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A grammar of Tagdal: a Northern Songhay language

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A grammar of Tagdal,
a Northern Songhay language

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0.1 Glosses, abbreviations and symbols

-	morpheme boundary
=	clitic boundary
'	stress marker, when over a vowel
ˈ	stress marker, only in phonetic transcriptions
[]	phonetic transcription
1SG	first person singular
1PL	first person plural
2SG	first person singular
2PL	second person plural
3SG	third person singular
3PL	third person plural
ADJ	adjective
ADV	adverb
ADJR	adjectiviser
ALL	allative
CAUS	causative
DEF	definite
EMPH	emphatic
FUT	future
GEN	genitive
IMP	imperfective
IND	indefinite
LOC	locative
NEG	negation
OBJ	object
PASS	passive
PL	plural
PRF	perfective
REL	relative
SUB	subject
SBDR	subordinator
SBJ	subjunctive
VEN	venitive

0.2 Grammatical Morpheme index

morpheme	gloss	section
a=	Third person singular clitic (3SG)	3.5.5
=a	Third person singular clitic, object (3SG.OBJ)	3.5.5
a-	Nominaliser, M Tuareg etymology	3.1.2
aayó	Singular definite demonstrative, proximal (DEF)	4.1
aɣzi	Singular medial distance demonstrative (COMP.MED)	4.1
aɣfén	Distal demonstrative (COMP.DIS)	4.1
akka	Interrogative, tag questions (INT.TG)	4.10.2
ámmaaka	Conditional 'if'	4.7.1
-an, -en, -wan, -tan	PL suffix	3.1.2
-an, -nan	Adjectiviser	3.3.1
anɣi=	Second person plural clitic (2PL)	3.5.5
ánzi	Second person plural independent pronoun (2PL.IND)	3.1.1, 4.11.2
ánɣa	Third person singular independent pronoun (3SG.IND)	3.1.1, 4.11.2
áygas	Connector, main clause, adversative 'however', 'therefore'	4.11.1
b-	Imperfective (IMP)	3.5.5
ə-	Subject Relative marker (SUB.REL)	4.8.1, 3.3.1
əŋguuzi	Connector, focus 'suddenly'	4.11.1
ənta	Interrogative, functions to cast doubt upon an assertion (INT)	4.6
ya= / =ay	First person singular clitic (1SG)	3.5.5
yaay	First person singular independent pronoun (1SG.IND)	3.1.1, 4.11.2
da	Emphatic marker (EMPH)	4.11.2
daayó	Locative postposition 'place'	4.3
felás	Reason subordinator 'because'	4.7.1
fo	Singular indefinite demonstrative (IDF)	4.1

ga	Locative postposition 'on'	4.3
harwá	Subordinating construction 'still'	4.7.1
ha aayó nda	Interrogative construction 'how?'	4.10.3
haziggá	Connector, main clause, reason 'because'	4.11.1
hazikán	Connector, main clause, marks end of discourse or section 'therefore'	4.11.1
i=	Third person plural clitic (3PL)	3.5.5
i-	PL prefix, Tuareg etymology	3.1.2
=i	Third person plural clitic, object (3PL.OBJ)	3.5.5
iiri=	First person plural clitic (1PL)	3.5.5
iiri	First person plural independent pronoun (1PL.IND)	3.1.1, 4.11.2
íngi / ínga	Third person plural independent pronoun (3PL.IND)	3.1.1, 4.11.2
zi	Singular medial distance demonstrative (MED)	4.1
kan	Locative postposition 'in'	3.5.5, 4.3
-kat	Venitive (VEN)	3.5.5
koy	Agentive, Songhay etymology	3.1.3
kud	Conditional 'if'	4.7.1
m-	Subjunctive (SBJ)	3.5.5, 4.7.1
-ma	Agentive, Tuareg etymology	3.1.3
man	Interrogative 'where?'	4.10.3
may	Interrogative 'who?'	4.10.3
maǰǰán, míǰǰán	Adversative coordinator 'but'	4.6.2
ma aafó	Interrogative construction 'which?'	4.10.3
maǰǰi	Interrogative 'what?'	4.10.3
meeda	Coordinate connector 'or'	4.2, 4.3
n, m, ŋ	Genitive (GEN)	2.4.1, 2.4.4, 3.5.5, 4.1, 4.3
-nan	Allative (ALL)	3.5.5
nə-	Perfective negation (NEG.PRF)	3.5.5
nəm-	Reciprocal (REC)	3.5.3, 3.5.4
nda	Coordinate connector 'and', 'with'	3.4
nda anəǰi	Negative conditional 'unless'	4.7.1
-nén	Plural suffix, demonstratives	4.1
-nen	PL Adjectiviser	3.3.1
ni= / =in	Second person singular clitic (2SG)	3.5.5
nin	Second person singular independent pronoun (2SG.IND)	3.1.1, 4.11.2
n beena	Locative construction 'over'	4.3
s-, ʃ, z, ʒ	Causative (CAUS)	3.5.3, 3.5.4
sa	Dative postposition (DAT)	3.4, 3.5.5,

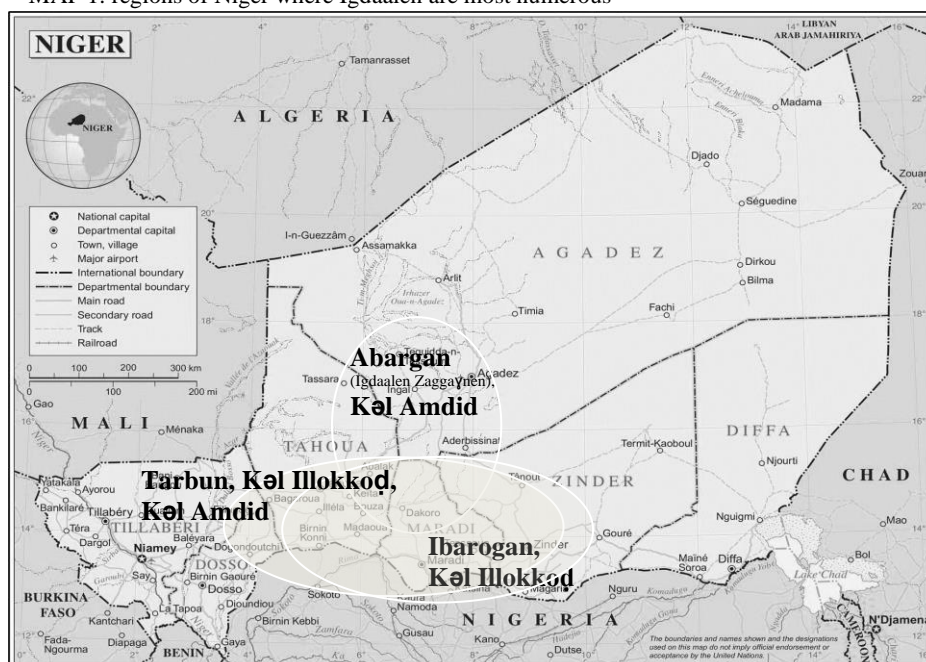
		4.3
sa	Subordinator (SBDP)	4.7, 4.7.2
sə-	Imperfective negation (NEG.IMP)	3.5.5
ʃen	Singular distal demonstrative (DIS)	4.1
t-	Nominaliser, F Tuareg etymology	3.1.2
tə-	Future (FUT)	3.5.5, 4.7.1
təw-	Passive (PASS)	3.5.3, 3.5.4
təzzár	Connector, main clause, time relation 'then'	4.11.1
-yen	Nominaliser, Songhay	3.1.3

Chapter 1

1 Introduction

Tagdal is a Northern Songhay language spoken by a semi-nomadic people called the Igdaalen, scattered throughout the central and eastern regions of the modern-day Republic of Niger. It is best known for mixing both Tuareg-Berber and Songhay structures and vocabulary. Igdaalen often refer to their language as Taheshit, or Tahitit. However, since this term could also be used to refer to other varieties of Northern Songhay, such as Tasawaq and even Tadaksahak from Mali, for the sake of simplicity, in this study the term Tagdal will be used for the language, and Igdaalen for the people.¹ The following map, from Benítez-Torres (2020) illustrates the approximate locations of the largest sub-groups of Tagdal within Niger.²

MAP 1: regions of Niger where Igdaalen are most numerous



¹ A single Tagdal speaker would be referred to as an Agdal, while Igdaalen is the plural form. Since the prefix *t-* is feminine, the term Tagdal could refer either to the name of the language – always feminine – or to an Agdal woman.

² This is by no means an exhaustive list; I merely list the largest sub-groups. Tagdal speakers themselves refer to their sub-groups and clans by the term *táwfiiten*, which could have a variety of meanings – anything from tribe to clan to ethnicity, to even species of plants and animals. This makes it difficult to account for every single sub-grouping in an exact manner.

1.1 Location

Since today the Igdaalen participate in the general semi-nomadic Tuareg-Berber milieu (Lacroix 1968), most are scattered in encampments throughout the central regions of Niger. In the southern areas, some groups can be found as far south as outside the town of Zinder, near the Nigerian border. In the north, some groups extend as far north as Arlit, several hundred kilometres from the Algerian border. However, Tagdal speakers are most numerous in the central and north-central regions of Niger, especially between the towns of Tahoua and Agadez and several hundred kilometres east and west of those points (see map 1).

In the north, mainly around the towns of Agadez and Ingal, the most numerous Tagdal-speaking sub-groups are the Kəl Amdid and the Abargan. The Abargan speak a variety of Tagdal, appropriately called Abargan, which seems very similar to Tadaksahak (see Christiansen-Bolli 2010).³ This is most notable in the phonology, which appears essentially identical to Tadaksahak (see chapter 2). In the hilly, savanna grassy regions of central Niger, chiefly from the town of Tahoua to just north of Abalak and several hundred kilometres east and west, the most common Tagdal sub-groups are the Tarbun and the Kəl Illokoḍ, with a smattering of Kəl Amdid. The Kəl Illokoḍ speak a variety of Tagdal, called Tamaslokkod, very similar to the Abargan farther north, while the Tarbun speak a variety similar to the Kəl Amdid, whose phonology is akin to Təwəlləmət, the most common Tuareg variety in the area.

In the southern region of Niger, south and west of Tahoua and east toward the town of Maradi, the most numerous sub-group is the Ibaroogan, with a smattering of Kəl Illokoḍ. The Ibaroogan are historically a separate ethnic group, socially and economically tied to the Igdaalen, who speak a variety of Tagdal called Tabarog.⁴ In their survey of Northern Songhay varieties of Niger, Rueck and Christiansen (1999) found a high degree of intelligibility between Tabarog and other varieties of Tagdal. Furthermore, I myself have observed that speakers of the various varieties of Tagdal, including Tabarog, who travel to large towns such as Tahoua and Agadez seem to understand each other and communicate quite well.⁵ Therefore, for the purpose of this study, Tabarog will be treated as a variety of Tagdal.

³ Interestingly, the Kəl Amdid in this northern region seem to speak a similar variety of Tagdal to the Tarbun much farther south, while the Kəl Illokoḍ in the south speak a variety more akin to the Abargan in the north (and to Tadaksahak in Mali). A study of historical migration patterns among Igdaalen might be revealing.

⁴ Most differences between Tabarog and other varieties of Tagdal are phonological (see chapter 2), though some vocabulary differences exist as well.

⁵ Tabarog speakers, as well as speakers of other varieties of Tagdal that I have been in contact with, often refer to their speech varieties as 'accents'.

1.2 Sociolinguistic situation

Over the years, a number of ideas have circulated concerning the origins of modern-day Igdaalen, from oral traditions⁶ to historical accounts,⁷ to educated guesses based on available linguistic data.⁸ Unfortunately, with the lack of written historical records, the origins of modern-day Igdaalen has been lost in antiquity, and retracing them is an almost impossible task. Most Igdaalen today would be considered Tuaregs (Lacroix 1968: 93) within the Niger-Mali sub-region, many living as client communities by providing religious services in exchange for payment and / or protection.⁹ Many others make a living as pastoralists, though with the spread of political instability in the region, this traditional lifestyle has come under increasing threat. Regardless, the focus of this study will be on providing a synchronic linguistic description of Tagdal as it exists today. Therefore, most questions about the origins of the Igdaalen are outside of the purview of this study.

What is fairly certain is that the ancestors of the Igdaalen were likely present when the Songhay Empire conquered the region of modern-day Niger and Mali in order to exploit the numerous trade routes between sub-Saharan and North Africa. Subsequent to this, Songhay became the Language of Wider Communication (LWC) in modern-day northern Niger until the arrival of the French in the late 19th century CE.¹⁰

Today, Songhay no longer functions as the LWC of northern Niger, and the only place where Northern Songhay and mainstream Songhay languages occur in the same area is in Mali (Christiansen-Bolli 2010) and southwest Niger. This means that most modern-day Tagdal speakers do not speak a mainstream Songhay language.

Outside of the towns and villages, Tuareg languages tend to function as the LWC. The most common Tuareg languages in the region include Təwəlləmmət in the southern and western regions of Niger and into eastern Mali, and Tayart in northern

⁶ Some postulating Jewish Moroccan, or some other North African, origin, while others posit Arab, or even Turkish origin.

⁷ See, for example, Adamou (1979) and Hamani (1989).

⁸ Among these are Nicolai (1990a, 1990b; 2003; 2006a, 2006b), Souag (ms, 2010, 2012, 2015a, b) and Benítez-Torres (2010, 2017). These will all be discussed further in this chapter.

⁹ Many Igdaalen, especially in the central regions of modern-day Niger, live in fairly closed encampments a short distance from, but attached to, larger Tamajaq (Berber)-speaking encampments. These provide religious services for their Tamajaq-speaking Tuareg patrons, from leading the five Islamic daily prayers to providing magical charms for protection and other esoteric purposes. Many Igdaalen have done quite well economically this way.

¹⁰ It is far from certain what language(s) functioned as the lingua franca(e) prior to this. Adamou (1979) and Hamani (1989) suggest an ancestor of modern-day Hausa. However, much of their work is meant to refute claims by some Tuaregs wanting to establish the independent state of Azawad in what is now Mali and Niger, that Hausa speakers are merely recent arrivals, and that Berber-speaking Tuaregs are the "original" population of the region. Regardless, no one is certain what the LWC was before Songhay.

Niger. Tetserret, a Western Berber language whose speakers also participate in the larger Tuareg milieu today (Lux 2011, Souag 2015b), is also present in the region, and a number of Tagdal speakers (PC) have claimed to speak Tetserret, as well as other Tuareg languages.

Those Igdaalen who are bilingual or multilingual often tend to speak one or more varieties of Tuareg, then possibly Hausa. A very few speak French, if they have attended school. When traveling into town, Igdaalen tend to function in Hausa or in Tuareg, depending on whom they are speaking with. Unless they have occasion to travel to the capital, few Igdaalen learn Zarma or any other nigerien language.

1.3 Classification

What follows is a brief discussion of Songhay languages in Section 1.3.1, followed by the criteria for classifying Northern Songhay languages and, specifically, Tagdal in Section 1.3.2.

1.3.1 Songhay

At present,¹¹ many researchers place all Songhay languages within the Nilo-Saharan family (see, for example, Bender: 1997, Ehret: 2001), though the idea is not without its detractors. Mukarovsky (1966) and Creissels (1981) suggested a convergence between Songhay and Mande languages, of the Niger-Congo family, sometime during Songhay's formative period, in order to explain the presence of Songhay features in certain varieties of Mande and vice-versa. Nicolai (1977, 1984, 1990b, 2006a) also suggested a relationship between Songhay and Mande languages, though for different reasons (see below). Creissels (1980), noting many shared syntactic features between Songhay and Mande, explored various explanations for them, including the possibility of placing Songhay within the Mande family. On the other hand, Dimmendaal (2008, 2019) considers Songhay an independent language family all its own.

Harrison, Harrison and Rueck (1997) found a high degree of intelligibility between all of the mainstream Songhay varieties spoken along the Niger river, from northern Benin through Niger and all the way to just south of the city of Gao in Mali. A number of these could be considered vernacular varieties. These include Wogo, which is likely to be a variety of Kaado, and Kurtey, spoken along the Niger River in both Mali and Niger. Nevertheless, they were essentially asking questions about intelligibility between the languages. Heath (1999 a,b) described both the Songhay varieties spoken in Gao and Timbuktu, spoken in modern-day Mali.

Nicolai suggested several possible scenarios for the development of Songhay (c.f. Nicolai 1977, 1990a, 1990b; 2003; 2006a, 2006b; Nicolai ms.). In one scenario, an extinct, possibly creolized or Koinéized, Afroasiatic language could have served

¹¹ i.e. since Greenberg's (1963) classification

as the lingua franca in the region of modern-day Niger and Mali. Having then lexified surrounding languages, which then eventually became modern-day Songhay,¹² this language subsequently disappeared, leaving only lexical items as evidence of its existence. During the period during which Songhay grammar would have been coalescing, Mande areal features would have entered into the language, as well as Songhay features entering into Mande languages.

A second possible scenario by Nicolai proposes that ancient lingua franca of the modern-day Niger and Mali *was* Songhay, which at the time had many more Afroasiatic features than modern-day Songhay. Subsequently, Mande features would have made their way into Songhay afterward, leaving only vocabulary of Afroasiatic origin. If so, then modern Songhay varieties are effectively a vernacularisation of this ancient 'Proto-Songhay', for lack of a better term.

Based on various criteria, Nicolai (1979: 12-14) divides the Songhay family of languages, into southern and a northern branches, which divided from Proto-Songhay.¹³ Languages in the southern branch include the western Songhay, spoken in the ancient Malian city of Timbuktu (Heath 1999a); central, which includes the Hombori in Mali and Marese in Burkina Faso; and eastern, most notably the variety spoken in Gao (Heath 1999b), sub-branches. It also includes Kaado, spoken principally in northern Niger; Zarma in Niger and Dendi in Benin. Souag (2009; 2010a, b; 2012) questions the idea of a southern branch, while accepting the idea of a northern one. Instead, he proposes a northwestern and eastern, with Tagdal and other Northern Songhay languages being actually identified as northwestern.¹⁴

Regardless, for the purposes of this synchronic study, Tagdal, Tadaksahak and Tasawaq will be referred to as "Northern Songhay", purely for the sake of convenience, essentially because of the history of the term "northern". No claim is meant about whether Songhay should be considered Nilo-Saharan or an isolate, since that question is beyond the scope of this study, nor about the question of northern vs. southern Songhay or eastern and northwestern.

1.3.2 Northern vs. mainstream Songhay

Despite the disagreement about what language family Songhay languages belong to (if any), the idea that Northern Songhay languages form a distinct unit apart from

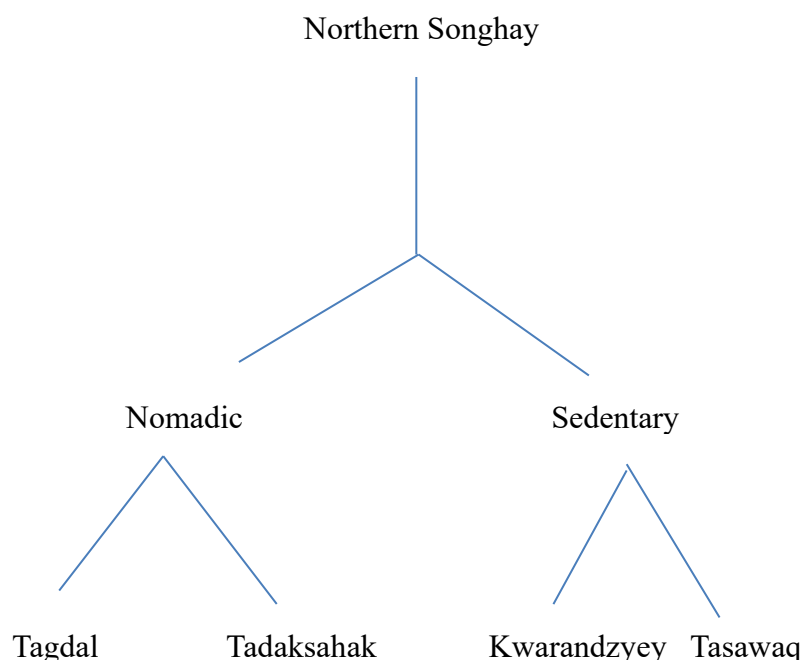
¹² Dimmendaal (1992, 1995) Kossmann (2005) and Benítez-Torres (2005) criticize Nicolai's theory and approach. Dimmendaal especially decries what he considers Nicolai's over reliance on word lists in order to come to sweeping conclusions about an entire language family.

¹³ Christiansen-Bolli (2010) and Kossmann (PC) refer to "Southern Songhay" varieties – i.e. any Songhay language not in the Northern Songhay group – as "mainstream Songhay", a practice which I will carry on as well.

¹⁴ Dimmendaal (2019) seems to accept Souag's assessment, pointing out that the shared features shared with surrounding languages could just as easily be attributed to borrowing, as to genetic affiliation.

other Songhay languages is not controversial at all (Kossmann 2008: 109). As was mentioned previously, the main difference between Northern and mainstream Songhay languages has to do with the heavy influence of Berber (Benítez-Torres and Grant 2017). Souag (2015a) notes a Tetserret substratum from the Western Berber family in Tadaksahak, which would likely apply to Tagdal as well. Nevertheless, the most recent Berber strata in Tagdal come from Tuareg languages, especially Təwəlləmmət.

Figure 1: Northern Songhay languages



Further, Nicolai's division of Northern Songhay into two sub-branches, the nomadic and the sedentary, is generally accepted and bears out from a grammatical standpoint (Benítez-Torres and Grant 2017). The main differences between the various Northern Songhay languages have to do with the relative degree of Berber influence.¹⁵ In the sedentary branch, one finds Kwarandzey (Kora-n-dje in Christiansen-Bolli 2010)¹⁶ of

¹⁵ In fact, one of the first things one notices upon hearing a Northern Songhay language being spoken is its heavily Berberised phonology. On numerous occasions, I witnessed uninitiated mother-tongue Songhay speakers who, upon hearing a Northern Songhay language for the first time, mistook it for Tuareg-Berber. This, despite the fact that, for example, Tasawaq and eastern Songhay from Gao share a very similar phonologies, at least on paper. On the other hand, Tuaregs who come from areas where Songhay is the LWC immediately recognise NS languages as not Tuareg.

¹⁶ The term Kwarandzey itself in Songhay means simply 'the language in/of the town/village'.

Algeria and Tasawaq in Niger, both of which are spoken by non-Tuaregs.¹⁷ A third language, Emghedeshie, was once spoken in the city of Agadez, in the modern-day Republic of Niger (Barth 1851, in Kirk-Greene 1972; Lacroix 1975), but has gone extinct.¹⁸ Tagdal and Tadaksahak are both part of the nomadic branch. Figure 1, based on Nicolai (1979), demonstrates the existing relationships between the various Northern Songhay languages.

For the purposes of this study, all of the languages outside of the Northern Songhay subgrouping will be referred to as "mainstream" Songhay languages. This is because to a large extent, questions of their origin and of whether they should be called "southern", "northwestern" or "eastern" are not relevant for the purposes of this synchronic description.

Historically, relatively little has been written on Northern Songhay languages in general. Apart from Nicolai's work (1977 and 1979, 1990a, 2003, 2006), Kossman (2008) describes adjectives in Tagdal, Tadaksahak and Tasawaq (more on how Tagdal treats modifiers in section 3.3). In addition, in their survey of Northern Songhay languages of Niger, Rueck and Christiansen (1999) did much of the preliminary work that led to this study.

The most notable literature on Tadaksahak is Christiansen and Christiansen (2002, 2007), Heath (2004), Christiansen and Levinson (2003) and Christiansen-Bolli (2003, 2009, 2010). In 2007b, Kossmann discusses how Tasawaq treats y-initial verbs, almost exclusively of Tuareg origin. Since both Tagdal and Tadaksahak share many of these same cognates with Tasawaq, y-initial verbs, which instead in Tagdal are ə-initial by default, will be discussed especially in section 3.2.¹⁹

Alidou's (1988) master's thesis is the most complete description existing of Tasawaq. Wolff and Alidou (2001) and Kossmann (2007a,b, 2016) also published on this language. In 2007a Kossmann discusses grammatical mixing in Tasawaq, pointing out some features of the noun in that language, many of which Tagdal also shares (see especially section 3.1 below).

¹⁷ Bernus (1972) suggests that modern-day Tasawaq speakers could be descended from Berbers who mixed with local populations. Adamou (1979), on the other hand, suggests descent from a Songhay-speaking colony established as a trading post in the town of Ingal in northern Niger.

¹⁸ Michael Rueck (PC) once shared with me an account of meeting with very old people in Agadez in the 1990s, whose grandparents had spoken Emghedeshie. Though they themselves had clearly shifted to Hausa, they still remembered some Songhay vocabulary, which they had heard from their grandparents. Regardless, due to its being extinct, I have not included Emghedeshie as part of the Northern Songhay ensemble.

¹⁹ Benítez-Torres and Grant (2017) and Benítez-Torres (2020) argue that at least some y-initial verbs in Tasawaq could be unproductive as-is borrowings, even though they are productive in Tagdal and Tadaksahak.

Relatively little exists on Kwarandzey. Most notably, Souag's (2010) thesis discusses various features of the language. Others include Champault's (1969) ethnographic description,²⁰ Tilmatine's (1996) brief description and Kossmann's (2004) discussion of the TAM sub-system. Not much will be mentioned here about this language, except that as a Songhay language, Tagdal shares much of the same features, including the TAM system (see section 3.2.1 below).

Lacroix (1968a, 1981) was possibly the first to call Northern Songhay languages "langues mixtes", due to the obvious Tuareg influence. Nicolai, while recognising Tuareg vocabulary as borrowing, theorised that Tuareg prosodies underwent a "reinterpretation", via the new Songhay schema, possibly during a process of shift.²¹ Wolff and Alidou (2001) went a different way and posited a non-genetic origin for Tasawaq, due to the mixed nature of its structures, which could not originally have come about by means of normal parent-to-child interactions.²² Benítez-Torres (2009) also suggested that Tagdal is a mixed language, which likely came about abruptly, in order for speakers to establish a separate identity from surrounding groups. Vellupilai (2015), based upon structural criteria, relying heavily on categories for mixed languages found in Bakker (2003) and Meakins (2013), classified Northern Songhay languages as Form-Structure (F-S) mixed languages, where the lexicon and grammar come from one language, while the syntax and formal structures come from another. On the other hand, Norval Smith and Anthony Grant (2019), based on sociolinguistic criteria, classify Northern Songhay languages as "neo-ethnic symbiotic" mixed languages, where languages arise out of speakers' perceived need to establish a new, unique, identity from the other groups around them. Ultimately, question on the origins of Tagdal and other Northern Songhay languages are somewhat beyond the scope of this study and will, therefore, not be discussed further in great detail.

1.4 Fieldwork, methodological framework

The Tagdal data in this paper are taken primarily from field work done in the modern-day Republic of Niger, compiled between 1999 and 2019. Most of these data were taken from 45 texts, mostly recorded between 2001 and 2003, of varying lengths and genres. A short lexicon of a few thousand items, based primarily on these texts, is a direct outworking of these texts, and is a work in progress. A few of the data were elicited, or were observed and recorded later by hand. Some material in this document

²⁰ With some linguistic discussion as well.

²¹ See Nicolai 1982: 306, for example, where theoretically, Tuareg vocabulary where stress falls on the penultimate syllable (described as the ['---] schema) would be mentally processed the same way as vocabulary with three low tones (described as ````).

²² Benítez-Torres and Grant (2017) and Benítez-Torres (forthcoming), while agreeing with a non-genetic origin for Tagdal and Tadaksahak, follow Lacroix (1968) in suggesting at least the possibility that Tasawaq might be a heavily-Berberised mainstream Songhay language.

came from Rueck and Christiansen (1999), Benítez-Torres (2009) and Benítez-Torres and Grant (2017).²³

Of the 45 texts which form the main corpus from which the data is drawn, 36 were narrative genre. Of these, 26 were folk tales of varying length, with the shortest being 12 lines long and the longest comprising of several hundred lines. The rest of these were personal stories, though not necessarily factual.²⁴ Five of the texts were descriptions (e.g. "what life was like when I was a child") three were procedural (e.g. "how to make tea"), and one was a sermon.

Seven men provided the recordings. They ranged in age from their late 70s to the their late teens or early twenties at the time when the recordings were made.²⁵ Most were in their thirties or forties. Of these, one (around age 30 at the time) spoke the Tabarog variety of Tagdal; three were of the Kəl Amdid (two around their late 30s or early 40s, one in his 20s) or Tarbun, or from their sub-groups; two were Kəl Illokod (in their 40s or 50s), or their sub-groups; and one was an Abargan (in his late 20s or early 30s).

A few of the examples in this document came from a paper notebook I kept, mostly for ethnographic and linguistic notes written down by hand. Almost all of these were written between 2002 and 2009. In at least three cases, the events or utterances it contained were written several hours after they occurred, due to lack of opportunity at the time to write anything down. Nevertheless, most of the observations were written down within minutes of the events they related. I have endeavoured to keep this document as free of anthropological observations as possible, and as far as I know the data appearing here is largely limited to linguistic utterances.

Over the years, additional data has been elicited. Some of this occurred when the data in the recorded texts (or in the course of SIL work) caused more questions to be asked. A few examples of this are: 1. over half of the apophonic nouns in Section 3.1.2 were elicited; 2. Tables 3-36-3-38 were almost entirely elicited, as were Tables 3-44 and 3-77. All of the other tables containing noun data have at least some elicited vocabulary. For example, whenever I encountered an unknown noun, it was usually – though not always – either in its singular or plural form. Therefore, I asked my teammates to provide the missing plural or singular form, along with whether stress falls on the penultimate or antepenultimate syllable. I also asked about various derivations of the root (e.g. Agentive, masculine, feminine). I have endeavoured to limit the elicited data to vocabulary, and not to full-sentence examples.

²³ Rueck and Christiansen (1999) provides a 360-item wordlist containing most of the items on the longer and shorter Swadesh lists and also a specimen of French text translated into several Northern Songhay varieties, including Tadaksahak, Tasawaq, Tagdal and Tabarog.

²⁴ One common technique I used was asking the teller to relate a story of a moment when he was really scared. A few of these were so outlandish (e.g. being attacked by a snake with two heads) that I have some doubt about their veracity.

²⁵ It is not uncommon in the Republic of Niger for people to not be sure of their exact age.

In every work, there will necessarily be some limitations in the data. This one is, unfortunately, not an exception. Some of the limitations include: 1. due to the suspicions of most Tagdal speakers vis-à-vis recording equipment, most of the recordings were made with a Marantz tape recorder, on cassette tapes. Since then, these have been backed up several times and digitized. However, in their original form, all of the recordings were done in analog format, rather than the more desirable WAV files of today. 2. All of the data recorded was from men. Over the intervening years, my wife and I were able to take quite a few ethnographic notes concerning women and we noticed no discernible grammatical difference between the way Tagdal-speaking men and women talk.²⁶ Nevertheless, the lack of data from women limits the usefulness of this document, at least to some extent. 3. The data transcriptions and the original lexicon were stored in an old SIL computer programme called "Shoebox", then transferred to another programme called "Toolbox" in 2007. Unfortunately, neither Shoebox nor Toolbox used unicode fonts. Therefore, in 2015, I transferred the lexicon into Field Works, another SIL programme which uses unicode fonts. In the past year I have also begun to transfer the text transcriptions into Field Works. Unfortunately, this process takes quite a bit of time, and will likely continue into the foreseeable future.

The main ideas for the organisation and content of this document began with Christiansen-Bolli's (2010) description of Tadaksahak and Alidou's (2008) sketch of Tasawaq. Throughout, I have worked to maintain a "theory-neutral" stance, or at least as much as was possible. Nevertheless, some theory did inform the writing and analyses. For Chapter 2, I mostly depended upon the excellent analyses done on Northern Songhay languages by both Christiansen-Bolli (ibid) and Nicolai (especially 1980 and 1990a). In the course of my own analysis, I relied upon Burquest (2006) and Krager (2004).

Chapter 3 was a particular source of stress, due to the relative scarcity of descriptions of Tuareg languages, and especially of their prosodic processes. Therefore, Kossmann's (2007) description of Ayer Tuareg, along with Lux's (2011) description of Tetseret were invaluable, as was Heath's (2005) description of the Tuareg variety spoken in Mali. Once again, the aforementioned Christiansen-Bolli (2010) was also useful in helping me know what questions to begin asking. For organising the description, I used Thomas Payne's (1997) guide to describing grammar. Dixon's (2009, 2013) *Basic Linguistic Theory* was also helpful. Kroeger (2005) was useful in analysing clauses. Givón (2001) and Dooley & Levinsohn (2001) were helpful in the analysis of complex sentences and the relations between clauses. Chapter 4 relied heavily upon the work of Dooley and Levinsohn (ibid), as well as Brown and Yule (1983).

²⁶ Though we were able to gather quite a bit of data concerning music, poetry and other art forms present among Tagdal-speaking women. And the subjects that Tagdal-speaking women usually talk about are different from those of men.

1.5 General typological sketch of Tagdal

This section will include a portion of a text, along with some brief grammatical notes to guide the reader. The text was recorded in 2005. The speaker was a young Abargan from near Agadez, who is now deceased. Therefore, where the transcription reflects his variety of Tagdal, it is noted. The story relates the teller's experience as a member of a caravan. The section included here relates a moment when some of their camels escaped and they had to recover them.

1.1 ʒaʒji n awélan aayó, iiríʃkəl,
 ʒaʒji n awelan aayo iiri= ʃíkəl
 day GEN hot season DEF 1PL travel
 'One day in that hot season, we traveled

iirikóy ággaala, iirimhurrú háyni.
iiri= koy aggaala iiri= m- hurru hayni
1PL go south 1PL SBJ search millet
and went to the south to get some millet.'

1.2 ʔamáy yu, ʔamáy amúgay,
ya= may yu ʔa= may amugay
1SG have female camel 1SG have male adolescent camel
'I had a female camel (and) an adolescent male camel.

yamkórəf-i.
 ya= m- kərəf =i
 1SG SBJ hobble 3PL.OBJ
 'I needed to hobble them.'

1.3 Hajigga, yazumbú, yakəraf̣ yu. Hajinaláqqam
hajigga ya= zumbu ya= kəraf̣ yu hajinalaqqam
therefore 1SG descend 1SG hobble female camel then
'Therefore I got down and hobbled the female. Then

ʔakáwkat amúgay ən téfar
 ʔa= kaw -kat amugay n téfar
 1SG remove VEN male adolescent camel GEN rope
 'I took off the male's rope.'

1.4 ʎatʃɪn ʎamkəɾəf-a, təzzár
 ʎa= tʃɪn ʎa= m= kəɾəf =a
 1SG say 1SG SBJ tie 3SG.OBJ
 'I said that I should tie him (first).

yamkaw á-kan geerí.

təzzar ʔa= m- kaw a= kan geeri
 then 1SG SBJ remove 1SG in saddle
 (only) then I should remove his saddle.'

- 1.5 Əŋguuʔi, iirin im̩nas iyiwəf. Aafó, tʃiyayyaanen
 əŋguuʔi iiri= n im̩nas i= əwəf aafó tʃiyayyaanen
 suddenly 1PL GEN camels 3PL startled INDEF sacks of grain
 'Suddenly, our camels were startled. One was carrying sacks of grain.'

iyiwər-a. Aafó, aráwki iyiwər-a.

i= əwər =a aafó arawki i= əwər =a
 3PL mount 3PL.OBJ INDEF bags 3PL mount 3PL.OBJ
 The other was carrying bags.'

- 1.6 Imúggaayan foonén, idərrəg
 imuggaayan foonen i= dərrəg
 some adolescent males 3PL flee
 'Some of the adolescent males ran away,

idá huunú aayó ággaala wáni.

i= da huunu aayó aggaala wani
 3PL do exit DEF south POSS
 and went south.'

- 1.7 Yu nda amúgay aayó kan geerí
 yu nda amugay aayó kan geeri
 female camel with male adolescent camel DEF in saddle
 '(and) The female and the adolescent

əbháw, idərrəg.

ə- b- haw i= dərrəg
 SUB.REL IMP tie 3PL flee
 that had the saddle tied on, (also) fled.'

- 1.8 Iyédkat, idá huunú aayó támmasna wani.
 i= yed -kat i= da huunu aayó tammasna wani
 3PL return VEN 3PL do exit DEF north POSS
 '(then) They came back and went to the north.'

- 1.9 ʔaay, ʔaqáyitkat yu nda amúgay.
 ʔaay ʔa= qayit -kat yu nda amugay
 1SG.IND 1SG chase VEN female camel and male adolescent camel
 'As for me, I chased the female and male camel.'

1.10 Amúgay, abkərəbkərəb. Aŋ geerí
 amugay a= b- kərəbkərəb a= n geerí
 male adolescent camel 3SG IMP bounce 3SG GEN saddle
 'The male was jumping up and down. his saddle

nda an bidóntan
 nda bidontan
 with water containers
 and the plastic water containers

nda káyyaatan, ibkərəbkərəb
 nda kayyaatan i= b- kərəbkərəb
 with baggage 3PL IMP bounce
 and the baggage were bouncing around

felás abərmaŋ, abdərřəg.
 felas a= b- ərmaŋ a= b- dərřəg
 because 3SG IMP scared 3SG IMP flee
 because he was scared and was running away.'

1.11 Yu, aŋga da, abtərəgtərəg
 yu aŋga da a= b- tərəgtərəg
 female camel 3SG.IND EMPH 3SG IMP short hop
 'The female, she (emphatic) was hopping around

felás téfar báara.
 felas tefar baara
 because rope loc
 because she had a rope on (i.e. she was hobbled).'

1.12 Yaay, yaqáyit-i, yaqáyit-i, ar yaýéhag.
 yaay ya= qayit =i ya= qayit =i ar ya= ehag
 1SG.IND 1SG chase 3PL.OBJ 1SG chase 3PL.OBJ til 1SG long time
 'As for me, I chased them and I chased them for a long time.

tʃiidʒí da, keení ahín yaay.
 tʃiidʒi da keeni a= hin yaay
 night EMPH sleep 3SG overpower 1SG.IND
 That night, sleep overtook me.'

1.13 Təzzár sa alfızər, yađzín amúgay əfáydaan,
 təzzar sa alfızər ya= zin amugay ə- faydaanan
 then when morning 1SG take male adolescent SBJ.REL other
 camel
 'Then in the morning I took another male camel

yayilkəm ísa.
 ya= əlkəm i= sa
 1SG follow 3PL DAT
 and I followed them.'

The first item of note is that Tagdal is an SVO language. Grammatical relations are generally communicated by their position in the sentence. The Subject is normally encoded in the verb by means of a proclitic, unless the verb contains a Subject Relative *ə-*, as in lines 1.7 and 1.13. The functions of the Subject Relative will be discussed in Chapter 4. Since the Subject is normally encoded in the verb, pronouns are usually present for focalisation. For example, in line 1.12 the first person singular pronoun *yaay* is there for focalisation. Full NP Subjects and Objects are also often present either when an element is being introduced for the first time (e.g. line 1.2), when it is being re-introduced after being absent (e.g. lines 1.10 and 1.11 when *yu* 'female camel' and *amúgay* 'adolescent male camel' are reintroduced), or for focalisation.

Some further notes: in line 1.4 the verb *tfin* 'say' reflects the Abargan pronunciation (see Table 2-3). The pronunciation usually used in this document is *fin*. In line 1.12, the pronunciation *tʃiidʒi* 'night' also reflects the Abargan variety, rather than *fiizi*. The same goes for line 1.5 where *tʃiyáyyaanen* 'heads of grain' contrasts with *fiyáyyaanen*. Finally, I draw attention to line 1.10, where the noun *bidóntan* 'water containers' is a loan word from French *bidon*, with a Tuareg plural suffix *-tan*.

Chapter 2

2.0 Phonological structure

2.1 Syllable structure

The following are the most common syllable patterns in Tagdal.

Table 2-1, most common syllable structures in Tagdal

open syllables	example	closed syllables	example
CV	wa 'eat'	CVC	koy 'go'
CVV	táasu 'food'	VC	áxluk 'destruction'
V	até 'he arrived'		
VV	áaʒir 'nut'		

2.2 Consonants

General remarks about the phoneme inventories of the different varieties of Tagdal can be found in Nicolaï (1979), though all of the remarks in the following sections concerning the dialectal data are from my own field research. As was stated in the previous chapter, the most common varieties of Tagdal are the Kəl Amdid, the Abargan / Kəl Illokoḍ variety, and Tabarog (see also Benítez-Torres, forthcoming). The consonant inventories will be described in Section 2.2.1.

2.2.1 Inventory

Tables 2-2 through 2-4 detail the consonant inventories in the major varieties of Tagdal. Table 2-2 gives the general inventory of consonants in the Kəl Amdid / Tarbun varieties. On the other hand, the consonant inventory of the Abargan and Kəl Illokoḍ, given in Table 2-3, is more akin to that of Tadakshak in Mali (Christiansen-Bolli 2010). One of the key differences is the presence of [tʃ] and [dʒ], which are contrastive with ʃ and ʒ. For example, tʃin ‘say’ and ʃin ‘heavy’, whereas in the Kəl Amdid / Tarbun variety these are pronounced ʃin ‘say’ and ʃin ‘heavy’. Table 2-4 describes the consonants in Tabarog. The main difference between Tabarog and Kəl Amdid / Tarbun is the absence of ʃ, ʒ, tʃ and dʒ. For example, ʃin ‘say’ or ‘heavy’ is pronounced sin, and ʒayʒi ‘day’ is pronounced zayzi. Otherwise, Tabarog is similar to other Tagdal varieties.

Table 2-2: consonant chart, Tarbun, kəl Amdid

	Labial	Alveolar	Pharyngealised	Palatal	Velar	Uvular	Pharyngeal	Laryngeal
Stops	b	t	d	ɸ	ɖ	k	g	q
Fricatives	f	s	z	ʃ	ʒ	x	ɣ	ħ
Affricates			ʂ					ħ
Glides	w			y				
Laterals		l	ɭ					
Taps		r	ɽ					
Nasals	m	n	ɳ		ŋ			

Table 2-3: consonant chart, Abargan, Kəl Ilokkod

	Labial	Alveolar	Pharyngealised	Palatal	Velar	Uvular	Pharyngeal	Laryngeal
Stops	b	t	d	ɸ	ɖ	k	g	q
Fricatives	f	s	z	ʃ	ʒ	x	ɣ	ħ
Affricates				tʃ	dʒ			ħ
Glides	w			y				
Laterals		l	ɭ					
Taps		r	ɽ					
Nasals	m	n	ɳ		ŋ			

Table 2-4: consonant chart, Tabarog

	Labial	Alveolar	Pharyngealised	Palatal	Velar	Uvular	Pharyngeal	Laryngeal
Stops	b	t	d	ɸ	ɖ	k	g	q
Fricatives	f	s	z		x	ɣ	ħ	ħ
Glides	w			y				
Laterals		l	ɭ					
Taps		r	ɽ					
Nasals	m	n	ɳ		ŋ			

2.2.2 Consonantal contrasts

Table 2-5 gives evidence for some key consonant contrasts in Tagdal.

Table 2-5, consonant contrasts

consonants		gloss		gloss
b/m	bay	'know'	may	'have'
	bun	'die'	mun	'spill'
	abbákad	'sin'	amádan	'shepherd'
	áblay	'chunk of dirt'	ámlay	'minced bush meat'
b/f	alzib	'pocket'	aggím	'thousand'
	ber	'older sibling'	fer	'open'
	fáttəkət	'explode'	bóttəqət	'ruin completely'
	zibbiitan	'types of dirt'	ziffaatan	'animal carcasses'
b/d	sətəb	'tie together'	sətəf	'spit'
	bay	'know'	day	'engage in commerce'
	əbər	'scratch'	ədər	'live'
	ədəb	'punish'	ədəd	'press down'
d/t	ʔarab	'Arab'	ərab	'almost catch'
	ərkəb	'pull'	əŋkəd	'be careful'
	duudú	'spill much liquid'	dúuta	'pound it'
	əndab	'shoot'	əmbaq	'exit'
d/ð	əfəd	'borrow / lend'	əbət	'grab'
	dələg	'decorate'	dələm	'persecute'
d/ʒ	adágar	'half, portion'	aɖágal	'father-in-law'
	ʃindí	'part of something'	ʃinzí	'rain'
g/k	ʒindé	'neck'	ʒinzíirí	'prayer'
	gungú	'belly'	kungú	'fill up'
	guugú	'iron'	kuurú	'leather'
	səgbəs	'cause to wear'	səkbəl	'cause to hold up'
g/ʒ	gen	'lose'	ʒen	'be old'
g/ɣ	gárfat	'kneeling'	karfó	'cord'
	agírəd	'granary'	ayíri	'dark animal w/ white spots'
q/k	əgba	'decompose'	əɣbəd	'worship'
	ərzəg	'move about'	ərzəɣ	'be successful'
	əqbəl	'to fulfill'	əkbəl	'to hold up'

		promise'		
q/ɣ	báaqa	'break it'	báaɣa-a	'want it'
	éɣad	'worry'	éqad	'raging fire'
	élay	'male calf'	élaq	'shin'
f/h	íffaayan	'edges'	íhhaayan	'descendants'
s/z	órəs	'descend'	órəz	'repay'
	órsəm	'tie closed'	órzəg	'move about'
s/ʃ	sin	'be heavy'	ʃin	'say'
	ássaayal	'fonio'	aʃʃáyal	'work'
	ʃaw	'demonstrate'	ʒaw	'help'
	ʃen	'over there'	ʒen	'old'
s/ʂ	amásir	'spy'	amáʂor	'forearm'
	ásak	'bird nest'	ášək	'song'
s/ʒ	órsəm	'tie closed'	órʒəɣ	'bless'
	ónsay	'beg'	ónʒay	'get up early'
z/ʒ	zəzɡəg	'cause to play'	zəzɡəg	'cause to accept'
	əzləg	'carry on shoulder'	əzləg	'search for lost thing'
x/ɣ	axárxar	'tearing apart'	aɣáɣar	'desert plain'
	əxfəl	'lock up'	əɣfər	'rent'
	əxsəs	'survive'	əɣsər	'reside'
	áxluk	'creation'	áylay	'small secret'
x/h	əxlək	'create'	əhkəm	'govern'
h/ʕ	alhál	'custom'	alʕár	'refusal'
	alhásəl	'briefly, nevertheless'	alʕánəb	'grape'
h/h	álhaq	'consequence'	alhál	'custom'
	Áwa	'poper name'	ába	'father'
	tawáqas	'small wild animal'	tabárar	'girl'
w/y	wánʒin	'refuse'	bánda	'behind'
	way	'woman'	yay	'cold'
	hay	'animal giving birth'	haw	'tie up'
l/d	yay	'cold'	yaw	'female camel'
	ékay	'pass by'	ékaw	'root'
	əlbək	'be skinny, sickly'	ədbaɣ	'close opening'
l/r	ámlay	'lean meat'	ámday	'giraffe'
	yel	'green grass'	yed	'return'
	əlməɣ	'dip into'	ərməɣ	'be afraid'
l/ɭ	ázwal	'mark'	ázwar	'jujube fruit'
	ázwal	'mark'	ázwaɭ	'locust'
	éelaw	'elephant'	éelab	'pit for hiding / storing'
r/d	rayəs	'cheap'	dáyna	'forget'

	tárab	'Arabic language'	tádad	'small finger'
r/ɣ	áwər	'shield'	áwəd	'boiling'
	báara	'LOC be verb'	báaɣa	'love'
	ərsək	'erase'	əɣsər	'move to s-place'
r/ɾ	arázzad	'diarrhoea'	ayáraf	'reunion'
	arəgan	'large male camel in heat'	ayəɣi	'cave'
	əkrəm	'fold together'	əkrəm	'rest animals'
m/n	abákar	'young ram'	abáykoɾ	'street dog'
	amádaf	'manager'	anádar	'jumping up and down'
	əmək	'lift up to cut'	ənəd	'control'
m/w	maw	'hear'	waw	'insult'
	áɣrəm	'town'	áyraw	'yoke for ox'
	na	'give'	ɲa ²⁷	'eat'
n/ŋ	nes	'measurement'	naʃ	'fat'
t/ʈ	əttəm	'number eight'	əttəf	'to spit'
	ətrəm	'to do quickly'	ətkəl	'to take'
	táwfooka	'headless carcass'	táwna	'cheese curds'

2.2.3 Distributional restrictions

Labials b and f in borrowed vocabulary

French loan words beginning with /p/ are regularly pronounced with /f/ in Tagdal. For example, *photocopies* would be pronounced [fottoko'fítan] and *projet* would be pronounced [faro:'ʒe] and the proper name Pascal [fas'kal].

Gemination

It is common in words in isolation with more than one syllable for the first consonant in the second syllable to be long, if it is followed by a vowel (i.e. if the consonant is intervocalic). There are two situations, however, where gemination is prevented from happening. First, in words where stress falls on the antepenultimate syllable and the vowel and consonant in the penultimate syllable elongate (see Section 3.1.2), gemination does not occur. Second, the presence of a long vowel in the first syllable (see Section 2.4.1) seems to prevent gemination from occurring. Finally, stress tends

²⁷ *ɲa* 'eat' is the pronunciation most common in the Abargan variety of Tagdal; the *kəl* Illokoɗ pronounce it *ɲwa*. Most other Tagdal speakers would pronounce this *wa* 'eat'.

to shift in different contexts, especially in the case of the verb, where a number of bound morphemes may occur in sequence. Therefore, in some contexts gemination would occur in different places in some words than it would occur in the isolated word or root. Other than the exceptions given above, gemination occurs in most words, especially in isolation. Table 2-6 demonstrates presents a few examples.

Table 2-6, examples of gemination

	word	gloss
1	aggóræd	'granary'
2	ággoz	'achilles tendon'
3	ammáðan	'shepherd'
4	awwákas	'wild animal'
5	éddæn	'graze'
6	énnæz	'bend over'
7	fóllæg	'to rebel'
8	húggü	'building'

The only consonants that cannot geminate are [ɾ], [h], [ħ] and [ʕ].

[ʕ] and [h]

[ʕ] and [h] are the only fricatives that do not occur in word final position. All other fricatives ([f], [s], [ʃ], [z], [ʒ], [ʃ], [ʒ], [x], [χ]) are attested in all word positions. (See Section 2.4.1.4 for a discussion of sibilant harmony.)

Nasals

Assimilation of /n/ is discussed in Section 2.4.1. Otherwise, all nasals can occur in any word position except for /ŋ/, which only occurs in syllable-initial, syllable-final or word-final position. My database has only three examples of this phoneme, given in Table 2-7. Of these, Examples 1 and 2, *ŋa* 'eat' and *kaŋ* 'fall', are in the Abargan variety of Tagdal; the Kəl Amdid / Tarbun and Tabarog varieties would pronounce these *wa* 'eat' and *kan* 'fall'.

Table 2-7, examples /ŋ/ in syllable-final or word-final position

	word	gloss
1	ŋa	'eat'
2	kaŋ	'fall'
3	tammasáŋat	'woman who cooks'

2.2.4 Consonant clusters

Word-initial

Unlike a number of mainstream Songhay languages, in Tagdal the combination of consonants 'nasal + C' does not occur in word-initial position. For example, *nda** 'and, with' in mainstream Songhay, is pronounced *ənda* 'and, with' in Tagdal.

Word-final

Words can only end in /t/ if it is preceded by a vowel. Therefore, many Tuareg cognates that would normally end with /t/ in Tadakshak and in a mainstream Tuareg languages would instead end with another single consonant in Tagdal. Table 2-8 demonstrates.

Table 2-8, Tuareg cognates that do not end with /t/ in Tagdal

	word in Tamajaq	Tagdal	gloss
1	tágdalt	tágdal	'name of Tagdal language'
2	tabārtart	tabárar	'girl'
3	táyłamt	táyłam	'young female camel'
4	táyłmørt	táyłmur	'elbow'
5	taməgrāwt	taməgraw	'supplication'

2.3 Vowels

All varieties of Tagdal have the same set of short and long vowels. The short vowels are given in Table 2-9. Essentially, Tagdal has the five vowels /a/, /e/, /i/, /o/, and /u/, plus the central vowel /ə/. All vowels except ə have a long counterpart. Nevertheless, in light of the findings in Chapter 3, this question might need to be revisited.

Table 2-9 short vowels in Tagdal

	Front	Mid	Back
High	i		u
Mid-high	e	ə	o
low		a	

Table 2-10 describes the long vowels in Tagdal.

Table 2-10 long vowels in Tagdal

	Front	Mid	Back
High	ii		uu
Mid-high	ee		oo
low		aa	

2.3.1 Vocalic contrasts

Table 2-11 gives evidence for some key short vowel contrasts in Tagdal.

