-i-wa* 'They would beat **the children**.'
- b. *əl-án* *dah-i-wa* 'They would beat **us**.'

Dialects may, therefore, exhibit co-variation in the expression of person indexes. The independent expression may be favored in 'perfective' constructions as an alternative to inverted 'perfective' form. Across the dialectal landscape, NENA varieties make use of independent pronouns besides the E-set. This can apply to person-unrestricted dialects like Jewish Barzani. Compare the following paradigms:

(14) **Two sets of object person forms in J. Barzani** (NW Iraq, Mutzafi 2002a:65)

	PREP SERIES		E-SERIES		
3FS	<i>xzé-lexun</i> ʔəl-u		<i>xzé-∅-lexun</i>	'You _{PL}	them '
MPL	<i>xze-le</i> ʔəl-a		<i>xəzy-a-le</i>	'He	her '
MS	<i>xze-la</i> ʔəl-e		<i>xze-∅-la</i>	'She	him '
1PL	<i>xze-lu</i> ʔəl-an		<i>xz-ax-lu</i>	'They	us '
2FS	<i>xze-li</i> ʔəl-ax	etc.	<i>xəzy-at-i</i>	'I _{FS}	you_{FS} ' etc.

The independent object person forms are not available in every dialect in the same respect but the contexts where they are most acceptable appear to be the perfective past. Jewish Amidya, for example, is a person-unrestricted dialect but does not generally favor independent expression of object person forms. Hoberman (1989:101-102) notes for this dialect that a set of independent person forms based on *ʔəl-* may be used to mark the P in highly formal language found in religious literature, and that only by enforced elicitation, the L-suffix in the 'imper-

fective’ may be omitted in favor of this set, e.g. *p-šaql-i ʔaleni* ‘They will take us’ instead of *p-šaql-i-lan* ‘They will take us’. Independent expression of object person forms remains more acceptable in the ‘perfective’ instead of the E-set, e.g. *šqil-ax-lu* instead of *šqal-lu ʔaleni* ‘They took us’. Yet, in person-restricted dialects, the independent forms are the only means to express non-third person forms in transitive perfective constructions. One such dialect is Jewish Arbel. Compare the following paradigms:

(15) **Person-restricted patient-marking in in J. Arbel** (NE Iraq, Khan 1999:119, 133)

	PREP SERIES	E-SERIES		
3FS	<i>ǧze-le ʔill-áw</i>	<i>ǧzy-a-le</i>	‘He	her’
PL	<i>ǧzé-lxun ʔill-u</i>	<i>ǧzé-ni-lxun</i>	‘You _{PL}	them’
MS	<i>ǧze-la ʔill-éw</i>		‘She saw	him’
1PL	<i>ǧze-lu ʔill-án</i>		‘They	us’
2FS	<i>ǧze-li ʔill-áx</i>		‘I _M	you_{FS}
	etc.		etc.	

Consequently, although the independent pronominal objects are optional in other clauses, they are necessary in ‘perfective’ constructions to refer to at least the first and second person.

Note that the marking also co-varies for the third person plural and the feminine singular. Both *ǧze-le ʔill-áw* and *ǧzy-a-le* are available for ‘He saw her’. Independent or dependent expression is optional for the third person. Yet, in dialects such as J. Arbel, the 3ms. must be expressed by this special series based on the preposition *ʔill-*, e.g. *ǧzéle ʔillew* ‘He saw him’ but not ***ǧze-Ø-le* ‘id.’ Along the person-conditioned hierarchy, then, the independent (‘PREP-set’ or ‘ʔall-set’) and the dependent set (‘E-series’) intersect at the third masculine singular which is morphologically least marked of the third person. This occurs across NENA dialects. Table 25 at the end of this subsection illustrates the distribution for a sample of a few dialects.

As a final note, historically, the *šmiʔ l-* construction could also be extended with prepositional complements in Aramaic languages of Late Antiquity, as illustrated by the preposition *ʔal-* ‘on’ below. Nevertheless, the independent prepositional objects are presumably separate historical developments in NENA.

(16) **Syriac** (5th c. Cureton 1864 2.11)

$\text{\textit{\text{šmĩŋ-}\text{Ø}}}$ $\text{\textit{l-}\text{ĩ}}$ $\text{\textit{\text{ʔlay-k}}}$ $\text{\textit{d=}}$
 heard-3MS DAT-1SG on-2MS SUBR=
 'I am informed / have heard (lit. Me is heard) **about you**_{MS} that...'

Table 25. *Distribution of independent object pronouns*

3FS/PL	3MS	1,2	DIALECTS' SAMPLE
	E-set	mainly $(\text{\textit{ʔal}})\text{\textit{l-}}$	(SE Turkey) J. Challa (Fassberg 2011); C. Ashitha (Borghero 2006), C. Gaznax (Gutman 2015) (NW Iraq) J. Barzani (Mutzafi 2002a); (NW Iran) C. Urmi (non-literary, Khan 2016)
E-set		mainly $(\text{\textit{ʔal}})\text{\textit{l-}}$	(NW Iraq) C. Barwar (Khan 2008a); (Trans-Zab) J. Arbel (Khan 1999), J. Sulemaniyya and Ḥalabja (Khan 2004a), J. Saqqiz (Israeli 1998), J. Kerend (Hopkins 2002), J. Urmi (Khan 2008a), J. Salamas (Duval 1883)
$\text{\textit{qa- (ka-)}}$			(NW Iran) C. Sardarid (Younan-sardaroud 2001)

4.1.2.2. *Two Independent Person Forms in Ditransitives*

It is worth noting that there is a tendency to differentiate between the recipient and patient in the 'perfective', when a preposition merges these. This tendency sets the 'perfective' apart from other clauses (cf. Hoberman 1989:101-102). A dative preposition such as $(\text{\textit{ʔal}})\text{\textit{l-}}$ 'to, for', for instance, can be employed to mark the recipient when the theme is pronominal or full nominal (see §3.4). This is the L-suffix for the 'imperfective' and the E-suffix for the 'perfective'. Khan (2016b:385) notes for C. Urmi that the person forms based on the dative preposition can mark the R throughout the system but they only mark the P in the 'perfective' constructions and, importantly, they can never mark the T of ditransitive verbs.

This can be contrasted with Christian Ashitha. Consider the following examples in (17) from Christian Ashitha. In (17a-c), the prepositional argument does not express the theme but the recipient regardless of person, NP type or TAM.

(17) C. Ashitha (SE Turkey; Borghero 2006:200-202)

- a. *yawəl-∅* *-lux* *ʔəll-a* (V+T = L-set, R = ʔəll-)
 give_{IPFV-A:3MS} -T:2MS R:OBJ-3FS
 'He gives you_{MS} to her.'
- b. *hiw-at* *-la* *ʔəll-e* (V+T = E-set, R = ʔəll-)
 give_{PFV-T:2FS} -A:3FS R:OBJ-3MS
 'She gave you_{FS} to him.'
- c. *hiw-le* *ʔəll-i* *mexulta* (T = fNP, R = ʔəll-)
 give_{PFV-A:3MS} R:OBJ-1SG food:FS
 'He gave me food.'

Yet, *ʔəll-* is not the only preposition used to indicate recipients. The preposition dedicated to the recipient can vary freely within a single dialect. When one of these prepositions is also dedicated to the patient (and possibly the theme), another preposition lends itself for further differentiation. In Christian Ashitha, for instance, *ʔla* serves as an alternative to *(ʔəll)l-*:

- d. *hiw-a* *-li* *ʔlāl-exu* (V+T = E-set, R = ʔlāl-)
 give_{PFV-T:2FS} -A:3FS R:DAT-2PL
 'I gave it_F to you_{PL}.'

Now, when the *(ʔəll)l-*-based series is combined with a 'perfective' verbal form, they can also mark the theme in C. Ashitha. The recipient is marked differently by another preposition, in this case *ʔla-*:

- e. *hiw-le* *ʔəll-a* *ʔlāl-ux* (T = ʔəll-, R = ʔlāl-)
 give_{PFV-A:3SG} T:OBJ-3FS R:DAT-2MS
 'He gave it_F to you_{MS}.'

What we do not seem to observe in Christian Ashitha are examples like the following where the theme and recipient are marked by the same preposition:

- f. ***hiw-le* *ʔəll-a* *ʔəll-ux* (T = ʔəll-, R = ʔəll-)
 give_{PFV-A:3SG} T:OBJ-3FS R:DAT-2MS
 'He gave it_F you_{MS}.'

Such a double object construction with two identical independent object person forms is avoided. This differentiation in the coding of the R seems to be a feature peculiar to the 'perfective'.

This indicates a constructional split based on the R that is sensitive to the inflectional base of the verb (or the TAM). Moreover, the use of *ʔall*-based person forms to mark the theme does not appear to be possible in the ‘imperfective’ (as in J. Amidya and C. Urmi mentioned above), e.g. ***yawəl-Ø əll-a tʔal-ux* ‘He gives **her to you_{MS}**’. The object-marking L-suffixes are still favored in the ‘imperfective’. The following diverging patterns unfold for ditransitive constructions based on the ‘imperfective’ against those based on the ‘perfective’:

	A	T	R
<i>yawəl-</i>	-E	-L	<i>ʔall-/tʔa(l)-</i>
<i>hiw-</i>	-L	<i>ʔall-</i>	<i>tʔa(l)-</i>

The *(ʔal)l*-based set, therefore, although they are ultimately derived from from a dative preposition, seem to pattern as an object-marking set in the ‘perfective’ in accordance with the L-suffixes in the ‘imperfective’. The morphological parallelism between *(ʔal)l-* and the L-suffixes presumably strengthens their morphosyntactic correlation.

4.1.3. *Cliticization and Secondary L₂-series*

The previous subsections explained that when the synthetic expression of pronominal objects is unavailable, an analytic strategy tends to be employed instead through the use of an independent set. There is also a tendency contrary to this, namely that what is put after the verb ends up increasingly more dependent on it in line with the rest of the suffixal verbal inflection. The independent pronouns based on the dative preposition *(ʔal)l-* are attached to the verb, much like the L-suffixes, and may become morphologically non-distinct. Where this merger is incomplete, we shall speak in terms of an L₂-set.

First of all, P-V word order is only possible with the fully independent person form, for example:

(18) **J. Kerend** (W Iran; Hopkins 2002:287)

P	V
<i>ʔəlóx</i>	<i>grəš-li</i> ‘I pulled you_{MS} ’.

J. Kerend, however, is a Trans-Zab Jewish dialect where the unmarked word order is generally P-V. When they are placed after the verb, however, there is a very strong tendency to cliticize with syncope of the initial *ʔ-* after consonants and *ʔə-*

after vowels. This coalescence yields another set of person form which we may call an *ʔall*-series (cf. Khan 1999) besides the familiar L-suffixes. C. Ashitha *xze-lé=ll-ən*, for example, is a coalescence of *xzele ʔall-ən* ‘He saw **us**’ (Borghero 2006:193) and J. Arbel *ǵzé-lan=ill-eu* ‘We saw **him**’ alternates with *ǵze-lan ʔill-éu* (Khan 1999:118-119, 133-134). In ditransitive constructions, the *ʔall*-series may even attach to an inverted ‘perfective’ construction where the E-set always denotes the T and the *ʔall*-series the R, e.g. J. Urmi *hiw-a-le=lli* ‘He gave her **to me**’ (Khan 2008b:123).

Ultimately, the simplification of /l/ neutralizes the distinction with L-suffixes. The following sets in Jewish Saqqiz (W Iran; cf. Khan 2009:158 for J. Sanandaj) including the familiar primary L-suffixes, the secondary prepositional *ʔall*-series and the possessive suffixes show how the sets of person forms may be neutralized:

(19) **Secondary L-set of dependent person forms in J. Saqqiz** (person-restricted, W Iran; Israeli 1998:30, 113)

	L ₁ -SET	L ₂ -SET	POSS
1SG	-li	-l-i	-i
2MS	-lox	-l-ox	-ox
FS	-lax	-l-ax	-ax
3MS	-le	-l-ev	-ev
FS	-la	-l-av	-av
PL	-lu	-l-u	-u

The secondary L₂-set in (19) represent the forms that correspond with the *ʔall*-series in closely related dialects of Jewish Saqqiz. The distinction in (19) between the L₁-set and the L₂-set is minimal in Jewish Saqqiz and clearly correlates with the ‘possessive’ suffixes. The /i/ of the preposition *il-* is absent in the forms that have undergone coalescence: ‘You kissed him’ is not ***nšiq-lan-ilev* but *nšiq-lan-lev* (Israeli 1998:115). Hence, all indexes but the third person singular indexes are identical with the familiar L-suffixes. Only the third person singular forms constitute another series of person markers¹¹². Thus, it is *nšiq-le-lav* for *nšiq-le ilav* ‘He kissed her’ and not ***nšiq-le-la*, as found in ‘neutral’ dialects. This makes it perhaps somewhat arbitrary to differentiate between a double L-set construction such as J. Urmi *xzé-le-li* ‘He saw me’ and a verbal form that com-

¹¹² Cf. Talay (2011:56-57) for a similar phenomenon in the Khabur dialects.

bines with an L₂-set such as J. Saqqiz *xze-le-li* ‘He saw me’. Indeed, such J. Saqqiz forms are effectively double L-set constructions. We need not differentiate between the two L-sets apart from the third person.

This notwithstanding, the morphosyntactic treatment of the L₁-set and *ʔall*-series is not always the same. Dialects may avoid expressing an object person form independently. They may also avoid treating the L-suffix as dependent instances of the same prepositional argument. In fact, the independent object person forms alternate with the E-series rather than the L₁-suffixes in the perfective past in Jewish Amidy where independent object person forms are avoided (cf. Hoberman 1989:101-103).

In addition, we noticed in the previous subsection for dialects such as Christian Ashitha that the *ʔall*-series is generally not doubled. Two objects with the same preposition are disfavored. Yet, the *ʔall*-series freely expresses an R subsequent to an L-suffix denoting the T in the ‘imperfective’, e.g. *yawəl-Ø-lux ʔall-a* ‘He gives **you**_{MS} to her’. This indicates that the L₁-suffix is not treated like the *ʔall*-series. Similarly, a double L₁-set construction is clearly distinct, when independent person forms are based on other prepositions such as *qa-* or *t(l)a-* in other dialects that still make use of the preposition (*ʔal*)*l-* for other purposes. The same speaker may employ the double L-set construction¹¹³ or an independent person form, for example:

(20) **J. Amidya** (person-unrestricted, NW Iraq; Greenblatt 2011: 336.8, 336.5)

- a. *mār-ri-lux*
say_{PFV}-1SG-2MS
‘I told **you**_{MS}.’
- b. *mār-ri ʔaθ-ux*
say_{PFV}-1SG to-2MS
‘I told **you**_{MS}.’

In sum, NENA dialects may use another set of object indexes based on the preposition (*ʔal*)*l-*. They strongly differ in productive usage of this *ʔall*-series and the degree of assimilation with the L-suffixes. The *ʔall*-series may seem very similar and may even end up phonologically identical through increasing adhesion to a preceding verbal form, yielding a secondary L₂-set or merging with the primary

¹¹³ This function appears to be part of an archaic layer in NENA that was available alongside marking the R by means of the E-series. The earliest texts witness (16th-17th c.) forms such as *mīr-ʔt-ti* ‘I told **you**_{MS} (R) besides *mār-rī-lu* ‘I told **them** (R)’ (Sabar 1976:xxxix, 53.10:16).

L₁-suffixes. The merger, however, is not complete. Third person patients tend to be marked differently. The primary L₁-suffixes are generally preferred in the ‘imperfective’.

4.2. Differential Object Marking Trans-Zab Jewish Dialects

The person role constraint closely interacts with differential object marking strategies and indirectly with person-based alignment preferences. Alignment splits due to the marking of patients in transitive constructions are sensitive to the prominence scale affecting the agreement and case-marking system (cf. Mengozzi 2005; Coghill 2014). Yet, the person role constraint is not inherent to ergative alignment but to the combination of an E-set marking the patient and the ‘perfective’ inflectional base (*qtil-*).

As we will see, the indexing through the E-suffixes and other strategies display splits and alternations. The distributional tendencies are not always clear. All else being equal, what applies to dependent third person forms will also apply to their use in the cross-indexing of full NPs (cf. Mengozzi 2005:252). How the person role split affects alignment patterns is entirely up to the dialect(s) in question. Three distinct types of Jewish dialects from the Trans-Zab dialect bundle will serve as an illustration. I will demonstrate that the transitive constructions are sensitive to the prominence scale regardless of morphological alignment in all these dialects. The argument ranking only indirectly affects alignment preferences. Hence, it is not a particular type of alignment *per se* that is favored in a specific context but a particular type of transitive construction or differential object marking strategy. What mainly differs across the dialects is the coding of the s which is not affected by the prominence scale. Moreover, in terms of trigger potential, the agreement with the P patterns accusatively throughout in all dialects, since it is conditioned by prominence, while this does not apply to the S and A.

Thus, the fact that we find ergative alignment in the South Eastern Trans-Zab Jewish varieties such as Sulemaniyya and Kerend only depends on the coding of the s. While it may be unusual from a functional typological perspective, it is not at odds with the transitive constructions typical for (Neo-)Aramaic. The prominence scale only indirectly influences alignment preferences. Both ergative agreement and accusative case-marking of the P are coordinated by differential object marking. The first and second person forms are dependent in the A and S role and necessarily independent in the P role because of the person role constraint. Thus, there is co-argument sensitivity (Witzlack-Marakevich et al.

2016): when the P is third person and dependent, only then, the person marking is ergative. Other person forms may be either dependent or independent regardless of other arguments.

4.2.1. Accusative Agreement and Prepositional Marking

Beginning with accusative marking, we observe that prepositional object person forms (or the *ʔall*-series) and the E-series may co-vary in ‘accusative dialects’. The first, however, is necessary for non-third person forms and the latter optional for third person arguments in person-restricted dialects. This serves to show that we are first and foremost concerned with a constructional split and not an alignment split.

The two strategies of object-marking ultimately constitute distinct coding devices, namely differential case-marking and differential indexing. The first is more analytic and noun-centered, the other more synthetic and verb-centered. Yet, this sharp distinction breaks down where the *ʔall*-series may be attached to the verb (despite the fact that they are prepositional object person forms).

It will be shown that accusative case-marking seems to penetrate the person marking system in ‘accusative dialects’ through the grammaticalization of the *ʔall*-series and marginalization of the E-set to cross-indexes of full nominal P arguments. The morphological markedness is shifting more definitively to the P in relation to the S and A. This spreads from the first and second person forms to other pronouns through the third masculine singular. The latter is even adopted in the verbal agreement system in Jewish Arbel where it regularly attaches to the immediately preceding verbal form.

4.2.1.1. Coherently Accusative Marking

Nothing changes with respect to alignment typology in fully ‘accusative dialects’ where these two coding strategies either compete or overlap. There are simply two ways in which accusative alignment is manifested and possibly both of these simultaneously. The E-series is fully integrated in the verbal form, and another *ʔall*-series less or not integrated derived from prepositional pronominal objects mark the P. The first is necessary for non-third person forms and the latter optional for third person arguments in person-restricted dialects. This is represented by the following examples in (21) from Jewish Arbel.

(21) **J. Arbel** (NE Iraq; Khan 1999)

- a. (intransitive)
dmix-le 'He slept.'
 sleep_{PFV-S:3MS}
- b. (transitive, dependent E-set)
ǧazy-a-le 'He saw **her**.'
 see_{PFV-P:3FS-A:3MS}
- c. (transitive, independent *ʔall*-set)
ǧze-le ʔall-í 'He saw **me**.'
 see_{PFV-A:3MS} P:OBJ-1SG

Both the case-marking and agreement pattern accusatively in dialects like Jewish Arbel. The P argument receives special treatment in either indexing through the E-set or case-marking by (*ʔal*)-, as shown in the following comparison:

(22) **J. Arbel** (NE Iraq; based on Khan 1999:288-290)

- [S] [V-S]
 a. *kābrá dmix-le*
 man:MS sleep_{PFV-S:3MS}
 'The man slept.'
- [DOM→ P] [V-A]
 b. *ʔal-ıyyá kābrá dwıq-le* (differential case-marking of P)
 DOM-DEM:MS man:MS seize_{PFV-A:3MS}
 'He seized this man.'
- [P] [V-P-A]
 c. *ʔıyyá golká dwıq-ā-le* (differential indexing of P)
 DEM:MS heifer:MS seize_{PFV-P:3FS-A:3MS}
 'He seized (lit. it_F) that heifer.'

What motivates speakers to choose either of these constructions is not altogether clear. Khan (1999:289-291) notes for Jewish Arbel that there is no clear-cut distribution between them. Case-marking is used less frequently and seems to be more sensitive to contextual salience and animacy than indexing. Indexing prefers P-V word order and is occasionally also used for indefinite NPs, while definite and usually inanimate NPs may lack differential marking altogether. In addition, sporadically, accusative case-marking and indexing of full NPs are combined:

- c. [A] [DOM→P] ← [V-P-A]
 kābrá *lā-ʔanne* *beʔé* *zabn-i-le*
 man:MS DOM-DEM:PL egg:PL sell_{PFV-P:3PL-A:3MS}
 ‘The man sold (lit. them) **those eggs**.’

The *ʔall*-series are generally attached to an immediately verbal form, e.g. *ǰzélox=alleu* ‘You_{MS} saw him’ for *ǰzelox ʔalléu*. The third person $\emptyset$ -morpheme from the E-set is not used in Jewish Arbel but the corresponding person form from the *ʔall*-series must be used instead, i.e. *ʔalléu* ~ *=lleu* ‘him’. Jewish Arbel has adopted this in the agreement system. It is the only means to index a masculine singular NP, for example:

- (23) **J. Arbel** (NE Iraq; Khan 1999: 498, Y:83)

[V-A-P] → [P]
xip-la=ll-eu *bron-í*
 wash_{PFV-A:3FS=OBJ-3MS} son-my
 ‘She washed (lit. him) **my son**.’

The E-set is preferred for feminine singular and plural nominals, so that we obtain the following cross-referencing system in the ‘perfective’:

<i>baxta</i>	<i>ǰazy-ā-lox</i>	‘You _{MS} saw (lit. her) the woman’
<i>nāše</i>	<i>ǰz-éni-lox</i>	‘You _{MS} saw (lit. them) the people’
<i>kābra</i>	<i>ǰze-lox=alleu</i>	‘You _{MS} saw (lit. him) the man’

The difference between indexing and case-marking could also hinge on the relative iconicity-related morphological markedness of the patient (Mengozi 2005; Barotto 2015). One may argue that in terms of morphological markedness, the inverted ‘perfective’ construction is less marked in terms of coding material. Generally speaking, patient indexes are morphologically slightly weaker than the subject and agent indexes in accusative dialects (see further below). The E-suffixes denoting the P involve zero ($\emptyset$) realization and are often person-restricted, while this does not apply to the L-suffixes denoting the S and A. The case-marking is, however, typically accusative, so that the P itself unquestionably receives overt coding while the S and A are zero-marked. Case-marking shifts the morphological markedness more definitively to the P over the A and the S.

Another difference is that the patient indexes from the *ʔall*-series immediately follow subject and agent coding when they attach to the verb which is in

accordance with the ‘imperfective’. Although all person referents are marked accusatively, the heavier coding is reserved for the first and second person, and in Jewish Arbel, also the third masculine singular. This suggests that Jewish Arbel is in the process of levelling the object coding from the E-set to the *?all*-set and the prepositional marking system is penetrating the agreement system through the grammaticalization of a new set of dependent person forms out of independent ones.

4.2.1.2. *Extended Ergative or Marked Nominative?*

Relative markedness plays an important role in Dixon’s (1979, 1994) approach to alignment (see §2.2.6). In his view, the P is ideally most marked in accusative systems, while the A is in ergative systems. Dixon (1979) introduced the term ‘extended ergative’ to describe a case system where the case-marker of the A may be extended to all instances of the S against the P that is functionally and morphologically the more default form (cf. Payne 1980). In line with Dixon (1979), Doron and Khan (2012:231-233) analyze the agreement pattern as given for such dialects as Jewish Arbel as ‘extended ergative’, since the P (i.e. the E-set) is less marked while the S is more marked like the A (L-set). Similarly, Menzozzi (2002b:45, fn. 144) refers to this pattern as theoretically “post-ergative”, although he admits “it cannot be regarded as ergative in itself”. Thus, the notion of ‘extended ergative’ is mainly diachronically motivated and presumes these dialects were once coherently ergative but have extended the L-suffixes that mark the agent to all intransitive verbs, aligning the A with the S.

Whether this diachronic view is tenable is yet to be assessed, but, synchronically, anything related to ‘nominative-accusative’ is preferable over ‘extended ergative’ or ‘post-ergative’. The obvious reason for this is that the defining characteristic of an ergative system, namely that the S and P are somehow treated alike is not observed (cf. Hoberman 1989:91, fn. 2). Adopting the term ‘ergative’, then, is rather misleading, at least from a synchronic perspective. Later, Dixon (1994:64), indeed, prefers the less confusing label ‘marked nominative’ instead of ‘extended ergative’, because the A receives no special treatment typical for an ergative system. Accordingly, Barotto (2015) suggests we could also consider the type of inflection in these dialects a kind of ‘marked nominative’.

Nevertheless, ‘marked nominative’ only marginally applies. Dixon (1994:67-68) points out he first and foremost applies these markedness principles to nominal case-marking and is reluctant to extend this to agreement through person forms. For, if the P has less or no trigger potential for agreement

(as opposed to the S and A), this is considered a typical form of accusative agreement (see §2.2.6). The reverse would pertain to a ‘marked nominative’ (or ‘extended ergative’) agreement system where the S and A are not overtly indexed but only the P is. It is clear that these NENA dialects are typically accusative in this respect¹¹⁴, since it is the agreement with the P that is more restricted and context-dependent against the agreement with the A and S which is also morphosyntactically grouped through the same set. These dialects, then, cannot be considered ‘marked nominative’ in this sense. There is one respect they could be. At the same time, Dixon (1994:68) considers the paradigm that has most zero realizations an unmarked instance of the expression of the S. Cross-linguistically, it is third person (singular) agreement marking that tends to be zero and especially in the S and A role (Siewierska 2004:24, 2005; see §2.4.4). This would be the 3ms. form of the E-set in NENA which is found in the expression of the P in these dialects, although not all of them such as Jewish Arbel where *ʔalléu* ‘him’ is used instead. This would render the agreement system for these dialects a type of ‘marked nominative’, since only the P is possibly zero¹¹⁵. Thus, the agreement is typically accusative in terms of trigger potential but only arguably ‘marked nominative’ in terms of phonological form. What is clear, however, is that ergative alignment is not found in the dialects concerned (at least synchronically).

4.2.2. **Neutral (overt) Agreement and Accusative Prepositional Marking**

In a comparable way to the preceding, the Jewish dialects of Iranian Azerbaijan like Urmi manifest neutral indexing for all persons (A=S=P), accusative indexing for the third person only (A=S≠P), while nominal case-marking patterns consistently accusatively. The accusative case-marking alternates with or combines with accusative or neutral agreement. Apart from person, the prominence scale hardly affects alignment preferences. These dialects are also characterized by an active-stative fluid type of subject-marking (see §5.1.2).

¹¹⁴ See also Coghill (2016:61-62) who arrives at a similar point of view.

¹¹⁵ This would only apply to unmarked clauses, since agreement with the A may also be $\emptyset$ in unspecified agent constructions (e.g. *xil-a* ‘It_F was eaten’), see Section 4.3. Since I consider this a pragmatically marked transitive construction, it is not part of the discussion here.

4.2.2.1. Extensive Neutralization

The P can be indexed by either L-suffixes or E-suffixes. This results in two distinct alignment patterns. The first is essentially accusative by isolating the P. This is confined to third person referents only, as exemplified below.

(24) **Third person only** (J. Urmi NW Iran; Khan 2008b)

- a. (transitive perfective)
xəzy-a-le 'He saw **her**.'
see_{PFV}-P:3FS-A:3MS
- b. (intransitive perfective)
+dməx-la '**She** went to sleep.'
sleep_{PFV}-S:3FS

Nevertheless, the S also aligns with the P for the third person in a perfect construction, as illustrated in (24c) and (24d) below. Since the transitive counterpart of the perfect is based on different verbal morphology, we will leave it out of discussion here¹¹⁶. For, otherwise, these dialects are neutral, grouping all functions.

- c. (transitive perfective)
xəzy-a-le 'He saw **her**.'
see_{PFV}-P:3FS-A:3MS
- d. (resultative aligns with the P)
+dmix-a '**She** has gone to sleep.'
sleep_{PFV}-S:3FS

The third person inflection, then, varies between neutral (e.g. *xzé-le-la* 'He saw her') or accusative (e.g. *xəzy-a-le* 'He saw her'), both in the expression of third person pronouns as well as differential indexing (see further below). Non-third person indexes, however, necessarily manifest a neutral agreement pattern which is represented below.

(25) **First and second person** (J. Urmi NW Iran; Khan 2008b)

- a. (intransitive) *+dməx-lax* 'You_{FS} went to sleep.'
sleep_{PFV}-S:2FS

¹¹⁶ See §5.1 and §5.3.3 for the relationship between the *s_P* form and other perfects in Jewish Urmi.

- b. (transitive) *xzé-li-lax* 'I saw you_{FS}.'
 see_{PFV-A:1SG-P:2FS}

First and second person references are, thus, excluded from the accusative verbal coding where neutral alignment is preferred. The first and second person are similarly not patient-like in the fluid-subject marking, e.g. **dmix-ex* 'We have fallen asleep', since ***+qtil-ex* 'killed **us**' is not available in transitive coding. The subject marking remains distinct (**dmix-ex* vs. **dmāx-lan*) but there is no alignment with the P contrary to the third person (**dmix-a* : *xāzy-a-le*). Another difference between the accusative and neutral coding is the affix order. In the accusative pattern, the P is suffixed immediately to the inflectional base and precedes the A. In the neutral pattern, the A always comes before the P¹¹⁷.

In addition, the two transitive constructions are not entirely functionally equivalent according to Khan's (2008b:259) informants for Jewish Urmi. The doubled L-suffixes typically express remote past events, while the person-constrained forms with an E-suffix typically recent past events:

- xzé-le-la* 'He saw her' (back then)
xāzy-a-le (just now)¹¹⁸

It should be noted that the preterit is essentially the same as the 'accusative dialects'. In terms of agreement potential, the S and A are clearly grouped against the P. The Jewish dialects of Iranian Azerbaijan employ differential case-marking or differential indexing or a combination thereof. The word order is typically verb-final. The overt case-marking is accusative, for example:

(26) **J. Urmi** (NW Iran; transcription modified)

- a. *+šultaná* *+dmāx-le*
 king:MS sleep_{PFV-S:3MS}
 'The king slept.'
 [A] [DOM→P] [V-A]
- b. *+šultaná* *ʔəl-bron-éw* *nšəq-le* (diff. case-marking)
 king:MS DOM-son:MS-his kiss_{PFV-A:3MS}
 'The king kissed **his son**.' (Garbell 1965:170)

¹¹⁷ How this aligns with the L-suffix marking the S immediately following the verbal base is a moot point, see §3.2.3.

¹¹⁸ This may be connected with the fluid active-stative alignment in these dialects, see §5.1.2.

The agreement may be either accusative or neutral. Compare:

- [P] ← [V+P]
- c. **tar-é** *pəlx-i-le* (accusative differential indexing)
 door-PL open_{PFV-P:3PL-A:3MS}
 ‘He opened (lit. **them**) **the doors**.’ (Garbell 1965:150)
- d. **tará** *pləx-le-le* (neutral differential indexing)
 door:MS open_{PFV-A:3MS-P:3MS}
 ‘He opened (lit. **it_M**) **the door**.’ (Garbell 1965:140)

The accusative case-marking is frequently combined with either of these agreement patterns (Khan 2008b:298-301). Compare the following examples:

- e. **ʔəl-d-o** **baxt-éw** *šiwq-a-le* (accusative throughout)
 DOM-LK-DEM:MS woman-his leave_{PFV-P:3FS-A:3MS}
 ‘He left (lit. **her**) **his wife**.’ (Garbell 1965:157)
- f. **+šultaná** **ʔəl-bron-éw** *nšəq-le-le* (agreement is neutral)
 king:MS DOM-son:MS-his kiss_{PFV-A:3MS-P:3MS}
 ‘The king kissed (lit. **him**) **his son**.’ (Garbell 1965:178)

Independent object person forms seem to follow the same pattern as full NPs. There is free alternation between dependent and independent person forms in Jewish Urmi. The suffixal L-series are given in (27c) and (27d) below and the independent *ʔall*-series in pre-verbal position are given in (27a) and (27b) below. This applies to both the ‘imperfective’ and ‘perfective’. Independent pronominal objects can also be indexed like full nominal objects. This is the regular construction of demonstrative pronouns with human referents (Khan 2008b:299) such as *o* in (27c) below. Interestingly, independent non-third person forms are regularly expressed without additional indexing (Khan 2008b:301), as illustrated in (27d).

(27) **J. Urmi** (NW Iran; Khan 2008b:426.137, 428.148, cf. 329)

P = ʔall-		P = L-set	
a.	ʔall-án <i>dah-i-wa</i> DOM-1PL beat _{IPFV-A:3PL-PST} ‘They would beat us .’	c.	<i>dah-í-wa-lan</i> beat _{IPFV-A:3PL-PST-P:1PL}
b.	ʔall-í <i>əmbəl-lu</i> DOM-1SG take _{PFV-A:3PL} ‘They took me .’	d.	<i>əmbəl-lu-li</i> take _{PFV-A:3PL-P:1SG}

- c. **əl-d-ó** *loka* +*plát-le-le*
 DOM-LK-DEM:SG there release_{PFV-A:3MS-P:3MS}
 ‘He had **him** released from there.’ (Khan 2008b:298)
- d. ****əll-án** *loka* +*plát-le-lan*
 **OBJ-1PL there release_{PFV-A:3MS-P:1PL}
 ‘He had **us** released from there.’

Speakers do not seem to have strong preferences for a particular strategy. Khan (2008b:297-300) notes that there are no clear distribution patterns apart from the following tendencies. The combination of both differential case-marking and indexing is regularly conditioned by definite human referents as well as the presence of demonstratives, while case-marking on its own is favored for non-third person forms. The fact that independent object person forms of the first and second person do not trigger agreement while independent pronouns such as *o* ‘that one’ regularly do so seems unexpected, since they are (by definition) definite, human and deictic and more salient than other arguments. Cross-linguistically, object person forms tend to be coded independently (Siewierska 2004:46-47) and independent person forms are generally confined to human referents, especially in the R role (ibid. 60-61). This also seems to hold for NENA but, interestingly, not for the first/second persons.

4.2.2.2. *Neutral Marking in Ditransitives*

The secondary L-suffixes that denote the P are possibly ultimately based on their use to mark the R. As described in §3.2.4, the double L-set construction found for Jewish Urmi is also attested elsewhere in ‘accusative dialects’ like Jewish Amidya (NW Iraq). In Jewish Amidya, the alternation between a doubled L-suffix and the E-suffixes is confined to the R, compare *mir-ət-ti* besides *már-ri-lux* ‘I told **you_{MS}**’ (Greenblatt 2011: 336.8, 336.5). A form like *nšəq-li-lux* ‘I kissed **you_{MS}**’ is not possible. Cross-linguistically, coding associated with recipients in ditransitive constructions may become the target construction for differential marking of the patient (e.g. Bossong 1985, 1991, see §2.4.2) and it is well-known that non-third person forms are more likely to fulfil the recipient role. In Jewish Urmi, then, the grouping of S and A with the R is already there like Jewish Amidya but the P also aligns with the R and necessarily for non-third person forms. The result is a rather striking system where all these functions are marked through the same set. The objects P and R both follow the A:

(28) **Grouping of R and P alongside A and S** (J. Urmi NW Iran; Khan 2008b)

- a. (intransitive)
+dməx-li 'I went to sleep.'
 sleep_{PFV-S:1SG}
- b. (monotransitive)
xzé-li-lax 'I saw you_{FS}.'
 see_{PFV-A:1SG-P:2FS}
- c. (ditransitive)
həw-li-lax 'I gave to you_{FS}.'
 give_{PFV-A:1SG-R:2FS}

Moreover, it should be pointed out that the dative preposition (*ə*)/- regularly expresses recipients and patients like the L-suffixes, e.g. *hwəl-le-le* ~ *hwəl-le alləw* 'He gave to him' (Khan 2008b:144). The case-marking of recipients is not sensitive to prominence in Jewish Urmi. The preposition *ə*/- may alternate with another preposition *ba*- (not be confounded with *b*- 'in, with') dedicated to recipients in Jewish Urmi, e.g. *hwəl-le baəw* 'They gave to him' (Khan *ibid.*). Recipient nominals are generally placed after the verb and themes generally before the verb. As in NENA in general (see §3.4.3), case-marking of the R is preferred over case-marking of the T, while agreement with the T overrules agreement with the R. (28d) offers an example of such a pattern in the perfective past. The preposition *ə*/- marks the R, the person form *-a* indexes the T.

- d. [T] ← [V+T] [ə→R]
o kaxtya hwəl-a-le əl-xalunt=ət mərza Mahmud
 DEM:SG letter:fs give_{PFV-3FS-3MS} DAT-sister=LK PRN PRN
 'He gave **the letter to the sister of Mirza Mahmud.**' (Garbell 1965:229, transcription modified)

When both the T and R are independent person forms, the T is based on the preposition *ə*/- like the P but the R is marked by the preposition *ba*- instead, for example:

- e. [ə→T] [ba→R]
ba-ma əll-áx hwəl-lu ba-í
 DAT-what OBJ-2FS give_{PFV-3PL} to-1SG
 'How come they gave **you_{FS} to me?**' (Garbell 1965:238, transcription modified)

This is consistent with a general tendency in NENA to avoid the identical case-marking of the T and R. It also indicates that prominent full NPs are treated differently from pronouns. While prominent full NPs tend to align the R role with the P in terms of case-marking through the preposition *əl-*, independent pronouns tend to align the T role with the P through the same preposition. The *all*-set of person forms, then, groups T and P indirectly, while such grouping is avoided for prominent full NPs. There is one exception known to me that demonstrates it is possible to combine even two identically case-marked objects in Jewish Urmi, as given in (28f) below. This is an exceptional example where the nominal theme is case-marked besides the nominal recipient through the same preposition (*əl-*). As expected for NENA, the additional indexing favors the T over the R. Neutral ditransitive case-marking (T=P=R), therefore, also occurs in this dialect, even alongside indirective indexing (T=P≠R).

- f. $[\text{əl} \rightarrow \text{T}]$ $\longleftarrow$ $[\text{V} + \text{T}]$ $[\text{əl} \rightarrow \text{R}]$
 əl-d-áy ***+kaló*** ***məspy-a-lu*** ***əl-+hatán***
 DAT-LK-DEM:FS bride:FS hand.over_{PFV}-3FS-3PL DAT-groom:MS
 ‘They handed **the bride over to the groom.**’ (Garbell 1965:155, transcription modified)

To summarize, identical case-marking of both the T and R is avoided in ditransitive clauses but is occasionally found for full NPs. Full nominal themes are generally zero-marked, while the recipient is marked by *əl-*. Independent pronominal themes, on the other hand, are generally marked by *əl-*, while the recipient is marked by the preposition *ba-*. The differential indexing favors the T over the R irrespective of whether this is expressed through the L-set or E-set.

4.2.3. *Ergative Agreement and Accusative Prepositional Marking*

The case-marking and agreement system diverge more rigorously in the alignment typology of the South Eastern Trans-Zab Jewish varieties. The nominal case-marking is accusative (A=S≠P), whereas agreement is ergative (A≠S=P). At the same time, first and second person forms pattern in a tripartite fashion (A≠S≠P). We will observe that what constrains the E-suffixes as patient-markers also constrains ergative agreement. At the same time, the prepositional marking overlaps with verbal person marking. The system found in these NENA dialects is typologically rather unusual.

4.2.3.1. Ergative Agreement

Firstly, the ergative alignment in these dialects is only realized, when the P is indexed by the E-series in the ‘perfective’ like most intransitive verbs. Example (29), for instance, repeats this. A is marked by the L-series, while P and S are marked alike by the E-series:

(29) **J. Kerend** (W Iran; Hopkins 1989a:428; 2002)

	INTRANSITIVE		TRANSITIVE
a.	<i>pləṭ-Ø-li</i> move.out _{PFV-3MS-1SG} ‘I took him out.’	c.	<i>pəṭ-a-li</i> move.out _{PFV-3FS-1SG} ‘I took her out.’
b.	<i>pliṭ-Ø</i> move.out _{PFV-3MS} ‘ He went out.’	d.	<i>pliṭ-a</i> move.out _{PFV-3FS} ‘ She went out.’

Secondly, ergative alignment is restricted to the third person. A and S are contrastive for all persons, including non-third person forms, e.g.

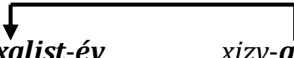
e.	<i>pliṭ-na</i> move.out _{PFV-1MS} ‘ I_M went out.’	f.	<i>pəṭ-li</i> move.out _{PFV-1SG} ‘ I took out.’

By contrast, no such realization is available for the P, e.g.

- g. ***pəṭ-**na**-le*
move.out_{PFV-1MS-3SG}
‘He took **me_M** out.’

Apart from this person restriction, the E-series fulfills all the functions that are also associated with the L-suffixes in the ‘imperfective’. This includes the indexing of prominent nouns. (30) below illustrates how the E-set cross-references a prominent NP *xalistá* ‘sister’ in either the S or P role. The L-suffixes indexes the A referent such as *ahmád* in (30a).

(30) **J. Saqqiz** (W Iran; Israeli 1998:103)

- a. *aḥmád* ***xalist-év*** *xízy-**a**-le*
PRN sister-his see_{PFV-P:3FS-A:3MS}
‘Ahmad saw **his** sister.’
- 

- b. *lima* *xalist-í* *miṭy-a* *bel-óx?*
 when sister-my arrive_{PFV-S:3FS} at.house-POSS:2MS
 'When did **my sister** arrive at your_{MS} house?'

The trigger potential of agreement is accusative (A=S≠P) in both inflectional systems. The P differs from the S and A only in trigger potential. S and A arguments are always indexed while the P is indexed only when it is definite (Khan 2007a:154). The indexing of full nominal Ps is more restricted and context-dependent than the indexing of the S. This limits the manifestation of the ergative pattern even further but to a similar degree as the accusative pattern in the 'imperfective'. The differential indexing is only ergative in phonological form in the 'perfective'. The following examples from Jewish Sulemaniyya compare both inflectional systems that demonstrate the overall similar special treatment of the P:

(31) **J. Sulemaniyya** (NE Iraq; illustration based on Khan 2004a, 2007a:154)

PERFECTIVE (PRETERIT)		IMPERFECTIVE (PRESENT)	
a.	<i>baxt-i</i> <i>nəšq-a-le</i> 'He kissed my wife.'	e.	<i>baxt-i</i> <i>nəšq-Ø-la</i> (def. P, a : la) 'He kisses my wife.'
b.	<i>baxta</i> <i>nəšq-le (Ø)</i> 'He kissed a woman.'	f.	<i>baxta</i> <i>nəšq-Ø (Ø)</i> (indef. P, Ø : Ø) 'He kisses a woman.'
c.	<i>baxtaké</i> <i>qim-a</i> 'The woman rose.'	g.	<i>baxtaké</i> <i>qem-a</i> (def. S, a : a) 'The woman rises.'
d.	<i>baxta</i> <i>qim-a</i> 'A woman rose.'	h.	<i>baxta</i> <i>qem-a</i> (indef. S a : a) 'A woman rises.'

The indexing of the S and A is not dependent on the relative prominence of the nominal referent in both systems. The indexing of the P in turn is dependent on the prominence scale (definiteness). And across both systems, the coding of the S is the same¹¹⁹. What is peculiar to the 'perfective' against the 'imperfective' is fundamentally the different marking of the A against the S, reserving the more marked set of argument indexes (L-series) for the A. Of course, the morphologi-

¹¹⁹ The South Eastern Trans-Zab Jewish varieties, however, also exhibit split subject-marking where the S may also align with the A depending on semantic and/or morphological factors, see §5.1.1.

cal alignment of the S with the P is also peculiar to the ‘perfective’ but its manifestation is more restricted than the coding of the A. There is, thus, a degree of diffusion of agreement properties across the grammatical functions for the ‘perfective’. The S and P align morphologically but not in terms of trigger potential, while the S and A align in terms of trigger potential but not morphologically. Moreover, it is higher ranking full nominals that are marked ergatively, while NPs of lower ranking in prominence such as indefiniteness proceed on a tripartite basis, since the expression of the P is zero but the S and A are distinct.

Ergative alignment, then, is evidently a rather marginal phenomenon in these dialects. The differential indexing of definite NPs and the expression of third person pronouns, as illustrated by the arrow in the following schema. One should note that the accusative person marking in the ‘imperative’ reaches to the utmost left edge.

(32) **NP-conditioned ergative indexing in the ‘perfective’**

1/2 PRO > 3 PRO > fNP: definite > indefinite



ERGATIVE INDEXING

The left edge of the scale in (32) is associated with the topicworthy participants that trigger differential marking in the P function. The first and second person are precluded from an alignment with the S (*qim-na* : ***nšaq-na-li*).

4.2.3.2. *Accusative Case-Marking and Tripartite Person Marking*

When we consider the case-marking system, a different tendency is observed. The Trans-Zab Jewish ‘ergative dialects’ use the dative preposition (*ʔəl*)- ‘to, for’ and its allomorphs to mark the patient NP differentially in an accusative fashion such as *bratǎké* ‘the girl’ in (33a) and *lixle* ‘each other’ in (33b).

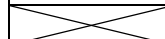
(33) **Differential case-marking**

	[A]	[DOM→P]	[V+A]	
a.	<i>bronǎké</i>	<i>həl- bratǎké</i>	<i>la-xe-wa-le</i>	<i>ba-ʕamr-éf</i>
	boy:DEF	DOM girl:DEF	NEG-seePFV-PST-A:3MS	in-lifetime-his
- ‘The boy had never seen **the girl** in his life.’ (J. Sanandaj, W Iran; Khan 2009:323)

- b. *il* *lixle* *nšiq-lu*
 DOM RECP kiss_{SPFV-A:3MS}
 ‘They kissed **each other**.’ (J. Saqqiz, W Iran; Israeli 1998:45)

Moreover, non-third person forms can only occur in their independent prepositional form, e.g. J. Sulemaniyya *nšaq-la ʔall-i* ‘She kissed **me**’. When we consider pronouns only, the *ʔall*-series express both third and non-third person referents like J. Sulemaniyya *ʔall-i* ‘me’ and *ʔall-éw* ‘him’ but the E-suffixes are confined to the latter. The independent object person forms, however, do not have the same status as the E-set. They are not used to differentially index nouns¹²⁰. The system that unfolds is represented in Table 26 below. Non-third person forms have to be expressed independently in the P role. The dependent forms are confined to the S and A role.

Table 26. *First and second person forms in relation to case-marking and agreement (in the ‘perfective’).*

CASE-MARKING		GLOSS	AGREEMENT	GLOSS
A	<i>brataké</i>	‘the woman’	<i>-la</i>	3fs.
S	<i>brataké</i>		<i>-a</i>	
P	<i>ʔal-brataké</i>		<i>-a</i>	
INDEPENDENT			DEPENDENT	
A	<i>ana</i>	‘I, me’	<i>-li</i>	1ms.
S	<i>ana</i>		<i>-na</i>	
P	<i>ʔalli</i>			

Strictly speaking, the independent person forms would seem essentially accusative like case-marking of full nominals. When we consider non-third person forms in the ‘perfective’ only, however, a tripartite subsystem unfolds. As there is no dependent person form available for the P, an independent one is selected instead. Yet, combined with other person indexes, it gives rise to a tripartite alignment type for all non-third person forms in contradistinction to the ergative indexing system confined to the third person forms. In our approach, this is strictly speaking not an accusative pattern (*pace* Barotto 2015:240, 243), since

¹²⁰ This may be possible in some other dialects such as Jewish Arbel (NE Iraq), see previous Subsection 4.2.1.

the S and A are still differentiated. This is illustrated below for first person masculine singular S and A and second person feminine singular P.

(34) **Tripartite alignment** (J. Sulemaniya NW Iraq; Khan 2004a)

- a. (intransitive)
kwiš-na 'I_M descended.'
 descend_{PFV-S:1MS}
- b. (transitive)
qəṭal-li *ʔall-áx* 'I killed you_{FS}.'
 kill_{PFV-A:1SG} OBJ-2FS

Nevertheless, although the split is strictly conditioned by the absolute properties of the argument in terms of person or nominal type, it has the effect that distinct combinations are possible in actual transitive clauses. When the P and A are both full NPs, the construction is evidently accusative, and when both are third person pronouns, it is evidently ergative. The cutoff point is between dependent person forms and independent nominals both belonging to the third person, while the first and second person seem to have a mixed subsystem of their own. Essentially, however, only the A and P are affected, while the S is not. When the P is non-third person but the A is third person, the transitive construction is identical to (34b) above:

- c. [A: 3] [P: 2]
qəṭal-la *ʔall-áx* 'She killed you_{FS}.'
 kill_{PFV-A:3FS} OBJ-2FS

But when the A is non-third person but the P is third person, the transitive construction is consistent with ergative indexing:

- d. [P: 3 – A: 2]
qəṭl-a-lax 'You_{FS} killed her.'
 kill_{PFV-P:3FS-A:2FS}

Both patterns may also occur when both arguments are third person.

4.2.3.3. Combining the Two DOM-Strategies

Differential case-marking and indexing of full nominals can also be combined. Thus, remarkably, it is possible though highly exceptional that differential object

marking involves both ergative indexing and accusative case-marking of the object. Khan (2004a) offers the following example, unique within his entire corpus. Although, strictly speaking, the verb is ditransitive, it proves the possible combination.

(35) **J. Sulemaniyya** (W Iran; Khan 2004a:326)

[DOM→T]	←	[V+T]	
<i>lā-yalé</i>		<i>lābl-i-le</i>	<i>ta-baǧdád</i>
DOM-child:PL		bring _{PFV} -3PL-3MS	DAT-PRN
'He took the children to Baǧdad.'			

It may be that this is only possible in the Sulemaniyya dialect. Khan (2009:319-320) does not mention an example for Sanandaj, for example.

We observe, therefore, three distinct patterns in the interaction of case-marking and agreement, reviewed in Table 27: either ergative agreement or accusative case-marking or both of them. The P aligns with the S ergatively only in terms of agreement.

Table 27. *Ergative agreement and accusative case-marking of the P*

	AGR	CM	
S	E-set		<i>kaldaké mət̪y-a</i> 'The bride arrived.'
P	E-set		<i>ḥatanaké kaldaké nāšq-a-le</i> (most frequent)
		ǰall-	<i>ḥatanaké ǰal-kaldaké nāšq-le</i> (less frequent)
	E-set	ǰall-	<i>ḥatanaké ǰal-kaldaké nāšq-a-le</i> (exceptional)

Note: These sentences are not actually attested but serve as illustrations of the concerning pattern.

Differential case-marking seems to be promoting a non-ergative pattern through the non-third person forms and, because of this, the prepositional marking system competes with or even combines with the person marking system. In accordance with the prominence hierarchy, then, case-marking becomes increasingly more likely for non-third person arguments, which are at the top of the hierarchy, and subsequently third person pronouns and prominent nouns. For the non-third person forms this results in a tripartite pattern, for nouns in an accusative pattern, while third person pronouns are either ergative or tripartite. These observations are summarized in Table 28.

Table 28. *Prominence hierarchy and (non-)ergative alignment*

1,2 PRO	>	3 PRO	>	definite fNP
CASE-MARKING				
TRIPARTITE (PRONOUNS)			ACCUSATIVE (NOUN)	
				INDEXING
				ERGATIVE

This is consistent with Dixon's observation (1994:109) that the accusative alignment has a wider range on the prominence hierarchy than the ergative, if a language manifests such a split.

In other respects, this alignment system is contrary to Dixon's observations. Ergative indexing tends to combine with ergative case-marking but not with the accusative (see §2.5.1). In the traditional view, the dependent person forms are more likely to pattern accusatively than independent person forms, and if they pattern ergatively, the expectation is that independent pronouns and full nominals will also pattern ergatively. Moreover, it is not expected for alignment splits sensitive to the referential hierarchy of NPs to favor ergative indexing for higher ranking full nominals. Rather, the higher ranking nominal is expected to align accusatively. It seems to me that the ergativity in Trans-Zab Jewish dialects constitutes a noteworthy counterexample and goes against this tendency. The lower ranking full nominals follow a tripartite pattern, while the higher ranking ones an ergative pattern. This tripartite-ergative split conditioned by the referentiality of the full nominal, then, is the exact mirror image of the ergative-tripartite split conditioned by the person reference of the pronoun.

In addition, in terms of markedness, the expectation for overt ergative indexing is rather that the P and S are equally overt while the A is typically not overtly indexed (see §2.2.6). NENA ergative indexing is not typical in this respect either. Also, it is confined to the third person feminine and plural in the P role and a zero realization of the P only in the third person masculine singular. Person indexing is thus not confined to the most salient arguments (contrary to functional typological observations, see §2.4.4). It is the non-third person forms that are most salient and these are not marked as such in the P role for NENA.

It is possible that this is connected with another cross-linguistic tendency that we also noted for the dialects in the previous subsections regardless of ergativity. Object person forms tend to be coded independently more readily so than the agent and subject especially human referents (Siewierska 2004:46-47, 60-61).

4.2.3.4. Horizontal Person Marking

Finally, for completeness's sake, I also mention here an instance of horizontal alignment in NENA. As noted in §4.1.3, the attachment of *ʔall*-series may end up as a secondary L₂-set and merge with the L-suffixes, for example in Jewish Saqqiz (Israeli 1998) and Jewish Sanandaj (Khan 2009:158). The independent object person forms based on the dative preposition *il-* immediately attach to the preceding verbal form and are phonologically non-distinct from the agent markers except for the third person singular. Thus, it is *nšiq-lax-li* 'You_{FS} kissed me' where *-li* out of *ili* 'me' is identical with the corresponding L-suffix, but it is *nšiq-lax-lev* for 'You_{FS} kissed him' and not ***nšiq-lax-le* (Israeli 1998:115).

The distinction between the L-suffixes and the *ʔall*-series is limited to the third person in Jewish Saqqiz. The object person forms *-lav* 'her' and *-lev* 'him' comprise an L₂-set corresponding with the *ʔall*-set (i.e. *ilav*, *ilev*) in other dialects and are distinct from the agent person forms *-la* and *-le* belonging to the L-suffixes. One could argue that the merger of the *ʔall*-series and the L-suffixes results in another alignment pattern, namely a horizontal one where P and A are marked alike. First of all, ergative alignment (*dmix-a* 'She slept' : *nšiq-a-le* 'He kissed **her**') is observed for third person referents only (marked by the E-set). A tripartite pattern co-varies with this for the third person singular L₂-set indexes only (*dmix-a* 'She slept' : *nšiq-le-lav* 'He kissed **her**'). In other respects, however, there is practically only one single L-set for first and second person as well as the third plural reference (i.e. *-lu*) that not only expresses the A but also the P. Thus, the A and P are arguably marked by the same set in these constructions:

(36) Horizontal alignment (1,2 and 3pl.) in Jewish Saqqiz

a. (intransitive)

dmix-an 'I_F went to sleep.'

sleep_{PFV-S:1FS}

b. (transitive)

nšiq-li-lax 'I kissed you_{FS}.'

kiss_{PFV-A:1SG-P:2FS}

4.3. Agent Omission and the Case-Marking of the Agent

While differential object marking was shown to be independent of alignment type, voice does seem to correlate with a particular alignment type. NENA dialects usually have passive voice constructions. As noted at several points, the L-suffixes that mark the agent may be lacking in several dialects, irrespective of

alignment type in the dialect. This gives rise to an agentless ‘perfective’ form (cf. Gutman 2008). In relation to the active, the agentless ‘perfective’ is reminiscent of the passive. (37) below offers an illustrative example.

- (37) *xabuše xil-i-le* ‘He ate the apples.’
xabuše xil-i(-Ø) ‘The apples were eaten.’ / ‘X ate the apples.’

In leaving the agent unexpressed, the question arises whether the construction is morphosyntactically still transitive or not (cf. Keenan and Dryer 2007:330) and whether this should be analyzed as ergative or passive. Is the patient-like argument in *xil-i* the S or the P? Passive and ergative can be studied along a continuum (Comrie 1988). In this section, it will be argued that there is a major difference in treating such clauses between Trans-Zab Jewish varieties that display ergative alignment and other NENA dialects¹²¹. The ‘dynamic-stative dialects’ show closer affinity with Trans-Zab Jewish ‘ergative varieties’¹²².

4.3.1. *Passive-Ergative Continuum*

Comrie’s (1988) criteria on the passive-ergative continuum are paraphrased in Table 29 below. The criteria allow for intermediate cases. Which criterion has greater weight, must be weighed on language-internal grounds¹²³. Moreover, they are not sufficient conditions for considering a construction passive or ergative-like but rather constitute a continuum. That is, we do not always have to decide whether a construction is ultimately either passive or ergative; it could just as well be somewhere in between. The criteria are treated briefly below in the reverse order (iii)-(i).

¹²¹ Recently, Khan (2017) reached the same conclusion.

¹²² See Mengozzi (1998) and Göransson (2015) for a comparison of the main labile verbs in NENA, although what Mengozzi calls “passive” represents the inchoative/anticausative counterpart here.

¹²³ From a diachronic point of view, the criteria may be ambiguous, too. For example, if the ergative transitive construction is ultimately passive in origin, there may well have been a point where the markedness opposition (iii) was lost.

Table 29. *Passive vs. ergative*

	Prototypical passive	Prototypical ergative
(i) Subject properties of the patient	The patient has all or at least more behavioral properties of the s than the agent	The patient has no or at least less behavioral properties of the s than the agent
(ii) Integration of the agent in clausal syntax	The agent is indexed by the verb or obligatorily expressed to no, a minimal or at least lesser extent	The agent is indexed by the verb or obligatorily expressed to a maximal or at least greater extent
(iii) Relative markedness	Non-basic voice: less frequent, less productive, more complex, and more restricted.	Basic voice: more frequent, more productive, less complex, and less or not restricted.

Notes: *Based on Comrie (1988).*

Constructs can be characterized in terms of a continuum and considered passive-like or ergative-like. Generally speaking, a voice opposition is a requirement for a passive, as entailed by criterion (iii). Without it, we are examining a different phenomenon. In terms of voice, the ergative functions similarly to the active voice of an accusative type. The first criterion mainly applies to the s-like behavioral properties such as equi-NP deletion of the P in languages like Dyirbal (see §2.2.3.4) which is very passive-like but irrelevant to languages where ergativity is only manifested in coding and not behavior (Keenan and Comrie 1977; Comrie 1988:12-15; Givón 1995:256-267).

It is the second criterion, however, that allows for most ambiguity. To what extent is the agent dispensable in languages? The omission of the A can still yield well-formed sentences where languages otherwise exhibit an ergative pattern (cf. Keenan 1976:313; Comrie 1988:18-19). Samoan, for instance, allows the absence of agent coding for most transitive verbs such as 'hit' in (38) below (Mosel and Hovdhaugen 1992:104). The agent of the corresponding active transitive clause is omitted in (38b) and the resulting construction is similar to the passive in that an impersonal agent may still be implied. The agent, therefore, is more loosely integrated in the clause in being freely omitted and unspecified much like oblique agents in the passive but there is no special verbal morphology indicating a voice shift.

- (38) **Samoa** (Polynesian, Samoa; Mosel and Hovdhaugen 1992:416, 421; glossing adapted)

	[V]		[ERG→A]		[P]			
a.	<i>Sā sasa e le teine</i>	<i>Ø</i>	<i>le</i>	<i>le maile.</i>				(specified agent)
	PST hit	ERG	the girl	ABS	the dog			
	'The girl hit the dog.'							
	[V]		[S/P?]					
b.	<i>Sā sasa Ø le le maile.</i>							(agentless/unspecified agent)
	PST hit	ABS	the dog					
	'The dog was hit.' / 'Someone hit the dog.'							

Naturally, the coding is indistinct from the S in intransitive constructions such as 'fall' in (38c) because of ergative alignment:

	[V]		[S]			
c.	<i>Sā pa'ū</i>	<i>Ø</i>	<i>le teine</i>			(intransitive)
	PST fall	ABS	the girl			
	'The girl fell.' (Mosel and Hovdhaugen 1992:108)					

Alternations of the kind in (39a) and (39b) would be a type of referential reduction of the agent, i.e. unspecified agent deletion, where possibly some impersonalization of the agent is intended.

This is similar to passive constructions that reduce the referentiality of the agent where traces of a transitive predicate may be retained. The unspecified agent is simply omitted or expressed as dummy NP or third person morphology. Complete omission of the agent (or subject) is also possible while retaining some of the transitive coding (Givón 1990:581-583), for example:

- (39) **Ute** (Uto-Aztecán, United States, Colorado; Givón 1990:581, glossing slightly modified)

	[A]		[P]		[V]	
a.	<i>ta'wá-ci</i>	<i>siváqtu-ci</i>	<i>paḡá-puḡa</i>			(active)
	man-SUBJ	goat-OBJ	kill-TENSE			
	'The man killed the goat'					
	[A]		[P]		[V-PASS]	
b.	<i>Ø</i>	<i>siváqtu-ci</i>	<i>paḡá-ta-puḡa</i>			(passive)
		goat-OBJ	kill-PASS-TENSE			
	'Someone killed the goat' / 'The goat was killed (by someone)'					

Ute, a Uto-Aztecan language, allows the agent/subject of any verb to be omitted (Givón 1990:583). This is distinct from the passive prototype in that the P retains object coding and the agent cannot be expressed as oblique.

Givón (1990:581) notes that (third person) plural agreement of the agent can still be retained in the agentless construction. Some residual reference to the agent is maintained, so that (39d) effectively means ‘Some persons killed the goat’.

	[A]	[P]	[V-A]	
c.	<i>ta'wá-ci-u</i>	<i>siváqtu-ci</i>	<i>paâá-qa-âa</i>	(active)
	man-SUBJ-PL	goat-OBJ	kill-PL-TENSE	
	‘The men killed the goat’			
	[A]	[P]	[V-PASS-A]	
d.	∅	<i>siváqtu-ci</i>	<i>paâá-qa-ta-pyga</i>	(passive)
	PL	goat-OBJ	kill-PL-PASS-TENSE	
	‘Some persons killed the goat’/ ‘The goat was killed (by some persons)’			

Valency alternations such as the passive may affect verbal morphology such as compound verbal constructions involving auxiliaries (e.g. *be* + perfect participle) and other coding properties of arguments such as case marking like the *by*-phrase in the English passive. Morphological modification is not always necessary, however. An alternation that does not involve a change in verbal morphology is considered labile. A valency alternation for an ambivalent verb like *open* in English, for example, does not involve a change in morphological marking. Ambitransitive verbs like *open* can have transitive and intransitive uses. Anticausatives may be distinguished from passives through special morphology. Samoan, for example, shows an anticausative alternation for verbs such as ‘break’, as illustrated in (40) below. The anticausative morpheme *ma* is added to the verb to detransitivize the event, shifting the viewpoint to an affectee of a spontaneous process rather than an action performed by an agent (Mosel and Hovdhaugen 1992:738).

(40) **Samoan** (Polynesian, Samoa; Mosel and Hovdhaugen 1992:738, glossing adapted)

			[P]			[A]	
a.	<i>Sā</i>	<i>fā'i</i>	∅	<i>l=o='u</i>	<i>nifo</i>	<i>e</i>	<i>le fōma'i.</i>
	PST	break	ABS	the=POSS=1SG	tooth	ERG	the doctor
	‘The doctor pulled my tooth out.’						

- [S]
- b. 'ole'ā ma=fa'i nifo! (inchoative)
- FUT DTR=break tooth
- 'My teeth are about to break off!'

In some languages where ergative morphosyntax predominates (such as Lezgian, Haspelmath 1993a), however, there is similarly no distinction in verbal morphology between verbs that freely omit the agent and spontaneous events. It is not always easy, then, to differentiate between anticausative and passive either. Haspelmath (1993b) demonstrates that insofar as speakers conceive a change of state as more likely to be spontaneous, the inchoative verb will be patient-oriented and the more likely the causative counterpart is derived. This raises an important issue. Without any overt oblique expression of the agent, it can be extremely difficult to distinguish a detransitivized clause from actual intransitives such as anticausatives. Naturally, anticausatives do not suggest that a speaker is unaware of any causal relationship. A speaker may even ascribe the change of state to some cause by adding a causal phrase, e.g. *The door opened because of the wind* (cf. Croft 1994b: 110). In her analysis of the passive, Siewierska (1984: 256) adds the criterion of a “strongly implied” agent (cf. Comrie 1985:326). We should understand her qualification of “strongly” in terms of relative salience to overt expression. That is, there is a closer association with some agent that is omissible in a passive construction (e.g. *The door was opened (by sth./sb.)*) relative to other similar agentless situations that a language encodes as such (e.g. *The door opened (by itself)*). It is this that gives rise to a structural affinity between the passive verb and a particular oblique expression of the agent. Due to the stronger implication of an agentive cause, intentional and instrumental adverbials, for example, are compatible with a passive but not an anticausative (Givón 2001: 117).

The possible omission of the agent, therefore, is not a decisive criterion to distinguish ergative constructions from passives (Haig 2008:41). Yet, if a language also employs agreement, it is the patient that is marked with s-like agreement in both the passive and ergative (Givón 1990:597-599). When the agent, however, also manifests itself in agreement, we more clearly diverge from the passive prototype and converge more closely with the ergative type. When the full agent NP is unexpressed but still manifested in agreement, this is indistinct from languages where coreferential NPs are not obligatory (also known as pro-drop) such as Spanish *él canta* vs. *canta* ‘He sings’ (Comrie 1988:18). This does not apply to the agent in a passive. Obligatory agreement unifies the s and

A and sets the A apart from other grammatical functions (P, T, R, OBL) where agreement is usually optional and sensitive to definiteness, animacy, and other factors relating to prominence. In the passive prototype, therefore, the coding of the patient is not expected to be sensitive to such factors.

By and large, then, the passive is syntactically intransitive but still semantically transitive in implying some agent, while the anticausative is both semantically and syntactically intransitive. The free omission of the agent is not a decisive criterion to distinguish passives from agents, but the integration of the agent is more evident in its indispensability and unconditional manifestation in verbal agreement.

4.3.2. *Passive Constructions and Oblique Agents in NENA*

Before we discuss the agentless ‘perfective’ form on the basis of the passive-ergative continuum, one should note that is not the only construction that expresses the passive in NENA dialects. Other constructions include:

- (i) Impersonal passive
- (ii) Auxiliary ‘come’ and infinitive
- (iii) Auxiliary ‘become’ and resultative participle
- (iv) Copula ‘be’ and resultative participle

Dialects may employ multiple passive constructions and these may even exist alongside the agentless ‘perfective’. Overt expression of the agent is rare in passive constructions. Since this is also seldom addressed in grammatical studies, only a few tentative remarks can be made, pending further investigation across dialects. If the agent is overt, it tends to be expressed through several prepositions, particularly *(ʔəl)l-* which otherwise also marks the recipient, and *mən* ‘from’.

4.3.2.1. *Impersonal Passive*

Impersonal constructions based on the unspecified third plural are common to NENA as a whole. A third person plural agent index such as *-i* in an ‘imperfective’ form *°qaṭl-i-wa-le* literally means ‘They would kill him’ but can be equivalent to ‘He would be killed’ or ‘One would kill him’. The coding does not change with respect to the active voice but the referentiality of the agent is reduced by using the 3pl. form, while the patient is highly topical. An example is given below from the Christian dialect of Aradhin (NW Iraq). The demonstrative *āwa* refers back to *berzara* ‘seed’ which is semantically plural. The verbal form *šawq-*

ī-le is indistinct from the active but the referential reduction of the agent indicates a type of passivization. The higher topicality of the patient also manifests itself in the differential indexing.

(41) **C. Aradhin** (NW Iraq; Krotkoff 1982:76.27, transcription adapted)

<i>pāyiš-Ø</i>	<i>berzara</i>	<i>dax</i>	<i>+barzare</i>	<i>š-šišme</i>	<i>daqīqa</i>
become _{IPFV-3MS}	seed:MS	like	seed:MS	LK-sesame	tiny:MS
<i>u</i>	<i>šawq-ī-le</i>	<i>āwa</i>	<i>mən</i>	<i>čēri</i>	<i>hul baher</i>
and	store _{IPFV-3PL-3MS}	DEM:MS	from	autumn	till spring

‘The seeds are small like sesame seed, and **they are stored** (lit. they store it_M that one) from fall to spring.’

The cause is generally not overtly expressed. It seems, however, to be possible at least in the following example from Christian Aradhin. The referentiality of the agent is reduced on the verb by using a third plural index (i.e. *-i*). The initiator NP is oblique (i.e. dative)¹²⁴:

(42) **C. Aradhin** (NW Iraq; Krotkoff 1982:76.28)

	[V-A-P]		[OBL]	[OBL]	
<i>lākin</i>	<i>masnd-ī-la</i>		<i>l-qēṣa</i>	<i>l-taq-āne</i>	<i>t-ʔilān-e</i>
but	III:support _{IPFV-3PL-3FS}		DOM-wood:MS	DAT-branch-M:PL	LK-tree-PL
<i>wīš-e</i>					
dry-M:PL					

‘But it_F (i.e. the tomato plant) is supported (lit. they support it_F) **by sticks, by dry branches of trees.**’

If this is correct, this may suggest that the third person plural is grammaticalized to an invariant passivizer in Christian Aradhin and the agent is expressed as oblique (see Gívon 1976:180 for the grammaticalization of such a passive in Kimbundu, a Bantu language).

4.3.2.2. Auxiliary COME and Infinitive

Periphrastic types of passives are also common in NENA dialects, particularly the use of an intransitive auxiliary ‘come’ with a verbal noun¹²⁵. The infinitive of

¹²⁴ It is not clear whether this is confined to third person plural initiators.

¹²⁵ This is a pattern replication from Northern Kurdish (Behdîni). In Kurdish, the infinitive is based on a past stem (like Aramaic *qtil-*) and can have an inherently passive meaning.

gnw ‘steal’, for instance, is *gnāwa* ‘stealing’ and together with the verb ‘come’ it expresses the passive:

(43) **J. Betanure** (NW Iraq; Mutzafi 2004a:69)

θe-lu *(lə-)gnāwa*
 come-S:3PL (to-)steal:INF
 ‘They were stolen.’

Literally, ‘they came (to) stealing’ (cp. English *They came to be stolen*). Cohen (2012:180, fn. 15) mentions a few examples for Jewish Zaxo (NW Iraq) in this construction type (the verb ‘come’ is *ʔsy* in this dialect). The agent is introduced by the prepositional phrase *bət/d ʔiz* ‘by’, literally ‘by hand of’, for example:

(44) **J. Zaxo** (NW Iraq; Cohen 2012:180, fn. 15)

[AUX+S: patient]	[INF]	[OBL: agent]
<i>u=b-ase-Ø</i>	<i>ʔəl maqōze</i>	<i>bəd ʔiz mušulmāne</i>
and-FUT-come _I PFV-3MS	to III:burn:INFV	by Muslims

‘He will be burned **by Muslims**.’

4.3.2.3. Auxiliary BECOME and Resultative Participle

Another construction type involves an intransitive process auxiliary ‘become’ *pyš* or *xdr* (or *ḡdr* depending on the dialect) with a resultative participle. The participle inflects like an adjective and agrees with the subject in gender and number (see further below). The verb is intransitive, for example:

(45) **C. Qaraqosh** (NW Iraq; Khan 2002a:383)

pəsra pəš-lə *xil-a*
 meat:MS become_IPFV-3MS eat:RPP-MS
 ‘The meat was eaten.’

This literally conveys ‘Meat became eaten’ (cp. German *Fleisch wurde gegessen*).

The agent can be expressed as oblique, generally through the prepositions *(ʔəl)l-* ‘to, for’ or *men-* ‘from’ (see also §5.2.3), for example:

(46) **C. Qaraqosh** (NW Iraq; Khan 2002a:383)

[S]	[AUX+S]	[RPP+S]	[OBL]
<i>pəsra</i>	<i>pəš-le</i>	<i>xil-a</i>	<i>l-kalwə</i>
flesh:MS	become _I PFV-S:3MS	eat:RPP-MS	DAT-dogs

‘The meat was (lit. became) eaten **by dogs**.’

- (47)
- C. Aradhin**
- (NW Iraq; Krotkoff 1982:106.118)

<i>bēθ-i</i>	<i>lē-xāšəx-Ø</i>	<i>ʔla t-pāyəs-Ø</i>
house:MS-my	NEG:IND-be.fit-s:3MS	for SUBR-become _{IFV-S:3MS}
<i>dīš-a</i>	<i>mən anne</i>	<i>nāše</i>
tread:RPP-MS	from DEM:PL	people

‘My house is not fit to be (lit. that it becomes) trodden **by people**.’

4.3.2.4. Copula BE and Resultative Participle

Dialects may also express the passive by combining the resultative participle and the ‘copula’ set or its suppletive pendant the verb *hwy* ‘be’. The resultative participle agrees with the subject in gender and number. Like other adjectives, the resultative participle is inflected for number and gender, but the latter only in the singular:

- (48) RESULTATIVE PARTICIPLE
- ¹²⁶

MS	<i>qṭil-a</i> (~ <i>qəṭl-a</i>)	‘killed’
FS	<i>qṭil-ta</i> (~ <i>qṭəl-ta</i>)	
PL	<i>qṭil-e</i> (~ <i>qəṭl-e</i>)	

Generally, the final vowels of the participle /a/ or /e/ and initial vowel of the ‘copula’ /i/ will undergo contraction to /e/. For example, the Jewish Arbel resultative participle of *klw* ‘write’ is *kliwá* ‘written’. If it combines with a copula beginning with /i/, such as *ile* ‘It_M is’, it fuses into *kliw-é=le* ‘It_M is written’ instead of *kliwa=ile*. The third person copula forms that evince an /l/-segment are noteworthy such as 3ms. =*ile* ‘He is’ and 3fs. =*ila* ‘She is’, but should not be confounded with other sets of person forms such as the L-suffixes. The agent is regularly expressed through the same prepositions as above, for example:

- (49)
- C. Baz**
- (Maha xtaya, SE Turkey; Mutzafi 2000:311)

[S]	[RPP-S]	[OBL]
<i>kawdanta</i>	<i>mxé-ta=la</i>	<i>l-mār-aw</i>
she-mule:FS	hit:RPP-S:FS=S:3FS	DAT-master:MS-her

‘The she-mule has been beaten **by its master**.’

- (50)
- J. Arbel**
- (NE Iraq; Khan 1999:285)

¹²⁶ The variable forms in parentheses are mainly found in Trans-Zab Jewish dialects, see §4.3 and §5.2.5.

[S]	[RPP-S]	[OBL]	
<i>gaw-kaxtá</i>	<i>kliw-é=le</i>	<i>min-il=id</i>	<i>malʔaxé</i>
inside-letter:MS	write:RPP-S:MS=S:3MS	from-hand=LK	angel:PL
'(He sees) the content of the letter is written by the hand of angels .'			

4.3.3. *Lablity in South Eastern Trans-Zab Jewish Varieties*

Having reviewed the various passive constructions in NENA, I will argue that the agentless 'perfective' form is not proper to a passive voice or an unspecified agent deletion construction in the 'ergative dialects'. It rather is an intransitive inchoative construction that may be interpreted as passive. Grammatical and morphological reasons will be given for this analysis and a comparison with the active-stative alignment in other NENA dialects.

Agent coding may be lacking for virtually every transitive verb in South Eastern Trans-Zab Jewish varieties, also referred to as 'ergative dialects'. The agentless form generally denotes a spontaneous event which indicate that, *ceteris paribus*, the agent is completely absent as in a patientive intransitive verb (such as *pil-Ø* 'He fell'). A verb like *pqy* 'shoot, burst' in (51) below can lack agent agreement. The agent agreement is present and the L-suffixes mark the agent in (51a). The verb takes no agent index in (51b) and the agent is left unspecified.

(51) **J. Sulemaniyya** (NE Iraq; Khan 2004a:297)

- [P] ← [V-P-A]
- a. *tfangǎké* *pəqy-a-le* (specified agent, causative)
 rifle:FS:DEF shootPFV-P:3FS-A:3MS
 'He fired the rifle.'
- [S] ← [V-Sp]
- b. *tfangǎké* *pəqy-a*
 rifle:FS:DEF shootPFV-3FS
 'The rifle was fired (by sb.).' (agent unspecified, inchoative)
 'The rifle exploded'

Khan observes for Jewish Sanandaj (W Iran), closely related to Jewish Sulemaniyya (NE Iraq), that the agentless counterpart of transitive verbs is generally conditioned by telicity, i.e. "telic actionality with an inherent endpoint constituting a change of state" (Khan 2009:309). Transitive verbs that have a definitive, lasting effect such as 'kill', e.g. *mamí qṭil-Ø* 'My uncle was killed', have an agentless counterpart but transitive verbs without a definitive, lasting effect on the patient-like argument such as 'see' or 'hit' cannot occur in such a construction. The pas-

sive of such verbs has to be expressed differently, for example, by the resultative participle and the copula or *hwy*, e.g. *xiya Ø-hāwe-Ø* ‘He may have been seen’ (Khan 2009:310).

Khan’s observations imply that practically all effective transitive verbs are labile. That is, forms like *qṭil-Ø* ‘He was killed’¹²⁷ and *pəqy-a* ‘It_F exploded’ are essentially inchoative or anticausative (Khan 2009:309), denoting an uncontrolled process arising spontaneously where the origin is less salient to the course of the event. The agent, however, could also be more strongly implied and the meaning is similar to that of an agentless passive: ‘The rifle was fired (by somebody)’. As discussed in §4.3.1, the free omission of the agent is a hallmark of various ‘ergative languages’ (Keenan 1976:313) and, therefore, not a decisive criterion to distinguish ergative from passive (cf. Haig 2008:41). The telicity condition and the spontaneous interpretation indicate that the status of the single argument in the agentless ‘perfective’ form is that of the s and the construction is essentially inchoative and not passive in ‘ergative dialects’.

Overt expression of the agent is not altogether avoided. An additional oblique agent is possible (Khan 2004a:297, 2009:309). The agent is introduced by the source preposition *mən-* ‘of’ in the following example:

(52) **J. Sanandaj** (W Iran; Khan 2009:309)

[S]	[V-S]	[OBL]		
<i>mam-í</i>	<i>qṭil-Ø</i>	<i>mən-laga</i>	<i>sarbazé</i>	(overt agent)
uncle-my	kill _{PFV-3MS}	from-side	soldiers	
‘My uncle was killed by the soldiers.’				

One should note that the same preposition marks the indirect cause (i.e. ‘because of’) and can be added to any intransitive predicate, e.g. *mən-qardá reṭ-Ø* ‘He is shaking because of the cold’ (Khan 2009:585). Thus, the agent complement in (52) is also typical for the indirect cause of anticausatives and, if thus understood, (52) would be more akin to English ‘My uncle got killed because of the soldiers’. Anticausatives do not suggest that a speaker is unaware of any causal origin and may add a causal phrase (cf. Croft 1994b:110) but the cause is otherwise not as strongly implied as in the prototypical passive.

The telicity condition and spontaneous reading indicate that the agentless construction is intransitive and the patient is the s. Agent coding is not simply

¹²⁷ It is not clear whether this could also mean ‘My uncle died’.

deleted in forms like *pəqy-a* 'It_F exploded'. Further support for this can be found in the inflectional morphology. The inflectional base of strong transitive verbs is not the same as that of intransitive verbs. Intransitive and transitive verbs are distinguished by means of a shift in syllable structure where the intransitive base consistently maintains a long front vowel /i/. As illustrated in (53) below, the intransitive usage of strong labile verbs morphologically follows the pattern of strong intransitive verbs. If the agent agreement were simply dropped, we would expect forms like *qətl-a* 'Someone killed her' but we find *qtil-a* instead.

(53) **Transitive and intransitive bases** (J. Sulemaniyya, NE Iraq; Khan 2005)

	TRANSITIVE		INTRANSITIVE	
3MS	<i>q̣təl-Ø-le</i>	‘He killed him’	<i>smix-Ø</i>	‘He waited’
3FS	<i>q̣əṭl-a-le</i>	‘He killed her’	<i>smix-a</i>	‘She waited’
3PL	<i>q̣əṭl-i-le</i>	‘He killed them’	<i>smix-i</i>	‘They waited’
	INTRANSITIVE			
3MS	<i>q̣ṭil-Ø</i>	‘He was killed’		
3FS	<i>q̣ṭil-a</i>	‘She was killed’		
3PL	<i>q̣ṭil-i</i>	‘They were killed’		

This is a further indication that the argument is the s and not the p.

It should be pointed out that, while most transitive verbs are labile, this is not to say that transitive verbs can alternate in valency through different stem formations. Several intransitive verbs such as *tym* 'finish' are transitivized by stem III:

(54) **J. Sulemaniyya** (NE Iraq; Khan 2004a:299)

- a. *tim-Ø* (inchoative, stem I)
 finish_{PFV-S:3MS}
 'It_M finished'
- b. *ktebăké mtim-a-le* (causative, stem III)
 book:FS:DEF finish_{PFV-P:3FS-A:3MS}
 'He finished the book.' (Khan 2004a:299)

Conversely, effective transitive verbs such as *ʔxl* 'eat' and *pqy* 'shoot' may omit the patient, while the coding of the agent remains the same. The patient *tfanga* in (16a-b) for example may be freely omitted and the L-suffix encodes the agent:

(55) **J. Sulemaniyya** (NE Iraq; Khan 2004a:297, 301)

- a. [P] [V-A] (patient specified)
tfanga pqe-le
rifle:FS shoot_{PFV-3MS}
'He shot a gun.'
- b. [V-SA] (patient unspecified)
pqe-le
shoot_{PFV-3MS}
'He shot.'

All else being equal, for each intransitive valence pattern that alternates with a transitive valence pattern of the same stem type, the agent is potentially completely absent and the event is considered to unfold spontaneously. This is consistent with the higher degree of saliency on the part of the patient for inchoatives/anticausatives (cf. Croft 2001:317). Most intransitive verbs will pattern like anticausatives inflected by E-suffixes. We can schematize this as follows:

(56) **Voice constructions**

INTRANSITIVE			TRANSITIVE
anticausative	passive	patient omission	active
E-set ($\supseteq$ S)			L-set ($\supseteq$ A)

Some labile verbs, however, do evince a distinction in the coding of the A and S that are arguably reminiscent of the antipassive voice (see §2.2.1) and this goes against the tendency in (57). Insofar as speakers perceive an agent-like argument to be more salient, the intransitive construction will not be patient-oriented. The verb *ylp* 'learn' can show distinct coding of the agent for the transitive and intransitive valence pattern:

(57) **J. Sulemaniyya** (NE Iraq; Khan 2004a:305)

- a. [P] [V-A] (active)
torá lip-le
Torah learn_{PFV-3MS}
'He learnt Torah.'
- b. [V-Sp] (antipassive)
ga-maktáb lip-Ø
at-school learn_{PFV-3MS}
'He learnt at school.'

Khan (2004a:301) explains that the distinction between (57a) and (57b) is not simply the omission of the patient but also aspectual. The antipassive form of *ylp* ‘learn’ in (57b) refers to a durative activity, while the active refers to a punctual activity. The durative aspect is typical for the antipassive in languages where ergativity predominates (Hopper and Thompson 1980; Cooreman 1994, see §2.3.3).

Antipassives may also correlate with reflexives (Comrie 1978:361-362). Similarly, some intransitive constructions that are understood as reflexive reveal distinct coding from the A in NENA such as *sxy* and *xpy* conveying ‘wash (oneself)’, for example:

(58) **J. Sulemaniyya** (NE Iraq; Khan 2004a:300; 2007a:150)

	[P]	[V-P-A]	
a.	<i>bronǎké</i>	<i>xip-Ø-la</i>	(active)
	child:MS:DEF	wash _{PFV} -3MS-3FS	
	‘She washed the child.’		
	[V-S]		
b.	<i>xip-a</i>		(antipassive)
	wash _{PFV} -3FS		
	‘She washed.’		

