



Universiteit  
Leiden  
The Netherlands

## **Indo-European origins of Anatolian morphology and semantics: innovations and archaisms in Hittite, Luwian and Lycian**

Norbruis, S.

### **Citation**

Norbruis, S. (2021, May 12). *Indo-European origins of Anatolian morphology and semantics: innovations and archaisms in Hittite, Luwian and Lycian*. LOT dissertation series. LOT, Amsterdam. Retrieved from <https://hdl.handle.net/1887/3176460>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3176460>

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

Cover Page



Universiteit Leiden



The handle <https://hdl.handle.net/1887/3176460> holds various files of this Leiden University dissertation.

**Author:** Norbruis, S.

**Title:** Indo-European origins of Anatolian morphology and semantics: innovations and archaisms in Hittite, Luwian and Lycian

**Issue Date:** 2021-05-12

# **Indo-European Origins of Anatolian Morphology and Semantics**

**Innovations and Archaisms in Hittite, Luwian and Lycian**

Published by

LOT

Kloveniersburgwal 48

1012 CX Amsterdam

The Netherlands

phone: +31 20 525 2461

e-mail: [lot@uva.nl](mailto:lot@uva.nl)

<http://www.lotschool.nl>

Cover illustration: KBo 10.34 (obv.), SULTANHAN (side C) and TL 44 (side A). All photos © Paul Randall Williams, licensed through Alamy and FunkyStock. Creative designer: Jelma Design.

ISBN: 978-94-6093-373-8

DOI: <https://dx.medra.org/10.48273/LOT0588>

NUR: 616

Copyright © 2021: Stefan Norbruis. All rights reserved.

# **Indo-European Origins of Anatolian Morphology and Semantics**

**Innovations and Archaisms in Hittite, Luwian and Lycian**

PROEFSCHRIFT

ter verkrijging van  
de graad van doctor aan de Universiteit Leiden,  
op gezag van rector magnificus prof.dr.ir. H. Bijl,  
volgens besluit van het college voor promoties  
te verdedigen op woensdag 12 mei 2021  
klokke 13.45 uur

door

**Stefan Norbruis**

geboren te Almelo

in 1986

*Promotor*

prof.dr. A.M. Lubotsky

*Co-promotor*

dr. A. Kloekhorst

*Promotiecommissie*

prof.dr. M.J. Kümmel (Friedrich-Schiller-Universität Jena)

prof.dr. H.C. Melchert (University of California, Los Angeles)

prof.dr. J. Schaeken

dr. W.J.I. Waal

The research for this work was carried out as part of dr. A. Kloekhorst's research project *Splitting the mother tongue: the position of Anatolian in the dispersal of the Indo-European language family* (2015-2020), which was funded by the Netherlands Organisation for Scientific Research (NWO; project nr. 276-70-026).

# Contents

Abbreviations and symbols	xiii
Languages and scripts	xiii
Grammar	xiv
Symbols	xv
Literature	xvi
Text	xvii
Acknowledgments	xxi
Introduction	1
Aims, basis and contents	2
Practical indications	4
References	5
NOMINAL PART	7
<b>CHAPTER 1</b>	
<b>The origin and spread of the ‘<i>i</i>-mutation’ paradigm and the prehistory of the Luwic nominal stem classes</b>	<b>9</b>
1 Introduction	9
2 Previous analyses	10
2.1 Starke 1990	11
2.1.1 Analysis	11
2.1.2 Discussion	13
2.2 Rieken 2005	14
2.2.1 Analysis	14
2.2.2 Discussion	16
3 Terminology and notation	18