Table 2-11, vowel contrasts, short vowels

		gloss		gloss
i/e	ʃin	'say'	ʃen	'over there'
	ʃiraw	'bird'	ʃéraw	'spoon'
i/ə	áabit	'chaff'	íibət	'take quickly and run away'
	íilis	'tongue'	íiləs	'repeat'
	agírer	'gutter'	agérri	'wisdom'
i/a	báari	'horse'	báara	'LOC verb'
	hínka	'wherever'	haŋgá	'accompany'
	hínzin	'prepare'	hánzi	'moon'
	taggírʃík	'victim of evil eye (f)'	tággarʃak	'evil eye'
i/u	hin	'prepare'	hun	'exit'
	fik	'to bury'	fur	'throw'
	alzinní	'genie'	alzanná	'cold'
i/o	aʏʏáyi	'cave'	annóyo	'skin rash'
	ʃin	'fig tree'	ʃon	'fill up'
	abbáykor	'hunting dog'	ibbíkar	'hunting dogs'
e/ə	éggən	'grouping'	éggəd	'take off'
	taddáber	'dove'	támbər	'grazing at night'
	abbéla	'big fire'	abbóki	'beating out grain'
	afféli	'runt'	afféga	'discovery'
e/a	derén	'gum arabic'	derán	'wish / desire'
	kárəd	'clean out'	kárad	'three'
	nes	'measurement'	naʃ	'fat'
	teʒíkan	'basket'	taʒík	'healing'
	ténəday	'fever'	tanáfrit	'suffering'
	téysay	'flock'	táymur	'elbow'
e/u	fer	'open'	fur	'throw'
e/o	les	'make dirty'	loq	'lick'
ə/o	dónnəg	'up high'	dónnay	'fill container'

				with small mouth'
ə/a	sérəs	'cause to submit'	sóora	'milk animal'
	égləz	'hand over'	églaz	'be left over'
	éftay	'spread out'	áftək	'outer garment'
	kórba	'mix together'	kar	'hit'
	səddəd	'cause to breast feed'	sáddas	'target'
ə/u	kárkər	'clean out'	kúrkur	'burn'
	sónfəs	'cause to breathe'	sónfu	'be at ease'
a/u	áylal	'valley'	áylul	'eternity'
	horrá	'be difficult'	hurrú	'search'
	kan	'fall'	kud	'take animals to pasture'
	sákla	'cause to spend the day'	səglu	'cause to go'
a/o	dar	'place on top of'	dor	'hurt'
	abbárkaw	'calf'	abbáŋkor	'temporary well'
u/o	dut	'pound grain'	dor	'hurt'
	húggü	'house'	húkkot	'stand from sitting position'
	əddəkúd	'measure out land'	əddəkot	'number'

Table 2-12 gives evidence for long vowel contrasts in Tagdal.

Table 2-12, vowel contrasts, long
vowels

i/i	míʒi ²⁸	gloss 'to separate'	ʃiʒi	gloss 'night'
	íbbaatan	'types of chaff'	ibátan	'losses'
	iddəd	'chase closely'	íibət	'take quickly and run away'
e/ee	témmar	'moment'	téematay	'crowd'
	ékkaw	'root'	éelaw	'elephant'
	éeyayt	'camel leather'	éyyaf	'worry'
ee/aa	éenar	'antelope'	áanar	'eyebrow'
	éemay	'folktale'	ammay	'3SG has'
a/aa	abbákad	'sin'	abbáara	'3SG is (loc)'
	abbárog	'person from the Ibároogan tribe'	ábbaawen	'wild cat'
	bárar	'boy'	ibáraadan	'young men'
aa/oo	báara	'LOC be verb'	bóora	'person'
	ʕárab	'Arab'	óoray	'gold'

²⁸ The long consonant likely reflects gemination in words with two syllables. Nevertheless, the fact that consonants never geminate following long vowels is very telling.

u/uu	dumbú	'slaughter (lit. slit throat)'	duudú	'spill much liquid'
	hurrú	'search'	húuru	'fire'
	gúgga	'iron'	gúugut	'polish'
uu/oo	gúugut	'polish'	kóorat	'tear apart'
	mólluulu	'shine, clean'	sálloolot	'spend time'
o/oo	goorá	'sit'	korrá	'be hot'
	aaró	'man'	ároori	'back'

2.3.2 Vowel realisations

Vowels are subject to a number of factors in their particular environments. In this section, pharyngealisation and its effects on vowels will be discussed, as well as how stress affects how vowels are realised phonetically. This section ends with a discussion of the central vowel /ə/.

The presence of a pharyngealised consonant, or of the phonemes /x/, /ɣ/, /q/, /ʕ/ and /ħ/ lowers the phonetic placement of the vowels surrounding it, as Table 2-13 shows.

Table 2-13, pharyngeal lowering of vowels

		example	gloss	phonetic realisation
/i/	lowers to	[i]	aɣəɣi 'cave'	[a'ɣ:ʌɣi]
/e/	lowers to	[ɛ]	éeɭab 'pit for hiding or storing'	['ɛ:ɭ'ab]
/a/	lowers to	[ɑ]	báaya 'to want'	['ba:ɣɑ]
/o/	lowers to	[ɔ]	ɖos 'touch'	[d'ɔs]
/u/	lowers to	[o]	áhluk 'destruction'	['ahlok]
/ə/	lowers to	[ʌ]	əqbəl 'fulfill promise'	['ʌqbʌl]

In unstressed syllables, especially in longer words such as the verb, where a number of morphemes can occur in sequence, the low vowel /a/ and the high vowels /u/ and /i/ often become lax and tend to centralise toward the direction of /ə/. Nicolai (1980: 235) states:

"...il est souvent difficile de cerner le timbre exact des voyelles, du moins en ce qui concerne certaines voyelles brèves lesquelles sont réalisées de manière "lâche" et se confondent aisément avec la voyelle centrale /ə/".

On the other hand, in unstressed syllables the realisation of the central vowel /ə/ assimilates to the placement of the following vowel. This is most noticeable when

preceding either high or low vowels, as in examples 2.1 and 2.2.

- 2.1 phonetic realisation verb
[ati'jarda] a= tə- yarda
3SG FUT agree
'He will agree.'
- 2.2 phonetic realisation verb
[atu'wāzɪn] a= tə- wāzɪn
3SG FUT refuse
'He will refuse.'

Further, where the Imperfective *b-* and the Subjunctive *m-* precede a verb root that begins with /b/ or /m/ respectively, an epenthetic /ə/ appears between them. Examples 2.3 and 2.4 illustrate this.

- 2.3 abəbáy
a= b- bay
3SG IMP know
'He knows.'

Example 2.4 demonstrates the normal SVO word order of the Tagdal clause.

- 2.4 aməməáy-a
a= m- may =a
3SG SBJ have 3SG.OBJ
'He should have it.'

2.4 Sound rules

2.4.1 Assimilation of place of articulation of /n/

When it occurs before a stop, /n/ assimilates to the point of articulation of the stop. This occurs both within the word, and across word boundaries. Table 2-14 shows examples of the nasal assimilating to its environment within the word.

Table 2-14, assimilation of /n/, within word

	word	gloss	verbal noun	gloss
1	əmbaq	'exit'	annábaq	'going out'
2	əɲkəd	'to be careful'	annákad	'being careful'
3	áɲga	'3SG pron'		
4	éndəb	'shoot'	annádab	'a good shot'
5	kubúɲkuubut	'to hide'	takubúɲkúbut	'hiding'

Table 2-15 demonstrates that nasal assimilation can occur across syllable boundaries as well. In this case, the examples have the first person singular pronominal clitic *ya=*, a bound morpheme, followed by the Genitive *n*. The resulting construction is the default way to indicate ownership.

Table 2-15, assimilation of /n/ across word boundaries

	clitic	Genitive	noun	gloss
1	<i>ya=</i>	<i>ŋ</i>	<i>kámba</i>	'my hand'
2	<i>ya=</i>	<i>ŋ</i>	<i>gánda</i>	'my country'
3	<i>ya=</i>	<i>n</i>	<i>tabárar</i>	'my daughter'
4	<i>ya=</i>	<i>n</i> ²⁹	<i>jaaráy</i>	'my friend'
5	<i>ya=</i>	<i>m</i>	<i>fárka</i>	'my donkey'
6	<i>ya=</i>	<i>m</i>	<i>bárar</i>	'my son'
7	<i>ya=</i>	<i>m</i>	<i>ber</i>	'my older sibling'
8	<i>ya=</i>	<i>m</i>	<i>qáaran</i>	'my studies'

2.4.2 Nasalisation of vowel before /n/

When a vowel occurs before /n/, which is then followed by /f, s, z, ʃ, ʒ, or ʒ/, in the surface phonetic realisation, the vowel is nasalised, as illustrated in Table 2-16.

Table 2-16, nasalisation of vowels before /n/

	phonetic realisation	word	gloss
1	[<i>ˈɛsej</i>]	<i>ɛnsay</i>	'beg'
2	[<i>ˈɛfa</i>]	<i>ɛnfa</i>	'benefit (v)'
3	[<i>bāˈyo</i>]	<i>banyó</i>	'head'
4	[<i>ˈgõfi</i>]	<i>gõñfi</i>	'snake'
5	[<i>ˈhãfi</i>]	<i>hãñfi</i>	'dog'
6	[<i>ˈhãzi</i>]	<i>hãñzi</i>	'moon'
7	[<i>ʒĩziːˈri</i>]	<i>ʒĩñziiri</i>	'prayer'
8	[<i>ˈsɛfəs</i>]	<i>sɛñfəs</i>	'breathe'
9	[<i>ˈʃĩzar</i>]	<i>ʃĩñzar</i>	'nose'
10	[<i>ˈʃĩʒa:ren</i>]	<i>ʃĩñʒaaren</i>	'mucus'

2.4.3 Devoicing of /y/ before fricatives

/y/ loses its voicing when it occurs before the voiceless fricatives /f/, /ʃ/ or /s/. Otherwise, when occurring before other voiceless consonants, /y/ maintains its normal

²⁹ In Examples 4 and 5, the nasal's surface realisation is as a nasalised vowel [yã].

form. Table 2-17 demonstrates some examples of /ɣ/ becoming voiceless before /f/, /ʃ/ or /s/.

Table 2-17, devoicing of /ɣ/, word internal

	phonetic realisation	verb	verbal noun	gloss
1	['əxfəl]	əɣfəl	aɣɣáfal	'lock up'
2	['əxfər]	əɣfər	aɣɣáfar	'rent'
3	['əxʃəd]	əɣʃəd	aɣɣáʃad	'ruin'
4	['əxsər]	əɣsər	taɣɣásar	'move to s- place'

One instance in which /ɣ/ loses its voicing across boundaries in Tagdal is when the first person singular clitic *ɣa=* attaches onto the Dative *sa*. In the process, the *ɣa=* inverts to *aɣ=*, placing /ɣ/ next to the sibilant in *sa*, in turn causing the construction *áɣsa* 'for me' or 'to me' to have the phonetic realisation [axsa].

2.4.4 lengthening of Genitive *n*

The Genitive *n* is long when it occurs intervocalically. Examples 2.5 through 2.8 illustrate this process.

2.5	húggu house	nn GEN	ámmas middle	'interior of the house'
2.6	bóora person	nn GEN	áɣɣəl right hand	'to the person's right side'
2.7	aayó DEF	nn GEN	aafóoda only one	'only one of that'
2.8	aaró man	nn GEN	ammázor forearm	'the man's forearm'

The same happens when the Genitive is attached onto a vowel-final pronominal clitic (Examples 2.9 through 2.14).

2.9	ɣa= 1SG	nn GEN	ízze child	'my child'
2.10	ni= 2SG	nn GEN	annárag spouse	'your spouse'
2.11	a= 3SG	nn GEN	amáʃor arm	'his arm'

2.12	iiri= 1PL	nn GEN	amáxlak	'our creator'
2.13	anʒi= 2PL	nn GEN	imásraagan water seekers	'your (pl) water seekers'
2.14	i= 3PL	nn GEN	árrayda blanket	'their blanket'

2.4.5 Long consonants at morpheme boundaries

In the verb, the Mood marker *m-* and the Imperfective marker *b-* are normally lengthened when the root begins with a vowel. If the Subjunctive is negated, in which case the Negation marker follows the *m-*, the aspect marker does not become long. If the aspect is Perfective, which has no marker, or after the Future marker *tə-*, the first consonant of the root is lengthened.

All of these things occur unless stress falls on the antepenultimate syllable of the root (see Section 3.1.2). In this case, consonant lengthening in the penultimate syllable cancels out all other consonant lengthening. Examples 2.15 through 2.18 demonstrate lengthening of the Imperfective *b-* and the Subjunctive *m-*.

2.15	phonetic realisation [ʔa'b:ətkəli]	verb 1SG IMP	ya= b- ətkəl =i take 3PL.OBJ	
				'I was taking'
2.16	phonetic realisation [a'b:əgba]	verb 3SG IMP	a= b- əgba rot	
				'It is rotting.'
2.17	phonetic realisation [i:ri'm:əfrəd]	verb 1PL SBJ	iiri= m- əfrəd walk backwards	
				'We should walk backwards.'
2.18	phonetic realisation [āʒi'm:əfrəga]	verb 2PL SBJ	anʒi= m- əfrəg =a be able 3SG	
				'You(pl) should be able to do it.'

In Examples 2.19 through 2.22 the aspect Perfective or Future (with the prefix *tə-*). In this context, it is the first consonant of the verb root which becomes long.

- 2.19 phonetic realisation verb
 [i:ri'f:ara:da] iiri= farad =a
 1PL sweep 3SG
 'We swept it away (i.e. won a victory over another team).'
- 2.20 phonetic realisation verb
 [i'yif:əda]³⁰ i= əfəd =a
 3PL borrow 3SG
 'They borrowed it.'
- 2.21 phonetic realisation verb
 [ɣatə'k:oj] ɣa= tə- koy
 1SG FUT go
 'I will go.'
- 2.22 phonetic realisation verb
 [intək:ɛ:'ni]³¹ ni= tə- keeni
 2SG FUT sleep
 'You will sleep.'

2.4.6 Final vowel elision

The final vowel is elided at word boundaries, if the following word begins with a vowel, as shown in Examples 2.23 through 2.25, where the final vowel of the Subordinator *sa* is elided.

- 2.23 phonetic realisation underlying structure
 [si'k:oj] sa ikoy
 sa i= koy
 SBDR 3PL go
 'when they left'
- 2.24 phonetic realisation underlying structure
 [si:ri't:ɛ] sa iiri= te
 SBDR 1PL arrived
 'when we arrived'

³⁰ Unlike Tadaqsahak, where verbs of Tuareg origin begin with /y/ as a default, in Tagdal /y/ is epenthetic. Therefore, it is the first consonant of the root which is elongated, not /y/, since it is not part of the root.

³¹ The second person singular *ni=* inverts to *in=* before the Future *tə-* or the Negations *sə-* or *nə-* (see Section 3.1.1).

	phonetic realisation	underlying structure			
2.25	[sa'yɪtkəla]	sa	a=	ətkəl	=a
		SBDR	3SG	take	3SG
		'when he took it'			

In Examples 2.26 and 2.27, the final vowel in *sa* is not elided because the verb begins with a consonant.

	phonetic realisation	underlying structure			
2.26	[sa ɣaz:u:'ru]	sa	ɣa=		zuuru
		SBDR	1SG		run
		'when I ran'			

	phonetic realisation	underlying structure			
2.27	[sa ni'sədwəla]	sa	ni=	s-	ədwəl
		SBDR	2SG	CAUS	grow
		'when you raised him'			

The dative marker *sa* is another word in which vowel elision commonly occurs. When it is followed by a word beginning with a vowel, or has the pronominal clitic bound morpheme attached as an Direct Object, the final vowel in *sa* is elided:

Table 2-18 non-NP Direct Object pronouns and clitics following Dative *sa*

	singular	plural
first	sa ɣaay	s íiri
second	sa nin	s ánzɪ
third	s-a	s-i

Vowel elision also occurs at word boundaries, especially at the end of the verb, almost always in verbs of Songhay origin. In Table 2-19, the final vowel in the verb root is elided when the following morpheme begins with a vowel. In the resulting construction, stress remains on the same syllable of the root. The examples provided here involve the vowel of the third person plural Direct Object clitic *=i*, or if the final vowel of the root is /i/, the third person singular Direct Object clitic *=a*.

Table 2-19, vowel elision in morpheme boundaries

	verb root + =i/a	phonetic realisation	gloss
1	dumbú + =i	[dum'bi]	'slaughter them'
2	ziini + =a	[zi:'na]	'seize it'
3	hurrú + =i	[hu'r:i]	'search for them'
4	dáyna + =i	['dayni]	'forget them'
5	ganjá + =i	[gan'gi]	'forbid them'

In general, Tuareg roots end in consonants and, therefore, vowel elision does not

apply. However, there are a few exceptional Tuareg roots that end in vowels, usually either /a/, /u/ or /i/. In those cases, the vowel does not elide. Instead, the addition of a Direct Object vowel leads to epenthesis of /w/ or /j/ before the final vowel, as shown in Table 2-20.

Table 2-20, lack of vowel elision Tuareg roots

	verb root	phonetic realisation	gloss
1	ólku + =a	['əɫkuwa]	'scoop it up'
2	sónfu + =a	['səɸuwa]	'put her at ease'
3	mízi + =a	['miʒija]	'take him aside'
4	mátɪ + =a	['məɸ:ija]	'change it'

Table 2-21 shows two exceptions³² to the vowel elision rule with Songhay roots, the verbs *híimi* 'clean' and *háɸfi* 'look'. Interestingly, in both cases the verb ends in an unstressed /i/. This may or may not have something to do with the lack of elision.

Table 2-21, exceptions, Songhay roots

	root plus suffix	phonetic realisation	gloss
1	híimi + =a	['hi:miʒa]	'clean it up'
2	háɸfi + =a	['haɸ:iʒa]	'look at it'

2.4.7 short /ay/, /aw/

The vowel /a/, when followed by the semi-vowels /y/ and /w/ is realised as [ej] and [ɔw] respectively. Table 2-22 provides examples of [ej].

Table 2-22, ay realises phonetically as [ej]

	word	phonetic realisation	gloss
1	áygas	['ejgas]	'therefore'
2	bay	[bej]	'know'
3	éfray	[ə'frej]	'be sick'
4	takárbay	[ta'karbej]	'pants'
5	táymaako	['tejma:ko]	'aid'
6	way	[wej]	'woman'
7	zay	[zej]	'steal'

Vowel length is discussed in Section 2.4.1, and the phenomenon is described in greater detail in Section 3.5.1. Here, I will only discuss the effect of vowel length before /y/, where in certain contexts, /a/ lengthens before /y/, leading to pairs of words where non-lengthened /ay/ [ej] corresponds to lengthened /aay/ [a:j], as demonstrated in Table 2-23.

³² I do not make any claim to these two being the only exceptions, simply the ones I could find.

Table 2-23, ay lengthens to aay

	word	with short	with long /aay/	phonetic realisation	gloss
1	bay		báay-a	[ˈbaːja]	'know it'
2	éfray		əyifráayan	[əyiˈfraːjan]	'sick (adj)'
3	takkárbay		ʃikárbaayan	[ʃiˈkarbaːjan]	'pants (pl)'
4	zay		záay-a	[ˈzaːja]	'steal it'

Likewise, lengthening the /a/ before /w/ results in a phonetic realisation [aːw]. Tables 2-24 and 2-25 demonstrate some examples.

Table 2-24, aw realises phonetically as [ɔw]

	word	phonetic realisation	gloss
1	ammáraw	[aˈmːarɔw]	'ancestor'
2	éezaw	[ˈeːzɔw]	'tassle'
3	haw	[hɔw]	'to tie up'
4	ɜaw	[ɜɔw]	'help'
5	ʃaw	[ʃɔw]	'call'
6	tamóklaw	[taˈmɔklɔw]	'midday meal'
7	zaw	[zɔw]	'bring / take'

Table 2-25, aw lengthens to aaw

	word	with short	with long /aaw/	phonetic realisation	gloss
1	amáraw		imáraawan	[iˈmaraːwan]	'ancestors'
2	éːzaw		ézzaawan	[ˈezːaːwan]	'tassles'
3	háw		háawa	[ˈhaːwa]	'tie him up'
4	ɜaw		ɜáaw-a	[ˈɜaːwa]	'help him'
5	ʃaw		ʃáaw-a	[ˈʃaːwa]	'call him'
6	tamóklaw		ʃimóklaawan	[ʃiˈmɔklaːwan]	'midday meals'
7	zaw		záaw-a	[ˈzaːwa]	'steal it'

2.5 Stress

Like Tadaksahak, from a phonetic standpoint, the features of stress in Tagdal can be defined as having "higher pitch contour and a more powerful airstream than an unstressed syllable." (Christiansen-Bolli 2010: 44).

Stress in Tagdal is primarily lexical (Nicolai 1980), despite some limited grammatical function, especially with respect to Tuareg vocabulary.³³ Nevertheless,

³³ Also like in Tadaksahak (Christiansen-Bolli 2010: 44), Tagdal speakers are aware enough of stress to make riddles or create humour by placing stress on the wrong syllable, even to the point of creating jokes by manipulating stress and, thereby, making different grammatical

grammatical function of stress in Tagdal is not as expansive as it is in, say, Tetserret (see, for example, Lux 2011: 265).

Stress in Tagdal is unpredictable. Most lexical items carry stress on one syllable, almost never on pronominal clitics and other bound morphemes, with some exceptions in cases of the Causative, Passive and Reciprocal prefixes. This section will concentrate primarily on how stress functions in isolated roots. However, it is much more complicated than this, since stress tends to shift in different contexts. Section 3.1.2 in the next chapter will include a discussion of how various morphemes affect stress placement, as well as how stress placement affects other phenomena such as gemination, consonant length and vowel length.

2.5.1 Monosyllabic, disyllabic words

In words with two syllables, stress falls on either the penultimate or on the final syllable, as Tables 2-26 through 2-29 demonstrate.

Table 2-26, stress in (C)VC.CV(C) words

	word	gloss
1	áwta	'youngest child'
2	élwa	'add onto'
3	bundú	'stick'
4	dumbú	'slaughter'
5	fárka	'donkey'
6	gánda	'land / country'
7	gónǵi	'snake'
8	mándam	'someone'

Table 2-27, stress in (C)VVCV.CV(C) words

	word	gloss
1	aayó	'DEM.DEF'
2	báara	'LOC verb "be"'
3	báari	'horse'
4	éelaw	'elephant'
5	éemay	'folk tale'
6	éenay	'colour'
7	fiiǵi	'sheep'
8	gúusu	'hole'
9	hiimí	'clean'
10	táasu	'batter / dough'

categories. The phenomenon needs to be studied in more detail, however, to be described.

Table 2-28, stress (C)VC.CV(C) in words

word	gloss
1 ágdal	'member of the Igdaalen tribe'
2 ámyar	'old man'
3 farkén	'donkeys'
4 harkúk	'always'
5 karfó	'rope'
6 tábsit	'acacia flower'
7 wánzin	'refuse'

Table 2-29, stress (C)V.CVC in words

word	gloss
1 árak	'old cloth'
2 óhhoḍ	'east wind'
3 ʃəʃʃəw	'cause to drink'
4 táḍḍad	'small finger'

2.5.2 Trisyllabic words, words with 4+ syllables

In words with three or more syllables, stress typically falls on either the penultimate or the antepenultimate syllable. In the examples in Table 2-30, stress falls on the antepenultimate.

Table 2-30, 3 syllables, stress on antepenultimate syllable

word	gloss
1 fálliwwəs	'be happy'
2 gəruurus	'make noise like a camel'
3 káyyaatan	'things'
4 kərsəssi	'to have excess'
5 ikkurʃan	'prayer beads'
6 mármaaso	'peanuts'
7 mánzaayan	'mean-spirited'
8 zəʒʒərgən	'make dirty'
9 ʃáwwaara	'decision'
10 tákkootay	'contribution'
11 táaraywat	'honey'

In Table 2-31, stress is on the penultimate syllable.

Table 2-31, 3 syllables, stress on penultimate syllable

word	gloss
1 affárag	'animal enclosure'
2 amánsay	'food'
3 əlləngət	'carry on top of head'
4 ərabbbət	'bite down and shake'

5	katánga	'wall'
6	kokéri	'perseverance, courage'
7	ləfáɣfəd	'be disappointed by surprise'
8	nəttérmas	'to arrest'
9	səlləbat	'female animal, with baby dead, still producing milk'
10	ʃiyúrad	'power'
11	tabarad	'young woman'
12	tazáryaf	'small brightly multi-coloured domestic animal'
13	təggúzi	'tree'

Stress rarely falls on the final syllable in words with three or more syllables. However, it is not impossible. Table 2-32 gives a few examples of this.

Table 2-32, final stress

	word	gloss
1	əddəkúd	'measure out land'
2	hiɲʃiini	'goat'
3	matalxér	'incense'
4	məzzuurú	'wild cat'

Finally, Table 2-33 gives some examples of words with four or more syllables. In this case, stress falls either on the penultimate or antepenultimate syllable, never before.

Table 2-33, stress in words w/ 4+ syllables

	word	gloss
1	abbarkóray	'man from Ibarkóraayan tribe'
2	abəráybəray	'applause'
3	aggənágən	'darkness'
4	kəbərəkəbbər	'to limp'
5	igínnaawan	'heaven'
6	tadəwwəkʃəf	'happiness'
7	tammagégrət	'barren woman'
8	tamántaaka	'army'
9	waalaxáwli	'of course!'

Chapter 3

3.0 Morphology

This chapter deals with the morphology of Tagdal, starting with the noun, the pronoun and the NP in Section 3.1. Section 3.2 will cover when Tagdal utilises Tuareg versus Songhay vocabulary. Section 3.3 discusses modifiers, followed by a brief discussion of adpositions in Section 3.4. Finally, Section 3.5 includes a description of the verb morphology, ending with a brief discussion of the Dative case and of the Verb Phrase, which will be completed in the following chapter. Throughout this chapter it will be demonstrated that in many cases, vocabulary of Songhay etymology and vocabulary of Tuareg etymology behave very differently from each other in Tagdal, especially at the level of the prosodies. This is reminiscent of Kossmann's (2010) idea of parallel system borrowing in Tasawaq and Tadakshak.

3.1 Nouns

Section 3.1.1 will discuss the pronominal sub-system of Tagdal. This includes both the independent pronouns, as well as clitics with pronominal function. In Section 3.1.2 the morphology of the noun will be discussed. This will introduce for the first time the differences in etymological behaviour between Songhay and Tuareg cognates in Tagdal. Finally, Section 3.1.3 will discuss how verb roots are nominalised, depending on their etymologies.

3.1.1 Pronominal subsystem

The Tagdal pronominal sub-system consists of two types of items with pronominal function. First, independent pronouns, which do not attach to any other item in the clause. Second, pronominal clitics, effectively bound morphemes which attach onto various elements of the clause. Each of these will be discussed below.

Independent pronouns

The pronouns in Tagdal tend to be differentiated based on person, first and second, and number, either singular or plural. Table 3-1 describes these.

Table 3-1, independent pronouns

	singular	plural
first person	yaay	íiri
second person	nin	ánzi
third person	ánga	ínnga / ínigi ³⁴

³⁴ The Abargan and kəl Ilokkod varieties use the third person plural pronoun *ínigi*, while the kəl Amdid, Ibarogan and Tarbun varieties use *ínnga*.

Since the pronoun is not a required element of the Tagdal clause, its functions often tend to be more pragmatic. This will be discussed in more detail in the following chapter.

Pronominal clitics

The pronominal clitics, described in Table 3-2, are essentially bound morphemes with pronominal function, which attach onto various elements of the clause.

Table 3-2, pronominal clitics

	singular	plural
first person	ʔa= / aʔ= ³⁵	firi=
second person	ni= / in= ³⁶	ánʒi=
third person	a=	i=

Unlike independent pronouns, pronominal clitics are usually a required element of the verb, and are common in other places where the element represented by a Noun Phrase is already known.

3.1.2 Noun morphology

This section includes a discussion of the noun morphology of Tagdal, along with certain prosodic behaviours, especially the interactions between stress, vowel length and consonant length. These will especially become important with respect to nouns of Tuareg origin, since they tend to add syllables as affixes are attached to the root, affecting each of the aforementioned phenomena. In any case, since so much of the morphology and accompanying prosodies depend on the etymology of the noun,³⁷ the section will begin with a discussion of nouns of Songhay origin, followed by a discussion of nouns of Tuareg origin.

Songhay origin

Nouns of Songhay origin make up around 25% of the overall Tagdal lexicon, though some 65% of basic vocabulary (Benítez-Torres 2009, Benítez-Torres and Grant 2017). Figure 3-1 demonstrates the basic structure of the noun of Songhay origin.

Figure 3-1 structure if the noun, Songhay origin

noun root PL -én

³⁵ only when attached to the Dative *sa*

³⁶ only when attached to the Dative *sa* or preceding the Future *tə-* or the Negations *sə-* or *nə-*.

³⁷ Similar to what occurs in *Tadaksahak* (Christiansen-Bolli 2010: 49).

Most nouns of Songhay origin begin with a consonant other than /t/ and will have either one or two syllables. When it is pluralised with the suffix *-én*, two things occur. First, if the noun in the singular has a CVC syllable pattern, which is very common, the vowel in the initial syllable lengthens, so that the CVC pattern now has a CV:CVC pattern in the plural. Second, stress will shift to the plural suffix *-én*. Table 3-3 demonstrates some common nouns of Songhay etymology with CVC patterns.

Table 3-3 nouns of Songhay origin, CVC pattern in singular form

	Singular		Plural	
1	ber	'older sibling'	beerén	'older siblings'
2	ben	'finishing'	beenén	'instances of finishing'
3	boy	'moving'	booyén	'instances when one moved'
4	dab	'cloth'	daabén	'clothes'
5	dam	'shameful thing'	daamén	'shameful things'
6	dor	'pain'	doorén	'hurt feelings'
7	ɗos	'touch'	ɗoosén	'touches'
8	dut	'pounding millet'	duutén	'instances of pounding millet'
9	fad	'thirst'	faadén	'thirsts'
10	fun	'keyhole'	fuunén	'keyholes'
11	fus	'swelling'	fuusén	'swellings'
12	har	'praise'	haarén	'praises'
13	haw	'attachement'	haawén	'attachements'
14	hin	'power'	hiinén	'powers'
15	kar	'hitting'	kaarén	'individual blows'
16	kaw	'removal'	kaawén	'removals'
18	koy	'master'	kooyén	'masters'
19	kud	'herding'	kuudén	'instances of herding'
20	man	'name'	maanén	'names'
21	nam	'bite'	naamén	'bites'
22	qos	'cut'	qoosén	'cuts'
23	ɟab	'shaving'	ɟaabén	'instances shaving'
24	ɟaw	'call'	ɟaawén	'calls'
25	tan	'chasing down'	taanén	'instances chasing down'
27	teɟ	'falling down hard'	teeɟén	'times of falling down hard'
28	tuk	'hidden thing'	tuukén	'hidden things'
29	waw	'insult'	waawén ³⁸	'insults'

³⁸ In Tadaqsahak (Christiansen-Bolli 2010:107) in the case of *waw* 'insult' stress does not shift as it does in Tagdal.

30	way ³⁹	'woman'	wayyén	'women'
31	zoq	'fight'	zooyén ⁴⁰	'fights'

It is also common for nouns of Songhay origin to have two syllables, with a CV̌:CV or CV̌:CVC pattern in the singular. Like the examples in Table 3-3, when the plural suffix *-én* is present, stress shifts to the final syllable. Furthermore, the final vowel in the singular is elided in the presence of the plural suffix. Table 3-4 demonstrates.

Table 3-4 nouns of Songhay origin, stress on penultimate syllable in singular form

	Singular		Plural	
1	bayna	'slave'	baynéen	'slaves'
2	báaya	'love'	baayén	'loves'
3	báari	'horse'	baarén	'horses'
4	béena	'top'	beenén	'tops'
5	bóora	'person'	boorén	'people'
6	bóojĩ	'ashes'	boofén	'types of ashes'
7	géeri	'saddle for camel'	geerén	'saddles, camels'
8	gúusu	'hole'	guusén	'holes'
9	háabu	'single strand of hair'	haabén	'hair'
10	háamu	'meat'	haamén	'types of meat'
11	híimi	'cleaning'	hiimén	'instances of cleaning'
12	húuru	'fire'	huurén	'fires'
13	húuwa	'milk'	huuwén	'types of milk'
14	kúuru	'skin'	kuurén	'skins'
15	kúusu	'cooking pot'	kuusén	'cooking pots'
16	qóora	'toad'	qoorén	'toads'
17	ʃáana	'small person'	ʃaanén	'small people'
18	sáawa	'resemblance'	saawén	'resemblances'
19	táasu	'meal'	taasén	'meals'

Table 3-5 demonstrates nouns of Songhay origin which have CVCCV or CVCCVC patterns in their singular form. In these nouns, stress will typically, but not always, fall on the penultimate syllable in the singular. However, like in the examples in the previous tables, it will shift to the syllable with the plural suffix *-én* in the plural form. In addition, if the singular form ends in a vowel, it will elide before the plural suffix.

³⁹ The nouns *bay* 'know' and *way* 'woman' in present an interesting exception, where instead of lengthening the initial vowel, it is the final consonant *y* that is lengthened in the plural, forming a CVC:VČ pattern.

⁴⁰ It is very common in Tagdal for the voiceless obstruent *q* to become the voiced fricative *y* intervocallically.

Table 3-5 nouns of Songhay origin, CVCCV and CVCCVC patterns

	Singular		Plural	
1	fárka	'donkey'	farkén	'donkeys'
2	gánda	'country'	gandén	'countries'
3	gárgor	'laughing'	gargoorén	'laughs'
4	gónjĩ	'snake'	gonjén	'snakes'
5	hámni	'fly'	hamnén	'flies'
6	hánzi	'month'	hanzén	'months'
7	hánjĩ	'dog'	hanjén	'dogs'
8	hárhor	'game'	harhoorén	'games'
9	háyni	'millet'	haynén	'kinds of millet'
10	híyaw	'wind'	hiyaawén	'winds'
11	záyzi	'day'	zayzén	'days'
12	kámba	'hand'	kambén	'hands'
13	káyna	'younger sibling'	kaynén	'younger siblings'
14	káyne	'jackal'	kaynén	'jackals'
15	kónda	'ant'	kondén	'ants'
16	márwa	'knot'	marwén	'knots'
17	sárho	'favour'	sarhén	'favours'

A number of Songhay nouns do not follow the typical pattern. In Table 3-6, nouns already place stress on the final syllable in the singular form. Therefore, when the plural *-én* is present, stress remains on the final syllable.

Table 3-6 nouns of Songhay origin, stress on final syllable

	Singular		Plural	
1	aaró	'man'	aarén	'men'
2	baŋgú	'well'	baŋgén	'wells'
3	banyó	'head'	banyén	'heads'
4	bundú	'stick'	bundén	'sticks'
5	dayná	'forgetting'	daynén	'instances of forgetting'
6	fanjí	'basket'	fanjén	'basket'
7	fijí	'sheep'	fijén	'sheep PL'
8	fuufú	'cold'	fuufén	'instances of cold'
9	fuunús	'lighting a fire'	fuunusén	'instances of lighting fires'
10	gungú	'belly'	gungén	'bellies'
11	haŋgá	'ear'	haŋgén	'ears'
12	hinjiini	'goat'	hinjiinén	'goats'
13	hiirí	'necklace'	hiirén	'necklaces'
14	huunú	'exit'	huunén	'exits'
15	ziidá	'walk'	ziidén	'walks'
16	zirbí	'year'	zibrén	'years'

17	zuulá	'making a deal'	zuulén	'instances of making a deal'
18	karfó	'rope'	karfén	'ropes'
19	korrá	'heat'	korren	'instances of heat'
20	kuudú	'blood'	kuudén	'types of blood'
21	laabó	'mud'	laabén	'types of mud'
22	maaní	'odour'	maanén	'oudours'
23	naasó	'fat'	naasén	'types of fat'
24	niiná	'mother'	niinén	'mothers'
25	nuunú	'smoke'	nuunén	'types of smoke'
26	ʃiɪɪ́	'night'	ʃiɪɪ́n	'nights'
27	ʃiirí	'salt'	ʃiirén	'salts'
28	wayní	'sun'	waynén	'suns'

Table 3-7 demonstrates nouns with CVC patterns, where in the plural form the initial vowel does not become longer. Instead, it is the final consonant of the singular form which elongates. In each of these cases, the vowel and consonant combination is /ay/, pronounced [ej].⁴¹ However, when combined with the plural suffix *-én*, instead of being pronounced [ba:j'en] and [wa:j'en] as one would expect, they are instead pronounced [bej:'en] and [wej:'en], represented here as bayyén and wayyén. This likely because Tagdal does not allow the long vowel ['ba:j] and ['wa:j] with closed syllables.⁴² Therefore, Tagdal speakers might find it easier to elongate the final consonant of the vowel in the presence of the plural *-én*. However, this question requires much more study.

Table 3-7 irregular nouns of Songhay origin, initial vowel does not elongate with plural

	Singular		Plural	
1	bay	'knowing'	bayyén	'things known'
2	hay	'birth (animal)'	hayyén	'births (animal)'
3	kay	'continuation'	kayyén	'continuations'
4	way	'woman'	wayyén	'women'
5	zay	'theft'	zayyén	'thefts'

In Table 3-8, the nouns in question have a CV pattern in the singular. Therefore, their plural form often does not add another syllable. The exception to this is Examples 2 and 5, where the plural *-én* does not seem to interact with the vowels /e/ and /i/ and requires an epenthetic /y/.

⁴¹ See discussion of /ay/ and /aw/ in the previous chapter.

⁴² For example, adding the third person singular proclitic =a to *zay* ['zej] changes pronunciation to *záy-a* 'steal it', pronounced ['za:ja] or to *báy-a* 'know it', pronounced ['ba:ja].

Table 3-8 irregular nouns of Songhay origin, CV pattern in singular

	Singular		Plural	
1	ʒe	'language'	ʒen	'languages'
2	ki	'standing'	kiyyén	'instances of standing'
3	me	'mouth'	men	'mouths'
4	mo	'eye'	mon	'eyes'
5	te	'arrival'	teyyén	'arrivals'

Table 3-9 demonstrates a number of other nouns of Songhay etymology that seem to be irregular. Example 1, *héewi* 'cow' takes the plural form *hawyéén*. In Example 2, *húggu* 'dwelling' has the second consonant already elongated in the singular form, rather than the expected **húugu*. In addition, stress does not shift to the plural marker and the plural form is the irregular *húzzén* 'dwellings'. In Examples 3 and 4, stress does not shift to the plural suffix.

Table 3-9 irregular nouns of Songhay origin

	Singular		Plural	
1	héewi	'cow'	hawýén	'cows'
2	húggú	'dwelling'	húʒzen	'encampment'
3	ʃaaráy	'friend'	ʃaaráyyen	'friends'
4	təgúuʒi	'tree'	təgúuʒen	'trees'

Tuareg origin

About 75% of the overall lexicon of Tagdal is of Tuareg origin. The structure of the typical singular noun of Tuareg is given in Figure 3-2.

FIGURE 3-2 structure of the noun word, Tuareg origin, singular
a- / t- Root

This section will include discussions of nouns of Tuareg origin, beginning with those that utilise the nominaliser *a-*, followed by those that begin with *t-*.

Prefix *a-*

In Tuareg languages, the prefix *a-* marks masculine nouns, which then require grammatical agreement. However, since Tagdal has no gender agreement, there is no reason to consider this prefix a gender marker, except in certain cases where it specifically functions to distinguish between a masculine or a feminine noun (see Section 3.2).

In the plural form, the prefix *i-* replaces *a-*, followed by the root. In turn, the

root is followed by the plural suffix, either *-an*, *-en*, *-wan* or *-tan*, as Figure 3-3 shows.

FIGURE 3-3 structure of the noun, Tuareg origin, plural

PL prefix	Root	PL suffix
i-		-an, -en, -wan, -tan

In nouns of Tuareg origin certain rules apply to all vocabulary of Tuareg origin, regardless of grammatical category.⁴³ 1) Stress will always fall on either the penultimate or antepenultimate syllable, regardless of how many syllables the word may have after adding suffixes and prefixes.⁴⁴ 2) Typically, stress will remain on the same syllable of the root, unless the addition of prefixes and suffixes would cause it to occur before the antepenultimate syllable. In this case, stress would then shift to the antepenultimate. 3) If stress falls on the antepenultimate syllable, this will affect the penultimate in two ways: a) the vowel in the penultimate syllable will elongate, unless it is /ə/. b) The consonant in the penultimate syllable will also elongate, unless it is /r/, or unless the presence of other consonants in the same syllable prevents this. In this case, the lengthening will occur in the following consonant unless it is /r/, or unless contact with other consonants prevents this. Finally, 4) Stress occurring in the antepenultimate syllable prevents gemination from occurring. Table 3-10 demonstrates a few common nouns that begin with the singular *a-* and take the *-an* plural suffix.

Table 3-10 nouns of Tuareg origin, nominaliser *a-*, plural *-an*

	Singular		Plural
1	abbákkad	‘sin’	ibákkaadan
2	abbárad	‘young man’	ibáraadan
3	ábbar ⁴⁵	‘deep scratch’	íbbaaran
4	abbárgan	‘showing off’	ibárgaanan
5	Abbarkóray	‘man from Ibarkoraayan tribe’	Ibarkóraayan
6	Abbárog	‘man from Ibaroogan tribe’	Ibároogan
7	abbəraybóray	‘aplause’	ibəraybóraayan
8	áblay	‘piece of clay’	íblaayan
9	abbóbaz	‘male cousin’	ibóbbaaazan
10	ábboora	‘sorghum’	íbbooran
11	ábroy	‘blanket’	íbrooʔan
12	addággal	‘father-in-law’	idággaalan

⁴³ See, for example, Section 3.1.2 for a discussion of stress placement in verbs of Tuareg origin and Section 3.3 for adjectives of Tuareg origin.

⁴⁴ In words where the root has more than three syllables, the preponderance of the data shows a preference for antepenultimate stress.

⁴⁵ In the case of *ábbar* ‘deep scratch’ and others like it, in the singular form the initial long consonant is likely due to gemination, while in the plural it is likely due to elongation of the consonant due to stress occurring in the antepenultimate syllable.

13	addánay	‘force-fed noble woman’	idánaayan
14	áddaz	‘fatigue’	íddaazan
15	ád gag	‘leather jerkin’	ídgaagan
16	addíben	‘marriage’	idíbbeenan
17	affaddáyan	‘fat around stomach’	ifadáyyaanan
18	affántak	‘bed cover’	ifántaakan
19	affaráqqan	‘stick’	ifaráqqaanan
20	affáray	‘sick feeling’	ifáraayan
21	afáryas	‘desert tortoise’	ifáryaasan
22	áf fay	‘cleaning’	íffaayan
23	Affélan	‘Fulani man’	Iféllaanan
24	affógga	‘discovery’	ifóggaanan
25	áfraw	‘wing’	ífraawan
26	aggórmel	‘tick full of blood’	igórmeelan
27	aggə́rúrus	‘mewling of camel’	igə́rúruusan
28	aggódrar	‘dust’	igódraaran
29	aggóras	‘countryside’	igóraasan
30	ággoz	‘achilles tendon’	íggoozan
31	aggúggel	‘person without father’	igúggeelan
32	ayyálay	‘small secret’	iyállaaayan
33	ayyázzar	‘small pool of water’	iyázzaaran
34	ayyábbber	‘hip’	iyábbeeran
35	áylal	‘valley’	íylaalan
36	áyyoora	‘morning’	íyyooran
37	ayyóraf	‘taking animals to well every 2 days’	iyyóraafan
38	áyrut	‘raven’	íyruutan
39	áhhah	‘freckle, mole’	íhhaalan
40	áhhoh	‘advice’	íhhoalan
41	ahhúlel	‘young donkey’	ihúlleelan
42	a33ámar	‘lamb’	izámmaaran
43	a33ə́naɣ3ə́naɣ	‘trembling’	izə́naɣjə́nnaayan
44	a33óbar	‘evil spirit’	izóbbaaran
45	akkábar	‘bowl’	ikábbaaran
46	akkábkab	‘pre-adolescent boy’	ikábkaaban
47	akkámay	‘herd of mammals’	ikámmaayan
48	akkárbah	‘grass hut’	ikárbaanen
49	akkárbay	‘trousers’	ikkárbaayan
50	akkáfwar	‘mountain’	ikáfswaaran
51	akkə́ŋkar	‘cockroach’	ikə́ŋkaaran
52	akólan	‘squirrel’	ikóllaanan
53	akkóm	‘grass tent’	ikkóman
54	akkótay	‘mouse’	ikóttaayan
55	akkúndur	‘rat’	ikúnduuran
56	alláday	‘pig’	iláddaayan
57	allámmad	‘teaching’	ilámmaadan

58	állawka	‘hammock’	íllaawkan
59	alláxar	‘tomb’	iláxxaaran
60	alhákim	‘governor’	alhákiiiman
61	alhízab	‘talisman, charm’	alhízzaaban
62	alhísab	‘calculation’	alhíssaaban
63	ámmaasa	‘seed’	ímmaasan
64	ammakáfaw	‘iguana’	imakáfjaawan
65	ammánnay	‘diviner’	imánnaayan
66	amánkas	‘punch’	imánkaasan
67	ammanókal	‘chief’	imanókkakaan
68	arázzad	‘diarrhea’	irázzaadan
69	aréggan	‘adult male camel in heat’	iréggaanan
70	arkánay	‘suffering’	irkánnaayan
71	assáhar	‘entry’	issáhhaaran
72	assənəflay	‘comfort’	isənəflaayan
73	attəgmi	‘something being sought’	itəgmiiyan
74	attərmas	‘hostage’	ittərmaasan
75	awwára	‘baby male camel’	iwáran
76	áwwas	‘urine’	íwwaasan
77	azzággaz	‘fenec fox’	izággaaazan
78	azzágraw	‘rainy season’	izágraawan

Table 3-11 demonstrates nouns of Tuareg origin with the Plural suffix *-en*.Table 3-11 nouns of Tuareg origin, nominaliser *a-*, plural *-en*

	Singular		Plural
1	abbíyaw	‘teenage boy’	ibíyyaawen
2	ábbus	‘bleeding wound’	íbbuusen
3	ádday	‘half, part’	íddaayen
4	addáyas	‘colostrum’	idáyyaasen
5	adgéljæt	‘mid-morning’	idgéljaaten
6	áffud	‘knee’	íffuuden
7	ayázziira	‘curdled milk w/ dates and cheese curds’	iyázziiren
8	aggábal	‘plant stem’	igábbaalen
9	agámmam	‘small amount of chewing tobacco’	igámmaamen
10	Ágdal	‘man from Igdaalen tribe’	Ígdaalen
11	ágnaw	‘cloud’	ígnaawan
12	aggúlgul	‘meadow’	igúlguulen
13	áylam	‘mount’	íylaamen
14	áhhar	‘male lion’	íhaaren
15	a33ómar	‘forebearance’	izómmaaren
16	ázwal	‘locust’	izwaalen
17	ákkaala	‘knot in camel’s nose’	íkkaalen
18	alláq	‘spear’	alláyen
19	állas	‘fight’	íllaasen
20	álham	‘anger’	álhaamen
21	alhókum	‘kingdom’	alhókkuumen
22	álmoṣ	‘sunset’	álmooṣen
23	amádhal	‘helper’	imádhaalen
24	ʔárab	‘Arab’	ʔáraaben
25	arídal	‘wolf’	iríddaalen
26	arríyal	‘single unit of currency’	arríyyaalen
27	assággay	‘baby gazelle’	isággaayen
28	assáyfat	‘likeness’	isáyfaaten
29	aʃʃíl	‘obligation’	iʃʃílen

Table 3-12 demonstrates nouns of Tuareg origin that take the Plural suffix *-wan*. These are not as common as those with *-an* and *-en*.

Table 3-12 nouns of Tuareg origin, nominaliser a-, plural -wan

	Singular		Plural
1	ammánsay	‘food’	imánsaywan ⁴⁶
2	abbárkaw	‘male calf’	ibárkaawan
3	ayrúru	‘descent from mountain’	iyrúruuwan
4	áknay	‘twin boy’	íknaywan

Table 3-13 demonstrates some nouns of Tuareg origin with the plural suffix *-tan*. These are relatively uncommon in Tagdal, as *-tan* is often a plural marker used for foreign borrowings.

Table 3-13 nouns of Tuareg origin, nominaliser a-, plural -tan

	Singular		Plural
1	abbárziya	‘street dog’	ibárziitan
2	aggánna	‘side’	igánnaatan
3	aggórri	‘wisdom’	igórriitan
4	ammízi	‘separation’	imízziitan

When the vowel /ə/ is the nucleus of the stressed syllable, no vowel lengthening takes place. Still, the preceding consonant lengthens unless the presence of other consonants in that syllable prevents it. In those cases, it is the consonant in the following syllable that lengthens, unless the presence of other consonants prevents it. Table 3-14 provides examples where /ə/ in the stressed syllable does not lengthen.

Table 3-14 nouns of Tuareg origin, nominaliser a-, no vowel elongation in plural

	Singular		Plural
1	abbáydəg	‘thief’	ibáydəggan
2	abbəwəl	‘shallow hole’	ibəlwan
3	addələg	‘decoration’	idələggan
4	addəmi	‘gazelle’	iddəman
5	affərəkək	‘trembling’	ifərəkəkkan
6	áftək	‘clothing’	íftəkkan
7	aggərəd	‘granary’	igərəddan
8	aggəzəl	‘hard work’	igəzzələn
9	agírər	‘gutter, stream’	iggírəran
10	aggərɣək	‘victim, evil eye’	igərɣəkkan
11	ayyáraf	‘celebration’	iyrəffan
12	ayyórrəg	‘animal dropping’	iyrərrəgan

⁴⁶ *imánsaywan* ‘foods’ and Example 4 *íknaywan* ‘twins’ seem to be exceptions, since the vowel in the antepenultimate syllable does not lengthen. One possible explanation is that in both cases, the plural form is the default with, for example, the singular *amánsay* occurring only rarely. (*áknay* ‘twin’ is more common.) However, this requires more study.

14	áyrəm	‘town’	iyrəmman
15	ahhəlólək	‘panting’	ihlóləkkən ⁴⁷
16	ahhánəfa	‘whining’	ihánnəfen
17	allásəl	‘quantity’	ilássəlen
18	assəksəs	‘dance’	isəksəssen
19	assəməgni	‘preparation’	isəmməgənən ⁴⁸
20	aʃʃikəl	‘voyage’	iʃʃikkəlen
21	áxlək	‘creation’	ixləkkən

Finally, Tables 3-15 through 3-20 provide examples of nouns of Tuareg etymology that for various reasons do not follow the typical pattern in their plural form. Most of these correspond to a series of nouns that, in mainstream Berber languages, have apophonic plural forms (see, for example, Kossmann 2011: 40, 2013: 204). Apophonic plural forms in Tagdal do not typically have a plural suffix, end with the vowel /a/ and often follow a pattern of alternating high vowels in the singular with low vowels in the plural form, or vice-versa. In Table 3-15, the vowels in both the singular and plural forms do not alternate from high to low, or from low to high in the plural form.

Table 3-15 apophonic nouns: no vocalic changes

1	ablóləg	‘large intestine’	iblóləg
2	ágna	‘preference’	ígna
3	annáyan	‘eyebrow’	innáyan
4	annamátʃtan	‘dead man’	innamátʃtan
5	anəsduuban	‘young married man’	inəsduuban
6	ayədman	‘guarantee’	iyədman

In Table 3-16, the second vowel in the apophonic plural alternates from low in the singular form to high in the plural.

Table 3-16 apophonic plurals: vowel alternates from high to low, plus other vowel changes

1	abbágog	‘male adult sheep’	íbgag
2	abbáyoq	‘leather canteen’	ibbíyaq
3	ánnil	‘ostrich’	ínyal
4	aʃʃámmur	‘rebel’	iʃʃúmmar
5	aɖɖəwi	‘gerbil’	iɖɖəwa
6	ammíʒʒir	‘abandoned town’	immíʒʒar
7	assəkbəl	‘support’	issəkbəl
8	abbáykor	‘hunting dog’	ibbíkar
9	aggənágən	‘darkness’	iggunúgan
10	azzəŋgu	‘enemy’	ízzəŋga

⁴⁷ The initial ə is likely there for epenthetic purposes.

⁴⁸ A number of Tagdal speakers I have heard pronounce this *isəmməgənən*. From what I could tell, it seems that both pronunciations seem to be more or less acceptable.

In Table 3-17, the initial vowel in the apophonic plural form alternates from low to high.

Table 3-17 apophonic nouns: low vowel to high vowel in plural

1	abbáŋkor	‘temporary well’	ibbíŋkar
2	abbáwan	‘leather sack’	ibbíwan
3	affákan	‘mat for covering food’	iffúkan
4	affakárkor	‘runt lamb’	iffəkárkar
5	akkáfar	‘infidel’	ikkúfar
6	allátam	‘side of body’	illútam
7	assámməd	‘leather sack’	issúmməd
8	aggáyəs	‘bustard’	iggúyəs
9	aggéləm	‘orphan’	iggúləm

Tables 3-18 through 3-21 demonstrate irregular nouns of Tuareg etymology of various kinds. The nouns in Table 3-18 do not take the suffix *i-* in their plural form.

Table 3-18 no *i-* in plural form

1	áadan	‘small intestine’	áadannan
2	áykar	‘male puppy’	áykaaran

The nouns in Table 3-19 take some kind of vowel reduction in their plural forms.

Table 3-19 vowel reductions in plural

1	áyǵəl	‘right hand’	íylan
2	addórəz	‘trace’	íddərzan
3	affárag	‘garden’	íffərgan
4	aggáraw	‘large body of water’	íggərwan
5	ahháket	‘leather tent’	íhhiktan
6	allággaz	‘watermelon’	íllagzen
7	awwáqas	‘wild animal’	íwwuysan
8	awwátay	‘year’	íwwutyán
9	addéggər	‘share’	íddegran

In Table 3-20, the vowels alternate from high in the singular form to low in the plural.