The intransitive valence pattern of such verbs like *xip-a* ‘She washed’ is, thus, not simply agentless and does not convey the meaning ‘She was washed (by sb. else)’.

An antipassive may also be extended with an oblique patient. This also holds for NENA. The intransitive alternant of (59a) in (59b) is patientless but takes subject coding distinct from the A. It may take a prepositional complement denoting the patient (*ga-ʔilí* ‘at my hand’). The meaning of the verb is only slightly different but it is clear that *xmatá nqis-a* in (59b) is agent-oriented and does not imply an agent other than ‘the needle’.

(59) **J. Sanandaj** (W Iran; Khan 2009:522)

	[A]	[V-A]	[P]	
a.	<i>hangǎké</i>	<i>nqəs-la</i>	<i>ʔəl-í</i>	(active)
	bee:FS:DEF	prick _{PFV} -3FS	OBJ-1SG	
	‘The bee stung me.’			
	[S]	[V-S]		
b.	<i>xmatá</i>	<i>nqis-a</i>		(patientless antipassive)
	needle:FS:DEF	prick _{PFV} -3FS		
	‘The needle pricked.’			

	[S]	[V-S]	[OBL]	
c.	<i>xmatá</i>	<i>nqis-a</i>	<i>ga-ʔil-í</i>	(antipassive)
	needle:FS:DEF	prick _{PFV} -3FS	at-hand-my	
	‘The needle pricked my hand’			

Khan (2009:304, 543) notes that human subjects require A-like coding of the subject in this construction. If the subject *xmatá* ‘needle’ is changed to a human NP like *baxtáke* ‘woman’, it is coded like the A instead:

	[S]	[V-S]	[OBL]	
d.	<i>baxtáke</i>	<i>nqas-la</i>	<i>ga-ʔilí</i>	
	woman:FS:DEF	prick _{PFV} -3FS	at-hand-my	
	‘The woman pricked my hand’			

Lability and omission of arguments is also known to lead to ambiguity in orientation in languages where ergativity predominates (e.g. Drossard 1998). The intransitive valence pattern of the verb *ylp* is agent-oriented in Jewish Sulemaniyya (see above). In Jewish Sanandaj (W Iran), it is oriented towards an affectee. Khan (2009:304, 534) notes that transitive form of the verb *ylp* ‘learn’, e.g. *ylap-le* ‘He learnt’, expresses a controlled activity (‘He learnt by himself’), while the intransitive form, e.g. *yálip-Ø* ‘He learnt’, expresses an activity where the subject is taught by somebody else (‘He learnt from somebody else’).

4.3.4. Lability in Other Dialects

The patient in the agentless ‘perfective’ form is difficult to categorize in terms of grammatical functions in ‘accusative dialects’. It will be argued that this form is neither a passive prototype nor inchoative in ‘accusative dialects’ but a truncated transitive construction where agent coding is omitted (cf. Keenan and Dryer 2007:330), unlike ‘ergative’ and ‘dynamic-stative dialects’ (see §4.3.4.5). There is evidence that this seemingly intransitive agentless construction can still be transitive. At the same time, it is not unambiguously subsumed under ergative alignment. Nevertheless, forms like *xil-a* ‘It_F was eaten’ may still be morphosyntactically transitive in dialects where accusative person marking predominates and this deviates from the passive prototype. We shall consider the following properties:

- referential properties of the agent;
- differential object marking.

4.3.4.1. *Passive and Anticausative*

When we turn to the ‘accusative dialects’, we note that, apart from the agentless form, voice is straightforward. Naturally, the S and A arguments are always treated alike. Verbs generally alternate in valency through causativization. The transitive verb is modified through a distinct stem formation of the verbal root such as *pl̥t̥* ‘move out’ (stem II against I):

(60) **C. Barwar** (NW Iraq; Khan 2008a)

a.	<i>pl̥t̥-le</i> go.out _{PFV-S:3MS}	‘He went out, away’	(stem I, inchoative)
b.	<i>mpul̥t̥-Ø-le</i> II:take.out _{PFV-P:3MS-A:3MS}	‘He took it _M out.’	(stem II, causative)

A few verbs such as ‘break’ and ‘open’ that are well-known to be labile in languages of the world are so in the ‘accusative dialects’ (Mengozi 1998; cf. Göransson 2015). The coding of the S and A does not diverge for labile verbs such as *pθx* ‘open’. The form is completely ambivalent. Object indexing and sometimes word order can serve a discriminatory function in valency alternations for such labile verbs (cf. Mengozzi 2006). In the intransitive valence pattern in (61a) below, the verb follows the S. In the transitive valence pattern in (61b), the verb precedes the P and the P is differentially marked. The cross-referencing of the P definitively distinguishes between an intransitive or transitive valence pattern (cf. Givón 1976:168). Post-verbal position is favorable for objects in dialects like Jewish Betanure.

(61) **J. Betanure** (NW Iraq; Mutzafi 2008a:256.399, 242.351)

	[S]	[V]	
a.	<i>tarʔa</i> door:MS	<i>pθax-le</i> open _{PFV-S:3MS}	(intransitive, S-V order)
	‘The door opened’		
	[V]	[P]	
b.	<i>pθix-ā-le</i> open _{PFV-P:3FS-A:3MS}	<i>kāwa</i> window:FS	(transitive, V-P order)
	‘He opened (lit. it _F) the window.’		

If no patient index is present and the gender and number of the patient and agent are identical, only the word order discriminates between the transitive and intransitive valence pattern, e.g. *tlix-le bεθa* ‘He destroyed the house’ vs. *bεθa tlix-le* ‘The house collapsed’ (C. Barwar, NW Iraq; Khan 2008a:756).

The agentless construction is non-distinct from the transitive apart from the presence of agent coding. Unlike ‘ergative dialects’, the spontaneous reading is only available for the verb that inflects like the A. This is illustrated by the following examples from Jewish Betanure for the verb *pq?* ‘burst’. Both the specified agent acting on a patient in the transitive valence pattern in (62a) and the subject of the intransitive valence pattern of the spontaneous event in (62b) are expressed through the L-set. When the agent is unspecified, however, the patient in (62c), may also be encoded through the E-set, exactly like the P in (62a).

(62) **J. Betanure** (NW Iraq, person-restricted; Mutzafi 2008a)

- a. *pqi?-a-lu* (causative, specified agent)
burst_{PFV-3FS-3PL}
‘They burst it_F.’
- b. *pqe?-la* (inchoative, spontaneous)
burst_{PFV-3FS}
‘It_F burst.’
- c. *pqi?-a* (impersonal, unspecified agent)
burst_{PFV-3FS}
‘It_F was burst (by sb.).’

As in the ‘ergative dialects’, a cause phrase may also be added to the inchoative/anticausative verb and is introduced by the source preposition *mən-* ‘from’ such as *mən ?ilāha* ‘by/because of God’ in (63) expressing the cause of *lqy* ‘get punished’ (an anticausative counterpart to stem II *lqy* ‘punish’; Mutzafi 2008a:360):

(63) **J. Betanure** (NW Iraq; Mutzafi 2008a:314.571)

[V-S]	[OBL]
<i>lqe-lox</i>	<i>mən ?ilāha</i>
be.punished _{PFV-S:2MS}	from God
‘You _{MS} have been punished by God .’	

The patient of the anticausative is treated as more agent-like than the patient of the agentless construction. At first glance, this may seem rather unexpected. The degree of saliency on the part of the patient could be expected to be higher for an anticausative intransitive type than for a passive, since the agent is not in view even implicitly in a spontaneous event (Croft 2001:317). Unlike ‘ergative dialects’, this is not reflected in the person indexes in ‘accusative dialects’.

Although it involves no special verbal morphology, the agentless construction resembles a passive. Hoberman (1989:111-112) notes for Jewish Amidya that the patient NP, if made explicit, is regularly put before the verb like the S. He points out that, when a topical patient occurs in pre-verbal position, no overt expression of the agent is possible. The referentiality of the patient can also be reduced. An example of its complete impersonal use is given below from an early Jewish scribal idiolect. The 3ms. serves as the unmarked form.

(64) **Early J. Nerwa** (Literary, NW Iraq; Sabar 1976:57 13:10)

<i>Abrāhām</i>	<i>mīr(-Ø)</i>	<i>ʔabb-e</i>
Abraham	say _{PFV} (-3MS)	about-3MS

'It was said about Abraham (lit. Abraham—, it was said concerning him).'

Such morphologically unmodified alternations between transitive and impersonal could constitute an impersonal labile alternation.

4.3.4.2. *Referential Continuity*

NENA dialects generally employ third person plural marking to reduce the referentiality of the agent in the construction of an impersonal passive (e.g. *xil-a-lu* 'Someone ate it_F', literally 'They ate it_F'). The 3pl coding is non-referential, respectively, dummy morphology in such pragmatically agentless contexts. The agentless construction converges with the unspecified third plural agent construction. The third plural L-suffix can also be dropped to reduce not only the referentiality but also the coding of the agent, such that the E-series continues the encoding of the patient but the expression of the agent is zero:

(65) <i>xil-i-lu</i>	'It was eaten.' / 'They ate them.'
<i>xil-i-Ø</i>	'It was eaten.' / 'They ate them.'

The main point, therefore, is that a 'perfective' without agent agreement morphology can entail an implicit reference to a third person (especially plural) agent just like the overt counterpart. It is essentially not distinct from the passive in Ute discussed in §4.3.1.

The omitted agent, however, can have more S-like syntactic properties than the P as in anaphoric deletion. Agentless 'perfective' forms can be analyzed as truncated transitive constructions, even in the case of early Jewish Nerwa (Gutman 2008:74, ex. 22). As Gutman (2008) demonstrates, the construction can entail an implicit reference to a third person (especially plural) agent just like the

overt counterpart. Similarly, Polotsky (1996:17-18) records examples for literary dialects in which lack of agreement with the A is confined to the third person plural¹²⁸ like the following examples where the agent reference is clear from the immediate context:

(66) **C. Ashitha** (Literary, NW Iraq; Polotsky 1996:17, transcription mine)

- a. *θe-lay* *šqil-a(-∅)* *baxta* *b-xurṭūθa* *w=zəl-lay*
 come_{PFV-S:3PL} take_{PFV-3FS(-3PL)} woman:FS by-force and-go_{PFV-S:3PL}
 ‘They came, **took the woman** by force and went.’
- b. *zəl-lay* *ṭfin-∅(-∅)* *sandūqa...*
 go_{PFV-S:3PL} carry_{PFV-3MS(-3PL)} chest:MS
 ‘They went, **lifted the chest...**’

Gutman (2008) records numerous examples for Jewish Zakho (NW Iraq) that also contain the zero expression of third person singular agents, although the plural is evidently more frequent.

Sabar (1976:48 fn. 101) mentions similar examples for early Jewish Nerwa texts and explains that it is rather a stacking of preterit forms in which only one of them takes L-suffixes, much like a serial verb construction. Yet, the null marked agent can also be co-referential with ‘imperfective’ constructions (Polotsky 1996:18). Hoberman (1989:111-112) notes for Jewish Amidya (NW Iraq), for instance, that the lack of agent agreement is restricted to the third plural, and that a third person plural agent is still recoverable from the context for interlocutors, as illustrated in (67) below.

(67) **J. Amidya** (NW Iraq, person-unrestricted; Hoberman 1989:111; glossing adapted)

- min* *ʔid-i* *šlip-a(-∅)* *g-əmr-i* *raḅθe=la*
 from hand-my draw_{PFV-3FS(-:3PL)} IND-say_{IPFV-A:3PL} big:FS=she.is
 ‘(There was also a ring_F on my hand;) **they drew it_F** from my hand, **they said**: It_F’s big.’

A ‘perfective’ stripped of agent agreement morphology, therefore, can entail an implicit reference to a third plural A regardless of the verbal form. It is perhaps somewhat similar to the English gerund, i.e. ‘ $\emptyset_i$ Having drawn it from my hand, they_i say’.

¹²⁸ All of his examples, it should be noted, are also confined to third person patients.

Finally, the overt expression of the agent NPs can be indistinct from the transitive counterpart. An example from Gutman's (2008) discussion is given below. A zero-marked full nominal agent *xūrāse* 'his friends' is present but the verb *fhm* 'understand' expresses only agreement with the patient:

(68) **J. Zaxo** (NW Iraq; Gutman 2008:74)

[A]	[V-P]	[P]	[V-A]	[P]
<i>xūrās-e</i>	<i>fhīm-a-(-Ø)</i>	<i>zāya</i>	<i>ū-ngaz-lu</i>	<i>səppās-u</i>
friend:PL-his	understand _{PFV-3FS(-3PL)}	matter:FS	and-bite _{PFV-3PL}	lip:PL-their
'His friends understood the matter, and bit their lips.'				

Note also how the word order is A-V-P, as expected for a transitive clause. Hoberman (1989:112) notes for Jewish Amidya that this overt expression is confined to third person plural agent NPs.

4.3.4.3. Differential Object Indexing

The same sensitivity to definiteness for objects may also be found for the patient in the agentless 'perfective' form. This is, for instance, found in Christian Barwar. In (69) below, the 'perfective' lacks agent indexes. The coding of the patient remains sensitive to prominence which is characteristic of the P (and not the S). This would suggest that, where the referentiality of the A is reduced, the morphosyntax is still transitive and the remaining single overt argument may still be treated like any other P (Khan 2008a:750). If it expresses no agreement, it is completely impersonal, i.e. *baxta qtil* 'A/the woman was killed'. The preverbal position of the patient, however, is typical for the S of inchoatives, e.g. *ʔo-bεθa tlix-le* 'The house collapsed', although word order is not entirely fixed:

(69) **C. Barwar** (NW Iraq, person-restricted; Khan 2008a:749-750, 758, 1984.33; cf. Doron and Khan 2012:231)

a.	<i>baxta qtil-a</i> woman kill _{PFV-3FS} 'The woman was killed.'	(definite patient)
b.	<i>baxta qtil</i> woman kill _{PFV} 'A/the woman was killed.'	(indefinite or definite patient)
c.	<i>ʔo-bεθa tlix-le</i> the-house destroy _{PFV-3MS} 'The house collapsed'	(inchoative)

'At that time my father slaughtered. **Sheep were slaughtered. They** cooked and made *xumša*' (Khan 2008a:2028, B10:40)

4.3.4.4. *Impersonal Passive, Ergative, or Something Else?*

Contrary to the ergative Jewish varieties, overt agreement with the A in the 'perfective' is not obligatory in other dialects (Hoberman 1989:111; Gutman 2008; Khan 2008a:750). Diachronically, Gutman (2008) argues that an originally impersonal passive construction was reinterpreted as active in its extension from non-referential (i.e. unknown) agents to referential (i.e. known) agents when combined with topical patients. An isolated occurrence of such an agentless 'perfective' form is interpretable as an impersonal passive (equivalent to the dummy third person A-coding) but a contextual occurrence is interpretable as active where the expression of the A is deleted. We noted that third person, especially plural, reference can still be retained.

This noteworthy, peculiar treatment of the A is taken to be evidence that even these 'accusative dialects' (like J. Amidya, C. Barwar etc.) that group S and A through the L-series (e.g. *nšəq-lu* 'They kissed' : *qəm-lu* 'They rose') exhibit a fundamentally ergative structure in the 'perfective'. Doron and Khan (2012; cf. Barotto 2015) argue that the absence of agent coding is, at bottom, evidence of ergativity. They (2012:231-233) conclude that this construction should be considered a type of 'ergative'. The L-suffixes that encode the A may be absent without violating the P status of the patient. Distinct from the passive and similar to the ergative, the A can be co-referentially deleted and, hence, share syntactic properties with the S.

It should be clear, however, that, in phonological form, no ergative grouping is manifested, since the P (i.e. the E-set) is distinct from the S (i.e. the L-set). Since the S and P trigger agreement (to the exclusion of the A), one could argue that this is an ergative grouping ($A \neq S = P$) in terms of trigger potential. The differential P-marking and the cross-clausal anaphoric deletion indicate that the unexpressed A has more S-like syntactic properties than the P. One should note, however, that the unambiguous accusative grouping of S and A in unmarked clauses seems to be more fundamental in these dialects. Overt agreement with the A is unrestricted, while the lack of agreement clearly is restricted, functionally specialized and not fully productive. Indeed, why the agentless 'perfective' form is not typically passive is presumably because the patient indexes are the same for the P in the active voice/transitive coding and distinct from the S. This is not the case in the ergative Trans-Zab Jewish Varieties (see the preceding subsection).

Moreover, it should be mentioned that the lack of agent agreement is possibly at least partially a contact-induced phenomenon. Inasmuch as a dialect allows the dropping of the agent, it parallels a Kurdish equivalent construction, where the verbal agreement with the (S and) P is fixed but the omission of the A can still be interpreted as transitive in Badīnānī Kurdish (see Haig 2008:262-268).

In the final analysis, it seems to me the agentless ‘perfective’ does not neatly fit in either the passive or ergative category. It is a restricted truncated transitive construction for dialect-dependent purposes. The diathetical ambiguity between personal active and impersonal passive alongside continuity with third person As would suggest that it simply expresses the event from the bare viewpoint of the patient, affected by a change of state, and that, in leaving the agent unmentioned, its recoverability from the context is significant in identifying an agent and treating it as a transitive clause. This would explain why only L-suffixes that mark the agent can be absent and not subject-marking L-suffixes¹³⁰. This also indicates that it is not a purely morphological property of the L-suffixes which could arguably have a semi-clitic nature (see §3.2.2), since the L-suffixes, after all, are never absent in their subject-marking function (at least in NENA).

4.3.4.5. *Lability in Dynamic-Static Varieties*

Dialects that manifest active-static alignment also have labile verbs and these generally behave similarly to the ‘ergative dialects’. The S_P form expresses the inchoative pendant with result state focus and the S_A form the perfective past. The form that corresponds with the inchoative in ‘ergative dialects’ expresses the realis perfect in ‘dynamic-static dialects’. Thus, the subject of the intransitive valence pattern that corresponds with the patient in the transitive valence pattern is coded in a patient-like or agent-like fashion depending on aspect. Thus, *plix-Ø* and *pləx-le* in (72) below are both inchoatives denoting a spontaneous event and not a passive.

¹³⁰ From the perspective of the language system as a whole, the agentless ‘perfective’ could also be analogical to the ‘imperfective’. The L-suffixes that mark the agent effectively behave like objects (P) which may be due to the parallelism with the L-suffixes that mark the patient in the ‘imperfective’ and are dropped in contexts where the patient has no or less referentiality (cf. §3.2.2), i.e. *q̄tīl-a-Ø* ‘X killed her’ : *°q̄tīl-a-Ø* ‘She kills X’.

(72) **J. Urmi** (NW Iran)

- [P] ← [V-P]
 a. **tar-é** *pəlx-i-le* (causative, perfective past)
 door-PL open_{PFV-P:3PL-A:3MS}
 ‘He opened (lit. **them**) **the doors**.’ (Garbell 1965:150)
- [S] ← [V-S_P]
 b. **tara** *plix-Ø* (inchoative, realis perfect)
 door:MS open_{PFV-S:3MS}
 ‘The door has opened.’ (Khan 2008b:294)
- [S] ← [V-S_A]
 c. **labb-ew** *pəlx-le* (inchoative, perfective past)
 heart:MS-his open_{PFV-S:3MS}
 ‘His heart opened (= He cheered up).’ (Khan 2008b:459)

Forms like *plix-Ø* ‘It_M has opened’, therefore, should not be considered passive and the agent is not overtly expressed in ‘dynamic-stative dialects’. In Jewish Urmi, the passive has to be expressed differently, for example, by the resultative participle and the copula, e.g. *o-naša +qtile=le* ‘The man is killed’ (Khan 2008b:83).

The main point in the end is that the argument in the agentless ‘perfective’ form is the S in both ‘ergative’ and ‘dynamic-stative’ Trans-Zab Jewish Varieties and not the P. This is not only grounded in the telicity condition and the spontaneous interpretation but also in the morphology. Strong intransitive and transitive verbs are morphologically distinguished. Although a stronger implication of the agent is not impossible, these dialects prefer other more typical constructions to express the passive voice.

4.3.5. **Focal Dative Marking of the Agent in non-Trans-Zab Varieties**

As discussed in the previous subsection, an agent, especially the third person plural, may still be interpretable in an agentless ‘perfective’ formation resembling the impersonal agent construction. The dative expression of the agent with such verbal forms is rare and archaic and mainly documented in textual sources. Unfortunately, no grammar fully treats its usage. An important disadvantage is that we do not obtain a full picture and, without consultation with native speakers, we do not know whether these textual data are representative of the dialect. It does show, however, that it is possible to add a dative agent and it will be pointed out that such agents have some unusual properties. Historically, such full nominals marked by *l-* and the L-suffixes represented the same prepositional

arguments. Synchronically, however, the L-suffixes are fully grammaticalized verbal suffixes. Other person forms are expressed like full nominals by the preposition *l-* and its allomorphs. As we will see, a pronominal agent or full nominal agent can be prepositional or zero-marked. It seems possible to me that some instances of such overt case-marking of the agent are a type of focal A-marking rather than simply an oblique agent complement to a passive construction¹³¹.

On the basis of the scarce data, we cannot draw strong conclusions. However we analyze the ergative-like phenomena, they are part of an archaic layer. It is restricted against the far more frequent agreement with the (personal) agent. The dative prepositional marking of the agent is a lingering feature of the historically dative agent resultative construction.

By and large, agent agreement is not obligatory but its absence is evidently marked. Case-marking of the agent in such contexts is common but not obligatory either. The following patterns are found and patterns (73b)-(73c) are discussed below:

(73) **Marked and unmarked expressions of the agent in the ‘perfective’**

a. **Unspecified agent construction**

xil-a-lu ‘It_F was eaten (by sbd.)’ / ‘People ate it_F’ (= ‘They ate it_F’)

xil-a-∅ ‘It_F was eaten (by sbd.)’ / ‘People ate it_F’ (= ‘They ate it_F’)

b. **With nominal agent (plural)**

xil-a-lu (∅-) *kalwe* ‘Dogs ate it_F’ (AGR only)

xil-a(-∅) *l-kalwe* ‘It_F was eaten by dogs’ (CM only)

(∅-) *kalwe* *xil-a-lu* ‘Dogs ate it_F’ (fronting, AGR only)

(∅-) *kalwe* *xil-a(-∅)* ‘id.’ (fronting, null marking)

l-kalwe *xil-a(-∅)* ‘It was dogs that ate it_F’ (fronting, CM only)

c. **With pronominal agent**

xil-a-li ‘I ate it_F’ (dependent only)

ʔana *xil-a-li* ‘I ate it_F’ (independent and dependent)

la-l-i *xil-a(-∅)* ‘It was I who ate’ (independent dative only)

ʔana *xil-a(-∅)* ‘I ate it_F’ (independent unmarked only, rare)

¹³¹ Recently, Coghill (2016:232f.) came to the same conclusion.

What we do not find is overt agreement and overt case-marking of the agent¹³², e.g. ***l-kalwe xil-a-lu* ‘Dogs ate it_F’, or independent dative pronoun and dependent L-suffix, e.g. ***lali xil-a-li* ‘I ate it_F’.

4.3.5.1. Dative Marking of the Agent

The agent can be introduced by the dative preposition (*ʔəl*)/- ‘to, for; on, about’, as illustrated by *l-dewe* ‘by the wolves’ in (74). This is comparable to agent complements in passives (see §4.3.2). One should note that the dative (*ʔəl*)/- is equally used to express other roles with agentless verbal forms (cf. Sabar 2002:96a), e.g. *u-ʔalle mīr-∅ pāsūq* ‘and **about him** (****by him) the verse is said’ (J. Zaxo, Sabar 1976:40 fn. 34).

(74) **J. Betanure** (NW Iraq; Mutzafi 2008a:68)

ʔərwe xil-i l-dewe
 sheep:PL eatPFV-3PL DAT-wolf:PL
 ‘The sheep were eaten **by wolves**.’

In early Jewish NENA texts from Nerwa and early Christian NENA poetry from Iraq, there are a few examples of this kind where the dative is used to mark the agent. Some of them are given below.

(75) **Early J. Nerwa** (Literary, NW Iraq)

- a. *ham āwa xīl-∅ ʔəll=əd kalwe*
 also DEM:MS eatPFV-3MS DAT=LK dogs
 ‘That one too had been eaten **by dogs**.’ (Sabar 1976:40, 2:10)
- b. *ʔəktīf-∅ l-bāb-e*
 bindPFV-3MS DAT-father-his
 ‘He (i.e. Isaac) was bound **by his father**.’ (Sabar 2002:190b)
- c. *l-man xīq-ētən*
 DAT-who createPFV-2PL
 ‘**By whom** where you_{PL} created?’ (Sabar 2002:40)
- d. *xzē-lu ʔəzzəta d-la xəzy-a ʔəl ču ʔādami*
 seePFV-A:3PL glory:FS SUBR=NEG seePFV-3FS DAT not.any human
 ‘They saw glory that **was not seen before by any human being**.’ (Goldenberg 1992:120)

¹³² This occurs productively in Turoyo, see §6.1.3.

(76) **Early C. Alqosh** (Literary, NW Iraq; Mengozzi 2002a: I2 28.31c)

mā d-lā xzē-Ø l-nāšā xzē-Ø-lē
 what SUBR=NEG seePFV-3MS DAT-anyone seePFV-P:3MS-A:3MS
 'What was not seen **by anybody** he saw.'

This is also found in the expression of the perfect (in dialects with a dynamic-stative alternation). The western peripheral dialect of Hertevin (Christian, SE Turkey), for instance, may express an intransitive valence pattern of monotransitive and ditransitive verbs in the realis perfect, e.g. *ħellek* 'It is eaten'¹³³, *hiw-a* 'It_F is given'. A dative agent may be added, as illustrated in (77a) and (77b) below. These constructions are clearly passive-like with the following exception. The fronted position of this dative agent in these examples is unusual and not consistent with other post-verbal obliques. Because of this fronting, the agent is also focal. Yet, a passive rather typically defocuses the agent (Shibatani 1985; Givón 2001). Also, the agent does not ever seem to be prepositional when the verb does express agent agreement.

(77) **C. Hertevin** (SE Turkey; Jastrow 1988:152.432, 156.499)

- a. *l-ēt?-aħ l-dewe ħellek l-naše qħellek*
 NEG-knowIPFV-A:1PL DAT-wolves eatPFV:3MS DAT-people killPFV:3MS
l-debbabe ħellek
 DAT-bears eatPFV:3MS

'We do not know whether he (i.e. Joseph) has been eaten **by wolves**, he has been killed **by people** or he has been eaten **by bears**.'

- b. *l-ʔalaha hiw-a lal-ew*
 DAT-God givePFV-3FS DAT-3MS
 'It_F (i.e. rulership) was bestowed to him (i.e. Joseph) **by God**.'¹³⁴

The construction with agreement corresponding with (77b), for example, would be:

- c. *hole ʔalah hiw-a-le lal-ew*
 ACTZ God givePFV-3FS-3MS DAT-3MS
 'God has given it_F to him.' (cf. Jastrow 1988:142.387)

¹³³ The masculine singular is often lengthened and extended with an obscure particle *-ek* in Christian Hertevin, i.e. *pteħħ-Ø + -ek* → *pteħħek* 'It_M has opened, has been opened' (Jastrow 1988: 53).

¹³⁴ N.B. Jastrow (ibid.) translates active: "Gott hat sie ihm verliehen".

As shown in (77c), it is possible that the recipient and agent may be both prepositional.

4.3.5.2. *Focalization and Zero Marking of the Agent*

Focal agents (in pre-verbal position) can also be zero-marked in combination with the agentless form (see §4.3.4). The agent NP is overtly expressed without overt agreement and without overt case-marking. The full nominal *kalwe* ‘dogs’ in example (78) is not case-marked and the verb only agrees with the (definite) patient:

(78) **J. Zaxo** (NW Iraq; Sabar 2002:193)

	[P]	[A]	[V-P]
	<i>xula dunye</i>	<i>(Ø-)kalwe</i>	<i>xīl-a(-Ø)</i>
Q	world:FS	dog:PL	eat _{PFV} -3FS
	‘Is it so that the world was eaten by dogs (or: Dogs ate it _F , the world)?’		

The patient is fronted before the agent in (79), so that the word order is unusual for an active clause (which is otherwise (A-)V(-A)-P) but the focal agent is not dative.

The restriction to third person (plural) agents does not appear to apply absolutely. Jewish Zaxo also unveils an instance with an independent person form of the first person. Gutman (2008:75) mentions the following noteworthy example where there is no agreement with the first person agent:

(79) *dʒər-ri ʔəl dīn dīd-i, ʔāna ʔwiz-a u=ʔaxtoxun la ʔōz-ūtū-la*
 return_{PFV}-1SG to religion LK-my I do_{PFV}-3FS and-you:PL NEG do_{PFV}-2PL-3FS
 ‘I returned to my own religion, I did it_F but you_{PL} do not do it_F’ (J. Zaxo, NW Iraq; Gutman 2008:75)

The usage of independent pronouns here marks the contrastive focus between speaker *ʔāna* ‘I’ and addressee *ʔaxtoxun* ‘you_{PL}’. Coreferential independent pronouns are not obligatory (also known as pro-drop) and usage of the unmarked independent person forms indicates topicalization and focalization (e.g. *ʔāna seli* ‘I(’m the one who) came’ vs. *seli* ‘I came’). Their usage without agreement is rather extraordinary, we would otherwise expect the form *ʔāna ʔwiz-a-li* ‘I(’m the one who) did it_F’. Yet, it could suggest that unmarked independent pronouns alternate with dative independent pronouns in the expression of focal agents (see further below).

4.3.5.3. Possible Transitive Interpretations

While a passive interpretation of such dative agent constructions seems possible in some cases, it is not altogether unproblematic. Siewierska (2004:160-162) notes that some languages may drop agent agreement, when the A is focal. Konjo, for example, employs dependent person forms for the A only when it is not in focus, while the focalized A lacks agreement and optionally ergatively case-marked (Friberg 1996:141). The agreement with the A is dropped, when the A is focalized through fronting to preverbal position and the A may be additionally case-marked (Friberg 1996:142-147). It is possible that the NENA data reflect a somewhat similar phenomenon.

First of all, the S is normally not expressed by the E-set but by the L-set in these dialects (i.e. *meθ-lē* 'He died'; Mengozzi 2002b:38)¹³⁵. The E-set otherwise denotes the P in the corresponding transitive construction, so the construction is morphologically not typically intransitive to begin with¹³⁶.

Secondly, these constructions can have an active-transitive interpretation (Mengozzi 2002b:36). We noted in the previous subsections that such agentless forms can still be interpreted as transitive and imply a third person agent, especially plural. There are possibly similar examples of this in early Christian NENA poetry. The form *šqil-ā* below, for instance, presumably has a 3pl agent reference that can be continued by L-suffixes that mark the agent on subsequent verbal forms in the same verse:

(80) **Early C. Alqosh** (Literary, NW Iraq; Mengozzi 2002a, J6 142.79)

- a. *šqil-ā(-∅)* *b-ʔiday-hin* *dery-ā-lay*
 take_{PFV}-3FS(-3PL) in-hands.of-their cast_{PFV}-3FS-3PL
 'She was taken away (or: **They**_i took her) and **they**_i cast her into their hands.'
- b. *l-manzal* *d-ihin* *nubl-ā-lay*
 to-dwelling LK-their carry_{PFV}-3FS-3PL
 '**They**_i carried her to their own dwelling.'

¹³⁵ The earliest written sources from NW Iraq, however, do contain traces of active-stative fluid subject marking (Mengozzi 2002b:38-39; 2005:249-250, cf. Sabar 1976, 2002:49; see §5.1.2).

¹³⁶ In Mlahso, the passive and anticausative are both marked by L-suffixes, for instance (see §6.3.2).

The agentless form can imply a certain degree of subordination or interdependency to another verb that does take overt agreement (see previous subsection). Mengozzi (2002b:36) mentions several examples where an active interpretation is also favored for dative agents. In the example below, the L-suffixes continue the same reference of the dative nominal. They all belong to the third person plural:

(81) **Early C. Alqosh** (Literary, NW Iraq; Mengozzi 2002a)

- a. *šqil-Ø* *l-māl[ā]ʾxē* *w-nube-Ø-lay* *drē-Ø-lay* *b-gehan[ā]*
 take_{PFV}-3MS DAT-angel:PL and-carry_{PFV}-3MS-3PL put_{PFV}-3MS-3PL in-PRN
 'He_i was taken **by angels**_y (or: **Angels**_y took him_i) and (**they**_y/****he**_i) carried him and put him in Gehenna.' (J6 142.79d)

This referential continuity between the dative agent and the subsequent agent indexes could suggest that they enjoy the same pragmatic status. The preceding agentless 'perfective' form *šqil-Ø* 'taken him' could be understood as a kind of gerund (compare English *Angels_i having taken him Ø_i carried him and Ø_i put him in Gehenna*). This notwithstanding, the absence of agent agreement and the overt case-marking of the agent is still marked with respect to overt agreement and zero case-marking (*malaxe šqil-Ø-lay* 'Angels took him').

In addition, dative agents may freely alternate with the L-suffixes that mark the agent as the independent expression of a full nominal agent. The verbal form below lacks agreement with a nominal agent referent which is marked by *l-* instead, but it does exhibit agreement with the antecedent *āw*:

- b. *āw* *d=lbiš-Ø* *l-ʾlāhā* *wa=lbeš-Ø-lan*
 DEM:MS SUBR=cloth_{PFV}-3MS DAT-God:MS and=cloth_{PFV}-3MS-1PL
 'He who was clothed **by God** and whom **we** clothed' (I1 19.53d)

The correspondence is obviously facilitated by the morphological parallel between the dative preposition (*l-*) and the (dative) person indexes (L-suffixes). No agent index is present in *lbiš-Ø* and the full nominal is introduced by the dative *l-ʾlāhā*. The status of the patient in the subsequent verbal form with agent agreement *lbeš-Ø-lan* 'We clothed him' is clearly the P. In both cases, the verb refers back to the antecedent *āw* 'he'. This free alternation might suggest that the patient index on *lbiš-Ø* enjoys a similar status to that in *lbeš-Ø-lan*, and that, thus, object coding is retained in the agentless form.

Independent dative pronouns can also be employed like full nominals instead of the L-suffixes. Goldenberg (1992:120-121) and Pennacchietti (1994:278, fn. 71) record examples where the agent is an independent dative person form¹³⁷, for example *lālox* in (82b) below.

(82) **Early J. Nerwa** (Literary, NW Iraq, person-unrestricted; Goldenberg 1992:121)

- a. *u-ʔatta d-bəd-šāmeʔ-∅ bāb-i dəx d-qṭīl-ən-nox*
 and-now SUB-FUT-hear_{IPFV-A:3MS} father-my how SUBR-kill_{PFV-A:1MS-P:2MS}
 ‘And now my father will hear how **you_{MS}** killed me_M.’
- b. *bəd-yāʔe-∅ d-lāl-ox qṭīl-ēna*
 FUT-know_{IPFV-A:3MS} SUBR-DAT-2MS kill_{PFV-S/P:1MS}
 ‘He will know that (it is) **by you** I was killed.’

The pre-verbal position of the dative agent indicates that it is focalized through fronting (Goldenberg 1992:121). Rhétoré (1912:220) offers the following example from (written) Christian Aqlōsh:

- (83) *l-gabro qṭīl-ā*
 DAT-PRN kill_{PFV-3FS}
 ‘(It is) **by Gawro** she was killed.’

Rhétoré (1912:220) remarks that the independent dative person form (*lāli* ‘me’, *lāloḵ* ‘you_{MS}’, *lāle* ‘him’ etc.) is used more assertively and conveys focalization like English ‘It is I (you, he etc.) who killed’. The pre-verbal position signifies an increase in prominence of the dative argument, although its association with the agent role is peculiar to its combination with the agentless ‘perfective’ form.

The dative seems to mark salient agents that are contextually somehow unexpected and highly agentive (i.e. ‘by me/dogs and not somebody/something else’) reminiscent of differential A-marking (see §2.4.3). In this case, such agent focus requires the absence of agent agreement. Moreover, it should be pointed out that the dative agent is possibly partly a contact-induced phenomenon. The

¹³⁷ As pointed out elsewhere, the L-suffixes and independent dative person forms are historically related. Synchronically, however, the L-suffixes, as verbal indexes, do not have the same status. Thus, example (39b) should not be mistaken for an extraction and fronting of an L-suffix (*pace* Goldenberg 1992:121; Pennacchietti 1994:278) but simply an independent variant of the person index. What is fronted is the expression of the agent in which it receives dative-case marking but it is not the L-suffix itself that is fronted.

Aramaic dative agent construction parallels the Kurmanji Kurdish ergative construction where the verbal agreement is typically controlled by the P, and the A is expressed by a distinct case form referred to as the ‘oblique’ which marks the P in the present tense.

Pending further investigation, I would tentatively consider this a type of optional ergative case-marking or differential marking of the A conditioned by focus¹³⁸. In some instances of the dative agent construction, this seems to me preferable than a straightforward oblique complement of a passive (cf. Mengozzi 2002b:36), because of the referential continuity with agent indexes and the agent focus that are clearly not passive-like (as the function of the passive is inactivization resulting rather in the defocusing of the agent). If this is correct, then the focal ergative case-marking is combined with tripartite agreement in phonological form, since the A is zero, the P is marked by the E-set and the S by the L-set. In fact, although strictly speaking, only the pronominal A is case-marked, the person marking is best characterized as tripartite, since all functions are marked differently (be it dependent or independent).

Finally, dative case-marking is found much more readily for the patient than for the agent in Neo-Aramaic. For further studies, it would be interesting to assess whether the agent and patient could both be case-marked simultaneously (e.g. *l-dewe xil-i l-ərwe* ‘It is wolves that ate the sheep’)¹³⁹. If it turns out that both the agent and patient may be identically case-marked, then this might be a type of horizontal alignment ($S \neq A = P$).

4.4. Alignment Splits and Multiple Transitive Constructions

As explained in the preceding sections, when it comes to the inflection of the ‘perfective’, the choice of E- or L-suffixes is necessarily though not sufficiently conditioned by

- (i) morphological base (*qṭil-* or *qaṭəl-*) for the marking of at least the A
- (ii) and at least person reference for the P (§§4.1-4.2).

This section explores a tendency to normalize the use of the E-suffixes or L-suffixes at the cost of either to encode a particular grammatical function (S, A, P) by morphologically adapting transitive coding in analogy to the ‘imperfective’. A

¹³⁸ A type that, interestingly, aligns agents at least with recipients in ditransitive constructions.

¹³⁹ Prepositional marking of both A and P is possible, for instance, in Turoyo, see §6.1.3.

type of neutralization of argument encoding can be observed inspired by the predominant morphosyntax in all NENA dialects along different paths¹⁴⁰. And this leads to a mixture between the ‘perfective’ and ‘imperfective’ morphology that is sometimes difficult to capture in terms of alignment.

When there is no verbal person marking of the P, the S and A are treated alike by means of the L-suffixes (*dmix-li* ‘I slept’, *xze-li* ‘I saw’) in both the accusative and neutral pattern. We will see that, when there is verbal person marking of the P, however, the whole construction changes and approximates the ‘imperfective’ depending on either the properties of the P or the properties of the A. There is a certain degree of co-argument sensitivity (Witzlack-Makarevich et al. 2016). Typologically, this is the mirror image of Comrie’s ‘antiergative’ type (1975, 1978:380-383) where it is the full presence of the A that triggers distinct coding and only the P is coded differently. In NENA dialects, it is the full presence of the P that triggers distinct coding, and the coding of the A is affected by the absence or presence of the patient. Part of this may be inspired by a tendency contrary to the neutral dialects, namely to discriminate between the A and P and avoid marking them by the same set of person forms (the L-suffix).

4.4.1. **System-Internal Neutralization of Object Indexes**

The preterit, or perfective past, is only a symmetrically inverted reflection of the ‘imperfective’ when S and A are also grouped. The majority of dialects, therefore, exhibit a morphosyntactic differentiation for both the A and S alike conditioned by TAM (*dməx-la* ‘She slept’ vs. *°damx-a* ‘She sleeps’).

The dialects that show neutral alignment (e.g. J. Urmi, C. Bohtan) employ the L-suffixes to mark all functions including both the A and P, e.g. J. Urmi *xzé-li-lax* ‘I saw you_{FS}’. As noted in §4.2.2, the addition of an object marking L-suffix to the preceding agent marking L-suffix is also found in some ‘accusative varieties’ for the recipient role only (*hu-li-lax* ‘I gave to you_{FS}’) and is presumably the starting point for its usage to mark the P. In addition, this neutralization is possibly partly inspired by parallelism between the ‘imperfective’ and ‘perfective’. Compare the forms in Table 30 below. The object-marking L-suffixes neatly align with each other in both systems. The arrow indicates the direction of the analogy from the

¹⁴⁰ See Pennacchietti (1994) for a brief overview and Mengozzi (2005) for a comparison with Kurdish.

‘imperfective’ to the ‘perfective’. The parallel would have been first available in the person indexes denoting the recipient and then extended to Ps (and Ts).

Table 30. *Imperfective–perfective parallelism of object marking L-suffixes*

	A	R		A	P
IMPERFECTIVE	E	<u>L</u>	:	E	<u>L</u>
	<i>k-wəl-Ø-</i>	-le		<i>*qatl-a</i>	-lu
	‘He gives	him’		‘She kills	them’
PERFECTIVE	<u>L</u>	<u>L</u>	:	<u>L</u>	<u>L</u>
	<i>hwəl-le</i>	-le		<i>*qtál-la</i>	-lu
	‘He gave	him’		‘She killed	them’

Source: Data based on Khan (2008b).

It seems plausible, therefore, that this pattern at least partly unfolded in analogy with the ‘imperfective’ where the L-suffixes specifically mark objects (cf. Penacchietti 1994). This is avoided in dialects such as Jewish Amidyā that maintain complete agreement inversion.

Finally, the reverse direction of analogy is also found, from the ‘perfective’ to the ‘imperfective’. Such levelling of dependent person forms in the ‘imperfective’ and ‘perfective’ is found in South Eastern Trans-Zab Jewish varieties. The L₂-series attached to ‘perfective’ forms are based on the *ʔall*-series but they may be employed with a status equivalent to that of the L₁-suffixes in a few dialects, e.g. J. Saqqiz *nšiq-li-lav* ‘I kissed **her**’ (out of independent *nšiq-li ʔilav*). This is replicated in the ‘imperfective’ of the in combination with first person singular E-suffixes, possibly because of the nasal resonant *-n-* akin to the lateral (Israeli 1998:114–117). Compare:

	IMPERFECTIVE		PERFECTIVE
3MS	<i>našiq-n-ev</i>	:	<i>nšiq-li-lev</i> (< <i>-li il-év</i>)
FS	<i>našiq-n-av</i>	:	<i>nšiq-li-lav</i> (< <i>-li il-áv</i>)
PL	<i>našiq-n-u</i>	:	<i>nšiq-li-lu</i> (< <i>-li il-ú</i>)

The L₂-series that are used to mark the P in the ‘perfective’ have penetrated the ‘imperfective’.

To conclude, neutral dialects have levelled the L-set of patient indexes throughout the verbal system in analogy with the ‘imperfective’. Analogy in the other direction is less frequent but also occurs such as the extension of L₂-series.

4.4.2. Competing Transitive Constructions: The *qam-qaṭal*-Construction

For transitive perfective past clauses, there is a strategy to adopt the L-suffixes as an alternative to the E-series in marking the P, namely the transitive *qam-qaṭal*-preterit. Although it is based on the ‘imperfective’ (*qatal*-), this secondary formation is paradigmatically linked with the ‘perfective’ (*qṭil*-) in the expression of the perfective past. Thus, there are two basic transitive perfective constructions. As we will see, this entails a split in both the A and P, where the *qam-qaṭal*-formation leads to ergativity.

Essentially, this ergative *qam-qaṭal*-formation is presumably an attempt to avoid the transitive morphosyntax of the ‘perfective’ (*qṭil*-), while maintaining the L-suffixes as the primary set for object indexes. Both the stacking L-suffixes, or neutral alignment, and the E-set of patient indexes are disfavored or disallowed in the perfective past depending on the dialect. When the P is not expressed or indefinite, the *qam-qaṭal*-construction cannot be used, and when the P is pronominal, it is favored over the *qṭil*-based construction, especially for the first and second person. This leads to a major split between intransitive and transitive morphosyntax in the perfective past and the differential treatment of the A depending on the reference of the P. When the P is pronominal, especially first and second person, the A is also marked differently, it is expressed through the E-set rather than the L-set conforming to the model of the ‘imperfective’.

4.4.2.1. Two Basic Transitive Constructions

The *qam-qaṭal*-construction is found across Jewish and Christian dialects which otherwise exhibit accusative alignment in the preterit and serves to indicate the preterit of transitive clauses with a patient index without inversion (*qaṭal*-A-P). It alternates and competes with the inverted preterit based on the ‘perfective’ (*qṭil*-P-A). The TAM marker *qam*- is simply prefixed to the ‘imperfective’ (*qaṭal*-) verbal form like other preverbal TAM modifications, for example:

(84) **The *qam-qaṭal*-preterit** (J. Amidya; Hoberman 1989)

a.	<i>k-šamṭ-i-la</i>	‘They hear her.’	
	IND-hear _{IPFV-A:3PL-P:3FS}		
b.	<i>qam-šamṭ-i-la</i>	‘They heard her.’	(= <i>šmiṭ-a-lu</i>)
	PFV-hear _{IPFV-A:3PL-P:3FS}		

Although it is based on the ‘imperfective’ (*qatal*-), it is equivalent to the ‘perfective’ (*qṭil*-) in the expression of the perfective past and used alongside intransi-

tive verbs such as *θe-le* ('came') in (85a) below. Compare (85a) and (85b) from the same story.

(85) **J. Amidya** (NW Iraq; Hoberman 1989:186.3)

- a. *θe-le* *bab-e* *u* ***qam-xaze-θ-le*** *bə-bxaya*
 come_{PFV-S:3MS} father-his and PFV-see_{IPFV-A:3MS-P:3MS} in-crying
 'His father came and **saw him** crying.'
- b. ***xze-θ-le*** *bron-e* *bə-bxaya*
 see_{PFV-P:3MS-A:3MS} son-his in-crying
 '**He saw** his son crying.'

This co-variation between preterit forms based on *qtil-* and *qam-qaṭal-* is widespread across Christian dialects of NENA. It is also found in Jewish dialects in NW Iraq, such as J. Amidya and J. Aradhin (Mutzafi 2002b). Example (86) gives the respective forms.

(86) **Two types of preterit in J. Amidya** (person-unrestricted, NW Iraq; Hoberman 1989; Greenblatt 2011)

	<i>qam-qaṭal</i>	<i>qtil</i>		
3FS	<i>qam-našəq-θ-la</i>	<i>nšiq-a-le</i>	'He	her'
MPL	<i>qam-našəq-ətu-lu</i>	<i>nšiq-í-loxun</i>	'You _{UPL}	them'
MS	<i>qam-našəq-a-le</i>	<i>nšəq-θ-la</i>	'She kissed	him'
1PL	<i>qam-našəq-i-lan</i>	<i>nšiq-ax-lu</i>	'They	us'
2FS	<i>qam-našəq-an-nax</i> etc.	<i>nšiq-at-ti</i>	'I _{FS}	you_{FS}' etc.

It should be pointed out that dialects that systematically employ the *qam-qaṭal-* construction such as Jewish Amidya otherwise belong to the accusative type. It is rarely the case that they also employ independent object person forms, since dialects tend to favor either of these two strategies to mark the P instead of the E-set¹⁴¹.

The fundamental difference between the two types of preterits is that the *qam-qaṭal-*preterit obligatorily takes patient indexes, while the *qtil-*preterit need not, as the following examples show. When the P is not expressible as in (87a), is omitted (87b) or its referentiality is reduced to an indefinite NP, the *qam-qaṭal-*formation cannot be used. Thus, the *qtil-*-based forms are allowed in

¹⁴¹ The only dialects known to me that use both strategies are C. Barwar (NW Iraq; Khan 2008a) and C. Urmi (NW Iran; Khan 2016).

contexts where the P is not indexed but the *qam-qaṭəl*-construction must include a patient index.

(87) **J. Amidya** (NW Iraq, person-unrestricted; adapted from Hoberman 1989; Greenblatt 2011)

<i>qṭil</i>		<i>qam-qaṭəl</i>	
a.	<i>dməx-lu</i> 'They went to sleep.'	f.	<i>**qam-damx-i</i> (S)
b.	<i>šmeʔ-lu</i> 'They heard'	g.	<i>**qam-šamʔ-i</i> (A without P)
c.	<i>šmeʔ-lu baxta</i> 'They heard a woman.'	h.	<i>**qam-šamʔ-i baxta</i> (indefinite P)
d.	<i>šmiʔ-a-lu</i> 'They heard her .'	i.	<i>qam-šamʔ-i-la</i> (pron P)
e.	<i>šmiʔ-a-lu baxta</i> 'They heard the woman.'	j.	<i>(**)qam-šamʔ-i-la baxta</i> (definite P)

The indexing of Ps as in (10j), however, is not equally available in all dialects for the *qam-qaṭəl*-formation. It is far less frequent than its *qṭil*-based counterpart in Jewish Amidya (NW Iraq; Hoberman 1989:52-53) and appears to be impossible, for instance, in C. Jilu (SE Turkey; Fox 1997:83). This suggests that the construction hinges on object person forms and is only secondarily included in the differential indexing of definite NPs, as indicated in Table 31. One should recall that no such constraints are identified for other TAM constructions based on *qaṭəl*- that are unambiguously part of the 'imperfective' inflectional system.

Table 31. *Two types of preterits and DOM in J. Amidya*

P	<i>qṭil</i> -	<i>qam-qaṭəl</i> -
[+pron]	optional (E-suffix)	obligatory (L-suffix)
[+index DOM]	+	–

Although J. Amidya freely employs the E-set of patient indexes, a quick glance at the texts in Hoberman (1989) and Greenblatt (2011) gives the impression that the *qam-qaṭəl*-forms that use L-suffixes instead is by far more common when the P is pronominal, while the pendant based on *qṭil*- is favored, when the P is a full NP. Further quantitative analysis is required to assess this.

Whereas dialects like J. Amidya would seem to have two constructions that co-vary, *qam-qaṭal*- is in complementary distribution with *qṭil*- in person-restricted dialects, such as J. Zakho and J. Betanure (Mutzafi 2008a:85-86). The person restriction marginalizes the E-set to third person reference in J. Zakho, while the *qam-qaṭal*-formation can freely express all persons through the L-set:

(88) **Person-restricted patient-marking in J. Zakho** (NW Iraq; Cohen 2012)

	<i>qam-qaṭal</i>	<i>qṭil</i>	
3FS	<i>qam-nāšəq-Ø-lu</i>	<i>nšiq-a-le</i>	'He kissed her '
PL	<i>qam-nāšəq-Ø-la</i>	<i>nšiq-i-le</i>	etc. them '
MS	<i>qam-nāšəq-Ø-le</i>	<i>nšəq-Ø-le</i>	him '
1PL	<i>qam-nāšəq-Ø-lan</i>	<i>**nšiq-ax-le</i>	us '
2FS	<i>qam-nāšəq-Ø-lax</i>	<i>**nšiq-at-te</i>	you_{FS} '
		etc.	

As a result, the *qṭil*-based preterit forms that include a patient index are more restricted.

Furthermore, it should be noted that in some dialects, such as C. Qaraqosh (NW Iraq; Khan 2002a:140) and C. Aradhin (NW Iraq; Krotkoff 1982:28), the *qam-qaṭal*-preterit is the only means to express a 3ms. object such that the following type of paradigm is observed:

<i>xəzy-a-li</i>	<i>baxta</i>	'I saw (lit. her) the woman'
<i>xəzy-i-li</i>	<i>naše</i>	'I saw (lit. them) the people'
<i>qam-xāz-ən-ne</i>	<i>nāša</i>	'I saw (lit. him) the man'

This is even more restricted in dialects like Christian Koy Sanjaq (NE Iraq, Mutzafi 2004b) where the *qam-qaṭal*-construction is the only means to express a patient index in the perfective past (see further below).

Table 32 illustrates its distribution across a few dialects depending on the person reference of the object. Pennacchietti (1994:269-270, 276-277) contends that the *qam-qaṭal*-preterit spread from Iraq, particularly the Mosul plain, to the West and North East of the NENA speaking area. The two transitive preterits correlate with respect to the person-role constraint and are at the same time paradigmatically linked. For J. Amidya and C. Jilu, for instance, it is the *qṭil*-preterit with the E-set of patient indexes that is favored in the differential indexing of object NPs, while the *qam-qaṭal*-preterit with the L-set of patient indexes is large-

ly confined to the expression of object person forms (cf. Cohen 2012:238 for J. Zaxo).

Table 32. *Distribution of qam-qaṭal-preterit and qṭil-preterit*

THIRD		FIRST/SECOND	DIALECTS' SAMPLE
<i>qṭil-</i>		<i>qam-qaṭal-</i>	(NW Iraq) J. Amidya (Hoberman 1989), J. Aradhin (Mutzafi 2002b); (NW Iran) C. Urmi (Literary, Murre-van den Berg 1999; spoken, Khan 2016)
<i>qṭil-</i>		<i>qam-qaṭal-</i>	(NW Iraq) J. Betanure (Mutzafi 2008a), J. Dihok (Sabar 1997), J. Zaxo (Cohen 2012), C. Alqosh (Coghill 2003), C. Aradhin (Krotkoff 1982), C. Barwar (Khan 2008a), C. Mangesh (Sara 1974), C. Qaraqosh (Khan 2002a), C. Telkepe (Coghill 2010, 2014), C. Tisqopa (Rubba 1993), C. Zaxo (Hoberman 1993); (SE Turkey) C. Baz (Mutzafi 2000), C. Jilu (Fassberg 1997), C. Sat (Mutzafi 2008c); (NW Iran) C. Salamas (Polotsky 1991);
<i>qam-qaṭal-</i>			(SE Turkey and NW Iraq) most of the Khabur dialects (Talay 2008), C. Nerwa (Talay 2001), C. Peshabur (Coghill 2013); (NE Iraq) C. Koy Sanjaq (Mutzafi 2004b), (W Iran) C. Sanandaj (Panoussi 1990)

4.4.2.2. Possible Motivations

It seems plausible to me that the *qam-qaṭal*-preterit is an attempt to confine the marking of salient objects to the L-set. The L-set, grounded in the morphology of the 'imperfective', is the only verbal expression of non-third person patients. The verb has to select a different inflectional base, because it cannot be combine with L-suffixes to express the P. Unlike 'neutral dialects' like J. Urmi, the doubling of L-suffixes is blocked for at least the P function. Forms like ***nšáq-la-li* 'She kissed **me**' are strongly disfavored, respectively, disallowed, while *hu-lu-li* 'They gave **me** (sth.)' where the L-set person form marks the recipient role exists besides *qam-yaw-i-li* 'They gave me'. The view that this construction hinges on the L-series can find additional support in the use of L-suffixes to mark the predicative possessor. The L-set is combined with the verb *hwy* 'be' in suppletion to the existential marker *ʔiθ* 'there is' and this can also be the *qam-qaṭal*-formation, for example, *qam-hāwe-le xa brūna* '**He** had a son' (lit. there.was-him a son, C. Aradhin,

Krotkoff 1982:38). This would be the *qam-qaṭəl*-preterit counterpart to the hypothetical *qṭil*-preterit ***wē-le-le* ‘He had’ (lit. was-it_M-him), a form unattested in this dialect, even though *wē-le-be* with a B-series does exist meaning ‘He could (lit. was-it-in.him)’ (Krotkoff 1982:38). It is, nonetheless, built on the ‘imperfective’ *°hāwē-le* ‘He has’, although the L-suffix encodes the possessor or benefactor rather than the patient (P).

The *qam-qaṭəl*-formation, therefore, most likely unfolds by conforming to both an avoidance of stacking L-suffixes, or of neutral alignment (i.e. a double L-set constraint), and a person role constraint. We noted that, when the P is a non-third person form, it cannot be expressed by means of *qṭil*-based inflection in person-restricted dialects. The transitive *qam-qaṭəl*-preterit is used instead. First and second person forms typically constitute the starting point of DOM (cf. Bosson 1985; Haig 2008:152). When the P is lower in prominence, i.e. non-pronominal, or indefinite, the *qam-qaṭəl*-construction cannot be used. Instead, speakers will opt for a *qṭil*-based expression like the above. It is as if the *qam*-preverb signals “Note that, before anything else, it is the object that requires indexing through an L-suffix and not the agent”.

These observations and the sensitivity to prominence indicate that this is not merely a suppletive paradigm (Cohen 2012:238; *pace* Polotsky 1991). It is a transitive perfective past construction dedicated to mark the patient differently for dialect-dependent reasons. The ‘imperfective’ without an object L-index (*°šam?-i* ‘They hear’) could, in theory, serve as base for any similar perfective derivation (*qam-šam?-i* ‘They heard’) but it is not readily used as such¹⁴². There is no morphological reason why patientless forms like ***qam-šam?-i* ‘They heard’ or ***qam-damx-i* ‘They slept’ are avoided. In terms of relative markedness, then, the *qam-qaṭəl*-form is the marked counterpart, being more restricted than the *qṭil*-perfective. In addition, the *qam-qaṭəl*-preterit does not appear to be combinable with prepositional/oblique arguments that take s-like subjects. Forms like ***qam-raṭəš-Ø ṭəbbi* ‘He noticed me’ do not appear to be possible, while *rṭəš-Ø ṭəbbi* ‘He noticed me’ is. The *qam-qaṭəl*-form, therefore, must promote the patient-like argument to full P function, as if it were an applicative voice

¹⁴² Polotsky (1961:21 fn.) mentions that such objectless forms sporadically do occur. This would require further investigation but it seems that such forms occur alongside another *qam-qaṭəl*-construction that does have object coding, e.g. *qam-doq-a (Ø) l-ḥa mənne qam-maḥy-a-lə l-arra* ‘She seized one of them and hit him to the ground’ (C. Urmi, Socin 1882 67.10; transcription simplified). Examples such as these do demonstrate the possibility of omitting an object index.

construction¹⁴³. Differential object marking, therefore, is a phenomenon broader in scope than we might assume and has at least partly motivated the usage of an entirely distinct verbal form. We would expect highly individuated objects to favor morphological salience.

There is one observation that is contrary to this and suggests the motivation for this construction is mainly morphological. Intransitive verbs with a dummy, non-referential object that display transitive morphology are not excluded from this formation, such as J. Zaxo *qam-gamṣ-ī-la* ‘They smiled’, lit. ‘they smiled (it)’ (Cohen 2012:142). This cannot be connected with prominence.

4.4.2.3. *Ergativity and Split A-Marking*

The marking of the A, however, is also involved in the *qam-qaṭal*-construction. An agent acting on a highly animate and referential participant will indirectly also receive distinct coding, i.e. the A and P are jointly treated differently, when the P is minimally a non-third person form. It is possible that the markedness, or the coding weight, of the entire construction, therefore, shifts in proportion to the P (Barotto 2015:238). If this is correct, this would be a person or prominence-driven inversion of the morphosyntax, rather than one driven by grammatical aspect. A transitive perfective construction dedicated to a pronominal P, serving as a device to mark the patient differently in the preterit but at the cost of indirectly also affecting the encoding of the A in the same paradigm. Transitive perfective past clauses are, thus, treated very differently from intransitive perfective past clauses. Compare the following labile verb *pθx* ‘open’ in (89a) and (89b). The intransitive construction always involves a *qṭil*-based form while the transitive counterpart shifts to the *qaṭal*-based form to cross-reference the object.

(89) **J. Betanure** (NW Iraq; Mutzafi 2008a:256.399, 266.426)

	[S]	[V-S]	
a.	<i>tarʔa</i>	<i>pθax-le</i>	(itr. preterit, <i>qṭil</i> -)
	door:MS	open _{PFV-3MS}	
	‘The door opened’		
	[P]	[V-A-P]	
b.	<i>tarʔa</i>	<i>qam-pāθx-i-le</i>	<i>ṭal-u</i> (tr. preterit, <i>qam-qaṭal</i> -)
	door:MS	PFV-open _{IPFV-3PL-3MS}	DAT-3MS
	‘They opened the door for him.’		

¹⁴³ Compare English *outrun* as in *John outran Mary* against simply *run*.

The presence of *qam-* as well as two distinct verbal indexes which cross-reference the A and P indicates that the clause is transitive as well as perfective past. This is consistent with the tendency of agreement affixes to become devices to differentiate between intransitive and transitive verbs (Givón 1976:168). In NENA, the TAM-marker *qam* is, thus, specified for perfective pastness as well as two-argument clauses.

This distinction is even more grammaticalized in varieties where the E-set of patient indexes is completely absent (cf. Mengozzi 2002b:42). One such dialect is Christian Koy Sanjaq (Mutzafi 2004b). The perfective TAM-marker *qa-* (like *qam-*) is combined with *qaṭal-* as the only, but only, expression of the perfective past with a P index:

(90) **C. Koy Sanjaq** (NW Iraq; based on Mutzafi 2004b)

	[V-S]		
a.	<i>sməx-la</i>	'She stood'	(S = L-set)
	[V-A] [P: fNP]		
b.	<i>ḡze-le baxta</i>	'He saw a woman.'	(A = L-set)
	[V-A-P: PRO]		
c.	<i>qa-ḡaze-Ø-la</i>	'He saw her.'	(A = E-set, P = L-set)

Unfortunately, Mutzafi (2004b) provides no data for the differential indexing of objects in the perfective past. There is evidence for its usage elsewhere, e.g. *xrud-le ʔe ḡūda* 'Demolish_{SG} (lit. **it_M**) **this wall**!' (Mutzafi 2004b:255, 256). Should this dialect express this in the preterit at all, it must employ the non-inverted construction as in (89c): hypothetically, *qa-ḡazy-a-le ʔe yāxora* 'She saw (lit. **him**) **this child**'.

In C. Koy Sanjaq, therefore, the *qṭil*-perfective is only found in patientless verbal forms. The L-set is used to mark the S and A for a *qṭil*-based form only and at the same time only the P for a *qam-qaṭal*-based form. When the verb takes an object index, the whole construction changes to that of the 'imperfective' morphology where it is the L-suffixes that denote the object. The marking of the A shifts accordingly. Indeed, the two perfective paradigms are in complete complementary distribution. What is principally a means to differentially mark the P in other dialects, constitutes a major distinction in the coding of the A in Christian Koy Sanjaq. A form like *nšəq-la* 'She kissed' cannot be combined with an object person form of any kind (neither E- nor L-set) but shifts to a form like *qa-našq-a-*

le ‘She kissed him’ instead. Object indexes are reduced to verbal forms based on *qaṭəl-* and the L-set of person forms.

It is difficult to capture this pattern in traditional terms of alignment typology. Table 33 shows an overview.

Table 33. *Alignment in the preterit in Christian Koy Sanjaq*

ITR.	[no P]	<i>qṭil-</i>			
				S	
				L-set	
TR.	[P: fNP]	<i>qṭil-</i>	A		P
			L-set		∅
	[P: PRO]	<i>qam-qaṭəl-</i>	A		P
			E-set		L-set

Although it is obviously partly parasitic on the accusative morphosyntax of the ‘imperfective’, there is a conspicuous morphosyntactic division in the inflectional paradigm of the perfective past based on the transitive coding which, strictly speaking, does not unambiguously select a particular set of grammatical functions but a combination thereof. When person marking of the P is absent, it is clearly nominative, grouping S and A together by means of the L-set of person markers (*qṭil-*) (the P being ∅). Should we include, however, the presence of a person index of the P, then it is A that is treated differently, and the P is grouped ergatively with the S by means of the L-suffixes, albeit attached to a different inflectional base (*qam-qaṭəl-*). It is the A that is treated differently while the S and P remain unaffected.

This pattern, therefore, seems to be basically ergative¹⁴⁴. Chyet (1995:245) adopts the term “pseudo-ergative” to refer to the dialects that use the *qam-qaṭəl*-preterit¹⁴⁵. He prefers this term, because transitive and intransitive verbs are treated differently. The distinction, however, is not between transitive and intransitive verbs *per se* but the presence or absence of person marking of the P. It is only one of the basic transitive constructions that triggers ergative agreement, when the P is a dependent person form¹⁴⁶.

¹⁴⁴ Khan (2017:891-892) appears to have reached the same conclusion by including this in his most recent discussion of ergative alignment.

¹⁴⁵ For a different view, see Coghill (2016:63, 65) who subsumes this under accusative alignment.

¹⁴⁶ This is a type of co-argument sensitivity (Witzlack-Makarevich et al. 2016).

If we would subsume this under a single, unified system, we could call it ‘antiaccusative’¹⁴⁷ as the mirror image of Comrie’s ‘antiergative’ type (1975, 1978:380-383), since the A is coded differently in the presence of the P (while this is the opposite in the ‘antiergative’ type where the P is coded differently in the absence of the A). The morphosyntax splits along two distinct constructions of which one is associated with the trigger potential of the P (*qam-qaṭal-*) and the other with the trigger potential of the S and A (*qṭil-*). The L-suffixes serve to signal the more salient argument in both constructions.

4.4.3. *Ergative Alignment in Peripheral Christian Dialects*

The doubling of L-suffixes in the preterit (e.g. *nšāq-la-le* ‘She kissed him’) neutralizes grammatical distinctions. S, A and P are all marked by means of the same L-suffixes. In some Christian dialects, of which Hertevin (SE Turkey) is thus far the only remaining witness¹⁴⁸, this is partly avoided. A distinct set is used to mark the agent that marginalizes the doubling of L-suffixes (and, consequently, neutral alignment). This set is modelled on the ‘imperfective’. This results in special marking of the A in a way comparable to the *qam-qaṭal*-preterit, and thus ergative alignment, albeit confined to the first and second person rather than the third.

4.4.3.1. *Fluid s-Marking*

Christian Hertevin shows various (person role) splits. First of all, subject indexes from the E-set are found in active-stative subject marking. The S is fluid for all persons; the L-set for the perfective past, the E-set for the realis perfect.

(91) **C. Hertevin** (SE Turkey; Jastrow 1988)

a.	<i>dmeḥ-li</i>	‘I fell asleep.’	(preterit, s = L-set)
b.	<i>dmiḥ-en</i>	‘ I_M have fallen asleep.’	(perfect, s = E-set)

The subject indexing in (91b) is further confined to positive polarity and realis mood (Jastrow 1988:58). It may also be found for anticausatives, e.g. *ptiḥ-a* ‘It_F

¹⁴⁷ This is not to be confused with a distinct use of the same term in Creissels (2009) where it represents the marked nominative case form or adposition and in Siewierska (1985) where it designates anticausative verbs.

¹⁴⁸ See Pennacchietti (1991; 1994:274-275) for examples in scribal idiolects from NW Iraq which suggest this construction is not necessarily a recent development and used to be more common. Special marking of the A is also found in the dialect of Umra (SE Turkey) (Fox 2009:53).

opened / was opened'. The masculine singular is often lengthened and extended with an obscure particle *-ek* in Christian Hertevin, i.e. *pteḥḥ-Ø + -ek → pteḥḥek* 'It_M has opened, has been opened' (Jastrow 1988: 53). There is no firm evidence it is productively used for transitive verbs (as in C. Bohtan see §5.1, see further below). Generally, in expressing transitive realis perfect clauses, C. Hertevin resorts to the actualizing pre-verbal TAM-marker *hole*¹⁴⁹ that may also be redundantly added to intransitives. This parallels the system in Jewish Rustaqa where the preverb is *lā* (see §5.1.2), as compared below.

C. Hertevin				J. Rustaqa	
(SE Turkey; Jastrow 1988:57-58)				(NE Iraq; Khan 2002b)	
(92)	PRETERIT				
a.	(Ø)	<i>ḥze-le</i>	‘He saw’	(Ø) <i>xze-le</i>	(A = L-set)
b.	(Ø)	<i>ḡite-le</i>	‘He came’	(Ø) <i>dye-le</i>	(S = L-set)
(93)	REALIS PERFECT				
a.	<i>hole</i>	<i>ḥze-le</i>	‘He has seen’	<i>lā</i> <i>xze-le</i>	(A = L-set)
b.	<i>(hole)</i>	<i>ḡite-Ø</i>	‘He has come’	<i>lā</i> <i>dye-Ø</i>	(S = E-set)

4.4.3.2. Multiple Transitive Constructions

When we turn to transitive coding, there are several constructions available and each of them is person-restricted: a typical 'perfective' construction confined to third person patients (*wid-a-le* 'He made it_F'), a double L-set construction confined to third person agents (*wid-le-la* 'He made it_F') and a mixture of the two confined to the first and second person agents (see below). The argument belongs to a particular person category and this absolute ranking determines the choice of a construction. Only the A and P are affected, while the S is not. In actual transitive clauses, different combinations of person forms are possible.

First of all, object indexes from the E-set are limited¹⁵⁰ to 3pl. and 3fs. in C. Hertevin so that *wéd-le* can only mean 'He made', not ***wéd-Ø-le* 'He made **him**'. This set is mainly used in cross-indexing to an object NP, especially in P-V word order (Jastrow 1988:63). Clauses that omit the patient or include full indefinite nominal patients are treated similarly to intransitive clauses. When the P is a full

¹⁴⁹ The preverbal actualizer *hole* is historically an invariant third person form of the presentative copula, cf. *lā* in J. Arbel and Rustaqa (Khan 1999; 2002b).

¹⁵⁰ They can also mark the subject in the realis perfect (e.g. *dmih-en* 'I have slept'), see §5.1.2.

indefinite NP, the verb expresses agreement only with the A (grouped with the S in the perfective past) but definite NPs may be indexed through the E-set:

	[V-A]	[P]	
(94)	<i>gnu-le</i>	<i>robʔiyet</i>	
	'He stole a bushel .'		
(95)	<i>gniw-a-le</i>	<i>robʔiyet</i>	
	'He stole the bushel .'		

Secondly, additional L-suffixes are available to denote the patient for all persons, e.g.

(96)	<i>wéd-le-le</i>	'He made him '
	<i>wéd-le-li</i>	'He made me '

Agent marking L-suffixes combined with patient marking L-suffixes are not available for all persons, however. For first and second person agents, C. Hertevin blends the L- and E-suffixes to a separate set which we shall refer to as the L-E-suffixes, for example:

(97)	<i>wéd-l-áh-lehon</i>	'We made you _{PL} '	(** <i>wed-lan-lehon</i>)
	<i>wéd-l-ét-ti</i>	'You _{MS} made me'	(** <i>wed-loh-li</i>)

4.4.3.3. Possible Motivations

A closer examination reveals that the expression of the A differs for the non-third person forms but is partly identical with the 'imperfective'. The shape and order of the E-suffixes (such as *-en* 1MS) followed by L-suffixes (such as *-lah* 2FS) are exactly the same (e.g. *-en-nah* < *-en* + *-lah*), but an /l/-element intrudes between the perfective base and the argument encoding. We can schematize this as follows:

(98)	<i>haz</i>	<i>-en</i>	<i>-lah</i>	<i>hazennah</i>	'I _M see you _{FS} '
	IPFV	A	P		
	BASE-	E-SET	L-SET		
	PFV-	↓L↓-	A	P	
	<i>hze-</i>	<i>l-</i>	<i>en</i>	<i>-lah</i>	<i>hzelénnaḥ</i>
					'I _M saw you _{FS} '

This transitive perfective construction, therefore, shows a peculiar case of blending of both the E- and L-suffixes to, what I would term, 'L-E-suffixes'. These

‘L-E-suffixes’ are of a binary ‘L-’ and ‘E-’ nature: They can be treated either like E-suffixes or like L-suffixes. They generally align with the L-suffixes where they pattern like the double L-set construction for third person pronouns, and the past marker is put before the L-suffixes:

(99) **L-E suffixes after past convertor** (Jastrow 1988:61)

<i>hze-</i>	<i>-wa</i>	<i>-le</i>	<i>-la</i>	<i>hzewalela</i>	‘He had seen her’
BASE	-PAST	-L(-E)	-L		
<i>hze-</i>	<i>-wa-</i>	<i>-l-en</i>	<i>-la</i>	<i>hzewalenna</i>	‘I _M had seen her’

Occasionally, however, they align with the E-suffixes that encode non-third person forms¹⁵¹, such that the past convertor *-wa-* precedes it like the ‘imperfective’:

(100) **L-E suffixes before past convertor** (Jastrow 1988:62)

<i>haz</i>	<i>-en</i>	<i>-wa</i>	<i>-lah</i>	<i>hazenwalah</i>	‘I _M saw you _{FS} ’
BASE	(L)-E	-PAST	-L		
<i>hze</i>	<i>-l-en</i>	<i>-wa</i>	<i>-lah</i>	<i>hzenwalah</i>	‘I _M had seen you _{FS} ’

The L-E-series are possibly an attempt to avoid both agreement inversion and neutral alignment through the stacking of L-suffixes. The same set, for instance, is also employed in the expression of the predicative possessor, if another L-suffix follows, e.g. *let-la haye m-tu mendi* ‘**She has** no knowledge about anything’, *lét-l-áh-le* (*let-lan* + *-le*) *haye* ‘**We have** no knowledge of that’ (Jastrow 1988:66-67). Moreover, it is interesting to note that the person restriction on the expression of the agent in the double L-set construction (*hze-le-li* ‘They saw me’) is also found in the expression of themes. Two consecutive L-suffixes are also employed in non-perfective ditransitive constructions. Thus, unlike the majority of NENA dialects, C. Hertevin allows a double L-set construction in the ‘imperfective’ as well as the imperative, e.g. *hal-le-li* ‘Give **them** to me’ (*hal* ‘give!’ + *-lehen* ‘them’ + *li* ‘me’). This is limited to a third person theme index and parallels the restriction to the third person agent immediately following the ‘perfective’ (*qtil-*). (101) offers a schema for comparison¹⁵².

¹⁵¹ In theory, the 3fs. L-suffix *-la* could also be interpreted as an L-E-suffix composed of *-l-* and 3fs. *-a*. It is possible the analogy started here.

¹⁵² In other contexts, the R is expressed indirectly by means of the preposition (*la*)- ‘to, for’, e.g. *matʔen-nen-na lal-ew* ‘I_M loaded it **for him**’ (Jastrow 1988:112.59).

(101) C. Hertevin (SE Turkey; Jastrow 1988:63)

		[A]	[P]	
		[3]	[1,2,3]	
a.	<i>hze-</i>	le	<i>-li</i>	' They saw me.'
	seePFV	A:3PL	P:1SG	
		[T]	[R]	
		[3]	[1,2,3]	
b.	<i>hal-</i>	le	<i>-li</i>	'Give them to me!'
	give:IMPV	T:3PL	R:1SG	

In light of this, it would seem that, at least for C. Hertevin, stacking of L-suffixes is principally avoided depending on person reference and not a particular participant role by itself, since this is disfavored for both themes as well as agents; a rather unusual combination.

The 'intrusive' /l/ partly also functions as a TAM-marker in the verbal system. If it were omitted, the construction would essentially be realis perfect *hze-en-naḥ* 'I_M have seen you_{FS}' as opposed to the preterit *hze-l-en-naḥ* 'I_M saw you_{FS}'. This appears to be extremely rare, however. The only example of this occurs in *ʔaya=sse qbıl-en-na* 'that, too, I_M have accepted (lit. it_F)' (Jastrow 1988:58-59). This is in tension with the orientation of (di)transitive verbs elsewhere, e.g. *qıl-en* 'I_M have been killed' (Jastrow 1988:59), *hellek* 'It_M has been eaten', *qıellek* 'It_M has been killed', *hiw-a* 'It_F is given' (Jastrow 1988:152.432, 156.499). Speakers prefer the actualizing preverb *hole* to express the transitive realis perfect on the basis of the preterit instead: *hole hze-l-en-naḥ* 'I_M have seen you_{FS}'.

4.4.3.4. Ergativity and Split A-marking

Speakers, therefore, use several constructions to express the perfective past. The three that include a reference to the P are sensitive person role effects and are reviewed in Table 34. Like the *qam-qaṭal*-construction (see §4.4.2), the L-E-suffixes only occur together with object indexes. They cannot be used to encode the S or the A without an index of the P. Constructions like ***dmeḥ-l-en* 'I_M slept' with subject coding instead of simply *dmeḥ-li* are impossible. Agent coding without a patient index is not possible either: ***hze-l-en (há)-baḥta* 'I_M saw a woman'. When there is no patient index, the S and A are treated alike by means of the L-suffixes (*dmeḥ-li*, *hze-li*). When the P is indexed, however, the whole construction changes depending on either the person of the P or the person of the A.

Table 34. *Three types of transitive ‘perfective’ constructions in C. Hertevin (SE Turkey)*

<i>qtil-</i>	P	A	
E-SET + L-SET	[-1,2;3 _{MS}] -E	[±1,2] -L	<i>gni-w-a-le robʔiyet hākoma</i> ‘They have stolen (lit. it_F) the king’s bushel ’
<i>qtil-</i>	A	P	
L-E-SET + L-SET	[-1,2] -L-E	[±1,2] -L	<i>hʒé-l-én-na baħtoħ</i> ‘ I_M saw (lit. her) your _{MS} wife.’
L-SET + L-SET	[-1,2] -L	[±1,2] -L	<i>hʒé-le-la baħtoħ</i> ‘ He saw (lit. her) your _{MS} wife.’

Source: Based on Jastrow (1988).

Dialects like C. Hertevin, therefore, not only have a person-driven differential marking of the P (*gni-w-a-li* ‘I stole **it_F**’ vs. *hʒé-la-li* ‘She saw **me**’), but also a person-driven differential marking of the A (*hʒé-le-la* ‘**He** saw her’ vs. *hʒé-l-én-na* ‘**I_M** saw her’). The use of the E-set as patient indexes for third person forms (*gni-w-a-le* ‘I stole **it_F**’) mirrors its incorporation as agent indexes in the L-E-set for first and second person forms (*hʒé-l-én-na* ‘**I_M** saw her’).

Consequently, although scholars widely recognize that the parallelism between the ‘L-E-set’ and the E-set in the ‘imperfective’ (e.g. Pennacchietti 1994), it seems to me that their usage in the preterit gives rise to an unmistakably ergative alignment pattern¹⁵³ for non-third person arguments. The following schema illustrates this.

(102) **Ergative pattern for non-third person reference in C. Hertevin (SE Turkey; Jastrow 1988)**

- a. (intransitive)
dméh-leħon ‘**You_{PL}** fell asleep.’
 sleep_{PFV-S:2PL}
- b. (transitive)
hʒé-l-áh-leħon ‘We saw **you_{PL}**.’
 see_{PFV-A:1PL-P:2PL}

¹⁵³ Khan (2017) recently came to a similar point of view. By contrast, the inverted ‘perfective’ construction is simply taken for granted as ergative in Barotto (2015:244–245). She considers the first/second person rather accusative and the third person ergative. Also, Coghill (2016:63, 65) subsumes Hertevin under dialects with accusative alignment.

The L-series groups the S and P. The L-E-series expresses the isolated A. Neutral alignment would be found in most other contexts where S, A and P are all marked by the L-set (*wéd-la-le* 'She made him')¹⁵⁴. One should recall that the ergative alignment found for the preterit in Jewish NENA dialects is sensitive to the person reference of the P. In C. Hertevin, the ergative alignment in the preterit is sensitive to the person reference of the A.

4.5. Summary

The L-set functions as agent indexes in the expression of the perfective past. The marking of the P in the inverted 'perfective' construction is restricted in most NENA dialects. When the P outranks the A on the person scale, the E-set is more acceptable to speakers. This person role split is generally attributed to ergativity (e.g. Mengozzi 2005; Doron and Khan 2012) but we noted that such splits occur regardless of alignment type (see also the person split in the progressive in §5.3.1). The absence of a person role split does seem to correlate with accusative alignment, since it appears that only in dialects that group the S and A, person marking can be unrestricted. Coincident with this person constraint, the ergative alignment of the S with the P in South Eastern Trans-Zab Jewish varieties (roughly Iraqi and Iranian Kurdistan) is confined to contexts of third person reference. They mark the first and second person necessarily and third person alternatively (i.e. [$\pm 1, 2$]) through an independent set of person forms based on the dative preposition (*ʔəl*)-, the *ʔəl*-series, resulting in tripartite person marking. Jewish and Christian dialects that pattern accusatively throughout are similar in this respect. The person split depends on the type of coding strategy. Transitive constructions are largely uniform but intransitive constructions diverge. Cliticization of the *ʔəl*-series in post-verbal position leads to a considerable degree of overlap up to virtually full neutralization with the L-suffixes in J. Saqqiz.

Alignment does seem to correlate more strongly with valency alternations. Several passive voice constructions are available to dialects. They are generally preferred over the agentless 'perfective' (such as the combination of the resultative participle and the 'copula' or the verb *hwy* 'be'). The agent is usually not overtly expressed in passives. Virtually all effective transitive verbs are labile in both the ergative Trans-Zab Jewish varieties and the dynamic-stative varieties of

¹⁵⁴ This is apart from the alternative pattern for 3fs. and 3pl. where the P may be marked by the E-set (*wid-a-le* 'He made **her**').

NENA. Semantic and morphological factors indicate that the agentless ‘perfective’ form, although interpretable as passive, is essentially anticausative and the patient-like argument is the s.

The agentless form is more complicated in ‘accusative dialects’ and allows for a kind of impersonal labile alternation. It shares properties with the passive (referential reduction of the A) and ergative type (referential continuity of the A), and seems to me to neatly fit in neither category. The possible addition of a dative agent to the agentless ‘perfective’ form (*q̣til*- ‘kill_{PFV}’) is found mostly in early textual witnesses and this may point to more ergative-like treatment of the A. The combined marking of the agent through the preposition (*ʔəl*)- and the L-suffixes does not occur. It is possible that the agent agreement is dropped to focalize the agent. The agent may be marked by (*ʔəl*)- and this tends to add agent focus which is not characteristic of the passive. This might be an instance of optional ergative case-marking conditioned by agent focus that is peculiar to the ‘perfective’. The person marking, however, is best characterized as tripartite.

Both person-restricted and unrestricted dialects can avail themselves of alternative strategies in person marking. As summarized below, independent prepositional ps, the double L-set construction, the L-E-series and the *qam-qatəl*-construction seem to share one basic property, and that is to render the L-suffixes that follow agent coding as they do in the ‘imperfective’ (V-A-P) to become the regular expression of pronominal patients throughout the verbal system instead of the inverted ‘perfective’ (V-P-A) (cf. Hoberman 1989:111, Mengozzi 2002b:46). It seems that what differentiates these constructions is at what cost the L-suffixes become available in patient-marking in accordance with the ‘imperfective’.

(103) Alternative strategies to mark the P

		A	P	
a.	<i>q̣til</i>	-L		INDEFINITE FULL NOMINAL P
b.	<i>q̣til-</i>	-L	<i>ʔəl-</i>	PREPOSITIONAL P (§4.1.2)
c.	<i>q̣til</i>	-L	-L	DOUBLING OF L-SET (§4.4.1)
d.	<i>q̣til</i>	-L-E-	-L	BLENDING OF L-SET AND E-SET (§4.4.3)
e.	<i>qam-qatəl</i>	-E	-L	THE <i>qam-qatəl</i> -CONSTRUCTION (§4.4.2)
	<i>°qatəl</i>	-E	-L	E-SET AND L-SET IN THE ‘IMPERFECTIVE’

Several dialects systematically employ a special transitive *qam-qaṭal*-construction in the preterit that can be characterized as ergative in grouping the S and P through L-suffixes, while the A is isolated through the E-suffixes. The L-suffixes mark the P attached to an ‘imperfective’ (*°qaṭal-*) form inflected for the A that is marked for perfective past aspect through the prefix *qam-*. This construction is dedicated to the expression of a transitive perfective past clause involving obligatory verbal person marking of both A and P as an alternative to the (person-restricted) E-series as patient markers.

