

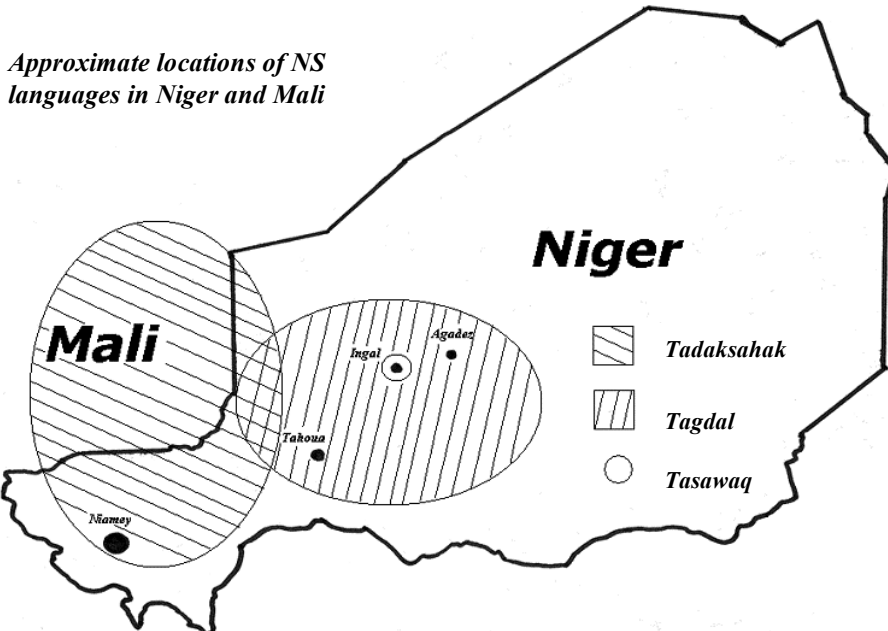
Inflectional vs. Derivational Morphology in Tagdal: A Mixed Language

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1. Introduction

Tagdal is a Northern Songhay language spoken in northern and central modern-day Niger. There are a total of three Northern Songhay languages (including Tagdal) in Niger and Eastern Mali, and another in southern Algeria: Tagdal and Tadaksahak are spoken by two semi-nomadic Tuareg-Berber tribes (of North African origin), called the Igdalan and the Idaksahak, respectively. Tasawaq, the third Northern Songhay language, is spoken by a sedentary people called the Isawaghan (sometimes called Ingal koyyu—literally, ‘the masters of Ingal’) in two villages of northern Niger: Ingal and Teggida-n-Tesumt (Adamou 1979:53).

There is possibly another Northern Songhay language in Niger, Tabarog, spoken by a sedentary people called the Ibarogan. These are socially and economically linked to the Igdalan, though they retain their own ethnic identity. There is a question as to whether Tabarog should be considered a separate language or simply a variety of Tagdal. Rueck and Christiansen (1999), in their survey of Northern Songhay languages in Niger, found a high degree of intelligibility between Tagdal and Tabarog.¹ They suggested that these two are likely varieties of the same language. Therefore, for the purposes of this paper, Tabarog and Tagdal are considered the same language.²



¹ Between 88 and 93 percent on Recorded Text Test mean scores.

² In my personal contacts with Ibarogan in Niger, I have also found a high degree of intelligibility between Tagdal and Tabarog. The Ibarogan and Igdalan themselves consider their speech varieties simply “accents” of the same language.

Yet another Northern Songhay language, Emghedeshie, was at one time the language of wider communication in the town of Agadez in northern Niger, but has been extinct since the early twentieth century (Hamani 1989:208). Besides the Northern Songhay languages spoken in Niger and Mali, there is Kora-n-ji (also spelled Korandje), a Northern Songhay language spoken in southwestern Algeria (Tilmatine 1991).

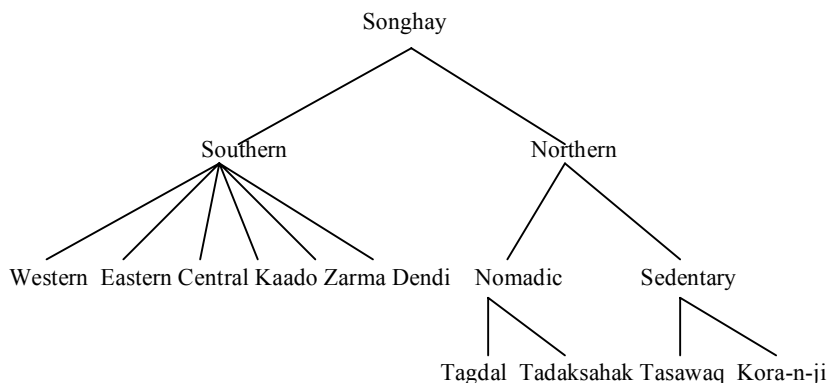
The goal of this paper is to demonstrate that Tagdal is a mixed language, and to propose some possible scenarios which could have led to its genesis and development. Thomason (2001:197) defines *mixed language* as a language that “arises in a contact situation involving just two languages, where there is widespread bilingualism...and every component is easily traceable to a single source language.” In other words, in the case of mixed languages (in contrast with creoles and pidgins), bilingualism plays a greater role in language genesis than imperfect learning of a superstrate language.