Table 3-20 high in singular to low in plural

1	ayǵáyi	‘cave’	iyǵáyan
2	akkézi	‘rooster’	ikkázan

In Table 3-21, the vowels alternate from low in the singular form to high in the plural. A few have other irregularities as well.

Table 3-21 nouns of Tuareg origin low vowels in singular, high in plural

1	áddəmən	‘guarantee’	áddumun
2	afféli	‘runt’	iffélian
3	afúruufu	‘imbecile’	ifíriifit
4	ahhórta	‘trace’	ihhórti
5	ákkaasa	‘rainy season’	ikássaaten
6	aššáqey	‘brother’	iššaqqéyan
7	áḍḍad	‘finger’	íḍḍdwan
8	addóləg	‘decoration’	idólləgan
9	abbówəl	‘shallow hole’	ibbólwən

Prefix *t-*

Many nouns of Tuareg origin in Tagdal begin with the prefix *t-* in their singular form. In plural nouns, *-t* also occurs, in cases where the noun ends with a vowel⁴⁹ or with /y/. In cases where a noun ends with /y/, interaction with *-t* changes the /y/ to /q/. For example *ammázaɣ* ‘Tuareg man’ would be *tammázaq* ‘Tuareg woman’.

In Tuareg languages, *t-* is a marker of the feminine gender and these nouns would require grammatical gender agreement.⁵⁰ The structure of the Noun with the nominaliser *t-* is given in Figure 3-4.

Figure 3-4 the structure of the noun, *t-*
t- ROOT -t

In the plural form, the *t-* occurs in the beginning of the noun, in its initial position, followed by the plural prefix *i-*. This results in the *t-* palatalising to [ʃ] before the *i-*.⁵¹ Finally, after the root the Plural suffix *-an*, *-en*, *-wan* or *-tan* appears. Figure 3-5 below demonstrates the structure of the noun of Tuareg origin with *t-* in its plural form.

Figure 3-5 the structure of the plural noun, *t-* nominaliser
t- i- ROOT -t -an, -en, -wan, -tan

The usual pattern of stress placement, consonant and vowel lengthening occurs in nouns with *t-*, as with all other vocabulary of Tuareg etymology (see Section 0 for a

⁴⁹ This is one area where Tagdal is different from Tadaksahak and from mainstream Tuareg languages, where nouns that begin with *t-* also end with *-t*. For example, *táɣrəm* ‘village’ in mainstream Tuareg languages and in Tadaksahak would be **táɣrəmt*, which in Tagdal would be incorrect.

⁵⁰ The *t-* also functions to distinguish feminine from masculine nouns, as well as large from small items in Tagdal. However, no grammatical agreement is required.

⁵¹ Palatalising *t-* to [ʃ] before *i-* occurs in most varieties of Tagdal, though in the Abargan and Kəl Amdid varieties it occurs as affricativisation, with *t-* becoming *tʃ-*. In Tabarog, the *t-* fricativises instead, to *s-*.

description). Table 3-22 demonstrates a few of the more common nouns of Tuareg origin that take *t-*, along with the Plural suffix *-an*.

Table 3-22 nouns of Tuareg origin, nominaliser *t-*, plural *-an*

	Singular		Plural
1	tabbárar	‘girl’	ʃibáraaran
2	tabbútut	‘navel’	ʃibúttuutan
3	taddálat	‘river grass’	ʃidállaan
4	tággot	‘hard morning rain’	ʃíggootan
5	tágrak	‘polite burp after meal’	ʃígraakan
6	taggófut	‘sand dune’	ʃigóffuutan
7	tayyárit	‘shout’	ʃiyáriitan
8	tayyáassar	‘ruinous mess’	ʃiyáraasan
9	táyyer	‘small bowl’	ʃíyyeeran
10	tahhákat	‘wild dog (Lycaon pictus)’	ʃihálkaatan
11	tahhírit	‘pre-adolescent cow’	ʃiháriitan
12	takkómar	‘cheese curds’	ʃikómmaaran
13	takkánar	‘forehead’	ʃikánnaaran
14	takkárbay	‘pants’	ʃikárbaayan
15	tákkay	‘conversation’	tákkaayan
16	támyar	‘old woman’	ʃímyaaran
17	tammédər	‘part of turban covering mouth’	ʃiméddəran
18	táymar	‘power’	ʃiymaaran
19	tarəmmaq	‘fear’	ʃirəmmaayan
20	tárkat	‘package’	ʃirkaatan
21	táwfooka	‘headless carcass’	ʃiwfookan
22	táwʃit	‘tribe’	ʃiwʃiitan
23	tazzárvat	‘string’	ʃizárkaatan

Table 3-23 demonstrates nouns that take the *-en* Plural suffix.

Table 3-23 nouns of Tuareg origin, nominaliser *t-*, plural *-en*

	Singular		Plural
1	tabbállit	‘shirt’	ʃibállitən
2	tabbárad	‘young woman’	ʃibáraaden
3	táblal	‘seed, grain’	ʃíblaalen
4	tabbólas	‘sack of grain’	ʃibóllaasen
5	taddáryal	‘gecko’	ʃidáryaalen
6	taffádaq	‘irrigation near water geyser’	ʃifáddaaken
7	táffer	‘gift for rendering service’	ʃíffeeren
8	tafláwis	‘happiness’	ʃifláwiisen
9	taggáddal	‘wrestling’	ʃígáddaalen
10	tággal	‘bride price’	ʃíggaalen
11	tágmar	‘hunt’	ʃígmaaren

12	tayyáyan	‘head of grain’	ʃiyáyyaanen ⁵²
13	táylal	‘small valley’	ʃíylaalen
14	táylam	‘caravan’	ʃíylaamen
15	tayyáyay	‘small blanket’	ʃiyáyyaayen
16	táylam	‘young female camel’	ʃíylaamen
17	tahhárdan	‘taditional string lute-like instrument’	ʃihárdaanen
18	taɣɣárgan	‘filthiness’	ʃizárgaanen
19	takkáلكال	‘skinned animal carcass’	ʃikálkaalen
20	takkárkar	‘coil of rope’	ʃikárkaaren
21	takkáʃit	‘inheritance’	ʃikáʃʃiiten
22	takəraməreemət	‘small temporary granary’	ʃikəraməremmiiten
23	talhútbat	‘sermon’	ʃilhútbaaten
24	tammádnay	‘force-fed noble woman’	ʃimádnaayen
25	tammagégrət	‘barren woman’	ʃimaggérəten
26	tamállaaɣa	‘race’	ʃimállaaɣen
27	tammárwal	‘hare’	ʃimárwaaalen
28	tallábas	‘trick’	ʃilábbaasen
29	tamməgraw	‘supplication’	ʃiməgraawan
30	tammáddal	‘fine sand’	ʃimáddaalen
31	tammáwat	‘young girl’	ʃimáwwaaten
32	tammólat	‘serving spoon’	ʃimóllaaten
33	tannákbal	‘mid-wife’	ʃinákbaalen
34	táŋgal	‘parable’	ʃíŋgaalen
35	táŋkad	‘piece, meat cut off bone’	ʃíŋkaaden
36	tárray	‘path’	tárreaayen
37	tassólbad	‘noise’	ʃisólbaaden
38	tazzáryaf	‘multi-coloured female animal’	ʃizáryaafen

Table 3-24 demonstrates a number of nouns of Tuareg etymology that take the suffix *-wan* in their plural form. Many of these, similar to *tayyáyan* ‘head of grain’, *takəraməreemət* ‘small temporary granary’ and *tammagégrət* ‘barren woman’ in Table 3-23, also undergo vowel changes, from low to high, in their plural forms.

Table 3-24 nouns of Tuareg origin, nominaliser *t-*, plural *-wan*

	Singular		Plural
1	tabbárday	‘rug’	ʃibárdiiwan
2	taddáŋgaw	‘granary made from mud bricks’	ʃidáŋgaawan
3	taffáski	‘Id al-Fitr holiday’	ʃifáskiiwan

⁵² A number of these examples, *tayyáyan* ‘head of grain’, *takəraməreemət* ‘small temporary granary’ and *tammagégrət* ‘barren woman’ also undergo vowel changes in their plural forms, with the vowel heightening from /a/ to /ə/ or from /ə/ and /e/ to /i/.

4	táyɣalgay	‘eagle’	ʃiyálgiiwan ⁵³
5	tayɣáwʃit	‘activity’	ʃiyáawʃiiwan
6	táyma	‘hip’	ʃiymaawan
7	táhhuude	‘oath’	ʃihíddaawan
8	takkárday	‘authorisation’	ʃikárdiiwan
9	tákkooba	‘sword’	ʃikábbiiwan
10	tamántaaka	‘army’	ʃimantákkiwan
11	táyte	‘intelligence’	táytiwan
12	taggétaw	‘cross’	ʃigíttaawan

Like nouns that begin with *a-*, there are cases of those with the *t-* where the stressed syllable has /ə/ in the nucleus, which is not lengthened. Table 3-25 demonstrates a few of these cases.

Table 3-25 nouns of Tuareg origin, nominaliser *t-*, no vowel elongation of /ə/ in plural

1	Singular		Plural
2	tádləm	‘persecution’	ʃídləm̄men
3	taggól̄təm	‘trapping by upper arm or leg’	ʃigól̄təm̄men
4	taggórəs	‘cold season’	ʃigórəssan
5	tággəzəl	‘kidney’	ʃíggəzəl
6	táyɾək	‘leather purse’	ʃíɾəkken
7	tamózzgəda	‘mosque’	ʃimózzgəden
8	tasólləf	‘tick’	ʃisólləfen

In Tables 3-26 through 3-28, the nouns follow apophonic patterns of pluralisation. Table 3-26 gives examples of apophonic nouns where vowels shift from high in the singular to low in the plural form.

Table 3-26 apophonic nouns of Tuareg origin, nominaliser *t-*, high to low

	Singular		Plural
1	tannómm̄er	‘thanks’	ʃinném̄mar
2	takkáff̄ar	‘infidel woman’	ʃikkúff̄ar
3	tannáfl̄ay	‘comfort’	ʃinnúfl̄ay
4	tazzógḡəz	‘knife’	ʃizzəgḡəz
5	tammúys̄ur	‘settling down’	ʃimmáȳsar

In Table 3-27, vowels shift from low in the singular to high in the plural form.

⁵³ *táyɣalgay* ‘eagle’, *táhhuude* ‘oath’ and *taṁantaaka* ‘army’ present several of those rare instances where stress changes in the plural form, since keeping it in the same syllable as the singular would, after adding the various prefixes and suffixes, place stress before the antepenultimate.

Table 3-27 apophonic nouns of Tuareg origin, nominaliser *t-*, low to high

	Singular		Plural
1	taddóbut	‘bed’	ʃiddəba ⁵⁴
2	taggólmas	‘turban’	ʃiggólmas
3	talláyaq	‘suffering’	ʃillíyaq

In Table 3-28 the apophonic nouns all have multiple vowel shifts within a single word, from the singular to the plural form.

Table 3-28 apophonic nouns of Tuareg origin, nominaliser *t-*, other

	Singular		Plural
1	tawwággoz	‘field’	ʃiwwúggaz
2	takkarákid	‘shame’	ʃikkorókad
3	tammaxátir	‘difficulty’	ʃimməxútar

Finally, I only found a single example of a noun with apophonic plurals that starts with *t-*, where the vowels remain the same in both the singular and plural form, *tazzárdam* ‘scorpion’, *ʃizzárdam* ‘scorpions’.

Stress cannot shift to before the antepenultimate syllable. In fact, as the data demonstrate with cases such as *taṁantaaka* ‘army’ / *ʃimantákkiiwan* ‘armies’, if adding affixes to the noun would cause stress to fall before the antepenultimate syllable, it instead shifts to the antepenultimate in the plural form. Table 3-29 demonstrates additional cases of this. In many of these cases, vowel shift also occurs in the plural form.

Table 3-29 nouns of Tuareg origin, nominaliser *t-*, 3+ syllables in plural, stress shifts to penultimate

	Singular		Plural
1	tábbooqa	‘thin dust’	ʃibóqqaatan
2	táddaara	‘tree trunk’	ʃiddáraaran
3	táffaayat	‘rice’	ʃifáyyaaten
4	táffeeda	‘injury from carrying load’	ʃifáddiiwan
5	táyyalgay	‘eagle’	ʃiyálgiiwan
6	táyyaara	‘situation’	ʃiyáraatan
7	tággarʃak	‘evil eye’	ʃigárʃaaken
8	tággaaʒa	‘large well with collapsed mouth’	ʃigáʒʒiiwan
9	tággəla	‘bread’	ʃigóllaawan
10	tágguuʒay	‘another place’	ʃigúʒʒaayen
11	táhhuude	‘oath’	ʃihíddaawan
12	tákkootay	‘offering, sacrifice’	ʃikóttaawan
13	tállaaqay	‘poor person’	ʃilóqqaawan

⁵⁴ *taddóbut* ‘bed’ is unusual in that stress changes to the antepenultimate syllable in the plural.

14	tamántaaka	‘army’	ʃimantákkiiwan
15	támməklaw	‘midday meal’	ʃiməklaawan
16	táraywat ⁵⁵	‘honey’	ʃiráywaatan
17	tássaaka	‘heifer’	ʃisákkaayen
18	táymaako	‘help’	taymákkootan

Tables 3-30 and 3-31 demonstrate cases of nouns with the *t*- nominaliser that behave irregularly. In Table 3-30, the *t*- in the plural form does not palatalise, likely due to the absence of *i*- in the plural form.

Table 3-30 nouns of Tuareg origin, nominaliser *t*-, irregular, *t*- does not palatalise in the plural

	Singular		Plural
1	táwit	‘chameleon’	táwwiiten
2	táayde	‘personality’	táaydeewan
3	taʃʃát	‘dark animal, white spots’	taʃʃáten ⁵⁶
4	táyɣam	‘footprint’	táyɣaamen
5	táyda	‘spear with stone tip’	táydiwan
6	tákkol	‘step’	tákkoolen
7	táyɫal	‘guinea fowl’	táyɫaalan

Table 3-31 demonstrates two examples of nouns that begin with *t*-, that do not conform to the normal pattern. *taddággal* ‘daughter in law’ seems to undergo some sort of consonant reduction in the plural form, with the loss of /g/, while *tawwáqqas* ‘small wild animal’ either has vowel alternation, from low in the singular form to high in the plural form, or, more likely, the vowel changes from /a/ in the singular to /ə/ in the plural, which then realises as /u/ in the presence of the preceding /w/. The latter is more likely, since the [u] in the penultimate syllable does not elongate, as it would normally do with stress on the antepenultimate.

Table 3-31 nouns of Tuareg origin, nominaliser *t*-, irregular other

	Singular		Plural
1	taddággal	‘daughter-in-law’	ʃíduulen
2	tawwáqqas	‘small wild animal’	ʃíwwuysan
3	táwʃit	‘tribe, species’	ʃiúʃʃiitan

⁵⁵ *táraywat* ‘honey’ is also unusual in that the vowel /a/ in the penultimate syllable remains short, resulting in /ay/, pronounced [ej], rather than /aay/ [aɛj].

⁵⁶ *taʃʃát* ‘dark animal with white spots’ is unusual on two counts. First, stress falls on the final syllable in its singular form. Second, in its plural form the initial *t*- does not palatalise, possibly because of the absence of *i*-.

3.1.3 Nominalisation, verbal nouns

This section contains discussions of how Tagdal nominalises verb roots, starting with those of Tuareg origin in Section 0, then continuing with Songhay cognates in section 0. By the end of this section, it will be clear that Tagdal has different strategies for nominalisation, depending on the etymology of the root in question.

Tuareg roots

Tagdal has various means of nominalising roots of Tuareg origin. The most common is by means of the prefixes *a-* and *t-*. Another common means is to utilise the Agentive prefix *ma-*, or its allomorph *na-*. Both of these are discussed below.

Morphological

One common means of forming nouns out of verb roots of Tuareg etymology is by means of the prefixes *a-* and *t-*. Table 3-32 shows some examples of roots that are nominalised with *a-*.

Table3-32 Tuareg roots nominalised with *a-*

	verb	gloss	noun	gloss	plural
1	əbbərgən	'show off'	abbərgan	'showing off'	ibərgaanan
2	əddəz	'be tired'	əddəz	'being tired'	iddəaazan
3	əddərər	'have need'	addóror	'need'	idórooran
4	əgməm	'chew tobacco'	aggámmam	'act of chewing tobacco'	igámmaamen
5	əhlək	'destroy'	əhluk	'destruction'	ihluukan
6	əhkəm	'reign'	alhókum ⁵⁷	'government'	alhókkuumen
7	əngər	'lean against sthg'	annágar	'leaning against sthg'	inággaaran
8	ərtək	'fall over'	aratak	'falling over'	iráttaaken
9	dələg	'decorate'	addələg	'decoration'	idəlləgan
10	zənnaynay	'tremble'	azənnaynay	'trembling'	izənnaynaayan
11	zəwwab	'respond'	alzəwab	'response'	alzəwwaaban
12	qáyyət	'chase'	áqqaayət	'search for criminals'	iqáyyətan
13	səbbəkəd	'do sin'	abbákkad	'sin'	ibákkaadan

⁵⁷ *alhókum*, the noun form of *əhkəm* 'reign' is actually of Arabic origin. The same goes for *zəwwab* 'respond' and *alzəwab* 'response'.

14	ságruurus	'make mewling camel sound'	agərúrus	'mewling sound of camel'	igərúruusen
15	sáyray	'teach'	assáyray	'teaching'	isáyraayan
16	səmáddərən	'think, ponder'	assəmádrən	'meditation'	isəməmádrənan
17	sónnəfrən	'choose'	annáfran	'choise'	ináfraanen

It is interesting to note that none of these instances of derived nouns ends with the plural morphemes *-wan* or *-tan*. The latter is fairly easy to explain, since *-tan* is often used to pluralise foreign borrowings. However, the absence of *-wan* is more difficult to explain and requires more study. Table 3-33 demonstrates some examples of Tuareg nominalised roots that begin with *t-*.

Table 3-33 Tuareg roots nominalised with *t-*

	verb	gloss	noun	gloss	plural
1	ádləm	'persecute'	tádləm	'persecution'	ʃidləmman
2	ádru	'eat together'	tádrut	'eating together'	ʃidrúuten
3	édwəl	'grow up'	táddawla	'growing up'	ʃidáwlaatan
4	égra	'understand'	taggərraw ⁵⁸	'understanding'	ʃigərraawan
5	égrək	'polite burp after meal'	tágrak	'polite burping after meal'	ʃigraaken
6	áyfər	'rent'	táyfər	'renting'	ʃiyfəren
7	əysər	'make a mess'	tayyáysar	'mess'	ʃiyássaaren
8	əzzərgen	'make dirty'	tazzárgan	'filthiness'	ʃizárgaanen
9	ənnəflay	'be rich'	tanáflit	'prosperity'	ʃinəfliyen
10	əqqərət	'scream'	tayárit	'screaming'	ʃiyáriitan
11	əzzər	'lead'	tazzárat	'beginning'	ʃizáraatan
12	dəwwəkʃəʃ	'be happy'	tadəwwəkʃəʃ	'happiness'	ʃidəwwəkʃəʃ
13	gárfak	'do evil eye'	taggarfak	'evil eye'	ʃigárfakaan
14	mədyər	'paste together'	tamádyar	'glue'	ʃimádyaraan
15	yáhu	'be born'	táhut	'birth'	ʃihhuutan

Agentive *-ma*

If a root is of Tuareg or Arabic origin, the prefix *ma-*, or its allomorph *na-* if /b/, /f/, /h/, /ʒ/, /l/ or /m/ exists in the root, can attach directly onto the root, along with other nominal affixes. The resulting noun means someone or something that performs the

⁵⁸ This needs to be compared with another noun, *aggərri* 'wisdom'. There is a likely connection between them, but this is beyond the scope of this study.

action of the root in question. The strategy is for *a-* or *t-* to appear before the Agentive *ma-*, with the initial *m* geminating unless stress occurs in the antepenultimate syllable, as figure 3-6 below demonstrates.

Figure 3-6 structure of the nominalised root with *-ma/-na* prefix
 nominalising prefix AGENTIVE root PL
a-/t- *ma- / na-* *-an/-wan/-en/-tan*

As roots of Tuareg origin gain syllables as a result of adding morphemes, the resulting construction will retain the same rules of stress, vowel elongation and consonant elongation discussed in Section 3.1.2. Table 3-34 demonstrates a few of these nouns of Tuareg origin, as they occur with roots of two syllables.

Table 3-34 Tuareg verb roots with two syllables, no other prefixes, taking *ma-* Agentive

verb root	gloss	w/ agentive	gloss	plural
1 áddəd	'press down'	ammádad	's-one who presses down'	imáddaadan
2 áddəg	'lead'	ammádag	'leader'	imáddaagan
3 ádyər	'to stick, glue'	ammádyar	'glue'	imádyaraan
4 áddən	'graze'	ammáddan	'animal grazing'	imáddiigan
5 áddər	'live'	ammúddar	'animal'	imúuddaaran
6 ádrər	'need'	ammádrar	's-one in need'	imádraaran
7 áddərəz	'leave traces'	ammádrəz	'tracker'	imádraazan
8 áqđəz	'be tired'	ammáqđaz	'tired person'	imáqđaazan
9 ádgət	'jump in pain/surprise'	amádɡat	's-one jumping in pain/surprise'	imádɡaatan
10 ádhəl	'be useful'	ammádhəl	'helper'	imádhaalen
11 éyray	'study'	ammáyray	'student'	imáyraayan
12 éflay	'be rich'	annáflay	'rich man'	ináflaayan
13 égyək	'work in a field'	ammágyak	'farmer'	imagíyyaakan
14 égyət	'testify'	ammagíyyat	'witness'	imagíyyaatan
15 ékʃəf	'discover'	ammákʃaf	'discoverer'	immákʃaafan
16 énsay	'beg'	ammánsay	'beggar'	immánsaywan
17 élkək	'weak'	ammálkak	'weakling'	immálkaakan
18 éŋgəd	'put on turban'	ammánɡad	'young man, recently received turban'	immanɡaaden
19 éryəm	'scold'	ammáryam	'scolder'	immáryaaman
20 éfɾəy	'to judge'	ammáfɾay	'judge'	imáfɾaayan
21 étkəl	'lift up'	ammátkul	'one lifted up'	imátkaaan
22 éstər	'be discreet'	ammástur	's-one discreet'	imástuuran
23 éwəy	'dance'	ammáway	'dancer'	imáwwaayan
24 éxlək	'create'	ammáxlak	'creator'	immáxlaakan

25	ázræg	'draw water for animals'	annázrag	's-one who draws water for animals'	inázraagan
26	áyray	'learn'	ammáyray	'student'	imáyraayan
27	ázri	'replace'	ammázri	's-one who replaces'	imázraayan
28	dállæg ⁵⁹	'decorate'	ammádlag	'decorator'	imádlagaan
29	zéyyad	'add, increase'	ammázyad	'extra person'	imázyaadan

The same pattern of stress placement and vowel and consonant elongation occurs with roots that have more than two syllables, as Table 3-35 demonstrates.

Table 3-35 Tuareg verb roots with three or more syllables, no other prefixes, taking ma-Agentive

	verb root	gloss	w/ agentive	gloss	plural
1	áffəga	'discover'	anáffəga	'discoverer'	inafəggaanan
2	əmməgən	'eat evening meal'	annamməgan	's-one eating evening meal'	inaməggaanan
3	ərakam	'be weak'	ammárkam	'weakling'	imárkaaman
4	ərakkan	'change direction'	ammárkan	's-one changing direction'	imárkaanen
5	əriiyəd	'release suddenly'	amáriyyad	'prisoner released from prison unexpectedly'	imariyyaadan
6	ərrəzəraz	'break w/ force'	amarrəzzəraz	'sthg broken w/ force'	imarrəzraazan
7	əzəgərelləz	'move slightly in sitting position'	annazgárlaz	's-one moving slightly in sitting position'	inazgárlaazan
8	bəriiyət	'throw sthg @ target'	annabbáryat	's-one throwing sthg @ target'	inabáryaatan
9	báttəqət	'completely ruin'	annabátqat	's-one who has been badly hurt in accident'	inabátqaatan
10	fəkfərkər	'shake violently'	anafəkkərkər	'person shaking'	inafəkərkəran

⁵⁹ Numbers 28 and 29 are exceptional, in that the root does not begin with ə-. However, in other respects they do conform to the overall rule of stress placement and elongation.

11	zəʒzərgən	'make dirty'	anaʒəʒzərgən	violently' 'unclean person'	inaʒəʒrgeenan
12	səbbəkəd	'sin'	annasbákkad	'sinner'	inasbákkaadan
13	səbbooka	'perform shamanism'	anásbooka	'shaman'	inasbókkaadan

In principle, any verb root of Tuareg origin with derivational affixes can be nominalized as well.⁶⁰ By far, the most common occurrence of this involves verb roots with the causative prefix *s-* and its allomorphs. In general, if the verb root being nominalised has derivational prefixes attached, the nominalising affixes will attach, and the normal rules of stress placement and vowel and consonant elongation described in Section 0 will apply. One key difference between agentive nouns with derivational affixes and those without is that those with derivational affixes generally do not undergo vowel changes. Table 3-36 has some common examples of nominalised verb roots of Tuareg origin with the Causative *s-* and its allomorphs.

Table 3-36 Tuareg roots with ma- Agentive, derivational morphemes on the root: Causative				
verb root w/ derivational morpheme	gloss	singular w/ Agentive	gloss	plural w/ Agentive
1 zəbzəg	'drive people crazy'	annazəbzəg	's-one who drives others crazy'	inazəbzəggen
2 səddəkud	'cause to measure'	amasəddəkud	's-one who orders measurements to be made'	imasəddəkkuden
3 səddən	'cause animals to be taken to pasture'	ammasəddən	's-one who sends animals to be taken out to pasture'	imasəddənen
4 sədwəl	'provide for s-one else to raise up'	ammasədwəl	's-one who helps to raise up'	imasədwəllen
5 səɣray	'teach'	ammasəɣray	'teacher'	imasəɣraayan
6 ʃəʃʃək	'doubter'	ammaʃəʃək	's-one who raises doubt'	imaʃəʃəken
7 səssəs	'cause to bind up tightly'	ammasəsəs	's-one who causes to bind up tightly'	imasəsəsan

⁶⁰ See Section 0 for a discussion of derivational affixes in Tagdal.

8	zárzəy	'cause to bless'	annažərzəy	's-one who pays for blessings for others'	inažərzəyyan
9	sətrəb	'cause to do quickly'	ammasətrəb	'person who works quickly'	imasətrəbbaan
10	səhhosay	'cause to be beautiful'	amasəhhosay ⁶¹	'person who works in beauty'	imasəhóssaayan
11	sídəd ⁶²	'cause to follow closely'	ammasídəd	'person sends s-one else to follow closely'	imasiddəden
12	síləs	'cause to repeat'	ammasíləs	'person who causes to repeat'	imasílləsen
13	zəzərrəb	'cause to taste'	anažəzərrəb	's-one who causes s-one else to taste'	inažəzərrəbaan
14	zəzəzəd	'force to bow down'	amažəzəzəd	's-one who forces to bown down'	imažəzəzədan
15	zəzəwab	'cause to answer'	annažəzəwab	's-one who causes to answer'	inažəzəwwaaban
16	zəzəbbəgbəg	'cause to puff up'	anažəzəbbəgbəg	'flatterer'	inažəzəbbəgbəg
17	zəzri	'cause to replace'	ammazəzri	's-one who causes to replace'	imazəzraayan

In principle, any verb root of Tuareg origin with the Reciprocal affix *nəm-* can be nominalised, though actual instances are relatively rare. The resulting noun takes the

⁶¹ Since in Agdal culture, people who work in beauty shops are usually women, this word would normally have the feminine prefix *t-*. The resulting noun would be *tamasəhhosay* 'woman who works in a beauty', with the plural being *šimasəhóssaayan*. However, for the sake of simplicity, I left the feminine prefix out. The male equivalent is *fab koy*, literally 'shaver' (see Table 3-40), a man who travels between various encampments offering beautifying services to men, especially shaving and cutting hair.

⁶² In examples 11 and 12 the roots in question begin with the vowel /i/.

meaning of, approximately, 'people who are doing action X to each other or together'. Stress usually falls on the antepenultimate syllable, especially if it contains the derivational affix, and follows the normal pattern for vocabulary of Tuareg origin described in Section 0. Due to the nature of the Reciprocal, these nouns are plural by default. Table 3-37 shows some examples.

Table 3-37 Tuareg verb roots with *ma-* Agentive, with other derivational morphemes on the root: Reciprocal

	root	gloss	w/ derivational morpheme	Gloss	w/ Agentive
1	əhkəm	'destroy'	nómməhkəm	'destroy each other'	inəməhkəmmen
2	əgyəl	'be faithful'	nómmədɣəl	'be faithful to each other'	imanəmmədɣəl ⁶³
3	əffəd	'borrow'	nómməfəd	'borrow from each other'	inanəməffəden
4	əfrəz	'separate'	nómməfrəz	'separate from each other'	inanəməfrəzzan
5	əgra	'understand'	nómməgra	'understand each other'	imanəməgraanan
6	əlləd	'put arms around'	nómmələd	'put arms around each other'	inanəməllədan
7	əzzəl	'hand sthg over w/ hand outstretched'	nómməzzəl	'hand sthg over to each other'	imanəmməzzələn
8	səsləm	'greet'	nómsəsləm	'greet each other'	imanəmsəsləmmen
9	zəzɣəl	'pull hand-over-hand'	nómməzɣəl	'pulling s-one out of a hole hand-over-hand w/ rope'	inanəmməzɣələn

In the same way, any verb root of Tuareg origin with the Passive affix *təw-* can be nominalised, though actual instances are relatively rare. The resulting noun means, approximately, 'person who is undergoing action X'. Stress falls on the syllable with the *təw-* prefix, and follows the familiar patterns for Tuareg vocabulary described in Section 3.1.2, as Table 3-38 demonstrates.

⁶³ This example is exceptional because in its nominal form it does not take the plural suffix – *en/-an*.

Table 3-38 Passive Tuareg verb roots, ma- Agentive, other derivational morphemes:

	verb root w/ derivational morpheme	gloss	singular w/ Agentive	gloss	plural w/ Agentive
1	táwwəzlay	'differentiated'	amatəwwəzlay	'person who was left out'	imatəwəzlaayyan
2	táwwətkəl	'taken'	amatəwwətkəl	'kidnappe d person'	imatəwətkəllan
3	táwwəzma	'squeeze'	amatəwwəzma	'squeezed person'	imatəwwəzman
4	táwwəxfəl	'locked'	amatəwwəxfəl	'person locked up'	imatəwəxfəllan
5	táwwədħəl	'helped'	amatəwwədħəl	'person helped'	imatəwədħəllan
6	təwzəzlay	'caused to be differentiated'	amatəwzəzlay	'person caused to be left out'	imatəwzəzlaayan

It is not unknown for an Agentive noun to be formed with two or more derivational morphemes. In general, these follow the stress and syllable formation rules found in Section 3.1.2, as well as the normal order for multiple derivational prefixes found in Section 3.1.2. Table 3-39 demonstrates.

Table 3-39 Tuareg verb roots with two or more derivational prefixes, ma- Agentive

	verb root w/o agentive	gloss	root with multiple derivational prefixes	Combination of derivational affixes	gloss
1	əɣray	'learn'	amasəssəɣray	CAUS, CAUS	'one who causes teaching (i.e. school administrator)'
2	əɣray	'learn'	amatəwəssəɣray	PASS, CAUS	'one who is caused (forced?) to learn' ⁶⁴

⁶⁴ The image here is of students who are held prisoners in school and forced to learn.

3	jíkəl	'travel'	imasənəmǰákkuulen	CAUS, REC	'ones who are caused to travel together'
4	kérəd	'tie up, hobble'	imatəwməmsəkérəddan	PASS, REC, CAUS	'ones who are caused to be tied up together (i.e. as prisoners)'
5	málləyət	'race'	imanəmsəməlóyyəten	REC, CAUS	'ones who race together'
6	málləyət	'race'	amasəsəmálləyət	CAUS, CAUS	'one who causes the race to occur (i.e. racing organiser)'
7	səgla	'go' ⁶⁵	imatəwnəmsəglen	PASS, REC, CAUS	'ones who were sent together'

Songhay roots

In most cases, Songhay and Tuareg roots are relatively easy to distinguish from each other in Tagdal. This section includes a brief discussion of Songhay verb roots, including how to determine whether most roots are nouns or verbs. The discussion of how roots of Songhay origin are nominalised with the suffix *-en* continues, as well as how Songhay cognates form Agentive nouns.

Determining verb vs noun

Since Songhay roots have little or no morphology to speak of in Tagdal, in most cases it is the location in the clause or sentence that determines whether a particular item is a noun or a verb. Nominalised verb roots of Songhay origin will be otherwise indistinguishable from verbs, except for their distribution in the clause or sentence. In Examples 3.1 through 3.3, those marked with *a* will contain an example where the root distributes like a typical verb, while *b* will include examples where the root will distribute like a noun.

⁶⁵ Examples 7 is formed from the suppletive Tuareg forms of the Songhay *koy* 'go'. (See Section 0.)

3.1a sa **niṭé**, iiriguuna-a harwá.
 sa ni= te iiri= guuna =a harwa
 SBDR 2SG arrive 1PL see 3SG still
 'When you arrived, we were still watching it (the movie).'

3.1b har nin **te**.
 har ni= n te
 until 2SG GEN arrive
 'Until you arrive.' (i.e. 'I'll see you when you get here.')

3.2a iiri**yeezi**ikaat-i ənda nin faarayyen.
 iiri= yeezi kat =i ənda ni= n faarayyen
 1PL return VEN 3PL with 2SG GEN friends
 'We sent them back with your friends.'

3.2b **yeezi**ikaat-a asəkóy hínzin ha!
 yeezi kat =a a= səkoy hínzin ha
 return VEN 3SG 3SG NEG.FUT fix thing
 'Returning it isn't going to fix a thing!'

3.3a ya**təkóy** Táhoua ənda-a.
 ya= tə- koy Tahoua ənda =a
 1SG FUT go Tahoua with 3SG
 'I will go with her to Tahoua.'

3.3b insəkóy da waalá ha fo ənda **kóynan**.
 ni= səkoy da waala ha fo ənda koy -nan
 2SG FUT.NEG do absolutely nothing with go ALL
 'You won't accomplish absolutely anything by going over there.'

Nominalising suffix **-yén**

A limited number of roots of Songhay etymology are nominalised by means of a suffix **-yén**, where the stress shifts to the syllable with the suffix and the initial /y/ in the suffix elongates, rather than the initial vowel. They are *bay* 'know', *bun* 'die', *may* 'have' and *wi* 'kill'.⁶⁶ Table 3-40 demonstrates how these are nominalised.

Table 3-40 Songhay roots nominalised with **-yén**

	root	gloss	nominalised root	gloss
1	bay	'know'	bayyén	'knowledge'
2	bun	'die'	buyyén	'death'

⁶⁶ I make no claim to this being an exhaustive list; there may be other roots nominalised by this means, of which I am currently unaware.

3	may	'have'	mayyén	'ownership'
4	wi	'kill'	wiyyén	'killing'

The rather limited distribution of this construction indicates that they may form a special case. However, for the moment this matter requires further study.

Agentive koy

By far the majority of Songhay verb roots in Tagdal are nominalised by means of an Agentive using the noun *koy*, literally 'lord' or 'master'. In principle, most any root of Songhay etymology can be nominalised in this manner, except for those which take the nominaliser *-yén*. Table 3-41 demonstrates a few common examples.

Table 3-41 Songhay roots nominalised with *koy* 'master'

	root	gloss	nominalised root	gloss
1	bis	'surpass'	bis koy	'the best'
2	dayná	'forget'	dayná koy	'forgetful person'
3	gab	'be inflexible'	gab koy	'stubborn person'
4	gar	'guard'	gar koy	'person who guards'
5	hárhor	'laugh'	hárhor koy	'funny person'
6	hurrú	'seek'	hurrú koy	'seeker'
7	je	'speak'	je koy	'speaker'
8	kəmmá	'find'	kəmmá koy	'finder'
9	kud	'herd'	kud koy	'shepherd'
10	nas	'be fat'	nas koy	'fat person'
11	qos	'cut'	qos koy	'cutter'
12	ɟab	'shave'	ɟab koy	'man who travels between encampments offering services to make men attractive'
13	zay	'steal'	zay koy ⁶⁷	'thief'
14	zúuru	'run'	zúuru koy	'fast runner'

The Agentive *koy* can also apply to the roots in Table 3-39, as Table 3-42 indicates.

Table 3-42 Songhay roots nominalised with *-yén*, with Agentive *koy*

	root	gloss	nominalised root	gloss
1	bayyén	'knowledge'	bayyén koy	'diviner'
2	buyyén	'death'	buyyén koy	'master of death'
3	mayyén	'ownership'	mayyén koy	euphemism for God (lit. 'owner of everything')

⁶⁷ Younger Tagdal speakers tend to use the Tuareg cognate *abáydəg* 'thief'.

- 4 wiyyén 'killing' wiyyén koy 'assassin'

koy 'master' can also be combined with nouns of either Tuareg or Songhay etymology, in order to indicate either Ownership or to indicate some kind of relationship to the semantic properties of the noun in question, as Table 3-43 demonstrates.

Table 3-43 *koy* 'master' with nouns

	noun	gloss	combination	gloss
1	ámṇəs	'camel'	ámṇəs koy	'camel owner'
2	báyna	'slave'	báyna koy	'slave owner'
3	fiiṣi	'sheep'	fiiṣi koy	'sheep owner'
4	isúdar	'food'	isúdar koy	'chef'
5	zúula	'commerce'	zúula koy	'merchant'
6	táayde	'personality'	táayde koy	'popular person'
7	tágmar	'hunting'	tágmar koy	'good hunter'

3.2 When to use Songhay and Tuareg vocabulary

Tagdal has certain occasions in which Songhay or Tuareg cognates are the correct choice. In most cases, the default vocabulary will be of Songhay origin, while Tuareg cognates are used when more information is necessary.

3.2.1 Generic vs. specific

One of the main functions of Songhay versus Tuareg cognates has to do with determining generic versus specific. The generic vocabulary item will almost always be of Songhay origin, while Tuareg vocabulary is used for specification. It is also a matter of domains of language use. Since Tagdal speakers are essentially part of the Tuareg socio-economic sphere, most of the overall lexicon is of Tuareg origin. Table 3-44 gives just a few examples.

Table 3-44 Generic Songhay, specific Tuareg

	generic noun	gloss	specific noun	gloss
1	kám̥ba	'hand, arm'	áyṣ̣əl	'right hand'
			zólḡət	'left hand'
			táymur	'elbow'
			ammánsur	'forearm'
			tagóltəm	'upper arm'
2	hinḡiini	'goat'	azzóláy	'adult male goat'
			áynəs	'baby goat'

			asságay	'6-12 month old goat'
			éɣayd	'young goat'
			afféli	'newborn goat'
3	hánǰi	'dog'	abbərɜia	'hunting dog'
			abbáykor	'street dog'
			áykar	'puppy'
4	ízze	'child'	bárar	'boy'
			aggúgəl	'orphan'
			ammáwa	'adolescent'
			áwta	'youngest child'
			abbíyyaw	'pre-teen'

Two possible exception to this otherwise general rule of Songhay generic, Tuareg specific. First, the Tuareg generic word *ámɲəs* 'camel', plural *imɲəs*, with the Songhay cognate *yu* 'adult female camel' and its plural *yúwwan*. Otherwise, however, all other nouns for camels in Tagdal are of Tuareg origin. Second, Songhay has two words for sibling: *káyna* 'younger sibling, plural *kaynéen* and *ber* 'older sibling', plural *beerén*. The Tuareg equivalent is *affáqeq* 'brother', which can only specify as far as masculine or feminine (see next section).

3.2.2 Masculine vs. feminine

As a further specification, Tuareg nouns can also differentiate between masculine and feminine, as Table 3-45 demonstrates. The feminine affix is *t-* (see Section 0), and the nouns in question follow the general rules of stress, word formation, consonant and vowel length, etc... described in Section 3.1.2. Unlike Tuareg languages, no grammatical agreement is required between masculine and feminine.

Table 3-45 Masculine vs. feminine, Tuareg nouns

	masuline noun	gloss	feminine noun	gloss
1	abbərɜia	'hunting dog (m)'	tabbərɜiat	'hunting dog (f)'
2	abbáyɖəg	'thief (m)'	tabbáyɖəg	'thief (f)'
3	abbóbaz	'cousin (m)'	tabbóbaz	'cousin (f)'
4	addágal	'father-in-law'	taddágal	'mother-in- law'
5	affáɣas	'desert tortoise (m)'	taffáɣas	'desert tortoise (f)'
6	allólli	'noble free man'	tallóllit	'noble free woman'

7	ammáwaḍ	'adolescent (m)'	tammawat	'adolescent (f)'
8	ammadéryəl	'blind man'	tammadéryəl	'blind woman'
9	ammanókal	'king'	tammanókal	'queen'
10	ammáyaay	'porcupine (m)'	tammáyaay	'porcupine (f)'
11	ámɣar	'old man'	támɣar	'old woman'
12	aɣǣq	'brother'	taɣǣq	'sister'
13	áwta	'youngest boy'	táwtat	'youngest girl'
14	bágzan	'show horse (m)'	tabágzan	'show horse (f)'
15	móknud	'dwarf (m)'	tamóknud	'dwarf (f)'

3.2.3 Large vs. small

The Tuareg prefix *t-* can also function to distinguish between large and small nouns, as Table 3-46 demonstrates.

Table 3-46 Large vs. small, Tuareg nouns

	masuline noun	gloss	feminine noun	gloss
1	abbóraybəray	'applause'	tabbóraybəray	'light, polite applause'
2	áḍḍaz	'fatigue'	táḍḍaz	'slight tiredness'
3	áyɾəm	'town'	táyɾəm	'village'
4	áftək	'cloak'	táftək	'short cloak'
5	agírrəmrəm	'complaint'	tagírrəmrəm	'minor complaint'
6	akkábbar	'bowl'	takkábbar	'small bowl'
7	akkáfwar	'mountain'	takkáfwar	'hill'
8	allággaz	'watermelon'	tallággaz	'small watermelon'
9	arkánay	'suffering'	tarkánay	'slight difficulty'
10	assámməd	'leather sack'	tassámməd	'small leather sack'
11	attókkən	'clay water container'	tattókkən	'small clay water container'
12	azzəggəz	'knife'	tazzəggəz	'dagger'

3.3 Adjectives, adverbs

3.3.1 Adjectives

In Tagdal, adjectives typically match the nouns they modify in number, either singular

or plural. There is no grammatical gender. Since the morphological behaviour of adjectives depends heavily on the etymology of the root, this section first covers adjectives of Songhay origin, followed by those of Tuareg origin. Special attention will be paid to how adjectives are formed morphologically from roots.⁶⁸

Songhay

The adjectivising suffix is *-an* or *-nan*, if the root ends in a vowel. Stress will remain in the original syllable in the singular. In their plural form stress will shift to the syllable with the plural adjectiviser *-en* or *-nen*. Table 3-47 demonstrates some common adjectivised roots of Songhay origin.

Table 3-47 adjectives, Songhay cognates

	Root (noun, verb)	gloss	w/ adjvr, singular	gloss	w/ adjvr, plural
1	buuhú	'burlap' (noun)	buuhúunan	'made of burlap (sg)'	buuhuunén
2	deegí	'to hang'	deegíinan	'hanging'	deegiinén
3	fáarad	'to sweep'	faráadan	'swept away (sg)'	faaradnén
4	fas	'to dig'	fáasan	'dug up (sg)'	fasnén
5	fik	'to bury'	fíikan	'buried (sg)'	fiknén
6	fuufú	'to be cold'	fuufúunan	'cold (sg)'	fuufuunén
7	fuunús	'to light on fire'	fuunúusan	'lit on fire (sg)'	fuunusnén
8	gar	'to guard'	gárnan	'guarded (sg)'	garnén
9	gúugut	'polish'	gúuguutan	'polished (sg)'	guugutén
10	ze	'be old'	zaanúunan	'old'	zaanuunén
11	kəkáy	'to build'	kəkáynan	'built (sg)'	kəkaynén
12	kuukú	'be long'	kuukúunan	'long (sg)'	kuukén
13	mor	'be far'	móornan	'far'	moornén
14	mun	'to spill'	múunan	'spilled (sg)'	muunén
15	nam	'to bite'	náaman	'bitten (sg)'	naamén
16	ǰiidi	'to be red'	ǰiidiinan	'red (sg)'	ǰiidiinén
17	waryá	'be large'	waryá	'large'	waryén

A few Songhay roots do not take any adjectiver in the singular form, but do take an adjectiviser in their plural, with stress shifting to the syllable with the adjectiviser. Table 3-48 demonstrates.

⁶⁸ The line between adjectives, relative clauses and verbs in Tagdal is quite opaque, and the three categories have a number of overlapping functions. However, here, I will only cover morphological issues relating to adjectives.

Table 3-48 adjectives, Songhay cognates w/ no adjvr in singular form

	Root (noun, verb)	gloss	w/ adjvr, singular	gloss	w/ adjvr, plural
1	biibí	'be black'	biibíi	'black'	biibén
2	dúŋguuru	'be short'	dúŋguuru	'short'	dúŋguurén
3	hiimí	'to clean'	hiimí	'cleaned'	hiimiinén
4	waryá	'be large'	waryá	'large'	waryén

A few adjective forms tend to be irregular. In Table 3-49, Examples 1 through 3 take both the Songhay adjectivising suffix *-u* or *-i*, plus *-an*. Examples 4 and 5 have reduplication. These examples loosely match those appearing in Christiansen-Bolli (2010: 134, 135), though not all of the cognates there match what occurs in Tagdal. For example, Example 13 in Table 3-46 in Tadaksahak would be *mormoríinan* 'far' (ibid), not *mórnan*.

Table 3-49, irregular adjectives of Songhay origin

	Root (noun/verb)	gloss	w/ adjvr, singular	gloss	w/ adjvr, plural
1	zen	'be old'	zaanúunan	'old'	zaanuunén
2	nas	'be fat'	naasúunan ⁶⁹	'fat'	naasuunén
3	qoq	'be dry'	qooyíinan	'dry'	qooyiinén
4	qos	'cut'	qósqoosan	'cut'	qosqoosén
5	was	'boil'	wáswaasan	'boiled'	waswaasén

Tuareg

Just like adjectives of Songhay origin, those of Tuareg origin will match the noun they are modifying in number. However, there are some key differences between the way that Tagdal treats adjectives derived from roots of Tuareg origin, from those of Songhay origin. First, stress in adjectives derived from Tuareg roots will tend to occur in either the penultimate or antepenultimate syllable. Second, the vowel in the stressed syllable will usually be long, at least in the singular form, unless it is /ə/. Third, stress will not shift in the plural form, unless maintaining it where it is would cause it to fall before the antepenultimate syllable. Fourth, the default plural adjectiviser is *-nen* or *-nan*, not *-en*.

The adjective of Tuareg origin, described in Figure 3-7, begins with the Subject Relative prefix *ə-*.⁷⁰ If the Tuareg root begins with /ə/, an epenthetic /y/ will be inserted, which will cause the initial /ə/ in the root to shift position to [i].⁷¹ The

⁶⁹ A few speakers I have heard use the form *naasén* 'fat', though *naasúunan* seems to be more common. This requires more study.

⁷⁰ The relation between the Subject Relative marker *ə-* and the participle in Berber languages, discussed briefly in the next chapter, is something that will require more study.

⁷¹ Like Christiansen-Bolli, I represent this orthographically here as /i/ for the sake of simplicity.

adjectivising suffix follows, either *-an* or *-nan* in the singular or *-en* or *-nen* in the plural.

Figure 3-7 adjective morphology, roots of Tuareg origin that begin with *-ə*

Subject Relative	verbal prefix (if begins with <i>-ə</i>)	root	adjr
<i>ə-</i>	<i>y-</i>		<i>-nen</i>

Table 3-50 demonstrates some examples of adjectives derived from two-syllable Tuareg roots.

Table 3-50 adjectives, Tuareg cognates, two syllables

	Root (noun, verb)	gloss	w/ adjvr, singular	gloss	w/ adjvr, plural	gloss, PL
1	əddəd	‘to press down’	əyidáadan	‘pressed down (sg)’	əyidádnen	‘pressed down (pl)’
2	əddər	‘to live’	əyiddáaran	‘alive (sg)’	əyiddárnén	‘alive’
3	ədrər	‘to need’	əyidráaran	‘needed (sg)’	əyidrárnén	‘needed (pl)’
4	əhhəd	‘to swear, give oath’	əyiháadan	‘pertaining to an oath (sg)’	əyihádnen	‘pertaining to an oath (pl)’
5	əffər	‘to promise’	əyiffáaran	‘promised (sg)’	əyiffárnén	‘promised (pl)’
6	ətkəl	‘to lift up’	əyiṭkáalan ⁷²	‘lifted up (sg)’	əyiṭkálnén	‘lifted up (pl)’
7	əṅkəd	‘be careful’	əyiṅkáadan	‘carefully (sg)’	əyiṅkádnen	‘carefully (pl)’
8	əqqəb	‘to traverse’	əyiqqáaban	‘traversed (sg)’	əyiqqábnen	‘traversed (pl)’
9	əqqəl	‘to wait’	əyiqqáalan	‘waited for (sg)’	əyiqálnén	‘waited for (pl)’
10	ətkəl	‘to lift up’	əyiṭkáalan	‘lifted up (sg)’	əyiṭkálnén	‘lifted up (pl)’
11	əzzár	‘be first, lead’	əyizzáaran	‘leader (sg)’	əyizzárnén	‘leader (pl)’
12	əzma	‘squeeze’	əyizmáayan	‘squeezed (sg)’	əyizmáynén	‘squeezed (pl)’
13	əzri	‘replace’	əyizráayan	‘replaced (sg)’	əyizráynén	‘replaced’
14	kérəd	‘to tie hands together’	əkráadan	‘having hands tied together’	əkrádnen	‘having hands tied together’

⁷² This example is unusual, in that in its singular form, stress shifts from the original syllable.

15	məʒʒəq	'to debate'	məʒʒáayən	(sg)'debated'	məʒʒáyənən	(pl)'debated'
16	zəddəg	'be holy'	zəddiigan	(sg)'holy (sg)'	zəddəgnən	(pl)'holy (pl)'

Table 3-51 demonstrates examples of adjectives derived from roots with three or more syllables.

Table 3-51 adjectives, Tuareg cognates, three or more syllables

	Root (noun, verb)	gloss	w/ adjvr, singular	gloss	w/ adjvr, plural	gloss, PL
1	bəttəqəṭ	'ruin completely'	bəttəqqáatan	'completely ruined'	bəttəqqáatnən	'completely ruined (pl)'
2	əddəryəl	'be blind'	əyiddəryáalan	'blinded'	əyiddəryáalnən	'blinded (pl)'
3	əffəraz	'separate'	əyiffərzáaran	'separated'	əyiffərzáarnən	'separated (pl)'
4	ərrəreggəṭ	'chase down w/ force'	ərrəreggáatan	'chased down w/ force'	ərrəreggáatnən	'chase down w/ force (pl)'
5	wánniifət	'look for sthg put down earlier'	wanifáatan	'searched for, put down earlier'	wanifátnən	'searched for, put down earlier (pl)'

A few irregular roots of Tuareg origin take the plural adjectiviser *-en*. Table 3-52 demonstrates some of these.

Table 3-52 adjectives, irregular Tuareg cognates, plural advr *-en*, other

	Root (noun, verb)	gloss	w/ adjvr, singular	gloss	w/ adjvr, plural	gloss, PL
1	əbbər	'scratch'	əyibráaran	'scratched'	əyibráaren	'scratched'
2	benná	'be good for nothing'	bennán	'good for nothing'	bennén	'good for nothing'
3	dəlbəb	'be fat'	dəlbəbban	'fat'	dəlbəbben	'fat'

4	dórən	‘to desire’	dóran	‘wished for’	dóraanen	‘wished for’
5	hóssay	‘be beautiful’	hóssaayan	‘beautiful’	hóssaynen	‘beautiful’
6	miiǰí	‘to separate’	miiǰán	‘separated’	miiǰén	‘separated’
7	málluulu	‘to shine’	málluulan	‘shiny’	mállúulen	‘shiny’

3.3.2 Adverbs

True adverbs form a fairly closed system, indicating additional spatio-temporal and manner information to the Verb Phrase. Table 3-53 indicates the adverbs in Tagdal and their function.

Table 3-53 adverbs in Tagdal

manner		spatio-temporal	
tármət	‘quickly’	meeraddaayóoda	‘this very instant’
wúllen	‘much, very’	ne / néeda	‘here’
səllán	‘slowly’	ǰen / ǰénda	‘there’
		kanǰin	‘before’

Tagdal has a number of other time expressions, such as the connector *hazinaláqqam* ‘after that’. For example, *meerá* ‘now’ is a connector with both spatio-temporal and syntactic functions, and will be discussed in the following chapter.