Dialects with neutral alignment include Jewish varieties in Iranian Azerbaijan such as J. Urmi and western peripheral Christian in SE Turkey dialects such as C. Hertevin and Bohtan. These varieties employ the L-set to mark the patient attached to the same L-set that marks the agent in a double L-set construction (*xzé-li-lax* ‘I saw you_{FS}’).

Unlike C. Bohtan and J. Urmi, C. Hertevin disallows neutral alignment for first and second person patients and subverts this by the in(ter)vention of a new set of agent markers, termed the ‘L-E-suffixes’. The ‘L-E-suffixes’ blend together E-suffixes (akin to the ‘imperfective’ system) and a preceding /l/-element taken from the L-suffixes. The first and second person pattern ergatively in the preterit in C. Hertevin, as they are isolated through a special set of person forms.

Apart from independent person forms, the strategies to mark the P that are employed as an alternative to the E-set seem to have infiltrated the verbal inflection of the preterit in analogy to the ‘imperfective’. Although they are analogical to the ‘imperfective’ (*qaṭal-*), they are paradigmatically linked with constructions based on the ‘perfective’ (*qṭil-*) that do not involve patient indexing. The morphosyntactic pattern of the ‘imperfective’ appears to be favored in constructions that do involve patient indexes and incidentally triggers morphological adaptation ranging from partial to complete adaptation. It seems that what differentiates these constructions is at what cost the L-suffixes become available in patient-marking in accordance with the ‘imperfective’. This is at the cost of role discrimination in the double L-set construction (*xzé-li-la* ‘I saw her’) because all roles are treated the same way, at the cost of the marking of the A through the L-series being replaced by the blended L-E-suffixes (*ḫzé-l-én-na* ‘I saw her’), and at the cost of the inflectional base as a whole in the *qam-qaṭal*-construction (*qam-xaz-ən-nax* ‘I_M saw her’). At the same time, what differentiates neutral alignment from the L-E-series and *qam-qaṭal*-construction seems to be the avoidance of doubling the L-set or at least approximating the ‘imperfective’ more closely to maintain role discrimination between the A and P. Dialects, thus, differ to what extent they tolerate ambiguity.

5. ALIGNMENT SPLITS IN NENA BASED ON VERB-RELATED PROPERTIES

Our discussion of alignment in NENA continues with the realis perfect and splits within the inflection of the ‘perfective’. This chapter is divided between simple constructions based on the ‘perfective’ (*qṭil-*) and compound verbal forms ultimately based on nominal forms of the verb such as the resultative participle (*qṭila*) which is morphologically and sometimes also functionally similar to the ‘perfective’ inflectional base. I use the terms simple and compound to distinguish between the two, because synthetic as opposed to analytic/periphrastic does not fully qualify due to the grammaticalization of finite verbal forms out of formerly analytic constructions in several dialects.

One should note that the terms ‘preterit’ and ‘perfect’, though functionally motivated, should be taken loosely and are in principle morphological categorizations. The ‘preterit’ (*qṭal-le* ‘He killed’) in NENA dialects, for instance, can express retrospective and resultative aspect, sometimes even proximative (Noorlander 2017), apart from the recent or perfective past in indicative clauses. Compound ‘perfects’ based on the resultative participle (*qṭila* ‘killed’) in turn can also express perfective past events in narrative discourse and can be used interchangeably with ‘preterit’ forms (e.g. in Christian Barwar, Khan 2008a:669-672).

There are four main realis perfect constructions in NENA:

- the ‘perfective’ (*qṭil*-form) itself;
- preverbal TAM-marking added to the ‘perfective’ (*qṭil*-form);
- distinct subject and/or agent coding in the ‘perfective’ (*qṭil*-form).
- compound perfect based on the resultative participle (*qṭila*) and a ‘copula’.

As we will see, the coding of the agent and/or subject is not symmetric across the ‘preterits’ and ‘perfects’ in all dialects. Dialects may even mix these constructions across intransitives and transitives. It is an important distinction whether dialects prefer preverbal TAM-marking or TAM-marking via distinct sets of dependent person forms or both.

In all of the so-called ‘dynamic-stative varieties’, it is the transitive realis perfect that stands out and displays the greatest diversity, since the difference in subject coding for the intransitive-resultative (e.g. *qim-Ø*) creates a gap for the transitive counterpart:

(1)		PRETERIT (DYNAMIC)	REALIS PERFECT (STATIVE)
TR.	<i>qtəl-le</i>	'He killed'	 'He has killed'
ITR.	<i>qim-le</i>	'He rose'	<i>qim-Ø</i> 'He is/has risen'

Compound verbal forms may interact with the 'perfective' and manifest converging or diverging alignment patterns. Both the compound perfect and the intransitive-resultative based on the 'perfective' penetrate the expression of the realis perfect but differently per dialect. The transitive realis perfect and transitive 'perfective' constructions are presumably morphologically adapted to the 'imperfective'. The morphosyntactic pattern of the 'imperfective' appears to be favored in transitive constructions overall and incidentally even triggers morphological adaptation.

5.1. Verb-Related Splits in Simple Verbal Forms

The preceding discussion mainly concentrated on argument-related properties in alignment splits. Morphosyntactic alignment also interacts with several verb-related properties which could be subsumed under semantic transitivity in NENA dialects (Khan 2004a:295-305, 2007a). We will concentrate on the two sets of person indexes that are suffixed to the 'perfective' inflectional base (*qtıl-*). Although the majority of dialects make no distinction between S (e.g. *qim-la* 'She rose') and A (e.g. *qtəl-la* 'She killed'), the marking of the S in the 'perfective' shows considerable diversity in a minority of dialects.

Lexical semantics is not a necessary determinant for transitive coding but they do evince some effects. As schematized in (2) below, agent-like coding (i.e. the L-set) will tend to cluster around the semantic properties on the right edge and hallmark an increase in the salience of the effect, sometimes increased agentivity, and perfective, punctual and dynamic event properties (cf. Khan 2004a:304-305). Patient-like coding (i.e. the E-set), as in inchoative or antipassive constructions, tends to cluster around the left edge and trigger a decrease in the salience of the effect correlating with a non-punctual, result state-oriented type of situation. In addition, when the patient is expressed as oblique (i.e. prepositional), it will tend to be less affected than when it is coded like the P (i.e. the E-set).

(2) Intransitive vs. transitive subject indexes

	E-suffix ($\supseteq$)		($\subseteq$) L-suffix
	←		→
	INTRANSITIVE		TRANSITIVE
	S argument		A argument
	patient-like		agent-like
Animacy	inanimate		animate, human
Agentivity	uncontrolled		controlled
TAM scale	stative > resultative > perfect > perfective past		
Dynamism	stative		dynamic
Punctuality	non-punctual		punctual

It should be noted that, regardless of semantics, agent coding may also occasionally be extended to intransitive verbs when they co-occur with a transitive verb. The L-suffixes that mark the agent of a transitive verb are attracted to an immediately preceding intransitive verb. Normally, the intransitive verb *zyl* ‘go’ is inflected through E-suffixes but in (3) below it takes an L-suffix to index the subject argument due to the following transitive verb:

- (3) *ʔay-zıl-wa-la* *mır-wa-la* *baqa* *Mərza* *Xǎnǎká*
she-go_{PFV}-PST-S:3FS say_{PFV}-PST-A:3FS DAT PRN PRN
‘She went (and) said to Mərza Xǎnǎka.’ (J. Sanandaj, W Iran; Khan 2009: 375)

All in all, it will be shown that the distinction in subject-marking does not evince a neat split between agentive and patientive verbs. It is the more agent-like marking of subjects that seems to be less predictable. This does not mean that agentive features such as control are completely irrelevant (cf. Khan 2004a:304). Verbs that are oriented towards a state (stative) or endpoint (telic) as well as a subject that lacks or has little control/agentivity favor patient-like marking. One purely morphological exception is the existential, respectively, copula verb *hwy* ‘be’. The stronger implication of a patient-like effect increases the agent-like subject coding (Khan 2004a:304-305, 2007a), yet, as we will see, this does not always apply.

5.1.1. *Split Subject and Agent-Marking in South Eastern Trans-Zab Jewish Varieties*

Intransitive verbs may take P-like coding (S_P) or A-like coding (S_A). There is no clear-cut distribution but semantic factors pertaining to agentivity, affectedness and lexical aspect do play a role. We shall first discuss several lexical verb classes and finally proceed to other relevant factors in more detail following Khan (2004a:295-305).

South Eastern Trans-Zab Jewish dialects show ergative alignment in the 'perfective'. The marking of the S is not uniform, however, and where the S is differentiated, this is not entirely arbitrary and semantic and morphological transitivity play a role. While most intransitive verbs ergatively align the S with the P (henceforth S_P), there are a few classes of intransitive verbs that accusatively align the S with the A (henceforth S_A) as illustrated in (4) below. Compare *ʔby* 'swell' and *nwx* 'bark' in J. Sulemaniyya:

(4) **Split subject-marking** (J. Sulemaniyya; Khan 2004a:298-300)

- a. (S_P patient-like intransitive)
zbot-í ʔaby-a 'My finger swelled.' (E-set)
- b. (S_A agent-like intransitive)
kalbá nwax-le 'The dog barked.' (L-set)

Fluid subject-marking may also occur. One single verb may occur in either S_A or S_P forms, e.g. *nqas-la* 'She pricked' and *nqis-a* 'It_F pricked' (Khan 2009:304; see further below). Although intransitive verbs mainly belong to stem I, other stems may also be intransitive, e.g. *gandar-Ø* 'It_M rolled' vs. *zarzar-re* '(The horse) neighed' (Khan 2004a:300).

Khan (2004a:295-305)¹⁵⁵ argues that the transitive semantics and/or morphosyntax of the clause specifies the selection of L-suffixes for the marking of the S which would otherwise be marked differently. Khan (2004a:304-305, 2007a:152-153) concludes that the following major factors condition this:

1. The action has an affectee that is expressed by an object.
2. The subject of the clause possesses the properties of an agent, such as being the controller and instigator of the action.
3. The verb has punctual Aktionsart.
4. The predicate is dynamic, expressing action rather than non-action.

¹⁵⁵ Cf. Khan (2007a:148-152, 2008b:73-75, 2009:302-308).

As already mentioned in §4.3.3, verbs conveying a telic, punctual and dynamic event such as *ʔxl* ‘eat’ and *pqy* ‘shoot’ may omit the patient, while the coding of the agent remains the same. The patient *tfanga* for example may be omitted in (5b):

- (5) **J. Sulemaniyya** (NE Iraq; Khan 2004a:297, 301)
- | | | | |
|----|----------------------------|----------------------------|-----------------------|
| | [P] | [V-A] | |
| a. | <i>tfanga</i> | <i>pqe-le</i> | (patient specified) |
| | rifle:FS | shoot _{PFV-A:3MS} | |
| | ‘He shot a gun.’ | | |
| | [V-S _A] | | |
| b. | <i>pqe-le</i> | | (patient unspecified) |
| | shoot _{PFV-S:3MS} | | |
| | ‘He shot.’ | | |

The coding of the agent may also be omitted for the same verbs, so that the agent is left unspecified:

	[P]	←	[V-P-A]	
c.	<i>tfangǎké</i>		<i>pəqy-a-le</i>	(specified agent)
	rifle:FS:DEF		shoot _{PFV-P:3FS-A:3MS}	
	‘He fired the rifle.’			
	[S]	←	[V-S _P]	
d.	<i>tfangǎké</i>		<i>pəqy-a</i>	
	rifle:FS:DEF		shoot _{PFV-S:3FS}	
	‘The rifle was fired (by sb.).’			
	(agent unspecified)			
	‘The rifle exploded.’			

Apart from Khan’s first factor, one might conclude from Khan’s factors that agent-like intransitives (S_A) are treated like such patient omission constructions.

The classes of verbs that typically instantiate S_A or S_P are summarized in Table 35 (on the next page). Examples are all taken from the Jewish dialect of Sulemaniyya (Khan 2004a) that are representative for all such varieties that exhibit ergative inflection in the ‘perfective’. The shades of meaning in between are more variable. The top row verb class comprising verbs denoting a patient-oriented state or (dis)position such as *zəde-Ø* ‘be afraid’ and the bottom row comprising an agent-oriented activity such as *ʔʔal-le* ‘play’. These represent the

two types of intransitive constructions that are considered the maximal opposites of one another.

Table 35. *Patient-like or agent-like marking of the s in J. Sulemaniyya*

VERB CLASS	CODING	EXAMPLES
state, (dis)position	E-set	<i>nəxip-Ø</i> 'be ashamed', <i>zəde-Ø</i> 'be afraid', <i>piš-Ø</i> 'remain'
change of state, (dis)position		<i>kəpin-Ø</i> 'become hungry', <i>səmiq-Ø</i> 'become red', <i>tiw-Ø</i> 'sit'
uncontrolled process		<i>pil-Ø</i> 'fall', <i>mil-Ø</i> 'die', <i>šəre-Ø</i> 'slip', <i>pəqe-Ø</i> 'explode'
controlled activity		<i>rəqil-Ø</i> 'dance', <i>məte-Ø</i> 'arrive', <i>lip-Ø</i> 'learn', <i>pəriq-Ø</i> 'finish'
reflexive: 'washing'		<i>saxe-Ø</i> 'wash, bathe', <i>xəpe-Ø</i> 'id.'
reflexive: 'grooming', 'putting on/off'	L-set	<i>lwəš-le</i> 'dress', <i>šləx-le</i> 'undress', <i>gre-le</i> 'shave'
sound emission, incl. bodily reactions, animal sounds		<i>nwəx-le</i> 'bark', <i>tpəl-le</i> 'sneeze', <i>gərgəm-le</i> 'thunder'
copula, existence (<i>hwy</i>)		<i>ye-le</i> 'be'
patient omission, mainly typically human activities		<i>xəl-le</i> 'eat', <i>šte-le</i> 'drink', <i>tʃəl-le</i> 'play', <i>hqe-le</i> 'speak'

Source: *Data from Khan 2004a:298-30*

The verbs that are most likely to receive patient-like coding (i.e. the E-set) are those that typically denote a situation oriented towards one single participant that registers a transitory state, e.g. *nəxip-Ø* 'He was ashamed', *kənip-Ø* 'He became hungry'. Those verbs that are most likely to receive agent-like coding (i.e. the L-set) are those that at least imply a change in a patient-like argument, even though no such patient argument is expressed explicitly. These include transitive verbs of which the patient may be omitted, e.g. *xəl-le* 'He ate', in which the ergative coding of the A is retained. As Khan points out (2009:303):

The use of the transitive inflection for these verbs, therefore, can be explained by the fact that there is an implied 'latent' affectee of the action, although this is not necessarily specified.

The stronger the implication of a patient, the more likely the A-like coding.

Generally, S_A -marking includes, for example, inherently reflexive verbs related to grooming or putting something onto oneself such as (6a) and (6b).

(6) **Reflexives** (J. Sulemaniyya; Khan 2004a:258, 296, 300; 2007a:150)

- a. *lwəš-le* 'He dressed himself.' (reflexive, *S_A*)
 b. *kse-le ba-baṭaní.* 'He covered himself with a blanket.' (reflexive, *S_A*)

Unlike other reflexive constructions, these verbs are not constructed together with a reflexive pronoun with additional person indexing through 'possessive' suffixes, e.g.

- c. *noš-aw məndy-a-la* *tex.* (reflexive object pronoun)
RFL-3FS throw_{PFV}-P:3FS-A:3FS down
 'She threw **herself** down.'

There are reasons to treat (6a) and (6b) as a type of patient omission¹⁵⁶. Firstly, the patient can also be made explicit, e.g. *jəl-éf ləwš-i-le* 'He put on **his clothes**', *təqn-éf gəry-a-le* 'He shaved **his beard**' (J. Sanandaj; Khan 2009:303). Moreover, these verbs can also be inflected in a patient-like fashion in an agentless construction:

- d. *lwiš-Ø* 'He was dressed (by sb. else).' (agentless, *S_P*)
 e. *kəse-Ø* 'He was covered (by sb. else).' (agentless, *S_P*)

The causative counterpart of these verbs also follows the pattern of patientless constructions. The causative of J. Sulemaniyya *lwəš-le* 'He got dressed', for instance, is stem III *məlbəš-le* 'He dressed sb.' (Khan 2004a:586) like patientless constructions such as *xəl-le* 'He ate' corresponding with stem III *mxəl-le* 'He fed sb.' (Khan 2004a:588). All of this suggests that they are, in fact, hardly distinct from patientless constructions where the patient is not expressed but clearly implied. An important difference, however, is that the agent of reflexive verbs is much more so affected than other verbs that have an implicit patient. One could view the explicit patient as a supplementary extension of a self-oriented action where the primary affectee is still most agent-like. That is, clauses like *jəl-éf ləwš-i-le* 'He put on his clothes' literally mean 'He dressed (in) clothes'. In the derived causatives of this verb, the additional object is also semantically secondary but more theme-like, e.g. *jullé labl-i-wa julle malbiš-i-wa-le* 'They took

¹⁵⁶ For a different view, see Coghill (2016:71-73) who considers this a type of fluid subject-marking.

his clothes and dressed him **in clothes**' (Khan 2004a:566.13), lit. 'they used to dress him clothes'. It would, therefore, be interesting to investigate whether the agentless forms *lwiš-Ø* 'He was dressed (by somebody else)' could also combine with such a secondary object, i.e. *lwiš-Ø jullé* 'He was dressed (in) clothes (by somebody else)'.

This notwithstanding, there are other intransitive constructions that are understood as reflexive but their subjects do not align with the A. These are notably *sxy* and *xpy* conveying 'wash (oneself)', for example:

f.	<i>bronăké xip-Ø-la</i>	'She washed the child'	(transitive, A = L-set)
g.	<i>xip-a</i>	'She washed, bathed.'	(reflexive, S = E-set)

Thus, a verbal form like *xip-a* would not denote an agentless intransitive event like 'She was washed (by sb. else)' and no other affected participant is implied than the subject. There is presumably a less strong implication of a patient for verbs like *xpy* 'wash' than verbs like *lwš* 'dress'. They do not take a secondary object like *lwš* 'dress' and the patient of 'wash' is the sole, primary affectee.

Semelfactive verbs in turn, including animate and inanimate sound emissions and less controllable bodily reactions such as *phr* 'yawn', *šhl* 'cough' and so forth are well-known in typological literature to share features with primary transitive verbs (Lazard 1998:136-139; cf. Sorace 2000:877). They are not equivalent in all dialects (see further below). In J. Sulemaniyya, all such intransitive verbs are inflected like the A:

(7) **Semelfactives** (J. Sulemaniyya; Khan 2004a:300, 2007a:151; transcription adapted)¹⁵⁷

a.	<i>kalbá nwəx-le</i>	'The dog barked.'
b.	<i>ʔewá gərgəm-le</i>	'The cloud thundered.'

Lazard (1998:139) suggests that such verbs tend to take *S_A* coding, because they imply a single, instant, manifestation impressing on a perceiver via the senses (see §2.3.1). This is morphosyntactically realized in an implicit P that that triggers *S_A* coding. Indeed, such verbs may take a cognate object in NENA, for example:

¹⁵⁷ These verbs correspond with Central Kurdish (Sulemani) phrasal transitives composed of *kirdin* 'do' and an indefinite noun phrase (Khan 2007b).

- c. (*tapoltá*) *tpəl-le* 'He sneezed (a sneeze).'

In what follows, we will examine more sophisticated distinctions on the basis of the following factors that correlate with S_A or S_P coding:

- agentivity or animacy;
- affectedness;
- aspectual factors;
- morphological factors.

5.1.1.1. Agentivity or Animacy

Other dialects in NW Iran will differentiate between semelfactives on the basis of agentivity. The subject's agentive properties, Khan's second factor, come into play here. In J. Qarah Hasan, for instance, (8a) 'bark' as an animal noise verb is distinct from (8b) 'sneeze' as a bodily action in which the latter is presumably viewed as an uncontrolled process (like *pil-Ø* 'fall') instead. The subject of *tpəl* 'sneeze' in (8b) is more patient-like than the subject of *nwx* 'bark' in (8a) through lack of control.

(8) J. Qarah Hasan (W Iran; Khan 2009:306)

- a. *nox-le* 'It_M barked' (S_A , controlled)
 b. *tpil-Ø* 'He sneezed' (S_P , uncontrolled)

Such instantaneous bodily reactions are known to lead to ambiguity in the degree of control of the s (Khan 2009:305; cf. Sorace 2000:877). It would be interesting to know, however, whether the verb in (8b) could take a cognate object or not. If not, this could also explain why the S is not marked like the A.

In the related dialect J. Sanandaj, animacy plays a role. If the subject is inanimate, the verb is categorized as intransitive and takes E-suffixes, compare:

(9) J. Sanandaj (W Iran; Khan 2009:294, 304-306)

	[S]	[V- S_A]	
a.	<i>xmara</i>	<i>sre-le</i>	(S_A , animate)
	donkey:MS	bray _{PFV-3MS}	
	'The donkey brayed.'		
	[S]	[V- S_P]	
b.	<i>ʔewá</i>	<i>gərgám-Ø</i>	(S_P , inanimate)
	cloud:MS	thunder _{PFV-3MS}	
	'The cloud thundered.'		

The inanimate subject *?ewá* ‘cloud’ of *grgm* ‘thunder’ in (10b) is inherently more patient-like than the animate subject *xmara* ‘donkey’ in (10b). Again, the animal noise verb is S_A . Note that the inanimate subject in (10b) is not necessarily less instigating than the A, so that the choice of between the S_P and S_A from depends on animacy in J. Sanandaj and not instigation/agentivity.

This also seems to hold for bivalent verbs that combine with prepositional complements and generally involve an aimer and a target as participants. Compare the alternation for the verb *nqs* ‘prick’ in (11) below. The subject is either animate or inanimate. When the subject is inanimate, the verb receives S_P coding (E-suffixes), if it is human and instigating, it receives S_A coding (L-suffixes) (Khan 2009:304). This is a fluid type of subject-marking conditioned by agentivity.

(10) **Animate (A-like) vs. inanimate (P-like) s** (J. Sanandaj; Khan 2009:304, 543)

	[S]	[V-S]	[OBL]	
a.	<i>baxtáke</i> woman:FS:DEF	<i>nqas-la</i> prickPFV-3FS	<i>ga-?il-í</i> at-hand-my	(S_A , human)
‘The woman pricked (lit. at) my hand.’				
b.	<i>xmatá</i> needle:FS:DEF	<i>nqis-a</i> prickPFV-3FS	<i>ga-?il-í</i> at-hand-my	(S_P , non-human)
‘The needle pricked (lit. at) my hand.’				

Animacy and agentivity also correlate. Khan (2009:304) notes that verb *ylp* ‘learn’ may also manifest this alternation depending on control. The A-like coding entails that the human subject learnt something through deliberate effort (controlled) and P-like coding entails that the human subject was taught something (uncontrolled).

(11) **Controlled (A-like) vs. uncontrolled (P-like)** (J. Sanandaj; Khan 2009:304, 543)

a.	<i>?ó rába mǝndixané</i> he many thing:PL	<i>ylap-le</i> learnPFV-3MS	(controlled, more A-like)
‘He learnt many things (by himself).’			
b.	<i>?ó rába mǝndixané</i> he many thing:PL	<i>yálip-Ø</i> learnPFV-3MS	(uncontrolled, more P-like)
‘He learnt many things (when taught by somebody else).’			

Nevertheless, one should note that the cross-linguistically, most typically agent-like intransitive verbs are controlled activities such as ‘dance’ (Croft

1998:52-53; see §2.3.1.). It is striking, then, that the most agent-like intransitive subject is treated like the P in Jewish Sulemaniyya, e.g. *rəqil-Ø* ‘He danced’. This is a noteworthy exception to Khan’s second factor (agentivity). Khan (2007a:150) points out that such verbs lack an implicit patient and do not have a labile counterpart with a transitive valence pattern. Clearly, however, such verbs could potentially take an object (cp. English *We danced the tango*) and some of them do, for example, *ylp* ‘learn’. The agent-like experiencer is coded like the A in the transitive valence pattern but like the P in the intransitive counterpart:

(12) **J. Sulemaniyya** (NE Iraq; Khan 2004a:301, 2007a:150)

a.	<i>torá lip-le</i>	‘He learnt Torah.’	(A = L-set)
b.	<i>lip-Ø</i>	‘He learnt.’	(S = E-set)

As we will see further below, Khan (2007a:150) explains such exceptions in J. Sulemaniyya on the basis of aspect.

5.1.1.2. Degree of Affectedness

The coding of the patient (Khan’s first factor) interacts with transitive semantic factors. The choice of intransitive or transitive coding and the degree of effectiveness on the part of the agent is generally connected with the greater degree of affectedness on the part of the patient (cf. Tsunoda 1981, 1985, see §2.3.3). The alternation between (13a) and (13b) depends mainly on whether the patient is more definitively affected or not (cf. Tsunoda 1985). In (13a), the less affected patient is encoded as oblique through the preposition *ba-*. The patient *yalaké* is only partially affected and the verb literally conveys ‘became attached to’ (Khan 2004a:304). The direct counterpart to this is (13b). The patient is completely affected, and this is expressed in the primary transitive morphosyntax.

(13) **OBL opposed to P** (J. Sulemaniyya; Khan 2004a:304)

	[S]	[V-S]	[OBL]	
a.	<i>hanga</i>	<i>dwiq-a</i>	<i>bă-yalaké</i>	(OBL, less affected)
				‘The bee stung the child.’
	[P]	[V-P-A]		
b.	<i>yalăké</i>	<i>dwəq-Ø-la</i>		(P, more affected)
				‘She seized the child.’

5.1.1.3. Aspectual Factors

Thus far we have observed splits based upon verbal classes and properties of arguments (Khan's first and second factor). Variation in s-marking is also partly conditioned by properties of the situation or event as a whole, i.e. aspect (Khan's third and fourth factor). This concerns punctuality and dynamism. In (14) below, for instance, the difference in punctuality plays a role, and in (15), the degree of dynamism (Khan 2008b:73-74).

(14) **Punctual (A-like) vs. durative (P-like)** (J. Sulemaniyya; Khan 2004a:305)

a.	<i>torá lip-le</i>	'He learnt Torah.'	(A, punctual)
b.	<i>ga-maktáb lip-Ø</i>	'He learnt at school'	(S _P , non-punctual)

Khan (2004a:301) explains that patient-like form of *ylp* 'learn' in (14b) refers to a "more diffuse, durative activity, spread over a long period of time, although presented perfectly as a unitary whole". Hence, the choice of patient-like over agent-like coding depends on durativity.

The difference between *prq* 'finish' and *bdy* 'begin' in (15) interacts with action-dynamics (Khan 2004a:304). *prq* 'finish' in (15b) expresses the cessation (endpoint) of an activity resulting in an enduring state of completion (i.e. durative and stative) and, hence, aligns with the P. *bdy* 'begin' entails the initiation of an event with a greater degree of dynamism and, hence, aligns with the A.

(15) **Active-dynamic (A-like) vs. stative (P-like)** (J. Sulemaniyya; Khan 2004a:301)

a.	<i>haštá (m)pərq-a-le</i>	'He finished the work.'	(stem II transitive)
b.	<i>pəriq-Ø m-xalá</i>	'He finished eating.'	(S _P , more stative)
c.	<i>bde-le b-xalá</i>	'He started eating.'	(S _A , more dynamic)

The S_P construction, therefore, seems to be favored for durative and stative situations (in accordance with Hopper and Thompson's transitive semantics, see §2.3.3). We could schematize this as follows:

(16) **Lexical aspect**

LESS TRANSITIVE	MORE TRANSITIVE
durative	punctual
stative	dynamic
E-set ($\supseteq$ S)	L-set ($\supseteq$ A)

Nevertheless, one should note that many dynamic verbs such as *pəqe-Ø* ‘explode’ (also punctual) and *rqil-Ø* ‘dance’ are not *S_A* verbs.

5.1.1.4. Morphological Factors

Purely morphological factors can also be important determinants. As expected, the absence or presence of object coding can result in A-like coding. Firstly, there are intransitive verbs that exhibit dummy, non-referential 3fs. object coding compare (17a-b) below. Lazard (1998:137) calls this an anti-impersonal construction. The referentiality of the P is reduced but some third person morphology is maintained (see §2.3.1). A-like subject coding is used, because the E-suffixes are reserved for the non-referential P. Hence, a verb like *gɒk* ‘laugh’ in (17a) is generally treated differently from *bɒy* ‘cry’. One single lexeme *ʔrq* in (17b) can express a semantic distinction between ‘flee’ and ‘run’ that is reflected in the type of inflection¹⁵⁸. The verb *gɒk* ‘laugh’ can also occur without transitive coding to express an incidental occurrence of laughter (Khan 2009:308).

(17) Verbs with non-referential 3fs. object (J. Sanandaj; Khan 2009:307-308)

a.	<i>gəxk-a-le</i>	‘He laughed’	vs.	<i>bəxe-Ø</i>	‘He wept’
b.	<i>ʔərq-a-le</i>	‘He fled’	vs.	<i>riq-Ø</i>	‘He ran’

When such verbs take a prepositional complement, the coding remains A-like, e.g. *gəxkale gai* ‘He laughed at me’ (Khan 2009:515). Dialects may differ in this respect. Compare *pəx* ‘rejoice’ in Jewish Saqqiz and Sanandaj:

c.	J. Saqqiz	J. Sanandaj
	(Israeli 1998:118)	(Khan 2009:523)
	<i>pəx-a-le</i>	<i>pəxix-Ø</i> ‘He rejoices’

The same verb *pəx* ‘rejoice’ takes A-like subject coding and combines with a prepositional complement in Jewish Sulemaniyya:

(18) J. Sulemaniyya (NE Iraq; Khan 2004a:582)

- [V+S=A] [OBL]
pəx-a-le baʔəu ‘He was happy with him’

¹⁵⁸ Semantically, verbs that exhibit a dummy object typically belong to the middle voice (cf. Mengozzi 2005).

The verb *hwy* ‘be’ takes A-like subject coding in all these dialects, e.g. *ye-le* ‘He was’. This is most likely morphologically motivated. The L-suffixes are presumably a means to express the past. A paradigm based on the E-series would have been morphologically identical to the present copula forms. Compare the forms for J. Sulemaniyya (Khan 2004a) below:

(19)	PAST	PRESENT
= <i>ye-le</i>	‘He was’	= <i>ye-Ø</i> ‘He is’
= <i>ye-la</i>	‘She was’	= <i>y-a</i> ‘She is’
= <i>ye-lan</i>	‘We were’	= <i>y-ex</i> ‘We are’ etc.

5.1.1.5. *Complex Predicates*

Complex predicates or light verb constructions where the verb takes a dummy full NP also occur, most of which are replicated either in material or pattern from Persian and/or Kurdish combining with *ʔwl* ‘do’ or *xØr* ‘become’ (e.g. Khan 2009:153), e.g. *ʔila wi-le* ‘He began’, lit. ‘He hand-did’. The verb itself determines the *S_A* or *S_P* coding. The construction may also be applied to non-Iranian material, e.g. *miłá xir-Ø* ‘He was circumcised’, lit. ‘He became circumcision’ (Khan 2009:586). They can also combine with additional referential object coding, e.g. *tahdíd wil-a-le* ‘He threatened **her**’, lit. ‘He threaten-did her’ (Khan 2009:109).

5.1.2. *Dynamic-Static Subject-Marking*

While aspectual factors play a role in the fluid subject marking in the South Eastern Trans-Zab Jewish varieties, this is more grammaticalized in the active-stative alignment that occurs, among others, in dialects that are otherwise described as neutral. The marking of the s in the ‘perfective’ is fluid between patient-like and agent-like coding depending on aspect. Doron and Khan (2012) refer to these dialects as ‘dynamic-stative’. Although I follow their terminology in this monograph, the aspectual opposition is primarily between perfective against resultative or retrospective aspect.

Among the Trans-Zab Jewish dialects, we noted that the southeastern Trans-Zab subgroup including Sulemaniyya (NE Iraq) and Sanandaj (W Iran) patterns ergatively. Active-stative fluid subject-marking is found further to the northwest in Iraqi Kurdistan and Iranian Azerbaijan. They minimally group together s and A through the L-set (*dməx-lan* ‘We slept’ : *nšəq-lan* ‘We kissed’), but they differentiate between E-suffixes and L-suffixes to mark the subject depending on aspect, as illustrated below.

(20) **Fluid s-marking conditioned by TAM****J. Urmi** (NW Iran; Garbell 1965; Khan 2008b)

- a. (perfective aligns with the A)
**dm̥ax-le* 'He went to sleep.'
- b. (resultative aligns with the P)
**dmix-∅* 'He is asleep, has gone to sleep.'

The patient-like inflection (i.e. E-set) for the s serves to denote an observed state resulting from a prior event. This can generally encompass stative, resultative, or retrospective (i.e. perfect) aspect, all of which are properly subsumed under the imperfective aspect focusing on a continuous result state against the perfective past representing the event completed in the past as a whole. This covariation is a fluid type of subject-marking where the *S_A* form (i.e. L-set) expresses the perfective past (i.e. wholly completed dynamic event) and the *S_P* form (E-set) the perfect or resultative (i.e. an enduring result state). The result-oriented *S_P* form (E-set) interacts with a fundamental distinction between transitive and intransitive realis perfect constructions. As a realis perfect, it is generally confined to the expression of result states of which its continuation in the actual present is inferred from direct perceptible evidence. In expressing the transitive counterpart, the 'dynamic-stative dialects' must have recourse to other means of coding.

The aspectual nuances and temporal context of the 'perfective' construction (*S_A* form) itself can be extended to the durative present in NENA dialects in general. In Christian Barwar, for example, it not only expresses the perfective past, but also a continuous result state in the present (cf. Maclean 1895:143-144, §54), such as *hadiya di-li ʔana* 'Now I know' (Khan 2008a:615), which can also have ingressive nuances, such as *kpin-ne* (< **kpin-le*) 'He has become hungry' (ibid.), or proximative *miθ-le* 'He is about to die' (Noorlander 2017). Several dialects, however, have grammaticalized this distinction through preverbal TAM-markers that indicate the realis perfect. These are, for example, the particles *ʔale* in J. Barzani and *lā* in J. Arbel and J. Rwanduz¹⁵⁹:

(21) **Consistent subject-marking but distinctive TAM preverb****J. Barzani**

(N Iraq; Mutzafi 2002a)

J. Arbel

(NE Iraq; Khan 1999)

¹⁵⁹ This is presumably a fossilized 3fs. form of the copula 'It_F is' (Khan 2007d).

a.	($\emptyset$)	<i>he-le</i>	($\emptyset$)	<i>?ilye-le</i>	'He came.'	(preterit)
b.	<i>?ale</i>	<i>he-le</i>	<i>lā</i>	<i>?ilye-le</i>	'He has come.'	(perfect)

Preverbal TAM-marking added to the 'perfective' is also found in Christian dialects, namely C. Sanandaj (Panoussi 1990, transcription modified):

- (22) ($\emptyset$)-*?ise-le* 'He came' (preterit)
gi-?ise-le 'He has come' (perfect)

There is, therefore, either a tense-aspectual distinction between perfect or preterit by the choice of a preverbal actualizing TAM-marker (J. Arbel *lā qim-le* 'He has risen' vs. ($\emptyset$) *qim-le* 'He rose') or by the choice of person agreement markers (J. Urmi *qim- $\emptyset$* 'He has risen' vs. *qim-le* 'He rose').

Jewish Rustaqa, a dialect located near to Rwanduz and bordering Arbel and Urmi, combines these two strategies. The same particle generally and redundantly accompanies the patient-like form (*qim- $\emptyset$* 'He is risen') in a fluid type of s-marking. The actualizer *lā* together with E-suffixes to mark the subject (*lā qim- $\emptyset$* 'He is risen') shifts the event viewpoint to a state resulting from prior action (Khan 2002b:404) against the agent-like form, as compared below. There appears to be no semantic difference between the presence or absence of the actualizer *lā*; it always combines with the S_P form.

(23) **Fluid s-marking and distinctive TAM preverb**

J. Rustaqa (NE Iraq; Khan 2002b:404)

a.	($\emptyset$)	<i>dye-le</i>	'He came (but might not be here).'	(dynamic)
b.	<i>lā</i>	<i>dye-$\emptyset$</i>	'He has come and is here now.'	(stative)

Finally, fluid subject-marking is not peculiar to Trans-Zab Jewish dialects or recently documented dialects. Mengozzi (2002b:38-39; 2005:249-250) notes that the usage of E-suffixes to mark the subject co-existed alongside L-suffixes in the earliest Christian NENA textual witnesses in North Iraq (17th century), e.g.

(24)	<i>su-li</i>	'I became old'	(perfective, s = L-set)
	<i>siw-en</i>	'I have become old'	(resultative, s = E-set)

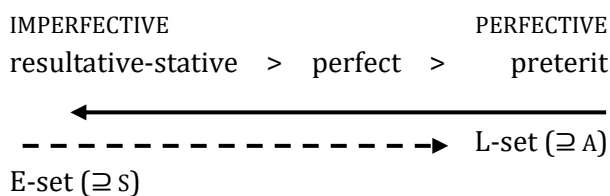
In a few other dialects, there are traces of earlier tense-aspect-sensitivity¹⁶⁰. In J. Bétanure, for instance, only the intransitive verb *pyš* ‘remain’ retains an *s_P* form expressing a perfect, e.g. *šop-əd kepe lá-piš* ‘No trace of stone has remained’ (Mutzafi 2008a: 68). The same formation of the verb *ʔzl* ‘go’ (*zil-a* ‘She is gone’) has grammaticalized into a proximative auxiliary ‘be about to’ in the Christian dialects of the Mosul plain from its resultative sense ‘be gone to’ (Borghero 2008:85; Coghill 2010:375; cf. Rhétoré 1912:156). In Jewish Barzani (Mutzafi 2002a), *s_P* forms are found for the modal auxiliary *mšy* ‘be able’, e.g. *mšil-ən* ~ *ħmil-ən* ‘I_M would be able’ vs. *mše-li* ‘I was able’ (preterit). The earliest NENA texts also retain examples of this type, e.g. *ʔəθy-a sāləd* ‘The hour has come’ (Sabar 1976: fn. 56), *la snīq-Ø* ‘It isn’t needed’ (Sabar 2002:242a).

Among the more recently documented Christian dialects, fluid subject-marking is still productively found in the western periphery such as C. Hertevin (SE Turkey; Jastrow 1988):

- (25) *dmeħ-li* ‘I fell asleep’ (perfective, s = L-set)
dmiħ-en ‘I have fallen asleep’ (resultative, s = E-set)

In terms of grammatical aspect, then, the E-suffixes that mark the s are further removed from the perfective past than the L-suffixes that mark the A on the TAM scale in (26), where L-set becomes less likely and E-set more likely from right to left.

(26) **Tense-Aspect-Mood scale**



The patient-like E-set (minimally for the s), therefore, if it exists in a NENA variety, will not be more grammaticalized to the right than the agent-like L-set (minimally for the A) on this scale. This aspectual scale applies particularly to stem I verbs to which most intransitive verbs belong. The L-suffixes are subject indexes with an inherent proclivity towards a perfective, punctual and dynamic

¹⁶⁰ Cf. also J. Koy Sanjaq in §5.3.3.

tense-aspectual profile (Khan 2004a:304-305). Diachronically, then, the *q̇til*-form with E-suffixes is generally less grammaticalized in NENA dialects along the path from resultative to perfective past, while the *q̇til*-form with L-suffixes has fully grammaticalized and sporadically still betrays traces of its original resultative-stative source.

5.1.3. TAM-Sensitive Alignment Splits

The inflection of the ‘perfective’ (*q̇til*-) constitute the basis of both perfective past (preterit) and resultative or realis perfect constructions in several NENA dialects. The preterit and realis perfect as such may express the following different types of alignment:

- accusative perfect against neutral preterit;
- ergative and tripartite perfect against accusative preterit.

5.1.3.1. Accusative-Neutral Split

The previous subsection concerned a distinction in the marking of the S. Intransitive verbs can occur in a patient-like subject form to denote the realis perfect (E-set) and an agent-like subject form to denote the preterit (L-set). This is also found for transitive verbs in the dialect of Bohtan (SE Turkey; Fox 2009). In Bohtan, spoken by Christians, the E-set is used to mark the realis perfect for intransitive verbs as in other Christian varieties such as Hertevin (SE Turkey; Jastrow 1988), for example:

(27) **C. Bohtan** (SE Turkey; Fox 2002:72, 73.3, 2009)

a.	<i>q̇am-li</i>	‘I got up, rose.’	(preterit, action-focus S = L-set)
b.	<i>q̇im-ən</i>	‘I _M am up, have risen.’	(perfect, result-focus S = E-set)

This dialect, however, is unique in that the ‘perfective’ not only inflects for different subject indexes but also different agent indexes. The E-set not only combines with the *q̇til*-base to mark the S but also the A in the realis perfect, as exemplified below.

c.	<i>ġze-∅-wa xa xalma</i>	‘He had seen a dream.’	(perfect, A = E-set)

The object indexes belong to the L-set:

d.	<i>ġz-ən-na</i> (< -ən + -la)	‘I _M have seen her.’	(perf., A = E-set, P = L-set)

- e. *mutw-əx-la* 'We have put them.' (perf., A = E-set, P = L-set)

The tense-aspect-conditioned inflection of the 'perfective' (*qṭil-*) affects S and A alike. The L-set consistently encodes the P. The L-set marks both the S and A only in the perfective past (*qəṁ-li* 'I rose' : *ǵzé-li-la* 'I saw her') where the E-set marks both the S and A in the realis perfect (*qim-en* 'I_M have risen' : *ǵz-ən-na* 'I_M saw her'). In light of this, the realis perfect inflection of *qṭil-* can be considered both semantically and morphosyntactically closer to the imperfective in expressing a state which continues relative to the temporal reference point. Indeed, the perfect and the 'imperfective' (*qaṭəl-*) share completely the same morphosyntax in C. Bohtan. This constitutes a tense-aspect-conditioned split between accusative and neutral within one morphological subsystem. It is the marking of the S as well as A that differs but the patient-marking is stable throughout. The two subsystems are represent in (28) and (29) below.

(28) **Preterit: Neutral**

- a. (intransitive)
qəṁ-li 'I rose.'
 rise_{PFV-S:1SG}
- b. (transitive)
ǵzé-li-la 'I saw her.'
 see_{PFV-A:1SG-P:3FS}

(29) **Realis perfect: Accusative**

- a. (intransitive)
qim-en 'I rose.'
 rise_{PFV-S:1MS}
- b. (transitive)
ǵz-ən-na 'I_M saw her.'
 see_{PFV-A:1MS-P:3FS}

Other dialects will express the transitive realis perfect differently, most often on the basis of the preterit, e.g. Jewish Arbel *lā qim-li* 'I have risen' : *lā ǵze-li* 'I have seen'.

The alignment is split along the TAM scale between neutral for the perfective past and accusative for the perfect which is closer to the aspectual profile of the 'imperfective' inflection:

(30) **Tense-Aspect-Mood scale**

IMPERFECTIVE		PERFECTIVE
perfect	>	preterit
ACCUSATIVE (E-SET)		NEUTRAL (L-SET)

5.1.3.2. *Ergative-Accusative Split*

The previous subsection mentioned Jewish Rustaqa (NE Iraq; Khan 2002b) among the dialects that exhibit fluid subject-marking conditioned by aspect. We may conclude from the following examples that the resultative also has a transitive counterpart that leads to a complex system of ergative and tripartite alignment similarly to the South Eastern Trans-Zab Jewish dialects discussed in §4.2.3.

Subject indexes may vary between agent-like and patient-like coding alongside pre-verbal TAM-marking. The TAM marker *lā* together with the E-series denoting the subject shifts the event viewpoint to a state resulting from prior action (Khan 2002b:404) against the agent-like form, as given below.

(31) **J. Rustaqa** (NE Iraq; Khan 2002b:404)

- a. (∅) *dye-le* 'He came (but might not be here).' (dynamic, s = L-set)
 b. (*lā*) *dye-∅* 'He has come and is here now.' (stative, s = **E-set**)

There is no distinction in agent coding between the preterit and perfect. *lā* expresses the realis perfect for transitive verbs where the L-suffixes mark the agent in Jewish Rustaqa:

(32) **J. Rustaqa** (NE Iraq; Khan 2002b:404)

- a. (∅) *qṭil-le* 'He killed' (preterit A = L-set)
 b. (∅) *qim-le* 'He stood up.' (preterit S = L-set)
 c. *lā* *qṭil-le* 'He has killed' (perfect A = L-set)
 d. *lā* *qim-∅* 'He is (risen and now) up.' (perfect S = **E-set**)

The choice of subject coding between E-suffixes and L-suffixes would be enough for intransitive verbs but the TAM-marking regularly precedes intransitive verbs just as the transitive counterpart. The only difference is the use of the E-set for subject person marking in the realis perfect.

Jewish Rustaqa, however, is also a person-restricted dialect. In marking the p, the E-set is limited to the 3fs. and 3pl, while non-third person arguments require an independent prepistional object (Khan 2002b:405), for example:

(33) *(lā) qṭil-ā-le* 'He (has) killed **her**.'

(34) *(lā) qṭil-le ʔill-i* 'He (has) killed **me**.'

Consequently, we not only have a split between the 'perfective' and 'imperfective' but we also have a split within the 'perfective' that is sensitive to TAM.

There are, thus, two subsystems that each have their own variation in alignment patterns. This is reviewed in (35). The dynamic and perfective aspect exhibits a markedness shift in accusative alignment depending on the type of patient-marking (see §4.2.1). The case-marking system penetrates the agreement system:

(35) **Accusative: Preterit** (J. Rustaqa, NE Iraq; Khan 2002b)

a. (intransitive)

priq-le 'He finished.'

finish_{PFV-S:3MS}

b. (transitive, 3fs. and 3pl. patient)

qṭil-i-le 'He killed them.'

kill_{PFV-P:3PL-A:3MS}

c. (transitive, non-third person or third person patient)

qṭil-le ʔill-ox 'He killed you_{MS}.'

kill_{PFV-A:3MS}

OBJ-2MS

The realis resultative or perfect counterpart evinces an ergative and tripartite pattern depending on the type of patient-marking that is conditioned by person. While the tripartite pattern is available for all persons, the ergative type is limited to the 3fs. and 3pl. This is illustrated in (36) and (37) below. The accusatively and ergatively patterning person forms (i.e. the E-suffixes) are inaccessible to the first and second person. The *ʔall*-series trigger an accusative or tripartite pattern but are both necessary for non-third person reference. Third person referents may appear in all constructions. What is interesting to note, then, is that ergative alongside tripartite alignment is found in the realis perfect rather than the preterit in this Jewish dialect. The same pattern is found for the preterit in South Eastern Trans-Zab Jewish varieties like J. Sulemaniyya (NE Iraq) (see §4.2.3).

(36) **Ergative: Realis perfect** (J. Rustaqa, NE Iraq; Khan 2002b)

a. (intransitive)

lā priq-i 'They are finished.'
 ACTZ finish_{PFV-S:3PL}

b. (transitive, 3fs. or 3pl. patient)

lā qtil-i-le 'He has killed them.'
 ACTZ kill_{PFV-P:3PL-A:3MS}

(37) **Tripartite: Realis perfect** (J. Rustaqa, NE Iraq; Khan 2002b)

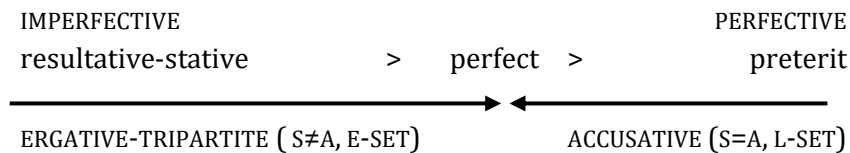
a. (intransitive)

lā priq-et 'You_{MS} are finished.'
 ACTZ finish_{PFV-S:2MS}

b. (transitive, non-third person or third person patient)

lā qtil-li ʔill-ox 'I have killed you_{MS}.'
 ACTZ kill_{PFV-A:1MS} OBJ-2MS

The alignment is split along the TAM scale between the grouping of s and A for the dynamic focus that generally expresses the perfective past and the distinction between s and A through either ergative or tripartite alignment for the result focus which is closer to the aspectual profile of the 'imperfective' inflection:

(38) **Tense-Aspect-Mood scale**

Thus, Christian Bohtan and Jewish Rustaqa evince another morphosyntactic split within the inflection of *qtil-*, the 'perfective'. The difference seems to be purely morphological. The dialects show two very distinct splits but the cutoff point along the TAM scale is similar. The perfective past is expressed in a neutral fashion in Christian Bohtan where all grammatical functions are marked by the L-set (much like Jewish Urmi), while the realis perfect patterns accusatively exactly like the 'imperfective'. Jewish Rustaqa evinces how the ergative-tripartite person indexing alignment in 'ergative dialects' is confined to the resultative and perfect and exists alongside the perfective past that patterns accusatively like 'accusative dialects' (such as Jewish Arbel).

5.1.4. TAM-Marking through Verbal Person Marking

What appears to be most central to the two major inflectional systems in NENA is the fundamental difference in marking between agent coding (*q̇til*-L vs. *qaṭal*-E). What is first and foremost peculiar to the ‘perfective’ against the ‘imperfective’ is the alignment of the S with any other function but rather reserving the L-series for the A in the perfective past. The morphosyntactic differences are particularly morphologically conditioned and not merely aspectual as such (cf. Polotsky 1979:208; Haig 2008:9 on Iranian). Otherwise we would expect that perfective aspect *per se* would always trigger agreement inversion, but this is not the case. It is also dependent on the type of inflectional base (i.e. *q̇til*-). This will be demonstrated by an alternative (transitive) *qam*-*qaṭal*-preterit. Tense-aspect discrimination, however, is crucial in the selection of either an E-set of subject indexes or L-set of subject indexes, the latter minimally also denoting the A in the perfective past.

A *qaṭal*-based construction found across dialects serves to indicate the preterit of transitive clauses with pronominal patients and competes with the ‘perfective’ (*q̇til*-). All that is changed is the preverbal TAM-marking, for example:

(39) TAM-preverbal preterit (J. Amidya; Hoberman 1989:103-104)

- c. *k-šamṭ-i-la* ‘They hear her.’
IND-hear_IPFV-A:3PL-P:3FS
- d. *qam-šamṭ-i-la* ‘They heard her.’ (= *šmiṭ-a-lu*)
PFV-hear_IPFV-A:3PL-P:3FS

The perfective past preverb *qam*-, or dialectal variants thereof, is added to the ‘imperfective’ inflectional base to render it equivalent to the perfective and create a (transitive) preterit. In both cases, the morphosyntax specific to the inflectional base is kept intact. (40) offers a comparison of two preterits.

(40) Two types of preterits in J. Amidya (Hoberman 1989, Greenblatt 2011)

<i>qam-</i>	<i>našəq-</i>	<i>ax-</i>	<i>lu</i>	<i>qamnašqaxle</i>	‘We kissed them.’
PFV-	IMPFV	A	P		
TAM-	STEM-	E-set	L-set		
	PFV	P	A		
	<i>nšiḡ-</i>	<i>ax-</i>	<i>lu</i>	<i>nšiḡaxle</i>	‘They kissed us.’

<i>*dməx-li</i>	‘I fell asleep.’	(preterit)
<i>*dmix-en</i>	‘I _M have fallen asleep.’	(perfect)

And yet, the E-suffixes may still be an alternative expression of third person patients in the preterit: *xəzy-a-li* ‘I saw **her**’ occurs besides *xzé-li-la* ‘I saw her’. Interestingly, however, according to Khan’s (2008b:259) informants for Jewish Urmi, the two types of patient-marking are not functionally equivalent. The doubled L-set typically expresses remote past events, while the person-constrained forms with an E-suffix typically express recent past events:

<i>xzé-le-la</i>	‘He saw her.’	(back then)
<i>xəzy-a-le</i>		(just now)

The tense nuance between remote and recent pastness that correlates with the type of patient-marking resembles the difference between preterit and perfect in subject coding (e.g. *dmix-a* ‘She has just fallen asleep’). Possibly, an intransitive form like *dmix-a* ‘She has (just) fallen asleep’ is influencing the tense-aspectual profile of forms like *xəzy-a-le* ‘He saw her just now’.

One should note most NENA dialects express the transitive realis perfect differently from Christian Bohtan. The transitive counterpart can be differentiated by a distinct TAM preverb. In J. Rustaqa, a dialect closely related to Urmi, the TAM-marking preverb *lā* marks the difference for transitive verbs (see §5.1.2).

It is a noteworthy fact that in all of these dialects where the S and P are grouped through the E-set, this is constrained by person, so that forms like ***nšiq-ən-na* ‘She kissed **me**’ do not occur (cf. Goldenberg 1992:125). Such forms with non-third person patients tend to be blocked particularly in dialects where the S is marked by means of the same E-set (*qim-ən* ‘I rose, have/am risen’ : ***nšiq-ən-na* ‘She kissed **me**’). Diachronically, the person split possibly indicates that first/second person enclitics have not fully grammaticalized to the P function in all NENA dialects, especially when their S-marking function is still present (which would account for why only accusative varieties can be person-unrestricted).

Early Christian Iraqi scribal idiolects might constitute a possible exception. They appear to reflect archaic uses of the E-set to mark both the S and P for all persons (Mengoizzi 2002b). Some early Jewish texts also exhibit a few traces of an E-set of subject indexes (Sabar 2002:49), e.g. .g. *ʔəθy-a sāfəd* ‘The hour has come’ (Sabar 1976: fn. 56), *la snīq-Ø* ‘It isn’t necessary’ (Sabar 2002:242a). Pa-

tient-like subject indexes (e.g. *siw-en* 'I_M have become old', *yθ-ən* 'I_M have come') co-existed for result-oriented nuances alongside the predominately agent-like subject indexes (e.g. *su-li* 'I became old', *yθe-li* 'I came') for the perfective past (Mengozi 2002b:38-39; 2005:249-250). The earliest witnesses from Iraq, therefore, bear witness to active-stative alignment where person-marking used to be unrestricted (Mengozi 2005) but do not evince a coherent form of ergative alignment. The default expression of the S is identical with the A (Mengozi 2002b:38). Accordingly, Mengozi (2002b:44-46) notes that "when Neo-Aramaic first appears in written sources" the transitive and intransitive inflection is "based on a non-ergative paradigm" and shows a system that "cannot be regarded as ergative in itself".

There is, then, no complete and coherent manifestation of ergative alignment in NENA. The two sets of person markers are not entirely neutral in relation to TAM, especially as subject and/or agent indexes. The E-set typically lacks behind in the grammaticalization from resultative to preterit (see §5.4). In C. Bohatan, this even applies to the agent for all persons (e.g. *ptix-i-le* 'They have opened it_M'). Apart from the inflectional base, dialects mark TAM distinctions through preverbs and/or subject and agent coding. Although the split between imperfective and perfective aspect is mainly morphological depending on inflectional base (*qaṭəl-* vs. *qṭil-*), TAM semantics clearly contributes. All major dialect types but especially 'dynamic stative dialects' indicate that the L-set also has a TAM-marking function in opposition to the E-set in the expression of the S and/or A.

5.2. Compound Verbal Forms

While the 'imperfective' is the general expression of the indicative imperfective aspect and the 'perfective' may be used to express the resultative or perfect as we saw in the previous section, speakers can generally also avail themselves of compound verbal forms. Compound verbal forms combine a 'copula' or the verb *hwy* 'be' with the infinitive or agent noun or the resultative participle in the expression of the progressive respectively perfect. One should note that such compound 'perfects' based on the resultative participle (*qṭila* 'killed') can also express perfective past events and replace 'preterit' forms based on *qṭil-* (e.g. in Christian Barwar, Khan 2008a:669-672). We will concentrate on accusative patterns in the majority of dialects and postpone other types in Trans-Zab Jewish varieties to the next section. Generally, the 'copula' cliticizes to the verbal element in the expression of the realis, non-negated, present, unless it attaches to

another element for pragmatic purposes. The deictic copula and negative copula are independent and precede the verbal element.

5.2.1. *Perfect and Progressive*

Eastern Neo-Aramaic languages employ a set of enclitic person forms generally termed the “enclitic copula” (Khan 2012). This series is principally used to construct non-verbal clauses denoting the present affirmative, or non-negative, as exemplified in (42a-b). They may also serve as the basis for analytical verbal constructions or even verbal inflection in NENA. The enclitic ‘copula’ is widely used in compound verbal forms based on a verbal noun, the infinitive (*qṭala* ~ *qaṭole* ‘killing’) or agent noun (*qaṭola* ‘killer’), or a verbal adjective, the resultative participle (*qṭila* ‘killed’), in the expression of mainly the progressive or the perfect as illustrated in (1b-c). This subsection will discuss the main types of compound verbal forms across NENA dialects. Not all dialects have grammaticalized a resultative participle and ‘copula’ to the expression of a perfect. In J. Arbel (NE Iraq; Khan 1999:284-285), for instance, the resultative participle is entirely confined to intransitive verbs and a few transitive verbs expressing durative situations entailing close proximity between agent and patient such as *rkiwá* ‘ride’ (< ‘having mounted’) and ‘dwell’. The orientation of the resultative participle is generally ambiguous. This is discussed in greater detail in §5.2.3.

(42) **J. Koy Sanjaq** (NE Iraq; Mutzafi 2004a:190.18, 48, 125, 130)

a.	<i>šer=wen</i> lion:MS=S:1MS ‘I _M am a lion.’	(nominal predicate)
b.	<i>gis-ta=wan</i> tired-FS=S:1FS ‘I _F am tired.’	(adjectival predicate)
c.	<i>rxāša=wex</i> walk:INF=S:1PL ‘We are walking.’	(progressive)
d.	<i>rxiša=wex</i> walk:RPP:MS-S:1PL ‘We have (lit. are) walked’	(perfect)

First of all, the ‘copula’ varies greatly in NENA (cf. Khan 2012:32). The paradigms in (43) provide some insight.

(43) The basic ‘copula’ (present affirmative) in NENA

	C. Hertevin	J. Zaxo	J. Sule- maniyya	C. Urmi	J. Urmi
	SE Turkey (Jastrow 1988)	NW Iraq (Cohen 2002)	NE Iraq (Khan 2004a)	NW Iran (Marogulov 1976) ¹⁶¹	NW Iran (Khan 2008b)
3MS	= <i>ile</i>	<i>īle (le)</i>	= <i>y(e)</i>	= <i>ilə</i>	= <i>ile</i>
FS	= <i>ila</i>	<i>īla (la)</i>	= <i>ya</i>	= <i>ila</i>	= <i>ila</i>
PL	= <i>ini</i>	<i>īlu (lu)</i>	= <i>yen</i>	= <i>ina</i>	= <i>ilu</i>
2MS	= <i>iħat</i>	<i>wət</i>	= <i>yet</i>	= <i>ivət</i>	= <i>ilet</i>
FS	= <i>ihat</i>	<i>wat</i>	= <i>yat</i>	= <i>ivat</i>	= <i>ilat</i>
PL	= <i>əħton</i>	<i>wētun</i>	= <i>yetun</i>	= <i>itun</i>	= <i>iletun</i>
1MS	= <i>ina</i>	<i>wən</i>	= <i>yen</i>	= <i>ivən</i>	= <i>ilen</i>
FS	= <i>ina</i>	<i>wan</i>	= <i>yan</i>	= <i>ivan</i>	= <i>ilan</i>
PL	= <i>əħnaħ</i>	<i>wax</i>	= <i>yex</i>	= <i>ivax</i>	= <i>ilex</i>

These person forms are used as the present affirmative, or non-negative, ‘copula’ and often contract with the final vowel of the host when they cliticize (see §3.1.1). The third person forms that evince an /l/-segment are noteworthy, e.g. 3ms. =*ile* and =*ila*, and should not be confounded with other sets of person forms such as the L-suffixes¹⁶². The same holds for the forms in J. Urmi where /l/ is found in the entire paradigm.

The negative and past counterpart of the ‘copula’ is expressed via an additional set, as illustrated in (44) below. In addition, it is common for NENA dialects to have a presentative or deictic set of ‘copula’ directing the attention to an observed state of affairs (more or less ‘Look/I see here he is’).

(44) C. Sat (SE Turkey, Mutzafi 2008:29)

	PRESENT				PAST
	AFFIRMATIVE		NEGATIVE	DEICTIC	AFFIRMATIVE
3MS	= <i>(i)le</i>	‘He is’	<i>layle</i>	<i>haydole</i>	= <i>(i)wa</i>
3PL	= <i>(i)na</i>	‘They are’	<i>layna</i>	<i>haydona</i>	= <i>(i)wa</i>

¹⁶¹ Transcription modified. See now Khan (2016a:248).

¹⁶² The grammaticalization of such phonetically reduced elements are notoriously difficult to contextualize historically. Khan (2001) believes the NENA third person copula forms that evince an /l/-element are diachronically related to the L-suffixes through a presentative construction **ī-le* ‘behold, him’. But note that this would fail to explain the third person singular restriction on the /l/-element.

PRESENT					PAST
	AFFIRMATIVE		NEGATIVE	DEICTIC	AFFIRMATIVE
2PL	<i>=(i)wutun</i>	‘You _{PL} are’	<i>laywutun</i>	<i>haydowutun</i>	<i>=(i)wútuwa</i>
1PL	<i>=(i)wax</i>	‘We are’	<i>laywax</i>	<i>haydowax</i>	<i>=(i)waxwa</i>
etc.		etc.			

The 'copula' verb *hwy* 'be' is a suppletive pendant to these forms in other TAM contexts, such as the subjunctive and future (see further below).

The resultative participle is inflected for number and gender like other adjectives, although for gender only in the singular. The paradigm for stem I verbs is as follows:

(45) **Resultative participle**¹⁶³

MS	<i>qṭil-a</i>	(~ <i>qəṭl-a</i>)	'killed'
FS	<i>qṭil-ta</i>	(~ <i>qṭəl-ta</i>)	
PL	<i>qṭil-e</i>	(~ <i>qəṭl-e</i>)	

The resultative participle can be combined with the 'copula' to form an (analytical) perfect or resultative construction, as exemplified for C. Karəmləsh (NW Iraq) below. The perfect is used for transitive and intransitive verbs alike where the 'copula' and participle generally express grammatical agreement¹⁶⁴. Generally, the final vowels of the participle /a/ or /e/ and initial vowel of the 'copula' /i/ will undergo contraction to /e/, e.g. C. Karəmləsh ms. *šqila* 'taken' + ms. *=ilə* 'He is' → *šqílelə* 'He has taken'.

(46) **C. Karəmləsh** (NW Iraq, Borghero 2008:80-81)

a.	PRESENT AFFIRMATIVE			
	INTRANSITIVE		TRANSITIVE	
3MS	<i>zíle=lə</i>	'He has gone'	<i>šqíle=lə</i>	'He has taken'
3FS	<i>zálte=la</i>	'She has gone'	<i>šqálte=la</i>	'She has taken'
2PL	<i>zíle=wutun</i>	'You _{MPL} have gone'	<i>šqíle=wutun</i>	'You _{MPL} have taken'
	etc.			

¹⁶³ The variable forms in parentheses are mainly found in Trans-Zab Jewish dialects.

¹⁶⁴ Deviating agreement patterns are discussed in §5.2.5, compare example (42d) *rxíša=wex* 'We have walked' (no agreement).

The resultative participle can also combine with the deitic ‘copula’ which always precedes it:

b. DEICTIC

3MS	<i>k-ilə zila</i>	‘He has gone’	<i>k-ilə šqila</i>	‘He has taken’
3FS	<i>k-ila zalta</i>	‘She has gone’	<i>k-ila šqalta</i>	‘She has taken’
2PL	<i>k-iwutun zile</i>	‘You _{MPL} have gone’	<i>k-iwutun šqile</i>	‘You _{MPL} have taken’

For past tense reference, the past ‘copula’ is used:

c. PAST

3MS	<i>šqile=wa</i>	‘He had taken’
3FS	<i>šqalte=wa</i>	‘She had taken’
2PL	<i>šqile=wutunwa</i>	‘You _{MPL} had taken’

The verb *hwy* ‘be’ complements the enclitic ‘copula’ to form a perfect in various (dialect-dependent) moods and tenses such as the subjunctive or past irrealis:

(47) **C. Urmi** (Literary, NW Iran; Marogulov 1976:53; transcription mine)

- a. $\emptyset$ -*hoy-a* *prəq-ta* ‘that she be finished’
 SBJ-be_{IPFV-S:3FS} finished-S:FS
- b. *bit-hoy-an-wa* *prəq-ta* ‘I_F would have finished.’
 FUT-be_{IPFV-S:1FS-PST} finished-S:FS

Other than the perfect, an uninflectable agent noun or infinitive, generally together with the preposition *b-* ‘in’ e.g. *bə-šqala* ‘in-taking’, may be used to form a progressive, generally by a similar type of construction involving a ‘copula’:

(48) **C. Karəmləsh** (NW Iraq, Borghero 2008:82-83)

a. BASIC	b. DEICTIC	
3MS	<i>b-šqále=lə</i>	<i>k-ilə bə-šqala</i> ‘He is taking’
3FS	<i>b-šqále=la</i>	<i>k-ila bə-šqala</i> ‘She is taking’
2PL	<i>b-šqále=wutun</i>	<i>k-iwutun bə-šqala</i> ‘You _{MPL} are taking’

Some dialects, mainly Christian and Jewish in NW Iraq, deviate from this pattern. In these dialects, the basic ‘copula’ generally precedes the verbal form and cliticizes only when it follows a non-verbal or less verbal predicate. In examples (49a-c) below, the copula is independent before the predicate and is

interpretable as either verbal or non-verbal. In examples (49d-f), the copula is enclitic and a more verbal interpretation is not available, so that the copula cannot be realized as such in the progressive.

(49) **J. Betanure** (NW Iraq; Mutzafi 2008a:50-51, 63, 66)

COP PRED		PRED=COP (non-verbal or less verbal only)	
a.	<i>ʔile tāma</i> 'He is there.'	d.	<i>tā́ma=yile</i> 'id.'
b.	<i>ʔile miθa</i> 'He has died/is dead'	e.	<i>míθa=yile</i> 'He is dead'
c.	<i>ʔile bə-šwāqa</i> 'He is leaving'	f.	<i>**bə-šwā́qa=yile</i>

Finally, the perfect and progressive are not necessarily both found in every dialect but often come together (cf. Khan 2007d). In C. Koy Sanjaq (NE Iraq; Mutzafi 2004b), for example, only the (analytic) perfect is based on a construction involving the 'copula'. The progressive involves a special preverbal TAM-marker *lā* before the indicative 'imperfective', e.g. *lā g-nāšəq-Ø* 'He is kissing'. Similarly, other dialects use such a TAM-maker to express both the perfect and progressive on the basis of the 'perfective', respectively, 'imperfective', e.g. *lā qṭəl-le* 'He has killed', *lā Ø-qəṭəl-Ø* 'He is killing' (J. Rustaqa; Khan 2002b). *lā* is presumably a fossilized 3fs. form of the copula *ila* 'It_F is' (Khan 2007d). Thus, as expected, it is entirely up to the dialect.

To recapitulate, the progressive and perfect are compound verbal forms based on a verbal noun and the resultative participle. The agent and subject indexes are marked by a special set, the 'copula', that also expresses the subject of non-verbal clauses. The basic copula that expresses the realis, non-negated present often cliticizes to the verb. The past copula may also cliticize to the verb while the deictic and negative copulas are independent. Dialects differ in what respect they have grammaticalized an agent-orientation and perfect aspect for resultative constructions. A patient-orientation is still available in dialects that have a perfect.

5.2.2. **Object Person Forms**

In the compound verbal forms expressing the perfect or progressive, the marking of object person forms is generally based on prepositions or on adnominal pronominal suffixes. We confine ourselves to accusative alignment in this sub-

section. The following major types of constructions are found among the NENA dialects (cf. Kapeliuk 2008):

- (i) object indexes belonging to the set of ‘possessive’ suffixes;
- (ii) independent object person forms of an *ʔall*-set or *ʔabb*-set;
- (iii) dependent object person forms of an *ʔall*-set or *ʔabb*-set.

Object person forms in the compound verbal forms, thus, are generally different from the ‘imperfective’ and ‘perfective’. There is some overlap in the relative order of dependent person forms, generally the same as the ‘perfective’ (V-P-A) rather than the ‘imperfective’ (V-A-P). The *ʔall*-series may also be found in the ‘perfective’ but much less so in the ‘imperfective’ (see §4.1.2)

5.2.2.1. ‘Possessive’ suffixes

In the first type, the originally nominal form of the verb takes object indexes from the otherwise adnominal set that denotes the possessor. This can be schematized as follows:

	P	A/S	
(b-)VN	-POSS	+ COP	
RPP	-POSS	+ COP	(+ PTCP agreement with A/S)

The patient is marked by the ‘possessive’ suffixes typical for nouns:

(50) C. Qaraqosh (NW Iraq; Khan 2002a:363)

- a. *k-ina* *ʃqil-ə*
DEIX-A:3PL taken -PL
 ‘They have taken.’
- b. *k-ina* *ʃqil-əḥ* (cf. *bab-əḥ* ‘his father’)
DEIX-A:3PL taken-P:3MS
 ‘They have taken **him**.’

(51) C. Urmi (Literary, NW Iran; Marogulov 1979:46, 58; Hetzron 1969:117, transcription mine)

PERFECT a. <i>dmíx=əla</i> slept-S:MS=S:3MS ‘He has slept.’	PROGRESSIVE b. <i>bə-dmáx=əla</i> in-sleep:INF-S:3MS ‘He is sleeping.’

- c. *šqál-t-u=vat*
 taken-A:FS-P:3MS=A:2FS
 You_{FS} have taken **him**.'
- d. *ayya +b-qtál-u=la*
 she in-kill:INF-P:3MS=A:3FS
 *ova *naša*
 that man
 'She is killing (lit. him) **that man**.'

The 'copula' encodes the s and A, and when combined with the resultative participle, there is also subject agreement, e.g. C. Qaraqosh *kila šqalta* 'She has taken' (NW Iraq), C. Urmi *šqálta=vat* 'You_{FS} have taken' (NW Iran). The patient indexes are added to the participle, e.g. C. Qaraqosh *kila šqalt-i* 'She has taken **me**', literally 'She is my taken (one)'. The 'copula' may cliticize to this form, e.g. C. Urmi fs. *šqalta* 'taken' + *-u* 'his' + 2fs. =*vat* 'you_{FS}.are' → *šqált-u=vat* 'You_{FS} have taken **him**'. The same holds for the progressive but the verbal noun does not inflect for agreement. Patient indexes are also used in differential indexing, as in (52b) above. This parallels the accusative pattern of the preterit in the 'perfective' system where the E-set marks the P and the L-set the A. Compare:

(52) C. Urmi (Literary, NW Iran; Marogulov 1979:58, transcription mine)

PRETERIT

[V-P-A]

- a. *šqil-ət-li*
 takePFV-P:2MS-A:1MS
 'I took you_{MS}.'
- PERFECT
- [V-P-A]
- b. *šqil-ux=vən*
 taken:MS-P:2MS=A:1MS
 'I_M have taken you_{MS}.'

The combination with full nominal objects in this construction type can also be based on adnominal possession. The object NP is marked by the genitive linker =*əd* typical for adnominal possessors in the annexation of noun phrases (Khan 2002a:367-368):

(53) C. Qaraqosh (NW Iraq; Khan 2002a:367)

<i>k-ilə</i>	<i>xil-əd</i>	<i>xabuša</i>
DEIX-A:3MS	eaten-LK	apples

'He has eaten apples.'

This also applies to object person forms in Jewish Zakho. They are marked by means of the independent possessive pronouns based on *did-*, an augmented form of the linker =*əd*, to which ‘possessive’ suffixes are added:

(54) **J. Zakho** (NW Iraq; Cohen 2012:142-143)

PERFECT			PROGRESSIVE				
a.	<i>le(w)ən</i>	<i>qṭīl-a</i>	<i>dīd-a</i>	b.	<i>wən</i>	<i>bə-šqāla</i>	<i>dīd-a</i>
	NEG:A:1MS	kill:RPP-A:MS	LK-3FS		A:1MS	in-take:INF	LK-3FS
	'I _M have not killed her (lit. her's)'				'I _M am taking her (lit. her's).'		

5.2.2.2. *Independent object person form*

Secondly, pronouns are expressed independently through prepositional person forms:

	A/S	P	
(b-)VN	=COP	OBJ	
RPP	=COP	OBJ	(+ PTCP agreement with A/S)

This is mainly the dative (*ʔəl*)/- in the majority of NENA dialects but other prepositions such as (*ʔəb*)/- can also be employed, compare (55)-(56) below.

(55) **J. Sulemaniyya** (NE Iraq; Khan 2004a:137-139)

PERFECT			PROGRESSIVE		
a.	<i>xzita=ya</i>	<i>ʔill-ux</i>	b.	<i>garoša=y</i>	<i>ʔill-a</i>
	see:RPP:A:FS=A:3FS	OBJ-2MS		in-pull:INF-A:3MS	OBJ-3FS
	‘She has seen you_{MS} .’			‘I _M am pulling her .’	

5.2.2.3. *Attached ʔall-set or ʔabb-set*

Thirdly, the prepositional person forms can become increasingly adhesive to the non-finite verbal form such that it supersedes the ‘copula’. The *ʔall*-series or *ʔabb*-series are regularly cliticized when placed after the verb:

(56) **C. Txuma** (Gundək, SE Turkey; Talay 2009:226.73)

<i>dax=it</i>	<i>bə-xzáya=bb-a</i>
how=A:2MS	in-see:INF=OBJ-3FS
‘What do you _{MS} reckon of (lit. how are you seeing) her ?’	

This is similar to type (i) in morphological dependency but the means of coding is the same as type (ii):

	P	A/S
(b-)VN	-OBJ	+ COP
RPP	-OBJ	+ COP

The *ʔall*-series in (57) and *ʔabb*-series in (58) are attached to the verbal base. The relative order of person indexes (V-P-A) is distinct from the same object person form in the ‘perfective’, e.g. *xzelé=ll-an* for *xzele ʔall-an* ‘He saw **us**’ (C. Ashitha, SE Turkey; Borghero 2006:193), but rather similar to the E-set, e.g. *qṭil-at-li* ‘I killed **you_{FS}**’.

(57) **C. Ashitha** (SE Turkey; Borghero 2006:195, 198)

	PERFECT	PROGRESSIVE
a.	<i>qṭíl-əllax=iwin</i> kill:RPP:A:MS-P:2FS=A:1MS ‘I _M have killed you_{FS} .’	b. <i>wewa mbašól-əlla</i> PST:A:3FS cook:INF-P:3FS ‘She was cooking it_r .’

(58) **C. Txuma** (Mazra, SE Turkey; Talay 2009:162.4, 190.1)

	PERFECT	PROGRESSIVE
a.	<i>moqyám-te-bbe=la</i> raise:RPP-A:FS-P:3MS=A:3FS <i>maskanta</i> education ‘She has enabled him to study.’	b. <i>bə-qráya-bbe=lə</i> in-call:INF-P:3PL=A:3PL <i>pləštaye</i> Palestinian:PL ‘They call them Palestinians.’

5.2.3. *Lability and Dative Marking of the Agent*

The resultative participle and the ‘copula’ or the verb *hwy* ‘be’ not only serve as the basis for a passive but also a compound perfect (see §4.3.2 and §4.3). Both are originally resultative constructions and their ambiguity in orientation is a type of lability. Word order and the presence an object or agent complement can be important differentiating factors. This is further complicated by the identical case-marking of the object or the agent. There are some parallels with the focal dative agents in the perfective past.

A resultative is a verbal construction typically derived from telic verbs that expresses an acquired state: a state that implicitly results from a previous event and which directly or indirectly affects a subject (Nedjalkov 1988, 2001; Haspelmath 1994). Resultatives are, strictly speaking, voice-neutral (Nedjalkov and Jaxontov 1988:16) and can be patient-oriented, subject-oriented and agent-

oriented. Subject-orientations for result states are found for intransitive verbs like J. Koy Sanjaq *dmixa=wen* 'I_M am asleep', *kpinta=wan* 'I_F am hungry', *ytiwe=le* (<*ytiwa-y_{le}) 'He is seated'. The predication of a result state is also found for transitive telic verbs that typically form agent-orientations in resultative constructions (see Nedjalkov and Jaxontov 1988) such as *dwq* 'hold', *šql* 'take', *lwš* 'wear, put on', *tfn* 'carry', *lyp* 'learn' (Kapeliuk 2008, cf. Nöldeke 1868:308, §150). In J. Arbel (NE Iraq; Khan 1999:284-285), the resultative participle is entirely confined to such lowly transitive types of verbs in this usage besides intransitive verbs, e.g. *rkiwa=wen* 'I am riding', *skina=wet* 'You_{MS} dwell'. In several dialects, the agent-orientation is available for virtually all transitive verbs in the expression of the perfect and perfective past. The possible connotation of an anterior change of state in the implied event leading to the result restate in resultatives is made explicit in the perfect (compare English resultative *He is gone* and perfect *He has gone*) and the resultant state in the present is absent in the perfective past.

Certain typical change-of-state verbs belonging to stem I, however, are labile and essentially voice-neutral in their resultative construction. A verb like *twr* 'break' can, therefore, express the following semantic ambiguity in Jewish Koy Sanjaq. The resultative participle *twirta* agrees with the subject expressed by the enclitic copula *=ila* 'She is'. It can express an intransitive state that is either patient-oriented (imply some external cause) or subject-oriented (anti-causative, spontaneous) or a transitive perfect that is agent-oriented:

(59) **J. Koy Sanjaq** (NE Iraq; Mutzafi 2004a:106)

twir-té=la (< *twirtá=*ila*)

broken-FS-she.is

- a. 'She is broken.' (patient or subject-oriented, intransitive, stative)
- b. 'She has broken.' (agent-oriented, transitive, dynamic)

The basic 'copula' is generally enclitic, following the participle. It may also alternate with an independent deictic copula. This is illustrated in the following examples from Christian Barwar. The forms with the deictic copula are mainly used to express the perfect and pluperfect (Khan 2008a:673-675).

(60) **C. Barwar** (NW Iraq; Khan 2008a)

BASIC		DEICTIC	
	<i>q̣il-ε=le</i>	<i>ho-le</i>	<i>q̣il-a</i>
	killed-MS=3MS	DEIX-3MS	killed-MS
a.	'He has killed.'	c.	'He has killed.' (A, dynamic)
b.	'He is killed.'	d.	'He is killed.' (S, stative)

Virtually any telic transitive verb is labile in this respect. These constructions are diathetically ambiguous between a dynamic-transitive perfect and stative-intransitive resultative. The orientation (subject/agent/patient) has to be contextualized. What applies to the construction based on the deictic 'copula' as illustrated in (60c) and (60d), generally also applies to other tense and modal categories of the perfect or passive based on the auxiliary *hwy* 'be'.

The third person enclitic 'copula' may also be omitted entirely, so that the participial inflection is the only remaining agent or subject coding (Khan 2008a:669-671). In general, a verbal form in the immediate coding takes the argument coding, e.g. *ʔəθy-ε=le wira=∅* 'He came (and) entered' (ibid. 670). Yet, such forms can also take a P and occur independently, for example:

- e. *q̣il-a(=∅) xá-neriye*
 killed-MS(=3MS) a-goat:MS
 'He has killed a male goat.' (Khan 2008a, A31:4)

Note that this clause could theoretically also mean 'The male goat (is) killed'.

These Christian and Jewish dialects, therefore, have the following system where the resultative or perfect constructions neatly parallel the preterit (perfective past) except for the passive which may be illustrated by the following example from Christian Barwar:

(61) **C. Barwar** (NW Iraq; Khan 2008a)

	PRETERIT	RESULTATIVE
TR.	<i>q̣il-le</i>	<i>q̣ilε=le</i>
ITR.	<i>qim-le</i>	<i>qimε=le</i>
PASS.	<i>q̣il-∅</i>	<i>q̣ilε=le</i>

In the following subsections, we discuss how the ambiguity in orientation can be resolved by the relative position of the 'copula', a greater degree of inte-

gration into the verbal system, or the presence of an object or agent complement.

The main point will be that the presence of a P is immediately determinant for an agent-orientation. A patient-oriented construction may be expanded by a dative agent, marked by the preposition (*ʔəl*)/-. Such dative agents exhibit some peculiar characteristics reminiscent of dative agents used with the agentless ‘perfective’ form. They may be used to express agent focus and overt case-marking may be lacking in focalized pre-verbal position which is otherwise not a feature of oblique arguments. Patient and agent person forms are even morphologically identical, when they are both marked through the corresponding *ʔəl*-series. Dialects can disambiguate between them by attaching the pronominal object immediately to the participle, by putting the ‘copula’ immediately before the participle or by omitting the ‘copula’ encoding the agent entirely. The latter is limited to the third person.

5.2.3.1. Position of the ‘Copula’

Some dialects, mainly those in North West Iraq, can differentiate between a dynamic-transitive perfect and stative-intransitive resultative by the relative position of the basic ‘copula’. If the ‘copula’ precedes the participle, the orientation is ambiguous, but when it follows it, the construction is always intransitive. Jewish Betanure, for example, distinguishes the patient-orientation from the agent-orientation through the cliticized post-verbal position of the copula in (62).

(62) J. Betanure (NW Iraq; Mutzafi 2008a)

COP PRED		PRED=COP	
	<i>ʔile ʃqil-a</i>		<i>ʃqil-a=yile</i>
	3MS taken-MS		taken-MS=3MS
a.	‘He has taken.’	c.	**‘He has taken’ (dynamic)
b.	‘He is taken.’	d.	‘He is taken.’ (only) (stative)

5.2.3.2. Verbalization

The aspectual opposition between the intransitive stative-resultative and transitive perfect also correlates with their integration into the verbal system (Kape-liuk 2008; cf. Mutzafi 2004a:105-109; Khan 2008a:653-659). In J. Koy Sanjaq, for instance, the difference is partly found in agreement pattern and negation. The resultative-stative, for example, conforms to other adjectives by expressing agreement in the plural, while the perfect lacks this. As illustrated in (63) below, the participle *šwiqé* is in the plural and agrees with the first plural subject in the

resultative *šwiqe=wex* ‘We are left’, while in the corresponding perfect, it takes the unmarked masculine singular form *šwiqa=wex* ‘We have left’. The agent-oriented perfect, therefore, will lack agreement as opposed to the patient-oriented resultative for transitive verbs: *nšiqə=wex* ‘We have kissed’ as opposed to *nšiqe=wex* ‘We are kissed’.

- (63) pl. *šwiqé* + =wex *šwiqe=wex* ‘We are left’ (resultative)
 sg. *šwiqá* + =wex *šwiqa=wex* ‘We have left’ (perfect)

5.2.3.3. Objects

The ambiguity in orientation is absent in the presence of an object. When the object is pronominal, it is expressed by attaching a pronoun from the *ʔall*-series (see §4.1.3)¹⁶⁵. This is given for Christian Barwar below. The enclitic ‘copula’ denoting the A is attached to the preceding participle, and the *ʔall*-set denoting the P is attached to the copula. If the copula is deictic and precedes the participle, the patient person form attaches immediately to the participle itself:

(64) **C. Barwar** (NW Iraq; Khan 2008a)

	BASIC		DEICTIC
a.	<i>qṭíle=l-alle</i>	b.	<i>ho-la</i> <i>qṭil-t-alle</i>
	killed-MS-A:MS-P:3MS		DEIX-A:3FS killed-FS-P:3MS
	‘He has killed him .’		‘She has killed him .’

The agent-marking enclitic ‘copula’ is completely mobile and can move to the front, e.g. *ku=t=ile qṭil-alle* ‘Each that **has** killed him’ (Khan 2008a, A24:43). The *ʔall*-series regularly attaches to participle when the ‘copula’ precedes it.