4	A new account	19
4.1	The adjectives	19
4.2	Identifying the paradigm	20
4.2.1	Paradigm-internal analysis	20
4.2.1.1	Morphological clues	20
4.2.1.2	<i>i</i> -stem paradigm: fleshing out the details	21
4.2.1.2.1	Ablaut vowel *- <i>e</i> - and a more general loss of *- <i>i</i> -	22
4.2.1.2.2	No length in the direct case endings	25
4.2.1.2.3	Discrepancies between Luwic and Hittite	27
4.2.1.2.4	Paradigm-internal analysis: outcome	28
4.2.2	Other <i>i</i> -stems?	28
4.2.2.1	Luw. - <i>i(ia)</i> -, Lyc. - <i>i(je)</i> -	29
4.2.2.2	Luw. - <i>a<sub>2</sub>ia/i</i> -, Lyc. - <i>Vije/i</i> -	30
4.2.2.3	<i>i</i> -stems outside nouns and adjectives	31
4.2.2.4	Other <i>i</i> -stems: conclusion	32
4.2.3	Lexical evidence: the inflection of original <i>i</i> -stem lexemes	32
4.3	The extent of the spread of the <i>i</i> -stem paradigm	33
4.3.1	<i>C</i> -stems	33
4.3.2	<i>u</i> -stems	34
4.3.3	<i>ā</i> -stems and <i>o</i> -stems	35
4.3.3.1	Lyc. <i>a</i> -stems < <i>ā</i> -stems	35
4.3.3.2	Lyc. <i>e</i> -stems < <i>o</i> -stems	36
4.3.3.3	Luw. <i>a</i> -stems	37
4.3.3.4	Mismatches: productivity of the Lyc. <i>a</i> -stems	39
4.3.3.5	<i>ā</i> -stems and <i>o</i> -stems: conclusion	41
4.4	A scenario of the spread	41
4.4.1	A collapse of <i>i</i> -stems, <i>C</i> -stems and <i>o</i> -stems	41



4.4.2	Why <i>i</i> -stems? An initial collapse of <i>i</i> -stems and <i>C</i> -stems	43
4.4.2.1	The evidence	43
4.4.2.2	Motivation and scenario	44
4.4.3	Further spread to the <i>o</i> -stems	45
5	Conclusion	46
	References	47

## CHAPTER 2

	<b>The Luwic inflection of proper names, the Hittite dative-locative of <i>i</i>- and <i>ija</i>-stems, and the Proto-Anatolian allative</b>	<b>51</b>
1	Introduction	51
2	The Luwic inflection of proper names	52
2.1	Personal names	52
2.1.1	Hieroglyphic Luwian	52
2.1.2	Cuneiform Luwian	56
2.1.3	Lycian	56
2.2	Toponyms	59
2.2.1	Hieroglyphic Luwian	59
2.2.2	Cuneiform Luwian	61
2.2.3	Lycian	61
2.3	Divine names	62
2.4	Proto-Luwic	65
2.4.1	Differences	65
2.4.2	Reconstruction of the paradigms	67
2.5	Pre-Proto-Luwic: prehistory of the case forms	68
2.5.1	The genitive and the ablative	68
2.5.2	The locative	68
2.5.3	The dative of personal names	73
3	The Hittite dative-locative of <i>i</i> -stems and <i>ija</i> -stems	75

3.1	The distribution of the dat.-loc. <i>-ija</i>	76
3.2	The origin of the dat.-loc. <i>-ija</i>	79
4	The origin of the Luwic onomastic dative	80
5	The Luwic dat.-loc. of <i>ija/i</i> -stems	82
6	The Luwian dat.-loc. of the genitival adjective	83
7	The Proto-Anatolian allative	85
8	Conclusions	91
	References	92

### CHAPTER 3

	<b>The distribution of <i>-a-</i> and <i>-e-</i> in the Lycian genitival adjective suffix</b>	<b>99</b>
1	Introduction	99
2	Earlier interpretations	100
2.1	<i>-a-</i> and <i>-e-</i> as phonetic variants	100
2.2	<i>-a-</i> and <i>-e-</i> as morphological variants	101
3	Outline	102
4	Lycian A: attestations, rules and exceptions	104
4.1	Nouns	104
4.1.1	<i>a</i> -stems (c.)	104
4.1.2	<i>i</i> -stems (c.)	107
4.1.3	<i>e</i> -stems (n.)	110
4.1.4	Consonant stems (n.)	111
4.2	Adjectives	111
4.2.1	<i>e/i</i> -stems	111
4.3	Pronouns	113
4.3.1	<i>e</i> -stem(s)	113
4.3.2	Non-ablauting <i>i</i> -stem(s)	114
4.4	Attested but unclear bases	114
4.5	Lycian A: conclusions	116