3.4 Adpositions

Tagdal has only one preposition, the instrumental or accompaniment marker *nda*, while all others are postpositions. Adpositions are usually preceded by either a Noun Phrase, pronoun or proclitic. Or in the case of *nda*, the NP follows. In cases where the NP does not need to be mentioned overtly, a proclitic or pronoun will be present either before or after. Table 3-54 lists the possible adpositions, along with their glosses and functions.

Table 3-54 list of adpositions in Tagdal

Preposition	gloss	function	postposition	gloss	function
nda	‘with’	Instrumental, Accompaniment	sa	‘for’	Dative
			kan	‘in’, ‘at’	Locative
			daayó	‘at’ (‘chez’)	Locative
			béena	‘on’, ‘over’	Locative

3.5 Verbs

Since Songhay and Tuareg verb roots are usually distinguishable in Tagdal,⁷³ this section will include, first of Songhay cognates, then of Tuareg cognates, followed by a discussion of the derivational morphemes which affix onto verb roots of Tuareg origin.

3.5.1 Songhay cognates

In general, Songhay verb roots are often distinguishable by their syllable patterns. By far the most common verb roots of Songhay origin have only one syllable and carry a CVC pattern. Table 3-55 demonstrates some of the more common verb roots of Songhay origin with CVC syllable patterns.

Table 3-55 Songhay verb roots with CVC syllable pattern

1	dut	‘pound (grain)’
2	may	‘have’
3	kaw	‘remove’
4	dab	‘dress’
5	ʃin	‘say’
6	koy	‘go’
7	hay	‘give birth’
8	ʔon	‘fill up’
9	daw	‘send’
10	har	‘declare, praise’
11	zoq	‘fight’
12	ben	‘finish’
13	kan	‘fall’
14	man	‘call, name’
15	man	‘be far’
16	gar	‘save, guard’
17	bun	‘die’
18	ʃat	‘fly’
19	bis	‘pass by’
20	bay	‘know’
21	fer	‘open’
22	nin	‘drink’
23	tuk	‘hide’
24	nam	‘bite’
25	yed	‘return’
26	kud	‘go to the bush with flock’

⁷³ See, for example, the discussion on syllable patterns of Songhay and Tuareg cognates in Christiansen-Bolli (2010:50-51).

27	qos	‘cut up’
28	nas	‘be fat’
29	giʃ	‘leave’
30	fad	‘be hungry’
31	waw	‘insult’
32	ban	‘be flexible’
33	dor	‘be in pain, hurt’
34	ʃab	‘apply make-up’
35	mun	‘spill’

When an additional vowel is added to a verb root of Songhay origin with a CVC pattern, such as (for example) when a direct object clitic attaches directly onto the verb, the initial vowel lengthens, so that the new syllable pattern is either CV̇:CV or CV:CV̇.⁷⁴ Examples 3.4 through 3.6 demonstrate a just few cases in which the initial vowel in the verb roots from Table 3-54 lengthen due to the addition of a vowel, in this case the third person singular direct object clitic.⁷⁵

3.4 vowel lengthening, Songhay cognates, verb root *nin* 'drink'

noun Direct Object			clitic Direct Object		
anín aʃʃáhi.			aníin -a		
a=	nin	aʃʃahi	a=	nin	=a
3SG	drink	tea	3SG	drink	3SG.OBJ
'He drank tea.'			'He drank it.'		

3.5 vowel lengthening, Songhay cognates, verb root *qos* 'cut'

noun Direct Object			clitic Direct Object		
iiriqos háamu.			iiriqóos -a		
iiri=	qos	háamu	iiri=	qos	=a
1PL	cut	meat	1PL	cut	3SG.OBJ
'We cut the meat.'			'We cut it.'		

3.6 vowel lengthening, Songhay cognates, verb root *hur* 'enter'

noun Direct Object			clitic Direct Object		
nihúr húggu.			nihúur -a.		
ni=	hur	húggu	ni=	hur	=a
2SG	enter	house	2SG	enter	3SG.OBJ
'You entered the house.'			'You entered it.'		

Table 3-56 demonstrates some common verb roots of Songhay origin with CV syllable patterns.

⁷⁴ The same process occurs in Tadakshak (Christiansen-Bolli 2010: 79).

⁷⁵ I have chosen the third person singular direct object clitic in the following examples only for the sake of simplicity; the central point here is lengthening of the initial vowel in the root.

Table 3-56 Songhay verb roots with CV syllable pattern

1	da	‘do’
2	ʃi	‘be, not have’
3	ki	‘stop, stand’
4	wa ⁷⁶	‘eat’
5	wi	‘kill’
6	na	‘give’
7	te	‘arrive’
8	bi	‘be black’
9	to	‘suffice’

All of the cases in Table 3-57 are of verb roots of Songhay origin with CV:CV syllable patterns.

Table 3-57 Songhay verb roots with CV:CV syllable pattern

1	báara	‘be’ (locative)
2	báaya	‘want, love, need’
3	buubó	‘be penitiful’
4	guuná	‘look’
5	ziidá	‘walk’
6	kéeni	‘sleep’
7	ziiní	‘grab’
8	kuukú	‘be long’
9	huunú	‘go out’
10	ʃidi	‘be red’
11	goorá	‘sit, stay’
12	zúuru	‘run’
13	híinjin	‘fix, arrange’

In such cases, the addition of a Direct Object clitic will result in the final vowel becoming elided, as in Examples 3.7 through 3.9. In some of these cases, the third person plural clitic =i is used, since eliding the vowel /a/ before the third person singular =a will not result in any discernible difference. In those cases where stress falls on the second syllable of the root, vowel elision will result in stress falling on the clitic instead.

3.7 vowel lengthening, Songhay cognates, verb root *baaya* ‘love’

noun Direct Object				clitic Direct Object			
abáaya an ízzen.				abáay -i			
a=	baaya	a=	n	izzen	a=	baaya	=i
3SG	love	3SG	GEN	children	3SG	love	3PL.OBJ
‘She loves her children.’				‘She loves them.’			

⁷⁶ In several mainstream Songhay languages, this word actually has a CCV pattern ɲwa ‘eat’.

3.8	vowel lengthening, Songhay cognates, verb root <i>guuná</i> 'see'			
	noun Direct Object		clitic Direct Object	
	anʒiguuná alfaqqiitan.		anʒiguun-í.	
anʒi=	guuna	alfaqqiitan	anʒi=	guuna =i
2PL	see	judges	2PL	see 3PL.OBJ
'You(pl) saw the judges.'			'You(pl) saw them.'	

3.9	vowel lengthening, Songhay cognates, verb root <i>huunú</i> 'exit'			
	noun Direct Object		clitic Direct Object	
	nihuunú tayaaysar aayó.		nihuun-á.	
ni=	huunu	tayaaysar aayó	ni=	huunu =a
2SG	exit	mess DEF	2SG	exit 3SG.OBJ
'You escaped that mess.'			'You escaped it.'	

Some Songhay verb roots with more than one syllable close the first syllable with a nasal consonant. Most, though not all, of these verb roots will take stress on the final syllable, as Table 3-58 demonstrates.

Table 3-58 Songhay verb roots with CVNVCV or CVNVCVCV

1	hámbaara	'fear'
2	dumbú	'slaughter' (lit. slit throat)
3	homboorí	'play drums'
4	zumbú	'descend'
5	hangá	'hear'

Finally, some Songhay cognates in Tagdal which do not fit the general patterns described above, as shown in Table 3-59.

Table 3-59 other

1	zaabén	'divide in half, share'
2	kəmmá	'find'
3	kəbbáy	'run into someone'
4	kəkkáy	'build'
5	háʃfi	'look/, understand'
6	hurrú	'search'
7	daabés	'add onto'
8	kúrkur	'burn'
9	karfó	'tie someone with rope'
10	bánda	'back, behind'
11	kámba	'handle, take care of'

3.5.2 Tuareg cognates

Like Songhay cognates, cognates of Tuareg verb roots in Tagdal tend to follow

certain recognisable patterns. A typical uninflected verb root without any derivational morphemes attached would begin with /ə/. These would generally be verb roots which in Tadaksahak, Tagdal's sister Northern Songhay language, would begin with /y/ rather than with /ə/. As is the case with adjectives of Tuareg origin in Tagdal, in cases where the epenthetic /y/ appears, the /ə/ in the root shifts position to [i]. Table 3-60 below demonstrates a few Tuareg cognates that both Tagdal and Tadaksahak share.

Table 3-60 some Tuareg cognates in Tagdal and Tadaksahak

	Tadaksahak root	Tagdal root
1	yíftay 'spread out'	éftay 'spread out'
2	yílkəd 'overtake'	élkəd 'overtake'
3	yíngəd 'put on turban'	éngəd 'put on turban'
4	yizəŋkəz 'push away'	əzəŋkəz 'push away'
5	yírəb 'almost catch sthg'	érəb 'almost catch sthg'
6	yítkəl 'take'	étkəl 'take'
7	yíxfəl 'lock up'	éxfəl 'lock up'
8	yízzəl 'reach out'	ézzəl 'reach out'

Uninflected verb roots of Tuareg origin function as the imperative, generally used to give commands. Whereas the /y/ in Tadaksahak verbs tends to be part of the root which disappears altogether in certain environments (see Christiansen-Bolli 2010: 52), in Tagdal it only occurs in an epenthetic role in cases where the verb has a Perfective marker. Examples 3.10 through 3.12 demonstrate how /y/ occurs epenthetically in Tagdal, in roots that begin with /ə/.

3.10 verb root: éngəd 'put on turban'

ayíngəd an íman sa.

a=	əngəd	a=	n	iman	sa
3SG	put on turban	3SG	GEN	soul	DAT

'He put his turban on by himself.'

3.11 verb root: éxfəl 'lock'

iyíxfəl íiri kásaw kan.

i=	əxfəl	íiri	kasaw	kan
3PL	lock	1PL.IND	prison	in

'They locked us up in prison.'

3.12 verb root: ézzəl 'stretch out'

abáydag ayízzəl an kámba.

abaydag	a=	əzzəl	a=	n	kamba
thief	3SG	stretch out	3SG	GEN	hand

'The thief stretched out his hand.'

It is worth noting that the verbs in Examples 3.10 through 3.12 would be the same in either Tagdal or Tadaksahak, since /y/ occurs in almost identical environments in both languages. The main difference is that /y/ in Tadaksahak occurs in the root, in the imperative, whereas in Tagdal it does not.

A large number of uninflected and underived verb roots of Tuareg origin have two syllables and a $\acute{V}CCVC$ pattern. Stress falls on the penultimate syllable. Table 3-61 demonstrates some of these.⁷⁷

Table 3-61 2-syllable Tuareg cognates beginning with /ə/ and have $\acute{V}CCVC$ syllable patterns

1	ədbaɣ	‘close’
2	ədrər	‘need’
3	ədkar	‘fill up’
4	əfnəz	‘make small’
5	əfraay	‘be sick’
6	əfrəd	‘walk backward’
7	əgməm	‘give chewing tobacco’
8	əgrəz	‘please someone’
9	əɣbər	‘kick backwards’
10	əɣdər	‘sneak around’
11	əɣrəs	‘pass through’
12	əhkəm	‘govern, rule’
13	əhlək	‘destroy’
14	əkbəl	‘sustain’
15	əlɣad	‘comfort’
16	əlɣəd	‘overtake, pass’
17	əlməd	‘show, demonstrate’
18	əndər	‘break off’
19	əngəd	‘put on turban’
20	ərgən	‘cover with dirt’
21	əryəm	‘scold’
22	əɾɣəɣ	‘give blessing’
23	əsləm	‘greet’
24	əʃɣəl	‘work’
25	əskat	‘separate’
26	ətrəb	‘do quickly’
27	əxsəs	‘survive’
28	əzləf	‘layer on thickly’
29	əzgər	‘exit’
30	əzrəg	‘draw water for animals’

Another common syllable pattern for uninflected Tuareg verb roots without

⁷⁷ This pattern is so common in Tagdal that in the interest of space, I have limited this list to only a few examples.

derivational affixes is $\acute{V}CCV$, also with two syllables. Like the cases above, stress falls on the penultimate syllable, as Table 3-62 demonstrates.

Table 3-62 2-syllable Tuareg cognates that begin with /ə/ and have $\acute{V}CCV$ syllable patterns

1	ádru	‘work together’
2	эгда	‘be equal’
3	эгра	‘understand’
4	э̀̀̀li	‘surround’
5	экла	‘spend the day, take a break’
6	экса	‘spend the cool season s-where’
7	элку	‘scoop up’
8	элwa	‘add onto, make bigger’
9	энfa	‘win something’
10	энгу	‘break out’
11	э̀̀̀ji	‘get up early’
12	э̀̀̀ti	‘mix together’
13	э̀̀̀zi	‘replace’

Two other common patterns for Tuareg verb roots in Tagdal is $\acute{V}CVC$, actually $\acute{V}C:VC$, since if the first consonant is a stop, nasal or sibilant, it will lengthen due to gemination.⁷⁸ Like other cases of Tuareg roots with two syllables, stress falls on the penultimate syllable. Table 3-63 demonstrates some examples.

Table 3-63 2-syllable Tuareg cognates that begin with /ə/ and $\acute{V}CVC$ or $\acute{V}C:VC$ syllable pattern

1	э́́́nnəz	‘bend down’
2	э́́́qqəb	‘leave’
3	э́́́qqəl	‘wait, show patience’
4	э́́́rəb	‘almost catch’
5	э́́́rəg	‘contribute’
6	э́́́rəs	‘lower’
7	э́́́rəz	‘repay’
8	э́́́ssay	‘tie together’
9	э́́́ššay	‘illuminate’
10	э́́́ssəs	‘tie up tightly’

A few Tuareg cognate verb roots in Tagdal do not begin with /ə/ and have two syllables. Typically, in these cases stress would fall on the penultimate syllable as well, as Table 3-64 demonstrates.

Table 3-64 Tuareg cognates that do not begin with /ə/ and have two syllables

1	gárɟak	‘give someone the evil eye’
2	héekay	‘watch out for, be careful of’
3	máday	‘glue together’

⁷⁸ See section Christiansen-Bolli (2010) for a discussion of gemination in Tadaksahak.

4	nətfəs	‘fold’
5	qáyit	‘chase’
6	zərag	‘take animals to the well’

Table 3-65 demonstrates examples of verb roots of Tuareg origin that begin with consonants⁷⁹ and have more than two syllables and stress falls on the antepenultimate syllable. Therefore, the conditions described in Section 3.1.2 apply.⁸⁰

Table 3-65 Tuareg cognates w/ more than 2 syllables, antepenultimate stress

1	bəraybəray	‘applaud’
2	bəttəqət	‘ruin completely’
3	bəbbəgət	‘blacken by the elements’
4	dəwwəkʃəʃ	‘make someone happy’
5	dəbərdəbbər	‘crawl quickly’
6	fəddəgdəg	‘make sound of animal running’
7	fəlliwwəs	‘be happy’
8	fərkərk	‘vibrate’
9	gəbbərrət	‘grab sthg out of someone’s hand’
10	gəruurus	‘make mewling sound’
11	guruurəs	‘sing’
12	yoruurud	‘tumble, fall down’
13	həlləkək	‘pant, sputter’
14	káytaaran	‘spend 2-4 months deep in the bush w/ animals’
15	kəbəkəkəbər	‘limp’
16	məlluulu	‘clean until shiny’
17	məttəkwi	‘move about’
18	hənnəfa	‘whine’
19	kórookod	‘be ashamed’
20	kubúŋkuubut	‘hide by covering up’
21	məggəgəz	‘be discouraged’
22	təhhəmət	‘accuse’
23	təragət	‘jump to get sthg off back’
24	təwwaala	‘leap’
25	wənniifət	‘search for sthg put down earlier’
26	wəraywəray	‘look around and around for sthg’
27	wəʃʃəʃət	‘burn trash’
28	wəziwwəz	‘scatter’
29	zəbəygzəbbəy	‘waddle’

⁷⁹ Other than s, z, ʃ or Z, since verbs that begin with these typically have a causative prefix (see below).

⁸⁰ A large number of these are cases of reduplication. However, the point here is that uninflected Tuareg verb roots with no derivational morphemes will usually have stress on the antepenultimate syllable.

30	zəllaɣla	‘slither’
31	zəwəɣzəwəɣ	‘pick at food a little at a time’

Table 3-66 contains some examples of Tuareg verb roots with more than two syllables, where stress falls on the penultimate syllable.

Table 3-66 Tuareg cognates w/ more than 2 syllables, begin w/ consonant, stress falls on penultimate

1	farákta	‘inspect’
2	ləfáɣfəd	‘be unpleasantly surprised, disappointed’
3	məɣáytər	‘have difficulties, problems’
4	məzərzər	‘try’
5	nətérməs	‘arrest’
6	sabára	‘cover woman seated on animal’
	sələɣad	‘plead’

Table 3-67 demonstrates some examples of Tuareg verb roots that begin with /ə/ and have more than two syllables. In those cases where stress falls in the antepenultimate syllable, the same conditions for Tuareg vocabulary described in Section 3.1.2 apply.

Table 3-67 Tuareg cognates w/ more than 2 syllables, antepenultimate stress, begin with /ə/

1	əffəga	‘uncover, reveal’
2	ələttuutəg	‘go easy on sthg or s-one weak’
3	əláfənzək	‘break apart’
4	əmməgən	‘eat during evening’
5	ənnəfli	‘be at ease, be rich’
6	ərəbət	‘wrinkle’
7	ərəkam	‘be weak, not solid’
8	ərəkan	‘push sthg forcefully’
9	əriiyəd	‘release sthg suddenly’
10	ərrərəgət	‘chase down w/ force’
11	ərrəzzərəz	‘break w/ force’
12	əssəɣləf	‘take one’s leave’
13	əzzələy	‘differentiate’
14	əzənkəz	‘push’

3.5.3 Derivational affixes

If the verb root is of Tuareg origin, then it will take one of three types of derivational prefixes, or combinations of more than one of these. The Tuareg derivational prefixes are: the causative *s-*, along with its allomorphs *f-*, *z-* and *ɣ-*;⁸¹ the reciprocal *nəm-*; and the passive *təw-*.

⁸¹ In Tabarog, which lacks /ɣ/ and /f/, the only allomorph is /z/.

When one of the derivational affixes attaches onto a Tuareg verb root, stress shifts onto the syllable with the prefix, unless this would cause it to fall before the antepenultimate syllable, in which case, stress would not shift. Otherwise, the conditions for Tuareg cognates described in Section 3.2.1 apply.

Causative

The default causative morpheme in Tagdal is *s-*, with /ə/ occurring in an epenthetic function if needed. In those cases where the Tuareg verb root begins with /ə/ and has two syllables, when the causative *s-* is added, no additional syllable is added. Therefore, stress remains in the penultimate syllable. Table 3-68 demonstrates the causative *s-* with verb roots that have two syllables.

Table 3-68 causative affix *s(ə)*- Tuareg cognates with two syllables

verb root	meaning	Causative morpheme	Verb w/ causative	Meaning w/ causative
1 əŋkəd	‘squeeze’	s-	səŋkəd	‘cause to squeeze’
2 əttəf	‘spit’	s-	səttəf	‘cause to spit’
3 əzzəd ⁸²	‘bow’	s-	səzzəd	‘cause to worship’
4 əhlək	‘destroy’	s-	səhlək	‘cause to destroy’
5 əhkəm	‘reign’	s-	səhkəm	‘cause to reign’
6 əkfəd	‘nurse’	s-	səkfəd	‘cause to nurse’
7 ədwəl	‘grow up’	s-	sədwəl	‘raise’
8 əfrag	‘be able’	s-	səfrag	‘cause to be able’
9 əxfəl	‘lock’	s-	səxfəl	‘cause to lock’
10 əsway	‘make animal wait’	s-	səsway	‘cause animal to wait’
11 ədbaɣ	‘close opening’	s-	sədbaɣ	‘close opening’
12 əddəz	‘be tired’	s-	səddəz	‘cause to be tired’
13 əgməm	‘chew tobacco’	s-	səgməm	‘cause to chew tobacco’
14 əyrəs	‘pass through’	s-	səyrəs	‘cause to pass through’
15 əyɾay	‘study’	s-	səyɾay	‘teach’
15 əyfər	‘rent’	s-	səyfər	‘cause to rent’
16 əyrəf	‘water animals every other day’	s-	səyrəf	‘cause to water animals every other day’
17 əlləm	‘uncover’	s-	səlləm	‘cause to uncover’

⁸² Normally, this verb root should take the causative allomorph *Z(ə)*-. However, this case is an exception.

18	ə́nta	‘begin’	s-	sə́nta	‘cause to begin’
19	ədru	‘work together’	s-	sədru	‘cause to work together’
20	ə́ktəb	‘write’	s-	sə́ktəb	‘cause to write’

In cases where the Tuareg verb root has more than two syllables, or would have more than two syllables when the causative prefix is added, stress shifts to the antepenultimate syllable of the with the causative prefix, as Table 3-69 demonstrates. When this happens, the conditions described in Section 3.1.2 apply.⁸³

Table 3-69 causative affix s(ə)-, Tuareg verb roots w/ more than two syllables, stress changes					
verb root	meaning	Causative morpheme	Verb w/ causative	Meaning w/ causative	
1	gə́rfət	‘kneel’	s-	sə́ggərfət	‘cause to kneel’
2	ə́mməgni	‘bounce back’	s-	sə́mməgni	‘cause to bounce back’
3	ə́mməgən	‘eat in the evening’	s-	sə́mməgən ⁸⁴	‘cause to eat in the evening’
4	ə́rəkam	‘structurally weak’	s-	sə́rəkam	‘cause to be structurally weak’
5	ə́bbədar	‘live’	s-	sə́bbədar	‘cause to live’ (i.e. to save one’s life)
6	ə́ssərqət	‘infiltrate’	s-	sə́ssərqət	‘cause to infiltrate’
7	gə́ruurus	‘mewl like camel’	s-	sə́gruurus	‘cause to mewl like camel’
8	kə́rəd	‘hobble animal’	sə-	sə́kkə́rəd	‘cause to hobble animal’
9	kə́rkər	‘clean’	sə-	sə́kkə́rkər	‘cause to clean’
10	lə́fləf	‘clamber quickly’	sə-	sə́llə́fləf	‘cause to clamber quickly’
11	lə́ngət	‘hang’	sə-	sə́llə́ngət	‘cause to hang’
12	mə́ggən	‘eat before sleeping’	sə-	sə́mmə́gən	‘cause to eat before sleeping’
13	ə́ddə́rəz	‘leave traces’	sə-	sə́ddə́rəz	‘cause to leave traces’
14	bə́kkə́mət	‘ambush’	sə-	sə́bbə́kmət	‘cause to ambush’

Table 3-70 demonstrates some exceptional cases, where the original stress remains

⁸³ In general, Tagdal accentual shift in the causative seems to be similar to the Perfective Causative, described in Heath (2005: 444-447), in the case of Tuareg spoken in Mali. Unfortunately, a study of derivational morphology and its effects on accentuation in the Tuareg languages of Niger has not been undertaken.

⁸⁴ In the case of *ə́mməgni* ‘bounce back’ and a few others, the initial long consonant is likely due to gemination, while the same long consonant in the causative form is likely due to elongation that accompanies the shift in stress to the antepenultimate syllable.

when the causative prefix is added, because stress already falls on the antepenultimate syllable.

Table 3-70 causative affix s(ə)-, Tuareg verb roots w/ more than two syllables, no stress shift

verb root	meaning	Causative morpheme	Verb w/ causative	Meaning w/ causative
1 əhálləklək	‘sputter’	s-	səhálləklək	‘cause to sputter’
2 əmməni	‘meet w/ someone’	s-	səmməni	‘cause to meet’
3 gálləfət	‘grab quickly’	sə-	səgálləfət	‘cause to grab quickly’
4 kərəbkərəb	‘tremble’	sə-	səkkərəbkərəb	‘cause to tremble’
5 kəbərəkəbər	‘limp’	sə-	səkkəbərəkəbər	‘cause to limp’

Table 3-71 demonstrates the occurrence of /- as an allomorph of s-.

Table 3-71 /- as allophone of s-

verb root	meaning	Causative morpheme	Verb w/ causative	Meaning w/ causative
1 əχfəd	‘ruin’	/-	fəχfəd	‘cause to ruin’
2 mətfa	‘store’	fə-	fəmmətfa	‘cause to store’
3 fəddən	‘count’	fə-	fəffəddən	‘cause to count’
4 əfrəχ	‘judge’	/-	fəfrəχ	‘cause to judge’
5 əfχəl	‘work’	/-	fəfχəl	‘cause to work’
6 əfrəχ	‘judge’	/-	fəfrəχ	‘cause to ruin’
7 əffək	‘doubt’	/-	fəffək	‘cause doubt’
8 əffaχ	‘illumine’	/-	fəffaχ	‘cause to illumine’
9 əfχəl	‘work’	/-	fəfχəl	‘cause to work’
10 gərfək	‘be jealous’	/-	fəggərfək	‘cause to be jealous’
11 kərfət	‘break into small pieces’	fə-	fəkkərfət	‘cause to break into small pieces’

ʒ- can also be an allomorph of s-, as table 3-72 demonstrates.

Table 3-72 ʒ- as allophone of s-

verb root	meaning	Causative morpheme	Verb w/ causative	Meaning w/ causative
1 əzzərgən	‘be dirty’	ʒ-	ʒəzzərgən	‘make dirty’
2 əməzwər	‘move tent’	ʒ-	ʒəmməzwər	‘cause to move around’
3 ʒənuunug	‘wander’	ʒə-	ʒəʒənuunug	‘cause to wander’
4 ʒərəb	‘test’	ʒə-	ʒəʒərəb	‘cause to test’

5	ázzək	‘beat’	3-	zázzək	‘cause to beat’
6	əzəggəlgəl	‘be hairy’	3-	zəzəggəlgəl	‘cause to be hairy’
7	zəwəb	‘respond’	3-	zəzəwəb	‘cause to respond’
8	əzzəl	‘hand over’	3-	zəzzəl	‘cause to hand over’
9	əzləg	‘place directly on top’	3-	zəzləg	‘cause to place directly on top’
10	zəlləd	‘bother’	3-	zəzzəlləd	‘cause to bother’
11	zərag	‘take animals to the well’	3-	zəzrag	‘cause to take animals to well’
12	zəbbəgbəg	‘puff up’	3ə-	zəzəbbəgbəg	‘cause to puff up’

z- can also be an allomorph of s-, as Table 3-73 demonstrates.

Table 3-73 z(ə)- as allophone of s(ə)-
verb root meaning

			Causative morpheme	Verb w/ causative	Meaning w/ causative
1	ənzəg	‘place’	z-	zənzəg	‘cause to place’
2	əzzəf	‘be naked’	z-	zəzzəf	‘cause to be naked’
3	ərzəm	‘pay’	z-	zərzəm	‘cause to pay’
4	əgzər	‘hold a grudge’	z-	zəgzər	‘cause to hold a grudge’
5	əzzar	‘be first’	z-	zəzzar	‘cause to be first’ (i.e. ‘rule’, usually unexpectedly)
6	zəddáy	‘know’ (someone)	zə-	zəzzəday	‘cause to know’
7	əzzəkət	‘cease’	z-	zəzzəkət	‘cause to cease’
8	ənəmməgzər ⁸⁵	‘be enemies’	z-	zənəmməgzər	‘cause to be enemies’
9	əmməzray	‘confuse’	z-	zəmməzray	‘cause confusion’
10	wəzziiwəz	‘scatter’	zə-	zəwəzziiwəz	‘cause to scatter’

⁸⁵ This is a case of the causative prefix z- occurring in the same verb as the Reciprocal *nəm-*. The occurrence of multiple derivational prefixes will be treated below in Section 3.5.

Reciprocal

Another derivational prefix in Tagdal is the reciprocal *nəm-*, which indicates that the subjects – by necessity plural – are either performing an action together or upon each other. Unlike Tadaksahak (Christiansen-Bolli 2010), in Tagdal *nəm-* does not have the allomorph *nə-*.

Whenever *nəm-* occurs with a verb root of Tuareg etymology, stress will shift to the syllable with the prefix, unless this would cause it to shift to before the antepenultimate, in which case it would not shift. In cases where stress shifts to the antepenultimate, it would have the same effects upon the penultimate syllable described in Section 3.1.2.⁸⁶ Table 3-74 demonstrates some common verb roots with the Reciprocal prefix attached.

Table 3-74 Tuareg verb roots with Reciprocal prefix

	verb root	gloss	w/ derivational morpheme	Gloss
1	əhkəm	'destroy'	nəmməhkəm	'destroy each other'
2	əgyəl	'be faithful'	nəmmədɣəl	'be faithful to each other'
3	əffəd	'borrow'	nəmməfəd	'borrow from each other'
4	əfrəz	'separate'	nəmməfrəz	'separate from each other'
5	əgra	'understand'	nəmməgra	'understand each other'
6	əlləd	'put arms around'	nəmmələd	'put arms around each other'
7	ətəkəl	'seize'	nəmmətəkəl	'seize each other'
8	əzzəl	'hand sthg over w/ hand outstretched'	nəmməzəl	'hand sthg over to each other'
9	fəkərkər	'shake about'	nəmfəkkərkər	'shake each other about'
10	gəbbərrət	'grab with force'	nəmgəbbərrət	'grab each other with force'
11	zəzɣəl	'pull hand-over-hand'	nənzəzɣəl	'pulling s-one out of a hole hand-over-hand w/ rope'
12	kərəbkərəb	'tremble'	nəmkərəbkərəb	'tremble together'
13	ləfləf	'scramble up quickly'	nəmləfləf	'scramble up quickly together'

⁸⁶ As with the case of the causative, the shift in stress seems to be similar to what occurs in the Reciprocal in the Tuareg language of Mali (Heath 2005: 477-479).

14	səsləm	‘greet’	nəmsəsləm	‘greet each other’
15	təxfər	‘rent’	nəmtəxfər	‘rent together’
16	wəzgət	‘engage in sexual intercourse’	nəmwəzgət	‘engage in sexual intercourse w/ each other’

Passive

The third derivational prefix possible for verb roots of Tuareg origin is the passive voice *təw-*, demonstrated in Table 3-75. When the passive voice affix is attached to a verb root, stress normally shifts to the syllable with the prefix, unless this would cause it to fall before the antepenultimate syllable. If stress falls upon the penultimate prefix, it will have the same effects in the penultimate described in Section 3.1.2.⁸⁷

Table 3-75 passive affix *təw-*
verb root meaning

			Verb w/ passive	Meaning w/ causative
1	bəkkəmət	‘ambush’	təwbəkmət	‘ambushed’
2	əttəf	‘spit’	təwwətəf	‘spat’
3	əhlək	‘destroy’	təwwəhlək	‘destroyed’
4	əxfəl	‘lock’	təwwəxfəl	‘locked’
5	əyrəs	‘pass through’	təwwəyrəs	‘pierced’
6	əyray	‘study’	təwwəyray	‘studied’
7	əyfər	‘rent’	təwwəyfər	‘rented’
8	əɣfəd	‘ruin’	təwwəɣfəd	‘ruined’
9	əktəb	‘write’	təwwəktəb	‘written’
10	əlləm	‘uncover’	təwwələm	‘uncover’
11	gəlləfət	‘grab quickly’	təwgəlləfət	‘grabbed quickly’
12	kərəd	‘hobble animal’	təwkərəd	‘animal hobbled’
13	kərfət	‘break into small pieces’	təwkərfət	‘broken into small pieces’
14	ləngət	‘hang’	təwləngət	‘hung’
15	zibbəgbəg	‘puff up’	təwzibbəgbəg	‘puffed up’

Multiple prefixes

Figure 3-8, based on Christiansen (2010: 53), demonstrates the order in which multiple derivational prefixes occur when attached to the root.

⁸⁷ Likewise, the stress shift in the Passive voice seems to be similar to what occurs in the Perfective Passive in the Tuareg language of Mali (Heath 2005: 467-468).

Figure 3-8 Multiple derivational affixes

Passive	Causative	Reciprocal	Causative	Root
təw-	s-	nəm-	s-	

Among attested combinations of multiple derivational prefixes are the following, given in Table 3-76:⁸⁸

Table 3-76 Attested cases of multiple derivational affixes

	combination	gloss
səssəyray	CAUS, CAUS	'cause to cause to learn'
təwəssəyray	PASS, CAUS	'be caused (forced?) to learn' ⁸⁹
təwməmsəyray	PASS, REC, CAUS	'be caused (forced?) to learn together'
nəmsəyray	REC, CAUS	'cause to learn together'
sənəmsəyray	CAUS, REC, CAUS	'cause to learn together'

3.5.4 Suppletion

Since the causative *s-*, the Reciprocal *nəm-* and the passive *təw-* can only attach onto verb roots of Tuareg origin, whenever a Songhay cognate is present and requires one of these three, Tagdal suppletes the Songhay verb root with one of Tuareg origin, with the prefix(es) in question already lexicalised.⁹⁰ Each of the suppletive forms of Tuareg origin follows the conditions for Tuareg vocabulary described in Section 3.1.2. Table 3-77 demonstrates some of the more common verbs of Songhay etymology and the Tuareg roots that supplete them.

One note of importance here: whereas the Tuareg suppletive verb forms are legitimate verbs in Tagdal, their root forms without the lexicalised prefixes are not. For example, the causativised verb *fəʔta* 'feed' (in effect, 'cause to eat') is a verb in Tagdal. the underived root **əʔta* 'eat' is not. The verb 'eat' in Tagdal is *wa*. Likewise, the passive *təwwəkəs* 'exited' is a verb, the Tuareg verb **əkkəs* 'exit' is not.

⁸⁸ For the sake of simplicity, the root *əyray* 'learn' will be used here. However, others could theoretically be possible as well.

⁸⁹ In the contexts in which Passive and Causative co-occur, it seems that there may be an element of forcing something to occur. However, this requires more study. (See for example, *amatəwəssəyray* 'one who is forced to learn' in Table 3-38 as an alternative term for 'student'.)

⁹⁰ Benítez-Torres (2020) suggests that suppletion came about due to the prosodic processes that came into the language with Songhay and Tuareg vocabulary.

Table 3-77 Suppletion of Songhay cognates in the verb root

	Songhay Verb root		Causative		Reciprocal		Passive	
1	báayà	'love'	sérat	'cause to love'	nómmərat	'love one another'	təwwərat	'loved'
2	bay	'know'	séşsen	'cause to know'	nómməşen	'know each other'	təwwəşen	'known'
3	ben	'finish'	sékkəsaw	'cause to finish'	nəmməksaw	'finish (for) each other'	təwwəksaw	'finished'
4	bis	'pass'	séekay	'cause to pass'	nómmeeKay	'pass each other'	təwwēekay	'passed'
5	buubó	'multiply'	séggəd	'cause to multiply'	nómməgəd	'multiply together'	təwwəgəd	'multiplied'
6	bun	'kill'	sənya	'cause to kill'	nómmənya	'kill each other'	təwwənya	'killed'
7	da	'give'	séssuuga	'cause to give'	nəməssuuga	'give to each other'	təwəssuuga	'given'
8	dab	'dress'	səlsa	'cause to dress'	nómməlsa	'dress each other'	təwwəlsa	'dressed'
9	daw	'send'	səssooka	'cause to send'	nəməssooka	'send each other'	təwəssooka	'sent'
10	don	'fill'	sədnay	'cause to fill'	nómmədny	'fill together'	təwwədny	'filled'
11	dut	'pound grain'	səssud	'cause to pound grain'	nómməlsud	'pound each others' grain'	təwwəlsud	'pounded'
12	fer	'open'	səssuura	'cause to open'	nəməssuura	'open (for) each other'	təwəssuura	'opened'

13	gar	'protect'	zǎzzaygǎz	'cause to protect'	nǎmǎzzaygǎz	'protect each other'	tǎwǎzzaygǎz	'protected'
	giǧ	'set loose'	sǎwwiia	'cause to set loose'	nǎmǎwwiia	'set each other loose'	tǎwwiia	'set loose'
14	goorǎ	'sit'	sǎtǧteema	'cause to sit'	nǎmǎtǧteema	'sit together'	tǎwǎtǧteema	'sat'
15	gun	'look'	sǎswǎl	'cause to look'	nǎmmǎswǎl	'look at each other'	tǎwwǎswǎl	'looked'
16	hangǎ	'hear'	sǎddǎrgǎn	'listen'	nǎmǎddǎrgǎn	'hear each other'	tǎwǎddǎrgǎn	'heard'
17	hangǎ	'accompany'	sǎssiidu	'cause to accompany'	nǎmǎssiidu	'accompany each other'	tǎwǎssiidu	'accompanied'
18	har	'declare'	sǎmmǎl	'cause to declare'	nǎmmǎl	'declare to each other'	tǎwwǎmǎl	'declared'
19	hay	'give birth'	sǎsseeru	'cause to give birth'	nǎmmeeru	'give birth together'	tǎwweeru	'birthed'
20	huunú	'exit'	sǎwwǎkǎs	'kick out'	nǎmǎwwǎkǎs	'leave together'	tǎwwǎkǎs	'exited'
21	ziinǎ	'grab'	sǎttǎrmǎs	'cause to grab'	nǎmǎttǎrmǎs	'grab each other'	tǎwǎttǎrmǎs	'grabbed'
22	kaw	'remove'	sǎkkus	'cause to remove'	nǎmmǎkus	'remove each other'	tǎwwǎkus	'removed'
23	kǎkǎy	'build'	sǎkrǎs	'cause to build'	nǎmmǎkrǎs	'build each other up (i.e. encourage)'	tǎwwǎkrǎs	'built'
24	kǎmmǎ	'find'	sǎgrǎm	'cause to	nǎmmǎgrǎm	'find each	tǎwwǎgrǎm	'found'

				find'		other'		
25	keení	'sleep'	sénsa	'cause to sleep'	nómmənsa	'sleep together'	təwwənsa	'slept'
26	kuukú	'be long'	zəzzəgrət	'cause to be long'	nəməzzəgrət	'be long together'	təwzəgrət	'made long'
27	koy	'go'	səgla	'cause to go'	nəmməgla	'go together'	təwwəgla	'gone'
28	may	'have'	səlla	'cause to have'	nəmməla	'have each other'	təwwəla	'had'
29	na	'give'	səkfa	'cause to give'	nəmməkfa	'give to each other'	təwwəkfa	'given'
30	ʃin	'say'	səssəna	'cause to say'	nəmməna	'say to each other'	təwwəna	'said'
31	te	'arrive'	súka	'cause to arrive'	nəmmuuka	'arrive together'	təwwuuka	'arrived'
32	tuk	'hide'	səyləf	'cause to hide'	nəmməyləf	'hide together'	təwwəyləf	'hidden'
33	wa / ɲwa	'eat'	ʃəʃta	'feed'	nəmməʃta	'feed each other'	təwwəʃta	'fed'
34	zaabén	'share'	zəzzəm	'cause to share'	nəmməzəm	'share together'	təwwəzzəm	'shared'
35	zoq	'fight'	səkənəs	'cause to fight'	nəmməknes	'fight each other'	təwwəknes	'fought'

It is interesting to note that the suppletive forms follow all of the prosodic rules outlined in Section 3.1.2. For example, *haŋgá* 'hear' becomes *sáddərgən* 'listen', *nəmáddərgən* 'listen to each other' and *təwáddərgən* 'heard'.

3.5.5 Verb morphology

Tagdal has a number of bound morphemes which attach both before and after the verb root. With few exceptions outlined below, they do not take any stress, since typically stress falls somewhere in the verb root. Table 3-78 shows the major elements that attach onto the verb root.

Table 3-78 structure of the verb word in Tagdal

Part of speech	Pronominal Clitic	Negation	TAM	Verb root	-kat -nan	Pronominal Clitic
Function	Subject	Negation	TAM		direction	Direct Object

In addition, some of the bound morphemes that attach to the verb root, under certain circumstances attach into the Dative marker *sa*, as part of the Verb Phrase, to indicate the Indirect Object. Therefore, this will also be discussed in the following sections.

Pre-verbal bound morphemes

The three pre-verbal bound morphemes in Tagdal are the pronominal Subject, clitic the Negation markers and the Tense-Aspect-Mood marker, each of which will be discussed below.

Subject pronominal clitics

The Subject pronominal clitic in Tagdal marks the Subject of the clause and with few exceptions⁹¹ is usually a required element of the sentence. Table 3-79 shows the subject pronominal clitics in Tagdal:

⁹¹ See, for example the discussion of Subject relative clauses in Section 4.2.

Table 3-79 subject pronominal clitics in Tagdal

Person:	Singular	Plural
First	ya-/ ay-	iri-
Second	ni- / -in ⁹²	anji-
Third	a-	i-

Normally these appear attached before the root, as the first element of the verb, before the negation and TAM marker. The proclitic may also attach to the genitive marker *n*, adpositions and the Dative *sa*. Examples 3.13 through 3.18 demonstrate how the subject clitic to indicate the Subject of the clause.

3.13 **ya**təzəzzəbətkaat-a.⁹³

ya= tə- zəzzəbət -kat =a
 1SG FUT CAUS come down VEN 3SG
 'I'll make him come down.'

3.14 **ni**mgáar-i ne da.

ni= m- gar -i ne da
 2SG SBJ guard 3PL here EMPH
 'You should keep them here.'

3.15 **a**kóy yáabu.

a= koy yaabu
 3SG go market
 'She went to the market.'

3.16 **ii**rikungú tággəla kan.

iri= kungu taggəla kan
 1PL satiate bread in
 'We had our fill of bread.'

⁹² The first person singular clitic *-ay* only occurs as an Indirect Object with the Dative *sa*. The second person singular *-in* occurs as an Indirect Object with the Dative *sa*, as well as before the Negations *se-*, *nə-* and the Future *tə-*.

⁹³ *zəzzəbət* 'cause to descend' is the suppletive form of the Songhay cognate *zumbú* 'descend'.

3.17 bəssəba **an**jitəbáy.
 bəsəba anji= tə- bay
 tomorrow 2PL FUT know
 'You (pl) will know tomorrow.'

3.18 sa **it**é daayó aayó, **ik**í.
 sa i= te daayó aayó i= ki
 SBDR 3PL arrive place DEF 3PL stop
 'When they arrived in that place, they stopped.'

The subject proclitic also attaches to the Genitive marker *n* to indicate Ownership or Kinship, as Table 3-80 demonstrates.

Table 3-80 subject clitic with Genitive marker *n*

	singular		plural	
first person	yan káyna	'my younger sibling'	irin káyna	'our younger sibling'
second person	nin káyna	'your younger sibling'	anjin káyna	'your (pl) younger sibling'
third person	an káyna	'his, her younger sibling'	in káyna	'their younger sibling'

The Genitive *n* generally adjusts its place of articulation to its environment, as Table 3-81 demonstrates.

Table 3-81 subject clitic with GENITIVE marker *n* when followed by bilabial

	singular		plural	
first person	yam móota	'my car'	iirim móota	'our car'
second person	nim móota	'your car'	anjim móota	'your (pl) car'
third person	am móota	'his, her car'	im móota	'their car'

Negation

The negation prefix follows the pronominal clitic. Tagdal has three negation prefixes, each of which, in addition to Negation, encodes some form of TAM. In addition, the future negation is not part of the morphology per-se; rather, it occurs as a syntactic construction. Nevertheless, it will be covered here as part of the discussion on negation.

The Perfective Negation marker *n-* or *nə-* is the default Negation in most

spoken discourse, as well as in stative verbs. It indicates that an action did not occur at some definitive point or, in the case of stative verbs, something which is currently not the case, as Examples 3.19 through 3.24 demonstrate.

3.19 harwá **anəz**áwkaat-a.
 harwa a= nə zaw -kat =a
 yet 3SG NEG.PRF carry VEN 3SG
 'He has not brought it yet.'

3.20 tabárar aayó, **anəh**óssay.
 tabarar aayo a= nə hōssay
 girl DEF 3SG NEG.PRF beautiful
 'That girl is not pretty.'

3.21 **inə**qbəl ha aayó
 i= nə əqbəl ha ayo
 3PL NEG accept thing DEF
 'They didn't accept

im bárar əzáwkat.
 i= n barar ə- zaw -kat
 3PL GEN son SUB.REL bring VEN
 'what their son brought them.'

3.22 **yanə**dayná-a.
 ya= nə dayna =a
 1SG NEG.PRF forget 3SG
 'I didn't forget it.'

3.23 harwá iirinəhuun-á.
 harwa iri= nə huunu =a
 yet 1PL NEG.PRF leave 3SG
 'We haven't exited (from) it yet.'

3.24 boorén aayoonén, **inə**fræg
 booren aayoonén i= nə əfræg
 people DEF 3PL NEG.PRF able
 'Those people couldn't

sa itəyáræg.
 sa i= tə yaræg
 SBRD 3PL FUT live together
 'live together (i.e. be neighbours).'

The imperfective negation is marked with the prefix *s-* or *sə-*. It indicates that a particular action is not the case at present, or was not the case in the past. Examples 3.25 through 3.29 demonstrate.

3.25 *yasəbwá ha aayó.*

ya= sə- b wa ha aayo
1SG NEG.IMP IMP eat thing DEF
'I don't eat that.'

3.26 *asəbáy ha aayó amdá.*

a= sə- bay ha aayo a= m da
3SG NEG.IMP know thing DEF 3SG SBJ do
'He doesn't know what he should be doing.'

3.27 *asəbsəməddərən waalá ha fo*

a= sə- b səmədrən waala ha fo
3SG NEG.IMP IMP think nothing thing IDF
'He doesn't worry about anything'

a-húngu kan.

a= n hugu kan
3SG GEN house in
'in his household.'

3.28 *isəbəddər*

i= sə- əddər
3PL NEG.IMP live
'They are dead. (lit. they are not living).'

3.29 *iirisəbmáy ha.*

iri= sə- b may ha
1PL NEG.IMP IMP have thing
'We didn't have anything.'

Normally, the Negation morpheme precedes the Tense-Aspect-Mood marker. However, in Tagdal the Subjunctive marker *m-* is followed by the Negation *sə-*, indicating that something should not happen, or should not be the case, as Examples 3.30 through 3.33 demonstrate.

3.30 *iirimsəđóos-a.*

iri= m- sə- đos =a
1PL SBJ NEG.IMP touch 3SG
'We shouldn't touch it.'

3.31 **nimsəkóoy-a**
 ni= m- sə- koy =a
 2SG SBJ NEG.IMP go 3SG
 'You shouldn't go there.'

3.32 **anjimsəwá izzén aayoonén.**
 anji= m- sə- wa izzie -en aayo -en
 2PL SBJ NEG.IMP eat child PL DEF PL
 'You (PL) shouldn't eat those seeds.'

3.33 **imsəkeení dáayo aayó.**
 i= m- sə- keeni daayo aayo
 3PL SBJ NEG.IMP sleep place DEF
 'They shouldn't sleep there.'

The Future marker *tə-* cannot occur with a Negation prefix. Therefore, in order to negate the Future, a clause with the negated Subjunctive *msə-* can be combined with the verb root *koy* 'go', immediately followed by another clause whose verb contains the Subjunctive *m-* to indicate what will not happen. This syntactic construction forms a stronger injunction than the verb occurring only with *msə-*, as Examples 3.34 through 3.37 demonstrate.

3.34 **nimsəkóy nimkóy!**
 ni= msəkoy ni= m koy
 2SG FUT.NEG 2SG SBJ go
 'Don't go!'

3.35 **anjimsəkóy anjimḍós aarén aayoonén!**
 anji= msəkoy anji= m- ḍos aaro -en aayo -en
 2PL FUT.NEG 2PL SBJ touch man PL DEF PL
 'Don't touch (i.e. harm) those men!'

3.36 **nimsəkóy nimérmaḃ!**
 ni= msəkoy ni= m ərmaḃ
 2SG FUT.NEG 2SG SBJ fear
 'Don't be afraid!'

3.37 **nimsəkóy nimháḃikat nin aláqqam!**
 ni= msəkoy ni= m haḃi -kat ni= n alaqqam
 2SG FUT.NEG 2SG SBJ look VEN 2SG GEN back
 'Don't look back (toward here)!'

If *-msəkoy* is followed by an unconjugated verb root, the injunction is even stronger than if it is followed by a conjugated verb with the Subjunctive *m-*, along the lines of

a direct order to not perform the action in question, as in Examples 3.38 through 3.40.

3.38 **nimsəkóy** kóy!
 ni= msəkoy koy
 2SG FUT.NEG go
 'You're not going!'

3.39 anj**nimsəkóy** faw ás-a!⁹⁴
 anji= msəkoy faw a= sa =a
 2p' FUT.NEG show 3sg DAT 3sg
 'You (PL) are not going to show it to him!'

3.40 **nimsəkóy** maryá aaró boorén aayoonén kan!
 ni= msəkoy maryá aaro boora -en aayo -en kan
 2SG FUT.NEG marry man person PL DEF PL in
 'You cannot marry a man from among those people!'

In Example 3.41, the injunction is made even stronger by the presence of *kaalá* 'never'.

3.41 kaalá **nimsəkóy** dós tabárar aayó!
 kaala ni= msəkoy dos tabarar aayo
 never 2SG FUT.NEG touch girl DEF
 'You're never to touch that girl!'

Tense-Aspect-Mood

In addition to the pronominal clitics and the negation prefixes, Tagdal also includes a number of prefixes and a zero-prefix, which comprise its Tense-Aspect-Mood subsystem. With the exception of the Subjunctive, these typically occur after the negation and before the verb root. The three TAM markers in Tagdal are the Perfective zero morpheme, the Imperfective *b-*, the Modal *m-* and the Future *tə-*.

The perfective aspect is the default choice in most spoken discourse, as well as with stative verbs. It denotes an action that took place and is now finished, or in the case of stative verbs, something which is currently the case. The perfective aspect is marked by a zero morpheme before the verb root, as in Examples 3.42 through 3.47.

3.42 yakóy.
 ya= koy
 1SG go
 'I left.'

⁹⁴ Example 3-36 is an example of stress shifting to the Indirect Object.

3.43 niguun-á.
 ni= gun =a
 2SG look 3SG
 'You saw it.'

3.44 záyñin, ánga ahóssay wúllen!
 zayñin anga a= hossay wullen
 wow 3SG.IND 3SG beautiful very
 'Wow, that one sure is beautiful!'

3.45 jiiji aayó, iriyíddəz.
 jiiji aayo iri= əddəz
 night DEF 1PL tired
 'That evening, we were tired.'

3.46 zayji aayó, anjiyéji yáy yan aŋŋayál.
 jayji ayo anji= yeji yay ya= n aŋŋayál
 day DEF 2PL return 1SG 1SG GEN work
 'That day, you (PL) gave me back my job.'

3.47 iŋidəwkat alkáma
 i= jidəw -kat alkama
 3PL collect VEN wheat
 'They collected the wheat.'

jiirén aayoonén hóssaynen kan.
 jiiri -en aayo -en hossay nen kan
 day PL DEF PL beautiful ADJR.PL in
 on good days.'

Imperfective aspect, marked with the prefix *b-* before the verb root, indicates that an action was at one time the case, is presently the case, or that it is habitual, as Examples 3.48 through 3.53 demonstrate.

3.48 yabŋaw ísa-a.
 ya= b- ŋaw i= sa =a
 1SG IMP show 3SG DAT 3SG
 'I was showing it to them.'

3.49 mǝʃɪggá⁹⁵ nibzǝkkǝnzǝr?
 mǝʃɪgga ni= b- zǝkkǝnzǝr
 why? 2SG IMP frown
 'Why were you frowning?'

3.50 tazzóri aayó abǝyiʃ nin!
 tazzori aayó a= b- ǝyiʃ nin
 hyena DEF 3SG IMP stalk 2SG.IND
 'That hyena was stalking you!'

3.51 iribteraw!
 iri= b- teraw
 1PL IMP be related
 'We're related!'

3.52 mǝʃɪggá anjibhǝfi ʃaaráyyen?
 mǝʃɪgga anji= b- hǝfi ʃaaray -en
 why? 2PL IMP look friend PL
 'Why are you (i.e. standing there) looking at each other?'

3.53 ibhangá nd-i.
 i= b- hanga nda =i
 3PL IMP accompany with 3PL
 'They hang out with them.'

In the Abargan and Kəl Illokoɗ varieties of Tagdal, in relaxed conversation the Imperpective marker *b-* is realised as [f] if the following consonant is voiceless. For example *abkóy* 'he is going' is pronounced [af'kɔj] and *abtʃin* 'he says' is pronounced [af'tʃin].⁹⁶ This phenomenon also occurs among speakers of the Kəl Amdid / Tarbun variety of Tagdal, but seems to be rare and most common among older speakers.

French loan words beginning with /p/ are regularly pronounced with /f/. For example, *photocopies* would be pronounced [fottoko'fitan] and *projet* would be pronounced [faro:'ʒe].

The Subjunctive marker *m-* indicates that the action in question should or needs to happen. In some cases, the the Subjunctive can be used to give an order in a softer manner (see Section 4.9).

⁹⁵ The question word *mǝʃɪggá* 'why?', a combination of *mǝʃfi* 'what?' and the postposition *ga* 'on', is treated here as a single word, rather than as two words, for phonological reasons. First, stress in the first part *mǝʃfi* seems to disappear, occurring instead on the final syllable *ga*. Second, where the /ʃ/ would normally be long if *mǝʃfi* were alone, the presence of *ga* seems to cancel out this long consonant, shifting it instead to the /g/.