When the clause contains two full NPs, the A function of the noun is typically indicated by agreement. When the gender and number differs between the arguments, the verbal construction always agrees with the A as it does with the S, and the respective roles are clear, for example:

c.	[A]	[COP-A]	[RPP-A]	[P]
	<i>ʔaw-naša</i>	<i>ho-le</i>	<i>dwiq-a</i>	<i>baxta</i>
	DEM-man:MS	DEIX-A:3MS	seize:RPP-A:MS	woman:MS
	‘The man has seized the woman.’ (Khan 2008a:657)			

¹⁶⁵ These can fully merge with the L₁-series (Khan 2008a:283), see §4.1.3 and §5.2.5.

When the patient is differentially marked, this will automatically disambiguate between the roles of the arguments. Differential object marking can be via indexing (the *ʔall*-series) or via case-marking (the dative preposition *ʔla*), for example:

- d. [A]-[COP:A] [RPP:A-P] → [P]
ʔat=it *qʔil-ʔalle* *xuwwe*
 you=A:2MS killed:A:MS-P:3MS snake:MS
 ‘Are you (the one who) has killed (lit. **him**) **the snake**?’ (Khan 2008a, A24:45)
- e. [A] [BE:A] [RPP-A] [DOM→P]
awwa *xuwwe* *t-awe-ʔ-wa* *qʔil-a* *ʔla-bron-i*
 DEM:MS snake:MS FUT-beIPFV-A:3MS-PST killed-A:MS DOM-son:MS-my
 ‘The snake would have killed **my son**.’ (Khan 2008a, A9:6)

The coding of either role may be completely lacking and the roles have to be inferred from the context. This applies when the two referents belong to the same gender and number and when the patient is not differentially marked. In (65a) below, the status of the argument *bron-i* is ambiguous, since no object is present, while, in (65b), an object is present. Both arguments are morphologically unmarked (ms.) but it is pragmatically obvious what their respective role is (a human agent against a fruit).

(65) **C. Barwar** (NW Iraq)

- a. (ambiguous)
- | | | |
|---------------|--------------|--------------|
| [S/A] | [COP] | [RPP] |
| <i>bron-i</i> | <i>ho-le</i> | <i>xil-a</i> |
| son:MS-my | DEIX-3MS | eat:RPP-MS |
- ‘My son has eaten’
 ‘My son is/has been eaten (by sth.)’ (Khan 2008a, A18:2)
- b. (active)
- | | | | |
|--------------------|--------------|--------------|---------------|
| [A] | [COP] | [RPP] | [P] |
| <i>xon-ux</i> | <i>ho-le</i> | <i>xil-a</i> | <i>xabuša</i> |
| brother:MS-your:MS | DEIX-A:3MS | eat:RPP-MS | apple:MS |
- ‘Your_{MS} brother has eaten an apple.’ (Khan 2008a:678)

The A argument regularly precedes the verb. The P argument, however, may be fronted, yielding the reverse word order:

c. (fronted object)

	[P]=[COP]	[RPP]	[A]
<i>la</i>	<i>xawxε=le</i>	<i>xil-a</i>	<i>xon-i</i>
NEG	peach:MS= COP:3MS	eaten-MS	brother:MS-my
'No, <u>a peach</u> my brother has eaten.' (Khan 2008a:678)			

Word order, then, may be an important clue but it is not definitive. Without the presence of an agent in (65c), the clause *la xawxε=le xila* would mean 'A peach is/has been eaten'.

5.2.3.4. *Dative Agents*

In the patient-oriented constructions, the patient is the s and controls agreement and the full NP remains unmarked. The agent is expressed by the dative preposition (*ʔəl*)-, such as *l-xəmyana* 'by father-in-law' below. In terms of word order, the dative agent may be put before the verb but will not precede the topical patient, as shown in (66b).

(66) C. Barwar (NW Iraq)

- a. [S: patient] [RPP-S] [OBL: agent]
Dalle *dwiq-a* *l-xəmyana*
 PRN:MS seized-MS DAT-father-in-law
 'Dalle has been seized **by her father-in-law**.' (Khan 2008a, C8:7)
- b. [S] [OBL][=COP+S] [RPP+S]
xabuša *šmoq-a* *l-dəbbε=le* *xil-a*
 apple:MS red-MS DAT-bear:MS=3MS eaten-MS
 'The red apple has been eaten **by the bear**.' (Khan 2008a, D2:65)

There is, however, an unusual feature in the marking of the agent in this type of construction. The dative case-marking of the agent NP may be absent when it is focalized to pre-verbal position (Khan 2008a:752). The remaining agreement, therefore, is controlled by the patient, while the agent remains unmarked such as *babi* 'my father' in (66c) below.

- c. [S/P] [A][=COP+S/P] [RPP+S/P]
ʔayya yaləxta *∅ babi=la* *zqir-ta*
 DEM:FS handkerchief:FS father:MS=3FS weaven-FS
 'This handkerchief has been woven (**by**) **my father**.' (Khan 2008a, A37:12)

This is reminiscent of the agentless ‘perfective’ that may also lack agreement with a zero-marked agent NP placed before the verb (see §4.3.4 and §4.3.5). It is unknown whether the construction in (66c) is also person-restricted. *Ceteris paribus*, however, this is not typical for an oblique argument, while the A is normally not case-marked. At the same time, the patient retains all s-like properties in controlling the verbal agreement. Although this coding is ergative-like, it is a marked voice construction that alternates with the more typical passive.

Moreover, since Khan (2008b) does not provide examples for pronominal agents in the passive, we have no information regarding this for C. Barwar. For a closely related dialect, C. Ashitha (NW Iraq), Borghero (2005:330) notes that pronouns are marked by the dative in the same way as full nominals:

(67) **C. Ashitha** (NW Iraq; Borghero 2005:330)

- a. *q̣tiltε=la l-gora* ‘She was killed **by a man**.’
 b. *q̣tilε=le ʔall-a* ‘He was killed **by her**.’

The orientation of the participle is distinguished morphologically in C. Ashitha. In the patient-oriented, or passive, construction, the ‘copula’ follows the participle and the ʔall-series denoting the agent remain separate. In the agent-oriented, or active, construction, the ʔall-series attaches immediately to the participle:

(68) **C. Ashitha** (NW Iraq; Borghero 2005:334-336)

ACTIVE		PASSIVE	
a.	<i>q̣til-əlla=le</i> killed:MS-DAT:3FS=3MS ‘He has killed her .’	c.	<i>q̣til-ε=le</i> <i>ʔalla</i> killed-MS=3MS DAT:3FS ‘He was killed by her .’
ACTIVE		PASSIVE	
b.	<i>q̣til-əlle</i> <i>winwa</i> killed:MS-DAT:3MS PST:1MS ‘I _M had killed him .’	d.	<i>q̣til-a</i> <i>winwa</i> <i>ʔalle</i> killed-MS PST:1MS DAT:3MS ‘I _M had been killed by him .’

The forms *q̣til-ε=le* ‘He was killed’ and *q̣tila winwa* ‘I_M had been killed’ could equally mean ‘He has killed’ and ‘I_M have killed’ when they combine with a nominal object (Borghero 2006:176). The cohesion of the ʔall-set with the verbal form is determinant for the agent orientation. This seems to be a well-balanced system but it is somewhat unexpected. Indeed, the ʔall-series can, at the same time, be employed in the preterit to mark the object independently of the verb, e.g. *xze-li ʔallax* ‘I saw **you**_{FS}’ (Borghero 2006:192; see §4.1.2). It is conceivable

this parallelism would have superimposed or at least influenced an active reading on the forms in (69c)-(69d) where the same person form is expressed independently but it does not exhibit this effect at all. On the contrary, it is the attachment of an object person form from the *ʔall*-set to the verb that signals that the construction is transitive and agent-oriented to differentiate it from the intransitive patient-oriented counterpart (cf. Givón 1976:168).

Finally, it should be pointed out that focal dative marking of the agent also occurs in these resultative constructions. We can illustrate this for the Christian dialect of Aradhin (NW Iraq; Krotkoff 1982). The situation is even more complex this dialect spoken further south to Barwar and Ashitha. Dative case-marking of the agent is also possible, for example:

(69) **C. Aradhin** (NW Iraq; Krotkoff 1982:34, 39)

- a. *xil-a* *l-kalba*
 eaten-MS DAT-dog
 ‘It_M (i.e. the dough) was eaten **by a dog**.’
- b. *šqil-a* *əlleħən*
 taken-MS DAT:3PL
 ‘It_M was taken **by them**.’

Note that the third person enclitic copula may be lacking in this construction. Krotkoff (1982:34) notes his informants’ interpretation of (69a) fluctuates between active ‘A dog has eaten it’ and passive ‘It was eaten by a dog’. The first interpretation readily applies to independent person forms with assertive focus occurring in pre-verbal position:

- c. *əlli=le* *wiδ-a*
 DAT:1SG-3MS done-MS
 ‘It is **I** (who) did it_M.’

This is a pseudo-cleft sentence where the ‘copula’ *ile* ‘It is’ focalizes the agent. This would otherwise be reserved for the unmarked independent person forms (to illustrate: *āna iwən dmixa* ‘**I**m (the one who is) asleep’). Quite confusingly, however, this same *ʔall*-series is the regular means to mark independent object person forms in the transitive perfect (Krotkoff 1982:34-35), for example:

- d. *wənwa* *xəzy-a* *əlle* ‘I had seen **him** (the man).’
 PST:1MS seen-MS DAT:3MS

- e. *ilɛ* *mkúsy-alle*
 3PL covered-DAT:3MS
 ‘They have covered **it_M**.’

Binding to the participle as exemplified in *mkúsy-alle* is only possible for the object complements as in Christian Ashitha. The agent complement is always expressed separately, so that (69e) could never mean ‘He covered them’.

In the construction based on the resultative participle, therefore, the agent and object complement are morphologically identical. It is the dative agent construction, however, that usually lacks a ‘copula’ form denoting the patient (Krotkoff 1982:34, 39). The presence of an agent-marking ‘copula’ delineates the difference between the two. For this reason, the dative agent construction appears to be confined to third person patients, such that neither ****ile qṭila alla** ‘He was killed by her’ nor ****iwən qṭila alla** ‘I was killed by her’ are possible but only (Ø) *qṭila alla* ‘He was killed by her’. When, however, the agent is in focus, such as *alli* in (70c), the third person masculine singular ‘copula’ is present as a focus marker and denotes an expletive subject only (‘It is X who...’). (70) below summarizes our observations for Christian Aradhin. Consequently, when the first and second person enclitic copula is present, the *ʔall*-series will always be interpreted to mark the object rather than the agent. The third person enclitic copula is avoided in the passive, unless it represents a (non-referential) focus marker.

(70) **C. Aradhin** (NW Iraq; Krotkoff 1982)

A-ORIENTATION, DATIVE PATIENT			P-ORIENTATION, DATIVE AGENT		
a.	<i>ile</i>	<i>qṭil-a</i> <i>alla</i>	c.	<i>qṭil-a</i>	<i>alla</i>
	3MS	killed-MS DAT:3FS		killed-MS	DAT:3FS
	‘He has killed her .’			‘He was killed by her .’	
b.	<i>iwən</i>	<i>qṭil-alla</i>	d.	<i>ʔilli=le</i>	<i>qṭil-a</i>
	1MS	killedMS-DAT:3FS		DAT:1SG=3MS	killed-MS
	‘I have killed her .’			‘It _M is I (who) have killed him.’	

5.2.4. **Contraction and Secondary E₂-series**

Synthetic and analytic constructions may converge or overlap at several points in some NENA dialects. The enclitic copula has reduced variants that partially or completely merge with the E-suffixes, giving rise to a secondary E₂-set where

the merger is not complete. Similarly, the cliticized *ʔall*-series may merge with the L-suffixes (see also §4.1.3)¹⁶⁶.

Certain contractions of the enclitic ‘copula’ and the vocalic ending of the nominal form of the verb result in person indexes that are (near)-identical with the E-suffixes. J. Sulemaniyya contractions in the progressive such as *garošét* ‘You_{MS} are pulling’ out of **garošá=yet* (INF+COP) are phonologically identical with the E-suffixes: *-ét*, as in *garš-ét* ‘You_{MS} pull’ (Khan 2004a:100). So, too, in C. Ashitha, contracted forms may alternate with uncontracted forms that are indistinct from the E-set. The contracted past perfect *q̣ṭil-in-wa* ‘I_M had killed’ of the uncontracted *q̣ṭila win-wa* ‘I_M had killed’ parallels the E-suffixes and past convertor *-in-wa* as in the past ‘imperfective’ *q̣aṭl-in-wa* ‘I_M used to kill’ (Borghero 2005:332). The structural cohesion between the verb and the enclitic ‘copula’ is virtually on the same level as the core verbal system.

The transitive realis perfect and progressive is regularly formed with the ‘copula’ and *ʔall*-series. In C. Barwar, the coding of the A and P by means of reduced variants, however, is partially merged with the E-suffixes and L-suffixes. The resultative participle expresses agreement with the agent. Reduced variants of the copula that are virtually identical with the E-set denote the agent. The patient can be expressed by L-suffixes or *ʔall*-series attached to these reduced variants. Forms like **q̣ṭila=iwət ʔalle* ‘You_{MS} have killed him’ have converted through contracted forms like *q̣ṭil-ət=alle* into *q̣ṭil-ət-le*¹⁶⁷, for example:

(71) **Perfect with reduced ‘copula’** (C. Barwar, NW Iraq; Khan 2008a:180, 280-281, 284)

	PERFECT		COPULA	E-SET
2MS	<i>q̣ṭil-ət-le</i>	‘You _{MS} killed him’	<i>=iwət</i>	<i>-ət</i>
FS	<i>q̣ṭilt-ət-le</i>	‘You _{FS} have killed him’	<i>=iwət, =iwət</i>	<i>-at</i>
PL	<i>q̣ṭile-tu-le</i>	etc.	<i>=iwətu, =iwitu</i>	<i>-itu</i>
1MS	<i>q̣ṭil-ən-ne</i>		<i>=iwən</i>	<i>-ən</i>
FS	<i>q̣ṭilt-ən-ne</i>		<i>=iwan, =iwən</i>	<i>-an</i>
PL	<i>q̣ṭil-əx-xe</i>		<i>=iwəx</i>	<i>-əx</i>

The reduced enclitic ‘copula’ is morphologically near-identical with the E-set and could hardly be considered a separate set.

¹⁶⁶ The relationship between this merger and the ‘imperfective’ is discussed in §5.2.5.

¹⁶⁷ The same holds for C. Ashitha (SE Turkey), see Borghero (2005).

Their form is virtually identical with the E-set except for the third person. We shall consider these a secondary E₂-set (like the secondary L₂-set). The third person looks rather different and is *-əl* or *=l*, presumably derived from 3ms. *=ile*, 3fs. *=ila* and 3pl. *=ilε*.

	PERFECT			COPULA
3MS	<i>qṭīl-əl-le</i>	'He has killed him'	besides <i>qṭile=l-əlle</i>	<i>ʔile</i>
FS	<i>qṭīlt-əl-le</i>	'She has killed him'	besides <i>qṭiltε=l-əlle</i>	<i>ʔila</i>
PL	<i>qṭīl-əl-le</i>	etc.	besides <i>qṭile=l-əlle</i>	<i>ʔilε/a/ey</i>

Non-reduced covariants of the 'copula' are used, when no coalescence occurs, for example, in the present and past tense:

(72) **'copula' set and E-set alternations** (Khan 2008a:189-190)¹⁶⁸

'COPULA'		E-SET	
<i>prīqtε=wən</i>	~	<i>priqt-ən</i>	'I _F have finished'
<i>prīxtε=wənwa</i>	~	<i>prīxt-ən-wa</i>	'I _F had flown'

Where the 'copula' is independent such as the negative 'copula' or deictic 'copula', the reduced variants are not used:

(73) **C. Barwar** (NW Iraq; Khan 2008a:284, 286)

<i>l-ən qṭīl-əlle</i>	(< * <i>qṭīl-a ʔəlle</i>)	'I _M have not killed him'	(negative)
<i>ho-n qṭīl-əlle</i>		'I _M have killed him'	(deictic)

Among Jewish dialects, contracted forms can be out of synch with their uncontracted counterparts. This is the case in Jewish Urmi where the synthesis of a formerly analytic construction constitutes the basis of an inflectional paradigm no longer synchronic with the 'copula'¹⁶⁹ as compared in (74) below for the first person.

¹⁶⁸ Third person forms do not show this same alternation, e.g. *prīqtε=la* 'She has finished' and *prīxta=wawa* besides *prīxtε=yawa* and *prixtε-wa* 'She had flown'.

¹⁶⁹ Only a non-verbal clause can take the full form of the enclitic copula in J. Urmi (Khan 2008b:282).

(74) **Progressive** (J. Urmi (NW Iran; Khan 2008b:84)

PROGRESSIVE (<i>qaṭol-</i> + E ₍₂₎ -SET)			'COP'	E-SET
<i>*qaṭol-én</i>	<	<i>*qaṭolá=len</i>	'I _M am killing'	= <i>ilen</i> - <i>en</i>
<i>*qaṭol-án</i>	<	<i>*qaṭolá=lan</i>	'I _F am killing'	= <i>ilan</i> - <i>an</i>
<i>*qaṭol-áx</i>	<	<i>*qaṭolá=lax</i>	'We are killing'	= <i>ilax</i> - <i>ax</i>

These endings are completely identical with the E-set found in the rest of the verbal system. They only differ in the third person morphemes *-é*, *-á* and *-ú* based on 'copula' forms =*ile*, =*ila* and =*ilu*, for example:

PROGRESSIVE			'COP'	E-SET
<i>*qaṭol-é</i>	<	<i>*qaṭolá=le</i>	'He is killing'	= <i>ile</i> - $\emptyset$
<i>*qaṭol-ú</i>	<	<i>*qaṭolá=lu</i>	'They are killing'	= <i>ilu</i> - <i>i</i>

Unlike first and second person agent indexes, which combine with the L-suffixes, these third person forms combine with an *ʔall*-series denoting the patient, for example:

PERFECT			
(75) <i>*qtəlt-an-ne</i>	<	<i>*qtəлта + =ilan + -le</i>	'I _F have killed him'
<i>*qṭil-u-lle</i>	<	<i>*qṭilé + =ilu + -le</i>	'They have killed him'

Negation and past tense are not expressed by special forms of the 'copula' in Jewish Urmi. The past convertor *wa* and negator *la* are used instead:

(76) <i>*qtəлта-n-ne</i>	'I _F have killed him'	(present)
<i>*qtəлтá-n-wa-le</i>	'I _F had killed him'	(past)
<i>la *qtəlt-an-ne</i>	'I _F haven't killed him'	(negative)

To sum up, the enclitic 'copula' may be phonetically reduced and merge with the E-set in originally compound verbal forms. The same applies to the *ʔall*-series in relation to the L-set. The difference between the 'enclitic' copula and the E-set is marginalized to the third person where a residue of the copula is still observed. This gives rise to a secondary E₂-set for the third person, while the first and second person are fully merged with the primary E₁-set.

5.2.5. Compound Verbal forms Modeled on the 'Imperfective'

The compound verbal forms may partially or completely converge with the ‘imperfective’ inflectional system. They may also interact with the person role constraint in the ‘perfective’ in this respect because of morphological identity. The presence of dependent object person forms favors a construction that is modelled on the ‘imperfective’ (see §4.4).

The enclitic ‘copula’ and the enclitic pronominal objects based on dative (*ʔall*)/- (the *ʔall*-series, see §4.1.3) are best considered inflectional endings in some of the compound verbal forms constructions discussed in the previous section where they become hardly distinguishable from the E₁-set and L₁-set. In C. Barwar, for example, the A and P are expressed in the compound verbal forms by means of reduced variants of the present, non-negated copula and the *ʔall*-series that strongly resembles their coding through the use of E₁-and L₁-suffixes in the ‘imperfective’. Compare the following transitive forms of the perfect and ‘imperfective’:

(77) **C. Barwar perfect and imperfective** (NW Iraq; Khan 2008a:280-281, 284)

	PERFECT	:	IMPERFECTIVE
2MS	<i>qʔil-ət-le</i> ‘You _{MS} killed him.’		<i>qaʔl-ət-le</i> ‘You _{MS} kill him.’
FS	<i>qʔilt-ət-le</i> ‘You _{FS} have killed him.’		<i>qaʔla-t-le</i> ‘You _{FS} kill him.’
PL	<i>qʔile-tu-le</i> etc.		<i>qaʔli-tu-le</i> etc.
1MS	<i>qʔil-ən-ne</i>		<i>qaʔl-ən-ne</i>
FS	<i>qʔilt-ən-ne</i>		<i>qaʔla-n-ne</i>
PL	<i>qʔil-əx-xe</i>		<i>qaʔl-əx-xe</i>

Presumably, originally uncontracted forms like **qʔila=iwət ʔalle* ‘You_{MS} have killed him’ converted through contracted forms like *qʔil-ət=alle* into *qʔil-ət-le* in analogy to the ‘imperfective’ in C. Barwar¹⁷⁰. If we consider the E₁-set person forms *-a* and *-i* to be gender agreement markers in the ‘imperfective’, then they pattern exactly like the gender agreement of the resultative participle in the perfect¹⁷¹, so that we obtain the following parallel:

	PERFECT	:	IMPERFECTIVE
MS	<i>qʔil-Ø-</i>		<i>qaʔl-Ø</i>

¹⁷⁰ The same holds for C. Ashitha (SE Turkey), see Borghero (2005).

¹⁷¹ This agreement is absent in the corresponding analytical progressive based on an indeclinable verbal noun *qʔala* (Khan 2008a:287), e.g. *qʔal-ət-le* ‘You_{FS} are killing him’.

	PERFECT		IMPERFECTIVE
FS	<i>q̣ĩl-t-</i>	:	<i>qaṭl-a-</i>
PL	<i>q̣ĩl-e-</i>		<i>qaṭl-i-</i>

The same is true for the past tense with past convertor *-wa-*, compare:

	PERFECT		IMPERFECTIVE
(78)	<i>q̣ĩlt-ən-wa-le</i>	:	<i>qaṭlá-n-wa-le</i>
	'I _F had killed him.'		'I _F would kill him.'

It should be noted that the stress pattern between the two forms is still distinct in C. Barwar.

The third person forms are (the E₂-set) (derived from 3ms. =*ile*, 3fs. =*ila* and 3pl. =*ilɛ*) are different but also follow the affix order of the E-suffixes in the 'imperfective'. Their characteristic *-əl-*element in the transitive present perfect is also found with the past convertor, merging the perfect with the 'imperfective', for example:

	PERFECT		IMPERFECTIVE
(79)	<i>q̣ĩlt-əl-le</i>	:	<i>qaṭla-le</i>
	'She has killed him.'		'She kills him.'
	<i>q̣ĩlt-əl-wa-le</i>	:	<i>qaṭlá-wa-le</i>
	'She had killed him.'		'She would kill him.'

The processes of analogy and phonetic erosion can lead to considerable mixing. Khan (2008a:284) notes that the reduced variants of the E₂-series, for instance, can combine with either the *ʔall*-series or L₁-series, i.e. *q̣ĩl-ən-alle* besides *q̣ĩl-ən-ne* for 'I_M have killed him'. Even the third person 'copula' set (fs. =*ila*, ms. =*ile*, pl. =*ilɛ*) may be (though rarely is) fully expressed before the L₁-suffixes e.g. *q̣ĩltɛ-la-le* (< **q̣ĩlta* + =*ila* + *-le*) '**She has** killed him'. It alternates with a construction based on the *ʔall*-series (Khan 2008a:284), for example:

(80)	<i>rápy-ɛl-lle</i>	<	* <i>rəpya=ile ʔall-a</i>	'He has thrown it _F down.'
	<i>rípe-lə-lle</i>	<	* <i>ripe=ilɛ ʔall-e</i>	'They have attacked him.'

The merger of the compound progressive and perfect with the 'imperfective' is virtually complete in Jewish Urmi. The transitive progressive and transitive realis perfect is identical to that of the inflection of the 'imperfective' apart

from the third person. The morphemes and stress pattern¹⁷² of non-third person indexes is indistinguishable from the 'imperfective'. Compare the following forms of the perfect and 'imperfective':

PERFECT		IMPERFECTIVE
(81) <i>*qtəlt-an-ne</i>	:	<i>*qatl-an-ne</i>
'I _F have killed him.'		'I _F kill him.'
<i>la *qtəlt-an-ne</i>	:	<i>la *qatl-an-ne</i>
'I _F haven't killed him.'		'I _F don't kill him.'
<i>*qtəlt-án-wa-le</i>	:	<i>*qatl-án-wa-le</i>
'I _F had killed him.'		I _F would kill him.'

The third person agent indexes constitute an E₂-set and are -*é*, -*á* and -*ú* consistent with the 'copula' forms =*ile*, =*ila* and =*ilu*. Unlike first and second person subject and agent indexes that are identical with the E₁-set, these third person forms combine with an *ʔall*-series denoting the patient, for example:

(82) **qṭil-u-lle* < **qṭilé* + =*ilu* + *ʔall-e* 'They have killed him.'

Importantly, the compound perfect's merger with the 'imperfective' would potentially also affect the interpretation of the 'perfective'. Person-restricted dialects such as J. Urmi disallow the marking of non-third person patients by the E₁-set in the perfective past. One should note that if they did allow so, the two constructions would completely converge for the masculine singular forms of first and second person agent indexes. The J. Urmi perfect and pluperfect ms. forms, for instance, would be phonologically identical with preterit and plupret-erit ms. forms but with inverted morphosyntax (as the 'imperfective', for example:

PERFECT (<i>*qtila</i> + E _{1/2} -set)		PRETERIT (<i>*qtil-</i> + E ₁ -set)
(83) <i>*qtil-ən-ne</i>	:	<i>**+qtil-ən-ne</i>
'I _M have killed him.'		'He killed me_M .'
<i>*qtil-ón-wa-le</i>	:	<i>**+qtil-ón-wa-le</i>
'I _M had killed him.'		'He had killed me_M .'

¹⁷² Ultimate stress on nominal forms facilitates this analogy in J. Urmi, i.e. **qtilá* 'killed one'.

It is conceivable that these two constructions would be incompatible. And yet, it is interesting to note how delicate this verbal system is such that a compound perfect form like **qtil-ən-ne* 'I_M had killed him' that potentially could be conflated to be an instance of the 'perfective' (*qtil-*) together with the E₁-set can neatly co-exist with preterit forms like **qtil-a-le* 'He killed her'¹⁷³.

The analogy between the 'imperfective' and compound perfect creates an interesting split between transitive and intransitive constructions of the perfect (and progressive) in both C. Barwar and J. Urmi. This is similar to the perfective past transitive constructions that are adapted to the 'imperfective' we discussed in the previous subsections. The L₁-suffixes that mark the patient in the compound verbal forms that are analogically modeled on the 'imperfective' result in a noteworthy difference in transitive and intransitive coding. This is illustrated by the pluperfect in C. Barwar. Every verb without object indexes can freely use the full form of the past 'copula' but a verb with object indexes adapts to the past 'imperfective'¹⁷⁴, for example:

(84) **Split in transitivity coding in C. Barwar** (Khan 2008a:190, 284-286)

- a. [-P] *príxa=wətwə* ~ *príx-ət-wa* 'You_{MS} had flown'
 [P: fNP] *pθíxa=wətwə (tǎra)* 'You_{MS} had opened (a door)'
 ~ *pθíx-ət-wa*
 [P: PRO] *pθíx-ət-wa-le* 'You_{MS} had opened it_M'

These constructions, therefore, make a subtle difference between an A with and without a P index. The omission or independent expression of the P favors a different construction. The verb adapts morphologically to the inflection of the 'imperfective' particularly when the patient is a dependent person form. The difference between intransitive and transitive coding is even stronger for third person referents. They are as follows:

- b. [-P] *príxta=wawa*¹⁷⁵ ~ *prixte-wa* 'She had flown'
 [P: fNP] *qťílt-əl-wa (gawra)* 'She had killed (a man)'

¹⁷³ These two are incompatible in the Christian dialect of Bohtan where the transitive realis perfect is fully based on the 'perfective' (*qtil-*), i.e. *qtil-ən-na* 'I have killed her' and *qtil-a-li* 'She has killed me' (both *qtil-* + E₁-set), see §5.1.

¹⁷⁴ Only an intransitive verb can take a reduced form of the past copula, cf. *príxewa* 'He had flown', *prixətwə* 'You_{MS} had flown' (Khan 2008a:190).

¹⁷⁵ Also *prixte=yawa*.

[P: PRO] *qṭilt-əl-wa-le*

'She had killed him'

Third person 'copula' forms are reduced to *-əl-* before the past convertor *-wa-* and an L-suffix denoting the patient. The presence of two person indexes favors the coding of the 'imperfective' and, interestingly, the same agent index *-əl-* is analogically restored for transitive verbs without an object index. Hence, one obtains the form *qṭilt-əl-wa* (instead of *qṭilta=wawa*) on the basis of *qṭilt-əl-wa-le* (instead of *qṭilta=wawa ṭalle*). Such patient indexes are lacking, for example, in contexts where the P is an indefinite full nominal:

- (85) *ṭay šwīq-t-əl-wa majma tama*
 she leave:RPP-FS-A:3-PST tray there
 'She **had left** a tray there.' (Khan 2008a, A4:53)

And yet, we will never find this morphology on an intransitive verb, so that forms like ***přixt-əl-wa* for 'She had flown' are impossible. The S is treated differently from both the A and P.

To conclude, the coding of A and P in the compound verbal forms in C. Barwar and J. Urmi is analogically levelled to that of the 'imperfective'. Through post-verbal cliticization, the basic 'copula' and *ṭall*-series assimilate fully to the E₁-suffixes and L₁-suffixes in the 'imperfective'. Consequently, transitive clauses are treated differently systematically in the compound perfect and progressive and are adapted to the more frequent pattern found in the 'imperfective' system, especially for the first and second person agent indexes. While gender and number agreement always groups the S and A, the S, A, and P, are all treated differently in a tripartite fashion for the third person indexes. The first and second person favor an accusative grouping of S and A throughout.

5.3. Constructional Splits in Trans-Zab Jewish Dialects

After the introduction of compound verbal forms in general the focus shifts to the expression of the perfect. In many NENA dialects, the perfect is expressed through a compound verbal form consisting of the resultative participle and the copula. There are some interesting features pertaining to agreement and case-marking from the perspective of voice and alignment¹⁷⁶.

¹⁷⁶ See also Coghill (2016:81-84, 272-283) who briefly discusses dialects with non-accusative alignment in the perfect and the gap for a transitive perfect.

The remaining subsections deal with Trans-Zab Jewish dialects. Trans-Zab Jewish dialects vary greatly in their treatment of intransitive verbs in general as well as the transitive realis perfect (see Khan 2008b:2-7, 146-148; 2009:5-9, 327-329). Western Iranian dialects such as Saqqiz, Sanandaj and Kerend and NE Iraq such as Sulemaniyya and Ḥalabja manifest ergative alignment in the perfective past (see §4.2.3). In the realis perfect, however, these ‘ergative dialects’ strongly diverge. Trans-Zab Jewish dialects in NE Iraq and NW Iran that show fluid subject-marking also evince considerable differences. In all of them, it is the transitive realis perfect that stands out and displays the greatest diversity, since the difference in subject coding creates a gap for the transitive counterpart.

(86)	PRETERIT (PERFECTIVE)	REALIS PERFECT (RESULTATIVE)
TR.	<i>qṭal-le</i> ‘He killed’	‘He has killed’
ITR.	<i>qim-le</i> ‘He rose’	<i>qim-Ø</i> ‘He is/has risen’

Moreover, there are several morphological properties that can manifest agreement in the compound verbal forms, namely the participial agreement, the ‘copula’ or E₂-set and some other person index such as ‘possessive suffixes’ or an *ʔall*-series. What is common to these dialects is that the inflectional base is different for transitive and intransitive verbs (transitive *pəlṭa* ‘taken out’ vs. intransitive *plīṭa* ‘gone out’) and the ‘copula’ is not mobile and takes a distinctive /y/-base (=y(e) ‘He is’, =ya ‘She is’).

5.3.1. **Person Role Constraint**

Compound verbal forms can also evince person role constraints similarly to the ‘perfective’ in a NENA dialect. A dependent person form marking the patient of first or second person, for example, cannot be combined with dependent person forms marking the agent in the Jewish dialect of Sulemaniyya (Khan 2004a). When the patient is of first or second person reference, it must be expressed independently¹⁷⁷.

Two types of object coding occur in the present progressive: (i) ‘possessive’ suffixes and (ii) independent *ʔall*-series. The forms are given below.

¹⁷⁷ Conversely, in Jewish Koy Sanjaq (NE Iraq), when the A is first/second person, the P is expressed by L-suffixes, whereas, when the A is third person, the P is expressed by ‘possessive suffixes’ (Mutzafi 2004a:100-101).

(87) **Person-role split in the progressive** (Khan 2004a:139)

	(ii) INDEPENDENT	(i) DEPENDENT		
3PL	<i>garošá=y ʔall-ú</i>	<i>garoš-u=ye</i>	'He is pulling	them'
FS	<i>garošá=y ʔall-á</i>	<i>garoš-aw=ye</i>	etc.	her' THIRD PERSON
MS	<i>garošá=y ʔall-é</i>	<i>garoš-ew=ye</i>		him'
1SG	<i>garošá=y ʔall-í</i>			me'
2PL	<i>garošá=y ʔall-ǎxún</i>			you_{PL}' NON-THIRD
	etc.			etc. PERSON

Only third person referents can occur as dependent object person forms. They are suffixed between the verb (*garošá* 'pulling') and the coding for A (=y(e) 'He is') in construction type I (second column). By contrast, the progressive combines with all persons when the patient is not dependent but expressed independently by a preposition instead (e.g. *ʔill-í*, first column). This parallels the person restrictions on the E-suffixes that mark the patient before the L-suffixes that mark the agent in the 'perfective':

	INDEPENDENT	DEPENDENT	
3MS	<i>grāš-le ʔall-áw</i>	<i>grāš-a-le</i>	'He pulled her'
1SG	<i>grāš-le ʔall-í</i>		me'

The person role constraint in Jewish Sulemaniyya as such does not hinge either on a particular alignment type *per se* (i.e. ergativity) or a particular TAM property *per se* but presumably on a specific combination of dependent person forms in a specific order (V-P-A).

5.3.2. Gender-Conditioned Hierarchical Agreement

The morphosyntax of the perfect evinces some interesting peculiarities in the Jewish variety of Sulemaniyya and Ḥalabja (NE Iraq; Khan 2004a) which are 'ergative dialects'. The inflectional base of transitive verbs differs in the perfect similarly to the perfective past. Unlike the perfective past, however, the perfect is generally accusative. The ergative agreement in the perfect is marginal and conditioned by feminine gender expressed only in the singular. The s consistently triggers overt participial agreement, whereas the A and P do so depending on gender.

Similarly to the preterit, intransitive and transitive verbs are distinguished by means of a shift in syllable structure where the intransitive base consistently

maintains a long front vowel /i/. The masculine singular form of the resultative participle and the third feminine singular inflection of the perfective for the s and P are identical:

(88) **Preterit and perfect in J. Sulemaniyya** (NE Iraq; Khan 2004a:98; 2005)

	PRETERIT		PERFECT	
TR.	<i>šəql-a-le</i>	'He bought it _F '	<i>šəqlá=y</i>	'He has bought'
	PRETERIT		PERFECT	
ITR.	<i>smix-a</i>	'She waited'	<i>smixá=y</i>	'He has waited'

The transitive stem I verbs conjugate similarly to the equivalent stem III verbs, e.g. preterit *mrədx-a-le* 'He boiled it_F' and perfect *mrədxá=y* 'He has boiled'. The resultative participle encodes gender and number agreement. The position of the 'copula' is stable in J. Sulemaniyya and does not attach to the subject but always attaches to the predicate. The paradigms of intransitive and transitive verbs are as follows:

(89) **Perfect paradigms in J. Sulemaniyya** (NE Iraq; Khan 2004a:98; 2005)

	INTRANSITIVE			TRANSITIVE		
MS	<i>qṭilá</i>	+COP		<i>qəṭlá</i>	+COP	
3	<i>smixá</i>	=y	'He has waited'	<i>šəqlá</i>	=y	'He has bought'
2	<i>smix-ét</i>		'You _{MS} have waited'	<i>šəql-ét</i>		'You _{MS} have bought'
1	<i>smix-ena</i>		'I _M have waited'	<i>šəql-ena</i>		'I _M have bought'
	INTRANSITIVE			TRANSITIVE		
FS	<i>qṭiltá</i>	+COP		<i>qəṭaltá</i>	+COP	
3	<i>smixta</i>	=ya	'She has waited'	<i>šqəлта</i>	=ya	'She has bought'
2	<i>smixta</i>	=yat ¹⁷⁸	'You _{FS} have waited'	<i>šqəлта</i>	=yat	'You _{FS} have bought'
1	<i>smixta</i>	=yan	'I _F have waited'	<i>šqəлта</i>	=yan	'I _F have bought'
PL	<i>qṭilé</i>	+COP		<i>qəṭlé</i>	+COP	
3	<i>smix-én</i>		'They have waited'	<i>šəql-én</i>		'They have bought'
2	<i>smix-etun</i>		'You _{PL} have waited'	<i>šəql-etun</i>		'You _{PL} have bought'
1	<i>smix-éx</i>		'We have waited'	<i>šəql-éx</i>		'We have bought'

The participle and 'copula' often undergo contraction. For example,

**smixé* + *=yetun* > *smixetun* 'You_{PL} have waited'

¹⁷⁸ The feminine singular forms in *-yat* and *-yan* may also contract, e.g. *smixtá-yan* > *smixtán* (Khan 2004a: 998).

In such contracted forms, stress is the only distinction against the preterit inflected for E-suffixes (Khan 2004a:99, 2005:366). Compare:

- (90) *smíx-ex* 'We waited' *qtil-* + E-suffixes
smix-éx 'We have waited' *qtila* + enclitic 'copula'

Generally, the alignment is accusative in the perfect in J. Sulemaniyya as in most NENA dialects. The participle and 'copula' will agree with the A or S and mark the object independently, for example *xzita=ya ʔall-ux* 'She has seen **you_{MS}**'. This construction is available for all persons as in the progressive (e.g. *garoša=y ʔall-ux* 'He is pulling **you_{MS}**').

Dependent person forms may also be used as patient indexes for the third person. The alignment is more complex, however. First of all, the P need not be expressed independently of the verb but must be attached to the participle as a 'possessive' suffix. The participle takes (adnominal) person indexes, e.g. *šəql-éw* 'taken **him**'. Like the E-suffixes, however, this is restricted to third person referents, e.g. *-éw* 'his', *-áw* 'her' and *-ú* 'their'. It should be noted that, when the third person patient is marked on the participle through the 'possessive' series, this parallels the marking of the patient in the preterit through the E-series. The 'copula' in the perfect resembles the L-suffixes in the preterit. Compare the parallel sentences in preterit and perfect in (91) below.

(91) **J. Sulemaniyya** (W Iran; Khan 2004a:522 R:163)

	[P] ←—————	[V-P- A]
a.	<i>ay-bratá</i> <i>ma=ya</i> <i>mi-t-aw=yet?</i>	
	DEM:FS-girl:FS why=3MS bring:RPP-P:FS-P:3FS=A:2MS	
	'Why (lit. is it _M) have you _{MS} brought this girl? '	
b.	<i>aya</i> <i>ma=ya</i> <i>my-a-lox?</i>	
	DEM:FS why=3MS bring:PFV-P:3FS-A:2MS	
	'Why (lit. is it _M) did you _{MS} bring her? '	

The person forms always pattern accusatively, the 'copula' expressing the S and A. The resultative participle, however, can agree either with the A or the P in this construction. This depends on the gender(-number) hierarchy, given in (92) below.

(92) **Gender(-number) hierarchy**

FS > non-FS (PL, MS)

The participle indexes the gender and number of the feminine singular outranking the non-feminine irrespective of its role as either the A or P. The masculine singular and the plural forms *qatla*, respectively, *qatle* coincide into *qatl-* before the ‘possessive’ suffixes against the feminine singular *qatla* which is reduced to *qalt-* and renders any distinction between the masculine singular and the plural obsolete. The main difference, then, is fs. *qat-t-* against non-fs. *qatl-Ø-*.

First of all, when all referents are non-feminine singular, participial inflection does not express anything other than non-feminine singular reference, so it could refer to either participant, as illustrated in (93). Forms like *nəšq-ew=yex* ‘We have kissed him’ (93c) and *nəšq-u=yet* ‘You_{MS} have kissed them’ are ambiguous with respect to their agreement with either A or P; their underlying declension could be *nəšqa* (ms.) or *nəšqe* (pl.) or no agreement at all. We simply cannot tell on the basis of these forms. The participle effectively only agrees with the S. The null marking is horizontal, grouping the A and P.

(93) **Null agreement with the non-feminine singular P/A** (Khan 2004a)

	A/P = non-FS		A/P = non-FS
a.	<i>nəšq-Ø-ew=yex</i> kiss:RPP-NONFS-P:3MS-A:1PL ‘We have kissed him.’ S = non-FS	c.	<i>nəšq-Ø-u=yet</i> kiss:RPP-NONFS-P:3PL=A:2MS ‘You _{MS} have kissed them.’ S = non-FS
b.	<i>šmix-á=y</i> wait:RPP-S:MS-S:3MS ‘He has waited.’	d.	<i>šmix-én</i> (= <i>smix-e</i> + <i>=yén</i>) wait:RPP-S:3PL ‘They have waited.’

When feminine singular is involved, the participle will always express agreement with the feminine argument, irrespective of its role. When it is the P argument, the person index marks the P accusatively but the participle agrees ergatively with the P in gender and number like the S:

(94) **Ergative agreement with the P** (Khan 2004a)

	P = FS > A = non-FS		P = FS > A = non-FS
a.	<i>nšəq-t-aw=yē</i> kiss:RPP-P:FS-P:3FS=A:3MS ‘He has kissed her .’ S = FS	c.	<i>nšəq-t-aw=yetun</i> kiss:RPP:FS-P:3FS=A:2PL ‘You _{PL} have kissed her .’
b.	<i>šmix-ta=ya</i> wait:RPP-S:FS=S:3FS		

'She has waited'

When the feminine singular is the A argument, the participle agrees accusatively with the A like the S:

(95) **Accusative agreement with the A** (Khan 2004a)

A = FS > P = non-FS a. <i>nšəq-t-ew=ya</i> kiss:RPP-FS-P:3MS=A:3FS 'She has kissed him.' S = FS b. <i>šmix-tá=ya</i> wait:RPP-S:FS=S:3FS 'She has waited'	A = FS > P = non-FS b. <i>nšəq-t-u=yat</i> kiss:RPP-FS-P:3PL=A:3FS 'You_{FS} have kissed them.' S = FS d. <i>šmix-tá=yat</i> wait:RPP-S:FS=S:2PL 'You_{PL} have waited'.

When all arguments are feminine singular, it is impossible to discern with which argument the participle agrees.

The same holds for the indexing of full NPs. When a full nominal P is not indexed, the participle agrees with the A, for example:

(96) **Agreement with A** (Khan 2004a:490.72)

[A]		[P]		[V+A]
<i>ʔana noši noši</i>		<i>jullé kaldá</i>		<i>xiṭ-ṭa-yan</i>
I myself myself		clothe:PL bride:FS		sew:RPP-FS-A:1FS
'I _F myself, on my own, sewed the clothes of a bride.'				

When a full nominal P is indexed, the gender determines participial agreement. A salient, feminine singular patient such as *ay-bratá* 'this girl' in (97) below may trigger overt participial agreement with the P.

(97) **Agreement with P** (Khan 2004a:522.163)

[P]	←————→	[V+P]-[A]
<i>ay-bratá</i>		<i>ma=ya mi-t-aw=yet?</i>
DEM:FS-girl:FS		why=3MS bring:RPP-P:FS-P:3FS=A:2MS
'Why (lit. is it _M) have you _{MS} brought this girl? '		

Thus, agreement with femine singular arguments overrides agreement with non-feminine singular arguments (Khan 2004a:137-138, 157) and the alignment depends on the properties of a co-argument. All functions S, A and P can

trigger agreement. It only patterns either ergatively or accusatively, when a non-fs. argument is additionally involved. The non-feminine singular arguments are ambiguous only in transitive clauses. Only non-feminine singular S triggers overt participial agreement, while the A and P do not. The morphosyntax shifts in the direction of the morphologically more marked feminine singular, regardless of the function. Only the A and P are treated differently depending on gender, while the S remains unaffected and the person indexes (i.e. the ‘copula’ and the ‘possessive’ suffixes) remain accusative throughout.

In sum, the gender agreement of the participle is irrespective of the A or P function of the argument. The agreement potential is the same for all functions (S, A, P) but not for all genders (feminine singular vs. non-feminine singular). It is the feminine singular argument *per se* that triggers overt agreement, not the function. Non feminine singular arguments arguably do not trigger participial agreement in transitive clauses, since there is no overt morphology that distinguishes between masculine singular or common plural (contrary to intransitive clauses). The resultative participle expresses agreement in gender and number with the P only for the third person and never first and second person. The ergative grouping of the S and P, then, only occurs, if the P is expressed as a dependent person form of the third person feminine singular, and no competing feminine singular A is involved.

5.3.3. *Splits and Co-Variation in the Realis Perfect*

North West Trans-Zab Jewish dialects in Iraqi Kurdistan and Iranian Azerbaijan exhibit active-stative fluid subject-marking (see §5.1.2). They have a tense-aspect-conditioned split for ‘perfective’ *q̄til-* between the E-set as subject indexes for the realis perfect and the L-set for the preterit (i.e. **dmix-a* ‘She is asleep, has gone to sleep’ vs. **dməx-la* ‘She slept’). The transitive counterpart of the simple intransitive perfect or resultative strongly differs across such dialects. The compound verbal constructions are competing and converging with the fluid subject marking.

Thus, the ‘perfective’ (*q̄til-*) and resultative participle (*q̄tila*) both constitute a possible basis for perfect constructions that may either complement each other or compete. The North West Trans-Zab Jewish dialects considered here all showed an intransitive construction based upon the ‘perfective’ and the E₁-set of person forms. It is the transitive realis perfect construction that is somehow derived.

The transitive realis perfect based on the resultative participle is partially merged but completely complementary with the intransitive resultative based on the ‘perfective’ in North Western Iranian Jewish dialects such as J. Urmi. As a result, Jewish Urmi shows tripartite alignment for the third person indexes in the realis perfect. The morphology presumably also evinces a marked ergative pattern in isolating the A for the feminine singular.

There are interesting parallels between the split subject marking in Jewish Urmi in the perfect and split subject marking in the ‘ergative dialects’. Apart from possible idiosyncracies, a major difference is the treatment of controlled activities such as ‘dance’ and semelfactives such as ‘bark’. Controlled activities are probably not compatible with the result state focus of the intransitive coding.

5.3.3.1. Competing Resultatives

In many respects, intransitive resultative or perfect forms like *dmix-Ø* are akin to compound verbal forms based on the enclitic ‘copula’ and resultative participle. In J. Rustaqa, for instance, the same sense of the intransitive resultative-stative is available for a construction based on the participle:

(98) **J. Rustaqa** (NE Iraq; Khan 2002b:404)¹⁷⁹

- a. ***lā*** *xmil-et* ‘You_{MS} are standing.’ (TAM + *qtil-* + E-set)
 b. *xmil-a=wet* ‘id.’ (RPP *qtila* + encl. ‘copula’)

Based on Khan (2002b), we can assume the following system for J. Rustaqa. The schema below gives the first person feminine forms for the two types of resultatives and the preterit; one (‘resultative I’) based on the ‘perfective’ (*qtil-*), the other (‘resultative II’ represented in gray shade) based on the resultative participle (*qtila*):

(99) **Two resultatives in J. Rustaqa** (NE Iraq; Khan 2002b)

	PRETERIT	RESULTATIVE I	RESULTATIVE II
	PFV-based		
TR.	<i>qtil-li</i>	<i>lā qtil-li</i>	
ITR.	<i>dmix-li</i>	<i>(lā) dmix-na</i>	<i>dmixá=wena</i> RPP-based

¹⁷⁹ Third person enclitic ‘copula’ forms (=ile, =ila, =ilu) presumably undergo contraction (e.g. *dmixe-le* < **dmixa=ile*). Khan (2002c) does not provide an example of this contraction but we can infer this from the contraction with noun phrases elsewhere.

Note how it is the intransitive constructions that show distinct verbal inflection. In principle, the transitive resultative *lā qṭil-li* with preverbal TAM-marking functions as the transitive counterpart to both ‘resultative I’ (*lā*) *dmix-na* and ‘resultative II’ *dmixá=wena*.

In a closely related Jewish dialect, Koy Sanjaq (NE Iraq), the TAM-marker *lā* is absent but ‘resultative I’ forms like *ɣxiš-Ø* ‘He has walked’ (Mutzafi 2004a:82) do occur. They are marginal and are largely supplanted by the second resultative construction, respectively, compound perfect. ‘Resultative I’ forms like *dmixe=lū* ‘They are asleep’ (RPP+COP) are more common than ‘resultative I’ forms like *dmix-i* ‘They are asleep’ (*qṭil-* + E-set) (Mutzafi 2004a:78, 105, 108). The compound perfect is, however, fully available for transitive verbs, so that we obtain the following system:

(100) **Two resultatives in J. Koy Sanjaq** (NE Iraq; Mutzafi 2004a)

	PRETERIT	RESULTATIVE I	RESULTATIVE II	
		PFV-based		
TR.	<i>qṭil-li</i>	<i>qṭilá=wen(a)</i>		
ITR.	<i>dmix-li</i>	<i>dmix-en(a)</i>	<i>dmixá=wen(a)</i>	RPP-based

It is the second resultative (*qṭilá=wena*) that serves as the transitive counterpart to the ‘resultative I’ based on the ‘perfective’ (*dmix-ena*) in J. Koy Sanjaq¹⁸⁰.

In both J. Rustaqa and J. Koy Sanjaq, there is some overlap between the ‘perfective’ (*qṭil-*) and resultative participle (*qṭila*) in either direction. In dialects further north in North West Iran such as Urmi, however, there is a mixed system with complete complementary distribution between the two types of resultatives (Khan 2008b:82-83). Transitive verbs have a complete system of their own based on the resultative participle and a secondary E₂-set ultimately based on but not identical with the enclitic ‘copula’ (*plix-é* < **plixa=ile* ‘He has opened’). Intransitive verbs are inflected for the familiar E₁-set, for example:

¹⁸⁰ The alignment of person indexes is tripartite in Jewish Koy Sanjaq (NE Iraq). The coding of the P differs depending on the person of the A. The copula indexes and the participle always agrees with the A. When the A is first/second person, the P is expressed by L-suffixes, e.g. *lbil-tá=wan-ne* ‘I_F have taken **him** along’, whereas, when the A is third person, the P is expressed by ‘possessive suffixes’, e.g. *nsiq-t-ew=ila* ‘She kissed **him**’ (Mutzafi 2004a:100-101). Although I cannot fully address this here, I presume this alternation is ultimately derived from ditransitives, where the third person copula marks the the theme and attaches to an L-set that reveals the same forms as the ‘possessive suffixes’.

(101) **J. Urmi** (NW Iran; Khan 2008b:263, 83)

- a. *xa tara plix-é* 'He opened a door.' (tr., *qṭilá*, A = E₂)
 b. *tara plix-Ø* 'The door has opened' (itr., *qṭil*, S = E₁)
 c. *o-tara plixe=le* 'The door is open.' (adj., *qṭilá*, S = COP)

The two systems complement each other entirely and constitute a paradigmatic relation, as illustrated in (102) below. The feminine forms highlight the difference between verbal base. The construction based the resultative participle inflects for gender like the nominal form (fs. *qṭilta* 'killed') and is combined with the E₁-series for the first and second person and the E₂-series for the third person. If the intransitive form had the same basis, it would inflect in the same way, i.e. ***dmixt-án* 'She has slept' but this is impossible.

(102) **Two resultatives in J. Urmi** (NE Iraq; Khan 2008b)

	PRETERIT	RESULTATIVE I+II
TR.	PFV <i>*qtəl-li</i>	RPP-BASED <i>*qtəlt-án</i>
ITR.	<i>*dməx-li</i>	<i>*dmix-an</i>

This also applies to their relative past tense forms that take the past convertor -*wa* instead of the past copula. Compare:

(103) **Equivalent forms with 'past convertor'**

	PRETERIT	RESULTATIVE I+II
TR.	PFV <i>*qtəl-wa-li</i>	RPP-BASED <i>*qtəlt-an-wa</i>
ITR.	<i>*dmáx-wa-li</i>	<i>*dmíx-an-wa</i>

5.3.3.2. Alignment Splits and Gender-Conditioned Ergativity

Jewish Urmi has a split between accusative and tripartite alignment depending on mood (realis as opposed to irrealis). Whenever the verb takes an object index in the perfect, this is marked by the L-suffixes (analogically to the 'imperfective', see §5.2.5): **qtəlt-an-ne* 'I_F have killed **him**.'

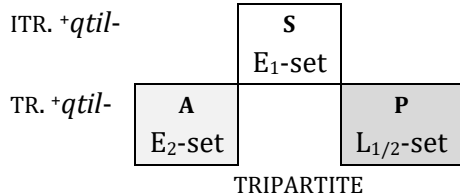
A more analytic construction is preferred in the *irrealis* mood. The auxiliary verb *hwy* 'be' is employed together with the participle, both agreeing with the subject and agent. The unmarked 'imperfective' form (*Ø-hawe*) of *hwy* expresses the subjunctive. The intransitive and transitive verbs pattern alike in this analytic construction, for example:

(104) **Irrealis perfect in J. Urmi** (NE Iraq; Khan 2008b:82, 142)

RESULTATIVE II

- TR. *+qtəl-tá=hawy-a* 'She may have killed'
+qtəl-tá=hawy-a-le 'She may have killed him'
 ITR. *+dməx-tá=hawy-a* 'She may have gone to sleep'

In terms of alignment, then, the irrealis perfect is accusative, and this is expected, because the inflection is fully based on the 'imperfective' form of *hwy* 'be'. When we confine ourselves to the realis perfect, however, the alignment pattern is best considered to be tripartite for the third person indexes and accusative only for the first and second person indexes. The first and second person subject and agent indexes are expressed by the E₁-set (*+dmix-an* 'I_M have slept' : *+qtəlt-an* 'I_M have killed'). Third person S and A are differentiated by the primary E₁-set (*plix-Ø* 'It_M is opened') and secondary E₂-set (*plix-é* 'He has opened (sth.)'). The patient index may be a primary L₁-set or secondary L₂-set. (35) illustrates this tripartite pattern.

(105) **Tripartite alignment for third person in the perfect in J. Urmi**

Finally, there is one subtle aspect in which the A is isolated. The resultative participle only agrees with the A and this is only overt in the feminine singular. No such overt agreement is found for the S and the P. Morphologically speaking, the transitive construction evinces more differentiation for the A than for the P which is also distinct from the S for feminine singular arguments. The difference is not visible for the masculine singular and the (common) plural. We may illustrate this with the first person coding. The Ø symbol indicates that we observe no difference with the intransitive verbs here.

- (106) 1MS *+qtil-Ø-ən-wa-la* 'I_M had killed her.'
+dmíx-Ø-ən-wa 'I_M had gone to sleep'

1PL	<i>+qtil-Ø-əx-wa-la</i>	'We had killed her.'
	<i>+dmix-Ø-əx-wa</i>	'We had gone to sleep'

Although the inflectional bases of the transitive verbs is diachronically different from that of intransitives (resultative participle *qtilá* + enclitic copula vs. perfective *qtil-* + E-set), there is no such distinction synchronically apart from which morpheme takes the stress (the person index or the inflectional base, respectively).

The feminine singular, by contrast, shows an additional /t/-element of originally the resultative participle form *+qtal-ta* 'killed' that inflected like an adjective. This is distinct from intransitive verbs, for example:

(107) 1FS	<i>+qtal-t-án-wa-le</i>	'I _F have killed him.'	(transitive)
	<i>+dmix-Ø-an-wa</i>	'I _F had gone to sleep'	(intransitive)

Thus, we observe special marking of the A in the feminine singular. This agreement is not just gender conditioned (as in Jewish Sulemaniyya see §5.3.1) but also conditioned by the A role. It is, therefore, ergative agreement for the feminine singular and accusative agreement for the masculine singular and the (common) plural. If this is correct, this would be an instance of a marked ergative agreement pattern. In the unmarked ergative, the S and P trigger overt agreement but not the A (see §2.2.6). In Jewish Urmi, the A triggers overt agreement but not the S and P.

5.3.3.3. *Split Intransitivity*

Not all intransitive verbs receive the same coding in the perfect in Jewish Urmi (NW Iran). Some intransitive verbs have transitive coding (i.e. E₂-set) in the realis perfect similarly to the 'ergative varieties' like Jewish Sulemaniyya (see §5.1.1). There are notable differences between split subject-marking J. Sulemaniyya and J. Urmi. Table 36 below compares the two dialects by using the preterit forms for J. Sulemaniyya and the perfect forms for J. Urmi. Contrary to J. Sulemaniyya, J. Urmi treats atelic verbs that denote a controlled activity such as *rqil-é* 'dance' as transitive consistent with Croft (1998:52-53)'s control hierarchy (see §2.3.1.). Conversely, semelfactives receive transitive coding in J. Sulemaniyya (*nwəx-le*) but intransitive (*nwix-Ø*) in J. Urmi. Other verbs that denote a controlled activity like *mty* 'arrive' and *prq* 'finish' are treated the same in both

dialects. Interestingly, J. Urmi differentiates between the putting on (*lwiš-é*) and the putting off of clothes (*šlix-Ø*) which is presumably simply an idiosyncrasy¹⁸¹. Khan (2008b:74) notes that a likely explanation for the differences is that punctuality is more fundamental in dialects like J. Sulemaniyya due to the perfective past sense of the preterit, whereas a resultant state is more fundamental to the J. Urmi perfect which is not readily available for (atelic) activity verbs like *rql* ‘dance’.

Table 36. *Comparison of subject-marking in J. Suleminiyya and J. Urmi*

		J. Sulemaniyya PRETERIT (Khan 2004a)	J. Urmi PERFECT (Khan 2008b)
state	‘be afraid’	<i>zæde-Ø</i>	<i>zæde-Ø</i>
change of state	‘become hungry’	<i>kpin-Ø</i>	<i>kpin-Ø</i>
uncontrolled process	‘explode’	<i>pæqe-Ø</i>	<i>páqe-Ø</i>
controlled activity	‘dance’	<i>rqil-Ø</i>	<i>rqil-é</i>
	‘jump’	<i>nənde-Ø</i>	<i>nəndy-é</i>
	‘ride’	<i>rkiw-Ø</i>	<i>rkiw-é</i>
	‘come out’	<i>plit-Ø</i>	<i>+plit-Ø</i>
	‘go’	<i>zil-Ø</i>	<i>zil-Ø</i>
	‘arrive’	<i>mæte-Ø</i>	<i>+mæte-Ø</i>
	‘finish’	<i>priq-Ø</i>	<i>priq-Ø</i>
sound emission	‘bark’	<i>nwəx-le</i>	<i>nwix-Ø</i>
	‘yawn’	<i>phər-re</i>	<i>phir-Ø</i>
	‘sneeze’	<i>tpəl-le</i>	<i>tpil-Ø</i>
	‘thunder’	<i>gərgəm-le</i>	<i>gərgím-Ø</i>
inherently reflexive	‘wash’	<i>sæxe-Ø</i>	<i>sáxe-Ø</i>
	‘undress’	<i>šlax-le</i>	<i>šlix-Ø</i>
	‘dress’	<i>lwəš-le</i>	<i>lwiš-é</i>

¹⁸¹ Possibly, the distinction is similar to J. Urmi *bašlamíš widé* ‘begin’ (a complex predicate consisting of ‘beginning’ + ‘do’) and *priq-Ø* ‘finish’ in terms of dynamism, i.e. begin vs. stop wearing.

5.3.4. *Passive and Ergative in the Realis Perfect*

Western Iranian Jewish dialects show ergative and tripartite person indexes in the perfective past (like J. Sulemaniyya, NE Iraq, see §4.2.3) but the perfect based on compound verbal forms is more restricted. While the vast majority of NENA dialects uses the ‘copula’ set as subject and agent indexes, the Western Iranian Jewish varieties use them as patient indexes. Moreover, as we will see, both the agent and the patient are restricted more so than the subject. Although these restrictions are reminiscent of the passive which may also be expressed by the resultative participle in NENA dialects (see §4.3.1 and §5.2.3), it will be argued that this not a passive voice construction in Western Iranian Jewish NENA. There are several reasons why the transitive perfect should not be mistaken to be one. We will consider the following reasons:

- (i) word order and case-marking;
- (ii) inflectional base of the participle;
- (iii) referential continuity;
- (iv) differential object marking.

5.3.4.1. *The Perfect in West Iranian Dialects*

The participle is inflected for number and gender like adjectives. In certain forms of the masculine singular and all forms of the plural, the participle and ‘copula’ mainly (though not always) undergo contraction (e.g. **smixé=yetun* > J. Kerend *smix=etun* ‘You have stood’) similarly to Jewish Sulemaniyya (see §5.3.1). Stress is the only cue to distinguish between these contracted perfect forms and their near-identical preterit counterparts (Hopkins 1989a, 2002). Compare:

(108) **J. Kerend** (W Iran; Hopkins 2002:287, 291)

<i>rqil-etun</i> ‘You _{PL} danced’	<i>qtil-</i> + E-suffixes	(preterit)
<i>rqil-étun</i> ‘You _{PL} have danced’	<i>qtila</i> + enclitic ‘copula’	(perfect)

In addition, one should note that the position of the ‘copula’ is stable in these dialects and always attaches to the predicate which normally follows the subject NP (J. Sanandaj, Khan 2009:335-337). Thus, the position of the copula =y after the subject NP *tatóx* ‘Your father’ in ***tatóx=y hiyá* ‘Your father has come’ is not possible but only after the participle: *tatóx hiyá=y*.

The dialects further differentiate between various moods and tenses of the perfect mainly by means of the verb *hwy* ‘be’. Intransitive verbs can occur in all perfect constructions alike, for example:

(109) **Intransitive perfect forms in J. Saqqiz** (W Iran; Israeli 1998:110, 149)

	PRESENT	PAST
REALIS	<i>dmixá=y</i> ‘He has fallen asleep’	<i>dmixēle</i> < <i>dmixá ye-le</i> ‘He had fallen asleep’
IRREALIS	<i>dmixá Ø-hawé-Ø</i> ‘He may have fallen asleep’	<i>dmixá Ø-hawe-Ø-wa</i> ‘He would have fallen asleep’

Transitive perfect constructions are more restricted. We will concentrate on the realis perfect. The perfect is mainly non-ergative the majority of NENA dialects, even though the ‘perfective’ may be ergative (for example J. Sulemaniyya, §4.2.3) or active-stative (for example J. Urmi, §4.6.3). In all of them, the ‘copula’ always expresses the subject and agent. In Western Iranian dialects, this is not the case. The participle as well as the ‘copula’ agree with the patient in the realis perfect. This is a striking deviation from the more common pattern in the transitive realis perfects among NENA dialects. Following (Khan 2008b:6), we may compare this to North Western Iranian Jewish varieties such as Urmi. Consider the following clauses:

(110) **The perfect in Iranian Jewish dialects** (Khan 2008b:6)

	[A]	[P]	[V-A-P]	
a.	<i>šwaw-í</i> neighbor:MS-my	<i>baxt-í</i> woman:FS-my	<i>nšiq-e-lla</i> kissed:NONFS-A:3MS-P:3FS	(NW Iran)
	[A]	[P]	[V+P]	
b.	<i>šwaw-í</i> neighbor:MS-my	<i>baxt-í</i> woman:FS-my	<i>nšaq-ta=ya</i> kissed-P:FS=P:3FS	(W Iran)
	‘My neighbor has kissed my wife .’			

In North West Iranian dialects, the E₂-set ending *-e* derived from the enclitic ‘copula’ (*ile*) agrees with the agent *šwawí* ‘my neighbor’ while the suffix *-lla* ‘her’ from the *ʔall*-series (derived from independent dative person forms) indexes the patient *baxtí* ‘my wife’. In the equivalent clause for Western Iranian dialects, the participial inflection reflected in the feminine singular *nšaqta* ‘kissed’ as well as the ‘copula’ reflected in the feminine singular *=ya* (otherwise denoting ‘She is’) index the feminine singular patient NP.

Interestingly, there is no overt coding of the agent (Hopkins 2002; Khan 2009:92). This is a major difference with other NENA dialects. Also, given the lack of agreement with the agent, the compound verbal form itself is unspecified for an agent which has to be inferred from the context and can never be a highly topical argument such as the first or second person. Thus, a hypothetical clause like (111) below is not possible.

- (111) ***aná* *baxtí* *nšəq-ta=ya*
 I woman:FS-my kissed-P:FS=P:3FS
 ‘I have kissed my wife.’

The realis perfect is similar to the passive, since the agent is obligatorily zero and incompatible with highly topical agents. In some languages, the agent in the passive construction is limited to the third person and may be omitted (Jelinek and Demers 1983; Croft 2001:288-290). In such languages, the passive cannot be used where the agent is non-third person and the s is third person (either pronominal or full nominal).

Yet, there are good reasons to believe this construction is not to be characterized as passive but as ergative.

5.3.4.2. Word order and Case-marking

First of all, the unmarked word order of full NPs in the perfect is consistent with other transitive clauses. Compare the perfect in (112a) with an equivalent preterit clause in (112b) in the Jewish dialect of Saqqiz:

(112) J. Saqqiz (W Iran; Israeli 1998:103)

	[A]	[P]		[V-P]
a.	<i>brat-év</i>	<i>axonowal-áv</i>	<i>la</i>	<i>xízy-én</i>
	girl:FS-his	brother:PL-her	NEG	see:RPP:P:PL-P:3PL
	‘His daughter has not seen her brothers.’			
	[A]	[P]		[V-P-A]
b.	<i>aḥmád</i>	<i>xalist-év</i>		<i>xízy-a-le</i>
	PRN	sister-his		seePFV-P:3FS-A:3MS
	‘Ahmad saw his sister.’			

The agreement is entirely limited to the patient in the realis transitive perfect (112a) contrary to the preterit where the agent is indexed (i.e. the L-suffixes). The agent NP in (112a) occupies the typical position of the A in the clause. Indeed,

the agent nominal is similarly zero-marked. It is not oblique, as we would expect for a passive.

5.3.4.3. *Inflectional Base*

Secondly, the difference between an agent- or patient-orientation is also reflected in the inflectional base (not for weak verbs like *xzy* ‘see’ in (112) above but for sound verbs like *grš* ‘pull’). Sound verbs differentiate between transitive and intransitive predicates. They differ in the vowel template of the participle similarly to the ‘perfective’. Transitive verbal forms have a vowel before the second radical in the masculine and plural base which is a reduced /ə/ (written <i> in Israeli 1996 for J. Saqqiz):

(113) **Transitive bases**

ms.	<i>gəršá</i>	‘pulled’
pl.	<i>gəršé</i>	
fs.	<i>grəšté</i>	

Intransitive verbs such as *smx* ‘stand, wait’ have a full /i/ and a stable vowel template. This also applies to the intransitive form of transitive verbs:

(114) **Intransitive bases**

ms.	<i>smixá</i>	‘waited’	<i>grišá</i>	‘pulled’
pl.	<i>smixé</i>		<i>grišé</i>	
fs.	<i>smixté</i>		<i>grišté</i>	

Thus, intransitive verbs are stable *smixá=y* ‘I have stood’, *smix=én* ‘I have stood’, *smixte=ya* ‘I have stood’ etc. Virtually all transitive verbs are labile but there is a morphological distinction between the intransitive and transitive valence pattern. The transitive valence pattern is *qətlá* or *qiltá* as in causative *pilt-á=y* ‘taken him out’ where an agent is still implied against the intransitive *qtilá* as in anticausative *plit-á=y* ‘He has gone out’ (J. Saqqiz, Israel 1998:107). We would expect to find and do find the intransitive verbal form for a passive: *grišá=y* ‘He has been taken’ (Khan 2009:93)

5.3.4.4. *Referential Continuity*

Co-referential deletion is not expected to be possible for the (oblique) agent in a passive prototype but only for the s (see §4.3.1). In the following examples, how-

ever, an intransitive construction is combined with a transitive one, both in the realis perfect. The agent in the conjoined clause is the same referent as the *s*. The $-\emptyset$ affix indicates that the agreement with the agent is not overtly expressed.

(115) **J. Kerend** (W Iran; Hopkins 2002:292)

	[S]		[A=S]	[P≠S]	[V+P](-[A])
a.	<i>hy-a=y</i> come:RPP-S:MS=S:3MS	<i>u</i> and	$(\emptyset)$ 3MS	<i>zuz-éf</i> money:MS-his	<i>ləbl-á=y(-\emptyset)</i> take:RPP:MS=P:3MS-A:3
	'He _i has come and (he _i has) taken his _i money.'				
b.	<i>h-ita=ya</i> come:RPP-S:FS=S:3FS	<i>u</i> and	$(\emptyset)$ 3FS	<i>zuz-áf</i> money:MS-her	<i>ləbl-á=y(-\emptyset)</i> take:RPP:MS=P:3MS-A:3
	'She _i has come and (she _i has) taken her _i money.'				
c.	<i>hy-éni</i> come:RPP:S:PL-S:3PL	<i>u</i> and	$(\emptyset)$ 3PL	<i>zuz-ú</i> money:MS-their	<i>ləbl-á=y(-\emptyset)</i> take:RPP:MS=P:3MS-A:3
	'They _i have come and (they _i have) taken their _i money.'				

The *s* of the intransitive verb *hyy* 'come' shows full agreement. It has the same referent as the agent of the following transitive clause. The transitive verb *lbl* 'take' agrees with the definite patient NP which is *zuza* 'money'. In each case there is a distinct reference for the agent as indicated by the possessor on *zuza* and this subject reference is the same as the preceding *s* of the intransitive verb. Other than the contextualization such as the possessor pronoun and the subject in the preceding intransitive clauses, the agent is not expressed. Accordingly, forms like *ləblá=y* 'taken her' still imply agreement with a third person agent, such that a feature [A:3] is arguably part of the construction (cf. Hopkins 2002). Transitive forms like *xəzyá=y* '(A:3) seen him' and *pəltá=y* '(A:3) taken him out' are active two-argument instances of the realis perfect.

In addition, the patient may be omitted and the verb remains referential to the agent, taking the unmarked 3ms. form (Khan 2009:325). Thus, where the patient is less salient to the event, an agent-orientation may be maintained such as *qry* 'study' in (116a). Similarly, intransitive *S_A* verbs such as *šhl* 'cough' in (116b) that take transitive coding in the perfective past also retain an agent-orientation (Khan *ibid.*). A passive interpretation completely ruled out.

(116) **J. Sanandaj** (W Iran; Khan 2009:325)

a.	<i>brat-i</i> daughter:FS-my	<i>qərya=y-∅</i> study:RPP:MS=3MS-3
	'My daughter has studied.'	

- b. *baxt-i* *šəhla=y-Ø*
 woman:FS-my cough:RPP:MS=3MS-3
 'My wife has coughed'

In same subject complements, modal verbs like *ʔby* 'want' (cf. *ʔəbe-le* 'He wanted') take the agentless transitive form, while the following subjunctive verb in the complement clauses expresses overt subject agreement, for example:

- c. *brat-i* *ʔəbya=y-Ø* $\emptyset_i$ *Ø-hiy-a*
 daughter:FS-my study:RPP:MS=3MS-3 SBJ-comeIPFV-S:3FS
 'My daughter wanted to come.' (Khan 2009:326)

5.3.4.5. Differential Object Marking

The marking of the patient is sensitive to definiteness in the realis perfect which is typical for objects. Agreement, for instance, is only manifested, when the patient argument is salient. Otherwise the compound perfect is in the unmarked masculine singular form, e.g. *gəršá=y*, and does not agree just as in the preterit, e.g. *grəš-li* 'I pulled' (Khan 2009:326). Although it is not uncommon for passives to disfavor non-third person arguments to occur as the oblique agent, it is typical for passives to favor them as the patient. The compound perfect concerned here, however, is not compatible with non-third person arguments either as the agent or patient. The person constraint on the patient, however, is not typical for a passive and it is similar to the ergative preterit. A first person form, for example, cannot be expressed as the patient as in the following hypothetical clause:

- (117) *šulṭana* ** *nšəqta=yan*
 king:MS kiss:RPP:P:FS=P:1FS
 'The king has kissed me_F.'

In addition, it is the patient argument that may receive (differential) case-marking by the dative preposition (*ʔəl*)-, for example:

(118) Differential case-marking

	[A]		[DOM→P]		[V]
a.	<i>šulṭaná</i>	il	<i>ganawá</i>		<i>qiṭlá=y</i>
	king:MS	DOM	thief:MS		pulled
- 'The king has killed **the thief**.' (J. Saqqiz, W Iran; Israeli 1998:229)

- b. *tat-í* ***həl-baxtaké*** *gəršá=y*
 father:MS-my DOM-woman:the:FS pulled
 'My father has pulled the woman.' (J. Sanandaj, W Iran; Khan 2009:329)

Similarly, the realis perfect freely combines with independent object person forms, for example:

(119) **J. Sanandaj** (W Iran; Khan 2009:324)

	[A]	[V]	[P]
a.	<i>brat-í</i>	<i>gəršá=y</i>	<i>ʔəl-éf</i>
	girl:MS-my	pulled	OBJ-3MS
	'My daughter has pulled him.'		
b.	∅	<i>gəršá=y</i>	<i>ʔəl-í</i>
	A:3	pulled	OBJ-1SG
	'(He/she/it/they has/have) pulled me.'		

Dependent person forms of the L₁-suffixes or L₂-series (see §4.1.3) may attach to the immediately preceding verbal form in J. Saqqiz just as in the preterit: *nišqá=y-lan* '(He/she/it/they has/have) kissed **us**' (Israeli 1998:117). First and second person patients are never expressed through the participial agreement or the 'copula', when the perfect is transitive. This is a type of person role constraint also attested for the preterit of these dialects (see §4.1.1). One would expect for a passive that participle and copula would agree with a highly topical patient just as the s but they do not. The patient coding of the perfect mimicks that of the P in the preterit (cf. Khan 2009:323).

Case-marking of the agent does not appear to be possible in these dialects for the realis perfect such that clauses like (120) below do not occur. This is typical for the A.

- (120) ** ***həl-brat-í*** *gəršá=y* *ʔəlí*
 DAT-daughter:FS-my pulled P:3MS
 'My daughter has pulled me.'

All things considered, it has been established that the transitive realis perfect (*gəršá=y*) in Western Iranian Jewish dialect is not a passive voice construction. This is supported by the coding and behavioral properties of the agent (lacking oblique case-marking, occupying initial position, co-referential deletion), the verbal form (distinct inflectional base for transitives and intransitives) and the differential marking of the patient. It still remains, however, a restricted

and impersonal construction, namely that both the A and P are limited to the third person.

5.3.5. *Alignment Splits in the Compound Perfect*

The perfect of Western Iranian Jewish dialects (Hopkins 2002; Khan 2009:90-92, 295-296, 323-326, 327-329) shows an interesting split between ergative and tripartite alignment depending on person both similarly and differently to the preterit (see §4.2.3). The agreement through the participle and the ‘copula’ is confined to both third person agents and third person patients in the compound realis perfect. Transitive clauses with two full NPs can freely occur in this construction, but pronouns are treated differently depending on person, showing, as we will see, ergative alignment for the third person and tripartite for the other persons. Contrary to other dialects, the *irrealis* pendant of this construction also follows this pattern.

The compound realis perfect freely combines with full NPs. When there is no overt agreement with either the A or P, the verb is an unmarked 3ms form. Agreement with full nominal patients is only overtly expressed, when the NP is definite or referential indefinite (Khan 2009:318-319, 326). The indefinite *xa baxta* in (121b) is salient and triggers overt agreement through both the participle and the ‘copula’, while *baxta* (121a) is not and the lack of agreement is indicated by the non-referential dummy 3ms. verbal form.

(121) J. Sanandaj (W Iran; Khan 2009:326)

	[A]	[P]	[V]
a.	<i>tat-i</i>	<i>baxta</i>	<i>nəšqa=y</i>
	father:MS-my	woman:FS	kissed:MS=3MS
	‘My father has kissed a woman.’		
	[A]	[P]	← [V-P]
b.	<i>tat-i</i>	<i>xa baxta</i>	<i>nšəq-ta=ya</i>
	father:MS-my	one woman:FS	kissed-P:FS=P:3FS
	‘My father has kissed a certain woman.’		

By contrast, the agent NP does not even trigger agreement, when it is a full and definite nominal such as *tati* ‘my father’ in (121), and even when the patient is omitted, for example:

- c. *brat-i* (Ø) *qərya=y*
 daughter:FS-my studied:MS=3MS
 'My daughter has studied' (Khan 2009:325)

Conversely, the prominent patient retains overt agreement, when the agent is still referential but unexpressed:

- d. (Ø) *mašinǎké* *lbəlte=ya*
 car:FS:DEF taken:FS=3FS
 'He has taken the car.' (Khan 2009:518)

This may be expected for ergative agreement morphology. The zero realization of the agent is typologically unmarked for ergative agreement (see §2.2.6). From the perspective of argument salience, the agreement potential of the A is even less than that of the P. Thus, even when the P ranks lower in prominence, the A does not trigger agreement but the P may do so.

Full nominal agents can freely combine with pronominal patients, while not all pronominal agents can do so. The marking of the patient is conditioned by person. Only the third person may be indexed on the compound verbal form. The non-third person forms are necessarily expressed through a different set. This is the *ʔall*-series of independent person forms in Jewish Sanandaj (Khan 2009), for example *ʔəl-ax* 'you' in (122b) below. Third person forms may also be expressed independently, e.g. *bǎruxǎwali gərša=y ʔəl-ef* 'My friends pulled him.'

(122) **Variation in patient-marking for the realis perfect** (based on Khan 2009:324)

	[A: fNP]	[V-P: PRO 3]	
a.	<i>bǎruxǎwali</i>	<i>grəšte=ya-Ø</i>	
	friend:PL-my	pulled:P:FS-P:3FS	
	'My friends pulled her/it_F .'		
	[A: fNP]	[V]	[P: PRO 1,2,3]
b.	<i>bǎruxǎwali</i>	<i>gərša=y</i>	<i>ʔəl-ax</i>
	friend:PL-my	pulled	OBJ-2FS
	'My friends pulled you_{FS} .'		

If a speaker should wish to express an agent other than the third person, another construction must be used instead of the compound perfect (Khan 2009:94). This is the 'perfective' (*qṭil-*) that otherwise expresses the perfective

past where L_1 -suffixes constitute the agent indexes. Thus, it is possible to say (123) below to convey either ‘I saw the woman’ (preterit) or ‘I have seen the woman’ (perfect) but it is not possible to include a non-third person agent in the compound perfect as illustrated in (53).

- (123) (*aná*) *baxtaké* *xəzy-a-li* (‘perfective’, *qṭil-*)
 I woman:FS:DEF seePFV-P:3FS=A:1SG
 ‘I saw the woman.’
 ‘I have seen the woman.’
- (124) (***aná*) *baxtaké* *xzi-ta=ya-∅* (compound perfect, *qṭilá*)
 I woman:FS:DEF see:RPP-P:FS=P:3FS
 ‘I have seen the woman.’

For third person agents as such, there are two distinct transitive constructions: *garš-a-le* ‘He pulled her’ for the preterit, or perfective past, but *grāštá=y* ‘(He) has pulled her’ for the realis perfect (J. Sanandaj, W Iran, Khan 2009:94). For first and second person agents, the perfect must be expressed through a transitive ‘perfective’ construction, e.g. *garš-a-li* ‘I have pulled her’ (Khan 2009:284). The following variation in the realis perfect is found for a non-referential agent, an third person agent and a non-third person agent:

(125) **Variation in agent-marking for the realis perfect** (based on Khan 2009:94)

INTRANSITIVE		S	
a. Agentless:	[1,2,3]		
	<i>grišté=yan</i>		‘I _F have been pulled’
TRANSITIVE		P	A
b. Third person agent:	[3]	[3]	
	<i>grāšt-é=y</i>	∅	‘He has pulled her’
c. Non-third person agent	P	A	
(‘perfective’-based)	[3]	[1,2]	
	<i>garš-a</i>	- <i>li</i>	‘I have pulled her’

When we consider the person categories in isolation, there is an alignment split between ergative and tripartite. The ‘perfective’ (*qṭil-*) necessarily also expresses the realis perfect for non-third person agents. The participial agreement and ‘copula’ in the realis perfect align the S and the P ergatively for third person reference, while the A is left unmarked (∅). The L_1 -set and *ʔall*-set attach

to the ‘perfective’ expressing the A, respectively, the P for non-third person reference, while the S is readily expressed through the construction based on the participle, so that each function is treated differently. The alignment pattern for non-third person arguments, therefore, is tripartite throughout (much like the preterit, see §4.2.3).

(126) **Ergative vs. tripartite alignment in the realis perfect** (based on Khan 2009)

FIRST/SECOND PERSON	THIRD PERSON
TRIPARTITE	ERGATIVE
a. (intransitive)	c. (intransitive)
<i>šmix-te=yan</i>	<i>šmix-te=ya</i>
‘ I_F have stood up’	‘ She has stood up’
b. (transitive)	d. (transitive)
<i>grəš-li ʔəl-ax</i>	<i>grəš-te=ya-Ø</i>
‘I have pulled you _{FS} ’	‘She has pulled her ’

In actual transitive clauses, the person categories are expressed differently depending whether they occur in the A or P role. That is, there is both a person split in the coding of the A and the coding of the P. The transitive form of the compound realis perfect as given in (126d) above is completely confined to the third person, both with respect to the A and the P. However, a third person agent may combine with a non-third person form from the *ʔəl*-series just as the preterit, e.g. *gərša=y ʔəl-ax* ‘He has pulled you_{FS}’ like *grəš-le ʔəl-ax* ‘He has pulled you_{FS}’ (Khan 2009:324).

Turning to other moods and tenses of the perfect, the same pattern occurs in the irrealis perfect. In the past realis perfect, the preterit of the (weak) verb *hwy* ‘to be’ is inflected with *L*₁- suffixes (*yele* ‘He was’) and is employed to express a past tense copula, the past counterpart to the enclitic ‘copula’ (=y(e) ‘He is’). The past copula is employed in intransitive perfect constructions, e.g. *dmixá ye-le* besides contracted *dmixēle* ‘He had fallen asleep’ (J. Saqqiz, Israeli 1998:110, 149), but this cannot be employed in a transitive pluperfect construction, e.g. **baxtaké xzité ye-lan* ‘We had seen the woman’. There is, therefore, no past tense counterpart to the compound perfect.

There is, however, an equivalent irrealis perfect. Instead of the ‘copula’, the subjunctive of *hwy* ‘be’ (*Ø-hawe-* ‘may be’ against realis base *k-we-* ‘is, shall be’) is combined with the resultative participle, e.g. *dmixtá=hawy-á* ‘She would have slept’ (J. Saqqiz, Israeli 1998:119). The two elements often have phonetically

reduced contracted alternants, fusing to one conjugational form through elision, compare *rqilé=hawen(i)* and *rqilá-wen(i)* ‘They would have danced’ (J. Kerend, Hopkins 2002:291ff)¹⁸². The irrealis transitive perfect is based on the same morphological elements but freely allows agent-marking through the use of L₁-suffixes to the subjunctive *hwy* in the same way as the preterit, e.g. *grāštá=hawy-a* ‘pulled her’ + *-le* ‘he’ > *grāštáwy-a-le* ‘He would have pulled her’. The person indexes consist of the L₁-series to mark the A and the E₁-series¹⁸³ to mark the s and P. Table 37 below offers an overview.