5	Lycian B: attestations, rules and exceptions	117
5.1	Nouns	117
5.1.1	<i>a</i> -stems (c.)	117
5.1.2	<i>i</i> -stems (c.)	118
5.1.3	Consonant stem(s) (c.)	119
5.1.4	<i>e</i> -stems (n.)	120
5.1.5	Attested but unclear base (n.)	120
5.2	Adjectives	121
5.2.1	<i>e/i</i> -stems	121
5.3	Lycian B: conclusions	121
6	Conclusions: synchronic rules	122
7	Historical interpretation	123
	References	126
	VERBAL PART	129
<b>CHAPTER 4</b>		
<b>From the Proto-Indo-European perfect to the Hittite <i>hi</i>-conjugation</b>		
Semantic and formal distributions between the <i>mi</i> - and <i>hi</i> -conjugations		
		<b>131</b>
1	Introduction	131
2	Existing scenarios and criticism	133
3	No stative perfects	136
4	The perfect and tense	136
4.1	PIE and IE developments	136
4.2	Anatolian: development to a preterite	138
4.2.1	<i>A priori</i> : predisposition	139
4.2.2	Perfect endings emerge as preterite endings	139
4.2.3	Eventive semantics	140
4.2.4	Syncretism with the <i>s</i> -aorist	140

4.3	The creation of a new present tense	142
5	Conjugation assignment I	145
5.1	Is there a principle?	145
5.2	In defense of formal transfers	147
6	Conjugation assignment II: A formal distribution between the <i>mi</i> - and <i>hi</i> -conjugations	151
6.1	Root formations	153
6.1.1	No adjacent laryngeal	153
6.1.1.1	* <sup>o</sup> <i>eC</i> -	153
6.1.1.1.1	* <i>CeC</i> -	153
6.1.1.1.2	* <i>CCeC</i> -	155
6.1.1.2	* <sup>o</sup> <i>eCC</i> -	157
6.1.2	Adjacent laryngeal	161
6.1.2.1	* <i>h</i> <sub>1</sub>	161
6.1.2.2	* <i>h</i> <sub>2</sub>	162
6.1.2.2.1	* <i>eh</i> <sub>2</sub>	163
6.1.2.2.2	* <i>h</i> <sub>2</sub> <i>e</i>	166
6.1.2.3	* <i>h</i> <sub>3</sub>	168
6.1.2.3.1	* <i>eh</i> <sub>3</sub>	168
6.1.2.3.2	* <i>h</i> <sub>3</sub> <i>e</i>	170
6.1.2.4	* <i>H</i>	171
6.2	Affixed formations	172
6.2.1	Reduplicated formations	172
6.2.2	Infixd formations (* <sup>o</sup> - <i>neC</i> -)	177
6.2.3	Suffixes	181
6.3	Overview and further interpretation	187
7	The ultimate origin of the <i>hi</i> -conjugation and the semantics of the PIE perfect	192
8	Summary and conclusion	198
	References	200

**CHAPTER 5**

<b>Evidence for the PIE augment in Anatolian</b>	209
1 Introduction	209
1.1 Ablaut in the <i>mi</i> -conjugation	209
1.2 Ablaut in the <i>hi</i> -conjugation	210
2 Previous explanations	211
3 A new interpretation	214
4 Vowel length	217
5 PIE	225
6 * <i>h<sub>1</sub>es-</i>	227
7 Conclusion	231
References	232

**CHAPTER 6**

<b>The etymology of PIE *<i>h<sub>1</sub>es-</i> ‘to be’</b>	<b>235</b>
References	240

**CHAPTER 7**

<b>The etymology of IE *<i>deh<sub>3</sub>-</i> ‘to give’</b>	<b>243</b>
References	249

Summary and conclusions	251
Index	261
Nederlandse samenvatting	301
Curriculum vitae	311