⁹⁶ [af'tʃi] in the Abargan variety

3.54 nin addələl ga, ɣamkóy.
 ni= n addələl ga ɣa= m- koy
 2SG GEN fault on 1SG SBJ go
 'I need to go because of you.'

3.55 nimkamba káyaatan kullú.
 ni= m- kamba káyaatan kullu
 2SG SBJ hand baggage all
 'You need to take charge of all the baggage.'

3.56 amna insa nìn azzúrəya.
 a= m- na in= sa ni= n azzurəya
 3SG SBJ give 2SG DAT 2SG GEN inheritance
 'He needs to give you your inheritance.'

3.57 irimzumbúunaan-a
 iiri= m- zumbu -nan =a
 1PL SBJ descend ALL 3SG
 'Let's go down there.'

3.58 anjimsənfu təgúuʒi n ʃəddáy.
 anji= m- sənfu təguuji n ʃədday
 2PL SBJ recline tree GEN under
 'You (PL) should rest under a tree.'

In Example 3.59, the presence of the independent pronoun, followed by the Emphatic marker *da*, indicate a strong topicalisation of the Subject.

3.59 ínga da, imjéwab ínsa.
 inga da i= m- jewab in= sa
 3PL EMPH 3PL SBJ respond 2SG DAT
 'They're the ones who should answer you.'

Tagdal marks the Future tense with the prefix *tə-*, after the negation marker and before the verb root. It denotes an action which in principle will occur at some point, but has not happened yet. The Future is the only TAM marker in Tagdal which cannot occur with a negation. Therefore, Tagdal depends on a number of other markers and syntactic structures to negate the Future. Examples 3.60 through 3.65 demonstrate.

3.60 mórnan, ɣatəbáq tassáhar!
 mor -nan ɣa= tə- baq tassahar
 far ALL 1SG FUT break door
 'Move away, I'm going to break (down) the door!'

3.61 nín, nibyédma
 nin ni= b- yedma
 2SG.IND 2SG IMP think
 'You? You think

sa intəʃĩ íirin amanókal?
 sa in= tə- ʃĩ iiri= n amanokal
 SBDR 2SG FUT be 1SG GEN chief
 'that you're going to be our chief?'

3.62 wáy aayó, atəʃĩ ánga fóoda.
 way aayó a= tə- ʃĩ anga fo da
 woman DEM 3SG FUT be 3SG.IND one emph
 'That woman is going to be all alone.'

3.63 ámmaaka ha ʒí ədá, iritəbún!
 ammaaka ha ʒi ə- da iri= tə- bun
 if thing MED SUB.REL do 1PL FUT die
 'If THAT happens, we'll die!'

3.64 ámmaaka anjidá ha aayó ʔahár, anjitəddər.
 ammaaka anji= da ha aayó ʔa= har anji= tə- əddər
 if 2PL do thing DEM 1SG say 2PL FUT live
 'If you do what I say, you will live.'

3.65 təzzár, im món itəfér.
 təzzar i= n mo -n i= tə- fer
 then 3PL GEN eye PL 3PL FUT open
 'Then their eyes will be opened (i.e. they will understand).'

In many cases, Tagdal speakers perceive the Subjunctive and the Future as almost identical, and will use them interchangeably, even from one sentence to the next, with all the other essential elements identical. Examples 3.66 and 3.67 are part of just one conversation in which the Subjunctive and the Future were used fairly interchangeably. Regardless, this issue requires more study.

3.66 nimʃín ása
 ni= m- ʃín a= sa
 2SG SBJ say 3SG DAT
 '(Please) tell him

sa bəssəba ʔatətəenan-a.

sa	bəssəba	ʔa=	tə-	te	-nan	=a
SBDR	tomorrow	1SG	FUT	arrive	ALL	3SG

that tomorrow I'll arrive over there.'

3.67 áaywa, haʒiddá,⁹⁷ nimtəenan bəssəba.

aaywa	hajidda	ni=	m-	te	-nan	bəssəba
yes	exactly	2SG	SBJ	arrive	ALL	tomorrow

Yes, that's right, you should be arriving over there tomorrow.

Suffixes

A number of elements follow the verb root in Tagdal. Most of these are bound morphemes, such as the directional suffixes *-kat* and *-nan*, as well as the Direct Object proclitic. This section will include these, as well as a discussion of the Dative marker *sa* and the Indirect Object.

Venitive *-kat*

The Venitive suffix *-kat*, or *-kaat* when followed by a vowel, indicates that the action is moving toward the speaker, as Examples 3.68 through 3.71 indicate.

3.68 ʃin ása amkóy**kat**.

ʃin	a=	sa	a=	m-	koy	-kat
say	3SG	DAT	3SG	SBJ	go	VEN

'Tell him to come here.'

3.69 nimguuná**kat** ha aayó ʔakəmmá.

ni=	m-	guuna	-kat	ha	aayó	ʔa-	kəmma
2SG	SBJ	look	VEN	thing	DEF	1SG	find

'Come look at what I found.'

3.70 álwaq aayó kan,

alwaq	aayó	kan
moment	DEF	in

'In that instant,

⁹⁷ *haʒiddá* 'exactly that' is comprised of three elements, *ha* 'thing', the Medial demonstrative *ʒi* and the Emphatic marker *da*. However, for similar phonological reasons as in the case of *məʃiggá* 'why?', here it is treated as a single word.

ʔayígrak**kat** sa irimbún.
 ʔa= əgra -kat sa iri= m- bun
 1SG understand VEN SBDR 1PL OPT die
 the understanding came to that we were going to die.'

3.71 máŋ**kat**, ʔamguuná**kat** nin!
 man -kat ʔa= m- guuna -kat nin
 approach VEN 1SG SBJ look VEN 2SG
 'Come closer (so that) I might look at you!'

Allative *-nan*

The Allative suffix *-nan*, or *-naan* when followed by a vowel, occurs relatively infrequently, especially in contrast to the Venitive *-kat*.⁹⁸ In general, *-nan* indicates that the action is moving away from the speaker, as in Examples 3.72 through 3.74.

3.72 iiridáwn**naan**-a nda-a.
 iiri= daw -nan =a nda =a
 1PL send all 3SG with 3SG
 'We sent her there with him.'

3.73 sa bəssəba, atéen**nan**.
 sa bəssəba a= te -nan
 SBDR tomorrow 3SG arrive ALL
 'The next day, he arrived there.'

3.74 daáʔo aayó amór**nan**.
 daayó aayó a= mor -nan
 place DEF 3SG far ALL
 'That place is far.'

There is one case in the database where *-kat* and *-nan* have a sort of derivational function, contrasting to form different meanings when affixed onto the same root. The root *day*, more or less meaning 'make a deal', when combined with the Allative and Venitive, give the root different meanings, at least from the outsider's perspective: *dáykat* 'buy' and *dáynan* 'sell'. Similarly, it might be possible to make the case that *koy* 'go', when combined with *-kat* becomes *kóykat* 'come'. However, *kóynan* 'go there' does not seem to be as common, and does not share quite the same nuances as *dáynan* 'sell'. Rather, *kóynan* 'go there' is rather unusual and limited to situations where the destination is already known. This is possibly because the default meaning of *koy* already implies moving away from. Regardless, the question of whether the

⁹⁸ In principle, though *-kat* means that the direction of the action is toward the speaker, in truth it occurs often enough that in speakers' minds there is little distinction in meaning between a verb root with *-kat* and one without it, especially in non-movement verbs.

directional markers *-kat* and *-nan* actually function as derivational morphemes with any other roots, and what relation, if any, they may have to Tuareg directional markers (see, for example, Lux 2011: 389) requires further study.

Direct Object

Finally, the Tagdal verb ends with the pronominalised third person singular or plural Direct Object clitics *=a* and *=i*. All other Direct Objects, when a pronoun rather than with a Noun Phrase, are independent pronouns, as Table 3-82 indicates.

Table 3-82 pronominal Direct Object markers

	singular	plural
first	yaay	iiri
second	nin	anʒi
third	=a	=i

Examples 3.75 and 3.76 demonstrate how the pronominalised Direct Object functions.

3.75 daayó aayó kan, iiridáykaat-**a**
 daayo aayo kan iiri= daykat =a
 place DEF in 1PL buy 3SG
 'It was in that place that we bought it.'

3.76 sa atóonaan-**i**, an-**í** izzé sa.
 sa a= to -nan =i a= na =i izzen sa
 SBDR 3SG fill ALL 3PL 3SG give 3PL child DAT
 'When he filled them up, he gave them to the children.'

In Examples 3.77 and 3.78, stress in the verb falls on the final syllable of the root. However, since in each case the final vowel is elided before the next vowel, stress shifts to the Direct Object.

3.77 anjimhang-í, imʒáaw **anʒi**.
 anji= m hanga =i i= m- jaw =anʒi
 2PL SBJ hear 3PL 3PL SBJ help 2PL
 Listen to them so that they can help you (PL).

3.78 ikəmm **íri** táffaala kan.
 i= kəmma =iri tafaala kan
 3p find 1p hut In
 They found us in the hut.

In short, the verb word in Tagdal consists of three prefixes which occur before the verb root: the pronominal clitic, which indicates the Subject; the Negation, which includes a Perfective, Imperfective and Subjunctive Negation; and the Tense-Aspect-Mood subsystem. This includes a zero morpheme for the Perfective, as well as an Imperfective, a Subjunctive and a Future.

The verb in Tagdal also comprises of two suffixes, which occur after the verb root. These include a directional suffix, with *-kat* indicating that the action is moving toward the speaker and *-nan*, which indicates that it is moving away. The final suffix in the verb is then the First and second person plural and third person singular and plural pronominal clitics, which indicate the Direct Object.

Dative Indirect Object

The postposition Dative marker *sa* indicates the Indirect Object which typically carries the Beneficiary or UNDERGOER role. More importantly, however, when the Indirect Object is an attached clitic pronoun instead a Noun Phrase, the PRON-*sa* construction forms an accentual unit with the Verb Phrase. Table 3-83 indicates the form of the clitic pronoun Indirect Object which attaches onto the Dative marker *sa*.

Table 3-83 pronominal clitics with the Dative *sa*

	singular	plural
first	áy=sa	íiri=sa
second	ín=sa	ánzi=sa
third	á=sa	í=sa

Another key point is that Tagdal's default clausal word order is SVO. However, when both the Direct and Indirect Objects are present, the Indirect Object, indicated with the Dative *sa*, precedes the Direct Object. The Direct Object will appear either as a NP following the Dative *sa*, the third person proclitics *=a* or *=i* attached to the end of *sa* as bound morphemes, or as first of second person independent pronouns, as Table 3-84 indicates.

Table 3-84 non-NP Direct Objects following Dative *sa*

	singular	plural
first	sa yaay	s íiri
second	sa nin	s ánzi
third	s-a	s-i

The presence of both the Indirect Object and Direct Object clitics and pronouns effect the overall Verb Phrase in certain ways. First, if the verb root ends with a vowel, it will elide before the Indirect Object clitic attached to the Dative *sa*. Second, if the

Direct Object following *sa* begins with a vowel, the final vowel in *sa* will also elide.⁹⁹ Finally, the primary stress of the Verb Phrase, and therefore, of the clause, will shift onto the Indirect Object clitic. Examples 3.79 through 3.81 demonstrate these processes.

3.79 *zawkat áŷsa affjáhi.*
 zaw -kat ŷa= sa affjáhi
 take VEN 1SG DAT tea
 'Bring me some tea.'

3.80 *may əšin ínŷa sa intəkóy?*
 may ə- šin in= sa sa ni= tə- koy
 who SUB.REL say 2SG DAT SBDR 2SG FUT go
 'Who told you that you were going?'

3.81 *irihaar ánŷisa, anjimsəd-á!*
 iri= har anŷi= sa anŷi= m- sə- da =a
 3SG declare 2PL DAT 2PL SBJ NEG.IMP do 3SG
 'We told you (PL) not to do it!'

In Examples 3.82 through 3.84, the final vowel in the verb root is elided before the Indirect Object.

3.82 *ad ása man Máno.*
 a= da a= sa man Máno
 3SG do 3SG DAT name Mano
 'He named him Mano.'

3.83 *an írisa móota aayó.*
 a= na iri= sa móota aayó
 3SG give 1PL DAT car DEF
 'He gave us that car.'

3.84 *id írisa ha horráanan.*
 i= da iiri= sa ha horra -nan
 3PL do 1PL DAT thing bitter ADJR
 'They made for us something bitter (i.e. made our lives miserable).'

Finally, in Examples 3.85 and 3.86, the final vowel of the Dative *sa* is elided in the presence of the Direct Object clitic or pronoun.

⁹⁹ Otherwise, it will not. For example, the unlikely sentence *asəkn áŷsa yaay* 'he showed me to myself', where the final vowel in *sa* does not elide because the Direct Object *yaay* does not begin with a vowel, is theoretically possible.

3.85 an **íns**-i.

a= na ni= sa =i
 3SG give 2SG DAT 3PL
 'He gave them to you.'

3.86 iiriqaran **ís**-a.

iri= qaran i= sa =a
 1PL read 3PL DAT 3SG
 'We read it to them.'

Chapter 4

4.0 Clause, Syntax, Paragraph structure

This chapter, will cover primarily phenomena in Tagdal above the morphophonemic and word levels. Sections 4.1 through 4.3 will cover phrase structures, starting with the Noun Phrase, then with the Adpositional Phrase. Sections 4.4 through 4.10 deal with various aspects of the clause and the sentence in Tagdal. Finally, section 4.11 details a number of ways in which sentences are coordinated to form paragraphs.

4.1 Noun Phrases

The only mandatory element in the NP in Tagdal is the head, either a noun, independent pronoun or proper name,. Most NPs contain no more than two additional elements after the head. Figure 4-1 is a list of the most common order of possible elements within a Noun Phrase.

Figure 4-1 Noun Phrase structure

HEAD (Dem/DET) (Numeral) (Dem/DET) (Adj) (Dem/DET)

In general, the default word order in the Tagdal NP has the head, usually a noun, pronoun, Possessor Phrase, Genitive Phrase or Relative Clause, with numerals and adjectives following.¹⁰⁰ The demonstratives or the determiner can either precede or follow the numeral or adjective.

In this section, elements of the Noun Phrase will be described mainly by how they function, rather than from the morpho-phonemic point of view. First, determiners will be described, along with brief discussions of their functions within discourse. Second, numbers and adjectives will be discussed. Finally, the Genitive Phrase and Possessor Phrase will be discussed.

Determiners, demonstratives

Tagdal has a number of demonstratives and determiners, with various functions. *fo* and *aafó* do not have deictic function, and usually occur when a referent is being introduced for the first time, or in cases of indefinite NPs.¹⁰¹ *aafó* may also function as a NP by itself, or as the pronominal head of a relative clause.

¹⁰⁰ In this way, it is similar to the order of constituents in the NP in Tadaksahak (Christiansen-Bolli 2010: 143), although it seems that ordering of determiners is more flexible in Tagdal.

¹⁰¹ However, this is not the whole story, as the absence of a determiner can also signal either definiteness or indefiniteness (see, for example Section 4.8.4 for how this affects relative clauses). Regardless, for the purpose of simplification, it will be referred to in this document as an Indefinite marker.

In contrast, Tagdal has a number of demonstratives with deictic function, which cannot co-occur with *fo* or *aafó*. The most common is the proximal demonstrative *aayó*, which like *aafó* can also function as a NP or as the pronominal head of a relative clause. The presence of *aayó* usually indicates old information or definiteness. *ʒí*, and *ʃén* also have deictic function, combined with relative distance, either physical or temporal, from the speaker.¹⁰² For the sake of convenience, in this document it will be referred to as a Definite marker.

In addition, Tagdal has a number of other compound demonstratives, *ayʒí*, in effect a combination of *aayó* and *ʒí*; and *ayʃén*, a combination of *aayó* and *ʃén*. In this section, each of these will be discussed, with emphasis placed on their functions within the Noun Phrase. Table 4-1 lists the various determiners in Tagdal, along with their functions.

Table 4-1 Determiners and their functions

determiner	function	gloss
fo / aafó	indefiniteness – introduction of new referents/participants in a discourse	'a certain, some, certain ones'
aayó	proximal distance, anaphoric, increased saliency of NP	'this, these'
ʒí	medial distance, anaphoric, increased saliency	'that, these'
ayʒí	medial distance, anaphoric, possibly stronger saliency than <i>ʒí</i> alone	'that, these'
ʃén	relatively long distance, anaphoric, increased saliency	'that, those (far away)'
ayʃén	relatively long distance, anaphoric, possibly stronger saliency than <i>ʃén</i> alone	'that, those (far away)'

Indefinite *aafó*, *fo*, *foóda*

The determiner *fo*, derived from *aafó* 'one', matches the noun it modifies in number. When *fo* modifies a plural noun, it takes the plural suffix *-nen* and stress shifts to the final syllable. Adding the CVC suffix *-nen* to *fo* leads to the lengthening of the initial, forming the plural determiner *foonén*.

In its singular form, *fo* can be glossed more or less as 'a certain one' of whatever NP it modifies, while in its plural form, it could be translated more or less

¹⁰² In this way, they seem to follow the general pattern described in Levinson (2004: 26), where deictic systems with more than two terms are “often organized in terms of a binary opposition between proximal and distal, with the distal category permitting finer discrimination between a ‘medial’ and ‘distal’”.

as 'some' or 'a certain number of'. Table 4-2 provides a few examples of nouns with the determiner *fo* in its singular and plural forms.

Table 4-2 Typical singular versus plural occurrences of *fo*

1	anafaráʃit fo	'an ignorant person'	inafaráʃiitan foonén	'some ignorant people'
2	anárag fo	'a certain neighbour'	ináraagan foonén	'certain neighbours'
3	ániibo fo	'a child born out of wedlock'	inniiban foonén	'certain children born out of wedlock'
4	árkaawal fo	'a promise'	irkáwwaalen foonén	'certain promises'
5	assáyri fo	'a teaching'	isáyraayan foonén	'some teachings'
6	bəndíga fo	'a rifle'	bəndíggaatan foonén	'some rifles'
7	fer fo	'an opening'	feerén foonén	'some openings'
8	fiiʒi fo	'a sheep'	fiiʒén foonén	'some sheep'
9	gúusu fo	'a hole'	guusén foonén	'some holes'
10	hámboori fo	'a mortar drum'	hamboorén foonén	'some mortar drums'
11	kám̐ba fo	'a hand'	kambén foonén	'certain hands'
12	me fo	'a mouth'	men foonén	'some mouths'
13	táamu fo	'a female slave'	taamén foonén	'certain female slaves'
14	taddágal fo	'a daughter-in-law'	ʃidduulen foonén	'some daughters-in- law'
15	way fo	'a woman'	wayyén foonén	'some women'

fóoda, structurally *fo* combined with the emphatic *da*, means 'only one', 'only' or 'alone'. The presence of the CV syllable in *da* causes the short vowel in *fo* to elongate, most likely indicating that the construction forms a single word. For obvious reasons, *fóoda* only occurs with singular nouns. Table 4-3 provides some examples.

Table 4-3 nouns with *fóoda*

1	abágog	'large adult male sheep'	abbágog fóoda	'only one large adult male sheep'
2	abáydag	'a thief'	abbáydag fóoda	'only one thief'
3	ánga	'he, she, it' (3sg Pronoun)	ánga fóoda	'he, she, it only'
4	íngi	'they' (3pl pronoun)	íngi fóoda	'only them'
5	baɲyó	'head'	baɲyó fóoda	'putting heads together' ¹⁰³

¹⁰³ *da baɲyó fóoda*, literally 'do one head', is a common expression used to indicate something

6	dab	'dress'		dab fóoda	'one dress'
7	yaay	'me'	(1sg	yaay fóoda	'only me'
		Pronoun)			
8	fárka	'donkey'		fárka fóoda	'one donkey'
9	gúusu	'hole'		gúusu fóoda	'one hole'
10	húgg	'dwelling'		húgg fóoda	'one dwelling'
11	tabáarar	'daughter'		tabbáarar fóoda	'only daughter'
12	tállaaqay	'poor person'		tállaaqay fóoda	'one poor person'

One of the most common functions of *fo* or *foonén* is to introduce new participants in a discourse. Once a participant has been introduced into a discourse, it occurs further on with or without a demonstrative with anaphoric function, or as a pronoun or pronominal clitic. Examples 4.1 through 4.3 demonstrate how *fo* functions to introduce new referents or participants.

4.1 sa yaté, **gónfi fo**
 sa ya= te **gonfi fo**
 SBDR 1SG arrive snake IDF
 'When I arrived, a snake

abáara húgg n ámmas.
 a= baara hugg n ammas
 3SG LOC house GEN interior
 was in the middle of the house.'

4.2 záyji kullú, **tállaaqay fo** abhurru jikóttawen
 zayji kullu tallaaqay fo a= b- hurru jikóttawen
 day all poor.man IDF 3SG IMP search charity
 'Every day, a certain poor man would beg

boorén aayoonén əbhur yáabu sa.
 booren aayoonén ə- b- hur yaabu sa
 people DEF.PL SUB.REL IMP enter market DAT
 from the people (who were) entering the market.'

4.3 ənguuɣii da, **way fo** até.
 ənguuɣi da way fo a= te
 suddenly a woman 3sg arrive
 'Suddenly, a woman arrived.

along the lines of working together to come up with a solution to a problem.

abzuurú, absáqqərət boorén sa.

a=	b-	zuuru	a=	b-	səqqərət	booren	sa
3sg	imp	run	3sg	IMP	scream	people	DAT

She was running (around), screaming at people.'

So far, all of the examples above are of *fo* or *foonén* introducing subjects. However, *fo* and other determiners can occur with any NP. Examples 4.4 through 4.7 show *fo* occurring with non-subjects.

4.4 sa yahun addunya, fik yaay
 sa ya= hun addunya fik yaay
 SBDR 1SG leave world bury 1SG.IND
 'When I die, bury me

ənda **móota fo** əbsáawa
 ənda moota fo ə- b- saawa
 with a car SUB.REL IMP resemble
 with a car

ənda aayóoda!
 ənda aayo da
 with this EMPH
 like this one!' (i.e. place it inside the grave with me)

4.5 asəkna áysa **boorén foonén**.
 a= səkna ya= sa **booren foonen**
 3SG demonstrate 1SG DAT certain people
 'He pointed certain people out to me.'

4.6 iiriná **iizé fo** sa-a.
 iiri= na **iizé fo** sa =a
 1PL give some.child DAT 3SG
 'We gave it to some (unspecified) child.'

4.7 ifur **tonzén foonén** guusuu kan.
 i= fur **tonzen foonen** guusu kan
 3PL throw some.rocks hole in
 'They threw some stones into the hole.'

Definite *aayó*, *zi*, *fen*

The demonstratives, *aayó*, *zi* and *fen* each have a similar anaphoric and exophoric

function, to bring into temporary prominence a previously-introduced referent.¹⁰⁴ The main difference between them has to do with proximity of the noun from the speaker, either in physical distance or in time, relative to the event. In general, *aayó*, *zí* and *jén* function to mark an NP as definite. However, since an NP lacking the demonstrative can also be definite,¹⁰⁵ *aayó*, *zí* and *jén* also raise the relative prominence of their NP, relative to the rest of the clause.

Demonstratives and determiners typically match the NP they modify in number, either singular or plural. In its plural form, *aayó* takes the suffix *-nen* and stress shifts to the final syllable. In addition, just as with *fo*, the vowel in the penultimate syllable is lengthened before *-nen*, making the plural *aayoonén*. Table 4-4 shows the modifier *aayó* in its singular and plural forms.

Table 4-4 singular versus plural occurrences of *aayó*

1	abbákad aayó	'this sin'	ibákkaadan aayoonén	'these sins'
2	abárkaw aayó	'this male calf'	ibárkaawan aayoonén	'these male calves'
3	abáykor aayó	'this dog'	ibíkar aayoonén	'these dogs'
4	abóbaz aayó	'this (male) cousin'	ibóbbaazan aayoonén	'these (male) cousins'
5	bangú aayó	'this well'	bangén aayoonén	'these wells'
6	dátaazal aayó	'this dawn'	datázzaalen aayoonén	'these dawns'
7	duudú aayó	'this strong rain'	duudén aayoonén	'these strong rains'
8	hangá aayó	'this ear'	hangén aayoonén	'these ears'
9	zayzi aayó	'this day'	zayzén aayoonén	'these days'
10	kúusu aayó	'this cooking pot'	kuusén aayoonén	'these cooking pots'
11	mállaaayat aayó	'this race'	imaláyyaaten aayoonén	'these races'
12	saarás aayó	'this spider'	saaraasén aayoonén	'these spiders'
13	sárho aayó	'this favour' (i.e. good will)	sarhén aayoonén	'these favours'
14	táffaayda aayó	'this wound from carrying heavy loads'	jíffaaydan aayoonén	'these wounds from carrying heavy loads'

Since anaphoric deixis is not obligatory, the presence of *aayó* or *aayoonén* (or *zí* or *jén*) in their anaphoric function raises the prominence of the NP, relative to other elements in the clause. In Examples 4.8 through 4.12, *aayó* and *aayoonén* are anaphoric, whereas 4.13 through 4.15 are exophoric.

¹⁰⁴ What Grimes (1975) calls a "thematic participant".

¹⁰⁵ See Section 4.8 for a discussion of relative clauses with no demonstrative and their function.

4.8 kaalá ʔanəguuná **boorén aayoonén!**
 kaala ʔa= nə- guuna booren aayoonen
 never 1SG NEG.PRF see people DEF.PL
 'I have never seen these people!'

4.9 **báarar aayó** atəwwəqəs har wa afaaná.
baarar aayó a= təwəqqəs har wa a= ʃaana
 boy DEF 3SG kicked out until moment 3SG little
 'This boy was kicked out (of his family) when he was still little.'

4.10 ʔasəbwá **ha aayó**.
 ʔa= sə- b- wa ha aayó
 1SG NEG.IMP IMP eat thing DEF
 'I don't eat that.'

4.11 sa ahár **ha aayó**, təzár agiʃ iiri.
 sa a= har ha aayó təzar a= giʃ iiri
 SBDR 3SG say thing DEF then 3SG leave 1PL
 'After declaring that, he left us (standing there).'

4.12 **aaró aayó**, an yáahu da ayíbdan.
 aaro aayó a= n yaahu da a= əbdan
 man DEF 3SG GEN birth EMPH 3SG crippled
 'This man was crippled from birth.'

4.13 insəbáaya, maʃʃán
 ni= sə- bay =a maʃʃán
 2SG NEG know 3SG.OBJ but
 'You don't know it, but

aaró aayó asərmay ʔaay.
 aaro aayó a= sərmay ʔaay
 man DEF 3SG scare 1SG.IND
 that man scares me.'

4.14 **ha aayó** atəzaw áʔsa wúllen!
 ha aayó a= tə- ʔaw ʔa= sa wullen
 thing DEF 3SG FUT help 1SG DAT much
 'This will help me a lot!'

In Example 4.15, **aayó** is functioning as a pronominal subject of the clause.

- 4.15 **aayonén** itədə iirisa jīməyutar.
 aayoonen i= tə- da iiri= sa jīməyutar
 DEF.PL 3PL FUT do 1PL DAT difficulties
 'Those (people) are going to cause us problems.'

zi occurs less frequently than *fo* or *aayó*, and does not seem to occur pronominally or as the head of a NP. Otherwise, it functions in a similar way to *aayó*, to mark an NP as definite and bring the NP into temporary prominence within a discourse, relative to other elements in the clause. The main difference is relative spatial or temporal distance, with *zi* indicating medial distance, relative to *aayó*, but not as long a distance as *fen*.

zi matches the noun it modifies in number. In its plural form, the plural suffix *-nen* is added and stress shifts to the final syllable. In addition, the initial vowel in *zi* is lengthened when *-nen* is added, forming the plural determiner *ziinén*. Table 4-5 demonstrates some examples.

Table 4-5 Typical singular versus plural occurrences of *zi*

1	aaró zí	'that man'	aarén ziinén	'those men'
2	álwaq zí	'that time'	álwaaqen ziinén	'those times'
3	baarí zí	'that horse'	baarén ziinén	'those horses'
4	gungú zí	'that belly'	gungén ziinén	'those bellies'
5	haar zí	'that speech'	haarén ziinén	'those (political) speeches'
6	nas zí	'that animal fat'	naasén ziinén	'those (types of) animal fat'
7	qaarán ¹⁰⁶ zí	'that class'	qáaran ziinén	'those studies'
8	tabbárad zí	'this young woman'	jíbáraaden ziinén	'those young women'

The following examples demonstrate how *zi* functions. Examples 4.16 and 4.17 are exophoric.

- 4.16 **álwaq zi**, boorén buuboonén
 alwaq zi booren buuboonen
 time MED people many
 'In that time (period), lots of people

ibəbáy qaarán.
 i= b- bay qaaran
 3PL IMP know study
 knew how to read.'

¹⁰⁶ The noun *qaarán* 'study' has the same form regardless of whether it is singular or plural..

4.17 iiribda-á **aaró ʒi** sa.
 iiri= b- da -a aaro ʒi sa
 1PL IMP do 3SG man MED DAT
 'We were doing it for that man (over there).'

In Example 4.18, adding the Emphatic marker *da* to *ʒi* shifts the stress to the final syllable and causes the initial vowel to elongate. Therefore, I treat it as a single unit. The resulting word, *ʒiidá*, is somewhat unusual.

4.18 **baarí ʒiidá** afúr ʔan ʃaaráy.
 baari ʒiida a= fur ʔa= n ʃaaray
 horse MED.EMPH 3SG throw 1SG GEN friend
 'That particular horse threw off my friend.'

In Example 4.19, the speaker mentions a certain mountain that had evil spirits (literally 'people of the desert') associated with it.

4.19 **akáʃwar ʒi** amay
 akaʃwar ʒi a= may
 mountain MED 3SG have
 'That mountain has

boorén aayoonén teneré wánen wullen.
 booren aayoonen tenere wanen wullen
 people DEF.PL desert POSS many
 many evil spirits.'

4.20 **tabárar ʒi** adá ʃismiitan ʔas da.
 tabarar ʒi a= da ʃismiitan ʔas da
 girl MED 3SG do jealousy only
 'That girl is just jealous.'

The demonstrative *ʃen* functions anaphorically to refer to old information within a discourse, while also raising the relative prominence of the NP it modifies and creates farther distance than that created by *aayó* or *ʒi*. When combined with the emphatic marker *da*, it retains its original stress. Unlike the other demonstratives, *ʃen* does not have different forms for the singular and the plural. In addition, it can occur in the beginning of the sentence as adverbial information, indicating a specific location which has already been introduced. Below are a few examples of how Tagdal uses *ʃen*. Examples 4.23 and 4.24 are exophoric.

4.21 məʃi ʔatəda meerá da?
 məʃi ʔa= tə- da meera da
 what? 1SG FUT do now EMPH
 'NOW what am I going to do?'

anatakme fén aĩ!
 anatakme fén a= fĩ
 brat DIS 3SG not. be
 'That brat isn't (there)!'

4.22 **iwəysan fén da,**
 iwəysan fén da
 wild.animals DIS EMPH
 'Those wild animals,

ingi itəttəwwiia bəssəba.
 ingi i= tə- tətwwiia bəssəba
 3PL.IND 3PL FUT release tomorrow
 'those are the ones that will be released tomorrow.'

4.23 **húggū fén anəmór wúllen.**
 huggu fén a= nə- mor wullen
 building DIS 3SG NEG.PRF far very
 'That building isn't very far.'

In Example 4.24, *fén* functions to introduce Location as adverbial information. In this case, it refers to a mythical distant country that the speaker was jokingly calling *gánda aayó annasára wáni* 'white people's country'.

4.24 **fén da,** boorén igərgəs.
 fén da boorén i= gərgəs
 DIS EMPH people 3PL be.rich
 'Over there, people are rich.'

Compound demonstratives *ayzĩ*, *ayfén*

Tagdal has two distal demonstratives, *ayzĩ* and *ayfén*, based on *aayó*. Both will be discussed in this section.

First, *ayzĩ* is composed of the two determiners *aayó* and *zĩ*. It matches the NP it modifies in number, with the resulting plural expression being *ayziinén*.¹⁰⁷ I treat *ayzĩ* as a single unit, rather than as a combination of two demonstratives, for several reasons. First, only the second part of the demonstrative, *zĩ*, is ever pluralised

¹⁰⁷ In Tabarog, the plural is *ayzén*.

– *ayziinén* rather than **aayoonén ziinén*. Second, the elision of the final stress-bearing vowel in the initial part, *aayó*, also most likely indicates a single unit.

One further note: *ayzí* in the singular sometimes co-occurs with the emphatic marker *da*. When they co-occur, stress shifts to the emphatic *da*, forming *ayziidá*; the plural form is *ayziinendá*. Most likely the presence of *da* makes emphasis even stronger.¹⁰⁸

ayzí and *ayziinén* occur relatively rarely, and they raise the referent or participant to even greater prominence than a single determiner *aayó* or *zí* would offer. For obvious reasons, constructions with *ayzí* and *ayziinén* are highly marked.

4.25 Meerá da, **aaró ayziidá**
 meera da **aaro** **ayzi** da
 now man COMP.MED EMPH
 'Today, *that* man

afí íirin amanókal.
 a= íi iiri= n amanokal
 3SG is 1PL GEN chief
 is our chief.'

4.26 **zayzén ayziinén,**
zayzen **ayziinen** iiri= gíj
 days COMP.MED.PL 1PL leave
 'It was during those days (that)

íirin gánda.
 iiri= n ganda
 1PL GEN land
 we left our country.'

4.27 zaw ása **ayziidá,**
 zaw a= sa **ayzi** da
 deliver 3SG DAT COMP.MED EMPH
 'Take *this one* to him,

¹⁰⁸ However, my Tagdal-speaking colleagues generally have difficulties explaining the differences between *ayzí* and *ayziidá* (or the plural form), often using them interchangeably.

nimsəzáw **ayzi**.¹⁰⁹
 ni= m- sə- zaw **ayzi**
 2SG SBJ NEG deliver COMP.MED
 not *that one*.'

The demonstrative *ayfén*, which sometimes occurs with the Emphatic marker *da*, is a compound comprised of *aayó* and *fén*. Like *fén*, *ayfén* has both an anaphoric or exophoric function, and also raises the relative prominence of the NP it modifies. It also creates distance from the narration place or event, greater than *ayzi*. It does not have any kind of plural form. Mother-tongue speakers have a difficult time explaining the difference between *fén* and *ayfén*. However, *ayfén* seems to give greater prominence to its NP than simply *fén*, especially when combined with the emphatic marker *da*. 4.28 through 4.30 are some examples. 4.30 is exophoric.

4.28 boorén **ayfén da**,
 booren ayfen da
 people COMP.DIS EMPH
 'Those people (currently not present)

isəbay amnəs.
 i= sə- bay amnəs
 3PL NEG.IMP know camel
 don't know (anything about) camels.'

4.29 álwaqqen **ayfén**, boorén ən táyte
 alwaqqen ayfen booren n tayte
 times COMP.DIS people GEN intelligence
 'In those days, people were more clever

abis írri-wáni.
 a= bis iiri= wani
 3SG pass 1PL POSS
 than we are'

4.30 móota aayó, aaró **ayfén** wáni.
 moota aayó aaró ayfen wani
 car this man COMP.DIS POSS
 'This car (belongs to) that man (in the distance).'

¹⁰⁹ This is also an example of *ayzi* functioning as a pronoun, replacing a full NP.

4.2 Noun Phrase coordination

When coordinating NPs, the connectors *nda* 'and' or 'with' and *meeda* 'or' are used. A connector is mandatory between each coordinated NP.

nda 'and'

nda 'and' is the most common coordinating connector for NPs in Tagdal. Examples 4.31 through 4.33 demonstrate how it is used.

- 4.31 **yu nda tawárat,**
 yu nda tawarat
 female.camel and female.baby.camel
 'A (female) camel and (her) baby

ibgóora tárray n ámmas.
 i= b- goora tárray n ammas
 3PL IMP sit road GEN middle
 were sitting in the middle of the road.'

- 4.32 **tármát ikóy imkəmmá**
 tármát i= koy i= m- kəmma
 quickly 3PL go 3PL SBJ find
 'Quickly, they went to find the

aaró nda way.
 aaro nda way
 husband and wife
 husband and wife.'

- 4.33 **sa ayédkat abhánga nda**
 sa a= yed -kat a= b- hanga nda
 SBDR 3SG return VEN 3SG IMP accompany with
 'When he returned, he was accompanied by

alqáli nda almúwwaṭkil nda amanókal
 alqali nda almuwwaṭkil nda anamokal
 judge and lawyer and king
 the judge, the lawyer, the king

nda soozútan mǎraw nda ahiṅka.
 nda sozitan maraw nda ahiṅka
 and soldiers 10 and 2
 and twelve soldiers.'

***meeda* 'or'**

Examples 4.34 through 4.36 demonstrate how the coordinator *meeda* 'or' is used in Tagdal.

4.34 nibáaya **kafé meeda affáhi?**
 ni= baaya kafe meeda affáhi
 2SG want coffee or tea
 'Would you like coffee or tea?'

4.35 yamkóy nda
 ya= m- koy nda
 1SG SBJ go with
 'Should I go with

yan kayna meeda yán nabóbaz?
 ya= n kayna meeda ya= n abobaz
 1SG GEN younger.sibling or 1SG GEN cousin
 'my little brother or my cousin?'

4.36 yamdá ayəl **meeda** zəlgət.
 ya= m- da ayəl meeda zəlgət
 1SG SBJ do right or left
 'I should turn right or left.'

Examples 4.37 through 4.39 are either coordinated NPs or coordinated clauses where the each clause shares the same VP¹¹⁰ and, therefore, the second occurrence is elided.

4.37 **nikəmmá** máraw **meeda** támmerwen?
 ni= kəmma maraw meeda támmerwen
 2sg find 10 or 20
 'Did you find ten or twenty (of them)?'

4.38 **itəgda** nda boorén aayoonén ne,
 i= tə- əgda nda booren aayoonen ne
 3pl FUT equal with people those here
 'Will they be equal to these people here

¹¹⁰ The question requires more study.

meeda aayoonén fáydaanen?
 meeda aayoonen faydaanen
 or DEF.PL others
 or to those others?'

4.39 **yamdá** ayəl **meeda** zəlgət.
 ya= m- da ayəl meeda zəlgət
 1sg SBJ do right or left
 'I should turn right or left.'

4.3 Adpositional phrases

Tagdal has only one preposition, the instrumental or accompaniment marker *nda*, while all others are postpositions. Adpositions are usually preceded by either a Noun Phrase, pronoun or proclitic. Or in the case of *nda*, the NP follows. In cases where the NP does not need to be mentioned overtly, a proclitic or pronoun will be present either before or after.

Table 4-6 lists the possible adpositions, along with their glosses and functions.

Table 4-6 list of adpositions in Tagdal

Preposition	gloss	function	postposition	gloss	function
nda (NP)	'with'	Instrumental, Accompaniment	(NP) sa	'for'	Dative
			(NP) kan	'in', 'at'	Locative
			(NP) daayó	'at' ('chez')	Locative
			(NP) ga	'on'	Locative
			(NP) n béena	'on', 'over'	Locative
			(NP) n jǐdáy	'under'	Locative
			(NP) n agánna	'beside'	Locative
			(NP) n aláqqam	'behind'	Locative

Each adposition is preceded (or followed, in the case of *nda*) by a Noun Phrase. The only exception is *béena* 'on, over', which requires the Genitive *n* after the NP. Examples 4.40 through 4.45 demonstrate some examples of each adposition.

4.40 **nda** aaró aayó
 nda aaro aayo
 with man DEF
 'with that man'

4.41 **yan faaráy sa**
 ya= n faaray sa
 1SG GEN friend DAT
 'for my friend'

4.42 móota **kan**
 moota kan
 car in
 'in the car'

4.43 yaay **daayó**
 yaay daayo
 1SG.IND place
 'my place'

4.44 banyó **ga**
 banyo ga
 head on
 'on top of the head'

4.45 húggu m béena
 huggu n beena
 house GEN over
 'over the house'

4.4 Word order in verbal clauses

The default word order in Tagdal is SVO, with an Indirect Object, introduced by the Dative *sa*, occurring before the Direct Object. Most of the following examples were taken from various other places in this document. In Examples 4.18 and 4.20, repeated from previous sections, both the Subject and Direct Object are full NPs.

4.18 **baarí ziida** afúr **yan faaráy**.
 baari ziida a= fur ya= n faaray
 horse MED.EMPH 3SG throw 1SG GEN friend
 'That particular horse threw off my friend.'

4.20 **tabárar ʒi adá fismiitan ʔas da.**
 tabarar ʒi a= da fismiitan ʔas da
 girl MED 3SG do jealousy only
 'That girl is just jealous.'

In Example 4.46, the Direct Object is a relative clause.

4.46 **ikəmmá mus aayó nikar tárray kan.**
 i= kəmma mus aayó ni= kar tárray kan
 3PL find cat DEF 2SG hit road in
 'They found the cat you ran over (with your car) on the road.'

In examples 3.79, 4.5, repeated from earlier, and 4.47 the Direct Object follows the Indirect Object.

3.79 **zawkat áysa affáhi.**
 zaw -kat ʔa= sa affáhi
 take VEN 1SG DAT tea
 'Bring me some tea.'

4.5 **asəkna áysa boorén foonén.**
 a= səkna ʔa= sa booren foonen
 3SG demonstrate 1SG DAT certain people
 'He pointed certain people out to me.'

4.47 **amasəyri amsəkná báraaran sa qáaran.**
 amasəyri a= m- səkna baraaran sa qaran
 teacher 1SG SBJ show children DAT study
 'The teacher should teach the children how to read.'

In Examples 3.48 and 3.85, repeated from the previous chapter, the Subject, Direct Object and Indirect Object are all pronominal clitics.

3.48 **ʔabfáw ísa-a.**
 ʔa= b- faw i= sa =a
 1SG IMP show 3SG DAT 3SG
 'I was showing it to them.'

3.85 **an íns-i.**
 a= na ni= sa =i
 3SG give 2SG DAT 3PL
 'He gave them to you.'

Therefore, to summarise, with some exceptions (see Section 4.11), basic word order in Tagdal is SVO, with the Indirect Object occurring before the Direct Object.

4.5 Non-verbal clauses

It is possible to leave the copula verb *fi* out of the predicate without changing the general meaning of the sentence. For example, *aarén aayoonen, soozíitan* 'those men are soldiers' and *aarén aayoonen, soozíitan ifi* 'those men are soldiers' refer to the same situation. However, by leaving out the verb, relative emphasis is put upon the qualities of the NP, usually communicated with an adjective. Examples 4.48 through 4.51 demonstrate this.

4.48 *aarén aayoonen, soozíitan.*
 aaren aayoonen soozíitan
 men DEF.PL soldiers
 'Those men are soldiers.'

4.49 *íiri, kárad.*
 iiri karad
 1PL three
 'We are three (people).'

4.50 *án̄ga, way zaanúunan.*
 aŋga way zaanuunan
 3SG.IND woman old
 'She (emph) is an old woman.'

4.51 *yan káyna marabóut.*¹¹¹
 ya= n kayna marabout
 1SG GEN younger.singling marabout
 'My younger sibling is a marabout.'

4.6 Clause coordination

Coordination in complex sentences, defined here as sentences with more than one clause, can occur in one of two manners. First, by means of combining the Tense,

¹¹¹ This is actually a term borrowed into French from the Arabic *almurábiṭ*. However, since *murábiṭ* is not a word in any nigérien language that I am aware of – the default word throughout seems to be *marabout* – it is likely that this word entered into Tagdal vocabulary as a borrowing from French. Therefore, I represent it here with italics.

Aspect or Mood markers of the VPs in each clause, with no connector (Section 4.6.1). Second, by means of connectors (Section 4.6.2). These include adversatives and disjunctives.

4.6.1 Clausal coordination without a connector

All clauses coordinated without connectors in Tagdal must share the same Tense-Aspect-Mode in their VPs. Most coordinate clauses without a connector express a simple conjunctive relationship, more or less translated as 'and'. Examples 4.52 through 4.56 illustrate this.

4.52 **aguun-í, azuurú tarmát.**

a= gun =i a= zuuru tarmat
3SG see 3PL.OBJ 3PL run quickly
'He saw them and ran away quickly.'

4.53 **nimzáwnaan-a húžen,**

ni= m- zaw -nan =a húžen
2SG SBJ take ALL 3SG.OBJ home
'You need to take it home'

nimsókna-a ni-niiná sa.

ni= m- sökna =a ni= n niina sa
2SG SBJ show 3SG.OBJ 2SG GEN mother DAT
'and show it to your mother.'

4.54 **aḵīn írisa iirimwá, iirimnin**

a= ḵīn iiri= sa iiri= m- wa iiri= m- nin
3SG say 1PL DAT 1PL SBJ eat 1PL SBJ drink
'He told us to eat and drink'

báaraan imtəwsəlyəd.

baraaran i= m- təw- s- əlyəd
children 3PL SBJ PASS CAUS be.comfortable
'and the children should be made comfortable.'

4.55 **ibáaya sa itəkóy, itúk káyyaatan kan.**

i= baaya sa i= tə- koy i= tuk káyyaatan kan
3PL want SBDR 3PL FUT go 3PL hide baggage in
'They wanted to go, so they hid among the baggage.'

4.56 **asəkúula íiri, iirigáar-a.**

a= səkúula =iiri iiri= gar =a
3SG not.like 1PL.OBJ 1PL guard 3SG.OBJ
'He didn't like us so we kept an eye on him (lit. 'guarded').'

In Example 4.57 the final clause has a Resultative kind of relation.

- 4.57 aaró aayó **abzínziiri**, **abná** zákkat,
 aaro aayo a= b- zinziiri a= b- na zakkat
 man DEF 3SG IMP pray 3SG IMP give alms
 'Such a man prays, gives alms (to the poor),

Yán Koy **abtúba**-a.
 Yán Koy a= b- tuba =a
 God 3SG IMP accept 3SG.OBJ
 and therefore God accepts him.'

In Example 4.58, both of the coordinated VPs are subordinate, introduced with *sa*. The principal clause is introduced with *təzzár* (also see section 4.11), which in this case contrasts with the coordinated clauses to indicate the nuance 'only then'.

- 4.58 sa **até**, **awá**,
 sa a= te a= wa
 SBDR 3SG arrive 3SG eat
 'After he arrived and ate,

təzzár ahur ám ba daayó.
 təzzar a= hur a= n ba daayo
 then 3SG enter 3SG GEN father place
 only then did he go to where his father was.'

In Example 4.59 the effect of the coordinated clauses seems to be a kind of marked contrast between those who were waiting and those who had left without them.

- 4.59 iiri**bbəqəl**, i**bjíkəl**.
 iiri= b- əqəl i= b- jíkəl
 1PL IMP wait 3PL IMP travel
 'We were waiting, (while) they were traveling.'

4.6.2 Clause coordination with connector

The most common connectors used for coordination of clauses are *maffán*, *míffan* 'but', *meeda* 'or' and sometimes *waalá* 'or'. All three are discussed below.

Adversatives *maffán*, *míffan* 'but'

The connector *maffán* 'but' is the most common way to express adversative relationships between clauses. It typically precedes the second clause, as shown in Examples 4.60 through 4.63.

4.60 ha kullú **nin** iiri*yífræg*,
 ha kullu nin iiri= əfræg
 thing all drink 1PL able
 Everything is permissible for us to drink,

maffán aməswəd harám inəsləmin sa.
 maffan aməswəd haram inəsləmin sa
 but alcoholic.drink forbidden Muslims DAT
 but alcohol is forbidden for Muslims.

4.61 yabáaya-a,
 ya= baaya =a
 1SG love 3SG.OBJ
 'I love her,

maffán am boorén iwánzin.
 maffan a= n booren i= wanzin
 but 3SG GEN people 3PL refuse
 but her parents won't accept (me).'

4.62 **nimáy** túraagat sa nimkóy in-húzen
 ni= may turaagat sa ni= m- koy i= n húzen
 2SG have authorisation that 2SG SBJ go 3PL GEN house
 'You have permission to go to their house,

maffán nimsəməw im báatuutan.
 maffan ni= m- sə- maw i= n baatuutan
 but 2SG SBJ NEG.IMP hear 2PL GEN discourses
 but you shouldn't listen to their words.'

4.63 **ahurrú** sa atəzáy ɣan ábbaawen
 a= hurru sa a= tə- zay ɣa= n ábbaawen
 3SG seek SBDR 3SG FUT steal 1SG GEN leather.sack
 'He tried to steal my purse

maffán ʔasórrawraw ágga, azúuru.

maffán ʔa= se- ərrowraw a= ga a= zuuru
 but 1SG CAUS scream 3SG on 3SG run
 'but I screamed at him and he ran.'

In Example 4.64, *maffán* introduces the sentence and, therefore, the connection is to the previous discourse. It is from a story where various other characters forgot about the victims in a village, but the hero is says that he will not abandon them.

4.64 **maffán** ʔaay da, ʔasəkóy dáyna-anʔi!

maffán ʔaay da ʔa= səkoy dáyna =anʔi
 but 1SG.IND EMPH 1SG NEG.FUT forget 2PL.OBJ
 'But as for me, I will not forget you (pl)!'

Tagdal has another rarely-occurring Adversative connector, *míffan* 'but'. It has the same syntactic distribution as *maffán*. While *míffan* is also used for adversative coordination, it expresses a stronger opposition than *maffán*.

4.65 ahurrú iirin íman, **míffan** iiridórræg.

a= hurru iiri= n iman míffan iiri= dærræg
 3SG seek 1PL GEN life but.FOC 1PL flee
 'He tried to kill us, but we escaped.'

In Example 4.66 *míffan* introduces a sentence, and the coordination takes place between the previous discourse and the main clause.

4.66 **míffan**, sa álwaq ató,

míffan sa alwaq a= to
 but.FOC SBRD moment 3SG achieve
 'But when the time came,

harwá inəté.

harwa i= nə- te
 still 3PL NEG.PRF arrive
 they had not arrived yet.'

Disjunctive, *meeda* and *waalá* 'or'

Another common connector for disjunctive coordination in Tagdal is *meeda* 'or', which does not carry stress and can also coordinate NPs (see Section 4.2), as shown in Examples 4.67 and 4.68.

4.67 **nimkóy meeda nimgoorá,**
 ni= m koy meeda ni= m- goora
 2SG SBJ go or 2SG SBJ stay
 '(Whether) you go or stay,

ha kullú fóoda.
 ha kullu fóoda
 thing all one.only
 'it's all the same.'

4.68 **fáarad meeda fik?**
 farad meeda fik
 sweep or dig
 '(Are you) sweeping or digging?'

A second disjunctive marker in Tagdal is *waalá* 'or'. This connector occurs much less frequently than *meeda* and seems to have an inherent negative 'not even' or perhaps 'or not' kind of sense. It is also used in tag questions (see Section 4.10.2). Example 4.69 demonstrates.

4.69 **nimsəkóy nimháfikat nin aláqqam,**
 ni= m- səkoy ni= m- hafī -kat ni= n aláqqam
 2SG SBJ NEG.FUT 2SG SBJ look VEN 2SG GEN back
 'You are not to look backward,

waalá nimgoorá dáayo fo kan!
 waala ni= m- goora daayo fo kan
 nor 2SG SBJ stay place IDF in
 'nor even to stop anyplace!'

In Example 4.70, the presence of the interrogative *ənta* indicates a strong question (see Section 4.10), in this case indicating a certain degree of frustration.

4.70 **ənta anzimáy diezél, waalá?**
 ənta anzi= may diezél waala
 INT 2PL have diesel or
 'Do you(pl) have diesel or not?'

4.7 Subordination

Relative clauses (Section 4.8) have a different structure from that of principal clauses, especially the Subject Relative. Other types of subordinate clauses, however, have

similar structures as their principle clause. Adverbial (Section 4.7.1) and complement clauses (Section 4.7.2), for example, are only distinguishable because they are introduced with the subordinator *sa*, or some other subordinating connector, or combination of connectors.

4.7.1 Adverbial clauses

Most commonly, adverbial clauses precede the main clause and are introduced with a connector, the most frequent being *sa* 'when'; *sa harwá* 'while' or 'before', and *harwá* 'in addition' or 'while', depending on its collocates; *ámmaaka* 'if'; *nda anǎŋi* 'unless'; and *ha aayó nda* 'in the manner of'. The use of the Subjunctive or Future marker to describe purpose is also possible. This section will discuss each of these.

Time relation, *sa* 'when'

The subordinator *sa* always introduces subordinate clauses.¹¹² When introducing an adverbial clause, it has a temporal element, translating more or less as 'when'. In places where the next word after *sa* begins with a vowel, the *a* in *sa* is elided.

4.71 **sa yaté**, yaguuná way fo
 sa ya= te ya= guuna way fo
 SBDR 1SG arrive 1SG see woman IDF
 When I arrived, I saw a woman

əbhurrú yān káyyaatan kan.
 ə- b- hurru ya= n kayyaatan kan
 SUB.REL IMP search 1SG GEN stuff in
 (who was) looking through my things.

4.72 **sa yakóy**, igoorá ibhár yáay ga.
 sa ya= koy i= goora i= b- har yaay ga
 SBDR 1SG go 3PL sit 3PL IMP say 1SG.IND on
 When I left, they started to talk about me.