Table 37. *Irrealis perfect in J. Kerend*

	INTRANSITIVE			
	BASE	S		
	<i>qṭila + hawe</i>	E ₁ -SET		
3MS	<i>rḳila-we</i>	-∅	‘He would have danced’	
3FS	<i>rḳilta-wy</i>	-a	‘She would have danced’	
3PL	<i>rḳilá-we</i>	-n(i)	‘They would have danced’	
	TRANSITIVE			
	BASE	P	A	
	<i>qəṭla + hawe</i>	E ₁ -SET	L ₁ -SET	
3MS	<i>gəršá-we</i>	-∅	-le	‘He would have pulled him’
3FS	<i>grāštá-wy</i>	-a	-le	‘He would have pulled her’
3PL	<i>gəršá-we</i>	-ni	-le	‘He would have pulled them’

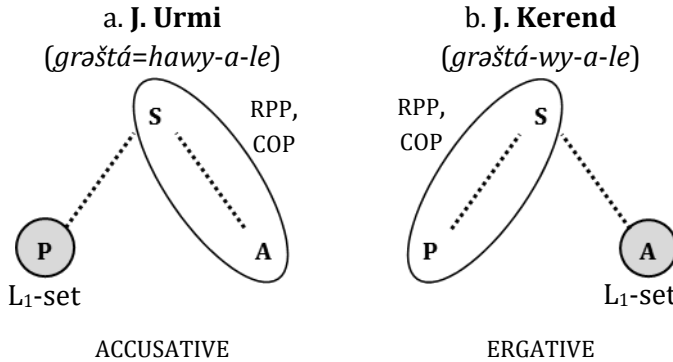
Source: Based on Hopkins (2002).

The functional distribution of the E₁-set and the L₁-set in the irrealis perfect are equivalent to the preterit. The morphosyntax is once again ergative in the expression of the third person, but this is all the more striking given that the inflectional base *∅-hawe* ‘may/would be’ is, in fact, ultimately an ‘imperfective’ (subjunctive) form. Other NENA dialects that have similar coding devices in an irrealis perfect construction have a fully accusative alignment as in the ‘imperfective’. In J. Urmi, for example, *grāštá=hawy-a-le* would mean ‘She may have pulled him’ (Khan 2008b:142), not ‘He may have pulled her’.

Thus, we observe the following contrast:

¹⁸² Cf. Khan (2009:92) for J. Sanandaj.

¹⁸³ The inflection is, nonetheless, based on the paradigm of final-y verbs as expected for the verb *hwy*.

(127) **Contrasting the irrealis perfect of J. Urmi and J. Kerend**

J. Urmi can be considered to be representative of the more common, expected pattern for the perfect in the verbal system. The two irrealis perfect constructions in the two distinct Jewish dialects mirror each other's morphosyntax. It would seem that the ergative coding of the 'perfective' lies at the base of the irrealis inflectional base *qətlawe-* in Western Iranian Jewish dialects like Kerend, while in North Western Iranian Jewish dialects like Urmi the construction is based on the 'imperfective'.

Table 38 at the end of this subsection below gives a brief overview of the ergative patterns attested in the Western Iranian dialects. Morphologically speaking, the three TAM-categories preterit, irrealis perfect and realis perfect constitute a separate uniform subsystem which operates according to principles non-existent in other TAM morphology within these dialects. There is a primary distinction between intransitive and transitive inflectional bases for sound verbs throughout. The two perfects are based on allomorphs of *qtil-* in the preterit along with its accompanying ergative morphosyntax. Finally, the coding associated with the S and P is directly linked with this aspectual stem and marked as close as possible to the verbal base.

Interestingly, it is the realis perfect that is morphosyntactically less transitive than the irrealis, while, semantically, realis mood is said to be a key feature of prototypical transitivity (Hopper and Thompson 1980). From a morphological angle, we also observe that the irrealis perfect is more synthetic and verbal than the realis. Although both essentially employ a verbal adjective, the irrealis incorporates the verb *hwy* into a new inflectional base that can be conjugated like the preterit. This facilitates the use of L₁-suffixes to mark the agent.

The realis transitive perfect (*qətlá=y*) is the most restricted of the three in not permitting the expression of non-third person arguments as either the P or the A. Although this is reminiscent of the passive voice, it otherwise qualifies as

an active transitive construction (see also previous subsection). One might expect the possible oblique expression of a full NP as the agent as in the preterit of some ‘accusative dialects’ (see §5.2.3) but no examples of this are known for the perfect in ‘ergative dialects’.

Lack of overt coding of the A could be explained by the unique nature of the construction itself. Since both the participle *and* the ‘copula’ always agree with the P, no agreement morphology is available for the agent, while the ‘copula’ would always express the A in other dialects. Moreover, the ‘copula’ is not mobile in these realis perfect forms and cannot be combined with either the L₁-suffixes, the L₂-series or the *ʔall*-series to encode the A (i.e. ***nqəšté=ya-li* or ***ʔalı nqəšté=ya* ‘I have kissed her’). This may be blocked, because all forms are equally compatible with case-marked object NPs and the *ʔall*-series through the dative preposition (*ʔal*)-. Nevertheless, one would expect that the ‘copula’ would become available as an agent index, when the patient is marked differently. This is not what we find. Instead, even when the patient coding attaches to the compound verbal form, the unmarked 3ms. is still preferred, leaving the agent unexpressed, e.g. *nišqa=y=lan* ‘(They/he/she/it has/have) kissed **us**’ (J. Saqqiz, Israeli 1998:117).

Table 38. *Ergativity in Jewish NENA in the preterit and beyond*

	BASE _{PFV}	S/P	A
		[3]	[1,2,3]
PRETERIT	<i>rqil-</i>	E ₁ -SET	
	<i>qəʔl-/qəʔl-</i>	E ₁ -SET	L ₁ -SET
		[3]	[1,2,3]
IRREALIS PERFECT	<i>rqiláwe</i>	+E ₁ -SET	
	<i>qəʔláwe</i>	+E ₁ -SET	L ₁ -SET
		[3]	[3]
REALIS PERFECT	<i>rqilá</i>	+COP	
	<i>qəʔlá</i>	+COP	Ø

Source: Data based on Khan (2009:94) and Hopkins (2002:297).

5.4. Historical Perspective: From Resultative to Preterit

In all likelihood, the accusative NENA dialects presumably once were fluid subject-marking dialects that lost the resultative-intransitive construction from the 19th century onwards (Mengozi 2005:249-250). It is generally assumed that this semantic alignment is a later development subsequent to an ergative system with the split in dialects like Jewish Sulemaniyya and eventually developed into accusative alignment¹⁸⁴. Following Goldenberg (1992), however, it seems more plausible to me on the basis of the synchronic variation that NENA started out with fluid subject-marking. The resulting gap for the marking of the agent is resolved differently in the respective dialects by the innovation of new transitive realis perfects, including the ‘ergative dialects’ like Jewish Sulemaniyya. Aspectual factors appear to be crucial in the selection of either patient-like subject indexes (the E₁-set) or agent-like indexes (the L₁-set) that reflect the grammaticalization from resultative-intransitive to perfective past. Nevertheless, I should point out that, recently, Khan (2017) came to a view much more in sympathy with Goldenberg (1992) and myself.

Khan (2008b:72-74) explains the development from a lexical split by the increasing grammaticalization of the lexical aspectual meaning of intransitive verbs inflected with L-suffixes. The lexical split found in dialects like J. Sulemaniyya (*nwax-le* ‘It barked’ vs. *twir-Ø* ‘It broke’) already sensitive to actionality and punctuality (e.g. *bde-le* ‘He began’ vs. *priq-Ø* ‘He finished’) besides agency grammaticalized to a tense-aspectual split (*twir-Ø* ‘It has broken’ vs. *twir-re* ‘It broke’) so that the L-suffixes that mark the agent were extended to all intransitive verbs (*nwax-le* ‘It barked’ vs. *twar-re* ‘It broke’). For this reason among others, as noted elsewhere in this monograph, Doron and Khan (2012) approach the accusative dialects as ‘extended ergative’. Khan (2008b:74) argues that “the dynamic punctual actionality inherent in the lexical meaning of the verb” as in J. Sulemaniyya grammaticalized so that “the crucial conditioning factor for the use of the L-suffixes” became “the temporal-aspectual contour with which the speaker wishes to present the action”. Khan (ibid.) maintains the intransitive ‘perfective’ inflected with E-suffixes “shifted from preterit to resultative perfect” (*plit-en* ‘I went out’ > ‘I am out, have gone out’), yielding the fluid subject-marking as found in dialects like Jewish Urmi. This distinct subject coding was subsequently lost in ‘extended ergative’ dialects and the expression of dynamic,

¹⁸⁴ See Hopkins (1989), Mengozzi (2002b:42-49), Khan (2002a:385, (2008d:106), Doron and Khan (2012), Barotto (2015:234), Coghill (2016).

punctual action through agent-like subject indexes (L-suffixes) was conventionalized (*plīt-li*, ***plīt-en*).

As suggested by Goldenberg (1992:129-130), however, I consider it more plausible that NENA started out with some kind of aspectual fluidity to begin with. A similar split, for instance, is also found in the Eastern Aramaic languages of Late Antiquity such as Syriac, since certain predicates with the *qṭil*-form are clearly more stative still. In particular, an agent-orientation is possible for a few transitive verbs under the semantic condition of close relative proximity (see Nedjalkov and Jaxontov 1988), such as *ʔḥd* 'hold', *šql* 'take (away), hold up, carry', *lbš* 'wear, put on', *grr* 'pull; drag' (cf. Nöldeke 1868:308, §150). They qualified as expressions of an ongoing result state such as (128a). They were equivalent in morphosyntax and overall imperfective aspectual profile to active participle constructions that would express a habitual or ongoing activity, e.g. *šāql-īn l-āh* 'They carry it_F'. By contrast, most verbs could also occur in the originally dative agent resultative construction where the roles are inverted such as (128b), but the aspectual semantics is different and not stative.

(128) **Syriac**

- a. *šqīl-īn* *l-āh*
 taken-3MPL DAT-3FS
 'They carry it_F.' (cf. Luke 7:14 *Pšītta*)
- b. *šqīl-ā* *l-hōn*
 taken-3FS DAT-3MPL
 'They have captured it_F.' (cf. Life of St. Ephrem the Syrian, Brockelmann 1905:23.21)

Moreover, there are attestations of intransitive verbs that occur with the precursors of the L-suffixes in Syriac, e.g. *mhallak l-ī* 'I have walked' (Nöldeke 1868:219, §279, 1875:382, fn. 2, §263; Van Rompay 1999)¹⁸⁵. Intransitive forms with L-suffixes could have been aspectually contrastive from those without, e.g. *lā qīm l-ī* 'I have not stood (up)' vs. *qayyīm-a=nā*¹⁸⁶ 'I_F am standing'.¹⁸⁷

¹⁸⁵ This could, of course, point to influence from the spoken language at this time (Khan 2007c:14).

¹⁸⁶ This is the *qatṭil*-pattern of the originally resultative participle mostly found for intransitive verbs in Syriac, Western Aramaic, and Central Neo-Aramaic, cf. Ṭuroyo *mhalax-li* 'I walked' and *qāyim-ono* 'I_F stood up'.

¹⁸⁷ This does not preclude that certain instances of *šmiʿ l*-constructions were still also interpretable as stative, but the grammaticalization is generally more advanced when it is the

Turning to Neo-Aramaic, both the diachronic and synchronic evidence would indicate that some kind of mixtures already existed in the ancestors of NENA. The resulting incoherence in this mixture is simply levelled out differently in the respective dialects by the innovation of new transitive realis perfects. The system found in the Christian dialect of Bohtan where this same form effectively marks the agent (e.g. *griš-i-le* 'They have pulled') is a case in point. It is possible that such agent-oriented resultatives are ultimately the historical source for this. This historical view approaches the intransitive preterit (*qim-Ø*) in the South Eastern Trans-Zab Jewish dialects from the exactly opposite angle: it is innovative rather than archaic. They would have lost subject-marking L-suffixes that once made possible a fluid tense-aspectual alternation with subject-marking E-suffixes. It is the transitive realis perfect that leaves room for innovation (*q̄talt-án*), not the intransitive, and this applies to all dialects that exhibit fluid subject-marking. This concurs with the confinement of the group-*ing* of the S and P to the preterit in ergative Jewish dialects (*qim-na* 'I_M rose').

It seems to me that Khan's original explanation is weaker than Goldenberg's. Khan's original view implies that agent indexes (i.e. L-suffixes) extended from transitive to intransitive verbs in the expression of a perfective past in the vast majority of dialects. Such a functional extension from a separate set of indexes for the A to adopt also S is plausible in itself (cf Dixon 1979, 1994). In the ergative dialects, there is also a split in the marking of S, since a few intransitive verbs also select for L-suffixes such as *lwəš-le* 'dress' and *nwəx-le* 'bark', as well as some fluidity *lip-Ø* 'learn' (durative) and *lip-le* 'learn' (punctual). A far less plausible assumption, however, is that the forms with E-suffixes in the preterit 'degrammaticalized' to a resultative (*qim-Ø* 'He rose' > 'He is up, has risen'). There is no independent evidence for this and the development is in itself not straightforward.

Goldenberg's view, on the other hand, already presupposes the availability of subject-marking L-suffixes for all intransitive verbs. Most dialects, therefore, do not need further explanation, only the ergative Jewish ones. For those dialects, the assumption is that the resultative (*qim-Ø* 'He is up') grammaticalized via the perfect ('He has risen') to preterit ('He rose'), replacing the preterit with subject-marking L-suffixes (*qim-le* 'He rose'). Such an account has more explanatory scope and power and argues from a development from resultative to preterit that is typologically more straightforward than that from preterit (back) to

agent-like argument that is marked by the dative (no longer compatible with adverbs such as 'still').

resultative. The compound perfects based on the resultative participle and the enclitic copula would have pushed the subject-marking E-suffixes into the perfective aspectual domain, as illustrated in (129) below. In Western Iranian Jewish dialects like J. Kerend, for instance, the transitive preterit partly fulfils the additional function of the transitive realis perfect counterpart of the intransitive which is based on the resultative participle. This process would have started with intransitive constructions as resultatives usually do cross-linguistically. The transitive formation based on this participle lacks behind and is still marginal.

(129) **Split in the realis perfect for J. Kerend** (W Iran; Hopkins 1989a: 427, fn. 35)

	PRETERIT	RESULTATIVE I	RESULTATIVE II
	PFV-based		
TR.	<i>q̄təl-li</i>		**q̄təltə=yan
ITR.	<i>q̄im-li</i>	<i>q̄im-an</i>	<i>q̄imta=yan</i> RPP-based

Khan (2004a:306, 314-318) notes that forms like *q̄im-Ø* can also express the perfect and serve as the dynamic counterpart to the participle-based constructions like *q̄imá=y* 'He has risen and is now up' which focus on the state resulting from an action. This could point to a formerly resultative usage of *q̄im-Ø*. The ousting of subject-marking L-suffixes in (129) could be partially triggered by this innovation of an intransitive resultative (*q̄imta=yan* 'I_F am up, have risen') that competes with the intransitive perfect (*q̄im-an* 'I_F have risen') in fluid subject-marking dialects (§5.3.3). J. Sulemaniyya (NE Iraq), closely related to J. Kerend (NW Iran), has innovated a fully productive transitive realis perfect that generally encodes the A through the copula like the S (*q̄təltá=yan* 'I_F have killed'). In J. Sulemaniyya, the transitive realis perfect is fully available besides the intransitive that ousted the original intransitive-resultative.

5.5. Summary

The majority of NENA dialects groups the S with the A through the L-suffixes in the preterit (perfective past). Semelfactive verbs such as *nwx* 'bark' typically also align their subjects with the A in South Eastern Trans-Zab Jewish varieties where other intransitive verbs align with the P. The A-like coding of the subject becomes increasingly more likely when the situation as a whole is semantically more transitive in implying a patient or patient-like effect. An antipassive-like

construction, where the implication of an effect is reduced but the coding of an agent-like subject aligns with the P, is preferred for durative and/or stative situations. While inanimate or uncontrolling arguments sometimes do not seem compatible with the S_A construction, control is not as significant a semantic feature, since various S_P verbs, for instance, denote controlled activities such as *rqil* 'dance' (*rqil-a* 'She danced').

The preference for P-like subject coding in durative or stative situations in split s-marking in South Eastern Trans-Zab Jewish dialects parallels the fluid s-marking dialects. A few Christian dialects in SE Turkey and a few Jewish dialects in NE Iraq and NW Iran split the coding of s for every verb depending on aspect. The choice over P-like (the E-set) or A-like (L-set) in subject coding is roughly conditioned on dynamic action focus as opposed to result-state focus. There are competing and overlapping compound verbal constructions in these and other dialects with overall the same aspectual profile. They are either based on a combination of the 'perfective' (*qṭil-*) and additional preverbal TAM-modification or the resultative participle (*qṭila*) declined like an adjective and the enclitic 'copula'. In all Jewish and Christian varieties that employ an E-set as subject indexes, be it in ergative or dynamic-stative alignment, it is the transitive realis perfect that is somehow derived and/or treated differently.

Dialects can be characterized as symmetric or asymmetric between transitive verbs such as *qtl* 'kill' and intransitive verbs such as *qym* 'rise' in terms of A and s coding across preterit (i.e. perfective past) and perfect (i.e. realis result-oriented) constructions. With respect to Jewish dialects, the group to the west of the Greater Zab river generally shows symmetry between the preterit and perfect. Dialects such as Jewish Betanure (NW Iraq) expresses this by means of a participial construction (*ile qima* 'He has risen'). Jewish Arbel (NE Iraq), a Trans-Zab Jewish dialect, is also symmetric and expresses the TAM-distinction by a pre-verbal particle *lā*:

(1)	J. Betanure (NW Iraq)		J. Arbel (NE Iraq)	
	PRETERIT	PERFECT	PRETERIT	PERFECT
TR.	<i>qṭil-le</i>	<i>ile qṭila</i>	<i>qṭil-le</i>	<i>lā qṭil-le</i>
ITR.	<i>qim-le</i>	<i>ile qima</i>	<i>qim-le</i>	<i>lā qim-le</i>

Within Trans-Zab Jewish, we find further notable differences. Jewish dialects in Iranian Azerbaijan like Urmi and a few in North Eastern Iraq such as Rustaqa exhibit tense-aspect-conditioned subject-marking (represented horizontally for intransitive verbs below). The main difference between the two is

the transitive counterpart to the intransitive-resultative that takes P-like subject coding. The transitive realis perfect is based on the resultative participle and ‘copula’ in J. Urmi (**qtilé* < **qtila=ile* like Betanure above) but on a preverbal TAM-marker in J. Rustaqa (like Arbel above):

	J. Urmi (NW Iran)		J. Rustaqa (NE Iraq)	
	PRETERIT	PERFECT	PRETERIT	PERFECT
TR.	* <i>qṭal-le</i>	* <i>qṭil-é</i>	<i>qṭil-le</i>	<i>lā qṭil-le</i>
ITR.	<i>qəm-le</i>	<i>qim-Ø</i>	<i>qim-le</i>	<i>lā qim-Ø</i>

Going further east, Jewish dialects in North Eastern Iraq like Sulemaniyya and Western Iranian varieties like Kerend maintain a distinction between the E-set for the S and the L-set for the A in the preterit (represented below vertically rather than horizontally). Again, the major differences among these varieties are found in the transitive realis perfect. The perfect is completely derived from the resultative participle in J. Sulemaniyya where the feminine singular argument always triggers participial agreement (irrespective of grammatical function) but the ‘copula’ encodes both the S and A (*qimtan=yan* ‘I_{FS} have risen’, *qṭalta=yan* ‘I_F have killed’). In Western Iranian varieties such as Kerend, both the participle and the ‘copula’ index the S and P and the A is limited to the third person and is not overtly indexed or case-marked. This is unlike other dialects. It is not compatible with first/second person agents (***qṭalta=yan* ‘I_F have killed’) for which the ‘perfective’ must be used instead (*qṭal-li* ‘I have killed’).

	J. Sulemaniyya (NE Iraq)		J. Kerend (NW Iran)	
	PRETERIT	PERFECT	PRETERIT	PERFECT
TR.	<i>qṭal-le</i>	<i>qəṭláy=y</i>	<i>qṭal-le</i>	I. <i>qṭal-li</i> II. <i>qəṭláy=y</i>
ITR.	<i>qim-Ø</i>	<i>qimáy=y</i>	<i>qim-Ø</i>	II. <i>qimáy=y</i>

Proceeding with the Christian varieties, the most drastic differences are found in the western periphery in the region of Bohtan (SE Turkey). Virtually all Christian dialects are symmetric. The majority patterns like Barwar where the preterit based on the ‘perfective’ and the perfect based on the resultative participle are neatly symmetric in subject-marking. This also applies to Bohtan, but here the difference is entirely based on the set of person indexes attached to the ‘perfective’ (*qṭil-*), the L-set for the preterit against the E-set for the perfect (both marking the S and A; *qṭil-Ø* ‘He has killed’, *qim-Ø* ‘He has risen’):

(4)	C. Barwar (NW Iraq)	C. Bohtan (SE Turkey)
	PRETERIT PERFECT	PRETERIT PERFECT
TR.	<i>q̇til-le</i> <i>q̇ṫilɛ=le</i>	<i>q̇ṫəl-le</i> <i>q̇til-Ø</i>
ITR.	<i>qim-le</i> <i>q̇imɛ=le</i>	<i>q̇əm-le</i> <i>qim-Ø</i>

Further west, Christian Hertevin reveals a system similar to that of Jewish Rustaqa (NE Iraq) where subject-marking is conditioned by aspect. The transitive counterparts are only differentiated by a pre-verbal TAM-marker (*hole*):

(5)	C. Hertevin (SE Turkey)
	PRETERIT PERFECT
TR.	<i>q̇tel-le</i> <i>hole q̇tel-le</i>
ITR.	<i>qem-le</i> <i>(hole) qem-Ø</i>

There are notable differences between the ‘neutral dialects’. In both J. Urmi and C. Bohtan, the marking of the agent and subject is tense-aspect-sensitive, while objects are marked by L-suffixes throughout. Only in C. Bohtan, the E-suffixes are not available to mark Ps but are reserved for the expression of the S and A in the perfect (e.g. *q̇til-a-le* ‘She has killed me’, **‘He killed her’). In J. Urmi, however, E-suffixes are available to mark third person Ps in the preterit in the expression of the recent past (*ẋazy-a-li* ‘I just saw her’) and to mark the S in resultative-stative pendant of the dynamic-stative subject-marking (*qim-a* ‘She has risen’).

6. ALIGNMENT SPLITS IN CENTRAL NEO-ARAMAIC

Central Neo-Aramaic closely parallels North Eastern Neo-Aramaic. This chapter will demonstrate that, regarding alignment, ʿTuroyo¹⁸⁸ is similar to the Jewish varieties of Iraqi and Iranian Kurdistan, and that Mlaḥso (extinct by now) is similar to Chistian dialects in SE Turkey such as Bohtan as well as Jewish dialects of Iranian Azerbaijan such as Urmi.

ʿTuroyo dialects are much less diverse than NENA dialects but there are notable difference (see §1.2.3). We will first compare ʿTuroyo with NENA ‘ergative dialects’ (§6.1. and §6.2.) and conclude with a comparison of Mlaḥso with ʿTuroyo and NENA (§6.3. and §6.4).

What will stand out is the richer voice system that characterizes Central Neo-Aramaic against NENA. Each stem formation (I-IV) has its own mediopassive pendant (I_M-IV_M). In addition, stem I verbs also include a special ‘perfective’ base *qaṭil-* that never combines with an L-set as agent or subject indexes. ʿTuroyo and Mlaḥso differ greatly in their usage of this form.

There is considerable overlap between the active and mediopassive base, however. This is illustrated in (1) below for the verb ‘open’ (cf. Mengozzi 1998:84):

(1) Inchoative ‘open’ in Central Neo-Aramaic and NENA

	ʿTuroyo	Mlaḥso	J. Sanandaj	J. Betanure
PFV	<i>ftiḥ-Ø</i> ‘It _M opened’	<i>mepseḥ-le</i>	<i>plix-Ø</i>	<i>pθəx-le</i>
IPFV	<i>°məftəḥ-Ø</i> ‘It opens’	<i>mepseḥ-Ø</i>	<i>pāləx-Ø</i>	<i>pāθəx-Ø</i>

ʿTuroyo and Mlaḥso not only differ from NENA in this respect but also from each other. Especially in Mlaḥso, the difference between ‘perfective’ and ‘imperfective’ is levelled by extension of the ‘imperfective’ base to the preterit, such that ‘imperfective’ mediopassive bases become combinable with the L-set as subject indexes (*mepseḥ-la* ‘It_F opened’ vs. *psiḥ-o-le* ‘He opened it_F’). The (Jewish) NENA dialects do not have a mediopassive formation but ʿTuroyo and Mlaḥso do have

¹⁸⁸ See also Coghill (2016:84-90) who briefly treats alignment in ʿTuroyo and Mlaḥso in comparison with NENA. Hemmauer and Waltisberg (2006) and, recently in more detail, Waltisberg (2016) argue that ʿTuroyo is essentially accusative. My own more nuanced view is that ergative alignment is, indeed, manifested in ʿTuroyo, as explained in Section 6.1.

one, namely a *mVq̣ṭVI*-form. This form is even extended to the preterit in Mlaḥso while maintaining the L-set for expressing the S as in the majority of NENA such as J. Betanure.

6.1. Alignment in Țuroyo

The alignment in Țuroyo is comparable to South-Eastern Trans-Zab Jewish dialects of NENA such as Sulemaniyya (NE Iraq) and Sanandaj and Saqqiz (W Iran). The ergative and non-ergative alignment types are complementary in Țuroyo, each confined to the third or non-third person category. After a discussion of the combinations of monotransitive and ditransitive alignment types for person marking, case-marking will be treated. Interestingly, agents, especially focal agents, can be marked both by the dative preposition (*e*)l- and the L-suffixes. This results in a combination of optional ergative case-marking and ergative agreement.

6.1.1. Ergative and Horizontal Person Marking

Ergative alignment is confined to third person forms in the inflection of the ‘perfective’ in Țuroyo in a comparable way to South-Eastern Trans-Zab Jewish dialects of NENA. It alternates with horizontal alignment for other persons.

As mentioned in §3.2.3, the E-set of person indexes groups the S and P for third person pronouns only, for example:

(2) Ergative alignment for third person pronouns

- a. (intransitive)
damix-o ‘She went to sleep.’
 sleep_{PFV-S:3FS}
- b. (transitive)
ḥazy-o-le ‘He saw **her**.’
 see_{PFV-P:3FS-A:3MS}

(3) Miden

- a. *ftəḥ-le* *ḥayn-e* (no indexing of definite P)
 open_{PFV-A:3MS} eye-his
 ‘He opened his eyes.’ (Ritter 1967-71, 81/18)

- b. *ʕayne d-ú-babo ftiḥ-i* (indexing of definite s)
 eyes of-the-father open_{PFV-S:3PL}
 ‘Father’s eyes opened.’ (ibid., 57/237)
- c. *ṭəm-le ʕayn-e u ftiḥ-i-le* (pronominal P)
 close_{PFV-A:3MS} eye-his and open_{PFV-P:3PL-A:3MS}
 ‘He closed his eyes and opened **them** (again).’ (73/400)
- d. *ftiḥ-i* (pronominal S)
 open_{PFV-S:3PL}
 ‘**They** opened.’

Ergativity is primarily pronominal in Ṭuroyo, as illustrated for the labile verb *ftḥ* ‘open’ in (3) above. The trigger potential for agreement is lower for the P. The person forms that mark the A and S function as cross-indexes. When there is a co-nominal in S or A-function, it always triggers agreement in Ṭuroyo. This is optional and rare for the P. A form without patient index like *ftəḥ-le* ‘He opened’ in (3a) is generally preferred at least in the Miden dialect (Jastrow 1985:137). Nevertheless, differential indexing of definite full NPs is occasionally also found¹⁸⁹, for example:

- [V+P] → [P]
- (4) *hāma Aḷoho sim-o-le mujiza haṯe* (diff. indexing of P)
 but God:MS do_{PFV-P:3FS-A:3MS} miracle:fs DEM:FS
 ‘But God performed **this miracle**.’ (Miden, Talay 2004:128.335)

Non-third person forms, however, pattern horizontally. The L-series groups both the A and P, as exemplified and schematized below.

(5) **Horizontal alignment for non-third person arguments**

- a. (intransitive)
damix-ono ‘I_F went to sleep.’
 sleep_{PFV-S:1FS}
- b. (transitive)
ḥzé-li-lax ‘I saw you_{FS}.’
 see_{PFV-A:1SG-P:2FS}

¹⁸⁹ See now also Waltisberg (2016:188-190) for more examples.

The patient index always follows the agent index in the double L-set construction. Since the order and role designation of the two L-suffixes is fixed, there is no ambiguity. From a comparative perspective, horizontal alignment is rare in the NENA subgroup¹⁹⁰, although double L-set constructions do occur. In the Jewish ‘ergative dialects’, independent expression of the object is preferred for the first and second person manifesting tripartite alignment. In Țuroyo, the object is freely expressed as a dependent person form (L-suffix).

It should be pointed out that the S may also align with the A (such as *nwəḥ-le* ‘It_M barked’) in Țuroyo depending on semantic and/or morphological factors, and that some transitive verbs mainly denoting mental states such as *šmʕ* ‘hear’ pattern accusatively (exactly like the ‘imperfective’), as discussed further in §6.2.1.

NENA constructions conditioned by the person of the P are somewhat different in distribution from Țuroyo. The third person forms are generally available in both alignment patterns and the first and second only in the non-ergative pattern. In Țuroyo, the two alignment types are complementary, both are confined by a person category. The table below illustrates the distinct strategies in object marking conditioned by person¹⁹¹ and the indexing of the S.

Table 39. *Person-conditioned alignment in Țuroyo (Miden)*

S = E-set		P = E-set			
<i>daməx-Ø</i>	‘He	<i>nšəq-Ø-la</i>	‘She	him’	[-1,2]
<i>damix-o</i>	‘She slept’	<i>nšiq-o-la</i>	‘She kissed	her’	
<i>damix-i</i>	‘They	<i>nšiq-i-la</i>	‘She	them’	
S = E-set		P = L-set			
<i>damix-ət</i>	‘You_{MS}	<i>nšəq-li-lǔx</i>	‘I_F	you_{MS}’	[+1,2]
<i>damix-at</i>	‘You_{FS}	<i>nšəq-li-lax</i>	‘I_M	you_{FS}’	
<i>damix-utu</i>	‘You_{PL}	<i>nšəq-lan-lalxu</i>	‘We	you_{PL}’	
<i>daməx-no</i>	‘I_M slept’	<i>nšəq-lax-li</i>	‘You_{FS} kissed	me_M’	
<i>damix-ono</i>	‘I_F	<i>nšəq-lǔx-li</i>	‘You_{MS}	me_F’	
<i>damix-ina</i>	‘We	<i>nšəq-xǔl-lan</i>	‘You_{PL}	us’	

¹⁹⁰ Horizontal alignment features in Jewish Saqqiz for the first and second person (see §4.2.3). Possibly, the realis perfect in C. Hertevin also shows horizontal alignment for the third person, i.e. *hole wed-le-lehen* ‘He has made them’ where A and P are grouped against (*hole*) *dmiḥ-Ø* ‘He has slept’.

¹⁹¹ It should be pointed out that the 2pl. and 3pl. L-suffixes have idiosyncratic allomorphs (Jastrow 1985:138) due to historical retentions that are not discussed here.

In actual transitive clauses, the coding of the agent is stable and does not vary depending on person, e.g. *nšiq-o-lan* ‘We kissed her’, *nšaq-la-lan* ‘She kissed us’ (Jastrow 1985:138-139).

Hemmauer and Waltisberg (2006) argue that the preterit is only superficially ergative and that a tripartite system points to an underlying accusative pattern similar to the present (respectively, ‘imperfective’). Our approach, however, does not differentiate between deep and superficial alignment and no alignment pattern is subsumed under another. It does differentiate agreement in terms of morphological marking and trigger potential which Hemmauer and Waltisberg seem to conflate. They rightly show that agent and (especially) subject agreement are ultimately primary to the verbal system. In terms of trigger potential, the indexing of full NPs is, indeed, accusative in Turoyo. When indefinite NPs are considered, subject NPs and agent NPs each take morphologically distinct sets (mainly E-set vs. L-set) and patient NPs generally do not trigger overt agreement (∅). This is, indeed, tripartite. Nevertheless, ergative alignment may still be observed for definite NPs, where definite patients trigger the same overt morphology as definite subjects. And when we consider the person category and its manifestation through dependent person forms only, the alignment is ergative for the third person and horizontal for the first and second person.

Recently, Waltisberg (2016:20, 176) denied any manifestation of ergativity in Turoyo and emphasizes that the alignment is essentially tripartite. Even though he rightly points out that there is tripartition, this does not exclude the possible manifestation of ergative alignment. As I showed in this subsection, when definite NPs and third person forms are considered, the morphological marking undeniably follows an ergative pattern. Such overt coding of the P is taken as starting point for the basic characterization of an alignment type in my approach (cf. Comrie 2005; Malchukov et al. 2010). The interesting fact that the inflectional base of certain intransitive verbs (CaCiC- as in *damix-o* ‘She fell a sleep’) differs from that of transitive verbs (CCiC- as in *ftih-o-la* ‘She opened itF’) in the ‘perfective’ does not alter this, because, it is the E-set that expresses the properties of the S argument, not the inflectional base.

In essence, the observations for Turoyo are rather similar to what is observed for South Eastern Trans-Zab Jewish dialects of NENA (see §4.2.3). *Ceteris paribus*, the S and A always trigger agreement regardless of person reference in both the ‘perfective’ and ‘imperfective’. Object indexes come in two sets depending on person: the E-set for third person aligning ergatively with the S and the L-set for the other persons aligning horizontally with the A. Moreover, the two sets

of patient indexes (E-set vs. L-set) are complementary in Țuroyo, while in NENA third person patient indexes generally occurs in both the E-set and the alternative strategy.

6.1.2. Ditransitive Person Marking

Additional L-suffixes in the ‘perfective’ mark the patient of first and second person in monotransitive alignment patterns. They may also mark recipients for all persons in ditransitive alignment types. A special set of person forms is used for the theme.

The second L-suffix is cannot be used in the expression of the P for the third person so that forms like ***nšáq-la-le* ‘She kissed him’ are disallowed¹⁹². This restriction is germane to their function as indicators of the patient (Jastrow 1985:137-138). When third person forms do feature in a double L-set construction, the secondary L-suffixes express the recipient or beneficiary in three-argument constructions¹⁹³, for example:

[V-R]	[T]
(6) <i>ftíh-ḥan-ne</i>	<i>u-tarfo</i>
open _{PFV-A:3PL-R:3MS}	the-door:MS
‘They opened the door for him .’ (Miden, Ritter 1967-71: 73/371)	

Only in the expression of the recipient-like argument, the third person occurs in the double L-set construction. For non-third person forms, however, the patient and recipient roles converge, for example:

[V-A-R]	
(7) <i>ftáh-le-la</i>	‘He opened for her (R)’ but not <i>** He opened her</i> (P).
[V-A-R/P]	
(8) <i>ftáh-le-li</i>	‘He opened (for) me (R/P)’

Țuroyo usually does not allow more than one object affix on the verb in ditransitive constructions. Only in extraordinary cases, the E-series may additionally mark themes even within a double L-set construction where the second

¹⁹² It should be noted that, in C. Hertevin, the situation is exactly the reverse: the double L-set construction (*hze-le-le*) is confined to third person agents.

¹⁹³ This is similar to NENA dialects such as Jewish Amidya (see §3.2.4).

L-suffix marks the recipient. This seems to be attested only for the verb *hyw* ‘give’ and third person anaphora in rural dialects (cf. Ritter 1990:75), for example:

- (9) [V] [T] [A] [R]
 húw **-i** *-le* *-lalle*
 give_{PFV} -3PL -3MS -3PL
 ‘He gave **them** to them.’ (Miden, Ritter 1967-71: 73/371)

It is much more common, however, that the T is marked by a special enclitic series (the same as the ‘copula’), when both the T and R are dependent person forms. This is confined to third person reference: =*yo* for the singular and =*ne* the plural, for example:

- (10) [V] [A] [R] =[T]
 hú *-li* *-lalle* =**yo**
 give_{PFV} -A:1SG -R:3PL =T:3MS
 ‘I gave them **it_M** (the milk).’ (Miden, Ritter 1967-71, 75/375)
 maḥát *-la* *-lalle* =**ne**
 put_{PFV} -A:3FS -R:3PL =T:3PL
 ‘She prepared **them** for them.’ (Miden, *ibid.* 115/110)

Only third person pronouns, therefore, exhibit distinct sets of dependent person forms for each argument class (P, T, R) while these are not distinguished for their first and second person counterparts. This person-based split is not found in the ‘imperfective’ (*qoṭəl-*) but, interestingly, a similar person split is found in the inflection of object indexes attached to the imperative (*qṭal*) (cf. Jastrow 1985:140-143, 1992:128-130). The imperative can combine either with a separate object series similar to the ‘possessive’ suffixes or an L-suffix. The special set is *-e*, *-a* and *-ene* marks the P and T of third person pronouns, when the R is a full nominal:

- (11) [V-T: PRO] [DAT→R: fNP]
 haw-e *l-Baṣuṣ*
 give:IMPV-3MS DAT-PRN
 ‘Give **it_M** to Baṣuṣ!’ (Miden, Ritter 1967-71, 115/283)

This is similar to the E-set in the ‘perfective’, for example:

- (12) [V-T: PRO] [DAT→R: fNP]
hiw-o-le *l-šalliṭa*
 give_{PFV-3FS-3MS} DAT-PRN
 'He gave **it_M** to Šalliṭa.' (Miden, Ritter 1967-71, 86/27)

The L-suffixes always express the R such as *-li* in the following example where the theme is a full nominal:

- (13) [V-R: PRO] [T:fNP]
haw-li *iḍ-ux*
 give:IMPV-1SG hand:FS-your:MS
 'Give **me** your_{MS} hand!' (Miden, Ritter 1967-71, 78/143)

Thus, we obtain the following sets for the third person in the 'imperfective' (including *qoṭəl-* and the imperative *qṭal!*) and the 'perfective'. The enclitic pronouns (also known as the 'copula') are used in each of them to mark chiefly the T when both the T and R are dependent person forms.

(14) **Distinct sets of object indexes for the third person**

	IMPERFECTIVE			PERFECTIVE		ALL-ROUND
	<i>qoṭəl-</i>	<i>qṭal!</i>		<i>qṭil</i>		(everywhere)
	P/T/R	P/T	R	P(/T)	R	T
	L-set	OBJ	L-set	E-set	L-set	ENCLITIC ('COPULA')
3MS	<i>-le</i>	<i>-e</i>	<i>-le</i>	<i>-∅</i>	<i>-le</i>	<i>=yo</i>
FS	<i>-la</i>	<i>-a</i>	<i>-la</i>	<i>-o</i>	<i>-la</i>	<i>=yo</i>
PL	<i>-lle</i>	<i>-ene</i>	<i>-lle</i>	<i>-i</i>	<i>-lle (-lalle)</i>	<i>=ne</i>

The enclitic series (or the 'copula') is confined to the third person throughout the verbal system. The L-suffixes equivalently express all objects for non-third person forms, synthesizing P, T and R. Apart from the imperative this synthesis is found for the L-set in the 'imperfective' (*qoṭəl-*) for all persons. First/second person indexes, therefore, follow the object coding of the 'imperfective' in the entire verbal system. This is a striking difference with NENA dialects where the E-set may equally synthesize the P, T and R¹⁹⁴.

¹⁹⁴ Compare NENA *mir-ət-ti* besides *mār-ri-lux* (< *mār-li*) for 'I told **you_{MS}** (R)' and *mir-a-li* 'I told it_F (T)' (J. Amidya; Greenblatt 2011:336.8, 336.5) but Țuroyo *mir-o-li* 'I told **it_F** (T)' and *málli-lux* (< *mār-li*) 'I told **you_{MS}** (R)'.

(15) [V-T] [R]
hú-le-lan *el-e / al-xu*
 'He gave **us** to him/to you_{PL}.'

(16) **Miden** (Jastrow 1985:143)

[V-A-P]
nšáq-li-lax
 'I kissed you_{FS}.'
 [V-S]
damix-ono
 'I_{FS} slept.'

b. **Indirective** (T=P≠R)

[V-A-P]

nšáq-li-lax (P/T/R[+1,2])

‘I kissed **you_{FS}**.’

[V-A-T] [R]

hú-le-lax el-i

‘He gave **you_{FS}** to me.’

e. ****Horizontal** f.

****nšáq-le-la**
‘He kissed her.’
damix-o
‘**She** slept.’

****Indirective**

***nšáq-le-la* (P/T[-1,2])
 'He kissed **her**'
 ***hú-le-la el-e*
 'He gave **her** to him'

The mirror image applies to secundative alignment. This is only possible, when the theme is dependent and third person. Only the S is marked by the E-set and the theme is expressed through the special set of enclitic person forms such as =yo in (16h) below. The grouping of A and P parallels the grouping of P and R.

g. Horizontal (S≠P=A) [V-A-P] <i>nšáq-li-lax</i> ‘I kissed you_{FS}.’ [V-S] <i>damix-ono</i> ‘I_{FS} slept.’	h. Secundative (T≠P=R) [V-A-P] <i>nšáq-li-lax</i> (R[+1,2], T[-1,2]) ‘I kissed you_{FS}.’ [V-A-R]=[T] <i>hú-le-lax=yo</i> ‘He gave her to you_{FS}.’

The ditransitive alignment is tripartite, however, where the monotransitive counterpart is ergative, when third person pronominal objects are concerned only. Compare the following two examples. The E-set groups S and P, but all roles are marked differently in the ditransitive alignment.

i. Ergative (S=P≠A) [V-P-A] <i>nšiq-o-le</i> ‘He kissed her.’ [V-S] <i>damix-o</i> ‘She slept.’	j. Tripartite (T≠P≠R) [V-P-A] <i>nšiq-o-le</i> ‘He kissed her.’ [V-A-R]=[T] <i>hú-le-la=yo</i> ‘He gave him to her.’

Apart from secundative alignment conditioned by third person themes, these constructions are rather different from the ‘imperfective’. The ‘imperfective’ otherwise shows indirective alignment and not tripartite. Țuroyo shows a split in ditransitive alignment that is sensitive to tense-aspect. Both the ergative and tripartite alignment are specific to the ‘perfective’ and both are confined to the third person.

Thus, the R is marked in the same way for all persons throughout the verbal system, while it is third person pronouns that are marked differently in the ‘perfective’ and imperative both as indicators of the T and P. The alignment for first and second person pronouns is either horizontal-indirective or horizontal-secundative. Moreover, secundative alignment only occurs when the T is third

person and dependent and the R is non-third person and dependent. Interestingly, third person indexes otherwise follow an ergative-tripartite pattern, both of which are specific to the ‘perfective’. It is furthermore remarkable that, in ergative-tripartite alignment, the agent and recipient (A=R) are marked by the same set, whereas, in horizontal-indirective alignment, all roles but the S and R are marked by the same set (A=P=T).

6.1.3. *Ergative and Horizontal Prepositional Marking*

Following the discussion of the dependent person forms, we will concentrate on the expression of independent person forms and full NPs. Both rural and urban dialects of ʿTuroyo may combine overt case-marking and overt agreement in the coding of the A that parallels the coding of recipients and predicative possessors. Ergative alignment may be manifested in both case-marking and agreement in Neo-Aramaic.

The ʿTuroyo dialects generally do not display differential case-marking of object NPs. At least speakers from the village of Raite (as represented in Ritter’s material in Ritter 1967-71 texts 95-113) constitute an exception which may case-mark definite object NPs (both patients and themes¹⁹⁵). This holds for both the ‘perfective’ and ‘imperfective’, for example:

(17) **Raite**

	[V-A]	[DOM→P]	
a.	<i>g-ħoze-∅</i>	<i>l-i-dāvāre</i>	
	FUT-seeIPFV-A:3MS	DOM-the-breach:FS	
	‘He will find (lit. see) the breach (in the wall).’ (Ritter 1967-71, 107/90)		
b.	<i>ħze-li</i>	<i>l-u-tadbir</i>	<i>diδ-ux</i>
	seePFV-A:1SG	DOM-the-measure:MS	LK-your:MS
	‘I saw your measurements .’ (Ritter 1967-71, 104/44)		

In several varieties, the agent may also be marked by means of the dative preposition *(e)l-* in the ‘perfective’ in ʿTuroyo dialects similarly to dialects of NENA (see §4.3.5). A noteworthy difference with NENA is that the preposition *(e)l-* is always combined with L-suffixes. Consequently, the agent enjoys unmissakenly the status of the A and not the oblique. The A is overtly indexed and

¹⁹⁵ An example of the case-marking of themes: *gd-obe-n-ux l-i-barθaydi* ‘I will give you_{MS} **my daughter**’ (Ritter 1967-71, 107/84).

case-marked. The dative agent is generally a highly salient argument that is in focus (often contrastive). Consider the following examples from the dialect of the village ȚIwardo. The subject NP (*Malke*) of a basic intransitive verb like *Øθy* ‘come’ is indexed but not case-marked. A similar NP in A-function is both case-marked by *(e)l-* and indexed by L-suffixes, whilst the P is zero-marked.

This interpretation presumably depends on the fronting of the patient and the third plural agent coding that is otherwise also found in unspecified agent constructions (i.e. *u-mšiho şluw-we* ‘They crucified Christ’ = ‘Christ was crucified (by sb.)’).

(18) Țuroyo (ȚIwardo; Ritter 1967-71: 33/34.37)

	[V-S]	[S]		
a.	<i>aθi-Ø</i>	<i>u-Malke</i>	<i>aŋm-a</i>	(no case-marking of S)
	come _{PFV-S:3MS}	the-PRN:M	with-3FS	
	‘Malke came with her.’			
	[V-A]	[ERG→A]	[P]	
b.	<i>hze-le</i>	<i>l-u-Țayawo</i>	<i>u-med-ano</i>	(case-marking of A only)
	see _{PFV-A:3MS}	DAT-the-Muslim:MS	the-thing:MS-DEM:MS	
	‘The Muslim saw this thing.’			

The same holds for independent dative person forms from the *el*-series, for example:

c.	<i>lo</i>	<i>el-i</i>	<i>u</i>	<i>lo</i>	<i>l-u-ḥawr-ayḍi</i>	<i>lā-hze-lan</i>
	NEG	DAT-1SG	and	NEG	DAT-the-friend:MS-my	NEG-see _{PFV-A:1P}
	<i>u-mede</i>	<i>d-am-m-at</i>				
	the-thing	SUBR-say _{IPFV-A:2SG}				
	‘Neither I nor my friend found the thing you _{SG} speak of.’ (ȚIwardo, Ritter 1967-71: 55/25)					

This also applies to demonstrative pronouns, as shown in (19b) and (19d) below. The dative argument generally expresses agent focus, as these examples indicate.

(19)	URBAN		RURAL
	(Prym-Socin 1888:133.9-10)		(Ritter 1967-71, 59/41, 33/32)
a.	<i>xlo l-ũno qṭi-li bab-ox</i>	c.	<i>lo el-i qṭi-li i-ḥūrmayḍūx</i>
	‘Do you think I killed your _{MS}		‘(It was) not I (who) killed
	your _{MS} father?’		wife.’

- b. *l-uwe mamté-le-lan*
u-l-ano qti-Ø-le
 'That one brought us (here)
 them, but **this one** slayed him.'
- d. *u l-ani hjəm-me aṣlayye*
u falit-i aṣlayye b-ax-xanejər
 '(It is) **these** (who) attacked
 and they fell on them with dag-
 gers.'

It should be pointed out that the inflection of the dative pronouns is rather different in the urban dialect (Midyat) where *(el)l-* combines with the unmarked independent pronouns instead of 'possessive' suffixes (e.g. *l-* 'to' + *ūno* 'I', *l-* 'to' + *huwe* 'he') similarly to demonstratives (e.g. *l-* 'to' + *hano* 'this', *l-* 'to' + *hani* 'these')¹⁹⁶. This is rather different from urban Ṭuroyo dialects such as Miden and Neo-Aramaic in general. (20) below compares the forms of Central and North Eastern Neo-Aramaic.

(20) **Inflection of *(e)l-* in Ṭuroyo and other Neo-Aramaic languages**¹⁹⁷

	Central			North Eastern
	Midyat	Miden	Mlahso	(C. Qaraqosh, Khan 2002a)
1SG	<i>l-ūno</i> 'to me'	<i>el-i</i>	<i>el-í</i>	<i>ʔall-i</i>
1PL	<i>l-aḥna</i> etc.	<i>el-an</i>	<i>el-ena</i>	<i>ʔall-an, ʔall-enan</i>
3SM	<i>l-uwe</i>	<i>el-e</i>	<i>el-áv</i>	<i>ʔall-əḥ</i>
3SF	<i>l-iya</i>	<i>el-a</i>	<i>el-á</i>	<i>ʔall-aḥ</i>
3PL	<i>l-anne</i>	<i>al-le</i>	<i>el-én</i>	<i>ʔal-hən, əll-ehən</i>

The conjoined case-marking and indexing of the A is noteworthy for Neo-Aramaic¹⁹⁸ and represents a type of optional A-marking that focalizes the agent. There is no equivalent construction to NENA where the agent is case-marked but not overtly indexed (e.g. *l-kalbe xil-a* 'By dogs it_F was eaten'). A construction that would potentially parallel this is exemplified below. The construction is intransitive and the dative expresses a recipient-like argument rather than the agent. (The labile alternations of verbs is further discussed in §6.2.1)

¹⁹⁶ In the second person, we find the forms *l-ūxat* for the masculine singular and *l-ūxatu* for the plural (Ritter 1990:3), which appear to be contaminations of expected *l-ox* and *l-oxu* and the independent pronouns *hat* and *hatu*.

¹⁹⁷ These forms presumably developed in analogy to demonstratives, cf. *hano* 'this one' : *l-ano* 'to this one' (*huwe* : x = *l-uwe*).

¹⁹⁸ However, cross-referencing of focalized NPs in itself not uncommon in Ṭuroyo. An independent pronoun in additive focus, for instance, is generally also indexed, for example:

(1) *gd-ūxl-o-li óno=ste* 'She will eat **me** too!' (Midən, Ritter 1967-71, 75/98)

- b. *haθe* *ono* *hawxa* *moláf-le-li* *bab-i*
 DEM:FS I thus teach_{PFV-A:3MS-R:1SG} father:MS-my
 ‘This (is) how **my father** taught me (to do it).’

The ʿTuroyo varieties such as the dialect from the village Raite which also employ differential case-marking of the P may also use this in a dative agent construction, as shown in (25a-b). The resulting case-marking alignment pattern is horizontal (S≠A=P).

(25) **Raite** (Ritter 1967-71, 107/85.116)

- a. *madʕal-le* *l-ʕAli* *aʕm-e* (case-marking of P only)
 take_{PFV-S:3MS} DOM-PRN:M with-3MS
 ‘He (i.e. the son) took along **Ali**.’
- b. *l-ʕAli* *grəš-le* *l-u-sayfo* (case-marking of A and P)
 DAT- PRN:MS pull_{PFV-A:3MS} DOM-the-sword:MS
 ‘**Ali** drew **the sword**.’

Similarly, the ergative case-marking of NPs may combine with the ergative indexing of NPs, as illustrated in the following examples. The word order often seems to be P-V-A. The full nominal *aḥḥeṭani* ‘this wheat’ and demonstrative pronoun *haθe* ‘this’ are indexed by the E-set like the S and the agent NP is both indexed and case-marked differently.

(26) **Iwardo** (Ritter 1967-71, 55/11, 46/25)

- a. *aḥ-ḥeṭ-ani* *xil-i-le* *l-u-moro*
 the-wheat:PL-DEM:PL eat_{PFV-P:3PL-A:3MS} DAT-the-master:MS
 ‘The owner ate **this wheat**.’
- b. *haθe* *sim-o-le* *l-u-Qanda*
 DEM:FS do_{PFV-P:3FS-A:3MS} DAT-the-PRN
 ‘(It was) Qanda (who) did **this**.’

One should note that intransitive verbs that take S_A agreement (see 6.2.1.4) may also show overt case-marking of the subject alongside overt agreement. For example, the subject of the stem III verb *hlx* ‘walk’:

- (27) *l-Nari* *malax-le* (case-marking of S_A)
 DAT- PRN:MS walk_{PFV-3MS}

‘Nari walked.’ (Raite; Ritter 1967-71, 96/229)

The distinct patterns in the interaction of agreement and case-marking observed thus far are recapitulated in below. The P aligns with the S ergatively mainly in terms of agreement. Case-marking may target either A or P and both A and P. The unmarked instances of both agent and patient NPs are most common, while case-marking of both is least common. An ergative or accusative case-marking pattern, then, appears to be favored. The combination of both indexing and case-marking of salient objects in the ‘perfective’ does not appear to occur. This would require further study to be ruled out completely.

Țuroyo, therefore, concurs with the cross-linguistic tendency to avoid the combination of ergative agreement with accusative case-marking (Dixon 1979:92, 1994:95; see §2.5.2). Moreover, even from a language-internal perspective, it is likely that there is an additional morphological factor for why this combination is avoided. The dative case-marking through the preposition (*e*)/*l*-correlates with the L-suffixes in marking the same role. This can be observed in the differential marking of the P in the ‘imperfective’, of the R in ditransitive constructions and of the possessor in predicative possession.

Table 40. *Indexing and case-marking of the A and the P*

S				
+AGR	–CM	<i>maty-o i-kalo</i> (most common) “The bride arrived.” <i>mhalax-la i-kalo</i> <i>mhalax-la l-i-kalo</i> (less common)* “The bride walked.”		
	+CM			
A		P		
+AGR	–CM	–AGR	–CM	<i>nšaq-le u-ḥaθno i-kalo</i> (most common)
	+CM		–CM	<i>nšaq-le l-u-ḥaθno i-kalo</i>
	–CM	+AGR	+CM	<i>nšaq-le u-ḥaθno l-i-kalo</i>
			–CM	<i>nšiq-o-le u-ḥaθno i-kalo</i>
	+CM	–AGR	+CM	<i>nšaq-le l-u-ḥaθno l-i-kalo</i> (least common)

Notes: These sentences serve as hypothetical examples of the concerning pattern. *_{SA} verbs only.

The combination of agreement through L-suffixes and dative case-marking is occasionally observed in Țuroyo in the marking of the P in the ‘imperfective’, for example:

(28) **Miden** (Ritter 1967-71: 81/49)

[V+P]	→	[DOM→P]
<i>k-ūḏi-i-le</i>		<i>l-u-zlām</i>
IND-know _{IPFV-A:3PL-P:3MS}		DOM-the-man:MS
'They know the man .'		

In addition, prepositional objects are typically marked by *(e)l-* independently of the verb or, if a dependent person form, as an L-suffix attached to the verb. Certain verbs such as *qry* 'call (for)' and *Ømr* 'say, tell' always takes such a complement in Ṭuroyo. Indexing and prepositional marking may also be combined:

(29) **Ṭuroyo** (Ritter 1967-71)

- b. *qre-le l-u-rišo d=ax-xodume* 'He called for **the head of the servants**.'
- c. *qré-le-la* 'He called (for) **her**.' (Miden, 85/55, 104)
- d. *qré-le-le l-u-abro* 'He called **for his son**.' (Raite, 107/55)

In like fashion, recipients regularly trigger additional indexing through L-suffixes across dialects, for example the addressee of the verb *Ømr* 'say':

[A]	[V-A-R]	[DAT→R]
(30) <i>u-zlām</i>	<i>mál-le-le</i>	<i>l-u-zfuro</i>
'The man said (lit. to him) to the little one .' (Miden, <i>ibid.</i> 76/65)		

The coding of focalized agents as such is identical with the differential marking of recipient NPs in the 'perfective'. Thus, a construction involving a dative full nominal such as *mār-le l-NP* based on *Ømr* 'say' is ambiguous to the role of the dative argument, it can either the recipient 'He said to NP' or agent 'NP said', for example:

(31) **Ŭwardo** (Ritter 1967-71, 35/35, 40)

- R: *mār-le l-u-mūstašārayde* 'He said **to his counselor**'
- A: *mār-le l-u-fmiro* '**The emir** said'

The two are not mutually exclusive and can even co-occur, for example:

- (32) [CM→A] [V-A] [CM→R]
l-u-ḥākām māl-le l-u-aḥun-aḡḡe u-faḡiro
 DAT-the-overlord:MS sayPFV-A:3MS DAT-the-brother:MS-his the-poor:MS
 ‘The overlord said to his poor brother.’ (Anḥəl, *ibid.* 59/3)

The A and a recipient-like indirect affectee can even be additionally indexed on the verb by L-suffixes. The first L-suffix refers to the A, the second the R-like affectee. The same order appears to apply to nominal constituents in such a construction, for example:

- (33) *mān sām-le-le l-u-ṣultono l-u-ṣmiro*
 what dopFV-A:3MS-R:3MS DAT-the-sultan:MS DAT-the-emir:MS
 ‘... what the sultan has done to the emir.’ (ṢIwardo, *ibid.* 36/87)

Nevertheless, the parallelism between the coding of the R and A is not complete. Dative case-marking of the agent is optional, while the addressee of a ditransitive verb like *ḡmr* ‘say’ is always case-marked. Moreover, dative recipients are not necessarily additionally indexed, while the dative agent is always additionally indexed. There is, however, a stronger parallel with the dative possessor in predicative possession based on the existential marker *kāt-* or the suppletive verb *hwy* ‘be’. The possessum, or possessee, remains zero-marked. Dative case-marking of the possessor is variable, while the L-suffixes always index the possessor, for example:

- (34) **Predicative possessor** (ṢIwardo, Ritter 1967-71, 58/3, 57/12)

- e. [PSSR] [EXIST-PSSR] [PSSM]
u-zlām-ano kāt-way-le arbfi kalōṭe
 the-man-DEM:MS EXST-PST-3MS forty daughter-in-law:PL
 ‘This man had forty daughters-in-law.’
- b. [PSSM] [EXST-PSSR] [CM→PSSR]
ma kāt-le l-u-malk-ano
 Q EXST-3MS DAT-the-king-DEM:MS
 ‘What does the king have?’

Indexing through L-suffixes and additional case-marking through *(e)l-* is readily found elsewhere within the language except for the P in the ‘perfective’. It is only in the ‘perfective’, then, that differential case-marking of the P through the dative cannot be combined with indexing, since this combination appears to be morphosyntactically linked with the use of a morphologically similar set of

dependent (dative) person forms (the L-suffixes). It seems plausible to me that the special case-marking of the P without indexing in the ‘perfective’ is ultimately secondary and analogical to the similar phenomenon in the ‘imperfective’.

The main point in the end is that, in transitive clauses with full NPs, ergative agreement can be combined with ergative case-marking in the ‘perfective’ in ʿTuroyo dialects but not with accusative case-marking. The case-marking of the A is optional and marks agent focalization, particularly contrastive focus. The ergative indexing of the P is differential. The dative (*e*)l- links a focal A with the same marking typical for the predicative possessor, recipients and beneficiaries, and a differentially marked P argument in the ‘imperfective’. In at least the dialect of Raite, the case-marking is horizontal, grouping both A and P by the preposition (*e*)l-, which is consistent with the horizontal pattern for non-third person forms in the ‘perfective’ through the L-suffixes.

6.2. Lability and the *qaṭil*-Form in ʿTuroyo

After a discussion of the splits based on argument-related properties we proceed with alignment in relation to voice and other verb-related properties. Valency alternations in ʿTuroyo closely parallel the ‘ergative dialects’ in NENA (see §4.3.3). The agentless ‘perfective’ form (cf. Gutman 2008) is also used in ʿTuroyo but there are notable differences. (1) below offers illustrative examples of its use.

(1)	<i>at-tarʕe ftiḥ-i-le</i>	‘He opened the doors.’	(active)
	<i>at-tarʕe ftiḥ-i</i>	‘The doors (were) opened.’	(anticausative)
	<i>ftiḥ tarʕe</i>	‘People opened doors.’	(impersonal)

This section compares such clauses with the NENA varieties.

6.2.1. Labile Verbs and the Voice System

Central Neo-Aramaic is noteworthy in comparison to NENA for its rich voice system that encompasses several mediopassive stem formations. The system is reflected for ʿTuroyo in Table 41 which is further discussed below.

Table 41. *The ʿTuroyo stem formations*

ACTIVE	MEDIOPASSIVE

IPFV		PFV		IPFV
Ia:	<i>qoṭəl-</i>	<i>qṭil-</i>	<i>qṭil-</i>	<i>mə-qṭol-</i>
Ib:	<i>doməx-</i>	<i>damix-</i>		
II:	<i>m-zabən-</i>	<i>m-zabən-</i>	<i>m-zabən-</i>	<i>mi-zabən-</i>
III:	<i>m-a-dməx-</i>	<i>m-a-dməx-</i>	<i>m-t-a-dməx-</i>	<i>mi-t-a-dməx-</i>
IV:	<i>m-farqəṭ-</i>	<i>m-farqəṭ-</i>	<i>m-farqəṭ-</i>	<i>mi-farqəṭ-</i>

Notes: dṃx ‘sleep’, zḅn ‘sell’, fṛq̣ ‘burst’. Stems in shaded cells take L-suffixes. Source: Data from Jastrow 1985.

‘Imperfective’ (IPFV) bases are given to the left and right and ‘perfective’ (PFV) in the middle of the table. This arrangement serves to show the convergence between the two voice systems in the ‘perfective’. The active and mediopassive are only differentiated by inflectional base in the ‘imperfective’. The inflectional bases for the ‘perfective’ are generally the same for both active and mediopassive with the following exceptions:

- (i) verbs belonging to what is called class ‘Ib’ of stem I (which distinctively has *CaCiC-* instead of *CCiC-*)
- (ii) verbs having a mediopassive of stem III with a typical *-t-*infix (*mtaC-CaC-*).

Stem I verbs diverge into two distinct classes: (Ia) takes *CCiC-* and (Ib) takes *CaCiC-* which are, respectively, *qṭil-* and *qaṭil-*¹⁹⁹ but the ‘imperfective’ base of both of these is *CoCəC*, i.e. *qoṭəl-*. Otherwise, what applies to stem Ia verbs generally also applies to derivational stems. The shaded area indicates forms that take agent (or subject) indexes of the L-set. The rest takes subject (or agent) indexes of the E-set.

Overall, voice is marked differently in the verbal morphology of the ‘perfective’ and ‘imperfective’. The ‘imperfective’ anticausative pendants consist of distinct mediopassive stem formations. The ‘perfective’, by contrast, shows valency alternations similar to what is observed for South Eastern Trans-Zab Jewish dialects of NENA. The two sets of person forms indicate a transitivity alternation in the ‘perfective’ yet insignificant as such in the ‘imperfective’ where it is the verbal stem itself that indicates this difference. Another important difference between the ‘imperfective’ and ‘perfective’ in T̤uroyo is a subclassification

¹⁹⁹ One should recall that the consonants *q-t-l*, although as a lexical root meaning ‘kill’, are treated as semantically empty and simply represent the consonantal template for sound verbs. The verb *q-t-l* ‘kill’ itself may not at all occur in this template.

within stem I verbs peculiar to the ‘perfective’. Stem (Ia) verbs generally occur in labile alternations and take a *qṭil*-base in the ‘perfective’, while stem (Ib) verbs generally do not and take a *qaṭil*-base. These are mainly intransitive and a few two-argument state verbs such as *šmī* ‘hear’ do occur in this class. Such secondary transitive verbs are coded differently from primary transitive verbs, reminiscent of the antipassive. An important difference with NENA is that the agentless ‘perfective’ form may be used to express an impersonal passive of both transitive and intransitive verbs.

6.2.1.1. Vowel Reduction

Vowel reduction leads to slight difference in the inflection of the ‘imperfective’ base *qoṭəl*- against both Mlaḥso *qoṭəl*- and NENA *qaṭəl*-. First of all, as a rule, *ə* is lost before a CV-sequence and turns to *a* before a closed syllable, so that *°doməx*- ‘sleep’ with *-no* of the 1ms. becomes *°domax-no* ‘I_M sleep’. Furthermore, rural dialects such as Miden have long *i* [i:] and *o* [o:] in verbal forms, these are shortened and neutralized to *ə* [ɪ], respectively, *ǔ* [u] in urban dialects in and around Midyat in an unstressed open syllable directly before the stressed syllable. Compare the following verbal forms²⁰⁰:

(2)		‘I _M sleep’	‘I _F went to sleep’
	Mn.	<i>°domax-no</i>	<i>damix-ono</i>
	Mt.	<i>°dūmax-no</i>	<i>daməx-ono</i>

Miden in turn has nearly completely merged the short vowel *ǔ* with *ə*. The differences in vowel reduction leads to the following paradigms in comparison to Mlaḥso:

(3)		Miden		Midyat		Mlaḥso	
1SM	‘I _M go to sleep’	<i>domax</i>	<i>-no</i>	<i>dūmax</i>	<i>-no</i>	<i>domex</i>	<i>-no</i>
1SF	‘I _F go to sleep’	<i>dəmx</i>	<i>-ono</i>	<i>dūmx</i>	<i>-an</i>	<i>domx</i>	<i>-ono</i>
3MS	‘He goes to sleep’	<i>doməx</i>	<i>-∅</i>	<i>doməx</i>	<i>-∅</i>	<i>doméx</i>	<i>-∅</i>

Consonant clusters with *ə* can be readjusted in the Midyat dialect such that ‘perfective’ *nšəq-o-le* ‘He kissed her’ alternates with *nšq-o-le* against Miden *nšiq-o-le* (Ritter 1990:63).

²⁰⁰ Also Mt. *əw* contracts to *u*. Compare Mt. *kθuwole* (for *kθəwole*) ‘He wrote it_F’ and Mn. *kθiwole* ‘id.’.

Phonological phenomena such as the ə-deletion rule and agreement inversion can yield ambiguous forms such that the ‘perfective’ and ‘imperfective’ bases merge (Jastrow 1985:144-145). ə becomes *a* before suffixes with an initial consonant but it is normally deleted in an open syllable. Since the subjunctive is the unmarked ‘imperfective’ form, this leads to ambiguity for stem II and IV verbs, for example II *hlq* ‘throw’:

- (4) *mḥalaq-* + *-no* → *mḥalaq-no* ‘that I throw’ or ‘I was thrown’
mḥalaq- + *-i* → *mḥalq-i* ‘that they throw’ or ‘they were thrown’

Similarly, a transitive form like *mḥalq-i-le* (stem II) can mean either preterit ‘He threw them’ or subjunctive ‘that they (may) throw it_M’²⁰¹. Moreover, the difference between the two inflectional bases is neutralized for final-/y/ verbs belonging to stem Ia in rural dialects like Miden which merge *ũ* with ə. This may be illustrated by a comparison to NENA:

	Țuroyo (Miden)		NENA
(5)	<i>Ø-ḥazy-o-li</i> (< *ḥũzy- < *ḥozy-)	‘that she sees me’	<i>Ø-xazy-a-li</i>
	<i>ḥazy-o-li</i>	‘I saw her’	<i>xazy-a-li</i>

The ambiguity does not apply, when the verb does not take both agent and patient indexes (i.e. E- and L-suffixes). In that case, the choice of person indexes is determinant, for example, in the intransitive verb *hlx* ‘walk’ belonging to stem II:

- (6) *ṁmhalax-no* ‘I_M walk’ (‘imperfective’, stem II, s = E-set)
mhalax-li ‘I walked’ (‘perfective’, stem II, s = L-set)

6.2.1.2. Labile Alternations

Virtually all transitive verbs of stem Ia can be ambivalent in a causative/inchoative alternation in Țuroyo (cf. Ritter 1990:124). We can, however, only speak of lability (i.e. no change in basic morphology), for the ‘perfective’. The mediopassive generally expresses the inchoative of the equivalent causative. Consider, for example, the verb *ftḥ* ‘open’ in the following alternation. The

²⁰¹ This resembles the situation in the NENA dialect C. Hertevin (SE Turkey; Jastrow 1988:38) where the ‘perfective’ and ‘imperfective’ bases are identical for derived stems.

inchoative marks the subject like a patient, while the causative takes an agent index from the L-set.

(7) **Labile alternation**

	[S]	[V-S]	
a.	<i>ʕayne</i>	<i>d-ú-babo</i>	<i>ftiḥ-i</i> (inchoative, no agent)
	eye:PL	LK-the-father	openPFV-S:3PL
	'Father's eyes opened.' (Miden; Ritter 1967-71, 81/18)		
	[V-A]	[P]	
b.	<i>ftəḥ-le</i>	<i>ʕayn-e</i>	(causative, specified agent)
	openPFV-A:3MS	eye-his	
	'He opened his eyes.' (57/237)		

We can compare this to South Eastern Trans-Zab Jewish varieties of NENA such as J. Sulemaniyya. The verbs *pqy* in NENA and *frqʕ* IV in Ṭuroyo pattern alike:

(8)	Ṭuroyo (Miden)	J. Sulemaniyya
	(Jastrow 1985:112)	(NE Iraq; Khan 2004a:297)
TR.	<i>mfarqaʕ-le</i>	<i>pqe-le</i> (A = L-set)
	'He burst (sth.)'	'id.'
	Ṭuroyo (Miden)	J. Sulemaniyya
ITR.	<i>mfarqʕ-o</i>	<i>pəqy-a</i> (S = E-set)
	'It _F (was) burst'	'id.'

A cause may be expressed overtly by the preposition *me* 'from', as illustrated in (9). *me* may also simply express the cause in other intransitive constructions, for example:

(9) **Ṭuroyo** (Qamišli, NE Syria; Noorlander field notes 2013)

a.	<i>u-tarʕo</i>	<i>ftəḥ-Ø</i>	<i>me</i>	<i>hawa</i>	<i>qwiθo</i>
	the-door:MS	openPFV-S:3MS	from	wind:FS	strong:FS
	'The door opened because of (or: was opened by) a strong wind.'				
b.	<i>i-dawmo</i>	<i>qayit-o</i>	<i>b-i-nuro</i>	<i>m-u-barqo</i>	
	the-tree:FS	start.burnPFV-S:3MS	with-the-fire:FS	from-the-lightening:MS	
	'The tree caught fire because of the lightening.'				

Anticausatives are known to be compatible with causal phrases (cf. Croft 1994b:110; see §4.3.1) but the implication is not as strong as in the passive prototype.

What we have seen thus far is similar to NENA, but there are also noteworthy differences. First of all, the valency alternation hinges on the selection of the L-set for agent indexing against the E-set for subject indexes in the ‘perfective’. The intransitive valence pattern, however, is morphologically distinct from the transitive pendant in the ‘imperfective’ by a different type of stem formation while no distinction for agent or subject indexing applies, for example:

(10) **Valency alternation in the ‘perfective’ against the ‘imperfective’**

	PERFECTIVE		IMPERFECTIVE	
TR.	<i>ftəḥ-la</i>	:	<i>°fəṭḥ-o</i>	(causative)
	‘She opened (sth.)’		‘She opens (sth.)’	
ITR.	<i>ftiḥ-o</i>		<i>°məftəḥ-o</i>	(inchoative)
	‘It _F (was) opened’		‘It _F opens, is being opened’	

The ‘imperfective’, therefore, maintains a voice distinction at the level of inflectional base only, whereas the ‘perfective’ does so at the level of person indexes. Some stem I verbs such as *fṣḥ* ‘be(come) glad’ are middle only (I_M), e.g. *fṣiḥ-Ø* ‘He was/became glad’. They evince no labile alternation (e.g. ***fṣəḥ-le* ‘He glad-denied’). This also parallels South Eastern Trans-Zab Jewish varieties of NENA, although NENA has no corresponding separate mediopassive base in the ‘imperfective’. Compare the cognate verb *pṣx* in Jewish Sanandaj:

(11) **Emotive response middle in Țuroyo and NENA**

	Țuroyo		J. Sanandaj (W Iran; Khan 2009:523)
PFV	<i>fṣiḥ-Ø</i>		<i>pṣix-Ø</i>
	‘He rejoiced’		‘id.’
IPFV	<i>°məfṣəḥ-Ø</i> (≠ <i>qoṭəl-</i>)		<i>păṣəx-Ø</i> (= <i>qatəl-</i>)
	‘He rejoices’		‘id.’

6.2.1.3. *Ergative and Neuter Verbs*

When we consider the omission of the patient, Țuroyo does not show distinctions in the marking of the agent (while this is possible in NENA ‘ergative dialects’). A verb like *ṣty* ‘drink’ can freely occur without the patient and the coding of the agent does not alter:

(12) **Miden**

	[V-A]	[P]	
a.	<i>štalle</i>	<i>i-qaḥw-aθθe</i>	
	drink _{PFV} :A:3PL	the-coffee:FS-DEM:FS	
	'They drank the coffee.' (Ritter 1967-71, 115/63)		
b.	<i>štalle</i>	(∅)	<i>maqrāṭ-ṭe</i>
	drink _{PFV} :A:3PL		III:breakfast _{PFV} -S:3PL
	'They drank and had breakfast.' (73/113)		

An antipassive as such where the agent becomes the s and the patient oblique is not found in Țuroyo.

Stem I verbs come in two subclasses depending on their pattern for the 'perfective': (Ia) *qṭil-* and (Ib) *qaṭil-*. The verbs of (Ib) the *qaṭil*-class are mainly intransitive and mostly do not occur in labile alternations. Jastrow (1985:71) refers to them as "neutrische Verben" ('neuter verbs'), i.e. belonging to neither the passive nor active voice. The E-set is used as subject indexes. The transitive valence pattern is derived, for example the verb *tym* 'finish' in the following alternation:

(13) **Causative alternation**

	[S]	[V-S]	
a.	<i>i-māsāl-ayδ-an</i>	<i>tayim-o</i>	(inchoative, stem Ib)
	the-story:FS-LK-our	finish _{PFV} -S:3FS	
	'Our thing is finished' (Ritter 1967-71, 115/149)		
	[V-A]	[P]	[A]
b.	<i>matām-le</i>	<i>u-šugl-ayδ-e</i>	<i>u-malko</i>
	finish _{PFV} -A:3MS	the-business:MS-LK-his	the-king:MS
	'The king finished his business.' (77/21)		

The causative counterparts mainly belong to either stem III or II as shown for a few verbs in (14) below. Only rarely do verbs alternate between stem Ia and stem Ib but it is possible such as Ib *mali-∅* 'be(come) full' (itr.) and Ia *mle-le* (tr.) 'fill' below. Sometimes this involves a subtle semantic shift such as Ib *qaṭāṭ-∅* 'He crossed' and Ia *qṭāṭ-le* 'He cut through', Ib *naṭār-∅* 'He waited' (itr.) and Ia *nṭār-le* (tr.) 'He guarded' (Ritter 1990:51).

	INCHOATIVE (Ib)		CAUSATIVE
(14)	<i>damāx-∅</i>	'sleep, fall asleep'	III <i>madmax-le</i> 'put to sleep'

<i>basəm-Ø</i>	'be(come) pleasant'	II	<i>mbasəm-le</i>	'please'	
<i>mali-Ø</i>	'be(come) full'	Ia	<i>mle-le</i>	'fill'	(rare)

These neuter verbs show causative or labile alternations where the patient-like argument is marked as the S in the inchoative. Some transitive neuter verbs in Turoyo come closer to an antipassive instead. This is similar to Samoan, a Polynesian language, where ergative alignment predominates. It employs ergative alignment for primary transitive verbs. Some stative verbs, especially two-argument experiencer verbs such as 'love', always occur in the antipassive, while action verbs never occur in this (cf. Comrie 1978:373). Stem Ib verbs in Turoyo are generally intransitive and may additionally take an oblique complement. A few stem Ib verbs can be morphosyntactically transitive, however. They express two-argument experiencer predicates such as *šaməŋ-Ø* 'He heard' and *aðəŋ-Ø* 'He knew' (Jastrow 1985:71; cf. Furman and Loesov 2014). Such experiencers are coded like the P in the system of the 'perfective' (e.g. *ftəh-Ø-le* 'He opened it_M') and like the S of intransitive verbs (e.g. *ftiḥ-Ø* 'It_M opened', *daməx-Ø* 'He slept').

These transitive neuter verbs may take clausal complements, full nominal objects and object indexes from the L-set (which is indistinct from the transitive coding in the 'imperfective'), as exemplified in (15a-b) below.

(15) **Miden**

- a. *i-naqla* *d-i-qriθo* *šamiŋ-i* *u-xabr-ano*
the-moment:FS SUBR-the-village:FS hearPFV-1PL the-word:MS-DEM:MS
'When the people of the village heard **the news**.' (Ritter 1967-71, 71/16)
- b. *čirok-áθe=ze* *əsrí-kore* *šamiŋ-ína-la*
story-DEM:FS=ADD twenty-times hearPFV-1PL-3FS
'This story, too, we (already) heard **it_F** twenty times.' (115/14)

This confirms that the alignment is primarily structurally dependent on the type of inflectional base (*qṭil-*) (and only secondarily on the type of TAM category). Nevertheless, semantically speaking, these verbs are not primary transitive verbs and, strictly speaking, the agent-like argument is not an actual instance of the A in the same sense as verbs like *qṭl* 'kill' or *twr* 'break' but rather an experiencer of some kind. The fact that these experiencer verbs belong to the largely intransitive neuter class could be because they do not (as strongly) imply an effect on a patient-like argument (similarly to the antipassive). The morphological resemblance of the transitive coding with the 'imperfective' might correlate

with the semantics of these verbs in that they are arguably closer to the aspectual profile of the ‘imperfective’ in expressing experiencer states rather than actions, although the situation is viewed as a whole in the expression of the perfective past (see further below).

Generally, such verbs do not display a distinction in the coding of transitivity. Unlike in NENA, the verb *ylf* ‘learn’ shows no difference for the transitive and intransitive valence patterns:

(16) **Intransitive and transitive *CaCiC*-‘perfective’**

- a. *yaləf-no* *toʷo* (intransitive)
 learn_{PFV-1MS} good:MS
 ‘I learnt well.’ (Iwardo, Ritter 1967-71, 37/11)
- b. *yaləf-Ø* *ʕalam* (transitive)
 learn_{PFV-3MS} science
 ‘He learnt science.’ (Midyat, ibid. 24/257)

Interestingly, some of the verbs that typically occur in class (Ib) are also compatible with the transitive coding of class (Ia). As discussed further in §6.2.1.4, they do show a distinction in agent coding. The verb *fhm* ‘understand’ for example may alternate between *faham-Ø* and *fham-le* (Ritter 1990:85), *faham-Ø* being like the ‘antipassive’, respectively, and *fham-le* the ‘ergative’. The semantic difference between the two does not seem to be very obvious but Ritter (1990:85) hints at an aspectual distinction of punctuality. The ‘antipassive’, e.g. *faham-Ø*, is durative, meaning ‘He knew, was able to perceive’, while the ‘ergative’, e.g. *fham-le*, is punctual, meaning ‘He realized’.

6.2.1.4. *Impersonal Labile Alternations*

Contrary to NENA, the agentless ‘perfective’ form is also compatible with two-argument state verbs and even intransitive verbs (cf. Ritter 1990:124). Verbs denoting a state such as *hzy* ‘see’ in (17) below may occur in a labile alternation. The intransitive valence pattern has a spontaneous reading.

(17) **Labile alternation for *hzy* ‘see’** (Midyat)

	[S]			[V-S]		[OBL]
a.	<i>Malaxo</i>	<i>Gábriyel</i>	<i>b-u-ḥūlmo</i>	<i>ḥze-Ø</i>	<i>l-Mor</i>	<i>Šəmṣon</i>
	angel:MS	PRN	in-the-dream:MS	see _{PFV-S:3MS}	DAT-HON	PRN
- ‘The angel Gabriel appeared to Lord Simon in a dream.’ (Ritter 1967-71, 11/107)

	[V-A]	[P]		
b.	<i>hze-li</i>	<i>b-ḥŭlm-i</i>	<i>ḥa</i>	<i>k-omər-Ø</i>
	see _{PFV-A:1SG}	in-dream:MS-my	one:MS	IND-say _{IPFV-A:3MS}
	'I saw in my dream one saying.' (23/9)			

Transitive verbs belonging to stem Ib that take a *qaṭil*-base in the 'perfective' can have a mediopassive counterpart (*I_M*), even though there is no corresponding form in stem Ib. The mediopassive (*I_M*) *iḍiḥ-Ø* 'be reknown' is for example reported to exist for (Ib) *aḍəḥ-Ø* 'know' for the verb *Ødḥ* 'know' (Jastrow 1985:76; Ritter 1990:727).

The mediopassive may also be used to express an impersonal passive. A causal origin is more strongly implied for a verb such as *qṭl* 'kill' in (18b) below but the verb expresses no agreement with the patient and takes the unmarked 3ms. form. Thus, the perfective is characterized by a type of impersonal labile alternation.

(18) **Miden**

a.	<i>qṭalle</i>	<i>tloθo</i>	<i>gawre</i>	<i>mən-aye</i>
	kill _{PFV-A:3PL}	three	man:MPL	from-3PL
	'They killed three men of them.' (Ritter 1967-71, 85/22)			
b.	<i>qṭil</i>	<i>tloθo</i>	<i>gawre</i>	<i>me-Midən</i>
	kill _{PFV}	three	man:MPL	from-Miden
	'Three men from Miden were killed' (85/12)			

A major difference between NENA and Țuroyo is that even intransitive verbs may be impersonalized (Ritter 1990:124ff.). This is illustrated for *dmx* 'sleep' and *rḥm* 'come together' below. The verb *dmx* 'sleep' belongs to stem Ib (*qaṭil*-) and the impersonalization involves a change in agreement and inflectional base only.

(19) **Impersonalization in Țuroyo** (Ritter 1990:124-125, 127)

a.	<i>daməx-Ø</i>	'He fell asleep.'	(<i>qaṭil</i> -, intransitive)
b.	<i>dmix(-Ø) larwal</i>	'People (lit. It _M) slept there.' ²⁰²	(<i>qṭil</i> -, impersonal)

An ambitransitive verb such *rḥm* 'come together', however, is labile in both personal and impersonal contexts:

²⁰² Compare the German original (ibid.): "es wurde auf dem Dache geschlafen".

- c. *rḡim-i* *am-maye* (*qṭil-*, inchoative)
gather_{PFV-3PL} the-water:PL
‘The water (pl.) accumulated.’
- d. *rḡim(-Ø)* *harke* *šəšwone* (*qṭil-*, impersonal)
gather_{PFV} here ant:PL
‘It_M swarmed here (with) ants.’

It should be noted that, for (19d), a construction with subject agreement, e.g. *rḡim-i harke šəšwone* ‘Ants swarmed here’, would theoretically also have been available. What restrictions there are to this impersonalization in Ṭuroyo requires further investigation but nothing like (19b) or (19d) is attested in NENA.

6.2.2. Split and Fluid Subject and Agent-Marking in Ṭuroyo

Ṭuroyo exhibits a two-dimensional split in the inflection of intransitive verbs: one with respect to the type of subject indexes (E-set/L-set) and another with respect to the morphological class for stem I verbs (*qṭil-/qaṭil-*). Only those verbs that take a *qṭil*-form in the ‘perfective’ show a split in patient-like, respectively, agent-like subject indexes. The subject marking split parallels the South Eastern Trans-Zab Jewish varieties (see §5.1.1). Subjects are always coded in a patient-like fashion in the *qaṭil*-class. Table 42 below illustrates the main semantic classes and respective coding that are compared with NENA below.

Table 42. *Patient-like or agent-like marking of the s in Ṭuroyo*

LEXICAL CLASS	CODING	<i>qṭil-</i>	<i>qaṭil-</i>
state, (dis)position	E-set	<i>ḡbin-Ø</i> ‘be angry’	<i>zayəṭ-Ø</i> ‘fear’
change of state, (dis)position	(S _P)	<i>ṭniḥ-Ø</i> ‘rest’	<i>yaṭu-Ø</i> ‘sit’
uncontrolled process		<i>ḥniq-Ø</i> ‘suffocate’	<i>naṭal-Ø</i> ‘fall’
		<i>čik-Ø</i> ‘sneak in’	<i>ṭabar-Ø</i> ‘enter’
controlled activity		<i>še-le</i> ‘swim’	<i>raqaḏ-Ø</i> ‘dance’
		<i>zmər-le</i> ‘sing’	<i>šaḡal-Ø</i> ‘work’
reflexive: ‘putting on’		<i>lwəš-le</i> ‘dress’	
		<i>šləḥ-le</i> ‘undress’	
sound emission	(S _A)	<i>nwəḥ-le</i> ‘bark’	
patient omission	L-set	<i>xi-le</i> ‘eat’	<i>šaməṭ-Ø</i> ‘hear’

Source: Data based on Jastrow 1985; Ritter 1990; Noorlander’s field notes 2013 (informants from Qamishli).