## Abbreviations and symbols

### LANGUAGES AND SCRIPTS

Alb.	Albanian
Arm.	Armenian
Av.	Avestan
CLuw.	Cuneiform Luwian
Cret.	Cretan
Eng.	English
Germ.	(Modern High) German
Goth.	Gothic
Gr.	Ancient Greek
Hitt.	Hittite
HLuw.	Hieroglyphic Luwian
Hom.	Homeric Greek
IE	Indo-European
It.	Italian
Lat.	Latin
Latv.	Latvian
Lith.	Lithuanian
LNS	Late New Script
Luw.	Luwian
Lyc.	Lycian
MH	Middle Hittite
MHG	Middle High German
MoGr.	Modern Greek
MS	Middle Script
Myc.	Mycenaean
NH	Neo-Hittite
NS	Neo-Script
Nw.	Norwegian
OCS	Old Church Slavic
OH	Old Hittite

OHG	Old High German
OIr.	Old Irish
OLat.	Old Latin
ON	Old Norse
OPruss.	Old Prussian
OS	Old Script
PAnat.	Proto-Anatolian
PGm.	Proto-Germanic
PIE	Proto-Indo-European
PLuw.	Proto-Luwic
PSlav.	Proto-Slavic
RCS	Russian Church Slavic
Sab.	Sabellic
Skt.	Sanskrit
Sp.	Spanish
Sw.	Swedish
Thess.	Thessalian
ToA	Tocharian A
ToB	Tocharian B
ToAB	Tocharian A and B
VLat.	Vulgar Latin

#### GRAMMAR

abl.	ablative
acc.	accusative
adj.	adjective
adv.	adverb
all.	allative
aor.	aorist
c.	common (gender)
conj.	conjugation
dat.	dative
dir.	direct cases
du.	dual



---

f.	feminine (gender)
fut.	future
gen.	genitive, genitival
gen.adj.	genitival adjective
imp.	imperative
impf.	imperfect, imperfective
inf.	infinitive
intr.	intransitive
loc.	locative
m.	masculine (gender)
n.	neuter (gender)
nom.	nominative
obl.	oblique cases
perf.	perfect
pl.	plural
plupf.	pluperfect
PN	personal name
poss.pron.	possessive pronoun
ppp.	passive past participle
pres.	present tense; present aspect
pret.	preterite, past tense
ptc.	participle
sg.	singular
subj.	subjunctive
subst.	substantive, substantivized
tr.	transitive
voc.	vocative

## SYMBOLS

>	develops into
<	develops from
>>	is analogically replaced by
<<	analogically replaces

→	is the derivational base of; outcome of a proportional analogy
←	is derived from
*...	reconstructed form
...*	unattested form of an attested lexeme
**...	counterfactual form
◦	omission of part of the form
~	comparable to, cognate with, varying with; (in example sentences) the word(s) under discussion
/	paradigmatically alternating with
//	the tablets on either side are duplicates
+	join with
∅	zero
#	word end
C	consonant
V	vowel
R	resonant
H	laryngeal
P	labial stop
T	dental stop
K	velar stop
X	variable in a proportional analogy

#### LITERATURE

IBoT	İstanbul Arkeoloji Müzelerinde bulunan Boğazköy Tabletlerinden Secme Metinler
KBo	Keilschrifttexte aus Boghazköi
KUB	Keilschrifturkunden aus Boghazköi
TL	Tituli Lyciae
obv.	obverse, recto, front side
rev.	reverse, verso, back side

---

RV	Rigveda
<i>Il.</i>	Iliad
<i>Od.</i>	Odyssey
Hdt.	Herodotus
Cic.	Cicero
<i>Amic.</i>	<i>De amicitia</i>
<i>Leg.</i>	<i>De legibus</i>
NT	New Testament
<i>Rom.</i>	<i>Romans</i>

## TEXT

c.	circa; century
cf.	confer, compare
cont.	continued
dial.	dialectal
e.g.	exempli gratia, for example
ed(s).	editor(s)
esp.	especially
et al.	et alii, and others
etc.	etcetera
f.	from page (preceding number) onward
fthc.	forthcoming
i.c.	in casu, in this case
i.e.	id est, that is
lit.	literature; literally
mr.	mister
n.	note
p.c.	personal communication
refs.	references
sc.	scilicet, namely, supply
s.v.	sub voce, under the lemma
vel sim.	vel similia/simile, or similar
viz.	videlicet, to wit, namely
vs.	versus, as opposed to



“Many resemblances are evident at first sight, others are discovered by more careful investigation, and the more closely we analyse the recondite structure of the kindred tongues, the more we are surprised to find them constantly developed by the same principle.”