4.73 **sa hánfi azín biizí**, azuurú
 sa hanfi a= zin biizí a= zuuru
 SBDR dog 3SG grab bone 3SG run
 After the dog took the bone, he ran

¹¹² Where a clause is introduced with *sa* following the main clause, it is usually a complement clause.

afáas-a gúusu kan.
 a= fas =a guusu kan
 3SG dig 3SG hole in
 and buried it in a hole.

4.74 **sa yabkóy lakól**, yabəbáy qáaran.
 sa ya= b- koy lakol ya= b- bay qaran
 SBDR 1SG IMP go school 1SG IMP know read
 'When I was going to school, I knew how to read.'

4.75 **sa iyédkat**
 sa i= yed -kat
 SBDR 3PL return VEN
 As they returned,

álman ibhúr in afárag.
 alman i= b- hur i= n afarag
 animals 3PL IMP enter 3PL GEN enclosure
 the animals were going into their enclosure.

Example 4.76 begins with *təzzár* 'then', which increases the relative prominence of the sentence, signals a peak episode in the discourse and connects temporally to previous sentences (see Section 4.11). The adverbial clause, introduced with *sa*, follows *təzzár* and is preceded by a brief pause between the two connectors, represented here with a comma.

4.76 *təzzár*, **sa kéeni ahúur-a** wúllen,
 təzzar sa keeni a= hur =a wullen
 then SBDR sleep 3SG enter 3SG.OBJ very
 Then, when he got very sleepy,

akánkat gánda.
 a= kan -kat ganda
 3SG fall VEN ground
 he fell to the ground.

***sa harwá* 'while', 'before', 'not yet'**

The combination of the two connectors *sa* and *harwá* introducing an adverbial clause can function in one of two ways. If the VP has the Imperfective marker *b-*, it indicates that the action was still in process when the action in the principal clause took place. The resulting construction could be translated more or less as 'while X was happening'.

It is similar to the 'while' relation communicated below, except that when *sa harwá* is used, emphasis seems to be placed upon the simultaneity of the actions in question, rather than upon the actions themselves. Examples 4.77 through 4.80 combine *sa harwá* with the Imperfective *b-*.

4.77 **sa harwá amanókal abhár** ikóy húdjen.

sa	harwa	amanokal	a=	b-	har	i=	koy	hudjen
SBDR	still	chief	3SG	IMP	speak	3PL	go	home

Meanwhile, as the chief was (still) speaking, they went home.

4.78 **sa harwá iiribfíkəl,**

sa	harwa	iiri=	b-	fíkəl
SBDR	still	1PL	IMP	travel

'While we were still traveling,

bóora fo azáy am móota.

boora	fo	a=	zay	a=	n	moota
person	IDF	3SG	steal	3SG	GEN	car

someone stole his car.'

4.79 **sa harwá abəbáara** húzen,

sa	harwa	a=	b-	baara	húzen
SBDR	still	3SG	IMP	LOC	home

While he was still home,

ikóy tármāt a-daayó.

i=	koy	tarmat	a=	daayo
3PL	go	quickly	3SG	place

they went quickly to his place.

4.80 **sa harwá abógməm,**

sa	harwa	a=	b-	əgməm
SBDR	still	3SG	IMP	chew.tobacco

'While he was still chewing the tobacco,

iiriyoggá fīwúkkāawen áala kan.

iiri=	yogga	fīwukkaawen	aala	kan
1PL	see.distance	worms	leaves	in

we spied worms in the leaves.'

On the other hand, *sa harwá* with a Perfective Negation in the VP of the adverbial clause indicates that the action did not take place, giving it the nuance of 'before' or in some cases 'not yet'. Examples 4.81 through 4.83 demonstrate.

4.81 **sa harwá anəbén nda je,**

sa harwa a= nə- ben nda je
 SBDR still 3SG NEG.PRF finish with speech
 'Before he was finished with his speech,

folissaatan ite, iziin-á.
 folissaatan i= te i= ʒin =a
 policemen 3PL arrive 3PL grab 3SG.OBJ
 'the police came and arrested him.'

4.82 **sa harwá inətó Táhoua,**

sa harwa i= nə- to Tahoua
 SBDR still 3PL NEG.PRF arrive Tahoua
 'They not arrived in Tahoua yet, when

esáns abén.
 esans a= ben
 gasoline 3SG finish
 '(their) gasoline ran out.'

4.83 **sa harwá inəytəf-i,**

sa harwa i= nə- əytəf =i
 SBDR still 3PL NEG.PRF ambush 3PL.OBJ
 'Before they could ambush them,

taməntəka awəzlət, ha kullú ayíɣfəd.
 taməntəka a= wəzlət ha kullu a= əɣfəd
 army 3SG tour everything 3SG ruin
 'the army patrol came around and everything was ruined.'

In summary, when *sa harwá* introduces an adverbial clause, if the VP has the Imperfective marker *b-*, it indicates that the action was still taking place as the action(s) in the principal clause, more or less translated as 'while'. On the other hand, if the VP in the adverbial clause has the Perfective Negation *nə-*, it indicates that the action did not take place, or had not taken place, relative to the action(s) in the principal clause. The resulting clause could be translated more or less as 'before' or 'not yet'.

Additive *harwá* 'in addition', 'while'

When *harwá* introduces a subordinate clause, it has either an additive 'in addition' or 'moreover' kind of relation, or a continuing kind of relation, translated more or less as 'while', as in Examples 4.84 and 4.85.

4.84 *yatəná ínsa takáʃit*
 ya= tə- na ni= sa takáʃit
 1SG FUT give 2SG DAT inheritance
 'I will give you (your) inheritance'

bóora kullú m mó kan,
 boora kullu n mó kan
 everyone GEN eye in
 in front of everyone

harwá yayíddər.
 harwa ya= əddər
 while 1SG live
 while I am still alive.'

4.85 *iirimkóy tármət, harwá anəgra!*
 iiri= m- yed tármət harwa a= nə- əgra
 1PL SBJ return fast while 3SG NEG.PRF understand
 'Let's get out of here quickly, while he still doesn't understand!'

In Examples 4.86 through 4.88, *harwá* adds or clarifies information in the main clause and could be translated as 'furthermore'.

4.86 *yanəguuna ha,*
 ya= nə- guuna ha
 1SG NEG.PRF see thing
 'I didn't see anything,

harwá yaʃi ne!
 harwa ya= ʃi ne
 furthermore 1SG not.be there
 furthermore I wasn't there!'

4.87 *anəgóora iiri-daayó,*
 a= nə- goora iiri= daayo
 3SG NEG.PRF stay 1PL place
 'He didn't stay with us, '

harwá ayíyrəs.

harwa a= əyrəs
 furthermore 3SG pass.through
 furthermore he passed through.' (i.e. without stopping)

4.88 ayiŋkəd daayó aayó kan,
 a= əŋkəd daayó aayó kan
 3SG be.careful place DEF in
 'He was careful (while he was) at that place,

harwá ayíyrəf boora kullú.

harwa a= əyrəf boora kullu
 furthermore 3SG encourage everyone
 furthermore he encouraged everyone (there).'

In Example 4.89, the subordinate clause introduced with *harwá* is pre-posed, placing relative focus of the sentence on the pre-posed adverbial clause.

4.89 harwá i-niina akéeni,

harwa i= niina a= keeni
 while 3PL mother 3SG sleep
 'While their mother slept,

iyíydər, ikoy zínziiri aayó əyrəm wáni.
 i= əydər i= koy zínziiri aayó əyrəm wani
 3PL sneak 3PL go celebration DEF town POSS
 they snuck out and went to the town fair.'

Conditional ámmaaka 'if'

The conditional marker *ámmaaka* 'if' introduces adverbial clauses before the principal clause. Examples 4.90 and 4.91 demonstrate.

4.90 ámmaaka niyárda, niməlkəmkat iirisa
 ammaaka ni= yarda ni= m- əlkəm -kat iiri= sa
 if 2sg agree 2sg SBJ follow VEN 1PL DAT
 If you're willing, you should follow us

ar iiritó Agádez.
 ar iiri= to Agadez
 til 1PL achieve Agadez
 until we reach Agadez.

4.91 **ámmaaka iiriguuna-á,**
 tazzar ammaaka iiri= guuna =a
 then if 1SG see 3SG.OBJ
 So then if we see him,

nimdá nin tagólmus.
 ni= m- da ni= n tagólmus
 3SG SBJ place 2SG GEN turban
 you should put on your turban.

Example 4.92 begins with *təzzár*, which is connected to previous discourse and increases its relative prominence. In this case, it forms part of the conclusion to an entire discourse.

4.92 **təzzár, ámmaaka niyízraay-a nda bóora fo,**
 tazzar ammaaka ni= əzray =a nda boora fo
 then if 2SG replace 3SG.OBJ with person IDF
 Then if you replace him with someone else,

intəmay jíməyútar əjilláanan.
 ni= tə- may jíməyutar ə- jillan -an
 2SG FUT have difficulties SUB.REL same ADJR
 you will have the same problems.

Conditionals with *kud* 'if'

The connector *kud*, which does not have stress, introduces a second conditional relation 'if'. Unlike conditional clauses introduced with *ámmaaka*, those introduced with *kud* are limited to asking or wondering whether something might be true or not. Therefore, there seems to be a definite, but subtle, difference in modality between conditional clauses introduced with *ámmaaka* and those introduced with *kud*. Clauses introduced with *kud* follow the main clause. Examples 4.93 through 4.96 demonstrate.

4.93 har áysa
 har ay= sa
 declare 1SG.OBJ DAT
 'Let me know

kud nibáaya sa záyzi aayó
 kud ni= baaya sa záyzi aayó
 if 2SG want SBDR day DEF
 if you want me

yamte nin daayó.

ya= m- te ni= n daayo
 1SG SBJ arrive 2SG GEN place
 to arrive at your place today.'

4.94 **yaśəstən ɣan íman kan kud ite, waalá.**

ya= səstən ɣa= n iman kan kud i= te waala
 1SG ask 1SG GEN soul in if 3PL arrive none
 'I wonder whether they have arrived or not.'

4.95 **iritəgún kud eerán ibén.**

iiri= tə- gun kud eeran i= ben
 1PL FUT see if waters 3PL finish
 'We'll see if the flooding is over.'

4.96 **wa har áysa kud anjitórəz**

wa har ɣa= sa kud anʒi= tə- ərəz
 COMM declare 1SG DAT if 2PL FUT pay
 'Tell me whether you will pay'

ɣan amúzar sa, waalá!

ɣa= n amuzar waala
 1SG GEN master nothing
 my master or not!'

In Example 4.97 *harwá* 'still' occurs after the Verb. Perhaps it is post-posed in order to reduce the relative importance of its VP, though the matter requires more study.

4.97 **iirisəbáy kud nim móota**

iiri= sə- bay kud ni= n moota
 1PL NEG.IMP know if 2SG GEN car
 'We don't know if your car'

adá harwá.

a= da harwa
 3SG do still
 still works.'

Tagdal also has a compound construction, combining *kud*, the emphatic marker *da* and the subordinator *sa*, resulting in *kud da sa*, with no stress on any of the syllables. This translates as 'even if'. Each of these constructions will be described below in Examples 4.98 through 4.100.

4.98 Ḡasəkóy iləs ḡamkóy a-daayó,
 ḡa= səkoy iləs ḡa= m- koy a= daayó
 1SG NEG.FUT ever 1SG SBJ go 3SG place
 'I'm never going to his place again

kud da sa am ber ahóssay.

kud da sa a= n ber a= hossay
 even.if 2SG GEN older.sibling 3SG beautiful
 'even though his older sister is beautiful.'

4.99 áḡga atəkəmmá takáḡit,
 aḡga a= tə- kəmma takaḡit
 3SG.IND 3SG FUT find inheritance
 'She (emphatic) is going to receive an inheritance,

kud da sa aḡi káyna.

kud da sa a= ḡi kayna
 even.if 3SG be younger.sibling
 'even though she is (the) younger sibling.'

4.100 ḡasəkóy koy,
 ḡa= səkoy koy
 1SG NEG.FUT go
 'I won't go,

kud da sa annábi

kud da sa annabi
 even.if prophet
 'even if a prophet

əḡamar áḡsa-a!

ə- yamar ḡa= sa =a
 SUB.REL command 1SG DAT 3SG.OBJ
 'were to order me to (go)!'

Negative conditional, counterfactual *nda anəḡi* 'unless'

Tagdal has a relatively uncommon construction, *nda anəḡi*, also pronounced *nda anəḡi* in the Abargan and kəl Amdid varieties and *nda anəsi* in Tabarog. In cases where it

occurs in the beginning of the sentence, or where the previous word ends in a consonant, an epenthetic *ə* appears, making the construction *ənda anəfi*.

nda anəfi functions primarily as the negative conditional 'unless' and can occur either before or after the main clause in a complex sentence. For obvious reasons, with this kind of relation the verb in the principal clause is often negated. In Examples 4.101 and 4.102 the clause with the negative conditional occurs after the principal clause.

4.101 *ɣasəkóy wa waalá ha fo,*
 $\gamma a =$ *səkoy* *wa* *waalá ha fo*
 1SG NEG.FUT eat absolutely.nothing
 'I am not going to eat absolutely anything,

nda anəfi ɣagún ɣam báraaran.

nda anəfi $\gamma a =$ *gun* $\gamma a =$ *n* *baraaran*
 unless 1SG see 1SG GEN children
 'unless I see my children.'

4.102 *wáyyen isəkuulá huunú,*
 $wayyen$ *i =* *səkuula* *huunu*
 women 3PL not.want exit
 'The women don't want to come out

nda anəfi aarén isəddərgən isa.

nda anəfi *aaren* $i =$ *səddərgən* $i =$ *sa*
 unless men 3PL listen 3PL DAT
 'unless the men listen to them.'

On the other hand, in Example 4.103 the subordinate clause occurs before the principal clause. What specific effect placing the clause with the negative conditional before or after the main clause requires more study, though it is likely that it has at least something to do with relative prominence.

4.103 ***nda anəfi ázzərəf,***
 $nda anəfi$ *azzərəf*
 unless money
 'Unless (he pays with) cash,

ɣawánɜ́in sa ɣatədaynaan-a.

$\gamma a =$ *wanɜ́in* *sa* $\gamma a =$ *tə-* *daynan* $=a$
 1SG refuse SBDR 1SG FUT sell 3SG
 'I refuse to sell it.'

nda anəfi also functions to introduce counterfactuals. The main clause follows the condition and must have either a Future or a Subjunctive marker in the verb. Examples 4.104 and 4.105 demonstrate.

4.104 **nda anəfi** akóoy-a,
 nda anəfi a= koy =a
 if.not 3SG go 3SG.OBJ
 'If he had (not) gone,

yaay da yambáara-a.
 yaay da ya= m- baara =a
 1SG.IND EMPH 1SG SBJ LOC 3SG.OBJ
 'I also would have been there.'

4.105 **nda anəfi** jaanuunan, yasəkóy dáynaana-a.
 nda anəfi jaanuunan ya= səkoy daynan =a
 if.not old 1SG NEG.FUT sell 3SG.OBJ
 'If it weren't old, I wouldn't be selling it.'

In Example 4.106, the clause containing the condition is introduced with the subordinator *sa*.

4.106 **nda anəfi** sa yasəkúula-a, ánga ambáaya-a.
 nda anəfi sa ya= səkuula =a a= m- baaya =a
 if.not SBJDR 3SG not.want 3SG 3SG SBJ want 3SG.OBJ
 'if it weren't that I don't want it, he would want it.'

***ha aayó nda* 'just as', 'how'**

Manner in Tagdal is communicated via the construction *ha aayó nda* 'just as' or 'in the manner of'. Clauses introduced with *ha aayó nda* can appear either before or after the principal clause in a complex sentence. In Examples 4.107 and 4.108, it occurs after.

4.107 intədə **ha aayó nda** yasəlməd nin.
 ni= tə- da ha aayo nda ya= səlməd nin
 2SG FUT do just.as 1SG demonstrate 2SG.IND
 'You will do just as I showed you.'

4.108 aaró ahar áysa **ha aayó nda ha aayó**.
 aaro a= har ya= sa ha aayo nda ha aayo
 man 3SG declare 1SG.OBJ DAT just.as thing DEF
 'The man spoke to me just like that.'

4.112 **man ha ayo nda yatabay**

man ha ayo nda ya= tə- bay
 how 1SG FUT know
 'How can I know

sa ha ayo nihar, jiimi aji?
 sa ha ayo ni= har jiimi a= ji
 SBDR thing 2SG say truth 3SG be
 that what you say is true?'

Purpose, by means of Subjunctive Mood, Future

Tagdal presents the purpose relation by means of a subordinate clause following the main clause, almost always with a Subjunctive *m-*, sometimes with the Future *tə-*, marker in its VP. No connector is necessary to introduce a purpose clause. Examples 4.113 through 4.116 demonstrate.

4.113 asəqqərət, bóora kullú
 a= s- əqqərət boora kullu
 3SG CAUS scream peron all
 'She screamed so that everyone

ambay baatu ayo.

a= m- bay baatu ayo
 3SG SBJ know matter DEF
 would know the issue.'

4.114 aji iirisa ha ayo iiribaaya,
 a= jin iiri= sa ha ayo iiri= baaya
 3SG say 1PL DAT thing DEF 1PL want
 'He told us whatever we wanted (to hear)

iirimkoy.

iiri= m- koy
 1PL SBJ go
 so that we would leave.'

4.115 asəffəraz aayoonén əbzəq,
 a= s- əffəraz aayoonen ə- b- zəq
 3SG CAUS separate DEF.PL SUB.REL IMP fight
 'He had those who were fighting separated,

kəbáy ambén.

kəbay a= m- ben
 gathering 3SG SBJ finish
 so that the meeting would end.'

4.116 abáaya sa atəzómiiɣi nda

a= b- hurru sa a= tə- ɣə- miɣi
 3SG IMP search SBDR 3SG FUT CAUS separate
 'He is trying to divorce

án way aayó karad wani,
 nda way aayo karad wani
 with woman DEF three POSS
 his third wife

aməmarya nda aafó əfáydan.

a= m- marya nda aafó ə- faydan
 3SG SBJ marry with INDEF SUB.REL other
 so that he can marry another.'

Here, Example 4.55 from above is repeated. It also has a subordinate clause marked with a Future marker.

4.55 ibáaya sa itəkóy, itúk káyyaatan kan.

i= baaya sa i= tə- koy i= tuk kayyaatan kan
 3PL want SBDR 3PL FUT go 3PL hide baggage in
 'They wanted to go, so they hid among the baggage.'

Reason *felás* 'because'

The connector *felás* 'because', *fəllás* in the varieties spoken by the Tarbun, Kəl Illókod and *fallás* in Tabarog, functions to introduce background information relating the reason why something occurred. It can occur either before or after the main clause in a complex sentence. The reason relation differs semantically from the purpose clauses introduced by means of the Subjunctive or Future in that, whereas the action in a purpose clause has not occurred, in prototypical reason clauses it has already been realised, as in Examples 4.117 and 4.118.

4.117 iirigiɣ-á **felás azén.**

iiri= giɣ =a felas a= ɣen
 1PL leave 3SG.OBJ because 3SG be old
 'We left him alone because he is old.'

4.118 **felás harwa**

felas harwa

because yet

'Because still

anəzəwkat iirisa-a,

a= nə- zaw -kat iiri= sa =a
 3SG NEG.PRF bring VEN 1PL DAT 3SG.OBJ
 he hadn't brought it to us

iirigoorá ne.
 iiri= goora ne
 1PL stay here
 we stayed here.'

Examples 4.119 and 4.120 are exceptional in that the action in the clauses introduced with *felás* has not been realised.

4.119 Ayidrər-a **felás ambén**

a= ədrər =a felas a= m- ben
 3SG need 3SG.OBJ because 3SG SBJ finish

'He needs it because he has to finish

jáyji aayóoda.
 jáyji aayo da
 day DEF EMPH
 this very day.

4.120 áŋga akəd án way nda an izzén

aŋga akəd a= n way ənda i= n izzen
 3SG.IND along.with 3SG GEN wife and 3PL GEN children

'Both he and his wife and their children

idərrəg, felas aməggər

i= dərrəg felas aməggər
 3PL flee because war
 fled, so that the war

amsəkoy aməhlək-i.

a= m- səkoy a= m- əhlək =i
 3SG SBJ FUT.NEG 3SG SBJ destroy 3PL.OBJ
 wouldn't destroy them.'

To summarise, Tagdal has a number of connectors and combinations of connectors that it uses to indicate the presence of adverbial clauses. These include the temporal subordinate marker *sa*; *sa harwá* 'while' or 'before', and *harwá* 'in addition' or 'while', depending on its collocates; *ámmaaka* 'if'; *nda anəfi* 'unless'; and *ha aayó nda* 'in the manner of'. It also uses TAM markers, usually the subjunctive *m-*, for the purpose relation, which differs from reason in that clauses with *felás* prototypically have actions which have been realised in their VP.

4.7.2 Complement clauses with *sa*

Complement clauses introduced with the subordinator *sa* most commonly occur with certain verbs. Among these are *báaya* 'want'; *yédma* 'think' or 'believe'; *əhor* 'be normal' or 'be necessary'; *híffil* 'need'; and *hurru*, which usually means 'seek', but when co-occurring with a complement introduced with *sa* actually means 'try'; and *siufa* 'prefer'. In all of these cases, the VP in the complement either has the Subjunctive *m-* or Future *tə-* marker. Two additional verbs, *əffək* 'doubt' and *bay* 'know' also take complements introduced with *sa*. However, in the latter two cases, TAM in the VP is not restricted to the Subjunctive and Future. *fin* 'say' and *har* 'declare' are also common, especially when *sa* introduces indirect speech. Each of these verbs and their complements will be discussed in turn below.

One of the most common verbs that take complement clauses introduced by *sa* is *báaya* 'want', as in Examples 4.121 - 4.123.

- 4.121 *yabáaya sa yatəda insa*
 ya= baaya sa ya= tə- da ni= sa
 1SG want SBD 1SG FUT do 2SG DAT
 'I would like to tell you'

arat n immaayan.
 arat n immaayan
 part GEN folk.tales
 a little story (i.e. folk tale).'

- 4.122 *iiribáaya*
 iiri= baaya
 1PL want
 'We would like'

sa nimənsay iirisa-a.
 sa ni= m- ənsay iiri= sa =a
 SBD 2SG SBJ supplicate 1PL DAT 3SG.OBJ
 you to ask it for us.'

4.123 abəbáaya
 a= b- baaya
 3SG IMP want
 'He wanted

sa intəzawkat ása-a.

sa ni= tə- zaw -kat a= sa =a
 SBDR 2SG FUT take VEN 3SG DAT 3SG.OBJ
 you to bring it for him.'

In Example 4.124, *səkiula* 'not want' is the negative of *báaya* in both Tagdal and in a number of mainstream Songhay languages.

4.124 iirisəkiula **sa nimkoy nin fóoda.**
 iiri= səkuula sa ni= m- koy nin fooda
 1PL not.want SBDR 2SG SBJ go 2SG.IND alone
 'We don't want you to go (there) alone.'

Another verb that often precedes complement clauses introduced with *sa* is *yédma* 'think' or 'believe', as in Examples 4.125 through 4.127.

4.125 záynin, niyédma
 zaɣnin ni= yedma
 INTERJ 2SG think
 'No way, you think

sa intəhkəm nda-íiri?

sa ni= tə- əhkəm nda =iiri
 SBDR 2SG FUT reign with 1PL.OBJ
 that you're going to rule over us?'

4.126 kaalá ɣanəyédma
 kaala ɣa= nə- yedma
 never 1SG NEG.PRF think
 'I never believed

sa ɣatəgún nim mo.

sa ɣa= tə- gun ni= n mo
 SBDR 1SG FUT see 2SG GEN eye
 that I would see your face (again).'

4.127 harwá, iiriyédma
 harwa iiri= yedma
 furthermore 1PL believe
 'Furthermore, we think

sa nin da, nimkóy iiri-daayó.

sa nin da ni= m- koy iiri= daayo
 SBDP 2SG.IND EMPH 2SG SBJ go 1PL place
 'it should be you who goes in our place.'

The verb root *əhor* 'be normal', 'be necessary' also takes a complement clause introduced with *sa*. The subject of the principal clause is the third person singular *a=*, which in this case translates as 'it is normal, necessary', as Examples 4.128 and 4.129 demonstrate.

4.128 anəhor **sa ɜayɜi aayó márya wáni,**

a= nə- əhor sa ɜayɜi aayo marya wani
 3SG NEG.PRF normal SBDP day DEF wedding POSS
 'It is not normal that, on the day of the wedding,

aaró amkóy way daayó ánga fóoda.

aaro a= m- koy way daayo anga fóoda
 man 3SG SBJ go woman place 3SG.IND alone
 'the man should go to the woman's place alone.'

4.129 ayíhor **sa bóora kullú ambáy isálan.**

a= əhor sa boora kullu a= m- bay isalan
 3SG normal SBDP person all 3SG SBJ know news
 'It is necessary that everyone should know the news.'

Like *əhor*, the verb *hiɟɟil* 'need' or 'must' when combined with a complement clause introduced with *sa* normally has the third person singular subject clitic *a=*. The AGENT or ACTOR will appear in the direct object position. Examples 4.130 through 4.132 demonstrate.

4.130 ahíɟɟil-a **sa amkóy Táhoua.**

a= hiɟɟil =a sa a= m- koy Tahoua
 3SG must 3SG.OBJ SBDP 3SG SBJ go Tahoua
 'He needs to go to (the town of) Tahoua.'

4.131 ahíɟɟil **yáy sa yatəɟikəl Faarása.**

a= hiɟɟil yay sa ya= tə- ɟikəl Faaransa
 3SG must 1SG.IND SBDP 1SG FUT travel France
 'I must travel to France.'

- 4.132 ahíj̥j̥il iiri **sa alhókum**
 a= híj̥j̥il iiri sa alhókum
 3SG must 1PL.IND SBDR government
 'We need for the government'

amd-í kásaw kan.
 a= m- da =i kasaw kan
 3SG SBJ put 3PL.OBJ prison in
 to put them in prison.'

The verb root of Songhay origin *hurru* 'seek', when combined with a complement clause introduced with *sa*, translates as 'try', as in Examples 4.133 and 4.134.

- 4.133 ahurrú **sa atəwí nin.**
 a= hurru sa a= tə- wi nin
 3SG seek SBDR 3SG FUT kill 2SG.IND
 'He tried to kill you.'

- 4.134 iirihurrú
 iiri= hurru
 1PL seek
 'We tried'

sa iirimsəlmədkat insa-a,
 sa iiri= m- s- əlməd -kat ni= sa =a
 SBDR 1PL SBJ CAUS demonstrate VEN 2SG DAT 3SG.OBJ
 to show it to you,
 maʃʃan niwánʒin.
 maʃʃan ni= wanʒin
 but 2SG refuse
 but you refused.'

Up to this point, all of the verb roots that take a complement introduced with *sa* require either a Subjunctive *m-* or a Future *tə-* in the VP of the complement clause. However, two verb roots, *əʃʃək* 'doubt' and *bay* 'know' take complements introduced with *sa*, but the VP in the complement is not restricted to any particular TAM marker. Both of these verb roots are described below.

The verb root *əʃʃək* 'doubt' is of Tuareg origin and takes a complement introduced with *sa*. Examples 4.135 and 4.136 demonstrate.

- 4.135 iiriyíʃʃək **sa ibhurrú**
 iiri= əʃʃək sa i= b- hurru
 1PL doubt SBDR 3PL IMP seek
 'We doubt that they're'

alxér aayó jiimi wáni.

alxer aayo jiimi wani
 peace DEF truth POSS
 truly seeking peace.'

4.136 **ɣayíʃʃək wúllen sa áŋga**

ɣa= əʃʃək wullen sa aŋga
 1SG doubt much SBDR 3SG.IND
 'I seriously doubt that person'

abáy ha kullú aayó əyédma.

a= bay ha kullu aayo ə- yédma
 3SG know thing all DEF SUB.REL think
 knows all that he thinks (he knows).'

The verb root *bay* 'know' also takes a complement clause introduced with *sa*, but does not require a Subjunctive *m-* or a Future *tə-* in the VP, as in Examples 4.137 through 4.139.

4.137 **iiribáy sa nin da, nizáay-a!**

iiri= bay sa nin da ni= zay =a
 1PL know SBDR 2SG.IND EMPH 2SG steal 3SG
 'We know that it was you who stole it!'

4.138 **ɣabáy wúllen sa abáaya ɣaay.**

ɣa= bay wullen sa a= baaya ɣaay
 1SG know much SBDR 3SG want 1SG.IND
 'I know very well that he loves me.'

4.139 **meerá da abay**

meera da a= bay
 moment EMPH 3SG know
 'Now he knows'

sa nin haŋgén ifér.

sa ni= n haŋgén i= fer
 SBDR 2SG GEN ears 3PL open
 that your ears are open (i.e. are listening).'

In Example 4.140 *təwwəsən* 'be known' is the suppletive Passive voice of *bay* 'know'.

4.140 **atəwwəsən bóora kullú sa**

a= təwwəsən boora kullu sa
 3SG known person all DAT
 'It is known to everyone'

sa iiritəmárya.

sa iiri= tə- marya
 SBDR 1PL FUT marry
 'that we are getting married.'

When the verb root *suufa* 'prefer' takes a complement clause, the default TAM in the complement is typically either the Subjunctive or Future, as in Example 4.141.

4.141 yaay da, yasúufa
 yaay da ya= suufa
 1SG.IND EMPH 1SG prefer
 'I personally would prefer'

sa amtówwəssəs wúllen.

sa a= m- təw- əssəs wúllen
 SBDR 3SG SBJ PASS tie.tightly much
 'that he be tied up very tightly.'

A complement clause introduced with the subordinator *sa* following the verbs *jin* 'say' or *har* 'declare' is the most common way to indicate indirect speech in Tagdal, as in Examples 4.142 and 4.143.

4.142 aḡin ísa sa asəkóy goorá
 a= jin i= sa sa a= səkoy goora
 3SG say 3PL DAT SBDR 3SG NEG.FUT sit
 'He said to them that he will not sit'

nda akáfar waalá aafó.

nda akafar waala aafó
 with infidel none INDEF
 'with any infidel.'

4.143 meerá da, iirihar ánzisa
 meera da iiri= har anzi= sa
 now EMPH 1PL declare 2PL DAT
 'Now, we declare to you(pl)'

sa anga kaalá anəyédkat ne.

sa kaala a= nə- yed -kat ne
 SBDR never 3SG NEG.PRF return VEN here
 'that he (emphatic) never came back here.'

To summarise, complement clauses are typically introduced with the subordinator *sa*.

Unlike adverbial clauses, which precede the principal clause of the sentence, complement clauses follow it. There are a number of verbs that take complements introduced with *sa*. Most of these will require the VP in the complement to have either a Subjunctive *m*- or a Future *tə*- TAM marker. However, two verb roots, *əffək* 'doubt' and *bay* 'know' may have any TAM in the VP of the complement clause. Other verb roots also take complements introduced with *sa*. When combined with *fin* 'say' and *har* 'declare', it is the default way for Tagdal to code indirect speech.

4.8 Relative clauses

The normal Subject or Object relative clause in Tagdal has the following structure:

Figure 4-2 Subject Relative Clause

NP	(DEM / DET)	V	(AP)
NP	<i>aayó / fo</i>	<i>ə</i> - / subject clitic	Adpos+NP+Adpos
		+ verb root	

The head NP occurs first, followed by an optional demonstrative *aayó* or determiner *fo*, depending on whether the head NP is definite or indefinite. These elements are followed by the verb. If the relativised position is the Subject, the verb usually begins with *ə*-likely the same *ə*- which occurs in adjectives of Tuareg origin (see section 3.3.1) and in *wh*- content questions (see section 4.10.3). *ə*- occupies the place where the Subject clitic would normally go in the verb. The exception to the presence of the Subject Relative *ə*- in the Subject Relative position is if the verb in the modifying clause has the Future marker *tə*- and/or a Negation, *sə*- or *nə*-. In those cases, the verb begins with the Future or Negation prefix. Finally, two verb roots¹¹³ that begin with the phoneme *b*, the locative *báara* 'be' and *báaya* 'love, want' do not co-occur with *ə*-. When these are present, if the head noun is the Subject of the relative clause, the verb does not start with *ə*-. If the verb contains the Future prefix *tə*- or a Negation *sə*- or *nə*-, it starts with the respective prefix. Section 4.8.1 discusses Subject relative clauses, followed by Object (Section 4.8.2) and Adpositional relative clauses (Section 4.8.3). Section 4.8.4 discusses a number of unusual constructions with similar functions to those of the relative clause.

4.8.1 Subject relatives clauses

Most relative clauses in Tagdal are Subject Relatives, where the head corresponds to the subject of the Relative Clause. The most common construction is for an NP with a determiner *aayó(nen)* or *fo(onen)*, followed by a verb that begins with the Subject Relative marker *ə*-, as in Examples 4.144 through 4.147.

¹¹³ As far as I can tell, no other verb roots, including those that begin with *b*, behave in this manner.

4.144 **ḡibáraaren aayoonén əwárya,**
 ḡibaraaren aayoonen ə- wárya
 girls DEF.PL SUB.REL be.big
 'Those girls who are nobles

imsəhuunú húžen.
 i= m- sə- huunu húžen
 3PL SBJ NEG exit dwelling
 shouldn't leave (their) homes.'

4.145 **aaró aayó əwánžin,** meerá abáaya
 aaro aayó ə- wánžin meera a= baaya
 man DEF SUB.REL refuse now 2SG want
 'The man who refused now wants

sa atəhár nda nin.
 sa a= tə- har nda nin
 SBDR 3SG FUT talk with 2SG.IND
 to talk to you.'

4.146 **yu aayó əbzáwkat káyyaatan**
 yu aayó ə- b- zaw -kat káyyaatan
 camel.female DEF SUB.REL IMP take VEN baggage
 'The camel that was carrying the package

anətó áyrəm.
 a= nə- to áyrəm
 3SG NEG.PRF arrive town
 didn't arrive in town.'

4.147 amáskəl yás da atəwí
 amaskəl yás da a= tə- wi
 fool only 3SG FUT kill
 'Only a fool will kill

héewi aayó əbná húuwa
 heewi aayó ə- b- na huuwa
 cow DEF SUB.REL IMP give milk
 the cow that gives milk

amwá árat ən háamu záyzi aayó.
 a= m- wa arat n haamu záyzi aayó
 3SG SBJ eat thing GEN meat day DEF
 in order to eat a little meat today.'

In Example 4.148 the construction *a-kullú aafó* provides the NP head in the relative clause and more or less translates as 'each one'. In Example 4.149 *a-kullú aafó* translates as 'every'.

4.148 **a-kullú aafó əyilkəm ása, agén.**

a=	kullu	aafó	ə-	əlkəm	a=	sa	a=	gen
3SG	all	DEF	SUB.REL	follow	3SG	DAT	3SG	lose

'Every single one (animal) that followed him (the goat) got lost.'

4.149 **a-kullú aafó əhinʒin ha fo,**

a=	kullu	aafó	ə-	hinʒin	ha fo
3SG	all	INDEF	SUB.REL	fix	something

'Each one who prepared something (i.e. a meal)

azáwkaat-a amanókal sa.

a=	zaw	kat	=a	amanokal	sa
3SG	bring	VEN	3SG.OBJ	chief	DAT

brought it to the chief.'

In Examples 4.150 and 4.151 the verb is followed by adpositional phrases.

4.150 **sa yaté yaguuná wáy fo əbhurrú**

sa	ya=	te	ya=	guuna	way	fo	ə-	b-	hurru
SBDR	1SG	arrive	1SG	see	woman	IDF	SUB.REL	IMP	search

'When I arrived, I saw a woman who was looking

yan káyyaatan kan.

ya=	n	kayyatan	kan
1SG	GEN	stuff	in

through my things.'

4.151 **ikəmmá fɪfɪfərootan aayoonén əbtəwər**

i=	kəmma	fɪfɪfərootan	aayoonen	ə-	b-	təwər
3SG	find	keys	DEF.PL	SUB.REL	IMP	placed

'They found the keys that had been left (lit. "placed")

moota ga.

moota	ga
car	on

on the car.'

In Example 4.152, the verb in the modifying clause begins with *ə-*, while the head is a first person singular independent pronoun.

4.152 **yaay da əzaabén táyər**

yaay da ə- zaaben táyər
1SG.IND EMPH SUB.REL share drinking.bowl
'I who share the drinking bowl with you,

nda nin, yətəhar ínsa

nda nin ya= tə- har ni= sa
with 2SG.IND 1SG FUT declare 2SG DAT
I will tell you

ha aayó nimdá.

ha aayó ni= m- da
thing DEF 2SG SBJ do
what you should do.'

In Examples 4.153 through 4.155, the the verb contains either a Future tense marker *tə-* or the Negation *nə-*. Therefore, it does not begin with *ə-*.

4.153 iirihúr **áylal aayó təzáwkat íiri Faaránsa.**

iiri= hur áylal aayó tə- zaw -kat iiri faaransa
3PL enter plane DEF FUT bring VEN 1PL.IND France
'We boarded the plane that would take us to France.'

4.154 tármāt azín **azayályol aayó tətəwwəfta íiri.**

tarmat a= zin azayályol aayó tə- tətəwwəfta iiri
quickly 3SG grab lamb DEF FUT be.eaten 1PL
'Quickly he snatched up the lamb that was going to feed us.'

4.155 meerá da nibhurrú **bóoren nəkóy?**

meera da ni= b- hurru booren nə- koy
now EMPH 2SG IMP search people NEG.PRF go
'Now you're looking for people who didn't go?'

In Examples 4.156 and 4.157, the verb does not begin with *ə-* because the root is either *báaya* 'love, want' or the Locative *báara*.

4.156 iirimáy daayó **bóora aayó kullú báaya sa.**

iiri= may daayó boora aayó kullu báaya sa
1PL have place person DEF all want DAT
'We have a place for every person that wants (one).'

- 4.157 asəwwəŋɣa **bóora kullú báara ne.**
 a= səwwəŋɣa boora kullu baara ne
 3SG cause.kill person all LOC there
 'He had everyone there killed.'

In Example 4.158, the idiomatic expression *meerá da aayóoda* means more or less 'right this instant'.

- 4.158 **ánzi-kullú aayoonén báara ne**
 anzi kullu aayoonen baara ne
 2PL all DEF.PL LOC there
 'Every single one of you that are there
 anzi-zumbú meerá da aayóoda!
 anzi= m- zumbu meera da aayooda
 2PL SBJ descend righ.this.instant
 should get down this instant!'

4.8.2 Object relative clauses

As with other relative clause constructions, when the Object is the relativised position the demonstrative or determiner follows the head noun, followed by the verb. However, the verb begins with a normal Subject clitic, rather than with -ə, and there is a gap in the Direct Object position of the relative clause. Examples 4.159 through 4.161 demonstrate.

- 4.159 **aaró aayó iiriqáyit** ar yáabu, ahuunú kásaw.
 aaro aayo iiri= qayit ar yaabu a= huunu kasaw
 man DEF 1PL chase till market 3SG exit prison
 'The man we chased into the market is out of jail.'

- 4.160 **izzén aayoonén nizáwkat** Kéita,
 izzen aayoonen ni= zaw -kat Keita
 children DEF.PL 2SG take VEN Keita
 'Those children you took to (the village of) Keita

meerá da ibáaya sa itáyéd húzen.
 meera da i= baaya sa i= tə- yed húzen
 now EMPH 3PL want SBDR 3PL FUT return home
 now want to go home.'

- 4.161 **tákkooba aayó nidáy bəssəba,**
 takkooba aayo ni= day bəssəba
 sword DEF 2SG sell yesterday
 'That sword you sold yesterday,

nin abóbaz amáay-a.
 ni= n abobaz a= may =a
 2SG GEN cousin 3SG have 3SG.OBJ
 'your cousin has it.'

Example 4.46 is repeated as an example of an Object relative clause.

4.46 ikəmmá **mus aayó nikar tárray kan.**
 i= kəmma mus aayo ni= kar tarray kan
 3PL find cat DEF 2SG hit road in
 'They found the cat you ran over (with your car) on the road.'

In Example 4.162 the head noun is replaced with the demonstrative *aayó*.

4.162 iirisúufa **aayó iiriwəzlət bi.**
 iiri= suufa aayo iiri= wəzlət bi
 1PL prefer DEF 1PL visit yesterday
 'We prefer the one (house) we saw yesterday.'

4.8.3 Adpositional relative clauses

The relativised Adpositional Phrase has the following structure:

Figure 4-3 Adpositional Phrase structure

NP	DEM / DET	Adpositional Phrase	Verb
N / NP	aayó / fo	sa / kan / nda	SBJ clitic + root

In general, the head, including the determiner or demonstrative *fo* or *aayó*, precedes the relativised AP. A brief pause follows, represented in the examples with a comma, then the adposition, followed by the verb, which in most cases begins with a normal Subject proclitic.

The Dative *sa* typically indicates the presence of an Indirect Object, most often with a BENEFACTOR or RECIPIENT role. Further, there is no pronominal reference to the head in the relative clause. Examples 4.163 through 4.166 demonstrate.

4.163 **bárar aayó, sa anzibəfɣəl zun¹¹⁴ farkén,**
 barar aayo sa anzi= b- əfɣəl zun farken
 child DEF DAT 2PL IMP work like donkeys
 'That child for whom you(pl) work like donkeys'

¹¹⁴ The word *zun* 'like' is most likely a code-switch from Tuareg and is possibly not a Tagdal word. I suspect the more common construction would have been *nda farkén* 'like donkeys'.

meerá abáaya sa atəgíʃ qáaran.

meera a= baaya sa a= tə- gíʃ qaran
now 3SG want SBDR 3SG FUT leave study
now wants to abandon (his) studies.'

4.164 **bóora aayó, sa húggu ətəwwəkrəs,**

boora aayo sa huggu ə- təwwəkrəs
person DEF DAT building SUB.REL built
'The person for whom the house was built

ahún addúnya.

a= hun addunya
3SG exit world
died (lit. "left the world").'

4.165 **bóora aayó, sa nisákna móota,**

boora aayo ni= sákna móota
person DEF 2SG demonstrate car
'The person to whom you showed the car

asənnəfrən aafó əfáydan.

a= sənnəfrən aafə ə- faydan
3SG choose INDEF SUB.REL other
chose another one.'

4.166 **ʃibáraaren aayonén, sa iirikóy Báaku,**

ʃibaraaren aayoonen sa iiri= koy Baaku
girls DEF.PL DAT 1PL go Baaku
'Those girls for whom we went to the Baku (bus station),

iirimzáwkaat-i húʒen,

iiri= m- zaw -kat =i húʒen
1PL SBJ take VEN 3PL.OBJ home
so that we could take them home,

ikóy nda boorá fo.

i= koy nda boora fo
3PL go with person IDF
went with someone (else).'

In relative clauses with the Locative *kan* 'in', 'on' or 'at', the postposition follows the head, followed by the determiner *fo* or the demonstrative *aayó*. There is no pronominal reference to the head in the relative clause. In Examples 4.167 through

4.170, the head noun of the phrase is the Subject of the sentence. Therefore, the Adpositional Phrase occurs in the beginning of the sentence.

4.167 **daayo aayo, kan nituk ázzərəf**, man abáara?
 daayo aayo kan ni= tuk ázzərəf man a= baara
 place DEF in 2SG hide silver where 3SG LOC
 'Where is the place where you hid the silver?'

4.168 **huggu aayo, kan ibgoorá**,
 huggu aayo kan i= b- goora
 house DEF in 3PL IMP sit
 'That place where they are staying,

iirinófræg sa
 iiri= nə- əfræg sa
 1PL NEG.PRF able SBDR
 we can't

iirimkəmmá-a.
 iiri= m- kəmma =a
 1PL SBJ find 3SG.OBJ
 find it.'

4.169 **búuhu aayo, kan iiridá árrəz**, man abáara?
 buuhu aayo kan ni= da árrəz man a= baara
 sack DEF in 2SG place rice where 3SG be
 'Where is the sack where we put the rice?'

4.170 **takábar aayo, kan nidá saafaarén**,
 takabar aayo kan ni= da saafaaren
 bowl DEF in 2SG place medicine
 'That bowl in which you put the medicine,

abtəwwəwər tasálat kan.
 a= b- təwwəwər tasalat kan
 3SG IMP placed mat in
 was placed upon the mat.'

In Examples 4.171 through 4.173, the relativised Adpositional Phrase is in the Object position of the sentence.

4.171 **ɣatəkóy alhásan daayo**,
 ɣa= tə- koy Alhásan daayo
 1SG FUT go Alhásan place
 'I'm going to Alhásan's place,

kan yamáy ha fo.¹¹⁵

kan ya= may ha fo
 in 1SG have something
 who owes me money (lit. "in whom I have something").'

- 4.172 hažikán, iirité **gánda aayó Faaransa wani,**
 hažikan iiri= te ganda aayo Faaransa wani
 therefore 1PL arrive city DEF Paris POSS
 'So we arrived at the country of France,

kan iirinəgun waalá ha fo,

kan iiri= nə- gun waala ha fo
 in 1PL NEG.PRF see absolutely.nothing
 where we didn't see absolutely anything,

felás ʃiizí abdá.

felas ʃiizi a= b- da
 because night 3SG IMP do
 because it was night time.'

- 4.173 yamʃikəl **Táhoua,**
 ya= m- ʃikəl Tahoua
 1SG SBJ travel Tahoua
 'I am going to travel to Tahoua,

kan yan tabárar ayíqəl yáay.

kan ya= n tabarar a= əqəl yaay
 in 1SG GEN daughter 3SG wait 1SG.IND
 where my daughter is waiting for me.'

The construction *kan NP báara*, where the noun is in fact a nominalised verb, is a fixed expression which translates more or less along the lines of "really does X very well" or "is very X". Example 4.174 demonstrates.

- 4.174 **hánʃi, kan zúuru báara aʃi.**
 hanʃi kan zuuru baara a= ʃi
 dog in run be 3SG be
 'It was a dog who ran really fast (lit. "dog in which running was in him").'

Similarly, the idiomatic expression *kan ADJ báara* 'in whom is ADJ' is used to indicate that the noun possesses the qualities in the ADJ in great abundance, as Example 4.175 demonstrates.

¹¹⁵ 'Something' is a common euphemism for money in many *Nigérien* languages.

4.175 áhhaane **tabárar, kan hóssaayan báara!**

ahaane tabarar kan hossaayan baara
 FOC girl in beauty LOC
 'Here is a very beautiful girl!'

Unlike other adpositions in Tagdal, *nda* 'with' is a preposition, rather than a postposition. However, in relativised Adpositional Phrases, *nda* tends to have the same structure as its postpositional counterparts, including not allowing pronominal reference to the head in the relative clause. One main difference is that, like *sa*, *nda* tends to follow, rather than precede, the head. Examples 4.176 through 4.178 demonstrate.

4.176 **aaró aayó, nda nibhangá, abáydag afi.**

aaro aayo nda ni= b- hanga abaydag a= fi
 man DEF with 2SG IMP accompany thief 3SG be
 'That man with whom you hang out is a thief.'

4.177 **karfó aayó, nda atətówkərəd, afi.**

karfo aayo nda a= tə- təw- kərəd a= fi
 rope DEF with 3SG FUT PASS tie.down 3SG not.be
 'There is no rope with which to hobble it (an animal).'

4.178 **bóora aayó, nda iirimfikəl,**

boora aayo nda iiri= m- fikəl
 person DEF with 1PL SBJ travel
 'The person with whom we're supposed to travel

harwá anətéekat.

harwa a= nə- te -kat
 still 3SG NEG.PRF arrive VEN
 'still hasn't arrived.'

Example 4.179 the verb *təwwənya* 'killed' is the Passive suppletive form of the Songhay *wi* 'kill'.

4.179 **iirinəkəmmá bəndiga aayó, nda atəwwənya.**

iiri= nə- kəmma bəndiga aayo nda a= təwwənya
 1PL NEG.PRF find rifle DEF with 3SG killed
 'We did not find the rifle with which he was killed.'

As usual, the postposition *ga* 'on' follows the head, with a brief pause, between the relativised phrase and the rest of the sentence, as in Examples 4.180 and 4.181.

4.180 adá **ha fó, ga boorén əbwí!**

a= da ha fo ga booren ə- b- wi
 3SG do something on people SUB.REL IMP kill
 'He did something that people kill over!'

4.181 ánga absəqqərət **ha aayó,**

aŋga a= b- səqqərət ha aayo
 3SG.IND 3SG IMP scream that.thing
 'That one screams out that

ga aaró kullú amsəsəm.

ga aaro kullu a= m- səsəm
 on man all 3SG SBJ be.silent
 'which every man should remain silent about.'

4.8.4 Other

In most cases, relative clauses are indicated by the grammatical elements present within the sentence. However, Tagdal has various types of relative-type constructions where some of these elements are omitted. The first part of this section discusses relative clauses without the demonstrative *aayó* or determiner *fó*, followed by a discussion of relative clauses where *aayó* and *fó* function as the head – not a rare occurrence in itself, but uncommon enough to be included in this section. Finally the section ends with a discussion of relative constructions introduced with the subordinator *sa*.

The absence of a definite or indefinite marker in relative clauses is fairly common in Tagdal. Christiansen-Bolli (2010) analysed this phenomenon in Tagdal's sister language, Tadaksahak, as an indefinite NP head. Tagdal, however, marks the indefinite NP head with *fó*. In this manner, it looks much more like Tuareg (e.g. Kossmann, 2011: 113, 159), whose NPs and relative clauses have a set of pre-modifier pronouns to mark definite, indefinite or neutral, as well as gender. Relative clauses lacking a pre-modifier pronoun could have either a definite or an indefinite NP head, though these are more likely to be indefinite. In Tagdal, this is also the case – in Examples 4.182 through 4.185, the last two are definite, all others are indefinite.

In at least some cases, the lack of the determiner *aayó* or *fó* in the NP, rather than indicating definite or indefinite, places emphasis upon certain qualities of the NP. For example, in 4.182, the NP subject *kayne* 'jackal' is being introduced to the discourse for the first time, so the question may or may not be applicable. Regardless, it lacks a determiner to indicate definite or indefinite. Instead, the focus of the sentence is on his qualities, specifically that of being clever – *fikərras əm bayyén*, literally 'knowledge of cleverness'.

4.182 meera, imúddaaran kullú,
 meera imuddaaran kullu
 now living.things (animals) all
 'Now, (of) all living things,

káyne abíis-i
 kayne a= bis =i
 jackal 3SG surpass 3PL.OBJ
 the jackal surpassed them

ḡikərras əm bayyén.
 ḡikərras m bay -en
 cleverness GEN know NOM
 in cleverness.'

In Example 4.183 some travellers had taken water from a well. Afterward, they placed the leather container used to draw water, represented in both clauses pronominally by =a, aside for others to use.

4.183 idá-a á-kan,
 i= da =a a= kan
 3PL place 3SG 3SG in
 'They put it in the place

bóora kullu əhurru sa-á.
 boora kullu ə- hurru sa =a
 person all SUB.REL search DAT 3SG
 for anyone who would look for it.'

In Examples 4.184 and 4.185, the NP is definite.

4.184 meerá da nibhurrú
 meera da ni= b- hurru
 now EMPH 2SG IMP search
 'Now you're looking for

bóoren nəkóy?
 booren nə- koy
 people NEG.PRF go
 the people who didn't go?'

4.185 iirikəmmá aarén əzay móota.
 iiri= kəmma aaren ə- zay moota
 1PL find men SUB.REL steal car
 'We found the men who stole the car.'

In some cases where the head noun of a relative clause is understood, it is possible to leave it out altogether. The result is usually a relative clause with either *aayó* or *aafó* acting as a pronominal head of the relative clause. Examples 4.186 through 4.189 demonstrate.

4.186 *ɣaguuná aayó nibhurrú.*

<i>ɣa=</i>	<i>guuna</i>	<i>aayo</i>	<i>ni=</i>	<i>b-</i>	<i>hurru</i>
1SG	see	DEF	2SG	IMP	search

'I saw the one that you are looking for.'

4.187 *aayoonén əbhangá nda-a,*

<i>aayoonen</i>	<i>b-</i>	<i>hanga</i>	<i>nda</i>	<i>=a</i>
DEF.PL	IMP	accompany	with	3SG.OBJ

'Those who hang out with him

imkí meerá da aayóoda!
i= m- ki meeraada aayooda
 3PL SBJ stop right away
 should stop right now!'

4.188 *iirisənnəfrən aafó əfi.*

<i>iiri=</i>	<i>sənnəfrən</i>	<i>aafó</i>	<i>ə-</i>	<i>fi</i>
1PL	choose	one	SUB.REL	not.be

'We chose one who was not here.'

4.189 *aayó səbgúr eerán,*

<i>aayo</i>	<i>sə-</i>	<i>b-</i>	<i>gur</i>	<i>eeran</i>
DEF	NEG.IMP	IMP	scoop.up	water

'The one who is not scooping up water,

əŋga da asənnəfrən.
aŋga da a- sə- ənnəfrən
 3SG.IND EMPH 3SG CAUS choose
 he is is the chosen (one).'

In Example 4.190, the Imperfective aspect *b-* places certain emphasis on the the verb being ongoing, rather than unfinished.

4.190 *ɣabhurrú aafó əyínnay.*

<i>ɣa=</i>	<i>b-</i>	<i>hurru</i>	<i>aafó</i>	<i>ə-</i>	<i>ənnay</i>
1SG	IMP	search	one	SUB.REL	new

'I'm in the midst of looking for a new one.'