Although it is impossible to predict exactly on the basis of semantics what type of coding is preferred, there are notable tendencies.

Similarly to Jewish dialects like Sulemaniyya, it is noteworthy that, from a cross-linguistic perspective, the semantically most agent-like class of verbs denoting controlled activities (Croft 1998:52-53; see §2.3.1.) includes many verbs that take S_P coding such as *raqəδ-Ø* ‘dance’ and *šəgəl-Ø* ‘work’ and *čik-Ø* ‘sneak in’.

Interestingly, the verb *šhy* ‘swim’ and other controlled activities do take agent-like coding (S_A) in Turoyo (*šhe-le*), while the cognate verb *sxy* in Jewish Sulemaniyya takes patient-like coding (*səxe-Ø*). The meaning of the verb is also different in the latter conveying the sense of ‘wash, bathe’. The corresponding verb is *hayəf-Ø* ‘wash (oneself)’ in Turoyo, e.g. *hayif-i an-noše eba* ‘The people washed with it_F’ (Miden, Ritter 1967-71, 78/213) Similarly to NENA, reflexives relating to dress and grooming such as *lwš* ‘dress’ show agent-like coding and may also take an object, e.g. *lwəš-še aj-julaθθe* ‘They put on their clothes’ (Miden, Ritter 1967-71, 76/33).

The agentless counterpart of transitive verbs which receive patient-like subject coding generally belong to the mediopassive stem formations. There are but few exceptions. An example is the verb *xlš* ‘save, escape’ which has a ‘perfective’ form *xaləš-Ø* ‘be saved’ (although a sense of ‘escape; become safe’ may also be in view; Ritter 1990:219ff). Verbs expressing uncontrolled processes generally take patient-like subject coding regardless of morphological class (either a *qtil-* or *qaṭil-*base) and correspond with NENA, as given in (20) and (21) below. The verb *yaqəd-Ø* ‘burn’, for example, belongs to stem Ib and has a derived causative. Practically only the *qtil-*base is used in labile alternations (see previous subsection), as exemplified in (21).

(20) **Derived causative (*qaṭil*-class)**

Turoyo

‘burn’

ITR. *yaqəd-Ø*

TR. *moqaδ-le*

J. Sulemaniyya (Khan 2004a)

ITR. *qil-Ø* (~ *yəliq-Ø*)

TR. *mqəl-le*

(21) **Labile (*qtil*-class)**

a. ‘break’

ITR. *twir-Ø*

TR. *twəl-le*

ITR. *twir-Ø*

TR. *twər-re*

b. ‘suffocate’

ITR. *ḥniq-Ø*
 TR. *ḥnəq-le*

ITR. *ḥniq-Ø*
 TR. *ḥnəq-le*

Ṭuroyo and North Eastern Neo-Aramaic diverge more strongly when it comes to the agent-like coding of subjects, as illustrated in (22) below. Verbs that denote a controlled event are treated differently, such that *šaḡal-Ø* ‘work’ and *gawər-Ø* ‘marry’ receive patient-like coding in Ṭuroyo but not in NENA, whereas *še-le* ‘swim’ receives agent-like coding in Ṭuroyo but not in NENA. Moreover, there is an exceptional group of transitive verbs belonging to subclass Ib (*qaṭil-*) that mainly express mental states where the agent-like experiencer is (indirectly) affected through some mental experience, including more controlled mental activities such as *yaləf-Ø* ‘learn’ (instigating) and uncontrolled mental processes such as *tafi-Ø* ‘forget’ (non-instigating) (Jastrow 1985:72; Ritter 1990:93; Furman and Loesov 2014). These correspond with *S_A* forms in NENA, as compared with Jewish Sanandaj below.

(22) **Subject coding in Ṭuroyo and Jewish Sanandaj**

	Ṭuroyo		J. Sanandaj (Khan 2009)
a.	<i>raqəḏ-Ø</i> ‘dance’	=	<i>rqil-Ø</i>
b.	<i>yaləf-Ø</i> ‘learn’	≠	<i>yləp-le</i> ²⁰³
c.	<i>še-le</i> ‘swim’	≠	<i>səxe-Ø</i> (also ‘wash’)
d.	<i>šaḡal-Ø</i> ‘work’ (< Ar.)	≠	<i>ḥaštá wi-le</i> (< Ir.; <i>ḥaštá</i> ‘work, wil- ‘do’ + <i>-le</i>)
e.	<i>gawər-Ø</i> ‘marry’	≠	<i>gəwr-e</i> (< * <i>gwər-</i> + <i>-le</i>)
f.	<i>aḏəf-Ø</i> ‘know’	≠	<i>ʔli-le</i>
g.	<i>šaməf-Ø</i> ‘hear’	≠	<i>šmi-le</i> ²⁰⁴

There are several verbs that have similar semantic characteristics as the (Ib) subclass taking a *qaṭil*-base but belong to the (Ia) subclass taking a *qṭil*-base and transitive coding (Ritter 1990:733), for example *ḥzy* ‘see’ and *bʕy* ‘want’:

²⁰³ The patient-like subject form in J. Sanandaj *yəlip-Ø* conveys ‘learn’ in the sense of knowledge reception (less control) rather than acquisition (more control), i.e. being taught by somebody else.

²⁰⁴ It is possible that the intransitive coding in local Arabic cognates influences a few verbs belonging to subclass Ib. Arabic stative *saməf-tu* ‘I heard’ and mediopassives *f-t-aham-Ø* ‘He understood’ and *aš-t-aḡal-tu* ‘I worked’ (Mardin, SE Turkey; Grigore 2007) correspond with Ṭuroyo *šaməf-no*, *fahəm-Ø* and *šaḡal-no*.

	<i>qṭil-</i>		<i>qaṭil-</i>
(23)	<i>hze-le</i> ‘see’	vs.	<i>šaməṭ-Ø</i> ‘hear’
	<i>bfe-le</i> ‘want’	vs.	<i>abəṭ-Ø</i> ‘want’ (roots <i>bṭy</i> vs. <i>Øbṭ</i>)

Interestingly, this is consistent with the cross-linguistic tendency that ‘see’ is the most salient of perception verbs (Viberg 1983) and more likely receives transitive coding than ‘hear’ (Haspelmath 2015).

Conversely, some middle-only verbs belonging to stem I_M, e.g. *θniḥ-Ø* ‘rest’, are similar to class Ib (*qaṭil-*) in terms of semantics (stative) but occur in a derived causative alternation (Jastrow 1985:77, 92), for example:

(24)	ITR.	I _M	<i>fṣiḥ-Ø</i>	‘be(come) glad’
	TR.	III	<i>maṣṣaḥ-le</i>	‘gladden’

Moreover, there are intransitive verbs belonging to other stem formations than stem I that receive agent-like subject coding such as II *hlx* ‘walk’, e.g. *mhal-ax-le* (N.B. besides Ib *raḥəṭ-Ø* ‘run’) and III *syw* ‘become old’, e.g. *masu-le*.

Subject and agent coding may also co-vary in Țuroyo. Aspectual factors are presumably involved reminiscent of the ergative-antipassive opposition conditioned by lexical aspect (see §2.3.3). This concerns stem I verbs that may alternate between the agent-like subject coding (Ia, *qṭil-* + L-set) and patient-like subject coding in the *qaṭil*-subclass (Ib, *qaṭil-* + E-set). Occasionally, verbs that otherwise generally would have a *qaṭil*-form in the ‘perfective’ have a *qṭil*-base as bi-form (Ritter 1990:85). There may be slight differences in meaning. Ritter (ibid.) offers examples of the following kind:

(25)	<i>kafən-Ø</i>	‘He starved’	<i>fahəm-Ø</i>	‘He has understood’
	<i>kfəl-le</i> ²⁰⁵	‘He became hungry’	<i>fhəm-le</i>	‘He realized’

Interestingly, Ritter (1990:51, 619) also mentions such forms for the verb *hwy* ‘become’ where *hwe-le* ‘It_M arose, became’ alternates with *hawī-Ø* ‘It_M became, happened’. Ritter (1990:85) notes that agent-like coding is apparently used “when one wants to emphasize the sudden occurrence of the event or its completed nature” (translation of German original mine)²⁰⁶. It seems to me that Rit-

²⁰⁵ < **kfən-le*.

²⁰⁶ German original (ibid.): “wenn man das plötzliche Eintreten des Geschehens, oder seinen abgeschlossenen Charakter hervorheben will”.

ter is referring to punctuality which could be comparable to the role of punctuality in subject coding in, for instance, the Jewish dialect of Sulemaniyya (Khan 2004a:301). A patient-like form such as *yalaḫ-∅* ‘He learnt’ would be durative while the agent-like form such as *ilif-le* ‘He learnt’ would be punctual. It is possible that *yalaḫ-∅* in (26a) below, for example, is used to focus on the learning process over time while the agent-like form *ilaf-la* in (26b) focuses on the moment of its completion (Ritter’s “completed nature”) for, even though both are perfective in terms of grammatical aspect (cf. Ritter 1990:656)²⁰⁷. One should note that this is also a distinction in the coding of the agent.

(26) **Punctuality vs. durativity** (Midyat; Prym-Socin 1881:157.25, 201.6)

- a. *yalaḫ-∅* *u-kürräko* *qroyo*, *msäk-le* (E-set, non-punctual)
 learn_{PFV-A:3MS} the-boy read:INF seize_{PFV-A:3MS}
as-saḥrat *b-i-qrayto*
 the-magicalpower:PL PRP-the-reading
 ‘The boy **learnt** to read, (and), through reading, received magical powers.’
- b. *omər* *ilaf-la* *qroyo?* *omər* *ilaf-la*, (L-set, punctual)
 he.says learn_{PFV-A:3FS} read:INF he.says learn_{PFV-A:3FS}
mayiθ-o
 die_{PFV-S:3FS}
 ‘He said: **Did she** (i.e. the camel_F) **learn** to read? He said: **She did learn** (it and) died.’

It is possible that an additional semantic difference in dynamism plays a role as observed for Jewish Sulemaniyya (see §5.1.1). This is compared in (27a-b) below. A verb like *tym* ‘finish’ would focus on the cessation of an action and is more stative and endpoint-oriented than a verb like *bḏy* ‘begin’ which is inherently more initiative and dynamic.

(27) **Dynamic vs. stative**

- Ṭuroyo** **J. Sulemaniyya** (NE Iraq; Khan 2004a)
- a. ‘finish’
 TR. *matəm-le* TR. *mtim-le* (stem III, A = L-set)
 ITR. *tayəm-∅* ITR. *tim-∅* (stem Ib, stative, S = E-set)
- b. ‘begin’

²⁰⁷ Ritter (1990:656) hints at such a subtle aspectual difference by his comment to (26b) “die Lehre ist abgeschlossen”.

ITR. *bde-le* ITR. *bde-le* (stem Ia, dynamic, S = L-set)

It should be noted, however, that one equally finds lexical alternatives which are not triggered by this semantic difference such as *xl̥ʂ* for ‘finish’ in examples like *maxlaʂ-li u-mūklo* ‘I finished eating’ (Ritter 1990:221).

Four main lexical classes, thus, interact and overlap, as summarized in Table 43. Each may attract other verbs of similar semantics or derivation patterns.

Table 43. *Ṭuroyo stem I subclasses in the ‘perfective’*

	<i>qatil</i> -BASE		<i>qatil</i> -BASE	
TRANSITIVE	<i>nʂəq-le</i> (Ia)	‘kiss’	<i>ʂaməɣ-Ø</i> (Ib)	‘hear’
INTRANSITIVE	<i>ʂhe-le</i>	‘swim’	<i>raqəδ-Ø</i>	‘dance’
	<i>f̥ʂiḥ-Ø</i> (I _M)	‘be(come) glad’	<i>saməq-Ø</i>	‘be(come) red’

The *qatil*-form stands out system-internally. It is largely confined to basic single argument verbs that do not occur in a labile alternation and two-argument verbs denoting mental situations. In other respects, split subject-marking in Ṭuroyo shows strong similarities to that in NENA. Agent-like coding (i.e. the L-set) becomes increasingly more likely under similar semantic conditions as in NENA (cf. Khan 2004a:304-305) where the S an effect is more strongly implied, and the event is punctual and dynamic. Nevertheless, lexicalization largely obscures these tendencies.

6.3. Alignment and Voice in Mlaḥso

Mlaḥso (extinct by now) is rather distinct from Ṭuroyo and similar to peripheral dialects of NENA in SE Turkey. The neutral alignment pattern of dependent person forms and the differential case-marking of the P is comparable to dialects like Jewish Urmi. Passive and anticausative voice phenomena in Mlaḥso are different from all other dialects. Finally, the realis perfect is based on the *qatil*-form regardless of lexical semantics and comparable to Christian Bohtan.

6.3.1. Neutral Agreement and Accusative Case-marking

The E-set is never used as object indexes in Mlaḥso. Mlaḥso groups all grammatical functions by the L-set in the perfective past, treating S, A and P alike²⁰⁸. This is similar to Christian NENA dialects in South East Turkey, particularly C. Bohtan (SE Turkey; Fox 2009), but also to the North West Iranian Jewish dialects such as Urmi (NW Iran; Khan 2008b). (1) offers a comparison for the verbs ‘take’ and ‘sleep’ between Mlaḥso and Jewish Urmi:

(1) Neutral alignment

Mlaḥso		J. Urmi	
(Jastrow 1994:150.27, 150.26, 148.18)		(NW Iran; Khan 2008b:428.148, 445)	
a.	<i>mobé-len-li</i> ‘They took me.’	b.	<i>əmbál-lu-li</i> ‘They took me.’
b.	<i>dmix-li</i> ‘I went to sleep.’		<i>dməx-li</i> ‘I went to sleep.’

In addition, similarly to J. Urmi, Mlaḥso uses differential case-marking of object NPs by means of the dative preposition (*e*)l-. However, it does not appear to be combinable with additional indexing.

Mlaḥso		J. Urmi	
[DOM→P]		[V-A]	
c.	<i>l-a-ʕez-ezan</i> ... <i>ʕid-len</i> DOM-the:PL-goat-ours seizePFV-3PL ‘They seized our goats (from us).’	e.	<i>əl-d-áy +ktāb əmbl-a-li...</i> DOM-LK-DEM book:FS takePFV-3FS-1SG ‘I took that book (to the library).’

An (*e*)l-series of independent object person forms is treated like full nominals and occurs in pre-verbal position (Jastrow 1994:14). It may also alternate with the L-set as dependent person form²⁰⁹. This is comparable to the *?all*-series in NENA such as J. Urmi:

²⁰⁸ For a different view, see Coghill (2016:90) who considers this “fully accusative alignment”, presumably because she identifies alignment on the basis of affix order rather than phonological form.

²⁰⁹ Jastrow (1994:54-56), however, suggests that, since his Turkish informants (Diyarbakır) predominantly use independent person forms instead, the higher frequency of object L-suffixes in the speech of his Syrian informant (Qamishli) are due to interference from Turoyo. Although her speech does witness to probably hybrid forms of Turoyo and Mlaḥso

d. *l-i mobe-len*
‘They took **me**.’

f. *əll-í əmbəl-lu*
‘They took **me**.’

One should note that the distinction between dependent and independent person forms is marginal in Mlaḥso. The difference between the L-set and (*e*)l-series is most conspicuous in the 3ms. and 1pl. where the preposition takes the distinct suffixes *-áv* and *-əna*. Compare (2a) and (2b) below.

(2) **Mlaḥso** (Jastrow 1994:96.164,167)

- a. *hiv-le* *el-áv* *mo* *dahvé* (independent)
give_{PFV}-A:3MS R:DAT-3MS hundred gold:PL
- b. *hív-le-le* *mo* *dahvé* (dependent)
give_{PFV}-A:3MS-R:3MS hundred gold:PL
- ‘He gave **him** one hundred pieces of gold.’

The pronominal expression of objects is limited in general in Mlaḥso. An object index is not obligatory and is frequently lacking when the referent is considered clear enough from the context. An object index is generally only expressed once and not continued by other constructions with the same referent (Jastrow 1994:56).

Finally, agents are not case-marked as in Turoyo except for the first person plural. The first person plural does not distinguish between dative and unmarked independent person forms. While other persons distinguish between unmarked and dative forms such as the first person singular *ono* ‘I’ as opposed to (*e*)li ‘me’ and third masculine singular *hiye* ‘He’ as opposed to *eláv* ‘him’, the first person plural is *eləna* throughout and can also mark the S or the A even in the ‘imperfective’ (compare Turoyo *aḥna* and *elan*) (Jastrow 1994:28, 63). It is based on the dative preposition (*e*)l- and the first person plural ‘possessive’ suffix *-əna*. Thus, unlike other independent person forms, the 1pl. *eləna* is completely neutral to its syntactic role, merging S, A, P, T and R (Jastrow 1994:63)²¹⁰, for example:

(Jastrow 1994:35), one could conversely argue that the prevalence of independent person forms in the speech of Jastrow’s other informants is due to an overall stronger interference of Kurmanji Kurdish in Turkey where such person forms are independent. Since the two co-existing object marking strategies are common to all his informants, I will not treat one as more genuinely Mlaḥso over the other.

²¹⁰ It appears, however, that a bi-form exists for its object-marking function on the basis of *fal-* ‘on, upon’, e.g. *ʕalena şadlen* ‘They took **us** (captive)’ (Jastrow 1994:104.2).

(3) **First person plural pronoun in Mlaḥso** (Jastrow 1994:104.2, 132.149, 104.11, 124.116, 121)

a.	<i>elāna pišlan tamo</i>	‘We stayed there.’	(S)
b.	<i>elāna emirlan</i>	‘We said.’	(A)
c.	<i>elāna mapleṭlen</i>	‘They helped us escape.’	(P)
d.	<i>elāna mobeḷe</i>	‘He brought us there.’	(T)
e.	<i>elāna hivlen</i>	‘They gave to us .’	(R)

Generally speaking, therefore, Mlaḥso case-marking is accusative but neutral for the first person plural. Agreement is morphologically neutral. Indexing and case-marking of arguments (as in the differential marking of the patient) do not appear to be combined.

6.3.2. Anticausative and Passive Voice

Mlaḥso distinguishes approximately the same stem formations as Ṭuroyo (see §6.2.1). The crucial difference with Ṭuroyo is the complete mixing of those stems in Mlaḥso through the extension of the ‘imperfective’ bases to the expression of the perfective past. The single L-set, otherwise associated with agent-like coding in Ṭuroyo and NENA, covers the entire voice spectrum ranging from causative to passive.

The Mlaḥso stem formations are represented in Table 44 below. The shaded area indicates where the L-suffixes are employed as subject and agent indexes. Interestingly, we find more or less the opposite distribution of Ṭuroyo (compare Table 41, cf. Jastrow 1996).

Table 44. *The Mlaḥso stem formations*

	ACTIVE			MEDIOPASSIVE	
	PRS		PRET	PRS	
	PERF	IPFV	PFV	IPFV	
I:	<i>qaṭil-</i>	<i>qoṭel-</i>	<i>qṭil-</i>	<i>me-qṭel-</i>	<i>me-qṭel-</i>
II:		<i>zaben-</i>	<i>zaben-</i>	<i>m-zaben-</i>	<i>m-zaben-</i>
III:		<i>m-a-dmex-</i>	<i>m-a-dmex-</i>	<i>m-t-a-šog-</i>	<i>m-t-a-šog-</i>
IV:		<i>qarveḥ-</i>	<i>qarveḥ-</i>		

Notes: zbn ‘sell’, dm̄x ‘sleep’, šyḡ ‘wash’, qrvḥ ‘chase away’. Stems in gray shade take L-suffixes. Stem III_M is only attested for weak verbs. Source: Data from Jastrow 1994:33-34.

As Table 44 illustrates, mediopassive stem formations such as *meqṭel-* ‘be killed’ and *mtaṣoġ-* ‘be washed’ correspond with the ‘imperfective’ (IPFV) in both the preterit and present. This is unlike Ṭuroyo where, apart from stem III, the mediopassive merges with the active in the ‘perfective’ (e.g. *qṭil-* for the preterit of both *qoṭəl-* ‘kill’ and *məqṭəl-* ‘be killed’).

Transitive and intransitive verbs inflect alike in the ‘perfective’ in Mlaḥso. Mlaḥso makes no distinction between the coding of the S or A, for example:

- (4) *dmix-lan* ‘We slept.’
ḥze-lan ‘We saw.’
šmiṯ-lan ‘We heard’.

(Patient-like) subject coding through the E-set such as ***psiḥ-o* ‘It_F opened’ does not occur.

The L-set marks the s in all intransitive constructions alike, including the passive. Only a few anticausatives remain in the active stem I that correspond with verbs belonging to stem Ib (*qaṭil-*) in Ṭuroyo, for example *ḥrv* ‘destroy’ of which the corresponding causative is stem III:

(5) **The verb ‘destroy’ in Mlaḥso and Ṭuroyo** (Jastrow 1994:118.85, 158)

Mlaḥso		Ṭuroyo	
a. ITR.	<i>beyt-í ḥriv-le</i> ‘My house got destroyed’	c. <i>bayt-i ḥaru-Ø</i>	(stem I)
b. TR.	<i>maḥrev-le</i> ‘He destroyed (sth.).’	d. <i>maḥru-le</i>	(stem III)
		‘id.’	

The s of a passive is similarly marked by the L-set. The *-t*-infix is the only morphological difference between the active and mediopassive of stem III verbs such as *Øḥt* ‘put’:

- (6) TR. III *maḥet-le* ‘He put (sth.).’
 ITR. III_M *mtaḥet-le* ‘He was put.’

Voice distinctions, therefore, are completely attuned to the type of stem in Mlaḥso (Jastrow 1994:41). In Ṭuroyo, by contrast, this is mainly dependent on the set of person indexes. We can contrast this stem neutralization in Mlaḥso to the voice distinctions in Ṭuroyo for the labile stem I verb ‘open’ and the transitive stem III verb ‘sell’ (cf. Jastrow 1996). The inflectional base is modified depending on TAM in Ṭuroyo. It is modified by valency in Mlaḥso.

- (7) **Stem neutralization in Mlaḥso** (Adapted from Jastrow 1994:83.53-54, 88.99; 1996)

Mlaḥso		Ṭuroyo	
a.	<i>tarʾó</i> <i>mepseh-</i> ∅ 'A door opens.'	f.	<i>ko-məftah-</i> ∅ <i>tarʾo</i> (present) 'id.'
b.	<i>tarʾó</i> <i>mepseh-</i> le 'A door opened.'	g.	<i>ftih-</i> ∅ <i>tarʾo</i> (preterit) 'id.'
c.	<i>tarʾó</i> <i>psih-</i> le 'He opened a door.'	h.	<i>ftəḥ-</i> le <i>tarʾo</i> (active, preterit) 'id.'
d.	<i>mzaben-</i> no 'I am sold.'	i.	<i>ko-mizaban-</i> no (passive, present) 'id.'
Mlaḥso		Ṭuroyo	
e.	<i>mzaben-</i> li 'I was sold.'	j.	<i>mzaban-</i> no (passive, preterit) 'id.'

The examples in (7) show that the Mlaḥso mediopassive makes no distinction between 'perfective' and 'imperfective' inflectional bases²¹¹. The mediopassive base (e.g. I_M *mepseh-*, III_M *mzaben-*) is stable throughout but the subject and agent coding is entirely tense-aspect-sensitive (e.g. E-set in the present vs. L-set in the preterit) regardless of lexical semantics. The levelling of mediopassive stems in Mlaḥso is presumably analogical to the active counterparts of stem II and IV verbs (Jastrow 1996:57). These similarly merge the 'imperfective' and 'perfective' in Ṭuroyo active forms²¹², for example:

Mlaḥso		Ṭuroyo	
k.	<i>zaben-</i> no 'I sell.'	m.	<i>ko-mzaban-</i> no (present) 'id.'
l.	<i>zaben-</i> li 'I sold.'	n.	<i>mzabal-</i> li (< <i>mzaban-li</i>) (preterit)

²¹¹ The distinction between 'imperfective' and 'perfective' is also levelled in the 1ms. conjugation of hollow verbs belonging to stem I, cp. *sim-no* (~ *səm-no*) 'I make (sth.)' and *sim-li* 'I made (sth.)' (Jastrow 1994:36).

²¹² There may also be another connection. It is possible to inflect certain 'perfective' forms of a mediopassive through L-suffixes to express a recipient referent in Ṭuroyo, e.g. *mtawmər-ṛe* (< *mtawmər- + -le*) *tə-mede* 'He (lit. him) was told nothing' (Jastrow 1992:85.15).

In the end, agent-like subject marking (i.e. the L-set) covers the entire voice spectrum in Mlaḥso, regardless of the salience of the patient or agent. No other known Neo-Aramaic variety also marks the S of the passive voice in this way. The choice between the two main sets of dependent person forms to index subject or agent referents in Ṭuroyo is primarily conditioned by the event structure in terms of lexical semantics (*twir-Ø* ‘It_M broke/was broken’ against *ú-kalbo nwəḥ-le* ‘The dog barked’) much like South Eastern Trans-Zab Jewish dialects of NENA such as J. Sulemaniyya (*twir-Ø* ‘It_M broke/was broken’ against *kalbaké nwəx-le* ‘The dog barked’). The type which is principally voice-conditioned in Ṭuroyo (e.g. *ftəḥ-le* ‘He opened sth.’ against *ftiḥ-Ø* ‘It_M opened’) is aspect-conditioned in Mlaḥso (*mepṣeḥ-Ø* ‘It_M opens’ against *mepṣeḥ-le* ‘It_M opened’). Moreover, while the ‘perfective’ bases of the Ṭuroyo mediopassive stem formations merge with the active mainly to express the preterit, they merge with the ‘imperfective’ in Mlaḥso to indicate voice (*pṣiḥ-le* ‘He opened sth.’ against *mepṣeḥ-le* ‘It_M opened’).

6.3.3. The Realis Perfect

The choice between the L-set or E-set in subject and agent coding depends wholly on aspect in Mlaḥso much like the dynamic-stative subject and agent marking in NENA dialects such as C. Bohtan (SE Turkey).

Ṭuroyo does not make a distinction in the coding of the subject and agent between perfective past or perfect. Verbal forms that otherwise denote the perfective past can also express the present perfect or a result state in Ṭuroyo just as in NENA, e.g. *aḏiḥ-at-li?* ‘Do you_{SG} still know me?’ (Qamishli, Noorlander 2013 field notes), and *ftiḥ-i ayn-a* ‘Her eyes were open’ (Midyat, Prym-Socin 1881:88.21). Nevertheless, it is possible to mark the realis perfect by means of the actualizing preverb *ko-* (which may also be enhanced by additional TAM-particles *ga* and *kal*), for example:

(8) Ṭuroyo (cf. Jastrow 1985: 153-154)

a.	(Ø-)qṭi-le	‘He killed (him).’	(preterit, A = L-set)
b.	ko- qṭi-le	‘He has killed (him).’	(perfect, A = L-set)
c.	(Ø-)qayām-Ø	‘He rose.’	(preterit, S = E-set)
d.	ko- qayām-Ø	‘He has risen.’	(perfect, S = E-set)
e.	(Ø-)šaməḥ-Ø	‘He heard’	(preterit, S = E-set)
f.	ko- šaməḥ-Ø	‘He has heard.’	(perfect, S = E-set)

This system where the only difference between preterit and perfect is preverbal TAM-marking has parallels in NENA (see §§5.1.25.1). Subject or agent coding co-varies for some verbs depending on lexical aspect. Punctual events may be distinguished by their respective subject coding, e.g. *kafən-Ø* ‘He starved’ vs. *kfal-le* ‘He became hungry’ (Ritter 1990:656).

In Mlaḥso, subject coding by means of the E-set is not only found in the ‘imperfective’ forms of all verbs but also in the perfect, only attested for stem I. The perfect is formed by the *qaṭil*-base. This inflectional base is otherwise limited to intransitive and semantically low transitive verbs in Ṭuroyo. It is employed together with the E-set of subject indexes to construct the perfect in Mlaḥso²¹³, for example:

(9) **Mlaḥso** (Jastrow 1994)

a.	<i>dmix-le</i>	‘He fell asleep.’	(preterit, s = L-set)
b.	<i>damix-Ø</i>	‘He has fallen asleep.’	(perfect, s = E-set)
c.	<i>qim-le</i>	‘He rose.’	(preterit, s = L-set)
d.	<i>qaym-Ø</i> (< * <i>qayim</i> -)	‘He has risen.’	(perfect, s = E-set)

These perfect forms as such, however, are not restricted to intransitive and lowly transitive verbs in Mlaḥso. All verbs, even transitives which do not feature in the so-called *qaṭil*-subclass in Ṭuroyo (such as *ḥze-le* ‘see’ against *šaməf-Ø* ‘hear’), can be conjugated in like manner in Mlaḥso (e.g. *šmiṯ-le* ‘He heard’ against *šamiṯ-Ø* ‘He has heard’). This situation is similar to our observations for C. Bohtan (SE Turkey) in NENA (see §4.4.3), although NENA does not show a change in inflectional base. (10) below offers a comparison of the verbs ‘see’ and ‘give’.

(10) **Transitive realis perfect in Mlaḥso and C. Bohtan**

Mlaḥso (Jastrow 1994)		C. Bohtan (Fox 2009)	
a.	<i>ḥze-li</i> ‘I saw.’	e.	<i>ḡze-li</i> (preterit, A = L-set) ‘id.’
b.	<i>ḥazi-no</i> ‘I _M have seen.’	f.	<i>ḡz-ən</i> (perfect, A = E-set) ‘id.’

²¹³ The *qaṭil*-forms can also be used to express states much like Ṭuroyo, e.g. *kla rumo kali* ‘Look there, a soldier is standing’ (Jastrow 1994:142.36).

analogical to the ‘imperfective’. In addition, the distinct coding of the agent (and subject) is primary in the TAM-marking in inflection and this seems to be partly also the case in ʿTuroyo.

First of all, as we saw in the previous section, the E- and L-series are tense-aspect-conditioned subject and agent markers in Mlaḥso. It is interesting to note that, in some respects, the Mlaḥso verbal system mirrors the use of the *qam-qaṭəl*-construction found in NENA dialects (see §4.4.2). We can compare Mlaḥso to the Christian dialect of Koy Sanjaq (NW Iraq) for NENA.

Several NENA dialects can avail themselves of a transitive perfective past construction based on the ‘imperfective’ stem and additional preverbal TAM-modification, termed the *qam-qaṭəl*-construction. This is the only means to express transitive clauses with an object index in Christian Koy Sanjaq, for example:

(12) **C. Koy Sanjaq** (NE Iraq; Mutzafi 2004b)

a. PRESENT

k- patəx-Ø ‘It_M opens.’ (itr. *qaṭəl-*)

k- patx-ā-le ‘She opens it_M.’ (tr. *qaṭəl-*)

PRETERIT

b. *ptəx-le* ‘It_M opened.’ (itr. *qṭil-*)

qa- patx-ā-le ‘She opened it_M.’ (tr. *qaṭəl-*)

The primary difference between the transitive coding of the present against the preterit is the preverb (*k-* vs. *qa-*), while intransitive coding is completely distinct.

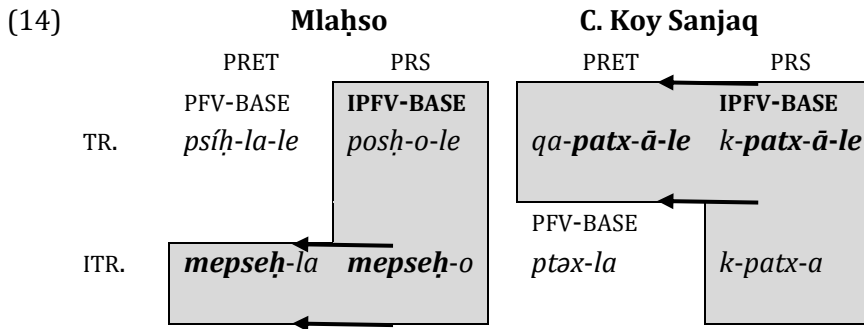
Conversely, Mlaḥso uses a dedicated intransitive construction on the basis of an ‘imperfective’ base. It is the type of subject coding only that expresses the TAM distinction:

INTRANSITIVE		TRANSITIVE		
(13)	<i>mepseḥ -o</i>	‘It _F opens.’	<i>posḥ-o-le</i>	‘She opens it _M .’ (present)
	<i>mepseḥ -la</i>	‘It _F opened.’	<i>psīḥ-la-le</i>	‘She opened it _M .’ (preterit)

TAM-marking in C. Koy Sankaq is primarily reduced to preverbal elements (*qa-* vs. *k-*), while this is mainly suffixal fused with person indexing in Mlaḥso (E-set vs. L-set). Only initial weak verbs can take the indicative-present preverb *x-* in Mlaḥso and they do not do so in the mediopassive. What makes Mlaḥso and C.

Koy Sanjaq also comparable is that both Neo-Aramaic languages do not employ the E-set as either subject or object indexes in the preterit. The E-set is obsolete in the ‘perfective’ so that constructions based on *qṭil-* such as ***psiḥ-o ~ **ptix-a* ‘It_F opened’ or ***psiḥ-o-li ~ **ptix-a-li* ‘I opened it_F’ do not occur.

The ‘imperfective’ base of the active-transitive is extended from the present to the preterit in NENA, while the ‘imperfective’ base of the intransitive pendant is extended from the present to the preterit. The direction of morphological adaptation is schematized in (14) below.



Interestingly, Turoyo finds itself in the middle. Consider the following examples.

- (15) *ko*-IPFV-E-L ***ko-*** *madamx-o-li* ‘She lulls me to sleep.’ (present)
 (Ø)-PFV-E-L (Ø-) *madamx-o-li* ‘I lulled her to sleep.’ (preterit)
- (16) *ko*-IPFV-E ***ko-*** *madmax-no* ‘I_M lull to sleep.’ (present)
 PFV+L *madmax-li* ‘I lulled to sleep.’ (preterit)

Preverbal TAM-marking (*ko-*) is significant to differentiate between forms that are morphologically identical such as stem III verbs like *madmāx-* ‘lull to sleep’. Preterit and actual present are only differentiated by the prefix *ko-*, when third person coding from the E-set (e.g. 3fs. *-o*) immediately follows the verbal base. When argument coding other than third person immediately follows the verbal base, no such ambiguity would arise due to the person role constraint and the E-set (*-no*) and L-set (*-li*) arguably signal a shift in TAM-function where *ko-* is practically superfluous. Forms like *madmax-no-le* ‘I lull him to sleep’ could only be interpreted as present. Mlaḥso does not employ the similar TAM preverb for most verbs, presumably also because the distinct subject and agent indexes are sufficient to keep the TAM categories apart.

The system in Mlaḥso, therefore, is not only grounded in the levelling of inflectional bases through morphological identity and analogy (cf. Jastrow 1996:57) but it is also facilitated by the TAM marking function of the respective sets of subject and agent indexes²¹⁵.

6.5. Summary

Central Neo-Aramaic has much in common with North Eastern Neo-Aramaic. Regarding alignment, Ṭuroyo and Mlaḥso are especially similar to the Trans-Zab Jewish dialects of NENA. Ṭuroyo is similar to Jewish dialects of Iraqi and Iranian Kurdistan. Mlaḥso is similar to Christian dialects in SE Turkey such as Bohtan as well as Jewish dialects of Iranian Azerbaijan. What sets them apart from these NENA varieties is the use of mediopassive stem formations, and a distinct ‘perfective’ base *qaṭil-* associated with no or a less strong implication of an effect.

Central Neo-Aramaic evinces effects of lexical semantics very similarly to NENA. The difference in the use of subject (and agent) indexes primarily hinges on valency and lexical semantics in Ṭuroyo and grammatical aspect in Mlaḥso. The ‘perfective’ distinguishes two bases for stem I verbs. A *qṭil*-base (common to all of Neo-Aramaic) which at least takes agent indexes from the L-set and a *qaṭil*-base that at least takes subject indexes from the E-set (like the ‘imperfective’).

In terms of aspect, preterit and perfect are distinguished by the TAM-preverb *ko-* in Ṭuroyo. Basic verbs known as ‘neuter verbs’ generally do not occur in labile alternations and have a special *qaṭil*-base in the ‘perfective’ in Ṭuroyo (e.g. *damix-o* ‘She fell asleep’ as opposed to *ftiḥ-o* ‘It_F opened’). A few transitive verbs that generally express two-argument mental states and activities such as *šm* ‘hear’ and *ylf* ‘learn’ also belong to this class and take coding similarly to that of the ‘imperfective’ (e.g. *šamiḥ-o-li* ‘She heard me’ : *°šamḥ-o-li* ‘She hears me’). Some of these verbs co-vary in the coding of the agent reminiscent of the antipassive, preferring the ergative (i.e. L-set) for the punctual aspect, e.g. *faham-Ø* ‘He understood’ (non-punctual) vs. *fhām-le* ‘He realized’ (punctual). This co-variation is also found for intransitive verbs (e.g. *kapān-Ø* ‘He starved’ vs. *kpāl-le* ‘He became hungry’). As in NENA, single argument states, change-of-state verbs and uncontrolled processes typically align their subjects with the patient, while verbs with a stronger implication of a dynamic effect

²¹⁵ Ironically, when I asked (educated) Ṭuroyo speakers (from Qamishli) whether forms like ***nšiq-at-li* ‘I kissed you_{FS}’ were possible, they replied with disapproval and told me I was confusing tenses.

such as sound emission verbs (e.g. *nwəḥ-le* 'He barked') typically align their subjects with the agent. Control seems to be more ambiguous. Controlled activities are variably categorized as either *S_P* or *S_A* in Ṭuroyo (e.g. *raqəḏ-Ø* 'dance' vs. *zmər-le* 'sing').

The distinction between preterit and perfect in Mlaḥso depends on both inflectional base (*qṭil-* vs. *qaṭil-*) and related agent and subject indexes (L-set vs. E-set). The *qṭil*-form combines with the L-set to express the preterit (*dmix-le* 'He fell asleep', *šmiṯ-le* 'He heard', *qṭile* 'He killed') but the *qaṭil*-form combines with the E-set to express the perfect (*damix-Ø* 'He has fallen asleep, is asleep', *šamiṯ-Ø* 'He has heard', *qaṭil-Ø* 'He has killed'). Both the L-set and E-set are used to express both agent and subject for all verbs in Mlaḥso:

(1)	Ṭuroyo		Mlaḥso	
	PRETERIT	PERFECT	PRETERIT	PERFECT
TR.	<i>ftəḥ-le</i>	<i>ko-ftəḥ-li</i>	<i>psiḥ-le</i>	<i>paṣiḥ-Ø</i>
ITR.	<i>daməx-Ø</i>	<i>ko-daməx-Ø</i>	<i>dmix-le</i>	<i>damix-Ø</i>

In terms of voice, Central Neo-Aramaic shows a more complex system than NENA in using mediopassive derivation classes. Ṭuroyo and Mlaḥso diverge significantly here as well. Ṭuroyo voice phenomena in the 'perfective' resemble Jewish 'ergative dialects' of NENA. A notable exception is the possible impersonalization of intransitives (*dmix larwal* 'People slept here'). The type of subject and agent indexes that is essentially voice-conditioned in Ṭuroyo is aspect-conditioned in Mlaḥso:

(2)	Ṭuroyo		Mlaḥso	
	PRETERIT	PRESENT	PRETERIT	PRESENT
ACTIVE	<i>ftəḥ-le</i>	<i>ko-fotəḥ-Ø</i>	<i>psiḥ-le</i>	<i>poseḥ-Ø</i>
MEDIOPASSIVE	<i>ftiḥ-Ø</i>	<i>ko-məftəḥ-Ø</i>	<i>mepseḥ-le</i>	<i>mepseḥ-Ø</i>

While the 'perfective' base merges transitive with intransitive constructions for stem I, II and IV verbs in Ṭuroyo to express the preterit (as opposed to the constructions based on the 'imperfective'), the 'imperfective' base merges preterit and non-preterit constructions in Mlaḥso to indicate voice. The mediopassive preterit of stem I verbs such as *ftḥ* 'open', for instance, is based on the 'perfective', respectively, *qṭil*-form in Ṭuroyo (as in NENA), e.g. *ftiḥ-Ø* 'It_M opened/was opened', while the corresponding 'imperfective' pattern is *maqṭal-*, e.g. *°məftəḥ-Ø* 'It_M opens/is opened' (against active *°fotəḥ-*). The mediopassive preterit in

Mlaḥso, however, is based on the *meqṭel*-form and takes L-suffixes to express the s, e.g. *mepseḥ-le* 'It_M (was) opened'. The *qṭil*-form is restricted to the 'perfective' in both subgroups but Ṭuroyo expresses a transitivity alternation in either L-suffixes to mark the A and E-suffixes to mark the s.

Patient-marking is person-restricted in the inflection of the 'perfective' in Ṭuroyo. The E-set is limited to the third person, grouping S and P ergatively, while first and second person are marked by the L-set, grouping A and P horizontally. The alignment of dependent person forms is completely neutral for Mlaḥso where the E-series is unavailable to mark the patient:

	Ṭuroyo		Mlaḥso	
	P[-1,2]	P[+1,2]	P[-1,2]	P[+1,2]
TR.	<i>ftiḥ-o-le</i>	<i>ftāḥ-le-li</i>	<i>psīḥ-le-la</i>	<i>psīḥ-le-li</i>
ITR.	<i>ftiḥ-o</i>		<i>mepseḥ-la</i>	

With respect to case-marking, the two subgroups also diverge. Mlaḥso patterns accusatively as is common for Aramaic in general. Differential case-marking as well as a series of independent object person forms are based on the dative preposition (*e*)l-. Interestingly, the independent pronoun of the first person plural (*elāna*) follows a neutral pattern. Although nouns are normally unmarked for case in Ṭuroyo, differential case-marking does occur. Ṭuroyo is unique in using the dative case also to mark differentially the A together with agreement (the L-suffixes). This yields an ergative case-marking pattern alongside ergative indexing of full NPs (e.g. *haṯe xil-o-le l-u-kalwo* 'The dog ate this'). The optional case-marking of the agent parallels the possessor in predicative possessor constructions (e.g. (*l*)-*u-malko kāt-le abro* 'The king has a son'). The possible case-marking patterns are illustrated below for the phrases 'The king opened the door' and 'The door opened'. Differential case-marking of the P is not common to all Ṭuroyo dialects but is not mutually exclusive with differential A-marking. In at least the dialect of Raite, they may be combined, manifesting horizontal alignment (like first and second dependent person forms). Ergative indexing appears to be combined only with ergative case-marking (and not horizontal case-marking).

(4) **Ṭuroyo**

a.	NEUTRAL (A=S=P)	ERGATIVE (FOCAL; A≠S=P)
TR.	<i>u-malko ftāḥ-le u-tarṣo</i>	<i>l-u-malko ftāḥ-le u-tarṣo</i>
ITR	<i>u-tarṣo ftiḥ-Ø</i>	<i>u-tarṣo ftiḥ-Ø</i>

b.	ACCUSATIVE (A=S≠P)	HORIZONTAL (S≠A=P)
TR.	<i>u-malko ftəḥ-le l-u-tarfo</i>	<i>l-u-malko ftəḥ-le l-u-tarfo</i>
ITR	<i>u-tarfo ftiḥ-∅</i>	<i>u-tarfo ftiḥ-∅</i>

7. OVERVIEW AND CONCLUSIONS

The overall purpose of this monograph has been to capture typologically the variation in which alignment is manifested in Eastern Neo-Aramaic languages (excluding Neo-Mandaic). This study concludes with the findings regarding correlations of alignment types and the related scales known from typological literature. Since this chapter is organized to avail readers of a reference guide and general overview, it presents abundant references to the relevant sections of this thesis. For convenience's and clarity's sake, a few representative examples are restated and reviewed.

The typological approach proved to be useful and accessible in disentangling the diversity in Eastern Neo-Aramaic. Using the more uniform 'imperfective' as a common frame of reference was found to be helpful in comparing the diverging alignment phenomena. It is not uncommon, however, that relationships between constructions and argument encoding turn out to be rather complex and/or asymmetric. What the Eastern Neo-Aramaic alignment systems clearly demonstrate is that the S, A and P, although grouped in some grammatical respects, can lead a life of their own. Intransitive and transitive constructions can vary independently of one another. The same construction can occur across dialects in rather different uses. Alignment variations and changes, therefore, are strictly based on the interaction of different intransitive and transitive constructions through agreement, prepositional marking, free person forms, and diachronic and system-internal factors, all of which seem to be largely independent of how we classify the entire arrangement of grammatical functions as a whole.

The main alignment types that were identified are summarized in Section 7.1. Although ergative constructions are always marginalized in some way, the treatment of S and P never seem to be exactly the same, and there is no unambiguous example of ergative case-marking in NENA, it would be simplistic to say that ergativity in itself is in decay. Furthermore, ergativity is one among several other types manifested in Eastern Neo-Aramaic. Historically, the L-suffixes are closely related with the dative preposition *l-* and some correlations inevitably remain present even in a synchronic perspective, so that it is tempting to consider the L-suffixes, in a very basic sense, a kind of dative dependent person forms. Independent dative person forms differ to a much greater extent across dialects and more closely correlate with the prepositional marking of full nominals than the L-suffixes. Yet, those independent pronouns that are based on the

dative preposition *l-* and its allomorphs exhibit a clear tendency to become increasingly dependent on the verb like the L-suffixes and grammaticalize into verbal suffixes.

Several alignment splits conditioned on verbal or aspectual scales occur in Eastern Neo-Aramaic (Section 7.2.). The differences in alignment types are inextricably linked with the historical development of the verbal inflection from an intransitive resultative construction to a transitive perfective past. This is confirmed by that fact that the coding of the *s* (and *A*) which is typically manifested in verbal agreement correlates more strongly with the expression of TAM than the coding of the *p*, especially differential object marking. The L-suffixes are more grammaticalized as indicators of the *A* in the expression of the transitive perfective past, while the E-suffixes as indicators of the *s* tend to ‘lack behind’ in the expression of the intransitive resultative.

While alignment types do seem to evince correlations in verb-related properties (Section 7.2 and 7.3.), argument-related scales only indirectly influence the alignment types (Section 7.2). Mainly the coding of the *p* is affected by such scales in differential object marking. The fundamental difference among dialects is the coding of the *s* which is insensitive to such scales, and the alternative strategy that is chosen as opposed to the inverted ‘perfective’ construction. The transitive perfective constructions dedicated to pronominal *Ps* are largely independent of intransitive constructions. Consequently, different alignment types only indirectly unfold in the differential indexing of arguments.

7.1. Overview of Major Alignment types

7.1.1. *Intransitive/Transitive Alignment Types*

The grouping of the *s* with other core arguments on the level of morphology (i.e. coding properties) or syntax (i.e. behavioral properties) is the defining characteristic of an alignment type (Croft 2012:259; §2.2.3.3). In this approach, ergative alignment entails the similar treatment of *s* and *p* in its coding or behavioral properties (Comrie 1978, cf. Dixon 1979). In the most typical example of morphological ergativity, the verb expresses agreement only with the *s* and *p* and only the *A* is case-marked (§2.2.3.3). This coherent type of ergativity does not exist in Neo-Aramaic. The rare phenomenon of ergative syntax where the *s* and *p* share behavioral properties is not attested either.

Nevertheless, morphological ergativity is manifested under certain conditions. It is restricted by

- (i) the inflectional base of the verb (*q̇til-/q̇aṭl-* or the related resultative participle *q̇tila/q̇aṭlá*; §5.3.5);
- (ii) the tense, aspect and, to some extent, the mood that the verb expresses (§5.1);
- (iii) and the position of the A and/or P arguments on the prominence hierarchy (§4.2.3).

The precise circumstances under which ergativity is manifested needs to be determined for each dialect (subgroup) independently. The TAM of the verb that conditions ergative alignment differs across dialects and the relevant factors of the prominence hierarchy also need not be the same. The inflectional base of the verb, however, is always a determining factor and the ergative alignment is structurally linked with the so-called ‘perfective’ *q̇til-* and/or the resultative participle (*q̇tila*).

7.1.1.1. Ergative Alignment

Where ergativity is observed, it is part of a so-called alignment split conditioned by verb-related and/or argument-related properties. An illustrative example of ergative agreement is repeated in (1a) below. The E-set (*-a*) indexes the S and A, while only the L-set (*-le*) indexes the P and precedes the coding of the A (§4.2.3).

(1) J. Saqqiz (W Iran)

	[S]		[V-S]	
a.	<i>daé</i>	<i>piré</i>	<i>dmix-a</i>	(intransitive)
	mother:FS	old	sleep _{PPFV-3FS}	
	‘The old woman slept.’ (Israeli 1998:100)			
	[A]	[P]	[V-P-A]	
b.	<i>ḥatán</i>	<i>kaldá</i>	<i>nišq-a-le</i>	(transitive)
	groom:MS	bride:FS	kiss _{PPFV-3FS-3MS}	
	‘The bridegroom kissed the bride.’ (ibid. 186)			

Ergative alignment as such is thus far only documented for Jewish NENA dialects of Iraqi and Iranian Kurdistan comprising the South Eastern Trans-Zab Jewish dialect bundle. These are referred to as ‘ergative dialects’. In Central Neo-Aramaic, ergative verbal person marking also occurs in ʿTuroyo (SE Turkey, NE Syria) which is illustrated in (2). In ʿTuroyo, there is a major subclass of basic verbs that takes an alternative ‘perfective’ base *q̇aṭil-* against *q̇til-* (such as

damix- for *dmx* ‘sleep’ below instead of *dmix-* as in NENA). Its overall typology is similar to the South Eastern Trans-Zab Jewish varieties (§6.1.1).

(2) **Ṭuroyo** (SE Turkey; Jastrow 1985, 1992)

[V-S]

- a. *damix-o* (intransitive)

sleep_{PFV-3FS}

‘**She** fell asleep.’

[V-P-A]

- b. *nšiq-o-le* (transitive)

kiss_{PFV-3FS-3MS}

‘He kissed **her**.’

Apart from the perfective past and perfect, ergativity also occurs in the expression of the irrealis perfect (5.3.5), while the imperfective past and present (both realis and irrealis) never pattern ergatively in any dialect. It is confined to the resultative in the Jewish dialect of Rustaqa. Ergative alignment is limited to the third person and to differential indexing of prominent NPs in all dialects (§4.2.3). In actual transitive clauses, non-third person agents freely combine with third person patients. The S and A are grouped in trigger potential similarly to other verbal constructions such as the ‘imperfective’. Moreover, the coding of the S is not uniform and constitutes a split between *S_A* and *S_P* verbs, some of which may also co-vary (§5.1.1 for NENA, §6.2.1.4. for Ṭuroyo).

Compound verbal forms expressing the realis present perfect in the Jewish varieties of Iranian Kurdistan may also pattern ergatively (§5.3.5). As expected, the resultative participle agrees with the S and P, illustrated by the feminine singular in (3a) and (3b) below, and the ‘copula’ (=ya) also groups the S and P, while the agreement with the A (*axonawali* ‘my brothers’) is unexpressed. The realis perfect as constructed in (3b) is confined to prominent full NPs and third person forms for both the A and P while the S is unrestricted. (The irrealis pendant of the perfect follows the same pattern and restrictions as the preterit.)

(3) **J. Saqqiz** (W Iran; Hopkins 2002:292)

[V-S]

- a. *hi-ta=ya* (intransitive)

come-FS=3FS

‘**She** has come.’

	[A]	[V-P]	
b.	<i>axonawal-i</i>	<i>xzi-ta=ya</i>	(transitive)
	brother:PL-my	seen-FS=3FS	
	'My brothers have seen her .'		

Other potentially even rarer examples of how ergative alignment is manifested are the following where the overt coding of the A enjoys special treatment (see also the *qam-qaṭal*-construction at the end of this subsection). To the best of my knowledge, these are not identified as ergative in other scholarly work. Yet, if my analysis of the dependent person forms in C. Hertevin (SE Turkey) is correct, the A is distinctly marked by a special set of person forms called the 'L-E-series' (that mixes the L- and E-set) such as *-laḥ* and *-leton* in (4c) and (4d), while the S and the P are expressed by the L-set. This manifestation of ergativity is limited to the first and second person forms (§4.4.3).

(4) **C. Hertevin** (SE Turkey; Jastrow 1988:76)

	[V-S]	
a.	<i>te-leḥon</i>	(intransitive)
	come _{PFV} -2PL	
	'You _{PL} came.'	
b.	<i>te-lan</i>	
	come _{PFV} -1PL	
	'We came.'	
	[V-A-P]	
c.	<i>ḥzá-láḥ-leḥon</i>	(transitive)
	see _{PFV} -1PL-2PL	
	'We saw you _{PL} .'	
	[V-A-P]	
d.	<i>ḥze-letón-nan</i>	
	see _{PFV} -2PL-1PL	
	'You _{PL} saw us.'	

Several NENA dialects make use of two very distinct basic transitive constructions. The special transitive perfective past construction based on the 'imperfective' (*qaṭal*-) is used in several NENA varieties (§4.4.2), as illustrated for the Christian dialect of Koy Sanjaq in (5) below. The E-set serves to index the A and the L-set marks the P like the S, as shown in (5c) below. This so-termed

qam-qaṭal-construction is paradigmatically linked with the ‘perfective’ (*qṭil*-) in the expression of the preterit or perfective past.

(5) **C. Koy Sanjaq** (NW Iraq; Mutzafi 2004b)

[V-S]

- a. *sməx-le* ‘He stood’ (intransitive preterit)

stand_{PFV-3MS}

[TAM-V-A-P]

- b. *qa-ḡazy-a-le* ‘She saw him.’ (transitive preterit)

PFV-see_{PFV-3FS-3MS}

Although the *qam-qaṭal*-formation in (5c) is obviously partly parasitic on transitive morphosyntax of the ‘imperfective’ (cp. example (4) above), there is a conspicuous morphosyntactic division between S and A but overlap between S and P that suggests ergative alignment. It is the A that is treated differently by means of the E-set (-a), and the P is grouped with the S by means of the L-suffixes (-le), albeit attached to a different inflectional base (*qam-qaṭal*-).

In actual transitive clauses, the L-E-series and *qam-qaṭal*-construction freely combine with patient marking of all persons (e.g. *qa-ḡaz-ax-le* ‘We saw him’, *ḡzé-lāḡ-le* ‘We saw him’), but, in several dialects, the *qam-qaṭal*-form is obligatory in the expression of first and second person patients and some of them also masculine third singular patients. This would indicate that this ergative alignment is necessary for the expression of the first and second person. Most typical intransitive verbs cannot occur in such construction (e.g. ***qa-samx-a* ‘She stood’, ***te-l-eton* ‘You_{PL} came’). They neither combine with (indefinite) full nominal patients nor the omission of the patient where forms like *ḡze-le baxta* ‘He saw a woman’ are preferred.

Transitive constructions generally make a difference in the coding of the P in Neo-Aramaic, especially patient indexes (§4.4). The marking of one argument is sensitive to that of the presence of the other. The omission, independent and full nominal expression of the P may favor a different construction and full nominal patients in general may be differentially indexed. In the case of the *qam-qaṭal*-construction, the verb completely adapts to the inflection of the ‘imperfective’ only when the patient is expressed as a dependent person form. The resulting ergative alignment is found, only in the presence of the P expressed as a dependent person form.

Regarding compound verbal forms in the perfect, special treatment of the A is also found in the participial agreement in the realis perfect of Jewish dialects of

Iranian Azerbaijan (§5.3.3). The feminine singular agent evinces an additional /t/-element of the resultative participle form **qtəl-ta* ‘killed’. This is only realized for the A, as shown in (6b) below. Neither the S, as illustrated by the $\emptyset$ symbol in (6a) and (6b), nor the P expressed by the L-suffix in (6c) and (6d) trigger such morphology. Thus, we observe ergative marking ($A \neq S=P$), although confined to the feminine singular and realis perfect.

(6) **J. Urmi** (NW Iran; Khan 2008b)

	[V		-S		-PAST]	
a.	<i>dmíx</i>	$\emptyset$	<i>-an</i>	<i>-wa</i>		(intransitive)
	slept		-1FS	-PST		
	'I _F had slept.'					
b.	<i>dmíx</i>	$\emptyset$	<i>-en</i>	<i>-wa</i>		
	slept		-1MS	-PST		
	'I _M had slept.'					
	[V		-A	-A	-PAST	-P]
c.	<i>*qtəl</i>	<i>-t</i>	<i>-án</i>	<i>-wa</i>	<i>-le</i>	(transitive)
	killed	-FS	-1FS	-PST	-3MS	
	'I _F had killed him.'					
d.	<i>*qtil</i>	$\emptyset$	<i>-én</i>	<i>-wa</i>	<i>-la</i>	
	killed		-1MS	-PST	-3FS	
	'I _M had killed her.'					

Ergative case-marking is only unambiguously attested in Turoyo (§6.1.3). The dative preposition (*e*)- marks the agent NP (*u-Ṭayawo* ‘the Muslim’) in (7b), while both the S and P are zero-marked. The ergative case-marking is optional and mainly conditioned by agent focus. A similar type of case-marking is documented in NENA but the status of the agent is more ambiguous due to close interaction with impersonal constructions.

(7) **Turoyo** (İlwardo, SE Turkey)

	[V-S]		[S]	
a.	<i>aθi-$\emptyset$</i>		<i>u-Malke</i>	<i>aθm-a</i>
	comePFV-3MS		the-PRN:M	with-3FS
	'Malke came with her.' (Ritter 1967-71, 33/34)			
	[V]		[ERG→A]	[P]
b.	<i>ḥze-le</i>		<i>I-u-Ṭayawo</i>	<i>u-med-ano</i>
	seePFV-3MS		DAT-the-Muslim:MS	the-thing:MS-DEM:MS
	'The Muslim saw this thing.' (ibid. l. 37)			

7.1.1.2. Accusative Alignment

Accusative alignment predominates either in agreement or prepositional marking (§3.3.1, §3.3.2, §4.2.1). Although ergativity is never as coherent and unrestricted like the accusative pattern in Eastern Neo-Aramaic, it would be misleading to consider it something abnormal that dialects seek to solve or dispose of. Nevertheless, accusative alignment is the most common. All Neo-Aramaic languages display this pattern in the ‘imperfective’ (including the imperative; §3.3) and most of them also in other grammatical ‘domains’ such as compound verbal forms expressing the perfect and/or progressive (§5.2.2). An illustration is repeated below for dependent person forms in the ‘imperfective’. The affix *-ax* from the E-set marks both the S and A while the affix *-loxun* representing the L-set marks the P and follows the coding of the A.

- (8) **J. Amidya** (NW Iraq; adapted from Hoberman 1989:35, Greenblatt 2011:95)

[V-S]

- a. *k-damx-ax* (intransitive)

IND-sleep_{PFV}-1_{PL}

‘We sleep.’

[V-A-P]

- b. *k-šamŋ-áx-loxun* (transitive)

IND-hear_{PFV}-1_{PL}-2_{PL}

‘We hear you_{PL}.’

The vast majority of NENA dialects also expresses the perfective past also accusatively (§4.2.1). The same sets of person forms are used in the same morphological order but the role they denote is inverted. In the illustration below, the L-set (*-loxun*) marks the S and A, while the E-set (*-ax*) expresses the P and precedes the coding of the A. The use of the E-set to mark first and second patients is only attested for dialects that show this grouping of S and A through the L-set. Varieties that manifest this pattern are referred to as ‘accusative dialects’.

- (9) **J. Amidya** (NW Iraq; adapted from Hoberman 1989:36, Greenblatt 2011:101)

[V-S]

- a. *dmix-loxun* (intransitive)

sleep_{PFV}-2_{PL}

‘You_{PL} slept.’

[V-P-A]

- b. *šmĩŋ-áx-loxun* (transitive)
 hear_{PFV-1PL-2PL}
 ‘You_{PL} heard us.’

In most dialects where the ‘perfective’ patterns accusatively, however, the P is expressed differently from the E-set, for example by another set known as the *ʔall*-series such as *ʔallĩ* in (10b) below. Although this is at least originally an independent set of dative person forms and geared to express objects independently (§4.1.2), it may freely attach to the preceding verbal form in post-verbal position, e.g. *ǵze-lox=ʔalli* ‘You_{MS} saw me’ (§4.1.3). This cliticization generally does not occur in the ‘imperfective’ where the L-set remains the preferred expression of object indexes.

(10) **J. Arbel** (NE Iraq; Khan 1999)

- [V-S]
 a. *dmix-lox* (intransitive)
 sleep_{PFV-2MS}
 ‘You_{MS} slept.’
- [V-A] [P]
 b. *ǵze-lox ʔall-ĩ* (transitive)
 see_{PFV-2MS} OBJ-1SG
 ‘You_{MS} saw **me**.’

In compound verbal forms, accusative alignment appears in similar constructions as the above (§5.2.2). In the majority of dialects, the resultative participle expresses agreement with the S and A in gender and number like adjectives, as indicated by the distinctly feminine singular morpheme *-t* in (11a) and (11b), and a set of person forms termed the ‘copula’ expresses the agreement in person, gender and number with the same roles. Depending on the dialect, the P may be expressed dependently or independently, usually distinct from the ‘imperfective’ and ‘perfective’, although the *ʔall*-series may also be used (§5.2.2). In (11b) below, the affix *-ux* expresses the P and attaches to the resultative participle (*zræcta* ‘scratched’) and precedes the ‘copula’ (=van) that marks the agreement with the A.

(11) **C. Urmi** (NW Iran; adaped from Hetzron 1969:116-117)

[V-S-S]

a. *dmáx-te=van*

slept-FS=1FS

'I_F have slept.'

[V-A-P-A]

b. *zrác-t-ux=van*

scratched-FS-2MS=1FS

'I_M have scratched you_{MS}.'

Accusative alignment is also manifested in differential case-marking. The full nominal *ʕaqubraké* 'the mouse' in (12b) below, for example, is marked by the preposition *(əl)l-*. This is the same preposition that serves as the base of *ʔall-* series, i.e. independent object person forms. Case-marking in general is accusative in virtually all dialects that use this coding strategy in DOM regardless of the type of agreement (§4.2).

(12) **J. Koy Sanjaq** (NE Iraq)

[V]

[S]

a. *qim-le**šeraké*

risePFV-3MS

lion:MS:DEF

'The lion rose.' (Mutzafi 2004a:191.22)

[A]

[V]

[DOM→P]

b. *šeraké**dwiq-le**l-ʕaqubraké*

lion:MS:DEF

seizePFV-A:3MS

DOM-mouse:MS:DEF

'The lion caught hold of the mouse.' (ibid. 189.15)

7.1.1.3. *Other Basic Alignment Types*

Not all constructions were clearly identifiable as accusative or ergative in Eastern Neo-Aramaic. First of all, a few dialects manifest neutral agreement (A=S=P) which involves the morphologically identical marking of S, A and P through the L-set, as illustrated below for the Jewish dialect of Urmi (§4.2.2). This is documented for Jewish dialects of Iranian Azerbaijan such as Urmi and Salamas in the eastern periphery, and Turkish Christian dialects in the western periphery such as Bohtan and Hertevin and the dialect of Mlaḥso in Central Neo-Aramaic (distinct from Țuroyo). These were referred to as 'neutral dialects'. What characterizes these dialects further is a type of fluid subject-marking conditioned by TAM (see §5.1.2).

(13) **J. Urmi** (NW Iran)

	[S]	[V-S]	
a.	<i>labb-ew</i>	<i>pləx-le</i>	(intransitive)
	heart:MS-his	openPFV-3MS	
	'His heart opened (= He cheered up).' (Khan 2008b:459)		
	[P]	[V-A-P]	
b.	<i>tará</i>	<i>pləx-le-le</i>	(transitive)
	door:MS	openPFV-3MS-3MS	
	'He opened (lit. it _M) the door.' (Garbell 1965:140)		

The L-suffixes are used in a strict order: patient indexes always follow agent indexes so that that V-P-A affix arrangements do not occur (e.g. *pləx-la-le* 'She opened it_M', **'He opened it_F'). Neutral alignment is sometimes confined to the absence of agreement (e.g. Siewierska 2004:52), since the morphologically identical person indexes generally do display a distinct affix position (§2.2.5). I prefer to consider phonologically identical sets of person forms to be an indication of neutral alignment (A=S=P) (cf. Siewierska 2003), even when they occur in a fixed linear order, but this may be considered accusative in typological studies on agreement because the S and A are closer to the stem. Yet, one could also argue that the S and P are alike in both constituting the final suffix of the verbal form. Thus, similarly to word order, it cannot be unambiguously determined which suffix is grouped with the S, so that the position of affixes is only a determining factor, if the position relative to the verb is clearly distinct (i.e. prefixal vs. suffixal) (§2.2.5). This does not preclude that the relative linear position contributes to role discrimination and is different from word order in other respects (for example, flexibility).

Secondly, tripartite alignment (A≠S≠P) is manifested in the inflection of the 'perfective' and compound verbal forms. As displayed in (14) below, the E-set (-*na*) marks the S, the L-set (-*li*) marks the A and the P is expressed independently by the *ʔall*-series. This type is common to the South Eastern Trans-Zab Jewish varieties that otherwise also manifest ergative alignment (§4.2.3). In Jewish Rustaqa, it is confined to the perfect like the ergative pattern (§5.1). It is available for all persons and the typical expression of the first and second persons, except for Jewish Saqqiz where only the third person singular is expressed in a tripartite fashion. Clauses with full NPs that do not involve differentially marked patients such as indefinite arguments are also treated in this manner, since the patient is zero-marked and the S is distinct from the A.

(14) **J. Sulemaniya** (NW Iraq; Khan 2004a)

- [V-S]
 a. *kwiš-na* 'I_M descended.' (intransitive)
 descend_{PFV-1MS}
- [V-A] [P]
 b. *q̣təl-li* *ʔəll-áx* 'I killed you_{FS}.' (transitive)
 kill_{PFV-1SG} OBJ-2FS

Person indexing in compound verbal forms may also evince tripartition (§5.3.3). The following example for the realis perfect in Jewish Urmi represents the coding of the *s* via the E-set (-*i*), the *A* through a different set akin to the 'copula' (-*u*) and the *P* by the *ʔəll*-series (-*lle*). This is limited to the third person. This notwithstanding, the compound perfect in Jewish Urmi also shows split subject marking, indicating that the *s* of some intransitive verbs do align with the *A*.

(15) **J. Urmi** (NW Iran; Khan 2008b)

- [V-S]
 a. *kwiš-i* 'They descended.' (intransitive)
 descend_{PFV-3PL}
- [V-A-P]
 b. *q̣til-u-lle* 'They killed him.' (transitive)
 kill_{PFV-3PL-3MS}

Thirdly, horizontal verbal person marking ($S \neq A = P$) groups the *A* and *P* by the L-suffixes. This is at least attested for Turoyo (§6.1.1) and Jewish Saqqiz (4.2.3.4), and partly also in the realis perfect of Hertevin (§4.4.3). The subject index in (16) below belongs to the E-set (-*ono*), while both the agent and patient indexes belong to the L-set. The agent index (-*li*) always precedes the patient index (-*lax*). It is confined to dependent first/second person forms in the 'perfective'²¹⁶.

(16) **Turoyo**

- [V-S]
 a. *damix-ono* 'I_F went to sleep.' (intransitive)
 sleep_{PFV-1FS}

²¹⁶ Conversely, the realis perfect in C. Hertevin presumably shows horizontal alignment confined to the third person where *A* and *P* are grouped by the L-set (e.g. *hole wéd-le-la* 'He has made it') against the *s* marked by the E-set (e.g. *hole dmiḥ-Ø* 'He has slept').

- [V-A-P]
 b. *ħzê-li-lax* 'I saw **you_{FS}**' (transitive)
 seePFV-1SG-2FS

Horizontal case-marking also occurs in Turoyo, at least in the dialect of the village of Raite (§6.1.3). The dative preposition (*e*)*l*- marks both the A and P, while the S remains zero-marked. It should be noted that the S of some intransitive verbs may also be overtly case-marked.

(17) **Turoyo** (Raite, SE Turkey)

- [S] [V]
 a. *Ĥasané Aliķi* *qayam-∅* (intransitive)
 PRN risePFV-3MS
 'Hasan Aliki rose.' (Ritter 1967-71, 95/145)
- [DAT→A] [V] [DAT→P]
 b. *l-Ĥali* *grāš-le* *l-u-sayfo* (transitive)
 DAT- PRN:MS pullPFV-A:3MS DAT-the-sword:MS
 'Ali drew **the sword**.' (ibid. 107/116)

7.1.2. Ditransitives and Combinations

It was established that all four major ditransitive alignment types occur in Eastern Neo-Aramaic languages (§3.4). Indirective constructions ($T=P \neq R$) appear to be preferred overall, open to virtually all transitive verbs, combinable with all types of arguments and possible in all clause types. Dialect-specific dative prepositions are used to express the R distinctly (§3.3.1).

Neutral alignment ($T=P=R$) or double object constructions are lexically or grammatically restricted. In a few dialects, a ditransitive verb can take two object indexes from the L-suffixes but this is confined to third person themes and 'imperfective' constructions, and the affix order is always V-T-R (§3.2.4). The double object construction is lexically restricted to verbs such as 'teach', factitives and verbs of filling and covering (2.3.4).

Secundative constructions ($T \neq P=R$) are even more limited. The grouping of P and R is confined to pronominal arguments. The T is expressed by a special series of dependent person forms (known as the 'enclitic copula') and restricted to the third person (§3.4.1).

The tripartite pattern ($T \neq P \neq R$) is rare. It is only found in 'perfective' constructions comprising dependent third person forms (§5.1.2, §3.4.1).

My research revealed no significant preferences for combinations of intransitive/transitive and ditransitive alignment types and no evidence for a possible connection between ergative and indirective alignment (cf. Siewierska 2004:63). Ergative and ditransitive tripartite alignment may be possibly connected (for third person dependent forms in Țuroyo) besides horizontal and indirective alignment (for the first/second person dependent forms; §6.1.2). All dialects and alignment types readily combine with indirective and secundative alignment.

This notwithstanding, there is a connection between monotransitives and ditransitive constructions in the combination of dependent person forms across the major TAM split between the ‘perfective’ and ‘imperfective’. The L-suffixes represent a set of dative person forms that correlate with the dative preposition (*əl/e*)/- at least diachronically (though not necessarily also synchronically). In ‘imperfective’ and similar verbal constructions (such as the imperative, compound progressive etc.), the L-set is used to express objects (P, T, R). In the ‘perfective’, however, it is generally confined to the expression of the R. The use of the L-set to express the R (or related roles such as predicative possessors, §3.5) is, therefore, independent of this split and may be found across the verbal system. Its use as A indexes is peculiar to the ‘perfective’. Consequently, the coding of the A and the R are potentially identical only in the ‘perfective’:

(18) **J. Amidya** (NW Iraq; Hoberman 1989:108)

[V-A-R]	[P]
<i>hu-le-li</i>	<i>pare</i>
give _{PFV} -3MS-1SG	money
‘He gave me money.’	

In most ‘accusative dialects’ of NENA such as J. Amidya, this double L-set construction consisting of two consecutive L-suffixes is only possible in ‘perfective’ ditransitive constructions where the secondary L-suffix can only be used to encode the R. In neutral dialects, it is naturally available for all object indexes (e.g. *xze-le-li* ‘He saw me’; J. Urmi, NW Iran; Khan 2008b) which is presumably an extension of its application in the ‘imperfective’ (§4.4.1). Even in the ‘imperfective’, the verb may take two object indexes from the L-set in a few dialects such as J. Zaxo and C. Hertevin (see §3.2.4). The first L-set denotes the theme, the second the recipient. The first L-set is restricted to third person Ts. Interestingly, this same person restriction on the first L-set occurs everywhere else where the L-set is doubled in C. Hertevin, suggesting that there is a connection

between the two. Thus, unlike the majority of NENA dialects, the restriction of third person agent indexes before patient indexes parallels the restriction of third person themes before recipient indexes:

(19) **C. Hertevin** (SE Turkey; Jastrow 1988:63)

		[A]	[P]	
		[3]	[1,2,3]	
a.	<i>ḥzé-</i>	le	<i>-li</i>	' They saw me.'
	see _{PFV}	3PL	1SG	
		[T]	[R]	
		[3]	[1,2,3]	
b.	<i>hál-</i>	le	<i>-li</i>	'Give them to me!'
	give:IMPV	3PL	1SG	

Stacking of L-suffixes appears to be avoided depending on person reference and not a particular role by itself, since it disfavors both Ts and As which is rather unusual. Conversely, stacking of L-suffixes is incompatible with third person pa-tients in Turoyo. The second L-suffix of the third person in a construction like *ftáh-li-le* can only refer to the R conveying 'I opened **for him**'. This is connected with the preference of horizontal alignment for the first/second persons in the 'perfective' where the L-suffix does merge all objects (i.e. *ḥzé-li-lax* 'I saw **you_{FS}**' = *hú-li-lax* 'I gave (**to**) **you_{FS}**'; §6.1.2).

Similarly, though also somewhat differently, independent expression of object person forms parallels prepositional indirect object constructions (§4.1.2.2). An independent *ʔall*-series of object person forms is used in the 'perfective' derived from the dative preposition (*ʔal*)- to express both the P and the R:

(20) **C. Ashitha** (SE Turkey; Borghero 2006:193, 200-202)

	[V-A]	[R/P]	[T]
a.	<i>hiw-le</i>	ʔall-i	<i>mexulta</i>
	give _{PFV-3MS}	DAT-1SG	food:FS
	'He gave me food.'		

- b. *xze-le* *ʔall-i*
 see_{PFV-3MS} DAT-1SG
 ‘He saw **me**.’

The inflectional systems differ here. The *ʔall*-series is the favored expression of the P in the ‘perfective’ but of the R in the ‘imperfective’ where dependent person forms, the L-set, are preferred to mark the P.

7.1.3. *Interactions of Prepositional Marking and Agreement*

As across languages of the world and the Semitic family in general, accusative alignment prevails in Neo-Aramaic. The accusative grouping is preferred in both case-marking and agreement but not to the same degree for each coding property. The agreement system can differ greatly in type and complexity from case-marking. Indeed, alignment splits are rather common in verbal agreement, while, regardless, case-marking patterns accusatively in the majority of dialects. This is most likely connected with the historical development of the TAM split in general where the ‘perfective’ agreement originated in the adjectival inflection of an originally resultative participle developing suffixal person forms similarly to the active participle.

Independent prepositional object person forms are generally included in the prepositional marking of full object NPs. The pronominal Ps can be prepositional while full nominal Ps need not be. Independent objects, and distinct strategies of object marking in general, are required when dependent equivalents are not available²¹⁷ irrespective of alignment type. In Neo-Aramaic studies, this has been connected with a decline of originally ergative alignment. This dissertation, however, shows that, synchronically, there is no connection with a particular alignment pattern (§4.2). There is a connection with a usage decline of particular sets of dependent person forms. This is generally the E-set in the ‘perfective’ which may be completely obsolete as object indexes. In ʿTuroyo, this also includes a set of object indexes related to the ‘possessive suffixes’ in the imperative (§6.1.2) and, in J. Sulemaniyya, the ‘possessive suffixes’ in the compound verbal forms expressing the perfect progressive (§5.2.3).

Similarly, only dependent person forms qualify as agreement markers and can index a coreferential nominal²¹⁸. The *ʔall*-series, otherwise independent like

²¹⁷ Universal G. in Haspelmath (2013:222).

²¹⁸ Universals A. and B. in *ibid*.

full NPs, may be phonetically reduced and attach to an immediately preceding verb, becoming increasingly dependent on it (e.g. *ǧzéllox=alleu* ‘You_{MS} saw him’ for *ǧzelox ʔalléu* in J. Arbel). As dependent person forms, they may be used in the indexing of masculine singular NPs in the ‘perfective’ alongside the E-set for the feminine singular and common plural, if available. The third person $\emptyset$ -morpheme from the E-set, for example, is not used in Jewish Arbel but the corresponding person form from the *ʔall*-series is the only means to index a masculine singular NP (§4.1.2.1).

Consistent with cross-linguistic tendencies, case-marking and agreement of full NPs usually converge, but some combinations are contrary to this tendency. This is summarized in the tables below for respectively splits with accusative and splits with ergative case-marking.

Table 45. *Splits with accusative case-marking*

CASE MARKING	AGREEMENT	DIALECTS
(A=S≠P) accusative	(A=S≠P) accusative	most of NENA and ʦuroyo (e.g. J. Amidya, C. Ashitha)
(A=S≠P) accusative	(A=S=P) neutral	Jewish dialects in NW Iran (e.g. J. Urmi) Christian dialects in SE Turkey (e.g. C. Bohtan; Mlaḥso)
(A=S≠P) accusative	(A≠S=P) ergative	SE Trans-Zab Jewish (e.g. J. Sulemaniyya)

Table 46. *Splits with ergative case-marking*

CASE MARKING	AGREEMENT	DIALECTS
(A≠S=P) ergative	(A≠S≠P) tripartite	possibly archaic Iraqi NENA dialects
(A≠S=P) ergative	(A≠S=P) ergative	ʦuroyo both rural and urban dialects
(S≠A=P) horizontal	(A≠S=P) ergative	ʦuroyo dialect of Raite

In all combinations, however, the case-marking is differential in some way. Transitive clauses with full NPs will often show no grammatical marking of the object. If they do express this, accusative indexing of full NPs is readily found alongside or combined with accusative case-marking in Aramaic in general (§3.3.2, §4.2.1). Ergative indexing may also be combined with ergative case-marking in ʦuroyo in the ‘perfective’ (§6.1.3). The E-set, for example *-i* in (21) below, indexes the P and the full nominal is zero-marked like the S, while the

dative preposition (*e*)*l*- and the L-set mark the A. The dative marking of the agent is optional and focalizes it.

(21) **Turoyo** (Iwardo, SE Turkey)

	[S]	[V-S]	
a.	<i>aḥ-ḥete</i>	<i>naḥiq-i</i>	
	the-wheat:PL	go.outPFV-3PL	
	'The wheat went out.'		
	[P]	[V-P-A]	[ERG→A]
b.	<i>aḥ-ḥeṭ-ani</i>	<i>xil-i-le</i>	<i>l-u-moro</i>
	the-wheat:PL-DEM:PL	eatPFV-3PL-3MS	DAT-the-master:MS
	'The owner ate this wheat.' (Ritter 1967-71, 55/11)		

Case-marking and agreement can also diverge with respect to alignment. If they do, the agreement is expected to be accusative and the case-marking ergative, while the other way around, accusative case-marking but ergative agreement is strongly disfavored (Comrie 1978:340; Dixon 1979:92, 1994:95-96; §2.5.1). There are examples scattered across NENA dialects, especially early scribal idiolects, that normally group the S and A accusatively by the L-set where a focalized agent NP is marked by the dative but it is not altogether clear whether this is to be understood as either ergative or passive-like, because the agent agreement is not overtly expressed (§4.3.5). The independent dative person form in the transitive construction in (22) below, for example, is not indexed on the verb (***qṭil-ēna-lox*). The person marking is tripartite, since the S is marked by the L-set in such dialects (*qəṁ-lox* 'You_{MS} rose'), and the P is marked by the E-set.

(22) **Early J. Nerwa** (Literary, NW Iraq; Goldenberg 1992:121)

	[ERG→A]	[V-P]
a.	<i>lāl-ox</i>	<i>qṭil-ēna</i>
	DAT-2MS	killPFV-1MS
	'It is you who killed me.'	
	[V-S]	
b.	<i>qīm-lox</i>	
	risePFV-2MS	
	'You rose'.	

In the South Eastern Trans-Zab Jewish varieties, the case-marking is accusative and the indexing ergative, grouping the S and P by the E-set (§4.2.3). Both,

however, are two distinct strategies of differential object marking that combine only exceptionally. In Jewish Sulemaniyya, accusative case-marking and ergative indexing of full NPs can be exceptionally be combined in differential object marking:

(23) **J. Sulemaniyya** (W Iran)

	[S]	[V-S]	
a.	<i>yalé</i>	<i>qim-i</i>	
	child:PL	rise _{PFV} -3PL	
	‘The children rose.’		
	[DOM→P]	[V-P] ²¹⁹	
b.	<i>lā-yalé</i>	<i>ləbl-i-le</i>	<i>ta-bağdád</i>
	DOM-child:PL	take _{PFV} -3PL-3MS	DAT-PRN
	‘He took the children to Bagdad.’ (Khan 2004a:326)		

Neutral agreement, where all arguments are marked by the L-set, also combines with accusative case-marking (§4.2.2):

(24) **J. Urmi** (NW Iran)

	[S]	[V-S]	
a.	<i>+šultaná</i>	<i>+dmáx-le</i>	
	king:MS	sleep _{PFV} -3MS	
	‘The king slept.’		
	[A]	[DOM→P]	[V-A-P]
b.	<i>+šultaná</i>	<i>ʔəl-bron-éw</i>	<i>nšáq-le-le</i>
	king:MS	DOM-son:MS-his	kiss _{PFV} -3MS-3MS
	‘The king kissed his son .’ (Garbell 1965:178)		

Horizontal case-marking through the dative preposition (*e*)/- also occurs in Țu-royo but this does not appear to combine with indexing (§6.1.3). The reason for this is presumably the close structural link between the L-set and the dative preposition that typically both mark a full nominal in other constructions, such as the recipient, predicative possessor, and a definite patient in the ‘imperfective’.

²¹⁹ Note that, strictly speaking, the verb is ditransitive and *yalé* ‘children’ is a theme, but it serves to show the possible combination of ergative indexing and accusative case-marking.

Agreement itself can also evince more refined combinations of alignment in terms of phonological form, position, and trigger potential. In Aramaic, the grouping of S and P in terms of trigger potential is never found, so that there is a clear preference for accusative alignment in this respect. The trigger potential may diverge from the phonological form. The indexing of full nominal Ps is more restricted and context-dependent than the indexing of the S and A. The differential indexing is only ergative in phonological form in the ‘perfective’. The following examples from Jewish Sulemaniyya demonstrate the special treatment of the P. The overt expression of the S and A is unconditional.

(25) **J. Sulemaniyya** (NE Iraq; illustration based on Khan 2004a, 2007a:148-149, 154)

	[A]	[P]	[V(-P-)A]	
a.	<i>gora</i> man:MS	<i>baxtaké</i> woman:DEF:FS	<i>nəšq-a-le</i> kiss _{SPFV-3FS-3MS}	(definite P) ‘The man kissed the woman.’
b.	<i>goraké</i> man:DEF:MS	<i>baxta</i> woman:FS	<i>nšəq-le</i> kiss _{SPFV-3MS}	(indefinite P) ‘A man kissed a woman.’
	[S]	[V-S]		
c.	<i>baxtaké</i> woman:DEF:FS	<i>qim-a</i> rise _{PFV-3FS}		(definite S) ‘The woman rose.’
d.	<i>baxta</i> woman:FS	<i>qim-a</i> rise _{PFV-3FS}		(indefinite S) ‘A woman rose.’

Finally, with respect to ditransitive clauses, the case-marking and agreement remain generally both indirective, since identical case-marking of two full NPs is disfavored. An exception is Jewish Urmi where indirective agreement (T=P≠R) may combine with neutral case-marking (T=P=R) (§4.2.2).

In the final analysis, there are no clear-cut distribution patterns in usage of either case-marking and/or agreement and the two coding properties do not appear to be in conflict in monotransitive constructions. First/second person objects are preferably independent and prepositional like demonstrative pronouns and full nominals due to the person role constraint in the ‘perfective’.