— Franz Bopp, 1820



## Acknowledgments

This book is the fruit of my PhD research conducted at Leiden University (2015-2020). I am grateful to the Netherlands Organisation for Scientific Research (NWO), and ultimately Dutch society, for funding the overarching project *Splitting the Mother Tongue*, as well as to grant-receiver Alwin Kloekhorst and professor Sasha Lubotsky for granting me the opportunity to fulfill this PhD position, and to develop my own findings and ideas.

I am also grateful for having been able to meet, exchange thoughts with, and enjoy the company of, other people in the field, especially Craig Melchert, Norbert Oettinger, Heiner Eichner, David Hawkins, Elisabeth Rieken, Ilya Yakubovich, Ignasi Adiego, Willemijn Waal, Theo van den Hout, Petra Goedegebuure, Zsolt Simon, Andrey Shatskov, and Martin Kümmel, as well as my fellow Anatolian PhD students, David Sasseville, Guglielmo Inglese, Michele Bianconi, Elena Martínez Rodríguez, Tobias Mosbæk Søborg, Thalia Lysen, Natalia Lodeiro Pichel, Tomoki Kitazumi, and last but not least my direct colleague Xander Vertegaal. Thanks to all of you for providing a stimulating scientific environment, as well as for being great company.

Thanks, also, to my other fellow students of linguistics, classics and/or history, who have contributed tremendously to the enjoyability of my PhD time: my most regular sparring and drinking partners Aljoša Šorgo, Chams Bernard, Kate Bellamy, Louise Friis, Rasmus Nielsen and Andrew Wigman, as well as Oscar Billing, Juan Briceño Villalobos, Laura Bruno, Giacomo Bucci, Petra Buffing, Francesco Burrone, Laura Dees, Federico Dragoni, Pascale Eskes, Cassandra Freiberg, Matilde Garré, Nastya Ionova, Anthony Jakob, Leonidas Kanterakis, Peter Alexander Kerkhof, Joachim Kraaij, Niko Kontovas, Andreas Krogull, Ezra la Roi, Wenjing Mao, Lotte Meester, Arjan Nijk, Tomeu Obrador-Cursach, Axel Palmér, Dalia Pratali Maffei, Luka Repanšek, Niels Schoubben, Marco van der Schuur, Paulus van Sluis, Benjamin Suchard, Kees Thijs, Daphne Vidali, Abel Warries, Vera Zwennes, and many others. Thank you all for a wonderful time.

I also owe a great deal to those who have laid the foundations for this dissertation as teachers: of Indo-European and historical linguistics especially Sasha Lubotsky, Alwin Kloekhorst, Michaël Peyrot, Michiel de Vaan, Lucien van Beek, Guus Kroonen, Tijmen Pronk, Hrach Martirosyan, Cor van Bree, Arjen Versloot, and numerous summer school teachers; of Greek and Latin linguistics among others Gerard Boter, Caroline Kroon, Harm-Jan van Dam, Suzanne Adema, and most of all Sjaak van Hal, Rutger Allan and Frits Waanders, who also represent successive waves in the discovery and nourishment of my passion for historical linguistics.

The ultimate foundation of this work are my parents and grandparents. I am grateful to them not only for having passed on to me favorable traits for doing historical linguistics, but also for always having encouraged and helped me to pursue in life what I find most interesting. I also thank other family members and friends, and want to mention specifically those I have been fortunate enough to have had around me in and around Leiden: Franco and Alda, Richard and Imme, Rolf and Froukje, Kiara and Mimi, the conductor and members of the Voorschotens Kamerkoor, and my fellow voice actors. My biggest thanks go to Annika, not least for enduring the high degree to which I have been engrossed in this work.