Another way that Tagdal replaces a relative clause's NP head is by means of the expressions *a-kullú aayó* 'every' and *a-kullú aafó* 'each'. Here, Examples 4.148 and 4.149 from above are repeated.

4.148 **a-kullú aayó əyilkəm ása, agén.**

a=	kullu	aayo	ə-	əlkəm	a=	sa	a=	gen
3SG	all	DEF	SUB.REL	follow	3SG	DAT	3SG	lose

'Every single one that followed him got lost.'

4.149 **a-kullú aafó əhinʒin ha fo,**

a=	kullu	aafó	ə-	hinʒin	ha fo
3SG	all	INDEF	SUB.REL	fix	something

'Each one who prepared something

azáwkaat-a amanókal sa.

a=	zaw	kat	=a	amanokal	sa
3SG	bring	VEN	3SG.OBJ	chief	DAT

brought it to the chief.'

There is a rare alternative to the relative constructions treated above, which involves the subordinator *sa*. In this construction the verb always takes the regular Subject prefixes, even in Subject relatives.

4.191 **aháfī aaró aayó**

a=	hafī	aaro	aayo
3SG	look.intently	man	DEF

'He looked intently at

sa ʔnga amay húgu.

sa	ʔnga	a=	may	hugu
SBDR	3SG.IND	3SG	have	house

the man who owns the house.'

4.192 **amárya nda way fo sa abáy qáaran.**

a=	marya	nda	way	fo	sa	a=	bay	qaran
3SG	marry	with	woman	IDF	SBDR	3SG	know	study

'He married a woman who knew how to read.'

4.193 **aaró aayó sa am man Séydu,**

aaro	aayo	sa	a=	n	man	Seydu
man	DEF	SBDR	3SG	GEN	name	Seydu

'The man whose name is Seydu,

án̄ga fód̄a amə́m̄aŋkat giʃé.
 aŋga fooda a= m- man -kat giʃe
 3SG.IND only.one 3SG SBJ be.near VEN window
 only he should approach the window.'

4.9 Commands, requests

How commands and requests are formulated in Tagdal depends on the how strong or polite the speaker wishes to make them, relative to the communication situation. Requests with a softer, more polite, less confrontational, tone are on one end of the scale, using a construction with the verb *báaya* 'want' followed by Noun Phrase, most often an independent pronoun, and the Locative marker *kan*. On the other end of the continuum, outright commands are usually made with a simple imperative verb. Between these two extremes, a simple clause with the verb containing the Subjunctive *m-* is the default for most commands and requests. Each of these is discussed below.

4.9.1 *báaya* NP *kan*

The most polite way to form a request in Tagdal is by means of the verb *báaya*, followed by a Noun Phrase or an independent pronoun and the Locative marker *kan*. This indicates both who is making the request and to whom. Usually the thing desired is formulated as a complement clause introduced by the subordinator *sa*.

4.194 **yabáaya án̄zi kan** sa an̄zimkóy
 ya= baaya an̄zi kan sa an̄zi= m- koy
 1SG want 2PL.IND in SBDR 2PL SBJ go
 'I would like you(pl) to go

folissaatan daayó, an̄zimhurrú áȳsa móota.
 folissaatan daayo an̄zi= m- hurru ya= sa moota
 police place 2PL SBJ search 1SG DAT car
 to the police station in order to get (my) car for me.'

4.195 **yabáaya nín kan**
 ya= baaya nin kan
 1SG want 2SG.IND in
 'I would like you

sa nimkóy yáay daayó¹¹⁶.
 sa ni= m- koy yaay daayo
 SBDR 2SG SBJ go 1SG.IND place
 to go to my place.'

¹¹⁶ in the construction *yáay daayo* 'my place', normal stress patterns are co-opted and stress shifts to the pronoun.

Examples 4.196 and 4.197 are descriptions of previous events.

4.196 **abəbáaya yaay kan**

a= b- baaya yaay kan
 3SG IMP want 1SG.IND in
 'He wanted me

sa yamkúd an álman.

sa ya= m- kud a= n alman
 SBDR 1SG SBJ herd 3SG GEN flock
 to take his animals out to pasture.'

4.197 **iiribáaya ánga kan**

iiri= baaya ánga kan
 1PL want 3SG.IND in
 'We would like

sa atəxáddədət iirisa jisállaaatan.

sa a= tə- xaddədət iiri= sa jisallaatan
 SBDR 3SG FUT roll 1PL DAT mats
 him to roll up the mats for us.'

4.9.2 With Subjunctive *m-*

A second type of construction for making requests or giving commands is by means of a Subjunctive marker on the Verb Word. This is the most neutral way of giving commands or making requests and is not considered either rude or excessively polite. Examples 4.198 through 4.200 demonstrate.

4.198 **nimsówər ha aayó ahákət kan.**

ni= m- səwər ha aayó akakət kan
 2SG SBJ place thing DEF tent in
 'You should put that in the tent.'

4.199 **anžimbáykat wúllen yam báaraan kan.**

anži= m- bay -kat wullen ya= n báaraan kan
 2PL SBJ know VEN very 1SG GEN children in
 'You should look well after my children.'

4.200 **bóora kullú**

boora fo kullu
 person IDF all
 'Each person should

amhiináakat an adáyas.

a= m- hiina -kat a= n adayas
 3SG SBJ prepare VEN 3SG GEN colostrum
 prepare their colostrum.'

4.9.3 With imperative

The strongest form for giving a command is the simple imperative verb. The imperative form does not take any proclitics, even for plural Subjects, or TAM markers, though it can be combined with a Negation in prohibitives. Since this form could be considered somewhat rude, it does not occur often.¹¹⁷ Examples 4.201 and 4.202 demonstrate.

4.201 **ətkəl-a!**

ətkəl =a
 take 3SG
 'Take it!'

4.202 **nəsəṭəf** takábar kan!

nə- s- əṭəf takabar kan
 NEG.PRF CAUS spit cup in
 'Don't spit in the cup!'

In Example 4.203, the two orders given are coordinated.

4.203 **koy** a-daayó, **záwkat** áysa

koy a= daayo zaw -kat ya= sa
 go 3SG place bring VEN 1SG DAT
 'Go to his place and bring to me

an fələqqaawan!

a= n fələqqaawan
 3SG GEN poor.people
 his dependents!'

¹¹⁷ The question of how one makes a request of a person of lower rank comes up here. In general, I personally have rarely heard servants, or even children, spoken to with the imperative, unless there was anger or annoyance being conveyed, or in case of emergencies. However, this is a question that requires more study.

4.10 Questions

The discussion below will include yes/no questions (Section 4.10.1), tag questions (Section 4.10.2) and content questions (Section 4.10.3).

4.10.1 Yes/no questions

Yes/no questions do not have any special particles or syntax. Most often, a slight rising of intonation at the end of the sentence indicates that the sentence is a question, as in Examples 4.204 through 4.207.

4.204 *insəkúula húuwa?*
 ni= səkuula huuwa
 2SG not.want milk
 'You don't want (any) milk?'

4.205 *bəssəba atəkóy yáabu?*
 bəssəba a= tə- koy yaabu
 tomorrow 2PL FUT go market
 'Is he going to market tomorrow?'

4.206 *nin da nibáaya sa intədərrəg?*
 nin da ni= baaya sa ni= tə- dərrəg
 2SG.IND EMPH 2SG want SBDR 2SG FUT flee
 'Do you, too, want to run away?'

4.207 *ha zi, harám meeda əyiháalan?*
 ha zi haram meeda ə- əħal -an
 thing MED forbidden or SUB.REL clean ADJR
 'Is that forbidden or is it allowed?'

Another way of asking yes/no questions in Tagdal is by means of the interrogative particle *ənta* introducing the sentence. In at least certain contexts, it seems that starting a sentence with *ənta* makes the question stronger, as opposed to the simple yes/no questions above. Examples 4.208 and 4.209 demonstrate questions introduced with *ənta*.

4.208 *ənta nidá tayáysar aayó?*
 ənta ni= da tayáysar aayo
 INT 2SG do mess DEF
 'Did you make that mess?'

4.209 **ənta** niyíqəl nim ber?
 ənta ni= əqəl ni= n ber
 INT 2SG wait 2SG GEN older.sibling
 'Are you waiting for your older brother?'

Beginning a question with *ənta* can communicate doubt about a previous assertion. This is especially true if the question immediately follows the assertion. In Examples 4.210 through 4.212, sentences marked with "a" indicate the assertion and those with "b" indicate the question which follows, introduced with *ənta*.

4.210a alžummafa atəyədnan a-daayó.
 alžumafa a= tə- yed -nan a= n daayo
 Friday 3SG FUT return ALL 3SG GEN place
 'He is going back to his place on Friday.'

4.210b **ənta** atəyéd?
 ənta a= tə- yed
 INT 3SG FUT return
 'Is he really going back?' (possible alternative: 'Is he ever really going back?')

4.211a aaró ʒi abáy takáfar wúllen.
 aaro ʒi a= bay takafar wullen
 man MED 3SG know French very
 'That man knows French very well.'

4.211b **ənta** abáay-a?
 ənta a= bay =a
 INT 3SG know 3SG.OBJ
 'Does he really know it?'

4.212a ʒayʒi aayó bóora fo alhókum wáni amté,
 ʒayʒi aayo boora fo alhokum wani a= m- te
 day DEF person IDF state poss 3SG SBJ arrive
 'Today someone from the government should come

amyeeʒiikat iirin ázzərəf.
 a= m- yeeʒi -kat iiri= n azzərəf
 3sg SBJ return VEN 1PL GEN silver
 to return our money.'

4.212b **ənta** itəyeeziikaat-a?¹¹⁸
 ənta i= tə- yeézi -kat =a
 INT 3PL FUT return VEN 3SG
 'Are they really going to return it?'

In Example 4.213, the response containing *ənta* in sentence *b* is further intensified with the construction *jiimí da* 'truly'.

4.213a yáyédma sa Alɣabbás abáaya Amina.
 ya= ədma sa Alɣabbas a= baaya Amina
 1SG think SBDR alɣabbas 3SG want Amina
 'I think that Alabbas loves Amina.'

4.213b **ənta** abáaya-a jiimí da?
 ənta a= baaya =a jiimí da
 INT 3SG want 3SG truth EMPH
 'Do you think that he really loves her?'

In Example 4.214, the presence of *ənta* adds an element of doubt, but also functions to make a question even stronger, adding an element of insult.

4.214 **ənta** nibáy jiimí?
 ənta ni= bay jiimi
 INT 2SG know truth
 'Do you even know (how to tell the) truth?'

4.10.2 Tag questions

In Tagdal, tag questions, where the positive answer is presupposed, are relatively uncommon and can be difficult to distinguish from content questions. Therefore, context is necessary to disambiguate. Usually tag questions are marked with *ákka* and intonation then rises at the end of the sentence, to indicate a question.

4.215 Xádər akóy **ákka**?
 Xádər a= koy akka
 Xádər 3SG go INT.TG
 'Xádər left, didn't he?'

¹¹⁸ In Examples 4.209 a,b, the Subject changes from the third person singular *a=* in the first sentence to the third person plural *i=* in the response. This most likely indicates that the Subject in sentence *b* has changed, from *bóora fo alhókum wáni* 'someone from the government' to the government itself.

4.216 móota amáy esáns **ákka**?
 moota a= may esans akka
 car 3SG have gasoline INT.TG
 'The car has gasoline doesn't it?'

4.10.3 Content questions

There are three main question particles, *may* 'who?', *məʃfi* 'what?' and *man* 'where?', as well as a few constructions based on these particles, which occur at the beginning of the sentence and take on a Subject function. When the interrogative element functions as the subject of the sentence, the verb will begin with the Subject Relative prefix *ə-*, rather than with a proclitic. At this point, content questions and relative clauses have similar syntax. Each of these particles, along with possible combinations derived from these, will be discussed below.

The interrogative particle *may* can occur by itself or can be combined with the Possessive marker *wáni*, in order to ask about ownership or kinship. Both are discussed below. Examples 4.217 and 4.218 demonstrate questions introduced with *may* 'who?'

4.217 **may** əʃi?
 may ə- ʃi
 who SUB.REL be
 'Who is it?'

4.218 **may** ədá tayaáysar aayó?
 may ə- da tayaaysar aayo
 who SUB.REL do mess DEF
 'Who made that mess?'

In Example 4.219 the question introduced with *may* is subordinate.

4.219 yaséstən ʔan íman kan
 ʔa= səstən ʔa= n iman kan
 1SG ask 1SG GEN soul in
 'I ask myself

may əyífræg ha aayó?
 may ə- əfræg ha aayo
 who SUB.REL power thing DEF
 'who is capable of doing that?'

The construction *may wáni*, a combination of *may* with the Possession marker *wáni*, or its plural, *may wánen*, functions to ask the question of ownership or kinship 'whose?', as in Examples 4.220 and 4.221.

4.220 **may wáni** ha aayó?
 may wani ha aayo
 who POSS thing DEF
 'Whose is that?'

4.221 **may wánen** álman fen?
 may wanen alman fen
 who POSS.PL flocks DIS
 'Whose animals are those?'

In Example 4.222, the Direct Object is placed in front and the predicate is the copular verb *fi*. The issue of the differences between the *may wáni* construction with or without the copula requires more study. It may be that fronting the Object requires the copula, or it could have something to do with Kinship. However, instances of this seem to be uncommon.

4.222 tabárar zi, **may wáni** afi?
 tabarar zi may wani a= fi
 girl MED who POSS 3SG be
 'That girl, whose (daughter) is she?'

Examples 4.223 and 4.224 are typical of how *məʃfi* 'what?' functions.

4.223 **məʃfi** nibáaya?
 məʃfi ni= baaya
 what 2SG want
 'What do you want?'

4.224 **məʃfi** anʒisónnəfrən?
 məʃfi anʒi= sɔnnəfrən
 what 2PL choose
 'What did you(pl) choose?'

In Examples 4.225 and 4.226, the Subjects of the main clauses take the Subject Relative *ə-*.

4.225 **məʃfi** əfi iridá?
 məʃfi ə- fi iiri= da
 məʃfi SUB.REL be 1PL do
 'What is it that we did?'

- 4.226 **məʃfi** ətəw wətəkəl?
 məʃfi ə- təw- ətəkəl
 what SUB.REL PASS take
 'What was taken (i.e. stolen)?'

There are a number of additional constructions derived from *məʃfi* 'what?'. *məʃfi álwaq*¹¹⁹ 'when?' is a combination of *məʃfi* with the noun *álwaq* 'moment' or 'time'.

- 4.227 **məʃfi álwaq** intədə-a?
 məʃfi álwaq ni= tə- da =a
 what time 2SG FUT do 3SG.OBJ
 'When are you going to do it?'

- 4.228 **məʃfi álwaq** iiritéenan?
 məʃfi álwaq iiri= te -nan
 what time 1PL arrive ALL
 'When did we arrive?'

- 4.229 **məʃfi álwaq** abáaya sa yamkóykát?
 məʃfi álwaq a= baaya sa ya- m- koy -kat
 what time 3SG want SBDR 1SG SBJ go VEN
 'When does he want me to come?'

məʃfiggá 'why?' is a combination of the particle *məʃfi* and the postposition *ga* 'on'. When combined, stress shifts to the final syllable and the first consonant in *ga* is lengthened, as in Examples 4.230 through 4.232.

- 4.230 **məʃfiggá** nida ha aayó?
 məʃfigga ni= da ha aayo
 why 2SG do thing DEF
 'Why did you do that?'

- 4.231 **məʃfiggá** ikóy sa yagánḡa isa-a?
 məʃfigga i= koy sa ya= ganḡa i= sa =a
 why 3PL go SBDR 1SG forbid 3PL DAT 3SG.OBJ
 'Why did they go when I forbade them to do it?'

- 4.232 **hazikán, məʃfiggá** amzáwnaan-a?
 hazikan məʃfigga a= m- zaw -nan =a
 therefore why 3SG SBJ take ALL 3SG.OBJ
 'So then, why does he need to transport it?'

¹¹⁹ In Tabarog, and possibly other varieties of Tagdal, this is pronounced as a single word *məʃfálaq*.

Questions using *man* 'where?'

man is another Interrogative particle, from which a number of other Interrogatives can be derived. When occurring by itself, it asks the question 'where?'. It also forms the base for *man ikət* 'how much?' and *man ha aayó nda* 'how?' Each of these will be discussed below. Examples 4.233 and 4.234 demonstrate how *man* 'where?' functions when occurring by itself.

4.233 **man** abáara?
 man a= baara
 where 3SG LOC
 'Where is it?'

4.234 **man** nisəwər-a?
 man ni= səwər =a
 where 2SG place 3SG.OBJ
 'Where did you put it down?' (meaning, 'Where did you leave it?')

man ikət 'how much?' is one derivation possible from the Interrogative particle *man*, as in Examples 4.235 and 4.236.

4.235 **man ikət** anʒidáynan?
 man ikət anʒi= day -nan
 how many 2PL deal ALL
 'How many did you buy?'

4.236 **man ikət** qáaran iyífræg?
 man ikət qaran i= əfræg
 how many read 3PL power
 'How many can read?'

In Example 4.237, the verb in the main clause has the Subject Relative marker *ə-*.

4.237 **man ikət** ətəwənnəfrən?
 man ikət ə- təw- ənnəfrən
 how many SUB.REL PASS choose
 'How many were chosen?'

The unusual construction *man ha aayó nda* 'how?' in the beginning of a sentence functions primarily to inquire about the means by which something was or is going to get done. It is a combination of the Manner construction *ha aayó nda* 'how' with the Interrogative particle *man*. Typically the Direct Object occurs before the predicate.

4.238 **man ha aayó nda** ha aayó niyífræg?
 man ha aayó nda ha aayó ni= əfræg
 how? thing DEF 2SG power
 'How could you do that?'

4.239 **man ha aayó nda** ha aayó ada?
 man ha aayó nda ha aayó a= da
 how? thing DEF 3SG do
 'How did this happen?'

4.240 **man ha aayó nda** hur nda húžen iyífræg?
 man ha aayó nda hur nda húžen i= əfræg
 how? enter toward buildings 3PL power
 'How were they able to get inside the compound?'

4.241 **man ha aayó nda** qáaran niyílməd?
 man ha aayó nda qaran ni= əlməd
 how? read 2SG learn
 'How did you learn to read?'

4.242 **man ha aayó nda** iiritətə?
 man ha aayó nda iiri= tə- te
 how? 1PL FUT arrive
 'How are we going to get there?'

***ma aafó* + NP 'which?'**

ma aafó 'which?' seems to be somewhat of an exception, in the sense that the it does not seem to be based on a base Interrogative connector.¹²⁰ Examples 4.243 and 4.244 demonstrate.

4.243 **ma aafó** iirin faarayyen kan intəgí?
 ma aafó iiri= n faarayyen kan ni= tə- gíʃ
 which 1PL GEN friends in 2SG FUT leave
 'Which of our friends will you leave behind?'

4.244 **ma aafó** intəsəʔkəl?
 ma aafó ni= tə- sə- əʔkəl
 which 2SG FUT CAUS take
 'Which one will you grab?'

¹²⁰ Unless *ma* itself the base. This is certainly possible. However, it only occurs in this instance.

In Example 4.245, *ma aafó álwaq* 'at which time' seems to be similar to *məffĩ álwaq* 'when?', except that the speaker was choosing between a number of possible moments, while with *məffĩ álwaq* refers to some unspecified, unknown moment in time.

4.245 **ma aafó** álwaq até?
 ma aafó alwaq a= te
 which time 3SG arrive
 'At what time did he arrive?'

In Example 4.246 *ma aafó* is the Subject of the sentence. Therefore, the Subject Relative *ə-* is used.

4.246 **ma aafó** ətəwsəgla?
 ma aafó ə- təw- səgla
 which SUB.REL PASS cause.go
 'which one was sent?'

Content questions with adpositions

It is possible to combine other question particles with adpositions in order to form questions. Among these are *may* 'who?', *ma aafó* 'which?' and *məffĩ* 'what?'. Each of these will be discussed below.

The most common question particle in this construction is *may* 'who?', as in Examples 4.247 through 4.249. Stress will fall on the interrogative particle *may* and the adposition will not take stress at all.

4.247 **máy nda** intəkóy?
 may nda ni= tə- koy
 who with 2SG FUT go
 'Who are you going with?'

4.248 **máy sa** iirimdá ha aayó
 may sa iiri= m- da ha aayó
 who DAT 1PL SBJ do thing DEF
 'Whom should we do this for?'

4.249 **máy daw**¹²¹ nikóy?
 may daw ni= koy
 who at 2SG go
 'To whose place did you go?'

¹²¹ Example 4.249 was pronounced by an Abargan-Tagdal speaker, in which the Locative is pronounced *daw* 'place' instead of *daayó*, as elsewhere in Tagdal.

In Example 4.250, *may ha fo* 'have something' is a euphemism for being owed money.

- 4.250 **máy kan** yamáy ha fo?
 who kan ya= may ha fo
 who in 1SG have thing IDF
 'Who owes me money?' (lit. 'In whom do I have something?')

ma aafó 'which?' can also be combined with adpositions, as 4.251 through 4.255 demonstrate.

- 4.251 tabbárar **ma aafó ga**¹²² izóq?
 tabarar ma aafó ga i= zoq
 girl which on 3PL fight
 'Which girl did they fight over?'

- 4.252 ahákæt **ma aafó kan** abáara?
 ahakæt ma aafó kan a= baara
 tent which in 3SG LOC
 'Which tent is he in?'

- 4.253 tasálat **ma aafó ga** yamgoorá?
 tasalat ma aafó ga ya= m- goora
 mat which on 1SG SBJ sit
 'Which mat should I sit on?'

- 4.254 **ma aafó sa** nidáykaat-a?
 ma aafó sa ni= daykat =a
 which DAT 2SG buy 3SG
 'Which one did he buy it for?'

- 4.255 **ma aafó nda** izáykat ázzərəf?
 ma aafó nda i= zay -kat ázzərəf
 which with 3PL steal VEN money
 'With which (tool) did they steal the money?'

Finally, *məffī* 'what?' can be combined with certain adpositions as well. It is likely that *məffiggá* 'why?' is one example, which occurs frequently enough to have become a separate construction. *Məffī* can be combined with others as well, as in Examples 4.256 and 4.257.

¹²² In Example 4.251, the Subject *tabbárar* 'girl' is placed in front for relative emphasis. In addition, it had not occurred in some time in the previous discourse and, therefore, needed to be reintroduced with a noun.

4.256 **məffī nda** intəhinziin-a?

məffī	nda	ni=	tə-	hinziin	=a
what	with	2SG	FUT	fix	3SG

'With what will you fix it?'

4.257 **məffī daayó** anziitəkúrkur?

məffī	daayó	anzi=	tə-	kurkur
what	place	2PL	FUT	burn

'What (person's) place will you(PL) burn?'

In Example 4.259, the normal stress pattern in *məffī* shifts to the adposition *kan*, which normally does not have any stress, leading to the form *məffīkán*. This is similar to what happens with *məffīggá* 'why?'. I have no explanation for this occurrence, since to my knowledge, *məffīkán* is not a fixed, regularly-occurring expression.

4.258 **məffīkán** iirimtúuk-a?

məffī	kan	iiri=	m-	tuk	=a
what	in	1PL	SBJ	hide	3SG

'What should we hide it in?'

4.11 Cohesion

This section will include discussions of cohesion, prominence and paragraph structure in Tagdal. Section 4.11.1 will discuss how connectors play a role in these three functions. Then, Section 4.11.2 will discuss various grammatical constructions that also play a role.

4.11.1 Particles, Connectors

The most common way of maintaining cohesion and increasing relative prominence in Tagdal is by means of connectors. Among the most common of these are *ha zi naláqqam* and *təzzár* 'after that' or 'then'; *áygas* 'but', 'before' or 'however'; *miffan* 'but'; *haziggá* 'because of that' and *hazikán* 'therefore'; and *ənguuzi* 'suddenly' or 'right then and there'.

ha zi n aláqqam / *ha aayó n aláqqam* 'after that'

The constructions *ha zi n aláqqam* and *ha aayó n aláqqam* 'after that' seem to be interchangeable. First, they signal the main clause in a complex sentence, especially

when combined with other clauses introduced by the subordinator *sa*. Second, they signal the end of a sequence of verbs, or the end of a section or paragraph. Third, when occurring in a stand-alone sentence with only one clause, the connection is to the preceding discourse and signals a brief peak in an episode. There seems to be a generational aspect to this connector. Older Tagdal speakers sometimes use *ha zi m bānda* or *ha aayó m bānda* instead. **bānda* 'behind', which does not seem to be a word in Tagdal otherwise, is the Zarma equivalent to the Tuareg *aláqqam* 'behind'.¹²³

In Example 4.259, *ha zi n aláqqam* here has two principal functions. First, it signals the end of a sequence of clauses and of the sentence. Second, it draws attention to the final verb *ki* 'stop' or 'stand'. In the context of the overall discourse, it indicates that the speaker and his co-travelers decided to stay, instead of continuing their journey.

4.259 *sa iirikóoy-a, iiritée-a,*
 sa iiri= koy =a iiri= te =a
 SBDR 1PL go 3SG.OBJ 1PL arrive 3SG.OBJ
 'When we went and arrived there

ha zi n aláqqam *iirikí á-kan.*
 ha zi nalaqqam iiri= ki a= kan
 after.that 1PL stop 3SG in
 then we stopped there.'

In Example 4.260 the comma represents a brief pause that occurs when *ha zi n aláqqam* introduces the sentence and, therefore, connects it to the previous discourse.

4.260 ***ha zi n aláqqam,*** *iirihúr áylal aayó*
 ha zi n alaqqam iiri= hur áylal aayó
 after.that 1PL enter vehicle DEF
 'After that, we boarded the plane

təzáwkat iiri Fáaransa.
 tə- zaw -kat iiri Faaransa
 FUT bring VEN 1PL France
 (that would) take us to France.'

Example 4.261 is from a story about a fight that broke out between some Tagdal speakers and some Fulani herdsmen over the right to use a well, during which a number of Fulanis were killed.

¹²³ In addition, in Zarma *bānda* also means 'buttocks'. Therefore, younger Tagdal speakers from majority Songhay speaking areas find the expression *ha zi m bānda* funny.

4.261 **ha aayó n aláqqam**, iiridá zirbí híŋka kásaw kan
 ha aayó n aláqqam iiri= da zirbí híŋka kasaw kan
 after.that 1PL do year two prison in
 'After that, we spent two years in prison'

boorén aayoonén n addólél ga!
 booren aayoonen n addólél ga
 people DEF.PL GEN responsibility on
 because of those people!'

Example 4.262 is about a naming ceremony seven days after the birth of a baby, after the man and his wife had lost a number of other children. The presence of *ha zi n aláqqam* serves to heighten the prominence of the events in the sentence.

4.262 **ha zi n aláqqam**, ada barar sa man Xádər.
 ha zi n aláqqam a= da barar sa man Xádər
 after.that 3SG place boy DAT name Xádər
 'After that, he gave the boy the name Xader.'

In Example 4.263, *ha zi n aláqqam* functions to bring the section of discourse to a close.

4.263 **ha zi n aláqqam**, sa aŋin áyša
 ha zi n aláqqam sa a= ŋin ya= sa
 after.that SBDR 3SG say 1SG.OBJ DAT
 'After that, when he told me I should go,

yamkóy, yaýéd ya-húngu.
 ya= m- koy ya= yed ya= n huggu
 1SG SBJ go 1SG return 1SG GEN dwelling
 I returned to my tent.'

***təzzár* 'then'**

At first glance, the connector *təzzár* 'then' is very similar to *ha zi n aláqqam* and *ha aayó n aláqqam* 'after that'.¹²⁴ Both indicate the presence of a main clause of a complex sentence, especially in cases where the first clause is introduced with the Subordinator *sa*. However, there are a number of key differences between *təzzár* 'then' and *ha zi n aláqqam* / *ha aayó n aláqqam* 'after that'. First, *təzzár* is primarily a temporal marker, while *ha zi n aláqqam* and *ha aayó n aláqqam* are primarily

¹²⁴ In fact, the two have enough overlapping functions that they are essentially interchangeable in short (i.e. one sentence to, say, two paragraph) discourses.

sequential markers. Second, *ha zi n aláqqam* / *ha aayó n aláqqam* tends to mark the end of a section or paragraph. *təzzár*, on the other hand, may occur at the end of a complex sentence in shorter discourses. But its normal function is to mark the beginning of a section or paragraph, especially at the peak episode of the discourse. Examples 4.264 through 4.266 show instances where *təzzár* introduces a main clause, following a clause(s) introduced with *sa*.

4.264 iirité húžen, **təzzár** iirifǝfta farkén.
 iiri= te húžen təzzar iiri= ǝfta farkén
 1PL arrive dwellings then 1PL feed donkeys
 'We arrived at the encampment, then we fed the donkeys.'

4.265 nimdá á-kan assúkər,
 ni= m- da a= kan assukər
 2SG SBJ place 3SG in sugar
 'You should put sugar in it,

nimzəzdər-a,
 ni= m- sə- əzdər =a
 2SG SBJ CAUS mix 3SG.OBJ
 you should mix it in,

təzzár niməqəl ar ǝikoffaawen imhur.
 təzzar ni= m- əqəl ar ǝikoffaawen i= m- hur
 then 2SG SBJ wait until foam 3PL SBJ enter
 then you should wait until it gets (lit. "until it should get") foamy.

4.266 sa ihínziin-a, **təzzár** aǝikəl akáy.
 sa i= hinziin =a təzzár aǝikəl a= kay
 SBDR 3PL fix 3SG.OBJ then trip 3SG continue
 'Then, after they fixed it, the trip continued.'

Likewise, in Example 4.267, someone was telling a friend directions to his house, near a mosque appropriately known as the "White Mosque" due to its white-coloured tiles.

4.267 nimdərən tárray aayó əyizzáaran wáni ga,
 ni= m- dərən tarray aayó ə- əzzar -an wani ga
 2SG SBJ turn road DEF SUB.REL first ADJR POSS on
 'You should turn onto the main road,

təzzár ǝa-húngu abáara
 təzzar ǝa= n huggu a= baara
 then 1SG GEN dwelling 3SG LOC
 then my house is

taməzɡədda qooráayan əm mó kan.
 taməzɡədda qooraay -an n mo kan
 mosque white ADJR GEN face in
 in front of the White Mosque.'

In Example 4.268, *təzzár* indicates the beginning of a new paragraph or section in the discourse.

4.268 **təzzár** bárar aayó kan tárra kóy báara,
 təzzar barar aayó kan tarra koy baara
 then boy DEF in wilderness master LOC
 'Then the boy who had the evil spirit

akan á-kan.
 a= kan a= kan
 3SG fall 3SG in
 beat him up (lit. "fell upon him").'

In Examples 4.269 and 4.270 *təzzár* is connected to the preceding discourse, rather than to the complex sentence that follows. In each case, it signals the peak episode of the discourse.

4.269 **təzzár**, keení ahúur-a wúllen,
 təzzar keeni a= hur =a wullen
 then sleep 3SG enter 3SG.OBJ very
 'Then, she got very sleepy

tabárar akánkat gánda.
 tabarar a= kan -kat ganda
 girl 3SG fall VEN ground
 and the girl fell to the ground.'

4.270 **təzzár**, ámmaaka niyízraay-a nda bóora fo,
 təzzar ammaaka ni= əzray =a nda boora fo
 then if 2SG replace 3SG.OBJ with person IDF
 Then if you replace him with someone else,

intəmay ʃiməyútar əʃilláanan.
 ni= tə- may ʃiməyutar ə- ʃillan -an
 2SG FUT have difficulties SUB.REL same ADJR
 you will have the same problems.

In Examples 4.271 and 4.272, *təzzár* appears in different places of essentially the same sentence.¹²⁵ In 4.271, *təzzár* is connected to the previous discourse, in this case explaining the reasons and importance of placing the turban on his head if/when they saw a particular, very conservative, older man who did not approve of uncovered male heads in his encampment.

- 4.271 **təzzár**, ámmaaka iiriguuna-á,
 təzzar ammaaka iiri= guuna =a
 then if 1SG see 3SG
 'So then if we see him,
- nimdá nin tagəlmus.
 ni= m- da ni= n tagəlmus
 3SG SBJ place 2SG GEN turban
 you should put on your turban.'

On the other hand, in Example 4.272 *təzzár* introduces the main clause of the sentence, indicating exactly when the turban should be put on.

- 4.272 ámmaaka niguuna-á,
 ammaaka ni= guuna =a
 if 2SG see 3SG.OBJ
 'If you see him,
- təzzár** nimdá nin tagəlmus.
 təzzar ni= m- da ni= n tagəlmus
 then 3SG SBJ place 2SG GEN turban
 then you should put on your turban.'

áygas 'but, therefore, however'

The rarely used connector *áygas* seems to function primarily as a short-term focus marker, raising the relative prominence of the immediate context in which the clause or sentence appears, or perhaps of the relation between the sentence and the discourse.

In Example 4.273, *áygas* draws attention to the fact that the young men telling the story should not have been hunting in a certain area. Therefore, when an old man told them to leave, they left precipitously.

¹²⁵ The author specifically elicited Example 4.272 from Tagdal speakers, in order to see what difference it would make to place *təzzár* in different parts of the sentence.

4.273 ámyar aḵin íirisa sa iirimkóy,
 amyar a= ḵin iiri= sa sa iiri= m- koy
 old.man 3SG say 1PL DAT SBDP 1PL SBJ go
 'The old man told us that we should leave,

áygas iirikoy.
 aygas iiri= koy
 therefore 1PL go
 so we left.'

In Example 4.274 *áygas* seems to have some sort of adversative meaning. It relates a story about a rich man who had bought some sheep and goats for the annual *Tabaski* animal sacrifice. He had the goats slaughtered and their carcasses arranged in neat order outside the house, because these would be distributed among the poor. However, since he had something else in mind for the sheep carcasses, he organised them in a different location.¹²⁶ Since the sheep had not been mentioned in this particular discourse for several clauses, it was necessary to reintroduce them with a noun, *fiiḵén*, whereas the other ACTORS and PATIENTS in the sentence were referred to with pronominal clitics.

4.274 aséxt-i ar iháḵi ḵaaráyyen kan,
 a= s- əxta =i ar i= haḵi ḵaarayyen kan
 3SG CAUS arrange 3PL til 3PL look friend in
 'He had them arranged so that they were facing each other,

áygas fiiḵén, anəzaabéen-i.
 aygas fiiḵen a= nə- zaaben =i
 but sheep 3SG NEG.PRF share 3PL
 but the sheep, he did not arrange.'

Finally, in Example 4.275 *áygas* is associated with the previous discourse, about a group of raiders who attacked an encampment, thinking that there was money hidden there.

4.275 áygas, sa iirinəhár ísa ha,
 aygas sa iiri= nə- har i= sa ha
 however SBDP 1PL NEG.PRF declare 3PL DAT thing
 'But, when we didn't tell them anything,

¹²⁶ There may even perhaps be a certain measure of social censure or criticism in the sentence, since the story was related by a poor person and mutton is more highly regarded than goat meat.

alham ahuur-i wúllen.
 alham a= hur =i wullen
 anger 3PL enter 3PL.OBJ very
 they got very angry.'

***əŋguuzi* 'suddenly', 'right then and there'**

əŋguuzi 'right then and there' usually introduces main clauses and tends to occur toward the beginning of complex sentences. It functions to draw attention only to the section of discourse to which it is connected, rather than to the larger context. This is shown in Examples 4.276 and 4.277.

4.276 ***əŋguuzi*** agíf an ʃileqáwan¹²⁷,
 əŋguuzi a= gíf a= n ʃileqawan
 right.then.and.there 3SG leave 3SG GEN poor.people
 'Right then and there, he abandoned his family

akóy Nizírya.
 a= koy Nizírya
 3SG go Nigeria
 and went to Nigeria.'

4.277 ***əŋguuzi***, zirbí karád n aláqqam,
 əŋguuzi zirbi karad n alaqqam
 suddenly day three GEN behind
 'Suddenly, after three days,

iirikəmmá ha aayó iiribhurrú.
 iiri= kəmma ha aayó iiri= b hurru
 1PL find thing def 1PL IMP search
 we found what we were looking for.'

In Example 4.278, *əŋguuzi* co-occurs with the Emphatic marker *da*, making it a little stronger. The entire sentence is introduced with *təzzár*, which introduces the peak episode of the discourse.

4.278 *təzzár* ***əŋguuzi*** da tabárar atuunú,
 təzzár əŋguuzi da tabarar a= tuunu
 then right.then.and.there EMPH girl 3SG rise
 'Then, right then and there, the girl woke up,

¹²⁷ In many local cultures the term *tállaaqay* 'poor person' or its plural *ʃiləqqaawan* could be used to refer to the people one is responsible for taking care of.

agoorá, awá.
 a= goora a= wa
 3SG sit 3SG eat
 sat up and ate (something).'

In Example 4.279, in a rather unusual structure, *əŋguuzi* draws attention to the noun *amakaʃit* 'inheritor', rather than to a clause or sentence.

4.279 aaha, **əŋguuzi** amakaʃit! iirimziin-á,
 aaha əŋguuzi amakaʃit iiri= m- zin =a
 aha right.then.and.there inheritor 1PL SBJ grab 3SG
 Aha, right there is the inheritor! Let's kidnap him

iirimkəmmá á-kan tənfa!
 iiri= m- kəmma a= kan tənfa
 1PL SBJ find 3SG in profit
 and make money off him!

***haziggá* 'because of that', *hazikán* 'therefore'**

Two further connectors, *haziggá* 'because of that' and *hazikán* 'therefore', which typically introduce sentences or simple clauses, function to indicate reason or Resultative types of relations, as well as to indicate the end of a section of discourse. *haziggá* is derived from the NP *ha zi* 'that thing', which would normally have stress on the determiner *zi*, combined with the postposition *ga*, which usually means 'on' or 'on top of', but also can mean 'because of'. In Tagdal the combination seems to make a single word; stress disappears altogether from the NP *ha zi* and shifts to the last syllable. Likewise, *hazikán* is derived from the same NP *ha zi*, plus the Locative postposition *kan*, making the combined construction meaning 'therefore'. Stress occurs on the last syllable of the expression, the postposition *kan*, which normally does not have any stress. The vowel in *zi* also elongates to *zii* before the CVC syllable in *kan*. In Example 4.280, *hazikán* occurs before an Adverbial Clause introduced with *ammaaka* 'if'.

4.280 **hazikán**, ammaaka anziyánda,
 hazikan ammaaka anzi= yanda
 therefore if 2PL agree
 'Therefore, if you(pl) agree,

yaay yatəbáy aggá.
 yaay ya= tə- bay a= ga
 1SG.IND 1SG FUT know 3SG on
 I personally will be responsible for him.'

In Example 4.281 and 4.282, *haziggá* is connected to the previous discourse.

2.281 **haziggá**, iwázziiwəz táyrəm kullú kan.
 hazigga i= wəzziiwəs táyrəm kullu kan
 because.of.that 3PL spread.out village all in
 'Because of that, they spread out throughout the whole village.'

4.282 **haziggá**, ámmaaka anzikəmmá tazəbət,
 hazigga ammaaka anzi= kəmma tazəbət
 because.of.that if 2PL find ring
 'Because of that, if you(pl) find the ring,

anzimyeəzi áysa-a.
 anzi= m- yeezi ya= sa =a
 2PL SBJ return 1SG DAT 2SG.OBJ
 you should return it to me.'

In Example 4.283 *haziiikán* is connected to a subordinate clause.

4.283 felás Maxmúddun adayná an tafafárot,
 felas Maxmuddun a= dayna a= n tafafarot
 because Maxmuddun 3SG forget 3SG GEN key
 'Because Maxmuddun forgot his key,

haziiikán arrəzzərəz tasəxfəl.
 hajiikan a= ərrəzzərəz tasəxfəl
 therefore 3SG break.with.force lock
 therefore he broke the lock.'

4.11.2 Prominence, grammatical constructions

The increased prominence of the Possessor Phrase, as opposed to the Genitive Phrase, was already discussed in Section 4.1. This section discusses of a number of other grammatical constructions that also increase relative prominence. First, there is a discussion of how changing word order affects the meaning of the sentence, followed by a discussion of the use of independent pronouns. Finally, the section ends with a discussion of the Emphatic marker *da*.

Word order

Since Tagdal is a fairly strict SVO language, beginning the sentence or clause with elements other than the Subject results in increased prominence. Benítez-Torres (2009) and Benítez-Torres and Grant (2017) discuss briefly the construction where the Direct Object is placed in front of the sentence, in the context of the Passive Voice, since, in effect, both have similar functions – to reduce the importance of the AGENT by increasing the importance of the PATIENT or UNDERGOER. However, elements other than the Direct Object may be placed in front of the sentence as well. These include the Indirect Object and various Adpositional Phrases. Each is discussed in this section. Below, in the examples marked "a" the element in question is in its normal place in the sentence, whereas in the examples marked "b" the same element is placed in front of the sentence.

In Examples 4.284 and 4.285 the sentences begin with the Direct Object. This is the most common element to be fronted. The resulting construction is either poetic in function, or it is used in situations where the speaker wishes to draw attention to the Direct Object, at the expense of other elements of the sentence.

4.284a Ílyas awá **háamu**.

Ilyas	a=	wa	haamu
Illias	3SG	eat	meat

'Illias ate meat.'

4.284b **háamu** Ílyas awá.

haamu	Ilyas	a=	wa
meat	Illias	3SG	eat

'It is meat Illias ate.'

4.285a Xámmed abáaya Amína.

Xammed	a=	baaya	Amina
Xammed	3SG	love	Amina

'Xammed loves Amina.'

4.285b Amína Xámmed abáaya.

Amina	Xammed	a=	baaya
Amina	Xammed	3SG	love

'It is Amina that Xammed loves.'

Example 4.286 has the Indirect Object, indicated by the Dative marker *sa*, in front of the sentence.

4.286a *azəzlay i-kan*
 a= z- əzlay i= kan
 3SG CAUS differentiate 3PL in
 'He differentiated between them'

an amúzar sa.

a= n amuzar sa
 3SG GEN master DAT
 for his master's sake.'

4.286b **an amúzar sa**
 a= n amuzar sa
 3SG GEN master DAT
 'It was for his master's sake'

azəzlay i-kan.
 a= z- əzlay i= kan
 3SG CAUS differentiate 3PL in
 that he differentiated between them.'

In Example 4.287 an Adpositional Phrase with the postposition *ga* 'on' or 'because of' stands in front of the sentence.

4.287a *yanəfræg-a nin addələl ga!*
 ya= nə- əfræg =a ni= n addələl ga
 1SG NEG.PRF be.able 3SG 2SG GEN reason on
 'I can't do it because of you!'

4.287b **nin addələl ga, yanəfræg-a!**
 ni= n addələl ga ya= nə- əfræg =a
 2SG GEN reason on 1SG NEG.PRF be.able 3SG
 'It is because of you that I can't do it!'

Likewise, Example 4.288 gives a Postpositional Phrase with the locative *kan* in front of the sentence.

4.288a *abáara móota kan.*
 a= baara moota kan
 3SG LOC car in
 'It is in the car.'

4.288b **móota kan** abáara.
 moota kan a= baara
 car in 3SG LOC
 'It is in the car (and nowhere else).'

In Example 4.289, the accompaniment or instrumental preposition *nda* and its accompanying phrase are fronted.

4.289a afuunús ahákət **nda afáana**.
 a= fuunus ahákət nda afáana
 3SG light tent with match
 'He lit up the tent with a match.'

4.289b **nda afáana** afuunús ahákət.
 nda afáana a= fuunus ahákət
 with match 3SG light tent
 'It was with a match that he lit the tent.'

Independent Pronouns

Another means by which Tagdal increases the prominence is by means of independent pronouns, sometimes combined with the Emphatic marker *da*. Since the Subject is normally encoded within the verb by means of pronominal clitics, independent pronouns are not crucial to the communication of referential meaning. Instead, they function to communicate certain nuances, especially to increase the prominence of the NP that is referred to, as demonstrated in Examples 4.290 and 4.291.

4.290 **yaay**, ʔanəʃi abáyɔg!
 ʔaay ʔa= nə- ʃi abayɔg
 1SG.IND 1SG NEG.PRF be thief
 'I am not (emphatic) a thief!'

4.291 **íngi da**, idá ha aayó!
 ingi da i= da ha aayó
 3PL.IND EMPH 3PL do thing DEF
 'They were the ones who did that.'

Emphatic particle *da*

When the Emphatic particle *da* follows a grammatical element, it immediately raises its prominence within the sentence, as in Example 4.292 and 4.293.

4.292 gazwál **da**, aǵi.
 gazwal da a= ǵi
 diesel EMPH 3SG not.be
 'There is absolutely no diesel.'

4.293 ha ʒi n aláqqam, takonéǵit amóttækwi
 ha ʒi n aláqqam takonéǵit a= móttækwi
 after.that hedge.hog 3SG move
 'After that, the hedgehog moved'

 ha aayó nda akúndar **da**.
 ha aayo nda akundar da
 just.as squirrel EMPH
 about just exactly like the squirrel.'

In Example 4.294, the Locative complement *ne* 'here' is raised in prominence.

4.294 igoorá ne **da**.
 i= goora ne da
 3SG sit here EMPH
 'They sat here (emphatic).'

In Example 4.295 *da* follows a construction with *fóoda* 'only one'.

4.295 aarén híŋka aayoonén ibáaya tabárar fóoda **da**.
 aaren híŋka aayoonen i= baaya tabarar fooda da
 men two DEF.PL 3PL want girl one EMPH
 'Those two men love the same young girl.'

In Examples 4.296 through 4.298, the *da* draws attention to the NPs it follows. When this occurs, it seems to be in conjunction with the determiners *aayó* and *ʒi*.¹²⁸ It is difficult to tell exactly what differences exist between raising the prominence of the NP with *da* and raising its prominence by placing it in front of the sentence, except to say that placing it in front seems to give it a stronger emphasis. However, this question requires more study.

4.296 kəbáy asənnəfrən aaró **aayóoda**.
 kəbay a= sənnəfrən aaro aayooda
 council 3SG choose man DEF.EMPH
 'This is the man whom the council chose.'

¹²⁸ I write these as one word because the presence of *da* causes the final vowels in *aayó* and *ʒi* to elongate. I have no explanation as to why, since *da* does not seem to have this effect on any other words in Tagdal.

4.297 awí an azáŋgu nda azəgəz **ziida**.

a= wi a= n azan̄gu nda azəgəz ziida
 3SG kill 3SG GEN enemy with knife MED.EMPH
 'He killed his enemy with that knife.'

4.298 ha zi n aláqqam iiriyoggá

ha zi n aláqqam iiri= yogga
 thing MED GEN behind 1PL notice
 'After that, we spied (from a distance)

moota aayooda iiribhurrú.

moota aayooda iiri= b- hurru
 car DEF.EMPH 1PL IMP search
 the exact car we were looking for.'

5.0 References

- Adamou, Aboubacar. 1979. *Agadez et sa région*. [Études nigériennes 44]. Niamey: Institut de recherches en sciences humaines.
- Alidou, Ousseina. 1988. *Tasawaq d'In-gall: esquisse linguistique d'une langue dite «mixte»*. MA thesis, Univ. of Niamey.
- Benítez-Torres, Carlos M. 2005. Review of Nicolaï (La force des choses ou l'épreuve 'nilo-saharienne': Questions sur les reconstructions archéologiques et l'évolution des langues.) *Journal of West African Languages* 32.1.
- Benítez-Torres, Carlos M. 2009. Inflectional vs. Derivational Morphology in Tagdal (Northern Songhay): a Case of Language Mixing. In: Fiona McLaughlin, Matondo Masungu, and Eric Potsdam (eds.), *Selected Proceedings of the 38th Conference on African Linguistics*. ed.. Somerville, Ma.: Cascadilla Proceedings Project., pp.69-83.
- Benítez-Torres, Carlos M. and Anthony P. Grant. 2017. On the origin of some Northern Songhay mixed languages. *Journal of Pidgin and Creole Languages* 32(2). 263-303.
- Benítez-Torres, Carlos M. 2020. Suppletion in Tagdal: a study of some verb root interactions between Songhay and Tuareg-Berber vocabulary in a Northern Songhay language. *Journal of Pidgin and Creole Languages* 35(2). 332-359.
- Bernus, Suzanne and Edmond Bernus. 1972. *Du sel et des dattes: Introduction à l'étude de la communauté d'Ingall et de Tegidda-n-tesemt*. Niamey: Centre Nigérien de Recherches en Sciences Humaines.
- Brown, Gillian and George Yule. 1983. *Discourse analysis*. Cambridge: Cambridge University Press.
- Burquest, Donald. 2006. *Phonological analysis*. Dallas, TX: SIL International.
- Champault, Dominique. 1969. *Une oasis du Sahara nord-occidental, Tabelbala*. Paris: CNRS.
- Christiansen, Regula & Steven K. Levinson. 2003. Relative Clauses in Tadakshak. In: *Electronic Working Papers*. Dallas, TX: SIL International. <http://www.sil.org/silewp/2003/silewp2003-003.pdf>.

- Christiansen, Niels & Regula Christiansen. 2002. Some verb morphology features of Tadakshak, or Berber or Songhay, this is the question. SIL Electronic Working Papers (2002–2005). Available online at: <http://www.sil.org/resources/publications/entry/7842>.
- Christiansen, Niels & Regula Christiansen. 2007. Tadakshak verb morphology with reference to Berber and Songhay origins. In: *Advances in Nilo-Saharan Linguistics. Proceedings of the 8th Nilo-Saharan Linguistics Colloquium, University of Hamburg, August 22-25, 2001*, ed by Doris L. Payne and Mechthild Reh. Cologne: Rüdiger Köpe, pp. 59-72.
- Christiansen-Bolli, Regula. 2010. A Grammar of Tadakshak: A Northern Songhay language of Mali. PhD dissertation, University of Leiden.
- Creissels, Denis. 1980. De la possibilité de rapprochements entre le songhay et les langues Niger–Congo (en particulier Mandé). In: Thilo C. Schadeberg and M. Lionel Bender, eds., *Nilo-Saharan: Proceedings Of The First Nilo-Saharan Linguistics Colloquium, Leiden, September 8–10*. 185–199. Dordrecht: Foris Publications.
- Dimmendaal, Gerrit. 1992. Review of Nicolai (Parentés linguistiques). *Bulletin of the School of Oriental and African Studies* 55. 73-5.
- Dimmendaal, Gerrit. 1995. Do some languages have multi-genetic or non-genetic origin? An exercise in taxonomy, ed. by Franz Rottland and Robert Nicolai, 357-72. [Nilo-Saharan 10]. Köln: Köppe Verlag.
- Dimmendaal, Gerrit. 2008. Language Ecology and Linguistic Diversity on the African Continent. *Language and Linguistics Compass* 2(5): pp. 840-858.
- Dimmendaal, Gerrit. 2019. Linguistic features and typologies in languages commonly referred to as ‘Nilo-Saharan’. In: H. Ekkehard Wolff, ed., *The Cambridge Handbook of African Linguistics*. pp. 326-381.
- Dixon, R.M.W. 2009. Basic linguistic theory, Vols, 1-2. Oxford: Oxford University Press.
- Dixon, R.M.W. 2013. Basic Linguistic theory, Vol. 3. Oxford: Oxford University Press.
- Dooley, Robert A. and Steven H. Levinsohn. Analyzing discourse: a manual of basic concepts. Dallas, TX: SIL International.
- Greenberg, Joseph, 1963. *The Languages of Africa* (International Journal of American Linguistics 29.1). Bloomington, IN: Indiana University Press.

- Givón, T. 2001. *Syntax: an introduction*, Vos. 1-2. Amsterdam: John Benjamins Publishing Company.
- Hamani, Djibo M. 1989. *Au carrefour du soudan et de la berbérie: Le sultanat touareg de l'Ayar*. [Études nigériennes 55]. Niamey: Institut de recherches en sciences humaines.
- Harrison, Annette, Byron Harrion and Michael J. Rueck. 1997. *Southern Songhay Speech Varieties in Niger: a sociolinguistic survey of the Zarma, Songhay, Kurtey, Wogo and Dendi peoples of Niger*. <http://www.sil.org/silesr/1999/004/zarmarpt4.pdf>.
- Heath, Jeffrey. 1999a. *A grammar of Koyra Chiini : the Songhay of Timbuktu*. Berlin and New York: Mouton de Gruyter.
- Heath, Jeffrey. 1999b. *Grammar of Koyraboro (Koroboro) Senni, the Songhay of Gao*. Cologne: Rüdiger Köppe.
- Heath, Jeffrey. 2004. Tadaksahak vocabulary. MS., 30pp.
- Heath, Jeffrey. 2005. *A Grammar of Tamashek (Tuareg of Mali)*. Berlin and New York: Mouton de Gruyter.
- Kager, René. 2004. *Optimality Theory*. Cambridge: Cambridge University Press.
- Kossmann, Maarten. 2004. Mood/Aspect/Negation Morphemes in Tabelbala Songhay (Korandje). *Afrika und Übersee*. 87. pp. 131-153.
- Kossmann, Maarten. 2005. Review of Nicolai (2003). *Journal of African Languages and Linguistics* 26/1. pp. 99-103.
- Kossmann, Maarten. 2007a. Grammatical borrowing in Tasawaq: In: Yaron Matras and Jeanette Sakel (eds.): *Grammatical Borrowing in Cross-Linguistic Perspective*. Berlin and New York: Mouton de Gruyter. pp. 75-90.
- Kossmann, Maarten. 2007b. The borrowing of aspect as lexical tone: y-initial Tuareg verbs in Tasawaq (Northern Songhay). *Studies in African Linguistics* 36(2). pp. 151-166.
- Kossmann, Maarten. 2008. Adjectives in Northern Songhay. *Afrika und Übersee* 90. pp. 109-132.
- Kossmann, Maarten. 2010. Parallel System Borrowing. Parallel morphological systems due to the borrowing of paradigms. *Diachronica* 27/3. pp. 459-488.