7.1.4. *Ergative-like Markedness*

Alignment types are sometimes further differentiated by their relative morphological and functional markedness (e.g. Dixon 1979, 1994; Croft 1988, 2001:138-146; §2.2.6). It is the isolated argument, not grouped with the s, in typologically marked systems that is realized as $\emptyset$ and/or has a greater potential to trigger overt agreement:

(26) **Implicational distribution of zero vs. overt coding**

If the unmarked arguments, i.e. nominative (S+A) or absolutive (S+P), show overt case-marking and can control agreement, the marked arguments, i.e. accusative (P) or ergative (A), will also do so. (after Croft 2001:139-146)

The 'marked nominative' and 'marked absolutive' types go against this tendency.

We did not observe such marked alignment types of case-marking in NENA or Central Neo-Aramaic, since the s is, on the whole, never prepositional. The one exception would be Turoyo where the agent-like s of S_A verbs may be marked by the dative like the A, showing a split in subject coding. Otherwise, the isolated argument is overtly marked in accusative or ergative case-marking and rarely both the A and P. No marked ditransitive alignment types were established either.

Most markedness considerations can be made in agreement. The possible zero realization and the trigger potential for overt agreement are the main factors in the markedness of agreement. The set of person forms that has most zero realizations is considered an unmarked instance of the expression of the s. We noted that the potential candidate for this would be the E-set where the 3ms. form is $\emptyset$. The L-set does not have any zero realizations. In addition, the trigger potential for overt agreement is (apart from the agentless 'perfective' form) higher for the s and A than the P throughout the verbal system in all dialects regardless of the morphological marking.

First of all, ergative grouping of the s and P by the E-set is typically only manifested in dependent third person forms and the differential indexing of definite NPs in South Eastern Trans-Zab Jewish and Turoyo (§4.2.3). The A always triggers agreement alongside the P. This is an evident asymmetry in the overt expression of agreement, since in coherently ergative agreement the s and P would have a trigger potential greater or equal to the A. As expected, however, the zero realization is only found for the third masculine singular s and P:

(27) **J. Saqqiz** (W Iran; based on Israel 1998)

- [V-S]
 a. *dmix-Ø* (intransitive)
 sleep_{PFV-3MS}
 ‘He slept.’
- [V-P-A]
 b. *nšiq-Ø-la* (transitive)
 kiss_{PFV-3MS-3FS}
 ‘She kissed **him**.’

Interestingly, we observed that the P does show a greater trigger potential than the A in the realis present perfect expressed through a compound verbal form in the ‘ergative dialects’ of NENA in Iranian Kurdistan (§5.3.5). The verb only indexes the S and P, as illustrated in (28) below. The agreement with the P is again dependent on definiteness, but the A never triggers agreement and this is expected for an ergative pattern. The expression of the A in this construction is limited to third person. Since the agreement is always with the P and triggered by definiteness, there is no resulting ambiguity. When there is no agreement, however, the unmarked 3ms. singular is used. Without differential case-marking of the P, the clause would be potentially ambiguous. The P-V word order preference contributes to argument disambiguation.

(28) **J. Saqqiz** (W Iran; Israeli 1998:100-101)

	[S]		[V-S]	
a.	<i>blan-ú</i>		<i>dmix-én</i>	
	daughter:PL-his		slept:NONFS-3PL	
	‘His daughters slept.’			
	[A]		[P]	[V-P]
b.	<i>branaké</i>	<i>il-é</i>	<i>bab-év</i>	<i>nišq-én</i>
	son:MS:DEF	hand:PL	father:MS-his	kissed:NONFS-3PL
	‘His daughter has not seen her brothers.’			

The overt vs. zero marking also plays a role in the participial agreement in the compound perfect of Jewish Sulemaniyya (and Ḥalabja) conditioned by gender (§5.3.1). Unlike the closely related ‘ergative dialects’ like J. Saqqiz above, the person forms always pattern accusatively: the ‘copula’ expresses the S and A, and the P is expressed by a different set (the *ʔall*-series or the ‘possessive suffixes’). The non-feminine singular forms coincide into *qətl-* before the patient person indexes against the feminine singular. The main distinction is between overt

agreement for the feminine singular (*qtəl-t-*) against non-feminine singular (*qətl-Ø-*). In transitive clauses, the feminine singular triggers participial agreement irrespective of the A or P function of the argument. Thus, essentially, ergative alignment is manifested, when the P is non-feminine singular and the A is feminine singular, while accusative alignment is manifested, when the P is feminine and the A is non-feminine singular.

(29) **J. Sulemaniyya** (NE Iraq; based on Khan 2004a)

- a. *nšəq-t-aw=ye* (agreement with the P)
 kissed-FS-3FS=3MS
 ‘He has kissed **her**.’
- b. *nšəq-t-ew=ya* (agreement with the A)
 kissed-FS-3MS=3FS
 ‘**She** has kissed him.’
- c. *šmix-ta=ya* (agreement with the S)
 waited-FS=3FS
 ‘**She** has waited.’

The trigger potential for person and number coding is the same for all grammatical functions, but the overt agreement in gender and number on the participle shifts in the direction of the morphologically marked category, the feminine singular, regardless of the role. The S and the non-participial coding (i.e. the ‘copula’ and the ‘possessive’ suffixes) remain unaffected.

A similar phenomenon results in special marking of the A in the compound perfect of Jewish Urmi. Only the feminine singular agent evinces an additional /t/-element (§5.3.3). Other arguments, including feminine singular objects, do not show this morphology. The overt agreement is not just conditioned by gender and number (as in Jewish Sulemaniyya) but also conditioned by the A role. If the analysis is correct, this would be an instance of a marked ergative agreement pattern, since the A triggers overt agreement but not the S and P.

Secondly, the accusative alignment of dependent person forms in NENA repeated below for has been analyzed as ‘marked nominative’ (Barotto 2015) or ‘extended ergative’ (Doron and Khan 2012; cf. Mengozzi 2002b:45, fn. 144) due to a conflation of case-marking and agreement typology. Clearly, these NENA dialects are typically accusative in terms of trigger potential but only arguably ‘marked nominative’ in terms of phonological form:

(30) **J. Amidya** (NW Iraq; adapted from Hoberman 1989:36, Greenblatt 2011:101)

[V-S]

- a. *dmix-le* (intransitive)

sleep_{PFV-3MS}

‘He slept.’

[V-P-A]

- b. *nšiq-Ø-le* (transitive)

kiss_{PFV-3MS-3MS}

‘He kissed him.’

The E-set of object indexes is more restricted in usage than the L-set in the majority of NENA dialects, however, and may even be confined to the 3pl. (-i) and 3fs. (-a), so that the zero realization of a third masculine singular object person form is impossible. Perfective past forms like *xze-la* could only mean ‘She saw’ and not ***xze-Ø-la* ‘She saw him’. Other strategies to express such objects have to be used, such as the *ʔall*-series in Jewish Arbel *ǧze-le ʔalléu* ‘He saw him’ (NE Iraq; Khan 1999:119) or the *qam-qatəl*-construction in C. Aradhin *qam-xāz-ən-ne* ‘I saw him’ (NW Iraq; Krotkoff 1982:28).

In a few ‘accusative dialects’ such as Jewish Zakho (Gutman 2008), it is possible that the agent NP is overtly expressed without triggering agreement. The L-suffixes that encode the A may be omitted without violating the P status of the patient (§4.3.4). The agent receives no coding reference to its role. A prominent P still triggers agreement, as exemplified below. The expression of the A in this construction is limited and generally marginalized to the third person, especially third person plural.

(31) **J. Zaxo** (NW Iraq)

[S]

[V-S]

- a. (Ø-)xūrās-e zəl-lu
friend:PL-his go_{PFV-3PL}
‘His friends went.’

[A]

[V-P-A]

[P]

- b. (Ø-)xūrās-e fhīm-a-Ø (Ø-)zāya
friend:PL-his understand_{PFV-3FS-3PL} matter:FS
‘His friends understood the matter.’ (Gutman 2008:74)

Doron and Khan (2012; cf. Barotto 2015) consider this peculiar treatment of the A to be evidence of ergativity in these morphologically ‘accusative dialects’. The

S and P are evidently not grouped in phonological form (L-set vs. E-set). One could only argue that this is an ergative grouping ($A \neq S = P$) in terms of trigger potential: the S and P trigger agreement to the exclusion of the A. The A is not obligatorily expressed. (Yet, one should note that agreement with the P is also not obligatory). The overt agreement with the S and P but zero expression of the A is typologically unusual (see, for instance, Bickel et al. 2013; §2.5.1) but also restricted in these dialects *vis-à-vis* transitive constructions that do show agent agreement. The A needs to be contextually identifiable, for instance by another preceding or following verbal construction. All else being equal, intransitive and transitive verbs pattern alike in these dialects. It is only this restricted agentless perfective clause that shows peculiarities, while overt agreement with the A is favored in most contexts. In my view, this is a special truncated transitive construction (Keenan and Dryer 2007:330) that is neither fully passive nor fully ergative. Despite the fact that there is no special verbal morphology, the agentless form features in impersonal labile alternations. Although this is not prototypical for a passive, object coding is sometimes also retained in impersonal passives (Givón 1990:581-583; §4.3.1). Its correlation with agent reference reducing devices such as the impersonal passive would explain why especially third person (plural) agents can be omitted, and not subject indexes, as a reanalyzed passive (Gutman 2008).

Finally, a similar case of lack of overt agreement with the agent in otherwise accusatively aligned constructions is the participial predicate of the compound perfect (§5.2.3). The ‘copula’ and the participle agree with the S and the A. The third person enclitic ‘copula’ may also be omitted entirely, while the participial inflection is the only remaining agent (or subject) coding:

(32) **C. Barwar** (NW Iraq)

- a. *q̣ṭil-a(=∅)* *xá-neriye*
 killed-MS(=3MS) a-goat:MS
 ‘He has killed a male goat’ / ‘A male goat has been killed.’ (Khan 2008a, A31:4)

The same resultative construction can also express the passive, so that, when the two referents belong to the same gender and number and the patient is not differentially marked, the functions have to be inferred from the context. Naturally, when the two referents are of distinct gender and number, there is no ambiguity, since the A controls the agreement. Word order may also contribute to role disambiguation but is not definitive. Although the agent regularly precedes

gressive), as illustrated in (33a) and (33b) below. In Jewish Sulemaniyya, the V-P-A order is confined to third person patients for both the preterit and the compound perfect (and progressive), as shown in (33c) and (33d). Importantly, although the preterit distinguishes the S from the A in J. Sulemaniyya, the progressive does not and shows an accusative grouping. Thus, the sequence does not correlate with an alignment type in this respect. This notwithstanding, there might be an indication of a correlation between the V-P-A order and accusative alignment. It is precisely in dialects where the ‘perfective’ is accusative in grouping the S and A by the L-set that the E-set marking the P is unrestricted in a V-P-A-sequence like (33a) below. Hence, the agreement inversion is only complete in dialects that are accusative throughout.

(33) **C. Urmi**

(Literary, NW Iran; Marogulov 1979:58)

PRETERIT

[V-P-A]

a. *šqil-ət-li*

take_{PFV}-2_{MS}-1_{SG}

‘I took **you_{MS}**.’

COMPOUND PERFECT

[V-P-A]

b. *šqil-ux=vən*

taken-2_{MS}=1_{MS}

‘I_M have taken **you_{MS}**.’

J. Sulemaniyya

(NE Iraq; based on Khan 2004a)

PRETERIT

[V-P-A]

c. *garš-a-le*

pull_{PFV}-3_{FS}-3_{MS}

‘He pulled **her**.’

COMPOUND PERFECT

[V-P-A]

d. *garš-aw=ye*

pulled-3_{FS}=3_{MS}

‘He has pulled **her**.’

In other dialects, the inflection of the ‘imperfective’ penetrates the inflection of the ‘perfective’, promoting a V-A-P sequence (cf. Mengozzi 2002b:46). We observed a possible tendency to normalize the use of the E-set or L-set at the cost of either to encode a specific grammatical function (S, A, P) by morphologically adapting transitive coding in analogy to the ‘imperfective’, the predominant morphosyntax. The ‘perfective’ and ‘imperfective’ morphology become mixed. The double L-set construction, the L-E-series and the *qam-qatəl*-construction are alternatives to the E-set analogical to the ‘imperfective’ and seem to be geared to make the L-suffixes in V-A-P sequence as in the ‘imperfective’ the regular expression of pronominal Ps throughout the verbal system, as illustrated in (34).

(34) **Alternative strategies to mark the P**

	V:IPFV	A	P	
	° <i>qaṭal</i>	-E	-L	E-SET AND L-SET IN THE 'IMPERFECTIVE'
	V:PFV	A	P	
a.	<i>qṭil</i>	-L		INDEFINITE FULL NOMINAL P
b.	<i>qṭil-</i>	-L	<i>ʔall-</i>	PREPOSITIONAL P (§4.1.2)
c.	<i>qṭil</i>	-L	-L	DOUBLING OF L-SET (§4.4.1)
d.	<i>qṭil</i>	-L-E-	-L	BLENDING OF L-SET AND E-SET (§4.4.3)
e.	<i>qam-qaṭal</i>	-E	-L	THE <i>qam-qaṭal</i> -CONSTRUCTION (§4.4.2)

These constructions, however, are not necessarily promoting accusative morphosyntax for dependent person forms (*pace* Mengozzi 2002b, 2005; Barotto 2015; Coghill 2016), since the S is not affected and remains expressed by the L-set. The double L-set construction, for example, manifests a type of neutral alignment. The L-E-series rather manifests ergative alignment (confined to first/second person agents), and the *qam-qaṭal*-construction also a pattern that can be characterized as ergative (preferred for first/second person patients).

Possibly, the dialects differ to what extent ambiguity is tolerated. The constructions above differ at what price the L-suffixes facilitate patient indexes in accordance with the 'imperfective' as an alternative to the E-set. This may be at the expense of morphological argument discrimination in the double L-set construction (*xzé-li-la* 'I saw her'), as all arguments are identical in phonological form, at the expense of the marking of the A by replacement through L-E-series (e.g. *ḥzél-én-na* 'I saw her') and is at the expense of the inflectional base and agent coding in the *qam-qaṭal*-construction (*qam-xaz-ən-nax* 'I_M saw her'). What differentiates the L-E-series and *qam-qaṭal*-construction from the double L-set construction could be the more close approximation of the 'imperfective' to maintain morphological distinction between the A and P.

This analogy also inspires morphological adaptation of the perfect in 'dynamic-stative dialects' and the compound progressive and perfect on the basis of the morphological parallelism between the enclitic copula and the E-set and between the *ʔall*-series and the L-set (§5.2.5). The phonetically reduced enclitic copula does not fully assimilate with the E-set in the third person. This indirectly influences the alignment manifestations. Jewish Urmi, for example, displays tripartite alignment for the third person indexes and accusative only for the first and second person indexes in the realis perfect. Third person S, A and P are each marked distinctly. This is consistent with the prominence scale, since the accusative type is favored for the higher ranking person referents.

7.2. Verb and Aspect-related Scales and Splits

7.2.1. The Tense-Aspect-Mood scale

I established to what extent Eastern Neo-Aramaic shows an alignment split based on TAM. Typologically, the semantic properties are often non-past, imperfective and imperative for the accusative type and past, perfective and non-imperative for the ergative type (§2.3.2). The major splits between perfective and imperfective aspect in Eastern Neo-Aramaic, however, mainly depend on inflectional base: *qṭil-* as opposed to *qaṭal-* (or *qoṭal-*) which are the end result of specific historical developments of the resultative and active participles respectively. The agreement (i.e. E-set) controlled by the P in the ‘perfective’ reflects the original adjectival agreement with the patient-like S of the resultative construction, while the agreement (i.e. E-set) controlled by the agent in the ‘imperfective’ reflects the original agreement with the agent-like S of the active participle. In addition, alignment types other than accusative and ergative are conditioned by TAM. Even ditransitive coding was found to be dependent on TAM. Yet, when there is a split, the accusative is favored in the imperfective (present).

First of all, the TAM-conditioned split represents first and foremost a constructional split. Aspectual factors are secondary. Moreover, the alignment for *qṭil-*, or the ‘perfective’, may not be different from that of *qaṭal-*, or the ‘imperfective’, but the constructional split is generally characterized by an agreement inversion. The agent and object indexes function the same way in the ‘perfective’ and ‘imperfective’, but the same sets of person forms denote the opposite grammatical function in either aspectual ‘domain’. The L-suffixes mark the P for *qaṭal-* but the A for *qṭil-*, the E-suffixes mark the A for *qaṭal-* but the P for *qṭil-*. Whether this leads to an additional distinction in alignment depends primarily on variation in the coding of the S in the concerning dialect(s).

In South Eastern Trans-Zab Jewish varieties, the ‘imperfective’ is accusatively aligned but the ‘perfective’ ergatively (§4.2.3):

(35) **J. Sulemaniyya** (NE Iraq; illustration based on Khan 2004a, 2007a)

ERGATIVE		ACCUSATIVE	
PERFECTIVE (PRETERIT)		IMPERFECTIVE (PRESENT)	
[P]	[V-P-A]	[P]	[V-A-P]
a. <i>baxt-i</i>	<i>nəšq-a-le</i>	b. <i>baxt-i</i>	<i>nəšəq-Ø-la</i>
‘He kissed my wife.’		‘He kisses my wife.’	

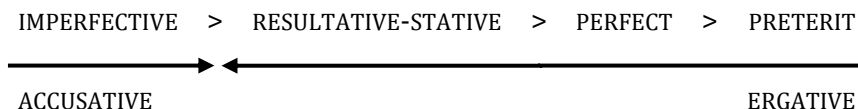
PERFECTIVE (PRETERIT)		IMPERFECTIVE (PRESENT)	
[S]	[V-S]	[S]	[V-S]
c. <i>baxtaké</i>	<i>qim-a</i>	d. <i>baxtaké</i>	<i>qem-a</i>
'The woman rose.'		'The woman rises.'	

It is mainly the transitive construction that is treated differently, while the S is consistent. On the other hand, some subjects of intransitive verbs do align with the A in the 'perfective', showing split subject marking:

[S]	[V-S]	[S]	[V-S]
e. <i>baxtaké</i>	<i>təl-la</i>	f. <i>baxtaké</i>	<i>tapl-a</i>
'The woman sneezed.'		'The woman sneezes.'	

In virtually all South Eastern Trans-Zab Jewish varieties, the ergative with accompanying split subject marking embodies also the realis and irrealis perfect and resultative aspect which are generally expressed by constructions based on the copula or *hwy* 'be' and the resultative participle that be considered to comprise allomorphs of *qtil-* (§5.3.5). These constructions constitute a separate, uniform subsystem where ergative alignment is manifested:

(36) Accusative-ergative split



Contrary to what we might expect typologically (cf. Malchukov 2015), however, the compound perfect and resultative in Sulemaniyya (and Ḥalabja) pattern accusatively (§5.3.1). Ergativity is only manifested in the simple *qtil*-based forms.

Intransitive 'perfective' clauses are completely distinct from the 'imperfective' only in dialects that systematically group the S and A by the L-suffixes (§4.2.1), as illustrated below. Consequently, accusative alignment prevails across TAM categories in the majority of dialects. In addition, the ergative *qam-qatəl*-construction based on the inflectional base *qatəl-* is found across these dialects and competes with *qtil-* in the expression of the preterit, or perfective past (§4.4.2). All that is changed is the preverbal TAM-marking, while the morpho-syntax specific to the inflectional base is kept intact.

(37) **J. Amidya** (NW Iraq; illustration based on Hoberman 1989; Greenblatt 2011)

ACCUSATIVE PERFECTIVE (PRETERIT)		ACCUSATIVE IMPERFECTIVE (PRESENT)	
[P]	[V-P-A]	[P]	[V-A-P]
a. <i>baxta</i>	<i>šmiŋ-a-le</i>	c. <i>baxta</i>	<i>šaməŋ-Ø-la</i>
'He heard the woman.'		'He hears the woman.'	
[S]	[V-S]	[S]	[V-S]
b. <i>baxta</i>	<i>qəm-la</i>	d. <i>baxta</i>	<i>qem-a</i>
'The woman rose.'		'The woman rises.'	

Jewish dialects of the northeastern periphery in NE Iraq and NW Iran and Christian dialects in SE Turkey show dynamic-stative subject marking that is conditioned by TAM (§5.1.2). The alternation between *S_A* and *S_P* constructions depends on the 'perfective' inflectional base (*qṭil-*) and is not found in the 'imperfective'. The *S* aligns with the *A* in the perfective aspect but with the *P* in the perfect and/or resultative:

(38) **J. Urmi** (NW Iran; Garbell 1965; Khan 2008b)

- a. (transitive preterit)
[V-P-A]
xəzy-a-le 'He saw **her**.'
see_{PFV-3FS-3MS}
- b. (intransitive preterit aligns with the A)
**dməx-le* 'He went to sleep.'
sleep_{PFV-3MS}
- c. (intransitive realis perfect aligns with the P)
dmix-a* 'She** has gone to sleep.'
sleep_{PFV-3FS}

The opposition between action and result-state focus of the intransitive situations correlates with their degree of grammaticalization from resultative to preterit. Intransitive resultative and/or perfect patient-like forms like *dmix-a* interact with resultative and/or perfect forms based on the enclitic 'copula' and resultative participle. By and large, the patient-like form (i.e. the E-set) will never be higher on the grammaticalization scale from resultative-stative to preterit than the agent-like form (i.e. L-set). There are only subtle differences between dialects in terms of aspect. In Jewish Rustaqa (NE Iraq), both the participial

(*qtila*) and the patient-like (*qtil-*) construction express an intransitive resultative-stative, whereas, in Jewish Urmi (NW Iran), only the participial construction with the analytic copula can be used to express resultative-statives and the patient-like form denotes the realis perfect (§5.3.3).

This notwithstanding, in all such ‘dynamic-stative dialects’, it is the transitive realis perfect that displays diversity. The difference in subject coding creates a gap for a transitive realis perfect that may manifest an alignment split:

(39)		PRETERIT		REALIS PERFECT
	TR.	<i>qṭəl-le</i>	‘He killed’	 ‘He has killed’
	ITR.	<i>qim-le</i>	‘He rose’	<i>qim-Ø</i> ‘He is/has risen’

The difference may be entirely based on the set of person indexes attached to the ‘perfective’ (*qtil-*). The A and S are grouped by the E-set in the perfect similarly to the ‘imperfective’ (*qaṭəl-*):

(40)		C. Bohtan (SE Turkey; Fox 2009)			
		PRETERIT		PERFECT	
	TR.	<i>qṭəl-le</i>	‘He killed’	<i>qṭil-Ø</i>	‘He has killed’
	ITR.	<i>qəm-le</i>	‘He rose’	<i>qim-Ø</i>	‘He has risen’

In addition, the L-set is used to express patient indexes throughout the inflectional system. Consequently, one cannot speak of either a patient-like form or agreement inversion in this dialect (§5.1). Only the marking of the A is distinguished in the same way as the S:

		PRETERIT		PERFECT	
	TR.	<i>qṭəl-le-lā</i>	‘He killed them’	<i>qṭil-i-le</i>	‘ They have killed him’
		<i>qṭəl-li-lux</i>	‘I killed you _{MS} .’	<i>qṭil-ət-li</i>	‘ You _{MS} killed me’

A similar pattern is documented for Mlaḥso (§6.3.3), although the perfect is distinguished from the preterit by a special inflectional base with a *CaCiC*-template, *qaṭil-Ø* ‘He has killed’. The transitive perfect can be considered both semantically and morphosyntactically closer to the imperfective, sharing the same morphosyntax. This constitutes a tense-aspect-conditioned split between accusative and neutral.

The gap may also be filled by a derivation of the ‘perfective’ through preverbal TAM-modification (§5.1). The TAM marker *lā* together with the patient-

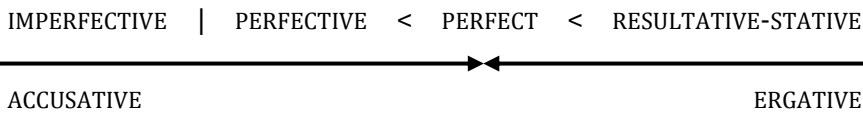
like form denoting the subject expresses the resultative in J. Rustaqa (NE Iraq) against the agent-like form expressing the transitive perfect, as reviewed below.

(41) **J. Rustaqa** (NE Iraq)

	PRETERIT		PERFECT/RESULTATIVE	
TR.	<i>qṭil-le</i>	'He killed'	<i>lā qṭil-le</i>	'He has killed'
ITR.	<i>qim-le</i>	'He rose'	<i>lā qim-Ø</i>	'He is up, risen'

The S and A are grouped for the dynamic focus that generally expresses the perfective past and S and A are distinguished for the result focus which is closer to *qaṭal-* in its aspectual meaning. The alignment split is in accordance with Malchukov (2015)'s TAM hierarchy:

(42) **Accusative-ergative split in J. Rustaqa**



Finally, ditransitive constructions are also conditioned by TAM. This does not necessarily lead to distinctions in alignment. We observed that pronominal themes tend to be expressed independently in the 'perfective' in several NENA dialects, while the same *ʔall*-series expresses only the R in the 'imperfective' (§4.1.2.2). In ʦuroyo, both ergative and ditransitive tripartite alignment are confined to the third person in the 'perfective' (§6.1.2).

On the whole, the differences in subject coding seem to reflect the degree of grammaticalization from of intransitive resultative to perfective past via the perfect (e.g. Bybee and Dahl 1989). The use of the E-set as subject indexes tends to be closely associated with the resultative-stative and/or perfect akin to the imperfective aspect more so than the use of the L-set as agent indexes to express the perfective past. Following Goldenberg (1992)'s suggestions, it is plausible that resulting incoherence is simply levelled out differently in the respective dialects by the innovation of new transitive realis perfects. Even for the South Eastern Trans-Zab Jewish dialects, it is plausible that the patient-like intransitive resultative (*qim-Ø* 'He is up') grammaticalized via the perfect ('He has risen') to preterit ('He rose'), replacing the preterit that used to be inflected like the A (*qim-le* 'He rose'). Language contact with ergative Iranian languages and innovative compound verbal constructions expressing the resultative and/or

perfect could have pushed the patient-like intransitive resultative into a preterit.

7.2.2. Split and Fluid Subject Marking

Ṭuroyo and South-Eastern Trans-Zab Jewish dialects show split subject marking and occasionally also fluid subject marking. While the *s* of most intransitive verbs ergatively groups the *s* with the *P* (*S_P*, i.e. the *E*-set), the *s* of a few classes of intransitive verbs groups the *s* with the *A* (*S_A*, i.e. the *L*-set). A few verbs may also co-vary between *S_A* or *S_P* forms. Although the variation in *s*-marking is not completely arbitrary, it does not evince a clear-cut distribution and is lexicalized for most verbs (§5.1.1).

In Ṭuroyo, basic verbs (stem I) come in two subclasses in the ‘perfective’, (Ia) taking a CCiC-template (*ftiḥ-o* ‘It_F opened’) and (Ib), so-called ‘neuter’ verbs, taking a CaCiC-template (e.g. *damix-o* ‘She fell asleep’). The (Ib) subclass always takes *P*-like coding of the *s*, and only the (Ia) subclass can combine with *A*-like coding (§6.2.1.4). Ṭuroyo not only shows split subject-marking in agreement but also in case-marking:

(43) Ṭuroyo (Raite, SE Turkey)

[*S*=*P*]

- a. **(Ø-)***Ḥasan Paša* *mayəθ-Ø*
 PRN:MS die_{PFV}-3MS
 ‘**Ḥasan Paša** died.’ (Ritter 1967-71, 96/26)

[*S*=*A*]

- b. ***I-Nari*** *malax-le*
 DAT-PRN:MS walk_{PFV}-3MS
 ‘**Nari** walked.’ (ibid. l. 229)

Generally, the verbs that are most likely to take *S_P* coding are those that typically entail an affectee of a state or uncontrolled process such as *kpn* ‘be/become hungry’. One exception is the existential or copula verb *hwy* ‘be’ in NENA that is explained morphologically. The same verb belongs to the (Ib) subclass in Ṭuroyo (*hawi-Ø* ‘He was, became, was born’).

By and large, when the verb is more semantically transitive event in more strongly implying some effect and denotes a punctual and dynamic event, the *S_A* forms are favored, even though no patient-like effect is expressed explicitly. Semelfactives, especially animal sound emissions such as ‘bark’ and more or less

controllable bodily reactions such as ‘laugh’ generally prefer S_A coding which is a typical feature of languages with ergative alignment (cf. Lazard 1998:136-139).

Causal factors pertaining to agentivity sometimes play a role in Jewish dialects of Iranian Azerbaijan. Control or animacy may sometimes determine compatibility with S_P or S_A coding. A lesser degree of control is not always compatible with the S_A coding for verbs ‘sneeze’ and ‘cough’, to review:

(44) **J. Qarah Hasan** (W Iran; Khan 2009:306)

a.	<i>nox-le</i>	‘It _M barked.’	(S=A, controlled)
b.	<i>tpil-Ø</i>	‘He sneezed.’	(S=P, uncontrolled)

An inanimate subject such as a natural force is also not always compatible with S_A coding, to review:

(45) **J. Sanandaj** (W Iran; Khan 2009:294, 304-306)

	[S]	[V- S_A]	
a.	<i>xmara</i>	<i>sre-le</i>	(S=A, animate)
	donkey:MS	bray _{PFV-3MS}	
	‘The donkey brayed.’		
	[S]	[V- S_P]	
b.	<i>ʔewá</i>	<i>gərgám-Ø</i>	(S=P, inanimate)
	cloud:MS	thunder _{PFV-3MS}	
	‘The cloud thundered.’		

Verbs that denote controlled activities show notable differences. When the verb can combine with a P, the agent-oriented construction where the P is omitted and not expressed explicitly generally takes the same A-like coding. When verbs of dress and grooming are used intransitively, the meaning can be reflexive without distinction in subject coding (e.g. *lwəš-le* ‘He dressed’). Typologically speaking, such controlled activities would be expected to be S_A verbs (Croft 2001:162-165; §2.3.1). Nevertheless, the S_P verbs also include controlled activities such as ‘dance’ and ‘learn’. ʤuroyo and NENA closely resemble each other in this respect. Only a few of such activities such as ‘swim’ take S_A coding in ʤuroyo (*šhe-le*) but S_P coding in NENA (*səxe-Ø*). The overall similar distribution in ʤuroyo and NENA is likely not incidental and parallels the categorization of stative or middle verbs in other Aramaic and Semitic languages.

Aspectual factors also play an important role. Telicity does not appear to be a significant trigger. Lexically, durative and stative situations do trigger P-like

coding, while punctual and dynamic situations trigger A-like coding. An S_P verb like *tym* ‘finish’ entails the cessation of an action and is more state and endpoint-oriented than an S_A verb like *bdy* ‘begin’ which is inherently more action and agent-oriented. The durative and stative correlate with the ‘imperfective’ where the A and S are also marked by the E-set.

A verb can occur in both S_P and S_A constructions, showing fluid subject marking. Similar semantic conditioning tendencies can be observed. Fluid subject marking can be conditioned by agentivity. Control may be a contributing factor: The A-like coding of *ylp* ‘learn’, for example, implies deliberate effort (controlled), while the P-like coding implies that the S learnt by being taught (uncontrolled). Animacy also contributes: When the S is an inanimate agent, the verb takes S_P coding, and, when the S is human and instigating, the S_A coding is preferred:

(46) **J. Sanandaj** (W Iran; Khan 2009:304, 543)

	[S]	[V-S]	[OBL]	
a.	<i>baxtăké</i> woman:FS:DEF	<i>nqəs-la</i> prickPFV-3FS	<i>ga-ʔil-í</i> at-hand-my	(S_A , human)
‘The woman pricked (lit. at) my hand.’				
b.	<i>xmatá</i> needle:FS:DEF	<i>nqis-a</i> prickPFV-3FS	<i>ga-ʔil-í</i> at-hand-my	(S_P , non-human)
‘The needle pricked (lit. at) my hand.’				

Fluid subject marking is also conditioned by aspect. Punctuality seems to be the primary contributing semantic factor in Țuroyo. The S_A construction favors a punctual reading:

(47) **Țuroyo** (SE Turkey; Ritter 1990:85)

a.	<i>kfəl-le</i> ²²⁰	‘He became hungry’	(S_A , punctual)
b.	<i>kafən-Ø</i>	‘He starved’	(S_P , durative)

A grammatical type of fluid subject marking conditioned by TAM is found in Jewish dialects of the northeastern periphery and Christian dialects in SE Turkey besides early scribal idiolects from N Iraq (§5.1.2). The S_P (i.e. E-set) construction generally denotes an observable (i.e. realis) state resulting from a prior event that can encompass stative, resultative, or perfect aspect (*dmix-Ø* ‘He is asleep,

²²⁰ < **kfən-le*.

has fallen asleep, has slept'). These can be viewed as subset of the imperfective aspect, while the s_A form (i.e. L-set) expresses the perfective past viewed from a complete whole (*dmāx-le* 'He went to sleep, slept').

Finally, we noted that a split in the coding of the s is also attested for non-ergative alignment. In the Jewish Urmi compound perfect, the coding of s and A is distinct for the third person (§4.6.3). Some semantically intransitive verbs are classified like primary transitive verbs and take transitive coding instead. The resulting split parallels South Eastern Trans-Zab Jewish. The main typological difference is the treatment of controlled activities such as 'dance' that do take transitive coding in Jewish Urmi (e.g. *rqil-é* 'He has danced') but intransitive in the 'ergative dialects'. Conversely, semelfactives or sound emission verbs such as 'bark' take intransitive coding in Jewish Urmi (e.g. *nwix-Ø* 'It_M barked') but transitive in the South Eastern Trans-Zab Jewish dialects. Presumably, telicity and dynamism play a greater role than punctuality in the Jewish Urmi perfect (Khan 2008b:73).

7.3. Lability and Ergativity

7.3.1. Lability, Passive, and Agent omission

Several Eastern Neo-Aramaic languages can employ an agentless 'perfective' form where the E-set is used to denote the patient and the agent is not expressed by agreement (e.g. *xabuše xil-i* 'The apples were eaten'). Although this is reminiscent of the passive, the NENA dialects usually prefer other passive voice constructions such as impersonal third person plural agent coding (§4.3.2). This construction was analyzed differently depending on whether the dialect groups the s with the P by the E-set or not.

Virtually all basic effective transitive verbs are labile in the so-called 'ergative dialects' (and, similarly, 'dynamic-stative dialects' such as Jewish Urmi). Based on semantic and morphological factors (§4.3.3), I established that the agentless 'perfective' form expresses the s and not the P in 'ergative dialects' (and similarly 'dynamic-stative dialects' like Jewish Urmi). Consequently, constructions like *xil-Ø* 'It_M was eaten' or *qṭil-Ø* 'He was killed' should be understood as ultimately derived from inchoatives like *plix-Ø* 'It_M opened' and *twir-Ø* 'It_M broke'. It should be noted that, in the Christian dialect of Bohtan (SE Turkey), closely related to the 'dynamic-stative' varieties, such a patient orientation is never available and an agent orientation is always preferred in order to express the perfect (e.g. *xil-Ø* 'He has eaten', *qṭil-Ø* 'He has killed').

Where lability is found in most other dialects, this is generally not distinct from the accusative pattern in the ‘imperfective’. If no patient index is present, there is no morphosyntactic distinction between a transitive or intransitive valence pattern apart from word order tendencies and differential object marking. There is a tendency for the P to follow the verb, and the S to precede it, but this is not fixed. There is also a tendency for object indexes to become a means to differentiate the transitive from the intransitive valence pattern (cf. Givón 1976:168). When a dialect can avail itself of a so-called *qam-qaṭal*-construction for perfective transitive clauses with object indexes, the intransitive valence pattern is always expressed by a *qṭil*-based form while the transitive valence pattern is ultimately based on the ‘imperfective’ *qaṭal*- to index the P:

(48) **J. Betanure** (NW Iraq; Mutzafi 2008a:256.399, 266.426)

	[S]	[V-S]	
a.	<i>tarʔa</i>	<i>pθəx-le</i>	(intransitive, inchoative)
	door:MS	open _{PFV-3MS}	
	‘The door opened.’		
	[P]	[V-A-P]	
b.	<i>tarʔa</i>	<i>qam-pāθx-i-le</i>	(transitive, causative)
	door:MS	PFV-open _{IPFV-3PL-3MS}	
	‘They opened the door.’		

The coding of the intransitive valence pattern can also traverse the TAM split (§6.4). The intransitive coding is morphologically adapted on the level of stem morphology for passive and anticausatives in the dialect Mlaḥso closely related to ʤuroyo. Mlaḥso, which displays neutral agreement, uses a dedicated intransitive construction on the basis of, ultimately, an ‘imperfective’ base (*mepseḥ-le* ‘It_M opened’). What expresses the difference in TAM is the choice of the E-set or L-set of person forms (cf. *mepseḥ-Ø* ‘It_M opens’). Consequently, special anticausative voice morphology (*meCCeC-*) is used to express the patient orientation (*tarʔó psiḥ-le* ‘He opened the door’ vs. *tarʔó mepseḥ-le* ‘The door opened’).

Complete omission of agent agreement is possible in ‘accusative dialects’ and can result in the retention of the transitive coding in a type of impersonal labile alternation. The agentless ‘perfective’ forms are effectively truncated transitive constructions, since the patient possesses properties of the P (contrary to the S) such as differential object marking and the agent can still be referential (§4.3.4). Such dialects allow the omission of agent agreement, presumably of

virtually every transitive verb. These agentless ‘perfective’ forms cannot be fully characterized as either passive or ergative. It is distinct from the passive prototype in that the patient retains object coding (e.g. *xil-a* ‘People ate it_F’, the E-set) and distinct from the ergative in that this object coding is clearly distinct from the s (e.g. *dməx-la* ‘She slept’, the L-set). The word order may be like the transitive or intransitive valence pattern of labile alternations. Third person, especially third person plural reference to the agent can be maintained (i.e. *xil-a* ‘(He/she/they) ate it_F’) and be semantically indistinct from the corresponding fully transitive, active construction. The agent may be overtly expressed in the dative like recipients (e.g. *l-kalwe xil-a* ‘It_F was eaten by dogs’) or completely zero-marked like the A (e.g. *kalwe xil-a* ‘It_F was eaten by dogs’). The latter is clearly not passive-like (§4.3.5). Yet, these constructions can evince focal marking of the agent much like differential and optional agent marking found in languages where ergative alignment predominates (2.4.3). In terms of agreement, an ergative grouping is only obtained in trigger potential. The zero realization of the A represents a distinct treatment from the overt agreement with the s and P (§4.3.3.). Nevertheless, I suggested that the agentless ‘perfective’ form expresses the event from the bare viewpoint of the endpoint, and that the agent’s recoverability from the context is determinant in identifying an agent and retaining object coding. I also suggested a possible pattern replication from the equivalent agentless and ergative construction in Kurdish.

Ṭuroyo differs from NENA in this respect. Virtually all verbs, including intransitives, can occur in a type of impersonal labile alternation (6.2.1.4). Thus, even subject coding may be simply left unexpressed (e.g. *rɪm(-Ø) šešwone* ‘It_M swarmed (with) ants’). The agent is not overtly expressed in such impersonal constructions. At the same time, Ṭuroyo personal labile alternations manifest ergative alignment (e.g. *ftiḥ-Ø* ‘It_M opened’).

The agent may also be omitted in the compound perfect where the agreement with the agent is generally expressed by the ‘copula’ and, usually also, the resultative participle (§5.2.3). Insofar as speakers perceive a patient-like argument to be more salient, the construction will not be agent-oriented and the agreement is controlled by the patient. Indeed, the agreement with the patient and lack of agreement with the agent is key to distinction in orientation. The agent can be overtly expressed, and may be morphologically identical with the P in the corresponding active through the dative preposition (*ʔal*)-. A greater structural cohesion between the P and the verb are determinant for the active as opposed to passive interpretation:

(49) C. Ashitha (NW Iraq; Borghero 2005:334-336)

	[V-A]	[COP:A]		[V-S]	[COP:S]	
a.	<i>q̣ṭil-a</i>	<i>winwa</i>	c.	<i>q̣ṭil-a</i>	<i>winwa</i>	
	killed-MS	PST:1MS		killed-MS	PST:1MS	
	'I _M had killed.'			'I _M had been killed.'		
	[V-P]	[COP:A]		[V-S]	[COP:S]	[OBL]
b.	<i>q̣ṭil-alle</i>	<i>winwa</i>	d.	<i>q̣ṭil-a</i>	<i>winwa</i>	<i>ʔalle</i>
	killed:MS-DAT:3MS	PST:1MS		killed-MS	PST:1MS	DAT:3MS
	'I _M had killed him .'			'I _M had been killed by him .'		

There is one respect in which the compound perfect with a patient orientation resembles ergative alignment. When the agent NP precedes the verb, it may be zero-marked like the A (e.g. *baxta Ø-babi=la q̣ṭilta* 'The woman was killed by my father'). It is the marked voice opposition that suggests it is passive.

7.3.2. Antipassive and Patient Omission

Most transitive verbs maintain an agent orientation and show no shift in the coding of the agent in patient omission constructions. The agent remains expressed by the L-set. In the South Eastern Trans-Zab Jewish varieties that show split subject marking, the stronger implication of an effect generally results in transitive coding (§5.1.1).

Similarly, there are intransitive verbs that occur in an anti-impersonal construction expressing dummy, non-referential (3fs.) object coding. When these verbs combine with a patient-like argument, the subject is coded like the A. Complex predicates or phrasal verbs reminiscent of noun incorporation in 'ergative languages' also occur where the intransitive or transitive verb takes a dummy nominal object element, most of which are transferred from Persian and/or Kurdish combining with *ʔwl* 'do' or *xØr* 'become' (e.g. Khan 2009:153). This is different from other languages that evince ergative alignment where non-referential dummy objects favor intransitive coding (Givón 1985a).

A few verbs, however, do display a difference reminiscent of antipassive voice constructions typical for certain 'ergative languages'. A semantically agent-like participant is expressed like the P instead. The antipassive-like construction expresses situations with semantically reduced transitivity (§2.3.3). In NENA, the antipassive-like intransitive construction involves a decrease in the degree of affectedness on the part of the patient-like argument (§4.3.3). It may also be used to express reflexives. In terms of aspect, the intransitive (antipassive) verbal forms can express a durative activity, while the transitive ('ac-

tive’/‘ergative’) refers to a punctual activity. The durative aspect correlates with the imperfective aspect constructions where the A and S are also marked by the E-set.

Non-human agents are not always compatible with the A-function, for which the antipassive-like form is preferred. The antipassive may be enhanced with a patient-like argument coded as oblique:

(50) **J. Sanandaj** (W Iran; Khan 2009:522)

	[A]	[V-A]	[P]	
a.	<i>hangǎké</i>	<i>nqəs-la</i>	<i>ʔəl-í</i>	(ergative)
	bee:FS:DEF	prickPFV-3FS	OBJ-1SG	
	‘The bee stung me.’			
	[S]	[V-S]		
b.	<i>xmatá</i>	<i>nqis-a</i>		(patientless antipassive)
	needle:FS:DEF	prickPFV-3FS		
	‘The needle pricked.’			
	[S]	[V-S]	[OBL]	
c.	<i>xmatá</i>	<i>nqis-a</i>	<i>ga-ʔil-í</i>	(antipassive)
	needle:FS:DEF	prickPFV-3FS	at-hand-my	
	‘The needle pricked my hand.’			

Similarly, human agents can be coded like the A in both constructions, but agents need not be, when they do not act deliberately. This shows that the degree of agentivity (i.e. control, instigation) is a significant, contributing factor. Similarly to subject marking, the marking of the agent can be split depending on agentivity. The A-like coding entails that the human argument deliberately initiates an action while the P-like coding rather entails that the something happens to the human argument:

(51) **J. Sanandaj** (W Iran; Khan 2009:304, 543)

a.	<i>ʔó rába mǎndixané</i>	<i>yləp-le</i>	(controlled, more A-like)
	he many thing:PL	learnPFV-3MS	
	‘He learnt many things (by himself).’		
b.	<i>ʔó rába mǎndixané</i>	<i>yǎlip-∅</i>	(uncontrolled, more P-like)
	he many thing:PL	learnPFV-3MS	
	‘He learnt many things (when taught by somebody else).’		

Ṭuroyo differs in several respects from NENA. When a verb exhibits an antipassive-like alternation, the transitive valence pattern takes transitive coding in NENA, expressing the agent by the L-set instead (unlike the S). In Ṭuroyo, several ‘neuter’ verbs can combine with a P in the same way as the ‘imperfective’ (e.g. *šamiṯ-o-le* ‘She heard him’) but contrary to most other transitive verbs such as *qṭl* ‘kill’ and *twr* ‘break’ that more strongly imply an effect (e.g. *twir-o-le* ‘He broke it_F’) (§6.2.1). These neuter verbs generally do not alternate with primary transitive verbs, do not express a passive orientation, and never seem to have a strong implication of a patient-like effect. The agent-like argument in this CaCiC-perfective is, strictly speaking, not the A. They constitute a special subclass of verbs mainly denoting intransitive or lowly transitive situations such as mental states. Ergative alignment is used for primary transitive verbs but a class of stative verbs always occur in this antipassive-like construction. Primary transitive verbs may be incompatible with the antipassive in certain languages. A few of such two-argument experiencer verbs (e.g. *yaləf-Ø* ‘He learnt’ and *iləf-le* ‘He learnt’) in Ṭuroyo may occur with either the A-like or P-like coding depending on what appears to be punctuality (§6.2.1.4). The A-like coding is preferred for the punctual reading. This is similar to fluid subject marking:

(52) **Ṭuroyo** (SE Turkey)

a.	<i>iləf-le qroyo</i>	‘He learnt to read.’	(punctual, A-like)
b.	<i>yaləf-Ø qroyo</i>	‘He learnt to read.’	(durative, P-like)

At the same time, it could indicate an instance where it is the intransitive coding that overrides alignment splits. In some languages where the alignment is split conditioned by TAM, the (ergative) transitive coding is preferred for primary transitive verbs such as ‘break’ even in the TAM constructions where other transitive verbs would follow a different (non-ergative) pattern. In Ṭuroyo, it would be the other way around. The primacy of an intransitive verbal class favors non-ergative coding regardless of TAM.

By contrast, most strategies to mark the P differently from the E-set in the ‘perfective’ are morphologically parallel with the ‘imperfective’ in NENA (§4.4). In some cases, the coding of the agent is also modified. An extreme case we discussed is the *qam-qatəl*-construction (§4.4.2), not found in the Trans-Zab Jewish dialect bundle or Central Neo-Aramaic, also correlates with transitivity alternations. This is not dependent on verbal class but on the nature of object coding. Reviewed below, the *qam-qatəl*-construction combines with an object index and

is used in dialects where the S and A are grouped by the L-set in the perfective past:

- (53) **J. Betanure** (NW Iraq; based on Mutzafi 2008a, compare p. 266.426 and 239.440)
- | | | | |
|----|----------------------------------|---------------|--|
| | [V-S] | | |
| a. | <i>xəl-le</i> | | (intransitive) |
| | eat _{PFV} -3MS | | |
| | ‘He ate.’ | | |
| | [V-A] | [P] | |
| b. | <i>xəl-le</i> | <i>xabūša</i> | (transitive but identical with intransitive) |
| | eat _{PFV} -3MS | apple:FS | |
| | ‘He ate an apple.’ | | |
| | [V-A-P] | [P] | |
| c. | <i>qam-ṭāxəl-Ø-la</i> | <i>xabūša</i> | (transitive but distinct from intransitive) |
| | PFV-eat _{IPFV} -3MS-3FS | apple:FS | |
| | ‘He ate the apple.’ | | |

It is the opposite of an antipassive voice construction. In the antipassive, the coding of the agent is typically distinct from the A in the transitive valence pattern in the absence of the patient. In the *qam-qaṭəl*-construction, the coding of the agent is distinct from the S in the presence of a patient index but the same as the S in the absence of a patient index. It results in a major distinction in the coding of the agent. The morphosyntax of transitive clauses without a patient index is not distinguishable from intransitive clauses. Yet, transitive clause that include a patient index are morphologically adapted to the transitive coding of ‘imperfective’ constructions. Therefore, the *qam-qaṭəl*-construction is arguably more transitive and not compatible with patient omission constructions. It is, however, compatible with anti-impersonal constructions with dummy third person object coding that are semantically intransitive.

7.4. Argument-Related Scales and Splits

7.4.1. Patient-Related Scales

An argument’s position on the prominence scale is generally assumed to correlate with the overt coding and trigger potential of agreement (§2.4). The S, in turn, is typically realized as zero (§2.4.1). Arguments ranking lower in promi-

nence are expected to evince the same coding properties as the S, while Ps that are highly prominent are not, since they are differentially marked either in case-marking or agreement. Therefore, differential object marking tends to reflect a distinction between the grouping of P with S ($P=S$) for lower ranking arguments and differentiation of P and S ($P\neq S$) for higher ranking arguments. In alignment splits based on an argument's relative position on the prominence scale, ergative alignment ($A\neq S=P$) tends to be found for the lower ranking arguments, while non-ergative alignment for the higher ranking arguments.

Most Eastern Neo-Aramaic languages make a distinction between several transitive constructions depending on the relative position of the P on the prominence scale. The 'perfective' and 'imperfective' show considerable overlap in terms of differential indexing and case-marking patterns. Even though the exact conditions of prominence (though mainly definiteness) differ per dialect, they are generally the same as with the 'perfective' and 'imperfective' constructions, despite the fact that the role marking of the agreement morphology is inverted. This demonstrates that some speakers have no difficulty in handling agreement inversion. Yet, dialects can differ strongly to what extent they overtly express the P-function. In some dialects such as Mlahso, object coding is rather simple and there is hardly any object coding altogether, so that object anaphora are simply unexpressed (§6.3.1). In yet other dialects such as Christian Hertevin, transitive constructions with an object index are extremely more complex than those without (§4.4.3).

What is evidently complicating, however, is person reference. Indeed, it is the absolute person reference of the P in the 'perfective' that influences most alignment variation. First/second person are not compatible with the P role in the inverted 'perfective' construction (e.g. ***nšiq-ax-loxun* 'You_{PL} kissed us') in the majority of Eastern Neo-Aramaic (§4.1.1). In several NENA dialects, the 3pl. and/or 3fs. may also be incompatible and sometimes even completely for all persons (as in Mlahso). This person role constraint closely correlates with a decrease in the use of the E-set as object indexes and the increase of other, innovated object marking strategies (cf. Mengozzi 2005; Khan 2007a; Coghill 2016) but not necessarily a decrease of ergativity. First/second person forms, being most topic-worthy, play a key role in the birth of DOM (e.g. Bossong 1985; Haig 2008:152). Alternative strategies to mark the P in the 'perfective' are available in all dialects. Generally, when a NENA dialect employs a different strategy for first/second person forms, this strategy is also available as an alternative for third person forms. Interestingly, by contrast, the two strategies are complementary and always preferred for a particular person category in ʿTuroyo. Moreover,

alternative strategies may co-vary for all persons in person-unrestricted dialects where the inverted ‘perfective’ construction is compatible with all persons in the P function. Conversely, there are dialects where the ‘alternative’ strategy is completely conventionalized for all persons and the E-set does not express the P at all. Thus, only Turoyo and the dialects where the E-set of object indexes is obsolete manifest a symmetric system, while all other varieties are asymmetric. Table 47 below provides an overview of the person-based alignment splits in the preterit and Table 48 (on the next page) of person and/or gender-based splits in the perfect. One should note, however, that the splits are not complementary in NENA dialects. The third person, sometimes the third masculine singular obligatorily, is included in the distinct set of the first/second person forms in NENA. Also, independent pronouns and full nominals do not pattern ergatively in C. Hertevin, even though the dependent third/second person forms point to ergative alignment (§4.4.3.4).

Table 47. *Overview of person splits in the ‘preterit’*

1 ST /2 ND PERSON (V-A-P)	3 RD PERSON (V-P-A)	DIALECTS
(A=S≠P) accusative	(A=S≠P) accusative	across NENA dialects (e.g. J. Challa, J. Barzani, J. Arbel)
(A=S=P) neutral	(A=S≠P) accusative	NW Iranian Jewish dialects (e.g. J. Urmi)
(A≠S≠P) tripartite	(A≠S=P) ergative	South Eastern Trans-Zab Jewish (e.g. J. Sulemaniyya)
(S≠A=P) horizontal	(A≠S=P) ergative	Turoyo (SE Turkey), J. Saqqiz (W Iran)
(A≠S=P) ergative	(A=S≠P) accusative	<i>qam-qatəl</i> -construction in Khabur, Iraq and Iran, L-E-series in C. Hertevin (SE Turkey)

In several dialects, independent object person forms like the *ʔall*-series are preferred, especially for the first/second person, treating them like full nominals. Such person splits are first and foremost a constructional split and have no direct bearing on ergativity (§4.2). It demonstrates that a particular set of argument indexes (i.e. the E-set) is gradually being replaced depending on the dialect. The same constraint simply works out differently in each dialect (group) and what is pertinent to alignment is only the marking of the S and its relationship to other core arguments.

Table 48. *Overview of person and gender-based splits in the ‘perfect’*

1 ST /2 ND PERSON	3 RD PERSON	DIALECTS
(A=S≠P) accusative	(A=S≠P) accusative	most of NENA dialects
(A=S≠P) accusative	(A≠S≠P) tripartite	NW Iranian Jewish dialects
(A≠S≠P) tripartite	(A≠S=P) ergative	most of Trans-Zab Jewish (NE Iraq, W Iran)
(S≠A=P) horizontal	(A≠S=P) ergative	Ṭuroyo (identical with preterit)
FEMININE	NON-FEMININE	DIALECTS
(A≠S=P) ergative / (A=S≠P) accusative	(S≠A=P) horizontal	J. Sulemaniyya and Ḥalabja (NE Iraq)
(A≠S=P) ergative	(A=S≠P) accusative	NW Iranian Jewish dialects

Both ‘accusative dialects’ such as Jewish Arbel (NE Iraq) and ‘ergative dialects’ such as Jewish Sulemaniyya (NE Iraq), it leads to a difference in the independent or dependent expression of objects in ‘perfective’ constructions. This is illustrated in (54) below. The independent expression by the *ʔall*-series is favored, when no dependent person forms (i.e. the E-set) are available. The prepositional marking system penetrates the person marking system. Consequently, the main difference between these two dialects is the coding of the s. Since the s is marked by the L-set in Jewish Arbel, there is no distinction in the relationship between the s and other core arguments. Both first/second and third person forms pattern accusatively, albeit through different coding properties. By contrast, since the s is marked by the E-set in Jewish Sulemaniyya, only the third person forms pattern ergatively and the first/second person forms follow a tripartite pattern (A≠S≠P). This concurs with the predications based on cross-linguistic tendencies. Cross-linguistically, object person forms tend to be coded independently (Siewierska 2004:46-47) and independent person forms, if restricted, typically refer to human referents, especially in the R function (ibid. 60-61). In line with this, the *ʔall*-series otherwise mark the R. The ergative-tripartite person split is consistent with the prominence scale, since the s and P groups the lower ranking persons. Yet, it should be noted that tripartite alignment is equally attested for the third person (i.e. *qṭal-le ʔalla* ‘He killed her’) which counters the prominence scale.

(54) **Accusative and tripartite compared**

J. Arbel (Khan 1999)		J. Sulemaniyya (Khan 2004a, 2007a)	
ACCUSATIVE-ACCUSATIVE		ERGATIVE- TRIPARTITE	
[V-S]		[V-S]	
a.	<i>qəm-la</i> 'She rose.'	e.	<i>qim-a</i> 'She rose.'
[V-P-A]		[V-P-A]	
b.	<i>qətl-a-le</i> 'He killed her.'	f.	<i>qətl-a-le</i> (dependent) 'He killed her .'
[V-A] [P]		[V-A] [P]	
c.	<i>qət-l-le</i> <i>ʔəllax</i> 'He killed you _{FS} .'	g.	<i>qət-l-le</i> <i>ʔəllax</i> (independent) 'He killed you _{FS} .'
[V-S]		[V-S]	
d.	<i>qəm-lax</i> 'You _{FS} rose.'	h.	<i>qim-at</i> 'You _{FS} rose.'

In Turoyo (SE Turkey) and the Jewish dialects like Saqqiz (W Iran) and Sanandaj (W Iran), horizontal alignment is confined to first/second person arguments alternating with ergative for the third person. Again, in NENA, the ergative pattern of the third person also shows signs of conflict with the prominence scale, namely: these West Iranian Jewish dialects manifest an alternative tripartite pattern for the third person alongside the ergative.

Neutral alignment is necessary for first/second person forms in the North West Iranian Jewish dialects such as Urmi and this alternates with accusative for the third person only. The fact that neutral alignment is preferred also shows that the differential marking is not geared to disambiguate the A from the P in phonological form. Again the fundamental difference between the two in terms of alignment is the coding of the S while the transitive constructions are similar:

(55) **Horizontal and neutral compared**

J. Urmi (Khan 2008b)		Turoyo (Miden, cf. Jastrow 1985)	
ACCUSATIVE-NEUTRAL		ERGATIVE-HORIZONTAL	
[V-S]		[V-S]	
a.	<i>qəm-la</i> 'She rose.'	b.	<i>qayim-o</i> 'She rose.'

	[V-P-A]		[V-P-A]
c.	<i>xəzy-ā-le</i>	f.	<i>ḥəzy-o-le</i>
	'He saw her.'		'He saw her .'
	[V-A-P]		[V-A-P]
d.	<i>xzə-le-lax</i>	g.	<i>ḥzə-le-lax</i>
	'He saw you _{FS} .'		'He saw you _{FS} .'
	[V-S]		[V-S]
e.	<i>qəm-lax</i>	h.	<i>qayim-at</i>
	' You _{FS} rose.'		' You _{FS} rose.'

A morphologically very different phenomenon is the *qam-qaṭəl*-formation to express the preterit. Yet, functionally, it is a type of differential object marking in that first/second person objects need to be marked by the L-set in this *qam-qaṭəl*-preterit against the alternative *qṭil*-preterit available for the third person, as reviewed below. Differential object marking has at least partly motivated the construction of an entirely distinct verbal form dedicated to the higher ranking P arguments.

(56) *qṭil*- and *qam-qaṭəl*-preterit compared

J. Zaxo (based on Cohen 2012:458-465)

	[V-S]
a.	<i>qəm-la</i>
	' She rose.'
	[V-P-A]
b.	<i>xəzy-ā-le</i>
	' He saw her.'
	[V-A-P]
c.	<i>qam-xāzə-ø-lax</i>
	'He saw you _{FS} .'
	[V-S]
d.	<i>qəm-lax</i>
	' You _{FS} rose.'

Regardless of alignment type, a prominent (primarily definite) P generally determines the prepositional marking and/or overt expression of cross-indexes of the P. (57) is an illustration of such DOM constructions in the 'perfective' based on the morphological pattern of Trans-Zab Jewish varieties. Differential prepositional marking and indexing can occur independently or combined.

(57) **Differential object marking**

	[A]	[(DOM→)P]	[V(-P)-A]	
a.	<i>ḥatán</i>	<i>ʔəl-kaldá</i>	<i>nšəq-le</i>	(diff. case-marking only)
	groom:MS	DOM-bride:FS	kissPFV-3MS	
b.	<i>ḥatán</i>	<i>kaldá</i>	<i>nəšq-a-le</i>	(diff. indexing only)
	groom:MS	bride:FS	kissPFV-3FS-3MS	
c.	<i>ḥatán</i>	<i>ʔəl-kaldá</i>	<i>nəšq-a-le</i>	(both strategies combined)
	groom:MS	DOM-bride:FS	kissPFV-3FS-3MS	
	'The bridegroom kissed the bride .'			

Differential case-marking by itself does not generally lead to distinct alignment types across dialects, since, by and large, the A is not overtly case-marked. The main opposition is between neutral for lower ranking arguments and accusative for the higher ranking ones. DOM may sometimes even involve several prepositions in a single dialect, e.g. *qa-*, *ṭla-* and *l-* in Barwar (Khan 2008a:784ff.). Incidentally, it results in horizontal case-marking ($S \neq A = P$) in the Raite dialect of Turoyo (6.1.3).

When we consider the differential indexing of full NPs, on the whole, the E-set of object indexes seems to be preferred in this function rather than the expression of pronouns. This preference may indicate that the agreement with the P in the inverted *qṭil*-base still reflects at least partially a vestige of what historically used to represent adjectival agreement in number and gender with nouns which is gradually replaced by a person indexing system. The differential indexing of patients by other transitive 'perfective' constructions is not always and not equally available in all dialects. The *qam-qaṭal*-formation, for example, is preferred for pronominal arguments and, therefore, the L-set can function as a pro-index rather than a cross-index, because, depending on the dialect, co-referential nominals can be incompatible. In the Christian dialect of Hertevin, the main usage of the E-set as object indexes is the indexing of topical, full nominal patients and, thus, a co-referential nominal is strongly preferred. The special transitive 'perfective' construction with the L-E-series denoting the agent must be used similarly to the *qam-qaṭal*-formation, when the P is pronominal and, necessarily, when it is first/second person (e.g. *ḥzē-l-en-naḥ* 'I saw you_{FS}'). Presumably, the alternative constructions become more readily included in the differential indexing via the third masculine singular, since, in some dialects, the *ʔəl*-series may be included as post-verbal cross-indexes.

This only indirectly influences the manifestation of alignment types where again the coding of the S is crucial. The E-set as patient indexes is limited to the

differential indexing of definite full NPs in the 'perfective' to the same degree as it the L-set as patient indexes in the 'imperfective'. Consequently, this also limits the manifestation of ergative agreement to definite full NPs (§4.2.3). By the same token, NPs of lower ranking in prominence follow a tripartite pattern, when the expression of the P is zero only because the S and A are kept distinct. The same holds for fully overt accusative agreement (§4.2.1) and neutral agreement (§4.2.2): They are confined to higher ranking NPs. Also, depending on the dialect, the alternative strategies can also be used in the differential indexing of third masculine singular Ps (because of the 3ms. zero realization in the E-set). In the end, the transitive constructions in (56) are functionally not very different across dialects, it is the intransitive constructions that differ.

At first value, this is remarkable, since one would not expect such grouping with S and P to be dependent on differential object marking. Ergative agreement for the higher ranking nominals is in direct conflict with the expectations for alignment splits. Differential P-marking is usually associated with non-ergative patterns, precisely because the properties of the P are central to its overt expression (and not the A). Yet, this need not surprise us, since the coding of the S is independent of such referential factors. It simply demonstrates, that, although accusative in terms of trigger potential, differential object marking is not confined to a particular morphological alignment (cf. Bosson 1985). Similarly, differential object marking by the preposition (*ʔal*)/- is found alongside accusative (§4.2.1), neutral (§4.2.2) and ergative (§4.2.3) agreement. From the perspective of the variation within NENA, then, the possible combination of ergative agreement and accusative case-marking in South Eastern Trans-Zab Jewish varieties makes perfect sense. The same constructions are found across dialects, but the difference is the marking of the S (which is not sensitive to the prominence scales).

Ergativity in itself, therefore, plays no role in the constructional preferences for person referents. Other factors presumably do contribute. Affix order, for instance, is not altogether insignificant. The V-P-A order is only available for the third person while the V-A-P order is necessary for the first/second person. Indeed, it seems that the proximity between the agent coding and the verbal stem is preferred in the constructions where the P is first/second person. This also holds for compound verbal constructions where ergativity does not occur even in the dialects that evince ergative alignment in the perfective past (§5.3.1). The compound progressive in Jewish Sulemaniyya, for example, requires independent expression of first/second person objects by means of the *ʔall*-series (*gorašá=y ʔall-ax* 'He is pulling you_{PS}'), while a V-P-A order is available for third person ob-

jects by means of a different set of affixes (*garoš-áw=y* ‘He is pulling her’) (§5.2.2). The imperative in Turoyo also shows a similar split to the ‘perfective’ without a trace of ergativity, although affix order need not play a role here.

7.4.2. *Agent-Related Scales and Splits in Transitivity Coding*

The (ergative) distinction between A and S (A≠S) may also depend on argument-related scales (§2.4.3). Following the prominence scale, A arguments ranking lower on such scales are not expected to show the same coding properties as the S. This is partially supported by the fact that arguments that are inanimate are possibly incompatible with the A-function or may be distinctly marked. Similarly, one would not expect ergative marking to be confined to the higher ranking first and/or second persons and neutral or accusative alignment to the lower ranking person category.

While the P and R can be marked by various prepositions, the A, if applicable in the dialect, can be marked only by the dative preposition *l-* and its allomorphs. The special marking of the A in Turoyo is optional and always combined with overt agent agreement (§6.1.3). At least one of the conditioning factors of this ergative construction is agent focus. The dative preposition (*e*)*l-* is used to express the unexpectedness of the A reminiscent of other languages that show differential or optional A-marking. It should be pointed out, however, that zero coding is also found for A arguments in focus, but overt marking of the A clearly correlates with agent focus. This dative agent construction is combinable with either differential ergative agreement or differentially, identically marked dative Ps, when such a focal agent combines with a prominent patient. The co-variation between an overtly and zero-coded A closely resembles predicative possessor constructions.

A less clear but also possible instance of focal A-marking is attested in NENA dialects where the L-suffixes group the S and A in the preterit (§4.3.5). This analysis is complicated by the connection with impersonal passives. There is a strong tendency to reduce the referentiality of the agent and restrict the person reference to the third person and especially third person plural. Only the L-suffixes denoting the A may be omitted in the agentless ‘perfective’ form while the verb expresses agreement with a salient P. Often another verb in the immediate context expresses the same topical referent:

- (58) **C. Ashitha** (Literary, NW Iran; Polotsky 1996:17, transcription modified)

θe-lay *šqil-a(-Ø)* *baxta* *b-xurṭūθa* *w=zəl-lay*
 come_{PFV-3PL} take_{PFV-3FS(-3PL)} woman:FS by-force and-go_{PFV-3PL}
 ‘They came, **took** the woman by force and went.’

This agentless ‘perfective’ construction in these dialects is possibly akin to some languages such as Konjo (Friberg 1996) where agent agreement is absent, when the A is focal (Siewierska 2004:160-162). The lack of agreement in itself is not clearly connectable with agent focus in NENA but when the agent is a full nominal, focalization may be involved. Interestingly, the full nominal agent can be either zero-marked or marked by the dative preposition (*ʔəl-*)/-. When the agent nominal is marked by the dative, it is often focal, but there is no agent agreement as in Turoyo. In addition, there is referential continuity between such dative agents and subsequent agent L-suffixes:

- (59) **Early C. Alqosh** (Literary, NW Iraq; Mengozzi 2002a)

šqil-Ø(-Ø) *l-māl[ā]xē* *w-nube-Ø-lay* *drē-Ø-lay* *b-gehan[ā]*
 take_{PFV-3MS(-3PL)} DAT-angel:PL and-carry_{PFV-3MS-3PL} put_{PFV-3MS-3PL} in-PRN
 ‘**Angels** took him and carried him and put him in Gehenna.’ (J6 142.79d)

If this is a type of focal ergative case-marking, then it combines with tripartite indexing, since the S (i.e. L-set) is marked distinctly from the P (i.e. E-set). Historically, such dative agents and the L-suffixes were similar instances of the same preposition, one nominal and the other pronominal. Synchronically, this relationship is complicated by the fact that the L-suffixes are fully grammaticalized verbal suffixes and other person forms are expressed like full nominals by the same preposition.

In terms of agreement, overt expression of the A is dependent on gender and number in the compound realis perfect in certain Trans-Zab Jewish dialects. In Jewish Sulemaniyya, the feminine singular triggers agreement regardless of role, but, if my analysis is correct, in Jewish Urmi and presumably dialects akin to it, special marking of the A is confined to the feminine singular, so that the feminine singular aligns ergatively while the masculine singular aligns neutrally (§5.3.1).

Verbal constructions can depend on the animacy of the A in dialects that the group the S and P by the E-set. In Jewish Sanandaj, this is marginal and also lexically motivated by the meaning of the verb. In a transitivity alternation, a non-human agent receives intransitive coding similar to the P, while a human agent

receives the transitive coding of the A (§5.1.1.1). This demonstrates that highly animate arguments are not always compatible with the P-like coding in the S role and that inanimate arguments are not always compatible with the A-function and require an intransitive verbal construction instead. While this clearly interacts with voice, it is the lower ranking argument (inanimates) that favors marking distinct from the A.

Similarly, person reference correlates with or confines A-marking. The trigger potential of the P outranks the A and even for third person in the compound realis perfect of West Iranian Jewish dialects (§5.3.5). The A is confined to the third person and realized as $\emptyset$. It shows neither prepositional marking nor agreement, while a prominent P, though also confined to the third person, freely triggers such coding properties. A first/second person A must be expressed via a different construction based on the ‘perfective’. No such restrictions are found for the S, however. As expected, therefore, the ergative pattern is confined to lower ranking persons and it is the A that is zero-coded. A tripartite pattern unfolds, when the A is first/second person.

Moreover, I suggested that relative ranking of person may have contributed to the conventionalization of the person role constraint in the ‘perfective’ (§4.1.1). When the P outranks the A in person, the use of the E-series or inverted ‘perfective’ construction seems to be more acceptable for speakers of otherwise person-restricted dialects (e.g. *šqil-ax-la* ‘She took us’), whereas, when both the A and P are maximally topicworthy, the construction is impossible (e.g. ***šqil-ax-loxun* ‘You_{PL} took us’). The fact that a balanced third person expression is possible indicates that role disambiguation is not significant in itself. The relatively lower ranking of the A is presumably significant in the choice of transitive ‘perfective’ constructions. It is conceivable that this also played role in the development of the person role constraint. The person role constraint is grounded in agent-related properties. An agent-like topicworthy argument is not compatible with the P coding. When we consider that first/second persons are more topicworthy and attract agent-like properties more so than the third persons, we can expect a conflict between two potential agents to be greater for arguments of the highest person reference and, thus, in such transitive clauses where the A and P are both maximally topicworthy, i.e. the first/second person clustering role association. This is complicated further by the agreement inversion. The P in the ‘perfective’ is coded like the A in the ‘imperfective’. The potential for agent-likeness may become somewhat greater through morphological identity. While this is, strictly speaking, independent of alignment type, the disambiguation between two poten-

tial agents would arguably be even more important, when the P marked by the E-set possibly also aligns with the S. This could explain why the person role constraint is fiercest in the dialects where the E-set can express the S alongside the P and why such person restrictions are not found in the intransitive constructions, since no such a conflict would arise. Moreover, it is possible that such first/second person clustering associations (***šmiʔ-ax-loxun* ‘You_{PL} heard us’) were never possible in the ancestors, and that the original *šmiʔ* *l*-construction was an impersonal construction to begin with.

Furthermore, special marking of the A may also be dependent on person reference. Typologically, the Christian dialect of Hertevin shows a rather complex agreement system in the ‘perfective’ (§4.4.3). Yet, if my analysis is correct, the first/second person pattern ergatively, while the 3ms. patterns neutrally and the 3fs. and 3pl. patterns either neutrally (e.g. *wéd-la-lehen* ‘She made them’) or accusatively (e.g. *wid-i-la* ‘She made them’). This would be an interesting counterexample to the predictions of the prominence scale, since it is the highest ranking arguments that pattern ergatively while the lower ranking persons do not. Typologically, independent pronouns and full nominals would not be expected to pattern accusatively alongside ergatively aligned dependent person forms but they do in C. Hertevin.

The reason for this special marking of the A is presumably connected with the possible conflict sketched above. The first/second person coding of the E-set triggers an agent-orientation. The E-set as objects indexes is only available in the inverted ‘perfective’ construction and confined to the 3fs. and 3pl. The special marking of the A is manifested in the E-set as fused with an inserted /l/-element akin to the L-suffixes, instantiating a separate set that I termed the ‘L-E-series’. This formation of the L-E-series is clearly analogical to transitive ‘imperfective’ constructions where the E-set always marks the agent:

(60) **C. Hertevin** (SE Turkey; based on Jastrow 1988)

	[V	-P	-A]	
a.	<i>wid</i>	<i>-a</i>	<i>-le</i>	‘He made it _F ’
	make _{PFV}	-3FS	-3MS	
b.	<i>wid</i>	<i>-en</i>	<i>-noḥ</i>	<i>**</i> ‘You _{MS} made me _M ’ but possibly ‘I have made you’
	make _{PFV}	-1MS	-2MS	
	[V	-A	-P]	
c.	<i>wéd -l</i>	<i>-én</i>	<i>-noḥ</i>	‘I _M made you _{MS} ’
	make _{PFV}	-1MS	-2MS	
d.	<i>ʔod</i>	<i>-en</i>	<i>-noḥ</i>	‘I _M make you _{MS} ’ (imperfective)
	make _{IPFV}	-1MS	-2MS	

The insertion of the /l/ is presumably also connected with the distinction in the marking of TAM for subjects that is expressed by the choice of sets of person forms, namely the E-set for the realis perfect (e.g. *dmiḥ-en* ‘I fell asleep’) and the L-set for the perfective past (e.g. *dmeḥ-li* ‘I slept’). In a related Christian dialect of Bohtan, this is completely grammaticalized for the agent and there is no inverted ‘perfective’ construction. The E-set expresses the A and S in the realis perfect as in the ‘imperfective’ (e.g. *xil-a-le* ‘He has eaten it_F’, *ǧz-ən-nux* ‘I_M have seen you_{MS}’) but the L-set expresses all grammatical functions in the perfective past (e.g. *xə-la-le* ‘She ate it_M’, *ǧze-li-lux* ‘I_M saw you_{MS}’). What differs between the two tenses, is the expression of the agent (§4.7.2.). The /l/-insertion in Hertevin, then, functions similarly to the L-set of agent indexes in Bohtan in the expression of the perfective past. A form like *wed-en-noḥ* in (cc) could, in theory, be interpreted as perfect ‘I_M have made you_{MS}’ in C. Hertevin.

Perfective transitive clauses with an object index can be treated very differently from those without and this creates a constructional split (§4.7). Although this is primarily motivated by the properties of the P, it can also affect the coding of the A. A co-referential nominal patient is not obligatory and sometimes even impossible in such constructions. The L-E-series in C. Hertevin only manifest themselves in the combination with a dependent object person form (that may cross-index a co-referential NP). Similarly, the *qam-qatəl*-construction also requires transitive coding but the marking of the A is the same for all persons. I suggested that these two constructions may have been partly motivated by a dialect-dependent disfavor of doubled L-suffixes in the ‘perfective’.

In addition, compound verbal forms analogical to the ‘imperfective’ also treat such transitive clauses differently and this affects the coding of the A, especially of the first/second persons. Without an object index, the A agreement is indistinct from S agreement. This also connects with the person role constraint. Two potential agents may be in conflict in the combination of two dependent forms in the ‘perfective’. The adaptation to the ‘imperfective’ presumably offers a simple solution, normalizing the use of the L-set to mark the object. The merger of the compound perfect with the ‘imperfective’ also yields forms virtually identical with that of the ‘perfective’, because of the correspondence between the resultative participle (*qṭila*) and the ‘perfective’ inflectional base (*qṭil-*). A few person-restricted dialects would have completely merged the compound perfect and transitive ‘perfective’ constructions in the masculine singular forms of first/second person agent indexes, if such forms would have been available in

the ‘perfective’ (§5.2.5). Such perfect and pluperfect ms. forms would be phonologically identical with equivalent preterit and pluperterit constructions while the person indexing patterns like the ‘imperfective’. The first/second person markers of the E-set denote the A rather than the P, while the third person markers of the E-set remain available to mark the P rather than the A in the preterit:

(61) **J. Urmi** (NW Iran; based on Khan 2008b)

PERFECT (+ <i>qtila</i> + E _{1/2} -set)		PRETERIT (+ <i>qtil</i> - + E ₁ -set)
+ <i>qtil-ən-ne</i>	:	**+ <i>qtil-ən-ne</i>
‘I _M have killed him.’		‘He killed me_M .’
+ <i>qtil-ən-wa-le</i>	:	**+ <i>qtil-ən-wa-le</i>
‘I _M had killed him.’		‘He had killed me_M .’

7.4.3. *Ditransitive Constructions and the Prominence Scale*

Ditransitive constructions can be studied in terms of role and prominence ranking associations (§2.4.4, §3.4). Higher ranking arguments are associated with the R role, while lower ranking arguments are associated with the T role. Ditransitive constructions can show complex interactions of differential indexing and case-marking.

This monograph briefly touched upon such phenomena in Eastern Neo-Aramaic. In both NENA and Central Neo-Aramaic, generally, when both the T and R are pronominal, only one of them can be expressed by the E-set or L-set on the verb (§3.4.2). An exception is found in a few dialects where an ‘imperfective’ verbal construction can comprise two object indexes from the L-set (§3.2.4). The ‘clustering’ pronominal association alternates between an indirective construction where the R is prepositional and a secundative construction where the third person T is represented by a special set of person forms known as the enclitic ‘copula’ (§3.4.1). There is no balanced person split. The indirective pattern is available to all person role associations but it is necessary for higher ranking themes. The secundative pattern, however, is incompatible with higher ranking themes. The T is necessarily third person.

In clauses containing full NPs that are not differentially marked, indirective alignment is preferred when the arguments are of equal ranking, although lexically restricted double object constructions also occur. A prepositional full nominal R is favored in the combination with a pronominal T. Conversely, a zero-marked full nominal T is favored in the combination with a pronominal R.

The preposition used in differential P-marking is generally identical with the dative preposition that marks the R (§3.3.1). The prepositional marking of the R is not sensitive to the prominence scale. There is a cross-dialectally strong tendency to avoid the joint marking of both the T and R by the same preposition but there are exceptions (§4.2.2.2). This is an important difference between pre-modern Aramaic languages such as Syriac and the Eastern Neo-Aramaic varieties discussed in this dissertation. Syriac allows the identical case-marking of the T and R (§2.4.3).

Since the T cannot be case-marked in indirective constructions, another coding property is used instead, so that differential indexing is generally only controlled by the T. This appears to be triggered primarily by definiteness. When the theme is omitted, the recipient may become available for differential indexing alongside its indirective prepositional marking. In a few exceptions, the R is not overtly case-marked but may be indexed like the P instead of the T. Even though differential case-marking and indexing may be freely combined in the marking of the P, they are generally not combined in the marking of the T alongside the R. An exception is Jewish Urmi and presumably closely related dialects where differential case-marking of the T ($T=P=R$) occurs alongside differential indexing of the T ($T=P\neq R$) (§4.2.2).

Thus, on the whole, the two coding properties seem to be balanced. Agreement is associated with themes, while case-marking is associated with recipients. Agreement with the T overrides agreement with the R, while case-marking of the R blocks the identical case-marking of the T.

The dative agent construction in Ṭuroyo bears close resemblance to the expression of recipients and predicative possessor constructions (§6.1.3). The dative marking of the A is optional and may indicate agent focus. It can be combined with tripartite or ergative indexing. The ergative indexing of the P is differential. Generally, the identical case-marking of both the A and P is avoided, so that the distribution of agreement with the P and case-marking of the A is similar overall to the T and R in the ditransitive constructions. In at least the dialect of Raite, however, both the A and P can be identically case-marked but there seems to be no additional agreement with the P.

Furthermore, such focal agents in the ‘perfective’ can be identically marked as recipients. Both the A and R can be prepositional and cross-indexed by L-suffixes. In Ṭuroyo, therefore, prepositional As in the ‘perfective’ are treated in the same ways as recipients, especially as the recipient and agent-like argument in the predicative possessor constructions where the possessor is cross-indexed

by L-suffixes and optionally marked by the dative. This could point to a parallel historical development.

7.5. Concluding Remarks and Outlook

The alignment variation in NENA and Central Neo-Aramaic is generally characterized in the literature as a departure from the ergative and a shift towards accusative alignment. The ergative morphology is exceptional within Aramaic and Semitic in general and is dissolved by accusative constructions driven by its overall accusative syntax. Strictly speaking, however, the findings of this study indicate that this picture is simplistic. The accusative grouping of the S with the A to the exclusion of the P is neither necessarily being promoted nor ergativity necessarily being diminished. It is not unlikely that further research will reveal even more variation than noted in this study. Yet, despite (or perhaps rather because of) the astonishing variation in modern Aramaic, there is no witness to a fully coherent ergative type in the data we have. Where it is observed, the conditions are not always what we might expect typologically. From the perspective of Neo-Aramaic syntax, however, ergativity is as compatible as the accusative or other alignment types with the agreement and case-marking systems.

Further research is needed to investigate the implications for historical dialectology, possible diffusion of constructions, and interdialectal communications, taking into account the speakers' religious identity. There is no synchronic evidence that compels us to assume that the grouping of S and P ever was coherent for Eastern Neo-Aramaic. Historically, ergativity or its possible functional motivations are not necessarily the ultimate trigger of the splits observed. Alignment has probably been unstable to begin with due to the inherent versatile nature of the resultative participle (*qṭil-*) that the alignment variation is based on, ergativity being one of several possible outcomes. In the evolution of constructions, the S and P (or the A) may lead a life of their own, and the relationship between them need not be symmetric. Transitive and intransitive constructions are likely not to have had the same status from the beginning. The historical potential for ergative agreement hinges on the resolution of the adjectival agreement with the original S into the expression of the P. Person forms play a key role in the coding of alignment in NENA and Central Neo-Aramaic.

Finally, this study barely touched upon the role of language contact, because the material in Neo-Aramaic is already so complex in itself. The agentless 'perfective' construction and dative agent construction (§4.3.5), for example, are interpretable as transitive possibly at least partially on the model of the Kurman-

ji Kurdish agentless and ergative construction (see Haig 2008:262-268), while the intransitive constructions in these dialects are rather distinct from Kurdish. Other issues raised in this thesis may also be partially motivated by replications from neighboring languages by bi- or multilingual speakers. Alignment does not appear to be a stable feature in Iranian languages either (cf. Dorleijn 1996; Mengozzi 2005; Haig 2008). This also has direct bearing on the debate whether language contact with Iranian contributed to the development of alignment in Neo-Aramaic (e.g. Khan 2004b, 2007b; Haig 2008). Contact-induced convergence with ergative neighboring languages could have played a role in the emergence of ergativity. The fluid subject-marking that also lies at the basis of the 'accusative dialects' in general does not seem to comply with the patterns of non-Aramaic languages in the area. Pattern replication from ergative neighboring languages could at least partly explain why the 'ergative dialects' lost this original fluid subject marking and adapted the subject coding to pattern in contiguous (Iranian) languages.

Again, we should bear in mind that intransitive and transitive constructions may differ in this respect, and that alignment may well not be completely copied from one language into the other. The identical marking of the A and P, for example, is typologically unusual in the development of alignment systems (e.g. Palancar 2002) but it is a well-known feature of some Iranian languages (e.g. Payne 1980; Bossong 1985).

The findings of this synchronic study, then, may serve as a fertile ground for further research regarding the historical development of alignment systems and the possible role of language contact.

REFERENCES

List of Journal Abbreviations

TSL	Typological Studies in Language
IOS	Israel Oriental Studies
JAOS	Journal of the American Oriental Society
JSS	Journal of Semitic Studies
CLS	Papers from the Regional Meeting of the Chicago Linguistic Society
BSOAS	Bulletin of the School of Oriental and African Studies
ZDMG	Zeitschrift der Deutschen Morgenländischen Gesellschaft

- Aissen, J. 1999. "Markedness and Subject Choice in Optimality Theory", *Natural Language and Linguistic Theory* 17:673–711.
- Aissen, J. 2003. "Differential Object Marking: Iconicity vs. Economy", *Natural Language and Linguistic Theory* 21:435–83.
- Aldai, G. 2008. "From Ergative Case Marking to Semantic Case Marking: The Case of Historical Basque." In: Donohue and Wichmann, 197–218.
- Amberber, M. 2005. "Differential Subject Marking in Amharic." In: M. Amberber and H. de Hoop (eds.) *Competition and Variation in Natural Languages: The Case for Case*, 295–319. Amsterdam (etc.): Elsevier.
- Anderson 1977 "On Mechanisms by which Languages Become Ergative." In: C.N. Li (ed.) *Mechanisms of Syntactic Change*, 317– 363. Austin (etc.): University of Texas Press.
- Andrews, Avery D. 2007. "The Major Functions of the Noun Phrase." In: T. Shopen (ed.), *Language Typology and Syntactic Description* (2nd edition) I: *Clause Structure*, 132-223. Cambridge: Cambridge University Press.
- Arnold, W. 1990. *Das Neuwestaramäische. V. Grammatik* (Semitica Viva 4/5). Wiesbaden: Harrassowitz.
- Arnold, W. and H. Bobzin (eds.) 2002. *Sprich doch mit deinen Knechten aramäisch, wir verstehen es! 60 Beiträge zur Semistik. Festschrift für Otto Jastrow zum 60. Geburtstag*. Wiesbaden: Harrassowitz.
- Bar-Asher, E.A. 2008. "The Origin and the Typology of the Pattern "qtil li" in Syriac and Babylonian Aramaic." In: A. Mamman, S. Fassberg and Y. Breuer (eds.) *Sha'arey Lashon: Studies in Hebrew, Aramaic, and Jewish Languages in Honor of Moshe Bar-Asher II*: 360–392. Jerusalem. (in Hebrew)
- Bar-Asher Siegal, E.A. 2011. "On the Passiveness of one Pattern in Jewish Babylonian Aramaic – A Linguistic and Philological Discussion", *JSS* 56:111–143.

- Bar-Asher, Siegal, E.A. 2014. "From a non-argument-dative to an argument-dative: the character and origin of the *qtīl lī* construction in Syriac and Jewish Babylonian Aramaic". *Folia Orientalia* 51:59-101.
- Barotto, A. 2015. "Split ergativity in NENA dialects." In: G. Khan and L. Napiorkowska (eds.), 232–249.
- Barðdal, J. 2001. *Case in Icelandic: A Synchronic, Diachronic, and Comparative Approach*. Lund: Department of Scandinavian Languages, Lund University.
- Bergsträsser, G. 1915. *Neuaramäische Märchen und andere Texte aus Ma'lūla: hauptsächlich aus der Sammlung E. Prym's und A. Socin's* (Abhandlungen für die Kunde des Morgenlandes 13). Leipzig: Brockhaus.
- Beyer, K. 1986. *The Aramaic language: Its Distribution and Subdivisions*. Göttingen: Vandenhoeck and Ruprecht.
- Bickel, B. 2008. "On the Scope of the Referential Hierarchy in the Typology of Grammatical Relations". In: G.G. Corbett and M. Noonan (eds.), *Case and Grammatical Relations: Papers in Honor of Bernard Comrie*, 191–210. Amsterdam: Benjamins.
- Bickel, B. 2011. "Grammatical Relations Typology." In: J.J. Song (ed.) *The Oxford Handbook of Language Typology*, 399–445. Oxford (etc.): Oxford University Press.
- Bickel B., G. Iemmob, T. Zakharko and A. Witzlack-Makarevich 2013. "Patterns of Alignment in Verb Agreement." In: D. Bakker and M. Haspelmath (eds.) *Languages across Boundaries: Studies in Memory of Anna Siewierska*, 15–36. Berlin (etc.): De Gruyter Mouton.
- Bickel, B. and J. Nichols 2009. "Case Marking and Alignment." In: A. Malchukov (ed.) *The Oxford Handbook of Case*, 304–321. Oxford (etc.): Oxford University Press.
- Bickel B., A. Witzlack-Makarevich and T. Zakharko 2015. "Typological Evidence against Universal Effects of Referential Scales on Case Alignment". In: I. Bornkessel-Schlesewsky, A.L. Malchukov, and M. Richards (eds.) *Scales and Hierarchies: A Cross-Disciplinary Perspective*. Berlin: De Gruyter Mouton.
- Blansitt, E.L. 1984. "Dechticaetiative and Dative." In: F. Plank (ed.) *Objects: Towards a Theory of Grammatical Relations*, 127–151. New York, NY: Academic Press.
- Booij, G. 2010. "Construction Grammar", *Language and Linguistics Compass* 4/7: 543–555,
- Booij, G. 2013. *Construction Morphology*. Oxford (etc.): Oxford University Press.

- Borghero, R. 2005. "The Evolution of the Verbal System in the North-Eastern Neo-Aramaic of Ashitha", A. Mengozzi (ed.) *Studi afroasiatici : XI incontro italiano di linguistica camitosemitica*, 325–336. Milano: Franco Angeli.
- Borghero, R. 2006. *The Neo-Aramaic Dialect of Ashitha*. Ph.D. Diss. University of Cambridge.
- Borghero, R. 2008. "The Verbal System of the Neo-Aramaic Dialect of Karamlesh." In: G. Khan 2008c (ed.), 75–89.
- Borghero, R. forthcoming: *The Christian Neo-Aramaic Dialect of Ankawa*. Piscataway, NJ: Gorgias Press.
- Bossong, G. 1985. *Empirische Universalienforschung: Differentielle Objektmarkierung in den neuiranischen Sprache* (Ars Linguistica 14). Tübingen: Gunter Narr.
- Bossong, G. 1991. "Differential Object Marking in Romance and Beyond." In: D. Wanner and D.A. Kibbee (eds.) *New Analyses in Romance Linguistics: Selected Papers from the XVIII Linguistic Symposium on Romance Languages Urbana-Champaign, April 7–9, 1988*, 143–170. Amsterdam/Philadelphia: John Benjamins.
- Bossong, G. 1998a: "Le marquage différentiel de l'objet dans les langues d'Europe." In: J. Feuillet (ed.) *Actance et Valence dans les Langues de l'Europe* (Empirical Approaches to Language Typology 20–2), 193–258. Berlin (etc.): Mouton de Gruyter.
- Bossong, G. 1998b: "Le marquage de l'expérience dans les langues d'Europe." In: J. Feuillet (ed.) *Actance et Valence dans les Langues de l'Europe* (Empirical Approaches to Language Typology 20–2), 259–294. Berlin (etc.): Mouton de Gruyter.
- Breedham, Ch. 1981. "The Passive in English, German and Russian", *Journal of Linguistics* 17/2: 319–327.
- Brockelmann, C. 1905. *Syrische Grammatik, mit Paradigmen, Literatur, Chestomathie und Glossar: Chrestomathie*. Berlin: Reuther & Reichard.
- Butt, M. and T.H. King 1991. "Semantic Case in Urdu", *CLS* 27:31–45.
- Bybee, J.L., Perkins, R.D. and W. Pagliuca 1994. *The Evolution of Grammar. Tense, Aspect and Modality in the Languages of the World*. Chicago: The University of Chicago Press.
- Bybee, J.L. and Ö. Dahl 1989. "The Creation of Tense and Aspect Systems in Languages of the World", *Studies in Language* 13/1:51–103.
- Bynon, Th. 2005. "Evidential, Raised Possessor, and the Historical Source of the Ergative Construction in Indo-Iranian", *Transactions of the Philological Society* 103/1: 1–72.

- Chyet, M.L. 1995. "Neo-Aramaic and Kurdish: An Interdisciplinary Consideration of their Influence on each other", *IOS* 15: 219–252.
- Coghill, E. 2003. *The Neo-Aramaic Dialect of Alqosh*. Unpublished Ph.D. Diss. University of Cambridge.
- Coghill, E. 2010. "Ditransitive Constructions in the Neo-Aramaic Dialect of Telkepe." In: Malchukov et al, 221–42.
- Coghill, E. 2013. "The Neo-Aramaic Dialect of Peshabur." In: Kutay et al, 37–48.
- Coghill, E. 2014. "Differential Object-Marking in Neo-Aramaic", *Linguistics* 52:335–364.
- Coghill, E. 2016. *The Rise and Fall of Ergativity in Aramaic: Cycles of Alignment Change*. Oxford (etc.): Oxford University Press.
- Coghill, E. forthcoming: *The Neo-Aramaic Dialect of Telkepe*. Piscataway, NJ: Gorgias Press.
- Cohen, E. 2012. *The Syntax of Neo-Aramaic: The Jewish Dialect of Zakho*. Piscataway, NJ: Gorgias Press.
- Comrie, B. 1975. "The Antiergative: Finland's Answer to Basque", *CLS* 11: 112–121.
- Comrie, B. 1976. *Aspect*. New York: Cambridge University Press.
- Comrie, B. 1978. "Ergativity." In: W.P. Lehmann (ed.) *Syntactic Typology: Studies in the Phenomenology of Language*, 329–393. Sussex: The Harvester Press.
- Comrie, B. 1981. "Aspect and Voice: Some Reflections on Perfect and Passive." In: P.J. Tedeschi and A. Zaenen (eds.) *Syntax and Semantics 14: Tense and Aspect*. New York (etc.): Academic Press.
- Comrie, B. 1985. "Causative Verb Formation and Other Verb-Deriving Morphology." In: T. Shopen (ed.), *Language Typology and Syntactic Description III: Grammatical categories and the lexicon*, 309–348. Cambridge: Cambridge University Press.
- Comrie, B. 1988. "Passive and Voice." In: M. Shibatani (ed.) *Passive and Voice* (TSL 16), 9–23. Amsterdam/Philadelphia: John Benjamins.
- Comrie, B. 1989. *Language Universals and Linguistic Typology: Syntax and Morphology*. 2nd ed. Oxford: Blackwell.
- Comrie, B. 2005. "Alignment of Case Marking." In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.) *The World Atlas of Language Structures*, 398–404. Oxford (etc.): Oxford University Press.
- Cooreman, A. 1994. "A Functional Typology of Antipassives." In: B.A. Fox and P.J. Hopper (eds.) *Voice: Form and Function* (TSL 27), 49–88. Amsterdam/Philadelphia: John Benjamins.

- Cooreman, A., Fox, B. and T. Givón 1984. "The Discourse Definition of Ergativity", *Studies in Language* 8/1:1–34.
- Corbett, G.G. 2003. "Agreement: The range of the phenomenon and the Principles of the Surrey Database of Agreement." In: D. Brown, G.G. Corbett & C. Tiberius (eds) *Agreement: A Typological Perspective* (Transactions of the Philological Society 101), 155–202. Oxford: Blackwell.
- Corbett, G.G. 2006. *Agreement*. Cambridge: Cambridge University Press.
- Creissels, D. 2008a. "Remarks on Split Intransitivity and Fluid Intransitivity." In: O. Bonami and P. Cabredo Hofherr (eds.) *Empirical Issues in Syntax and Semantics* 7: 139–168. Paris: Colloque de syntaxe et sémantique.
- Creissels, D. 2008b. "Direct and Indirect Explanations of Typological Regularities: The Case of Alignment Variations", *Folia Linguistica* 42/1:1–38.
- Croft, W. 1984. "Semantic and Pragmatic Correlates to Syntactic Categories." In: D. Testen, V. Mishra and J. Drogo (eds.) *Papers from the Parasession on Lexical Semantics Chicago, 27–28, April 1984* (CLS 20), 53–71. Chicago, IL: Chicago Linguistic Society.
- Croft, W. 1990. *Typology and Universals*. 1st ed. Cambridge (etc.): Cambridge University Press.
- Croft, W. 1991. *Syntactic Categories and Grammatical Relations: The Cognitive Organization of Information*. Chicago, IL: The University of Chicago Press.
- Croft, W. 1993. "Case Marking and the Semantics of Mental Verbs." In: J. Pustejovsky (ed.) *Semantics and the Lexicon* (Studies in Linguistics and Philosophy 49), 55–72. Dordrecht: Kluwer Academic.
- Croft, W. 1994a. "The Semantics of Subjecthood." In: M. Yaguello (ed.) *Subjecthood and Subjectivity: The Status of the Subject in Linguistic Theory*, 29–75. Paris (etc.): Ophrys, Institut français du Royaume-Uni.
- Croft, W. 1994b. "Voice: Beyond Control and Affectedness." In: B.A. Fox and P.J. Hopper (eds.) *Voice: Form and Function* (TSL 27), 89–117. Amsterdam/Philadelphia: John Benjamins.
- Croft, W. 1998. "Event Structure and Argument Linking." In: M. Butt. and W. Geuder (eds.) *The Projection of Arguments: Lexical and Compositional Factors*, 21–63. Stanford, CA: CSLI Publications.
- Croft, W. 2001. *Radical Construction Grammar: Syntactic Theory in Typological Perspective*. Oxford (etc.): Oxford University Press.
- Croft, W. 2003. *Typology and Universals*. 2nd ed. Cambridge (etc.): Cambridge University Press.
- Croft, W. 2012. *Verbs: Aspect and Causal Structure*. Oxford (etc.): Oxford University Press.

- Cureton, W. 1864 (ed.): *Ancient Syriac Documents* (repr. 2005). Piscataway, NJ: Gorgias Press). London.
- Dahl, Ö. 2000. "Egophoricity in discourse and syntax", *Functions of Language* 7:37–77.
- Damsma, A. forthcoming: *The Neo-Aramaic Dialect of Haşsan*. Piscataway, NJ: Gorgias Press.
- DeLancey, S. 1981. "An Interpretation of Split Ergativity and Related Patterns", *Language* 57:626–657.
- DeLancey, S. 1982. "Aspect, Transitivity and Viewpoint." In: P.J. Hopper (ed.) *Tense-Aspect: Between Semantics and Pragmatics* (TSL 1), 167–183. Amsterdam/Philadelphia: John Benjamins.
- DeLancey, S. 1984. "Notes on Agentivity and Causation", *Studies in Language* 8/2: 181–213.
- DeLancey, S. 1985. "On Active Typology and the Nature of Agentivity." In: F. Plank (ed.) *Relational Typology*, 47–60. Berlin: Mouton.
- DeLancey, S. 1987. "Transitivity in Grammar and Cognition." In: R.S. Tomlin (ed.) *Coherence and Grounding in Discourse* (TSL 11), 53–68. Amsterdam/Philadelphia: John Benjamins.
- Diessel, H. 1999. *Demonstratives: Form, Function, and Grammaticalization* (TSL 42). Amsterdam/Philadelphia: John Benjamins.
- Dixon, R.M.W. 1979. "Ergativity", *Language* 55:59–138.
- Dixon, R.M.W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Donohue, M. 2008. "Semantic Alignment Systems: What's what, and what's not?" In: Donohue and Winchmann, 24–75.
- Donohue, M. and Winchmann, S. 2008. *The Typology of Semantic Alignment*. Oxford (etc.): Oxford University Press.
- Dorleijn, M. 1996. *The Decay of Ergativity: Language-internal or Contact-induced?* (Studies in Multilingualism 3). Tilburg: Tilburg University Press.
- Doron, E. and Khan, G. 2010. "The Debate on Ergativity in Neo-Aramaic", *Proceedings of the Israel Association for Theoretical Linguistics* 26:1–16.
- Doron, E. and Khan, G. 2012. "The Typology of Morphological Ergativity in Neo-Aramaic", *Lingua* 122: 225–240.
- Dowty, D.R. 1991. "Thematic Proto-Roles and Argument Selection", *Language* 67:547–619.
- Drijvers, H. J. W. 1964. *Book of the Laws of the Countries: Dialogue on Fate of Bardaisan of Edessa* (Semitic Texts with Translations 3). Assen: Van Gorcum and Comp.

- Drossard, W. 1998. "Labile Konstruktionen." In: L. Kulikov and H. Vater (eds.) *Typology of Verbal Categories: Papers Presented to Vladimir Nedjalkov on the Occasion of his 70th Birthday*, 73–84. Tübingen: Niemeyer.
- DuBois, J.W. 1987. "The Discourse Basis of Ergativity", *Language* 63:805–855.
- Duval, R. 1883. *Les dialects néo-araméens de Salamas*. Paris: F. Vieweg.
- Fassberg, St.E. 2011. *The Jewish Neo-Aramaic Dialect of Challa*. Leiden: Brill.
- Fauconnier, St. 2011a: "Differential Agent Marking and Animacy", *Lingua* 121:533–547.
- Fauconnier, St. 2011b: "Involuntary Agent Constructions are not Directly Linked to Reduced Transitivity", *Studies in Language* 35/2:311–336.
- Fauconnier, St. 2012. *Constructional Effects of Involuntary and Inanimate Agents: A Cross-Linguistic Study*. PhD. Diss. Katholieke Universiteit Leuven.
- Fassi Fehri, A. 1988. "Agreement, Binding, and Coherence." In: M. Barlow and C. A. Ferguson (eds.) *Agreement in Natural Language: Approaches, Theories, Descriptions*, 107–158. Stanford, CA (etc.): Center for the Study of Language and Information.
- Fillmore, Ch.J. 1977. "Topics in Lexical Semantics." In: R.W. Cole (ed.), *Current Issues in Linguistic Theory*, 76–138. Bloomington: Indiana University Press.
- Fischer, W. 1972. *Grammatik des Klassischen Arabisch*. Wiesbaden: Harrassowitz.
- Foley, W.A. and Van Valin R.D. jr. 1984. *Functional Syntax and Universal Grammar*. Cambridge: Cambridge University Press.
- Fox, S.E. 1997. *The Neo-Aramaic Dialect of Jilu* (Semitica Viva 16). Wiesbaden: Harrassowitz.
- Fox, S.E. 2002. "A Neo-Aramaic Dialect of Bohtan." In: W. Arnold and H. Bobzin, 165–180. Wiesbaden: Harrassowitz.
- Fox, S.E. 2009. *The Neo-Aramaic Dialect of Bohtan* (Gorgias Neo-Aramaic Studies 9). Piscataway, NJ: Gorgias Press.
- Furman, Y. and S. Loesov 2014. "Studies in the Turoyo Verb". In: Khan and Napierkowska (eds.), 1–28
- Garbell, I. 1965. *The Jewish Neo-Aramaic Dialect of Persian Azerbaijan*. The Hague: Mouton.
- Gildea, S. and F. de Castro Alves 2010. "Nominative–Absolutive: Counter–Universal Split Ergativity in Jê and Cariban", S. Gildea and F. Queixalós (eds.) *Ergativity in Amazonia*, 159–199. Amsterdam/Philadelphia: John Benjamins.
- Gildea, S. and F. Zúñiga 2016. "Referential Hierarchies: A New Look at Some Historical and Typological Patterns", *Linguistics* 54/3:483–529

- Givón, T. 1971. "Historical Syntax and Synchronic Morphology: an Archeologist's Field Trip", *CLS* 7: 394–515.
- Givón, 1976. "Topic, Pronoun and Grammatical Agreement." In: C.N. Li (ed.) *Subject and Topic*, 151–185. New York: Academic Press.
- Givón, T. 1979. *On Understanding Grammar*. New York: Academic Press.
- Givón, T. 1981. "Typology and Functional Domains", *Studies in Language* 5:163–193.
- Givón, T. 1982. "Definiteness and Referentiality." In: J. Greenberg (ed.), *Universals of Human Language* IV, 291–330. Stanford, CA: Stanford University Press.
- Givón, T. 1984a: *Syntax: A Functional-Typological Introduction* I. Amsterdam, Philadelphia: John Benjamins.
- Givón, T. 1984b: "Direct Object and Dative Shifting: Semantic and Pragmatic Case." In: F. Plank *Objects: Towards a Theory of Grammatical Relations*, 151–182. New York, NY: Academic Press.
- Givón, T. 1985a: "Ergative Morphology and Transitivity Gradients in Newari." In: F. Plank (ed.) *Relational typology*, 89–107. Berlin: Mouton.
- Givón, T. 1985b: "Iconicity, Isomorphism and Non-Arbitrary Coding in Syntax." In: J. Haiman (ed.) *Iconicity in Syntax* (TSL 6), 187–219. Amsterdam/Philadelphia: John Benjamins.
- Givón, T. 1990. *Syntax: A Functional-Typological Introduction* II. Amsterdam/Philadelphia: John Benjamins.
- Givón, T. 1995. *Functionalism and Grammar*. Amsterdam/Philadelphia: John Benjamins.
- Givón, T. 2001. *Syntax* II. Amsterdam/Philadelphia: John Benjamins.
- Goldberg, A. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago, IL: Chicago University Press.
- Goldberg, A. 2001. "Patient Arguments of Causative Verbs can be Omitted: The Role of Information Structure in Argument Distribution", *Language Sciences* 23: 503–524.
- Goldenberg, G. 1992. "Aramaic Perfects", *IOS* 12, 113–37.
- Göransson, K. 2015. "Causative-Inchoative Alternation in North-Eastern Neo-Aramaic". In: Khan and Napiorkowska (eds.), 207–231.
- Greenblatt, J. 2011. *The Jewish Neo-Aramaic Dialect of Amadya*. Leiden: Brill
- Grigore, G. 2007. *L'arabe parlé à Mardin – monographie d'un parler arabe "périphérique"*. București : Editure universităţii.
- Gutman, A. 2008. "Reexamination of the Bare Preterite Base in the Jewish Neo-Aramaic Dialect of Zakho", *Aramaic Studies* 6.1: 59–84.

- Gutman, A. 2015. "Some Features of the Gaznax Dialect (South–East Turkey)". In: G. Khan and L. Napiorkowska (eds.), 305–321.
- Gzella, H. 2004. *Tempus, Aspekt und Modalität im Reichsaramäischen*. Wiesbaden: Harrassowitz.
- Gzella, H. 2015. *A Cultural History of Aramaic*. Leiden: Brill.
- Häberl, Ch.G. 2009. *The Neo-Mandaic Dialect of Khorramshahr* (Semitica Viva 45). Wiesbaden: Harrassowitz.
- Haig, G. 2001. "Linguistic Diffusion in Present-Day East Anatolia: From Top to Bottom." In: A.Y. Aikhenvald and R.M.W. Dixon (eds.) *Areal Diffusion and Genetic Inheritance: Problems in Comparative Linguistics*, 197–224. Oxford (etc.): Oxford University Press.
- Haig, G. 2008. *Alignment Change in Iranian Languages: A Construction Grammar Approach* (Empirical Approaches to Language Typology 37). Berlin (etc.): Mouton de Gruyter.
- Handschuh, C. 2015. "Split Marked-S Case Systems." In: I. Bornkessel-Schlesewsky, A.L. Malchukov and M. Richards (eds.) *Scales and Hierarchies: a Cross-Disciplinary Perspective*, 297–320. Berlin (etc.): De Gruyter.
- Harris, A.C. "Georgian." In: *Syntax* (Handbooks of Linguistics and Communication Science 9) II:928–940. Berlin: De Gruyter.
- Haspelmath, M. 1990. "The Grammaticalization of Passive Morphology", *Studies in Language* 14/1: 25–74.
- Haspelmath, M. 1993a. *A Grammar of Lezgian*. Berlin (etc.): Mouton de Gruyter.
- Haspelmath, M. 1993b. "More on the Typology of Inchoative/Causative Verb Alternations." In: B. Comrie and M. Polinsky (eds.), *Causatives and Transitivity* (Studies in Language Companion Series 23), 87–120. Amsterdam/Philadelphia: John Benjamins.
- Haspelmath, M. 1994. "Passive Participles across Languages." In: B. Fox and P.J. Hopper (eds.) *Voice: Form and Function* (TSL 27), 151–77. Amsterdam/Philadelphia: Benjamins.
- Haspelmath, M. 2004a: "On Directionality in Language Change with Particular Reference to Grammaticalization." In: O. Fischer, M. Norde and H. Perridon (eds.) *Up and Down the Cline: The Nature of Grammaticalization* (TSL 59), 17–44. Amsterdam/Philadelphia: Benjamins.
- Haspelmath, M. 2004b: "Explaining the Ditransitive Person–Role Constraint: A Usage-based Approach", *Constructions* 2: 1–71.
- Haspelmath, M. 2005a: "Ditransitive Constructions: The Verb 'Give'." In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.) *The World Atlas of Language Structures*, 426–429. Oxford (etc.): Oxford University Press.

- Haspelmath, M. 2005b. "Argument Marking in Ditransitive Alignment Types", *Linguistic Discovery* 3.1:1–21
- Haspelmath, M. 2007. "Ditransitive Alignment Splits and Inverse Alignment", *Functions of Language* 14/1:79–102.
- Haspelmath, M. 2010. "The Behaviour-before-Coding Principle in Syntactic Change", F. Floricic (ed.) *Essais de typologie et de linguistique générale: Mélanges offerts à Denis Creissels*, 541–554. Lyon: ENS.
- Haspelmath, M. 2011a. "On S, A, P, T, and R as Comparative Concepts for Alignment Typology", *Linguistic Typology* 15:535–567.
- Haspelmath, M. 2011b. "The Indeterminacy of Word Segmentation and the Nature of Morphology and Syntax", *Folia Linguistica* 45/1:31–80.
- Haspelmath, M. 2013. "Argument Indexing: a Conceptual Framework for the Syntactic Status of Bound Person Forms." In: D. Bakker and M. Haspelmath (eds.) *Languages across Boundaries: Studies in Memory of Anna Siewierska*, 197–226. Berlin (etc.): De Gruyter Mouton.
- Haspelmath, M. 2015. "Transitivity Prominence", A.L. Malchukov and B. Comrie (eds.) *Valency Classes in the World's Languages I*, 131–147. Berlin: De Gruyter Mouton.
- Hasselbach, R. 2013. *Case in Semitic: Roles, Relations, and Reconstruction* (). Oxford: Oxford University Press.
- Haude K. and A. Witzlack-Makarevich 2016. "Referential Hierarchies and Alignment: An Overview", *Linguistics* 54/3:433–441.
- Haude K. and F. Zúñiga 2016. "Inverse and Symmetrical Voice: on Languages with Two Transitive Constructions", *Linguistics* 54/3:443–481.
- Heger, K. 1985. "Akkusativische, ergativische und aktivische Bezeichnung von Aktantenfunktionen." In: F. Plank (ed.) *Relational Typology*, 109–129. Berlin: Mouton.
- Heine, B. 1997. *Possession: Cognitive Sources, Forces and Grammaticalization*. Cambridge: Cambridge University Press.
- Heine B. and T. Kuteva 2002. *World Lexicon of Grammaticalization*. Cambridge (etc.): Cambridge University Press.
- Heinrichs, W. 1990. "Written Turoyo." In: idem (ed.) *Studies in Neo-Aramaic*, 181–207. Atlanta, GA: Scholars Press.
- Hemmauer, R. and Waltisberg, M. 2006. "Zum relationalen Verhalten der Verbalflexion im Turojo", *Folia Linguistica Historica* 27/1–2, 19–59.
- Hoberman, R. D. 1983. *Verb Inflection in Modern Aramaic: Morphosyntax and Semantics*. Ph.D. Diss. University of Chicago.

- Hoberman, R. D. 1989. *The Syntax and Semantics of Verb Morphology in Modern Aramaic: A Jewish Dialect of Iraqi Kurdistan* (American Oriental Series 69). New Haven, Connecticut: American Oriental Society.
- Hoberman, R. 1993. "Chaldean Aramaic of Zakho." In: R. Contini, F.A. Pennacchietti and M. Tosco (eds.) *Semitica: Serta philologica Constantino Tsereteli dicata*, 115–127. Torino: Silvio Zamorani.
- Hoop, de H. and M. Lamers, 2006. "Incremental Distinguishability of Subject and Object", L. Kulikov, A. Malchukov and P. de Swart, 269–287.
- Hopkins, S. 1989a: "Neo-Aramaic Dialects and the Formation of the Preterite", *JSS* 34:413–32.
- Hopkins, S. 1989b: "A Tale in the Jewish Neo-Aramaic Dialect of Nayada (Persian Azerbaijan)", *Jerusalem Studies in Arabic and Islam* 12: 243–281
- Hopkins, S. 2002. "Preterite and perfect in the Jewish Neo-Aramaic of Kerend" In: W. Arnold and H. Bobzin, 281–298.
- Hopkins, S. 2005. "Is Neo-Aramaic a Semitic language?" In: G. Khan (ed.), *Semitic Studies in Honour of Edward Ullendorff*, 62–83. Leiden (etc.): Brill.
- Hopper, P.J. and S.A. Thompson 1980. "Transitivity in Grammar and Discourse", *Language* 56:251–299.
- Hopper, P.J. and E.C. Traugott 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Huehnergard, J. 1997. *A Grammar of Akkadian* (Harvard Semitic Studies 45). Atlanta, GA: Scholars Press.
- Iemmolo, G. 2010. "Topicality and Differential Object marking: Evidence from Romance and Beyond." In: *Studies in Language* 34/2:239–272.
- Iemmolo, G. 2013. "Symmetric and Asymmetric Alternations in Direct Object Encoding", *STUF: Language Typology and Universals* 66/4:378–403.
- Israeli, Y. 1998. *The Jewish Neo-Aramaic Dialect of Saqqiz (Southern Kurdistan)*. PhD. Diss. Hebrew University of Jerusalem. (in Hebrew)
- Janda, R.D. 2001. "Beyond 'Pathways' and 'Unidirectionality': On the Discontinuity of Language Transmission and the Counterability of Grammaticalization", *Language Sciences* 23:265–340.
- Jastrow, M. 1903. *A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature* (repr. in 1975, New York: Yudaica Press). London: Luzac (etc.).
- Jastrow, O. 1978. *Die mesopotamisch-arabischen qaltu-Dialekte I: Phonologie und Morphologie* (Abhandlungen für die Kunde des Morgenlandes 43). Wiesbaden: Steiner.

- Jastrow, O. 1985. *Laut- und Formenlehre des neuaramäischen Dialekts von Mīdin im ʿTur ʿAbdīn*. 3rd ed. Wiesbaden: Harrassowitz.
- Jastrow, O. 1988. *Der neuaramäische Dialekt von Hertevin (Province Siirt) (Semitica Viva 3)*. Wiesbaden: Harrassowitz.
- Jastrow, O. 1992. *Lehrbuch der ʿTuroyo-Sprache (Semitica Viva Didactica 2)*. Wiesbaden: Harrassowitz.
- Jastrow, O. 1994. *Der neuaramäische Dialekt von Mlaḥsô (Semitica Viva 14)*. Wiesbaden: Harrassowitz.
- Jastrow, O. 1996. "Passive Formation in ʿTuroyo and Mlaḥsô", *IOS* 16: 49–57.
- Jastrow, O. 1997. "Zum neuaramäischen Dialekt von Hassane (Provinz Şirnak)", in: A. Afsaruddin and A.H. Mathias Zahniser (eds.) *Humanism, Culture and Language in the Near East: Studies in Honor of Georg Krotkoff*. Winnona Lake, Indiana: Eisenbrauns, 275–281.
- Jastrow, O. 2008. "Old Aramaic and Neo-Aramaic: Some Reflections on Language History." In: H. Gzella and M.L. Folmer (eds.) *Aramaic in its Historical and Linguistic Setting*, 1–10. Wiesbaden: Harrassowitz.
- Jelinek, E. and R.A. Demers 1983. "The Agent Hierarchy and Voice in Some Coast Salish Languages", *International Journal of American Linguistics* 49/2:167–185.
- Joosten, J. 1996. *The Syriac Language of the Peshitta and Old Syriac Versions of Matthew: Syntactic Structure, Inner Syriac Developments and Translation Techniques (Studies in Semitic Languages and Linguistics 22)*. Leiden (etc.): Brill.
- Kapeliuk, O. 1989. "Some Common Traits in the Evolution of Neo-Syriac and Neo-Ethiopian", *Jerusalem Studies in Arabic and Islam* 12:294–320.
- Kapeliuk, O. 1996. "Is Modern Hebrew the only 'Indo-Europeanized' Semitic Language? And what about Neo-Aramaic?", *IOS* 16:59–70.
- Kapeliuk, O. 2004. "Iranian and Turkic Structural Interference in Arabic and Aramaic Dialects", *Jerusalem Studies in Arabic and Islam* 29:176–94.
- Kapeliuk, O. 2008. "Between Nouns and Verbs in Neo-Aramaic." In: G. Khan 2008c:131–147.
- Kász, Cs. 2015. "Valency Properties of Verbs in Modern Standard Arabic." In: A. L. Malchukov and B. Comrie (eds.) *Valency Classes in the World's Languages*, 327–364. Berlin: De Gruyter Mouton.
- Keenan, E.L. 1976. "Towards a Universal Definition of Subject." In: C.N. Li (ed.) *Subject and Topic*, 303–333. New York: Academic Press.

- Keenan, E.L. and B. Comrie, 1977. "Noun Phrase Accessibility and Universal Grammar", *Linguistic Inquiry* 8/1:63–99.
- Keenan, E.L. and M.S. Dryer, 2007. "Passive in the World's languages." In: T. Shopen (ed.) *Language Typology and Syntactic Description I: Clause Structure*, 325–361. 2nd ed. Cambridge.
- Kemmer, S. 1993. *The Middle Voice*. Amsterdam/Philadelphia: John Benjamins.
- Khan, G. 1988. *Studies in Semitic Syntax*. Oxford (etc.): Oxford University Press.
- Khan, G. 1999. *A Grammar of Neo-Aramaic: The Dialect of the Jews of Arbel*. Leiden: Brill.
- Khan, G. 2002a. *The Neo-Aramaic Dialect of Qaraqosh*. Leiden: Brill.
- Khan, G. 2002b. "The Neo-Aramaic dialect of the Jews of Rustaq." In: W. Arnold and H. Bobzin (eds.), 395–410.
- Khan, G. 2004a. *The Jewish Neo-Aramaic Dialect of Sulemaniyya and Halabja*. Leiden: Brill.
- Khan, G. 2004b. "Aramaic and the Impact of Languages in Contact With it Through the Ages." In: P. Bádenas de la Peña et al. (eds.) *Lenguas en Contacto: el testimonio escrito*, 87–108. Madrid: Consejo superiores de investigaciones científicas.
- Khan, G. 2007a. "Ergativity in the North Eastern Neo-Aramaic Dialects." In: T. Bar and E. Cohen (eds.) *Studies in Semitic and General Linguistics in Honor of Gideon Goldenberg* (Alter Orient und Altes Testament 334), 147–57. Münster: Ugarit-Verlag.
- Khan, G. 2007b. "Grammatical Borrowing in North Eastern Neo-Aramaic." In: Y. Matras and J. Sakel (eds.) *Grammatical Borrowing in Cross-Linguistic Perspective*, 197–214. Berlin (etc.): Mouton de Gruyter.
- Khan, G. 2007c. "The North Eastern Neo-Aramaic dialects", *JSS* 52:1–20.
- Khan, 2007d. "Indicative Markers in North-Eastern Neo-Aramaic." In: M. Moriggi (ed.) *XII Incontro Italiano di Linguistica Camito-semitica (Afroasiatica): Atti*, 85–97. Soveria Manelli: Rubbettino.
- Khan, G. 2008a. *The Neo-Aramaic Dialect of Barwar I–III*. Leiden: Brill.
- Khan, G. 2008b. *The Jewish Neo-Aramaic Dialect of Urmi*. Piscataway, NJ: Gorgias Press.
- Khan, G. 2008c. (ed.) *Neo-Aramaic Dialect Studies*. Piscataway, NJ: Gorgias Press.
- Khan, G. 2008d. "Remarks on the Function of the Preterite and the Perfect in North-Eastern Neo-Aramaic." In: G. Khan 2008c, 105–130.
- Khan, G. 2009. *The Jewish Neo-Aramaic Dialect of Sanandaj*. Piscataway, NJ: Gorgias Press.

- Khan, G. 2011. "North Eastern Neo-Aramaic." In: St. Weninger et al. (eds.) *The Semitic Languages: An International Handbook*, 708–724. Berlin (etc.): De Gruyter.
- Khan, G. 2012. "The Copula in North–Eastern Neo–Aramaic." In: F. Corriente, G. del Olmo Lete, A. Vicente J.–P. Vita (eds.) *Dialectology of the Semitic Languages: Proceedings of The IV Meeting On Comparative Semitics Zaragoza 06/9–11/2010*, 25–31. Sabadell, Barcelona: Editorial Ausa.
- Khan, G. 2016. *The Neo-Aramaic Dialect of the Assyrian Christians of Urmi* I–IV. I: (2016a) *Grammar: Phonology and Morphology*, II: (2016b) *Grammar: Syntax*. Leiden-Boston: Brill.
- Khan, G. 2017. "Ergativity in Neo-Aramaic." In: edited by J. Coon, D. Massam, and L. Travis (eds.) *The Oxford Handbook of Ergativity*, 873–899. Oxford: Oxford University Press.
- Khan, G. and L. Napiorkowska (eds.) 2015. *Neo-Aramaic in its Linguistic Context*. Piscataway, NJ: Gorgias Press.
- Kim, R. 2008. "'Stammbaum" or Continuum? The Subgrouping of Modern Aramaic Dialects Reconsidered", *JAOS* 128/3:505–531.
- Kim, R. 2010. "Towards a Historical Phonology of Modern Aramaic: The Relative Chronology of Turoyo Sound Changes." In: M. Fales and G. F. Grassi (eds.) *CAM-SEMUD: 13th Italian Meeting of Afro-Asiatic Linguistics. Udine May 2007*, 229–238. Padova: S.A.R.G.O.N. Editrice e Libreria.
- Kittilä, S. 2005. "Remarks on Involuntary Agent Constructions", *Word* 56(3): 381–419.
- Kittilä, S. 2006. "Object–, Animacy– and Role–Based Strategies: a Typology of Object Marking", *Studies in Language* 30/1:1–32.
- Kirtchuk, P. 2016. "Aspect as the Source of Diathesis in North-Eastern Neo-Aramaic (NENA) and Beyond with Remarks on Transitivity, Accusativity, Ergativity and Case". In: Zl. Guentchéva (ed.), *Aspectuality and Temporality: Descriptive and Theoretical Issues*, , 634–652. Philadelphia: John Benjamins.
- Klamer, M. 2008. "The Semantics of Semantic Alignment in Eastern Indonesia." In: Donohue and Winchmann, 221–251.
- Krotkoff, G. 1982. *A Neo-Aramaic Dialect of Kurdistan: Texts, Grammar and Vocabulary* (American Oriental Series 64). New Haven, Connecticut: American Oriental Society.
- Kulikov, L., Malchukov A. and P. de Swart, 2006. *Case, Valency and Transitivity* (Studies in Language Companion Series 77). Amsterdam/Philadelphia: John Benjamins.

- Kupferman, L. 1995. "La construction passive en *se faire*", *Journal of French Language Studies* 5: 57–83.
- Kutscher, E.Y. 1969. "Two 'Passive' Constructions in Aramaic in the Light of Persian", *Proceedings of the International Conference on Semitic Studies held in Jerusalem, 19–23 July 1965*, 132–51. Jerusalem: Israel Academy of Sciences and Humanities.
- Kuty, R., Seeger U. and Sh. Talay (eds.) 2013. *Nicht nur mit Engelszungen: Beiträge zur semitischen Dialektologie Festschrift für Werner Arnold zum 60. Geburtstag*. Wiesbaden: Harrassowitz.
- Lahdo, A. 2013. "The Martyrdom of Mōr 'Zuzoyo: A new Ṭūrōyo text from Kfarze in Ṭūr 'Abdīn." In: Kuty et al., 207–214.
- Lakoff, G. 1977. "Linguistic Gestalts", *CLS* 13: 236–287.
- Lambrecht, K. 1994. *Information Structure and Sentence Form: Topic, Focus, and the Mental Representation of Discourse Referents*. Cambridge: Cambridge University Press.
- Langacker, R.W. 1987. *Foundations of Cognitive Grammar I: Theoretical Prerequisites*. Stanford: Stanford University Press.
- Langacker, R.W. 1991a: *Foundations of Cognitive Grammar II: Descriptive Application*. Stanford: Stanford University Press.
- Langacker, R.W. 1991b: *Concept, Image and Symbol: The Cognitive Basis of Grammar*. Berlin (etc.): De Gruyter Mouton.
- Lattke, M. 2005. *Oden Salomos: Text, Übersetzung, Kommentar* III: Oden 29–42. Transkription des Syrischen von Klaus Beyer (Novum Testamentum et Orbis Antiquus 41/3). Göttingen: Vandenhoeck & Ruprecht.
- Lazard, G. 1994. *L'actance*. Paris: Presse Universitaires de France.
- Lazard, G. 1998. *Actancy*. Berlin (etc.): Mouton de Gruyter.
- Lazard, G. 2002. "Transitivity Revisited as an Example of a More Strict Approach in Typological Research", *Folia Linguistica* 36 (3–4): 141–190.
- Lehmann, C. 1988. "On the Function of Agreement." In: M. Barlow and C. A. Ferguson (eds.) *Agreement in Natural Language: Approaches, Theories, Descriptions*, 55–65. Stanford, CA (etc.): Center for the Study of Language and Information.
- Lehmann, C. 1995. *Thoughts on Grammaticalization*. München (etc.): Lincom Europa.
- Loesov, S. 2012. "A New Attempt at Reconstructing Proto-Aramaic, I". In: L. Kogan (ed.) *Babel und Bibel* 6: 421–456. Winona Lake, Ind: Eisenbrauns.
- Macleane, A. J. 1895. *Grammar of the Dialects of Vernacular Syriac as Spoken by the Eastern Syrians of Kurdistan, North-West Persia, and the Plain of Mosul with*

- Notices of the Vernacular of the Jews of Azerbaijan and of Zakhu near Mosul.* Cambridge: At the University Press.
- Macuch, R. 1993. *Neumandäische Texte im Dialekt von Ahwaz* (Semitica Viva 12). Wiesbaden: Harrassowitz.
- Malchukov, A.L. 2005. "Case Pattern Splits, Verb Types, and Construction Competition." In: M. Amberber and H. de Hoop (eds.) *Competition and Variation in Natural Languages*, 73–117. London: Elsevier.
- Malchukov, A.L. 2006. "Transitivity Parameters and Transitivity Alternations: Constraining Co-Variation." In: L. Kulikov, A.L. Malchukov and P. de Swart, 329–357.
- Malchukov, A.L. 2015. "Towards a Typology of Split Ergativity: A TAM–Hierarchy for Alignment Splits." In: I. Bornkessel–Schlesewsky, A.L. Malchukov and M. Richards (eds.) *Scales and Hierarchies: a Cross-Disciplinary Perspective*, 276–296. Berlin (etc.): De Gruyter.
- Malchukov, A.L., M. Haspelmath and B. Comrie 2010a. (eds.) *Studies in Ditransitive Constructions: A Comparative Handbook*. Berlin (etc.): De Gruyter Mouton.
- Malchukov, A.L., M. Haspelmath and B. Comrie 2010b. "Ditransitive Constructions: A Typological Overview." In: Malchukov et al., 1–64.
- Marogulov, Q.I. 1976. *Grammaire néo-syriaque pour écoles d'adultes (dialecte d'Urmia* (Comptes rendus du Groupe Linguistique d'études camito-sémitiques Supplement 5; translated by O. Kapeliuk). Paris.
- Matras, Y. 1992. "Ergativity in Kurmanji (Kurdish)", *Orientalia Suecana* 41:139–154.
- McGregor, W. 2006. "Focal and Optional Ergative Marking in Warrwa (Kimberley, Western Australia)". *Lingua* 116/4:393–423.
- McGregor, W. 2010. "Optional Ergative Case Marking Systems in a Typological-Semiotic Perspective". *Lingua* 120/7:1610–1636.
- Mengozi, A. 1998. "'The Mountains will be Covered with Snow': On the Fringes of Transitivity in the Neo-Aramaic of Alqosh (North Iraq)", *Afroasiatica Tergestina: Papers from the 9th Italian Meeting of Afro-Asiatic (Hamito-Semitic) Linguistics, Trieste, April 23–24, 1998*, 83–99. Padova: Unipress.
- Mengozi, A. 2002a: *Israel of Alqosh and Joseph of Telkepe: A Story in a Truthful Language Religious Poems in Vernacular Syriac (North Iraq, 17th Century) I: An Anthology* (Corpus Scriptorum Christianorum Orientalium 627). Louvain: Éditions Peeters.
- Mengozi, A. 2002b: *Israel of Alqosh and Joseph of Telkepe: A Story in a Truthful Language Religious Poems in Vernacular Syriac (North Iraq, 17th Century) II: In-*

- troduction and Translation* [(Corpus Scriptorum Christianorum Orientalium 628). Louvain: Éditions Peeters.
- Mengozzi, A. 2005. "Neo-Aramaic and the so-called 'Decay of Ergativity' in Kurdish." In: P. Fronzaroli and P. Marassini (eds.) *Proceedings of the 10th Meeting of Hamito-Semitic (Afroasiatic) Linguistics* (Quaderni di Semitistica 25), 239–256. Florence: Dipartimento di linguistica, Università di Firenze.
- Mengozzi, A. 2006. "Middle Markers: Neo-Aramaic and Italian Verbal Forms with a 3rd Singular Feminine Pronominal Object." In: M. Moriggi (ed.) *XII Incontro Italiano di Linguistica Camito-Semita (Afroasiatica): Atti*, 105–15. Sovera Mannelli: Rubbettino.
- Mithun, M. 1991. "Active/Agentive Case Marking and its Motivations", *Language* 67:510–546.
- Mohanan, T.W. 1994. *Argument Structure in Hindi*. Stanford, CA: CSLI Publications.
- Moravcsik, E.A. 1988. Agreement and Markedness." In: M. Barlow and C. A. Ferguson (eds.) *Agreement in Natural Language: Approaches, Theories, Descriptions*, 89–106. Stanford, CA (etc.): Center for the Study of Language and Information.
- Mosel, U. and Hovdhaugen, E. 1992. *Samoan Reference Grammar*. Oslo: Scandinavian University Press.
- Muraoka, T. 2005. *Classical Syriac: A Basic Grammar with a Chrestomathy*. 2nd ed. Wiesbaden: Harrassowitz.
- Murre-van den Berg, H.L. 1999. *From a Spoken to a Written Language: the Introduction and Development of Literary Urmia Aramaic in the Nineteenth Century*. Leiden (etc.): Nederlands Instituut voor het Nabije Oosten.
- Mutzafl, H. 2000. "The Neo-Aramaic Dialect of Maha Khtaya d-Baz: Phonology, Morphology and Texts", *JSS* 45/2:293–322.
- Mutzafl, H. 2002a: "Barzani Jewish Neo-Aramaic and its Dialects", *Mediterranean Language Review* 14:41–70.
- Mutzafl, H. 2002b: "On the Jewish Neo-Aramaic Dialect of Aradhin and its Dialectal Affinities." In: W. Arnold and H. Bobzin, 479–488.
- Mutzafl, H. 2004a: *The Jewish Neo-Aramaic Dialect of Koy Sanjaq (Iraqi Kurdistan)*, (Semitica Viva 32). Wiesbaden: Harrassowitz.
- Mutzafl, H. 2004b: "Features of the Verbal System in the Christian Neo-Aramaic Dialect of Koy Sanjaq and their Areal Parallels", *JAOS* 121/1: 1–15.
- Mutzafl, H. 2004c: "Two Texts in Barzani Jewish Neo-Aramaic", *BSOAS* 67/1: 1–13.
- Mutzafl, H. 2008a: *The Jewish Neo-Aramaic Dialect of Betanure (Province of Dihok)* (Semitica Viva 40). Wiesbaden: Harrassowitz.

- Mutzafi, H. 2008b: "Trans-Zab Jewish Neo-Aramaic", *BSOAS* 1/3: 409–431.
- Mutzafi, H. 2008c: "The Neo-Aramaic dialect of Sat (Hakkâri, Turkey)." In: G. Khan 2008c:19–37.
- Næss, Å. 2006. "Case Semantics and the Agent–Patient Opposition." In: L. Kulikov, A.L. Malchukov and P. de Swart, 309–327.
- Næss, Å. 2007. *Prototypical Transitivity* (TSL 72). Amsterdam/Philadelphia: John Benjamins.
- Nedjalkov, V.P. 1988 (ed.): *Typology of Resultative Constructions* (TSL 12). Amsterdam/Philadelphia: John Benjamins.
- Nedjalkov, V.P. 2001. "Resultative Constructions." In: M. Haspelmath (ed.), *Language Typology and Language Universals* (Handbooks of Linguistics and Communication Science 20), 928–940. Berlin: De Gruyter.
- Nedjalkov, V.P. and S.J. Jaxontov, 1988. "The Typology of Resultative Constructions." In: Nedjalkov, 3–62.
- Nichols, J. 1986. "Head-marking and Dependent-marking Grammar", *Language* 62:56–119.
- Nichols, J. 1992. *Linguistic Diversity in Space and Time*. Chicago (etc.).
- Nöldeke, Th. 1868. *Grammatik der neusyrischen Sprache am Urmia-See und in Kurdistan*. Leipzig: T.O. Weigel
- Nöldeke, Th. 1875. *Mandäische Grammatik* (repr. 1964). Darmstadt: Wissenschaftliche Buchgesellschaft.
- Nöldeke, Th. 1904. *Compendious Syriac Grammar* (translated by J.A. Crichton). London: Williams and Norgate.
- Noorlander, P.M. 2014. "Diversity in Convergence: Kurdish and Aramaic Variation Entangled", *Journal of Kurdish Studies* 2:201–224.
- Noorlander, P.M. 2017. "The Proximative and its Correlatives in North Eastern Neo-Aramaic." In: A. Korn and I. Nevskaya (eds.) *Prospective and Proximative in Turkic, Iranian and Beyond*, 187–210. Wiesbaden: Reichert Verlag.
- Noorlander, P.M. and D. Stilo 2015. "On the Convergence of Verbal Systems of Aramaic and its Neighbours. Part I: Present-Based Paradigms." In: G. Khan and L. Napiorkowska (eds.), 426–452.
- Odisho, E.Y. 1988. *The Sound System of Modern Assyrian (Neo-Aramaic)* (Semitica Viva 2). Wiesbaden: Harrassowitz.
- Öpengin, E. 2013. *Clitic-Affix Interactions. A Corpus-based Study of Person Marking in the Mukri Variety of Central Kurdish*. Unpublished Ph.D. Diss. University of Paris 3, Sorbonne Nouvelle and Otto-Friedrich University of Bamberg.

- Panoussi, E. 1990. "On the Senaya Dialect." In: W. Heinrichs (ed.) *Studies in Neo-Aramaic*, 107–29. Atlanta, GA: Scholars Press.
- Payne, J.R. 1980. "The Decay of Ergativity in Pamir Languages", *Lingua* 51:147–186.
- Payne, Th.E. 1997. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge: Cambridge University Press.
- Pennacchietti, F.A. 1988. "Verbo neo-aramaico e verbo neo-iranico." In: V. Orioles (ed.) *Tipologie della convergenza linguistica. Atti del Convegno della Società Italiana di Glottologia*, 93–101. Pisa: Giardini.
- Pennacchietti, F.A., 1991, "Gli allomorfi della flessione preteritale nel dialetto neo-aramaico orientale di Hertevin (Turchia) in prospettiva storica." In: A.S. Kaye (ed.), *Semitic Studies in Honour of Wolf Leslau on the Occasion of his 85th Birthday, November 14th, 1991*, 1197–1202, Wiesbaden: Harrassowitz.
- Pennacchietti, F.A. 1994. "Il preterito neoaramaico con pronomi oggetto", *ZDMG* 144: 259–283.
- Polotsky, H.J. 1961. "Studies in Modern Syriac", *JSS* 6:1–32.
- Polotsky, H.J. 1979. "Verbs with two Objects in Modern Syriac (Urmi)", *IOS* 9:204–227.
- Polotsky, H.J. 1991. "Modern Syriac Conjugation", *JSS* 36:263–277.
- Polotsky, H.J. 1996. "Notes on a Neo-Syriac Grammar", *IOS* 16:11–48.
- Rees, M. 2008. *Lishan Didan. Targum Didan*. Piscataway, NJ: Gorgias Press.
- Retsö, J. 1987. "Copula and Double Pronominal Objects in Some Semitic Languages", *ZDMG* 137/2:119–245.
- Rhétoré, J. 1912. *Grammaire de la langue Soureth ou chaldeen vulgaire, selon le dialecte de la plaine de Mossoul et des pays adjacents*. Mossoul: Impr. des Pères Dominicains.
- Ritter, H. 1967–71: *Ṭūrōyō: Die Volkssprache der syrischen Christen des Ṭūr 'Abdîn* A. Texte I: 1967, II: 1969, III: 1971. Beirut: Steiner.
- Ritter, H. 1979. *Ṭūrōyō: Die Volkssprache der syrischen Christen des Ṭūr 'Abdîn* B. Wörterbuch. Beirut: Steiner.
- Ritter, H. 1990. *Ṭūrōyō: Die Volkssprache der syrischen Christen des Ṭūr 'Abdîn* C. Grammatik. Stuttgart: Steiner.
- Rosch, E. 1978. "Principles of Categorization." In: E. Rosch and B.B. Lloyd (eds.) *Cognition and Categorization*, 27–48. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rubba, J.E. 1993. *Discontinuous Morphology in Modern Aramaic*. Ph.D. Diss. University of California, San Diego. Ann Arbor: University Microfilms International.

- Rubin, A.D. 2005. *Studies in Semitic Grammaticalization* (Harvard Semitic Studies 57). Winona Lake, Indiana: Eisenbrauns.
- Sabar, Y. 1976. *Pəšaṭ Wayəḥî Bəšallāḥ. A Neo-Aramaic Midrash on Beshallāḥ (Exodus)*, Introduction, Phonetic Transcription, Translation, Notes and Glossary. Wiesbaden: Harrassowitz.
- Sabar, Y. 1997. "The Story of Balaam and his She-Ass (Numbers, Chapter 22) in four Neo-Aramaic Dialects: A Comparative Study of the Translations." In: A. Af-saruddin and A.H. Mathias Zahniser (eds.) *Humanism, Culture, and Language in the Near East. Studies in Honor of Georg Krotkoff*, 301–317. Winona Lake, Indiana: Eisenbrauns.
- Sabar, Y. 2002. *A Jewish Neo-Aramaic Dictionary: Dialects of Amidya, Dihok, Nerwa and Zakho, Northwestern Iraq* (Semitica Viva 28). Wiesbaden: Harrassowitz.
- Sara, S. 1974. *A Description of Modern Chaldean*. The Hague/Paris: Mouton.
- Schlesinger, M. 1928. *Satzlehre der aramäischen Sprache des babylonischen Talmuds*. Leipzig.
- Shibatani, M. 1985. "Passives and Related Constructions: a Prototype Approach", *Language* 61:821–848.
- Shibatani, M. 2004. "Voice." In: G. Booij et al (eds.) *Morphology: An International Handbook on Inflection and Word-Formation II*: 1145–1165. Berlin (etc.): De Gruyter.
- Shibatani, M. 2006. "On the Conceptual Framework for Voice Phenomena", *Language* 44: 217–269.
- Siewierska, A. 1984. *The Passive: A Comparative Linguistic Analysis*. London (etc.): Croom Helm.
- Siewierska, A. 1999. "From Anaphoric Pronoun to Grammatical Agreement Marker: Why Objects Don't Make it", *Folia Linguistica* 33:225–252.
- Siewierska, A. 2003. "Person Agreement and the Determination of Alignment", *Transactions of the Philological Society* 101/2:339–370.
- Siewierska, A. 2004. *Person*. Cambridge (etc.): Cambridge University Press.
- Siewierska, A. 2005: "Alignment of Verbal Person Marking." In: M. Haspelmath, M. S. Dryer, D. Gil and B. Comrie (eds.) *World Atlas of Language Structures*, 406–409.
- Siewierska, A. and D. Bakker 2009. "Case and Alternative Strategies: Word Order and Agreement." In: A.L. Malchukov and A. Spencer (eds.) *The Oxford Handbook of Case*, 290–303. Oxford: Oxford University Press.

- Silverstein, M. 1976. "Hierarchy of Features and Ergativity." In: R.M.W. Dixon (ed.) *Grammatical Categories in Australian Languages*, 112–171. Canberra: Australian Institute of Aboriginal Studies.
- Sinha, J. 2000. *Der neuostaramäische Dialekt von Bēšpān*. Wiesbaden: Harrassowitz.
- Socin, A. 1882. *Die neu-aramäischen Dialekte von Urmia bis Mosul: Texte und Übersetzung*, Tübingen: Verlag der H. Laupp'schen Buchhandlung.
- Sokoloff, M. 2002. *A Dictionary of Jewish Babylonian Aramaic*. Ramat-Gan: Bar Ilan University Press / Baltimore: Johns Hopkins University Press.
- Sokoloff, M. 2009 *A Syriac Lexicon. A Translation from the Latin, Correction, Expansion, and Update of C. Brockelmann's Lexicon Syriacum*. Winona Lake, IN: Eisenbrauns; Piscataway, NJ: Gorgias Press.
- Stassen, L. 2009. *Predicative Possession*. Oxford (etc.): Oxford University Press.
- Stilo, D.L. 1981. "The Tati Language Group in the Sociolinguistic Context of Northwestern Iran and Transcaucasia", *Iranian Studies* 14, 137–87.
- Stilo, D.L. 2004a. "Iranian as Buffer Zone Between the Universal Typologies of Turkic and Semitic." In: É.Á. Csató, B. Isaksson and C. Jahani (eds.) *Linguistic Convergence and Areal Diffusion: Case Studies from Iranian, Semitic and Turkic*. London, 35–63.
- Stilo, D.L. 2004b. *Vafsi Folk Tales*. Wiesbaden: Reichert Verlag.
- Stil, D.L. 2010. "Ditransitive Constructions in Vafsi: a Corpus-Based Study." In: Malchukov et al., 241–276.
- Stilo, D.L. and P.M. Noorlander 2015. "On the Convergence of Verbal Systems of Aramaic and its Neighbors. Part II: Past Paradigms Derived from Present Equivalents." In: G. Khan and L. Napiorkowska (eds.), 453–484.
- Swart, de P. 2006. "Case Markedness." In: L. Kulikov, A.L. Malchukov and P. de Swart, 249–267.
- Talay, Sh. 2001. "Grammatikalische Anmerkungen und Texte zum neu-aramäischen Dialekt von Nerwa (Nordirak)", *Mediterranean Review* 13:1–37.
- Talay, Sh. 2004. (ed.) *Lebendig begraben: Die Entführung des syrisch-orthodoxen Priesters Melki Tok von Midan in der Südosttürkei. Einführung, aramäischer Text (Turoyo), Übersetzung und Glossar* (Studien zur Orientalischen Kirchengeschichte 29). Münster: LIT.
- Talay, Sh. 2008. *Die neuaramäischen Dialekte der Khabur-Assyrer in Nordostsyrien* (Semitica Viva 40). Wiesbaden: Harrassowitz.
- Talay, Sh. 2009. *Neuaramäische Texte in den Dialekten der Khabur-Assyrer in Nordostsyrien* (Semitica Viva 41). Wiesbaden: Harrassowitz.

- Talay, Sh. 2011. "Zu einigen Besonderheiten des nordost-neuaramäischen Verbal-system", *Folia Orientalia* 47:52–64.
- Talmy, L. 1976. "Semantic Causative Types." In: M. Shibatani (ed.) *Syntax and Semantics 6: The Grammar of Causative Constructions*. New York: Academic Press.
- Taylor, J.R. 1995. *Linguistic Categorization: Prototypes in Linguistic Theory*. Oxford (etc.): Oxford University Press.
- Testelec, Y.G. 1998. "On Two Parameters of Transitivity." In: L. Kulikov and H. Vater (eds.) *Typology of Verbal Categories: Papers Presented to Vladimir Nedjalkov on the Occasion of his 70th Birthday*, 29–45. Tübingen: Max Niemeyer.
- Tóth, I. 1998. "Va- and Ván-Participles in Hungarian", *Linguistics in the Netherlands* 15:201–212.
- Trask, R.L. 1979. "On the Origins of Ergativity." In: F. Plank (ed.), *Ergativity*. New York, 385–404.
- Tsunoda, T. 1981. "Split Case-Marking Patterns in Verb-Types and Tense/Aspect/Mood", *Linguistics* 19: 389–438.
- Tsunoda, T. 1985. "Remarks on Transitivity", *Journal of Linguistics* 21:385–396.
- Van Rompay, L. 1999: "Les versions syriaque", in: F. Petit (ed.), *La chaîne sur l'Exode I: Fragments de severe d'Antioche. Texte grec établi et traduit*. Louvain: In Aedibus Peeters.
- Velupillai, V. 2012. *Introduction to Linguistic Typology*. Amsterdam/Philadelphia: John Benjamins.
- Verbeke, S. 2013a: "Differential Subject Marking in Nepali: The Agent Marker *le* in Imperfective Constructions", *Linguistics* 51(3): 585–610.
- Verbeke, S. 2013b: *Alignment and Ergativity in New Indo-Aryan Languages* (Empirical Approaches to Language Typology 51). Berlin: De Gruyter.
- Viberg, Å. 1983. "The Verbs of Perception: a Typological Study." In: B. Butterworth, B. Comrie and Ö. Dahl (eds.) *Explanations for Language Universals*, 123–162. Berlin: Mouton de Gruyter.
- Waltisberg, M. 2002. "Zur Ergativitätshypothese im Semitischen", *ZDMG* 152:12–62.
- Waltisberg, M. 2016. *Syntax des Turoyo* (Semitica Viva 55). Wiesbaden: Harrassowitz.
- Warburton, I.P. 1973. "Modern Greek Verb Conjugation: Inflectional Morphology in a Transformational Grammar", *Lingua* 32:193–226.
- Wichmann, S. 2010. "Ditransitive Constructions in Tlapanec." In: Malchukov et al., 651–677.

- Witzlack-Makarevich, A. Zakharko, L.B. Zúñiga, F. and B. Bickel 2016. "Decomposing Hierarchical Alignment: Co-Arguments as Conditions on Alignment and the Limits of Referential Hierarchies as Explanations in Verb Agreement", *Linguistics* 54/3:531–561.
- Wright, W. 1871 (ed.): *Apocryphal Acts of the Apostles I: Syriac Texts*. London: Williams and Norgate.
- Wright, W. 1869 (ed.): *The Homilies of Aphraates, the Persian Sage*. London: Williams and Norgate.
- Younansardaroud, H. 2001. *Der neuostaramäische Dialekt von Sārdä:rid* (Semitica Viva 26). Wiesbaden.
- Younansardaroud, H. 2002. "Der neuostaramäische Dialekt von Sārdä:rid" In: W. Arnold and H. Bobzin (eds.), 841–51.
- Zúñiga, F. 2002. *Inverse Systems in Indigenous Languages of the Americas*. Ph.D. Diss. University of Zurich.

SAMENVATTING

Grammaticale functies in Oost Neo-Arameese talen vanuit een typologisch perspectief

Het Noordoost Neo-Aramees (afgekort NENA naar het Engels *North Eastern Neo-Aramaic*) en Centraal Neo-Aramees (afgekort CNA) zijn dialectgroepen behorend tot de moderne varianten van de oosterse tak van het Aramees, een Semitische taal. Het zijn de spreektaal van joodse en christelijke gemeenschappen in of afkomstig uit de regio die algemeen bekend staat als Koerdistan (Zuidoost-Turkije, Noord-Irak en West-Iran). Onderzoeksteams en individuele projecten hebben het dialectlandschap van het Neo-Aramees in de afgelopen twintig jaar in kaart gebracht en een enorme mate van diversiteit tentoongespreid. Hoewel men over het algemeen van dialecten spreekt, onderscheiden deze zich van elkaar op een vergelijkbaar niveau van diversiteit als de Romaanse of Germaanse talen. Dit proefschrift beperkt zich tot het NENA en CNA, aangezien deze de meest opmerkelijke en uiteenlopende alignmentpatronen vertonen (hfst. 1).

Deze Oost Neo-Arameese dialecten laten zich kenmerken door een opmerkelijke inversie van de grammaticale uitdrukking van persoon (inclusief geslacht en getal) op basis van tijd, aspect en modus (afgekort TAM). Afhankelijk van een imperfectieve of perfectieve inflectiebasis (respectievelijk *CaCəC-* of *CCiC-*) van de werkwoordsvorm drukken dezelfde pronominale suffixen precies het tegenovergestelde uit (bijv. *qaṭl-a-le* 'Zij doodt hem' en *qṭil-a-le* 'Hij heeft haar gedood'). Deze inversie gaat terug op constructies gegrond op participia. De imperfectieve inflectie is ontsproten uit het actieve participium en de perfectieve uit het resultatieve participium. De zogenaamde E-suffixen (bijv. *-a* 'zij/haar') die als eerst aan de werkwoordsvorm worden toegevoegd zijn ontstaan uit de congruentie in geslacht en getal van het predicatief gebruikte participium en/of toegevoegde enclitische pronomina. De zogenaamde L-suffixen (bijv. *-le* 'hij/hem') die daarop volgen zijn oorspronkelijk datiefpronomina gevormd op basis van het voorzetsel *l-* 'aan, voor'. De perfectieve werkwoordsvorm die ontstaan is uit het resultatief participium en de datieve agens staat bekend als de *qṭil l-* of *šmiṣ l-* constructie en is het meest opmerkelijk. Andere Arameese talen of Semitische talen in het algemeen hebben dit nooit op deze wijze gegrammaticaliseerd.

Het wetenschappelijk debat over dit verschijnsel hangt nauw samen met diens oorsprong. De inversie die optreedt is in de literatuur aanvankelijk be-

schreven en verklaard vanuit diathese door de vergelijkbare, bekende alternantie tussen het actief en het passief (d.w.z. *qtil-a-le* is hetzelfde als 'Zij is door hem gedood'). De *qtil l*-constructie wordt ook verklaard vanuit de correlatie tussen de ontwikkeling van bezitsuitdrukkingen ('Er is mij een boek' = 'Ik heb een boek') en een perfectum zoals het hulpwerkwoord *hebben* in de bekende Europese talen gebruikt wordt samen met het voltooid deelwoord om het perfectum of preteritum (de perfectief verleden tijd) uit te drukken. Later is dit verschijnsel in het kader van taaltypologie door parallelle fenomenen in andere talen van de wereld uitgelegd als een vorm van zogenaamde gespleten ergativiteit (Engels *split ergativity*). Bij een ergatief(-absolutief) systeem deelt het subject (S) van een intransitieve constructie (zoals *Zij* in *Zij is gestorven*) morfologische en/of syntactische eigenschappen met de patiëns (P), het ondervindend object van een transitieve constructie (zoals *haar* in *Hij heeft haar gedood*), en niet de agens (A), het handelende subject van een transitieve constructie (zoals *Hij* in het voorafgaand voorbeeld), in tegenstelling tot wat gebruikelijk is bij een (nominatief-)accusatief systeem waarbij deze gedeeld wordt met de A. Een kenmerkende eigenschap van gespleten ergativiteit of talen met een ergatief systeem in het algemeen is dat het ergatieve patroon zich uitsluitend voordoet in de uitdrukking van bepaalde grammaticale categorieën, terwijl de rest van de grammatica een accusatief patroon volgt. Het is typisch voor een splitsing op basis van TAM dat de ergatieve markerings van argumenten zich beperkt tot het perfectieve aspect en de accusatieve markerings voorkomt in het imperfectieve. Een soortgelijk systeem is tevens ontstaan in naburige Iraanse talen waarmee sprekers van het Aramees in contact zijn geweest.

Het doel van voorliggende studie is om de variatie in het markeren van de kernargumenten van transitieve en intransitieve constructies in het NENA en CNA typologisch met elkaar te vergelijken en te plaatsen in het bredere kader van de taaltypologie. Het boek bestaat uit zeven hoofdstukken. Eerst wordt een uitgebreide inleiding gegeven in het concept van grammaticale functies dat in het Engels onder de term *alignment* valt (hfst. 2). *Alignment* (ruwweg "het op één lijn plaatsen") van grammaticale functies behelst meer dan een naamvalsysteem en is nauw verwant aan doch uiteindelijk verschillend van diathese. Het beschrijft de wijze waarop de kernargumenten of syntactische rollen (S, A, P) van intransitieve en transitieve constructies op gelijksoortig of verschillend behandeld worden in hun morfologische en/of syntactische eigenschappen. Het belangrijkste daarbij is welke eigenschappen de S deelt met de A en/of P. Het prototype van de passieve diathese valt binnen deze benadering onder de intransitieve constructies. De patiëns fungeert hier als de S en de agens als een oblique

argument. Dit is niet hetzelfde als een ergatief patroon maar vertoont in meer of mindere mate wel overeenkomsten. Dezelfde methode wordt tegenwoordig ook toegepast op de verhouding tussen de P van de monotransitieve constructie en het zogenaamde thema (T), het direct object, en de ontvanger (R voor Engels *recipient*), het indirect object, van de ditransitieve constructie zoals respectievelijk het geschenk en de ontvanger van de het werkwoord *geven*. Na een algemeen overzicht van de morfologie en syntaxis (hfst. 3) worden deze twee dialectgroepen uitvoeriger bestudeerd (hfst. 4, 5 en 6), zodat deze twee uiteindelijk met elkaar binnen het bredere typologische kader met elkaar vergeleken kunnen worden (hfst. 7). De morfologie en syntaxis van het imperfectief diende als een praktisch uitgangspunt voor het vergelijken van de diverse congruentiepatronen.

Een algemene opvatting onder deskundigen van het Neo-Aramees is dat de dialecten zich oorspronkelijk een systematisch gespleten ergatief systeem vertoonden en geleidelijk aan veranderd hebben in een totaal accusatief systeem. Met andere woorden, het ergatieve gehalte is vreemd aan Semitische talen en is daarom een verschijnsel dat geheel volledig zal verdwijnen. Dit proefschrift toont echter aan dat de situatie ingewikkelder is en betwist, gezien de diversiteit in de moderne dialecten, of het Oost Neo-Aramees ooit zo homogeen en samenhangend is geweest met betrekking tot alignment als de vakliteratuur veronderstelt. Elk dialect kan zagezegd zijn eigen ding doen en zelfs in de precies tegenovergestelde wijze van andere dialecten. Er zijn meer patronen dan uitsluitend het ergatieve of accusatieve en ze worden ook naast of door elkaar gebruikt. Bovendien doet ergativiteit zich voor in contexten waar men niet zou verwachten of waar men zou kunnen verwachten dat het verdwenen zou zijn.

Allerlei factoren afhankelijk van de taalsituatie zelf zoals taalcontact en taalevolutie kunnen een belangrijke rol spelen in de keuzes van sprekers voor bepaalde constructies. De verschijnselen in andere talen van de wereld scheppen mogelijke verwachtingen voor wat we in het Oost Neo-Aramees zouden aantreffen met betrekking tot alignmenttypes en hoe die zich manifesteren. De manifestaties van grammaticale functies op zichzelf kunnen variëren. Er wordt een belangrijk onderscheid gemaakt tussen de morfologische en syntactische eigenschappen van argumenten. De morfologie kan kernargumenten uitdrukken door middel van pronomina of persoonsaffixen in de werkwoordsvorm die in meer of mindere mate gecombineerd worden met een coreferentieel nomen of door middel van naamvallen of voorzetsels. In veel talen van de wereld spelen deze morfologische eigenschappen nauwelijks tot geen rol, maar is de woord-

volgorde belangrijk om argumenten te onderscheiden. Men spreekt dan van neutrale alignment. Hoewel accusatieve en ergatieve systemen zich vaker voordoen, zijn andere alignmenttypes ook geattesteerd. Een driedeling is mogelijk waarbij de S, A en P (of P, T en R) op elk afzonderlijke wijze worden uitgedrukt. De tegenhanger hiervan is het neutrale patroon waarbij alle argumenten op identieke wijze worden behandeld. Daarnaast bestaat er een horizontaal patroon waarbij de A en P op identieke wijze worden gemarkeerd maar juist de S zich onderscheidt.

Alignment veronderstelt een relatie tussen intransitieve en transitieve constructies waarbij de overeenkomsten tussen de S en andere kernargumenten fundamenteel is. Wat het Oost Neo-Aramees aangeeft is dat deze relatie niet symmetrisch hoeft te zijn. Intransitieve en transitieve constructies kunnen onafhankelijk van elkaar variëren. De argumenten S, A en P kunnen ieder een eigen leven leiden. Perfectieve transitieve constructies met een pronominaal object-suffix genieten een bijzondere status in het Oost Neo-Aramees en variëren veelal onafhankelijk van overeenkomstige intransitieve constructies.

In het meest typische, coherente geval van ergativiteit drukt het werkwoord uitsluitend congruentie uit met de S en de P en is uitsluitend de A gemarkeerd door een aparte naamval of voorzetsel. Dit systeem komt als zodanig niet voor in het Neo-Aramees. Morfologische ergativiteit treedt echter wel in het Oost Neo-Aramees op maar in een andere vorm en beperkt door bepaalde omstandigheden. Het wordt ten minste beperkt door (i) de inflectiebasis van het werkwoord (CCiC- of het daaraan gerelateerde resultatieve participium CCiCa), (ii) de tijd, aspect en ten dele modus die het werkwoord uitdrukt en (iii) de positie van de A en/of de P op de nominale hiërarchie.

Gespletenheid in alignment wordt over het algemeen ingedeeld op basis van verbale en nominale eigenschappen. Ook combinaties van deze types kunnen in talen optreden. Verbale eigenschappen kunnen de lexicale semantiek van de gebeurtenis inhouden of de TAM van de verbale constructie als geheel. Nominale eigenschappen hebben betrekking op hiërarchieën van persoon (1>2>3), bezieldeheid en bepaaldheid. De precieze voorwaarden waaronder ergativiteit zich manifesteert moet voor elk dialect of elke dialectgroep afzonderlijk bepaald worden. De TAM categorieën die het werkwoord weergeeft verschillen tussen de dialecten onderling en de relevante factoren van de nominale hiërarchie hoeven niet hetzelfde te zijn. De inflectiebasis van het werkwoord is echter doorgaans een bepalende factor en de ergatieve alignment wordt structureel gekoppeld aan de perfectieve basis (*q̄til-* ~ *q̄aṭl-*) en/of het resultatief participium dat daarvan afgeleid is.

Een ergatief patroon waarbij de E-suffixen de S en P markeren en de L-suffixen de A (*dmix-a* ‘Zij is in slaap gevallen’ : *nəšq-a-le* ‘Hij heeft haar gekust’) is tot op heden uitsluitend geattesteerd in de Joodse dialecten van het NENA in Irakëes en Iranëes Koerdistan en in ʿTuroyo, de grootste groep binnen het Central Neo-Aramees, gesproken door Syrisch-orthodoxe christenen in of afkomstig uit Zuidoost Turkije. Een subklasse van basiswerkwoorden in het ʿTuroyo wordt gekenmerkt door een alternatieve perfectieve vorm *CaCiC-* (zoals *damix-o* ‘Zij is in slaap gevallen’) in tegensstelling tot *CCiC-* die gebruikt wordt voor de andere basiswerkwoorden. Typologisch gezien lijkt het sterk op de Joodse dialecten. Veruit de meeste dialecten volgen echter een accusatief patroon waarbij de L-suffixen de S en A markeren en de E-suffixen de P (*dmix-le* ‘Hij is in slaap gevallen’ : *nšiq-a-le* ‘Hij heeft haar gekust’). Ergatieve markering door preposities is alleen duidelijk geattesteerd in het ʿTuroyo. De datieve prepositie (*e*)/*l-* drukt de agens uit, terwijl de S en P ongemarkeerd blijven. Deze markering is optioneel en drukt met name focus uit. Een vergelijkbaar verschijnsel komt ook voor in het NENA maar de status van de agens is daar ambiguë.

In het geval van gespletenheid in TAM volgen deze dialecten een typische splitsing in alignment. Naast het perfectieve verleden en het perfectum komt ergativiteit ook voor in de uitdrukking van het irrealis perfectum, terwijl het imperfectieve verleden en tegenwoordige tijd (zowel realis als irrealis) in enig dialect nooit een ergatief patroon aanhouden. Het is beperkt het resultatieve aspect het joodse dialect van Rustaqa. In het Oost Neo-Aramees staat deze splitsing echter los van het verschijnsel ergativiteit. Ook een neutraal patroon kan worden beperkt ten opzichte van het accusatieve patroon. Er is veeleer sprake van grammaticalisatie van oorspronkelijk participiale constructies en de onderlinge dialectverschillen hangen nauw samen met de intransitieve constructies. De gespletenheid in alignment in het Oost Neo-Aramees correleert duidelijk met de grammaticalisatie van een intransitieve resultatieve constructie tot een preteritum (oftewel perfectief verleden tijdsvorm) via een perfectum. De resulterende verschillen in alignment hangen samen met deze grammaticalisatie naar gelang de L-suffixen niet alleen de A maar ook de S markeren in het preteritum (bijv. *dmix-li* ‘Ik heb geslapen’). Wanneer echter de E-suffixen de S markeren, is deze minder gegrammaticaliseerd in TAM en drukt het eerder nog het intransitief resultatief uit (bijv. *dmix-en* ‘Ik ben in slaap (gevallen)’). Dit grammaticale onderscheid in de markering van de S laat zijn sporen achter in vroege geschreven joodse en christelijke bronnen uit Noord-Irak en treedt nog steeds op in meer of minder levendige mate in de joodse dialecten in Iranëes Azerbeidjan

zoals Urmi en Salamas en enkele joodse varianten in Noordoost-Irak en Turkse christelijke dialecten in de westerse periferie zoals Bohtan en Hertevin.

De markering van de *s* is echter evenmin gelijkvormig in de dialecten waar ergativiteit voorkomt. In dit geval is er veelal sprake van lexicalisatie. De *s* deelt de morfologische eigenschappen met de *A* of de *P* afhankelijk van het verbale lexeme en, als hier een semantische grondslag voor te vinden is, dan deelt het ook semantische eigenschappen met een agens of patiëns. Wanneer een werkwoord de *s* aan de *A* koppelt, wekt dit de indruk dat sprekers de transitieve morfosyntaxis voor een intransitief werkwoord verkiezen. Wanneer de agens doelbewust een definitieve verandering bewerkt bij de patiëns vindt de koppeling van de *s* aan de *A* eerder plaats in joodse dialecten waarbij ergativiteit optreedt verband.

Gespleten ergativiteit wordt in de alignmenttypologie in verband gebracht met de nominale hiërarchie waarbij het typisch voorkomt bij laag gerangschikte (pro)nomina. Bovendien wordt beweerd dat de combinatie van ergatieve pronominale suffixen en accusatieve markering van zelfstandige nomina niet voorkomt of hoogst uitzonderlijk is. Ergativiteit in het Oost Neo-Aramees houdt echter uitsluitend indirect verband met de nominale hiërarchie. De ergatieve constructie wordt beperkt tot de derde persoon en het differentieel markeren van het object (de *P*). Deze persoonsbeperking is een typisch geval van gespleten ergativiteit, aangezien de eerste en tweede persoon bij uitstek hoger in rang zijn. Aan de andere kant, wanneer het object zich op een hogere positie van de nominale hiërarchie bevindt, veroorzaakt dit expliciete congruentie met het object. Dit is opmerkelijk, aangezien ergativiteit niet geassocieerd zou worden met het hoger gerangschikte nomen maar juist met het lager gerangschikte nomen. In uitzonderlijke gevallen kan het ergatieve congruentiepatroon ook gecombineerd worden met een accusatieve markeringsstrategie. Ook dit is dus typologisch gezien hoogst opmerkelijk. Al deze verschijnselen zijn echter onafhankelijk van de morfologische ergativiteit in het Oost Neo-Aramees en verschillen niet van andere dialecten waarbij ergativiteit niet optreedt. In die dialecten komen dezelfde transitieve constructies voor, maar is alleen de markering van de *s* anders. Dezelfde beperkingen treden op voor accusatieve en neutrale congruentiepatronen en hangen waarschijnlijk samen met de participiale oorsprong van het perfectief. Bovendien treden dezelfde beperkingen op in andere niet-ergatieve constructies in de taalvarianten waar ergativiteit zich voordoet en speelt waarschijnlijk de omgedraaide volgorde van de pronominale suffixen ten opzichte van het imperfectief een rol.

Dit proefschrift laat bovendien zien dat er ook andere wijzen zijn waarop ergativiteit zich voordoet. Een aparte serie pronominale suffixen in het christelijke dialect van Hertevin (Zuidoost-Turkije), de zogenaamde 'L-E-suffixen' (een vermenging van de L-suffixen en E-suffixen) drukt de A uit, terwijl de S en P door de L-suffixen worden uitgedrukt. Deze manifestatie van ergativiteit is beperkt tot de eerste en tweede persoon, waarbij we typologisch gezien juist het tegenovergestelde zouden verwachten zoals in de andere dialecten. Daarnaast geniet de A een apart markeringsstrategie in de participiale congruente in geslacht en getal in het samengestelde realis perfectum van joodse dialecten van Iranes Azerbeidzjan. De ergatieve congruentie in geslacht en getal tussen de A en het werkwoord treedt alleen op bij het vrouwelijk enkelvoud.

Velerlei NENA dialecten gebruiken een ergatieve transitieve perfectieve constructie gebaseerd op de inflectiebasis van het imperfectief met een toevoegde perfectief preverbium *qam-*, de zogeheten *qam-qaṭal*-constructie. De E-suffixen markeren de A, de L-suffixen markeren P. Dezelfde L-suffixen worden echter ook gebruikt in de markering van de S. Hoewel deze werkwoordsvorm vanzelfsprekend de imperfectieve vervoeging volgt is het niet zomaar suppletief maar maakt het deel uit van het paradigma van het perfectief. Derhalve dient het als een onderdeel worden beschouwt van het congruentiepatroon van het perfectief. Het congruentiepatroon dat zich hierdoor ontvouwt vertoont een morfosyntactisch onderscheid tussen intransitieve en transitieve zinnen die vergelijkbaar is met het ergatieve patroon. De *qam-qaṭal*-constructie kan immers niet voor alle zinstypes gebruikt worden. Intransitieve zinnen kunnen hier niet mee worden uitgedrukt en het wordt vrijwel altijd gebruikt met een pronominaal suffix die de P markeert. Voor een onafhankelijk nomen in de P-functie of de afwezigheid van zo'n nomen wordt de constructie op basis van het perfectief (*qṭil-*) verkozen. Uitsluitend wanneer de P wordt uitgedrukt als een pronominaal suffix past de werkwoordsvorm zich aan aan de vervoeging van het imperfectief. In dit ergatieve type wordt de A anders gemarkeerd in de aanwezigheid van een pronominale P.

Daarnaast toont de voorliggende studie aan dat niet alle patronen in een accusatief-ergatieve tweedeling passen. Een aantal dialecten gebruiken de pronominale L-suffixen voor elk rol en vertonen dus neutrale alignment. Dit komt voor in joodse dialecten van Iranes Azerbeidzjan zoals Urmi en Turkse christelijke dialecten in Bohtan en Hertevin en het dialect Mlahso behorend tot het Central Neo-Aramees (anders dan het Țuroyo). De L-suffixen worden gebruikt in een vaste volgorde (V-A-P) en zijn waarschijnlijk aangepast naar het model

van het imperfectief waar dezelfde volgorde optreedt. De tegenhanger van het neutrale patroon komt ook voor waarbij de drie kernargumenten ieder afzonderlijk gemarkeerd worden. Dit is het gebruikelijke alternatief voor de eerste en tweede persoon in de joodse dialecten waar ergativiteit voorkomt. Het horizontale patroon waarbij de A en P worden uitgedrukt door de L-suffixen komt ook voor onder een aantal van zulke dialecten. In een dorpsvariant van het Turoyo (Raite) treedt dit zelfs op bij de markering door voorzetsels. Het datieve voorzetsel (*e*)/- drukt zowel de A als de P uit.

CURRICULUM VITAE

Paul Noorlander was born on February 12, 1988, in Leidschendam. He graduated in higher secondary education (havo) at College 't Loo in Voorburg in 2005 and completed the foundation course in the first year of European Studies at The Hague University of Applied Sciences in 2006. He subsequently studied Comparative Indo-European Linguistics at the Faculty of Humanities of Leiden University with a minor in Middle Eastern Studies and obtained a Bachelor's degree (*cum laude*) in 2009. He obtained a Master's degree (*cum laude*) in Hebrew and Aramaic Languages and Cultures at the same faculty in 2011. From 2009 to 2011 he followed the Research Master Program of Linguistics at the Leiden University Centre for Linguistics (LUCL). He also assisted in the revision of J.P. Lettinga's *Hulpboek bij de Grammatica van het Bijbels Hebreeuws* (Leiden (etc.): Brill, 2000; 9th edition) under the direction of Dr. M.F.J. Baasten and Dr. W.Th. van Peursen. He was employed as a PhD candidate at LUCL from 2011 to 2016 and as a lecturer in the first semester of the academic year 2016/2017. He taught several courses for Hebrew and Jewish Studies and the Leiden Summer School Linguistics during 2011–2014 including *Comparative Semitics*, *Aramaic Cultural History* and *Introduction to Neo-Aramaic*. He now works as a researcher at the same institute.