- Kossmann, Maarten. 2011. *A grammar of Ayer Tuareg (Niger)*. Cologne: Rüdiger Köppe.
- Kossmann, Maarten. 2013. *The Arabic Influence on Northern Berber*. Leiden and Boston: E.J. Brill.
- Kossmann, Maarten. 2016. A Tasawaq (Northern Songhay, Niger) text with grammatical notes. *Linguistic Discovery* 13/1. pp. 82-118.
- Kroeger, Paul R. *Analyzing grammar: an introduction*. Cambridge: Cambridge University Press.
- Lacroix, Pierre Francis. 1968. L'ensemble songhay-jerma: Problèmes et thèmes de travail. *Actes du 8e congrès SLAO. Ann. Université d'Abidjan, série H*. pp. 87-99.
- Lacroix, Pierre F. 1975. Emghedeshie – Songhay language of Agadez. Doc. Tr. RCP 322. Paris.
- Lacroix, Pierre Francis. 1981. Emghedeshie, « Songhay language of Agadez », à travers les documents de Barth. In: *Itinérances...en pays peul et ailleurs: mélanges réunis par les chercheurs de l'ERA 246 du CNRS à la mémoire de Pierre Francis Lacroix*. Paris: Société des Africanistes. pp. 11-19.
- Lux, Cécile. 2011. *Étude descriptive et comparative d'une langue menacée : le tetserret, langue berbère du Niger*. Cologne: Rüdiger Köppe.
- Meakins, Felicity. 2013. Mixed languages. In: *Contact languages: A comprehensive guide*, Y. Matras and P. Bakker (eds). Berlin: Mouton. pp. 159-228.
- Mukarovsky, Hans G. 1966. Zur Stellung der Mandesprachen. *Anthropos*, 61. pp. 679-688.
- Nicolai, Robert. Unpublished online article. A Songhay-Mande Convergence Area? Facts, Questions, Frames. http://www.unice.fr/ChaireIUF-Nicolai/TextesRN/Songhay-mande_convergence.pdf
- Nicolai, Robert. 1977. Sur l'appartenance du songhay. In: *Annales de la faculté des lettres de Nice*, 28. pp. 129-145.
- Nicolai, Robert. 1980. Le Songhay Septentrional (études prosodiques). In: *Itinérances...en pays peul et ailleurs: mélanges réunis par les chercheurs de l'ERA 246 du CNRS à la mémoire de Pierre Francis Lacroix*. Paris: Société des Africanistes. pp. 229-256.

- Nicolai, Robert. 1984. *Préliminaires à une étude sur l'origine du songhay: matériaux, problématique et hypothèses*, Berlin: D. Reimer. Series: Marburger Studien zur Afrika- und Asienkunde. Serie A, Afrika; 37.
- Nicolai, Robert. 1990a. L'évolution 'problématique' du songhay septentrional (Analyse d'une situation de contact). *Travaux du Cercle Linguistique de Nice* 10-11. pp. 135-148.
- Nicolai, Robert. 1990b. *Parentés linguistiques (à propos du songhay)*. Paris. Éditions du CNRS.
- Nicolai, Robert. 2003. *La force des choses ou l'épreuve 'nilo-saharienne': Questions sur les reconstructions archéologiques et l'évolution des langues*. Cologne: Rüdiger Köppe.
- Nicolai, Robert. 2006a. Songhay-mande convergence area : questions and frames, *Annual Publication in African Linguistics* 4. pp. 5-30.
- Nicolai, Robert. 2006b. Aux marges de l'espace chamito-sémitique : songhay et apparentements non-linéaires. In Amina Mettouchi and Antione Lonnet : *Les langues chamito-sémitiques (afro-asiatiques)* (special issue of *Faits de langues*). pp. 245-277.
- Nicolai, Robert. Unpublished online article. A Songhay-Mande Convergence Area? Facts, Questions, Frames. http://www.unice.fr/ChaireIUF-Nicolai/TextesRN/Songhay-mande_convergence.pdf
- Payne, Thomas. 1997. *Describing morphosyntax: a guide for field linguists*. Cambridge: Cambridge University Press.
- Rueck, Michael and Niels Christiansen. 1999. Northern Songhay speech varieties in Niger. SIL Electronic Survey Reports 1999-008. Dallas, Tex.: SIL International. <http://www.sil.org/silesr/1999/1999-008/silesr1999-008esr.pdf>
- Smith, Norval and Anthony P. Grant. 2019. Mixed languages, younger languages, and contact-induced language change. In: Anthony P. Grant (ed): *The Oxford Handbook of Language Contact*. Oxford: Oxford University Press. pp. 303-330.
- Souag, Lameen. 2009. The subclassification of Songhay and its historical implications. *Journal of African Languages and Linguistics* 33/2. pp. 181-213.

- Souag, Lameen. 2010a. The Western Berber Stratum in Kwarandzyey. In Harry Stroomer, Maarten Kossmann, Dymitr Ibriszimow and Rainer Vossen (eds.). *Etudes berbères V, Essais sur des variations dialectales et autres articles*. Cologne: Rüdiger Köppe. pp. 177-189.
- Souag, Lameen. 2010b. Grammatical contact in the Sahara: Arabic, Berber, and Songhay in Tabelbala and Siwa. School of Oriental and African Studies, University of London PhD dissertation.
- Souag, Lameen. 2012. The subclassification of Songhay and its historical implications. *Journal of African Languages and Linguistics* 33/s. pp. 181-213.
- Souag, Lameen. 2015a. Explaining Korandjé: Language contact, plantations and the trans-Saharan trade. *Journal of Pidgin and Creole Linguistics* 30. pp. 189-224.
- Souag, Lameen. 2015b. Non-Tuareg Berber and the Genesis of Nomadic Northern Songhay. *Journal of African Languages and Linguistics* 36/1. pp. 121-143.
- Tilmatine, Mohamed. 1996. Un parler berbéro-songhay du sud-ouest algérien (Tabelbala) : éléments d'histoire et de linguistique. *Études et Documents Berbères* 14. pp. 163-198.
- Velupillai, Viveka. 2015. *Pidgins, creoles and mixed Languages: An Introduction*. Amsterdam and Philadelphia: John Benjamins.
- Wolff, H. Ekkehard and Manou Ousseina Alidou. 2001. On the non-linear ancestry of Tasawaq (Niger). Or: how "mixed" can a language be? In Derek Nurse (ed.), *Historical Language Contact in Africa* (special volume of *Sprache und Geschichte in Afrika* 6/17) Cologne: Rüdiger Köppe. pp. 523-574.

Appendix, short folk tale in Tagdal

Maḥammad ən fīkárbaayen ənda agáyəs ənda táylaalen ("Maḥammad of the coulottes and the bustard and the guinea fowls") – (by H.A. recorded May 8, 2003 with H.A., I.S. Redacted into Toolbox with H.A., I.S and AF between May 10-16 2003. Corrections by H.A., 2003)¹²⁹

1 Yətəda ánzisa isálan ən Maḥammad ən fīkárbaayen
 ya= tə- da anzi= sa isalan ən Maḥammad ən fīkarbaayen
 1SG FUT do 2PL DAT news GEN GEN coulottes

'I'm going to tell you(pl) the tale of Mahammad of the coulottes,

 ənda agáyəs ənda táylaalen.

 nda agayəs nda taylaalen

 and bustard and guinea hens

 ...the bustard and the guinea hens.'

2 Ibáara ənguuzi.
 i= baara ənguuzi
 3PL be place

'They were there.'

3 Maḥammad ən Takárbay aǰín táylaalen sa ánga
 Maḥammad n takarbay a= fín taylaalen sa anga
 of culotte 3SG say guinea hens DAT 3SG.IND

'Mahammad of the coulottes said to the guinea hens that he (emphatic)

¹²⁹ This one of a series of folk tales in Tagdal, relating the adventures of a trickster character played by a jackal named *Maḥammad ən fīkárbaayen*. ("Maḥammad of the Coulottes"; in popular imagination, the lighter-coloured legs of the jackal resemble pants.) In this tale, *Maḥammad ən fīkárbaayen* matches wits against a bustard and a pack of guinea fowl.

abáy şat .
 a= bay şat
 3SG know fly
 ...knew how to fly.'

4 Ámmaaka abté, atəfərkək.
 ammaaka a= b- te a= tə- fərkək
 when 3SG IMP arrive 3SG FUT vibrate; move
 'Whenever he would come, he would shake about.'

5 Abjín isa «Yan jibáraaren , wa
 a= b- jín i= sa Ya= n jibaraaren wa
 3SG IMP say 3PL DAT 1SG GEN daughters COMM
 'He would say, "My daughters,

zumbúkat, yamzín ánzí kan
 zumbu -kat ya= m- zin anzi= kan
 descend VEN 1SG SBJ grab;take 2PL LOC
 ...come down so that I can take

aafóoda!»
 aafo da
 one EMPH
 ...only one of you.'

6 Ámmaaka yazín ánzí kan aafóoda,
 ammaaka ya= zin anzi kan aafo da
 when 1SG grab;take 2PL.IND LOC one EMPH
 'After I've taken only one of you,

anzimyéd aafóoda meeda híinka meeda kárad!
 anzi= m- yed aafo da meeda hinka meeda karad
 2PL SBJ return one EMPH or two or three
 ...or maybe two or three, you can go back!

7 Ámmaaka yažiini íngi, anziimyéd, aayóonen
 amaka ya= žini inga anzi= m- yed ayo
 when 1SG take 3PL.IND 2PL SBJ return DEF.PL

'When I've taken them (emphatic),

fáydaanen imyéd.»
 faydan -en i= m- yed
 other ADJR 3PL SBJ return
 ...the rest can go back.'

8 Ibáara énguži.
 i= baara énguži
 3PL be place

'They were there.'

9 Žáyzi kullu híinka aaró an álwaq ató, aayó kan
 žayzi kullu hinka aro a= n alwaq a= to aayo kan
 day each two man 3SG GEN moment 3SG arrive DEF LOC

'Every two days the time would come

abɣwá.
 a= b- ɣwa
 3SG IMP eat
 ...for him to eat.'

10 Atəyerkat, amʒín an táylal,
 a= tə- yer -kat a= m- ʒin a= n taylal
 3SG FUT return VEN 3SG SBJ grab;take 3SG GEN guinea hen

'He would return, in order to take his guinea hen,

táylaalen híinka meeda kárad, ékat kan abaáya
 taylaalen hinka meeda karad ekat kan a= baaya
 guinea hens two or three measure LOC 3SG love; desire;

...(or) two or three, however many he wanted

amʒiiní.
 a= m- ʒin =i
 3SG SBJ grab;take 3PL
 '...so that he could take them.'

11 Ibáara énguuzi. .
 i= baara ənguʒi
 3PL be place

'They were there.'

12 Ibáara énguuzi, ibáara énguuzi ar agayəs até
 i= baara ənguʒi i= baara ənguʒi ar agayəs a= te
 3PL be place 3PL be place until bustard 3SG arrive

'They were there they were there, they were there a long time, until the bustard arrived

ído.¹³⁰
 i= daayo
 3PL place
 ...at their place.'

¹³⁰ In the Abargan and Kəl Ilokkod varieties of Tagdal, *daayó* 'place' is pronounced *do*, which is actually closer to mainstream Songhay. (Zarma and Songhay from Gao also use *do* for 'place'.) Therefore, in the Tarbun and kəl Amdid varieties, the expression would have been *idaayó* 'their place', rather than *ido*.

13 Afín ísa « Wa zumbúkat,
 a= fín i= sa wa zumbu -kat
 3SG say 3PL DAT COMM put_down;descend; install VEN

'He said to them, "My daughters, come down

yan fíbaraaren, ázi aayó!
 ya= n fíbaraaren anzi= aayo
 1SG GEN daughters 2PL DEF
 ...all of you there!'

14 ʒayzi zi tatartaara ázi aayó, kaalá anzibdaw!»
 ʒayzi zi tatartaara anzi= aayo kala anzi= b- daw
 day MED 2PL DEF before 2PL IMP send

'Today, before I send for you (i.e. come up there)!''

15 Ifín ása « Anəfí írim ba aayó
 i= fín a= sa a= nə fí iiri= m ba aayo
 3PL say 3SG DAT 3SG NEG.PRF to be 1PL GEN father DEF

'They said to him, "Isn't that our father, who

əbfín Maḥammad ən
 ə- b- fín Maḥammad ən
 SUB.REL IMP be.called GEN
 ...is called Mahammad

fíkarbaayen, əbté,
 fíkarbaayen ə- b- te
 coulottes SUB.REL IMP arrive
 ...of the coulottes, who comes

əbʒín íiri kan ahínka
 ə- b- ʒin iiri kan ahinka
 SUB.REL IMP grab;take 1PL.IND LOC two

...and takes away two

meda kárad?»

meda karad

or three

...or three of us?"

16 Agáyəs, ánga, aʃín ísa « Ámmaaka até,
 agayəs anga a= ʃín i= sa ammaaka a= te
 bustard 3SG.IND 3SG say 3PL DAT when 3SG arrive

"The bustard, for his part, said to them, "when he arrives,

anʒimʃín ása, ánʒi,
 anʒi= m- ʃín a= sa anʒi=
 2PL SBJ say 3SG DAT 2PL

...you should say to him that you (emphatic)

anʒisəbzumbú ʒáyʒi aayó.
 anʒi= sə b- zumbu ʒayʒi ayo
 2PL IMP.NEG IMP descend day DEF

...won't come down today.'

17 Áygas anʒimsəsəffəga yaay, yaay aayó
 aygas anʒi= m- sə- sə- əffəga yaay yaay aayo
 but 2PL SBJ NEG.IMP CAUS reveal 1SG.IND 1SG.IND DEF

"But don't tell him that it was me

ga, əhar ánʒisa-a !»
 ga ə- har anʒi= sa =a
 against; between SUB.REL tell 2PL DAT 3SG

...who told you that!"

18 (Ha zi n aláqqam) ahar ísa sa (káyne) ,
 ha zi -n alaqqam a= har i= sa sa kayne
 thing MED of back 3SG tell 3PL DAT SBDR jackal

'Then he told them about how he (Mahammad of the coulottes) didn't

asəbáy şat, abfərkək
 a= sə- bay şat a= b- fərkək
 3SG NEG.IMP know fly 3SG IMP vibrate

...know how to fly, and he only shook his fur...'

bénnan wani da abdá-a. .
 bennan wani da a= b- da =a
 good for nothing POSS EMPH 3SG IMP do 3SG
 ...for nothing.'

19 Sa (káyne) até, aḡin ísa « Ȳan
 sa kayne a= te a= ḡin i= sa Ȳa= n
 SBDR jackal 3SG arrive 3SG say 3PL DAT 1SG GEN

'When the jackal came back, he said to them, "My

ḡibáraaren, wa zumbúkat,
 ḡibaraaren wa zumbu -kat
daughters COMM put_down;descend; install VEN
 ...daughters, come down,'

yamwá áṅzi kan ahínka meeda kárad!»
 ya= m- wa anṅzi= kan ahinka meeda karad
 1SG SBJ eat 2PL LOC two or three
 so that I can eat two or three from among you!'''

20 (Maʃʃán) táylaalen iwánzin sa itəzumbúkat.
 maʃʃan taylaalen i= wanʒin sa i= tə- zumbu -kat
 but guinea hens 3PL refuse SBDR 3PL FUT descend VEN

'But the guinea hens refused to come down.'

21 Təzzar akí in ʃiddáy, aʃín ísa
 təzzar a= kí i= n ʃiddáy a= ʃín i= sa
 then 3SG stand_up; stop 3PL GEN below 3SG say 3PL DAT

'Then he stood underneath them and said to them,

« Meerádda yatəkeʒíinan ánzigga! »
 meera da ya= tə- keʒi -nan anʒi= ga
 now EMPH 1SG FUT climb ALL 2PL against
 ...'Now I'm going to climb up there to you!''

22 Akóy, amzuurú, amdá bətər bətər.
 a= koy a= m- zuuru a= m- da bətər bətər
 3SG go 3SG SBJ run 3SG SBJ do stand back stand back

'He went, farther and farther back, so that he could run (at them).'

23 Ámmaaka atóonan ayʃén,
 ammaaka a= to -nan ayʃén
 when 3SG be enough ALL COMP.DIS

'When he got far enough

atəyərɣarkat.
 a= t- əyərɣar -kat
 3SG DIM jump into VEN
 ...to jump up,'

24 Təzzár ašát.

təzzar a= şat
then 3SG jump

'Then he jumped.'

25 (Maǰǰán) sa ašát, atəyérkat gánda kan. .
maǰǰan sa a= şat a= tə- yed -kat ganda kan
but SBDR 3SG jump 3SG FUT return VEN land LOC

'(But) when he humped, he would come back down to the ground.'

26 Anətóonan təguzi n táddaara. .
a= nə- to -nan təguzi n taddaara
3SG NEG.PRF be enough ALL tree GEN trunk

'He never even made it to the trunk of the tree.'

27 Harwá ibáara ənguuzi.
harwa i= baara ənguuzi
still 3PL be place

'They were still there.'

28 (Ha zi n aláqqam) iǰín ímmaayan za ho:
ha zi n alaqqam i= ǰín immaayan za ha aayo
thing MED GEN back 3PL say souls EMPH thing DEF

'Then they said to themselves this:

abhar isa ǰiimí da, aǰi waala
a= b- har i= sa ǰiimi da a= ǰi wala
3SG IMP say 3PL DAT truth EMPH 3SG to be nothing
...he (the bustard) told them the truth,

tanyarí.

tanyari

lie

...it was nothing but a lie.'

29 Təzzár iṣát təguʒi ʒi ga, ikóy, aafó əmán
 təzzar i= ʃat təguʒi ʒi ga i= koy aafó ə- man
 then 3PL fly tree MED on 3PL go INDEF SUB.REL near

'Then they flew away from that tree and went to another near

ánga.

anga

3SG.IND

...that one.'

30 Káyne abzuurú in ʃiddáy néeda.
 kayne a= b- zuuru i= n ʃidday ne da
 jackal 3SG IMP run 3PL GEN below there EMPH

'The jackal was running beneath them to there.'

31 Abʃin ísa « Wa zumbúkat!
 a= b- ʃin i= sa wa zumbu -kat
 3SG IMP say 3PL DAT COMM descend VEN

'He was saying to them, "I command you to come down!"

32 Yaay, yabáy ʃat!
 yaay ya= bay ʃat
 1SG.IND 1SG know; require; take care of fly

'I (emphatic) know how to fly!'

33 ʔatəkóy, ʔamʒín ánʒi, ánʒi kullú,
 ʔa= tə- koy ʔa= m- ʒin anʒi= anʒi kullu
 1SG FUT go 1SG SBJ take 2PL.IND 2PL.IND all

'I'm going to take all of you

ʔamɲwá ánʒi kullú!
 ʔa= m- ɲwa anʒi kullu
 1SG SBJ eat 2PL.IND all
 ... and eat you!

34 Kan ʔán Koy əyiṭkáalan aayó ga,
 kan ʔa= n koy ə- əṭkəl -an aayo ga
 LOC 1SG GEN master; lord SUB.REL lift ADJR DEF on

'(I swear) by God most high,

ʔabáy ʃat!»
 ʔa= bay ʃat
 1SG know fly
 ...I know how to fly!'''

35 (Ha ʒi n aláqqam táylaalen iʃín in gá
 ha ʒi n alaqqam taylaalen i= ʃín i= n ga
 thing MED of back guinea hens 3PL say 3PL GEN between

'(Then the guinea hens said among themselves),

kan) «Asəbəy ʃat,
 kan a= sə- bay ʃat
 LOC 3SG NEG.IMP know fly
 ... "He doesn't know how to fly,

asəbay waalá ha aafó.»
 a= sə- bay waala ha aafó
 3SG NEG.IMP know nothing thing INDEF
 ...he doesn't know anything."

36 Sa atéenan, igar sa jīimí da.
 sa a= te -nan i= gar sa jīimi da
 SBDR 3SG arrive ALL 3PL guard SBDR truth EMPH

'After he left, they realised that it was true.'

37 Təzzár aĵin ísa «Ēnta may əhar ánĵisa
 təzzar a= ĵin i= sa ənta may ə- har anĵi= sa
 then 3SG say 3PL DAT INT who? SUB.REL tell 2PL DAT

'Then he asked them, "Who told you

sa yasəbáy şat?»
 sa ya= sə- bay şat
 SBDR 1SG NEG.IMP know fly
 ...(that) I don't know how to fly?"'

38 Isəsəm, inəhar
 i= səsəm i= nə- har
 3PL quiet.be 3PL NEG.PRF announce;say;declare; praise

'They stayed quiet, they didn't tell

(ása) waalá ha fo.
 a= sa waala ha fo
 3SG DAT none thing INDEF
 ...him anything.'

"Therefore, they knew that it was true."

'He didn't know how to fly.'

'But the bustard (had) told them not to tell about it.'

'Even more than that, he told them not to tell

ása ha aayó ga ánga da (aĩ).

asa ha aayo ga anga da a= ĩ

SBD R thing DEF about 3SG.IND EMPH 3SG be

'When the jackal returned, he knew that tree

sa táylaalen iyəwər am béena.
 sa taylaalen i= əwər a= n beena
 SBDR guinea hens 3PL ascend 3SG GEN top

...where the guinea hens had gone to the top.'

44 Ifin agáyəs, anga da, kan «Agáyəs abkaw
 i= ĩn agayəs anga da kan agayəs a= b- kaw
 3PL say bustard 3SG.IND EMPH LOC bustard 3SG IMP remove

'They told him, "The bustard eats

an deerán.»
 a= n deeran
 3SG GEN gum arabic
 ...his gum arabic (i.e. from this tree)."

45 (Meera) agáyəs fáw da abté,
 meera agayəs faw da a= b- te
 now bustard always EMPH 3SG IMP arrive

'Now, the bustard always came

abkáw an deerán, ar ʒáyʒi aayó kan
 a= b- kaw a= n deeran ar ʒáyʒi aayo kan
 3SG IMP remove 3SG GEN gum arabic man day DEF LOC

...and ate gum arabic until that day

ayíktət sa ánga da ahár
 a= əktət sa anga da a= har
 3SG remember SBDR 3SG.IND EMPH 3SG tell

...that he remembered that it was he who told

táylaalen sa (kayne)
 taylaalen sa kayne
 guinea hens SBD R jackal
 ...the guinea hens that (the jackal)
 asəbəy şat.
 a= sə- bay şat
 3SG NEG.IMP know fly
 ...didn't know how to fly.'

46 fíkkeenan asəsəm.

fíkkeenan a= səsəm
 then 3SG quiet be
 'So he got quiet.'

47 (Káyne) aʃín ísa «ʔabáy aaró aayó zindé
 Kayne a= ʃín i= sa ʔa= bay aaro aayo zinde
 jackal 3SG say 3PL DAT 1SG know man DEF neck

'The jackal said to them, "I know a man

kukuunan wani.

kuku -nan wani

long ADJR POSS

...with a long neck.'

48 Ánga da aʃín ánʒisa ʔasəbəy şat!»
 anga da a= ʃín anʒi= sa ʔa= sə bay şat
 3SG.IND EMPH 3SG say 2PL DAT 1SG CAUS know fly

'It was he who told you that I don't know how to fly!'"

49.1 Inəʃin ása, kay!
 i= nə- ʃin asa kay
 3PL NEG.PRF say SBDR

'They didn't tell him anything.'

50 Íngi inəhar ása waalá ha fo.
 inga i= nə- har asa wala ha fo
 3PL.IND 3PL NEG.PRF say SBDR none thing INDEF

'They (emphatic) didn't say anything to him at all.'

51 (Maʃʃán) ibtuk asa-a felás ánga
 maʃʃan i= b- tuk =a a= sa =a felas anga
 but 3PL IMP hide 3SG 3SG DAT 3SG because 3SG.IND

'So they hid it from him because he (the bustard)

aʃin ísa, imsəhár
 a= ʃin i= sa i= m- sə- har
 3SG say 3PL DAT 3PL SBJ NEG.IMP tell

...had told them not to tell

Maḥammad ən ʃikárbaayen sa, ha aayó ga
 ən ʃikarbaayen sa ha aayo ga
 GEN coulottes DAT thing DEF about

...Mahammad of the coulottes that

 ánga da ahar ísa-a.
 anga da a= har i= sa =a
 3SG.IND EMPH 3SG tell 3PL DAT 3SG

...it was he who told it to them.'

52 Haʒiggá, akóy təguʒi aayó kan,
 ha ʒi ga a= koy təguʒi aayo kan
 thing MED because 3SG go tree DEF LOC

'Therefore he went to that tree where

abzáwkat deerán.
 a= b- zaw -kat deeran
 3SG IMP bring VEN gum arabic
 ...he (the bustard) got his gum arabic.'

53 (Harwá) inəʃin ása waalá ha fo.
 harwa i= nə- ʃin asa waala ha fo
 still 3PL NEG.PRF say SBDR none thing INDEF

'(But) they still wouldn't tell him anything.'

54 Sa atéenán təguʒi aayó kan, deerán báara ayalen.
 sa a= te -nan təguʒi aayo kan deeran baara ayalen
 SBDR 3SG arrive ALL tree DEF LOC gum arabic be on top

'When he returned to the tree, there was gum arabic all over it.'

55 Sa atéenán deerán do, təzzár aʒin təguʒi,
 sa a= te -nan deran daayo təzzar a= ʒin təguʒi
 SBDR 3SG arrive ALL gum arabic place then 3SG grab tree

'(So) when he arrived at the place where there was gum arabic, he grabbed the tree

afik (ar) akawkat mo
 a= fik ar a= kaw -kat mo
 3SG bury until 3SG remove VEN eyes
 ...and dug (himself in) until

fóoda za (do aayó).
fo da za daayo aayo
INDEF EMPH EMPH place DEF
...only one eye was sticking out.'

56 (Sa) agáyəs akóykat, álwaq aayó deerán
 sa agáyəs a= koy -kat alwaq aayo deerán
 SBDR bustard 3SG go VEN moment DEF gum arabic

'When the bustard came, the time for

amwá wani até.
a= m- wa wani a= te
3SG SBJ eat POSS 3SG arrive
...eating gum arabic arrived.'

57 Abórkəb an zindé ar agún mo fóoda
 a= b- ərkəb a= n zinde ar a= gun mo fo da
 3SG IMP pull 3SG GEN neck until 3SG see eye INDEF EMPH

'He was leaning out his neck until he saw one solitary eye

báara gánda.
baara ganda
be ground
...in the ground.'

58 Aǰin «Ǽnta ganda ne ada mo?»
 a= ǰin ənta ganda ne a= da mo
 3SG say INT ground here 3SG do eye

'He said, "Does the dirt in this place have eyes?"

59 (Maǰǰán) sa aháǰi, anəgún addə́rəz waalá ha
 maǰǰan sa a= haǰi a= nə- gun addə́rəz waala ha
 but SBDR 3SG look 3SG NEG.PRF see trace none thing

'(But) when he looked closely, he didn't see anything,

fo, akóy amhiini.
 fo a= koy a= m- hiini
 INDEF 3SG go 3SG SBJ win
 so he thought he should be fine.'

60 Maǰammad ən ǰikárbaayen, ánga, abaára daayo.
 ən ǰikarbaayen anga a= baara daayo
 GEN coulottes 3SG.IND 3SG be place

'As for Mahammad of the coulottes, he was there.'

61 Abaára ənguuzi ar (ǰíliay) ahúrkaat-a ǰiǰi.
 a= baara ənguuzi ar a= hur -kat =a ǰiǰi
 3SG be place until fatigue 3SG enter VEN 3SG night.

'He was there until exhaustion overtook him in the evening.'

62 ǰílyay ayǰdgəzkaat-a.
 ǰílyay a= ədgəz -kat =a
 fatigue 3SG worry VEN 3SG

'Exhaustion was bothering him.'

63 Təzzar agáyəs até.
 təzzar agayəs a= te
 then bustard 3SG arrive

'Then the bustard arrived.'

64 Sa até daayó kan amkáwkat an
 sa a= te daayo kan a= m- kaw -kat a= n
 SBDR 3SG arrive place LOC 3SG SBJ remove VEN 3SG GEN

'When he arrived at the place where he was going to take the

deerán, (káyne) ánga da kan ažiin-á,
 deran kayne anga da kan a= 3in =a
 gum arabic jackal 3SG.IND EMPH LOC 3SG grab;take 3SG

...gum arabic, right there the jackal grabbed him

har atuunúukat ənda «La-ilah ilah Allah.»¹³¹
 har a= tunu -kat nda
 until 3SG get up VEN with
 ...and he (the bustard) got up (saying) "La-ila ila Allah."

65 (Təzzár agáyəs) aḥin ása «Nin, fiizén kon
 təzzar agayəs a= ḥin a= sa nin fiizen koyyen
 then bustard 3SG say 3SG DAT 2SG.IND sheep (PL) masters

"Then the bustard said to him, "Aren't you the one (that)

kullú ifilas nin aayó ga
 kulu i= filas nin aayo ga
 all 3PL= have confidence 2SG.IND DEF about
 ...all the shepherds trust...

nin da abáy şat?»
 nin da a= bay şat
 2SG.IND EMPH 3SG know fly
 ...(that) you (emphatic) how to fly?"

¹³¹ The first part of the Islamic *Shahada*. In many parts of West Africa, including Niger, it is used as an interjection communicating shock or surprise.

66 (Íkkeenán,) ¹³² tazzar aĵin ása , amzín
 ikkeenán tazzar a= ĵin a= sa a= m- zin
 then then 3SG say 3SG DAT 3SG SBJ grab;take

'Then he said to him that he should stick out

an áfraw amhánga-a.
 a= n afraw a= m- hanga =a
 3SG GEN wing 3SG SBJ ear 3SG
 ...his wing so that he could hear it.'

67 (Aĵin ása) «Ámmaaka itéenán, ámmaaka
 a= ĵin a= sa ammaaka i= te -nán ammaaka
 3SG say 3SG DAT when 3PL= arrive ALL when

'(He also said,) "When the shepherds arrive

fiiĵén kon iĵín "Maḥámád ən ĵikárbaayen
 fiiĵen koyyen i= ĵin Maḥammad n ĵikarbaayen
 sheep (PL) masters 3PL= say GEN coulottes
 ...and say "Mahammad of the coulottes

abáy şat," nimĵín
 a= bay şat ni= m- ĵin
 3SG know; require; take care of fly 2SG= SBJ say
 ...knows how to fly," you should say

"Mhmm , Təbārək Allah."¹³³

allah

"Tebarek Allah."

¹³² In the *Kəl Amdid* variety of Tagdal, *Íkkeenán* and its variant *ĵikkeenán* (borrowed from Hausa) seem to have functions similar to *təzzár* (see chapter 4).

¹³³ It is common in many West African cultures to use the Arabic expression *təbārek Allah* 'Thanks be to God' to ward off the evil eye. The expression is often used when someone is given a complement, in case it was given with evil intent or out of jealousy.

68 *ʃikkénan, nibáara ma ziida.*»¹³⁴

ʃikkeenan ni= baara ma zi da
 then 2SG= be what MED EMPH

'So, you are there (at the place now).'

69 (Həzigga,) *sa ikárvat fiizén*
ha zi ga sa i= kar -kat fiizén
 hear MED against; between SBDR 3PL= hit VEN sheep (PL)

'Therefore, when they were flying

kon əm béena, təzzár iʃín «ʃik Maḥammad ən
koyyen n beena təzzar i= ʃin ʃik Maḥammad n
 masters GEN over then 3PL= say GEN

...over the shepherds, they said, "Wow, Mahammad..."

ʃikárbaayan abáy şat!»
ʃikarbaayan a= bay şat
 coulottes 3SG know; require; take care of fly
 '...of the coulottes knows how to fly!'"

70 *Təzzár aʃín «Mmhm gəmoq qəm maga.*»¹³⁵

təzzar a= ʃin
 then 3SG say

'Then he said, "Mmhm, gemoq qəm maga."'

¹³⁴ At this point in the story, the jackal is holding on to the bustard by its mouth (while holding out its "wings" to show off) as they fly above the place where the shepherds were. This bit of implied information seems to have been understood by everyone (except me).

¹³⁵ Nonsense phrases, trying to say *təbərek Allah* without opening his mouth.

71 Asəsəm, anəhár waalá ha
 a= səsəm a= nə- har waala ha
 3SG quiet.be 3SG NEG.PRF announce;say;declare; praise none thing
 'He (then) got quiet and didn't say
 fo.
 fo
 INDEF
 ...anything (else).'

72 (Ha zi n aláqqam) agoorá abáara
 ha zi n alaqqam a= goora a= baara
 thing MED GEN back 3SG sit 3SG be

'Then he started to go over the

amsədæg aǰín, «ǰiimi sa
 a= m- s- ədæg a= ǰín ǰiimi sa
 3SG SBJ CAUS head toward 3SG say truth SBDR
 ...same spot. He said, "Is it really true that

Maḥámmad abáy şat?»
 Maḥammad a= bay şat
 3SG know; require; take care of fly
 ...Mahammad knows how to fly?'"

73 Aǰín, «Mmhm hmm.»
 a= ǰín
 3SG say

'He said, "Mmhm hmm."'

74 Ayíləs aháar-a ar kárad wani.
 a= ələs a= har =a ar karad wani
 3SG repeat 3SG say 3SG until 3 POSS

'He asked him again, up to three (more) times.'

75 Káyne (agáyəs) ayíləs aḵín ása «Nimḵín
 kayne agayəs a= ələs a= ḵín a= sa ni= m- ḵín
 jackal bustard 3SG repeat 3SG say 3SG DAT 2SG= SBJ say

'The bustard asked him again, saying, "You should say

 ása 'təbarək Allah.'
 a= sa
 3SG DAT
 ...to him "təbarək Allah."

76 Konné, nimḵín (isa) 'Təbarək Allah.'»
 koyyen ni= m- ḵín i= sa
 masters 2SG= SBJ say 3PL= DAT

'To the shepherds you should say, "təbarək Allah."'

77 (Káyne) afér am me, aḵín «Təbarək Allah.»
 kayne a= fer a= m me a= ḵín
 jackal 3SG open 3SG GEN mouth 3SG say

'(The jackal) opened his mouth and said, "təbarək Allah."'

78 Təzzár akán gánda, fiizén kon kan.
 təzzar a= kan ganda fiizen koyyen kan
 then 3SG fall ground sheep (PL) masters LOC

'Then he fell to the ground, among the shepherds.'

79 Ikəmma-a, ibkáar-a, ibkáar-a,
 i= kəmma =a i= b- kar =a i= b- kar =a
 3PL= find 3SG 3PL= IMP hit 3SG 3PL= IMP hit 3SG

'They found him, they hit him, they hit him,

 ibkáar-a, igiif-á.
 i= b- kar =a i= gif =a
 3PL= IMP hit 3SG 3PL= leave 3SG
 ...they hit him, and they left him (for dead).'

Summary

A Grammar of Tagdal, a Northern Songhay language of Niger provides a synchronic description of the Tagdal language as it is spoken by the Igdaalen of the Republic of Niger. These people are usually counted as Tuaregs by the larger population of Niger and are spread among semi-nomadic encampments from as far south as near the southern border with Nigeria, to the northern city of Agadez, and areas in between.

Northern Songhay is considered a branch of the larger Songhay language family. However, it also shares many features of Berber languages, especially of Tuareg. Features of Tuareg can be found throughout the language, side-by-side with Songhay features. Both Tuareg and Songhay features are easily recognisable as coming from either source language. At first look, the syntax seems to be primarily Songhay in origin. However, this is something which warrants more study.

Chapter one provides information concerning the people, the sociolinguistic situation, and some discussion about the classification of Songhay, and Northern Songhay languages in particular. Some discussion of the methodology in this book, as well as a brief text are also included.

Chapter two is a description of some of the most common phonological processes in Tagdal. It is shown that both closed and open syllables are possible, as well as syllables that begin with vowels. Next, an inventory of the consonants in the language is provided, including of the three most common Tagdal varieties, that of the Abargan and Kəl Illokod, which most resemble Tadaksahak; followed by that of the Kəl Amdid and Tarbun; then of Tabarog. The section on vowels demonstrates that, at least at first glance, all of the vowels except for schwa have long and short variants. Nevertheless, in light of the findings in the third chapter, this might need to be revisited. It is demonstrated that the surface realisation of vowels is context-dependent, with vowels in unstressed syllables being uttered in a more central position. It is also demonstrated that the central vowel ə will change its position and height, even its roundedness, depending on context. In the section about sound rules, the assimilation of /n/ is discussed. It is also demonstrated that /n/ is realised as a nasalisation on the preceding vowel when it is followed by /f, s, z, ʃ, ɣ, or ʒ/. In words that end in a vowel, the final vowel is elided when the following word begins with a consonant. In addition, /ay/ with a short vowel is realised as [ej] and /ow/ with a short vowel is realised as [ɔw]. The final section shows the various stress patterns possible in Tagdal.

The third chapter presents the morphology of Tagdal, along with some of the main prosodic features of the language, which accompany the morphology. It is demonstrated that Tagdal has, in fact, two prosodic sub-systems, one for vocabulary of Tuareg origin and one for vocabulary of Songhay origin. The chapter begins with a description of the pronominal sub-system. It then continues with a description of the noun of Songhay etymology. It is demonstrated that the vowel in the CVC syllable of

Songhay origin elongates to CVVCV when another vowel is added. By contrast, nouns of Tuareg origin function by a completely different set of rules. The main consideration with nouns of Tuareg etymology is whether, after all the prefixes and suffixes are added, stress falls on the penultimate or on the antepenultimate syllable. If stress falls on the antepenultimate syllable, this affects vowel and consonant length throughout the word. The section ends with a description of how masculine and feminine nouns function with respect to Tuareg vocabulary. The chapter then moves on to how Tuareg roots are nominalised, versus how Songhay roots are nominalised, along with a brief discussion of when to use Songhay versus when to use Tuareg vocabulary. This is followed by a discussion of adjectives in Tagdal, beginning with how Songhay roots are adjectivised and ending with how adjectives are formed from Tuareg roots. Most adjectives derived from Tuareg roots involve the presence of the Subject Relative marker *a-*. A discussion of adverbs and adpositions, which are fairly closed sets in Tagdal, follows. The next section of chapter three describes the verb. Once again, the language treats verb roots of Songhay origin differently from those of Tuareg origin. This is especially important because primary stress in the verb normally occurs somewhere on the root. The following section discusses three derivational affixes which attach onto verb roots of Tuareg origin: the Passive the Reciprocal and the Causative. Since the question in Tuareg roots is whether stress falls on the penultimate or antepenultimate syllable once all prefixes and suffixes are accounted for, affixation is an important consideration for all Tuareg verbs. The section on the three prefixes in question ends with a discussion of suppletion, where Songhay roots are supplanted by those of Tuareg origin whenever one of the three derivational prefixes comes into question. Chapter three continues with a discussion of the morphology of the verb. This includes the bound morphemes that precede the verb root – the proclitic, the Tense-Aspect-Mood prefix and negation prefixes. The chapter ends with a discussion of what follows the verb root. This includes the Venitive and Allative suffixes and the Direct Object clitic. Then the Indirect Object is discussed, along with the Dative marker *sa*.

Chapter four begins with a description of the Noun Phrase, starting with a discussion of determiners. Tagdal has a number of determiners, each of which matches the Noun Phrase in number, either singular or plural. The determiners then function to indicate whether the Noun Phrase is definite or indefinite. The next section discusses Noun Phrase coordination. Normally each coordinated Noun Phrase is followed by one of several conjunctions. The next section describes the Adpositional Phrase. Tagdal mostly has postpositions, though one preposition, *nda*, also functions as a coordinator. Next, default SVO word order is discussed in normal clauses containing a verb, followed by a brief discussion of non-verbal clauses. The next section describes clause coordination, both with and without a connector.

The sections which follow discuss syntax, especially in complex sentences – defined here as sentences containing more than one clause. First, a description of subordinate clauses is provided. In general, these can be broken down into various types of adverbial clauses, various types of complement clauses and relative clauses. Relative clauses can be either Subject, Object or adpositional relatives. The subject relative clause is distinguishable by the presence of the Subject Relative marker *a-* where the

proclitic would normally go in the verb. The object relative clause is one where the Object is the relativised position and the demonstrative or determiner follows the head noun, followed by the verb. Instead of the Subject Relative *ə-*, the verb has a normal proclitic. There is also an adpositional relative clause, where the Adpositional Phrase is relativised. The following section describes how commands and requests are made in Tagdal, followed by a section describing how questions are formed, either yes/no, tag or various kinds of content questions.

Finally, the book ends with a very brief description of how Tagdal handles elements above the sentence, such as paragraphs or an entire discourse. The section begins with a discussion of cohesion between sentences, between paragraphs and within a discourse. This is followed by a brief description of how the language uses word order, the presence (or lack of) pronouns and connectors to either increase or decrease the prominence of various elements in the larger discourse.

Samenvatting

Een grammatica van het Tagdal, een Noord-Songhai-taal van Niger biedt een synchrone beschrijving van de Tagdal-taal zoals die gesproken wordt door de Igdaalen in de Republiek Niger. Deze mensen worden door bevolking van Niger gewoonlijk tot de Toeareg gerekend en leven verspreid over semi-nomadische kampementen van de grens met Nigeria in het Zuiden tot de stad Agadez in het Noorden en gebieden daar tussenin.

Het Noord-Songhai wordt beschouwd als een tak van de grotere Songhai-taalfamilie maar deelt ook vele kenmerken met de Berbertalen, in het bijzonder met Toeareg. Kenmerken van het Toeareg zijn aanwezig door de gehele taal heen, zij aan zij met Songhai-kenmerken. Zowel Toeareg- als Songhai-kenmerken zijn gemakkelijk te identificeren als voortkomend uit één van de twee brontalen. Op het eerste gezicht lijkt de zinsleer voornamelijk in het Songhai haar oorsprong te vinden. Dit onderwerp vergt echter meer onderzoek.

Het eerste hoofdstuk biedt informatie over de sprekers, de sociolinguïstieke situatie en bespreekt de classificatie van het Songhai, in het bijzonder van het Noord-Songhai. Dit hoofdstuk bevat ook een bespreking van de methodologie en een korte tekst.

Het tweede hoofdstuk bestaat uit een beschrijving van enkele van de meest voorkomende fonologische processen in het Tagdal. Het zal worden aangetoond dat zowel gesloten als open lettergrepen mogelijk zijn en dat lettergrepen daarnaast ook met een klinker kunnen beginnen. Vervolgens wordt de verzameling van klinkers gepresenteerd van de drie meest voorkomende Tagdal-varianten: 1) de taalvariant van de Abargan en de Kəl Illokoɗ, die het meest op het Tadaksahak lijkt, 2) de taalvariant van de Kəl Amdid en de Tarbun en 3) het Tabarog. De paragraaf over klinkers toont aan dat, in ieder geval op het eerste gezicht, alle klinker behalve de sjwa lange en korte varianten hebben. Echter, gezien de bevindingen in het derde hoofdstuk, moet deze analyse wellicht herzien worden. Het zal worden aangetoond dat de oppervlakte-realisatie van klinkers afhankelijk is van context. Klinkers in onbeklemtoonde lettergrepen worden gecentraliseerder uitgesproken. Het wordt ook aangetoond dat de centrale klinker ə wat betreft positie en hoogte, zelfs ronding, verandert afhankelijk van de context. In de paragraaf over klankverschuivingen wordt de assimilatie van /n/ besproken. Het wordt ook aangetoond dat /n/ gerealiseerd wordt als nasalisatie van de voorafgaande klinker wanneer deze gevolgd wordt door /f, s, z, ʃ, ʒ, of ʒ/. In woorden die eindigen op een klinker wordt de laatste klinker geëlideerd als het volgende woord met een medeklinker begint. Daarnaast wordt /ay/ met een korte klinker gerealiseerd als [ej] en /ow/ met een korte klinker als [ɔw]. De laatste paragraaf beschrijft de verscheidene klemtoonpatronen die mogelijk zijn in het Tagdal.

Het derde hoofdstuk presenteert de vormleer van het Tagdal en eveneens enkele van de voornaamste prosodische kenmerken van de taal die met de vormleer verbonden

zijn. Het zal worden aangetoond dat het Tagdal eigenlijk twee prosodische subsystemen heeft: één voor vocabulaire van Toeareg-origine en één voor vocabulaire van Songhai-origine. Dit hoofdstuk vangt aan met een beschrijving van het pronominale subsysteem en geeft vervolgens een beschrijving van naamwoorden met een Songhai-etymologie. Het wordt aangetoond dat de klinker in een CVC-lettergreep van Songhai-origine verlengd wordt tot CVVCV wanneer er een klinker aan toegevoegd wordt. Naamwoorden van Songhai-origine daarentegen volgen een volledig andere set regels. De belangrijkste kwestie wat betreft naamwoorden met een Toeareg-etymologie is of de klemtoon valt op de voorlaatste of op de op twee na laatste lettergreep na toevoeging van prefixen en suffixen. Als de klemtoon op de op twee na laatste lettergreep valt, dan heeft dit een effect op de duur van de klinkers en medeklinkers in het hele woord. Deze paragraaf sluit af met een beschrijving van het functioneren van mannelijke en vrouwelijke naamwoorden in relatie tot de Toeareg vocabulaire. Het hoofdstuk gaat verder met de nominalisering van Toeareg-wortels versus de nominalisering van Songhai-wortels en met een korte bespreking van de keuze tussen het gebruik van Songhai en Toeareg vocabulaire. Dit wordt gevolgd door een bespreking van bijvoeglijk naamwoorden in het Tagdal: eerst de adjectivisering van Songhai-wortels en vervolgens de adjectivisering van Toeareg-wortels. De meeste bijvoeglijk naamwoorden die van Toeareg-wortels afgeleid zijn, bevatten een bijvoeglijke markeerder voor onderwerpen ('Subject Relative marker'), *a-*. Dit wordt gevolgd door een bespreking van bijwoorden en adposities, die tamelijk gesloten woordklassen zijn in het Tagdal. De volgende paragraaf van hoofdstuk drie beschrijft het werkwoord. Opnieuw maakt de taal een onderscheid tussen werkwoordwortels van Songhai-origine en werkwoordwortels van Toeareg-origine. Dit is vooral belangrijk omdat de hoofdklemtoon van het werkwoord gewoonlijk ergens op de wortel valt. De volgende paragraaf bespreekt drie derivatie-affixen die zich hechten aan werkwoordwortels van Toeareg-origine: het passieve, het wederkerende en het overgankelijke affix. Affixatie is een belangrijk onderwerp omdat het plaatsen van de klemtoon op de voorlaatste of op de op twee na laatste lettergreep in Toeareg-werkwoorden na de toevoeging van alle prefixen en suffixen gebeurt. De paragraaf over de drie prefixen eindigt met een bespreking van suppletie: Songhai-wortels worden vervangen door Toeareg-wortels wanneer één van de besproken drie prefixen gebruikt worden. Hoofdstuk drie gaat verder met een bespreking van de vormleer van het werkwoord. Dit omvat de gebonden morfemen die aan het werkwoord voorafgaan - het procliticum, het tijd-aspect-modaliteit-prefix en ontkennende prefixen. Het hoofdstuk sluit af met een bespreking van wat volgt op de werkwoordwortel. Dit omvat de cislocatieve en andatieve prefixen en het lijdend voorwerp-cliticum. Vervolgens worden het lijdend voorwerp en de datief-markeerder, *sa*, besproken.

Het vierde hoofdstuk begint met een beschrijving van het naamwoordelijk zinsdeel ('Noun Phrase'), als eerste met een bespreking van determinatoren. Het Tagdal heeft een aantal determinatoren en allen vertonen ze congruentie met het naamwoordelijk zinsdeel wat betreft getal - enkelvoud of meervoud. De determinatoren geven aan of het naamwoordelijk zinsdeel bepaald of onbepaald is. De volgende paragraaf bespreekt de nevenschikking van naamwoordelijke zinsdelen. Elk nevenschikt naamwoordelijk zinsdeel wordt gewoonlijk gevolgd door één of meerdere voegwoorden. De volgende paragraaf beschrijft het adpositie-zinsdeel ('Adpositional

Phrase'). Het Tagdal heeft overwegend postposities, maar één prepositie, *nda*, fungeert evenwel als nevenschikkend voegwoord. Vervolgens wordt de basiswoordvolgorde SVO besproken in normale zinnen die een werkwoord bevatten, gevolgd door een korte bespreking van niet-verbale zinnen. De volgende paragraaf beschrijft de nevenschikking van zinnen, zowel met als zonder voegend element. De daaropvolgende paragrafen bespreken de zinsleer, in het bijzonder die van complexe zinnen - hier gedefinieerd als zinnen die uit meer dan één zin ('clause') bestaan. Als eerste worden ondergeschikte zinnen besproken. Over het algemeen kunnen we deze indelen in verschillende soorten bijwoordelijke bijzinnen, verschillende soorten complement-zinnen en bijvoeglijke bijzinnen. Bijvoeglijke bijzinnen kunnen een bepaling zijn bij een onderwerp, lijdend voorwerp of een adpositie-zinsdeel ('Adpositional Phrase'). De onderwerp-bijvoeglijke bijzin wordt gekenmerkt door de aanwezigheid van een bijvoeglijke markeerder voor onderwerpen ('Subject Relative marker') op de plaats vóór het werkwoord waar gewoonlijk het procliticum staat. De lijdend voorwerp-bijvoeglijke bijzin is een bepaling bij het lijdend voorwerp. Het demonstrativum of de determinator in deze bijzin volgt het hoofdvoornaamwoord en wordt op zijn beurt gevolgd door het werkwoord. In plaats van de bijvoeglijke markeerder voor onderwerpen, *a-*, treffen we hier een gewoon procliticum aan. Er zijn ook adpositionele bijvoeglijke bijzinnen; zij vormen een bepaling bij een adpositie-zinsdeel. De volgende paragraaf beschrijft hoe bevelen en verzoeken uitgedrukt worden in het Tagdal. De daaropvolgende paragraaf beschrijft het formuleren van vragen, zowel van ja/nee-vragen als van aanhangselvragen en verschillende typen inhoudsvragen.

Het boek sluit af met een zeer korte beschrijving van hoe het Tagdal omgaat met eenheden boven het niveau van de zin, zoals paragrafen en complete narratieven. De paragraaf begint met een bespreking van de samenhang tussen zinnen, tussen paragrafen en binnen een narratief. Dit wordt gevolgd door een korte beschrijving van hoe de taal woordvolgorde en de aan- of afwezigheid van pronomina en voegende elementen inzet om verschillende elementen in het narratief een meer of juist minder prominent plek te geven.

Curriculum Vitae (English)

Carlos Miguel Benítez-Torres was born in 1968 in Mayagüez, Puerto Rico. In the late 1970s, he and his family moved to Miami, Florida, United States. While there, he attended Miami Springs High School and later Miami Christian College, where he majored in Psychology. After high school, he studied the University of Texas at Arlington, where he earned a Masters degree in Humanities, specialising in Linguistics.

Between 1999 and 2013, Carlos and his family lived in the Republic of Niger, where they formed part of SIL's Northern Songhay team, concentrating most of their time in the Tagdal language development. While there, he learned to speak Tagdal and worked in language development. This included developing working orthographies in both Roman and Arabic scripts, as well as promoting Tagdal as an indigenous nigérien language, apart from Tamajaq. In 2013, he was officially accepted into the PhD programme in Linguistics at the University of Leiden. Most recently, he has been part of the faculty of Linguistics at Payap University.

Curriculum Vitae

Carlos Miguel Benítez-Torres werd geboren in 1968 in Mayagüez, Puerto Rico. Eind jaren zeventig verhuisde hij met zijn familie naar Miami, Florida, Verenigde Staten. Daar volgde hij middelbaar onderwijs aan de Miami Springs High School, waarna hij aan Miami Christian College, psychologie studeerde. Na deze studie behaalde hij aan de Universiteit van Texas in Arlington, een masterdiploma in geesteswetenschappen, met als specialisatie taalwetenschap.

Tussen 1999 en 2013 woonden Carlos en zijn gezin in de Republiek Niger, waar ze deel uitmaakten van het ‘Northern Songhay’-team van SIL. Ze richtten zich hier voornamelijk op taalontwikkeling. Dit omvatte het ontwikkelen van orthografieën in zowel Romeinse als Arabische lettertekens. Daarnaast hielpen ze ook om het Tagdal te promoten als een inheemse Nigerese-taal, afzonderlijk van de Toeareg-variëteiten. In 2013 werd Carlos officieel toegelaten tot het PhD-programma Taalwetenschap aan de Universiteit Leiden. Meest recent maakte hij ook deel uit van de faculteit Taalwetenschap van Payap University in Chiang Mai, Thailand.