1.1. Genetic affiliation

The characteristic that most marks Northern Songhay languages from better-known (southern) Songhay languages is heavy Berber influence—either from an early version of modern day Tamajaq from Niger and Mali, or from some other extinct Berber language. This affects virtually every aspect of the languages. First, the phonologies of Northern Songhay languages are essentially Berber (Afro-Asiatic) phonologies: “Tout se passe comme s’ils avaient abandonné le système...songhay pour ne garder que le système Tamacheq.” (Nicolai 1979:266) Secondly, a large portion of the lexicon (depending on the domain) is of Berber origin. Finally, noun and verb morphology and other aspects of the grammar demonstrate the influence of Berber. In addition to Berber influence, SVO word order and the lack of tones in the nomadic languages (Tagdal and Tadaksahak) further serve to distinguish Northern Songhay languages from Southern Songhay languages (Nicolai 1979:15).

Due to the particular language mixtures involved, Northern Songhay languages resemble each other more than they resemble other Songhay, or Berber, languages. However, they differ in their degree of Berber influence and in their degree of similarity to Southern Songhay languages. Proportionally, Tadaksahak has the most Berber influence and the least similarity to Songhay.³ Tasawaq most resembles Southern Songhay languages (including tone), and Tagdal is in the middle of the two extremes.

The following figure, adapted from Nicolai (1979:14), presents the Songhay language family.



1.2. The literature

The first Westerner to document the existence of Northern Songhay languages was the explorer Heinrich Barth, who wrote *An outline chrestomathy of Emghedeshie, 'The language of Agadez'* (in

³ Tadaksahak has a 50% lexical similarity to Songhay in Mali (Liebrecht 1996).

Kirk-Green:1972) in 1851, after his travels in the region of modern-day northern Niger. It was in this article that Barth noted the influence of Tamajaq (Berber) on Emghedeshie. However, no effort was made at the time to distinguish between the various varieties of Songhay. Subsequently, various researchers studied Songhay languages, especially their phonological inventories and tonal systems. Most notable among these were Prost (1956, 1966), Tersis (1972) and Heath (1999). It was LaCroix (1968) who first mentioned Northern Songhay languages in linguistic circles, calling them “*langues mixtes*,” due to the strong influence of both Songhay and Berber. Lacroix (1975) also raised the question of whether Tasawaq should actually be placed in the northern or southern Songhay branch, since this is the Northern Songhay language which maintains the most features of mainstream (southern) Songhay. Since then, Robert Nicolai (1979, 1980, 1987a, 1987b, 1990a, 1990b, 2000, 2003) has done the bulk of the research into Northern Songhay languages.⁴

2. Linguistic evidence for two grammatical systems

As evidence that Tagdal’s origins are those of bilingualism, I will demonstrate that Tagdal has incorporated characteristics of two grammatical systems—Songhay and Berber. I will present the different ways in which Tagdal adjusts verbal valence (along with some corresponding grammatical constructions with the same functions), based on whether the verb in question is of Berber or Songhay origin.⁵

Most of the data used is the result of some 8 years of research among Tagdal speakers from various communities within Niger. Some speakers I came into contact with were from the Agadez region in northern Niger, at one time on the easternmost frontier of the Songhay empire, and the rest came from the Abalak/Tchin-Tabaredene region of central Niger. The remaining data was taken from other researchers who worked in both Tagdal and other related languages.

2.1. *Inflectional morphology*

Tagdal, along with its sister Northern Songhay language, Tadaksahak, is an agglutinative language, or in any case, much more so than Tasawaq and southern Songhay languages. This is most likely due to its Berber influence. In this section, I will present the three types of inflectional prefixes of Tagdal verbal morphology: the subject prefix and its pronominal system, negation, and tense-aspect-mode (TAM). All of these are of Songhay origin, and are easily recognizable as Songhay by anyone who speaks a Songhay language. Compare, for example, with inflections in Songhay varieties from both Timbuktu and Gao, as described by Heath (1998, 1999).

2.1.1. *The pronominal system of Tagdal*

The following are the independent pronouns in Tagdal. Though these are not prefixes (therefore, not technically part of inflectional morphology), I present them in order to demonstrate, for those familiar with Songhay languages, that the pronominal system of Tagdal is indeed of Songhay, and not Berber, origin.

	Singular	Plural
First person	yqy	iri
Second person	nin	anji
Third person	anga	ingi

⁴ Nicolai has concentrated much of his work on establishing a link between modern-day Songhay and an extinct, creolized Afro-Asiatic language that possibly existed in the region of modern-day Mali sometime in the past. Regardless of what one thinks of this theory (see Dimmendaal 1992, 1995), Nicolai has certainly been a major player in Songhay historical linguistics over the past thirty years.

⁵ Some verbs in Tagdal are of Arabic origin. Many of these verbs also exist as Tamajaq (Berber) verbs of Arabic origin, in which case they are treated as Berber verbs.

The following are the subject prefixes. These are clitics, attached to the verb.

	Singular	Plural
First person	ɣa-	iri-
Second person	ən / ni- ⁶	anji-
Third person	a-	i-

2.1.2. Negation in Tagdal

Tagdal has two prefixes for negation. The negative prefix *nə-* functions as a perfective negation, and is the default choice for negation, especially in spoken discourse. It indicates something which did not occur in the past, or in the case of stative verbs (especially in spoken discourse), something which is not true or is not the case, as in the following examples.

- (1) a. ɣanəkoy.
 ɣa- nə- koy
 1s NEG go
 ‘I did not go.’
- b. ɣanəkimma-a.
 ɣa- nə- kimma- a
 1s NEG find 3s
 ‘I did not find it.’
- c. ɣanəyarda.
 ɣa- nə- yarda
 1s NEG agree
 ‘I disagree.’
- d. ɣay, ɣanəši amanokal!
 ɣay ɣa- nə- ši amanokal
 1s 1s NEG be chief / king / boss
 ‘I (emphatic) am NOT the boss/king/chief!’

The other negation prefix is *sə-*. This indicates a negation in the present, future or in irrealis, as in the following examples:

- (2) a. ɣasəbkoy.
 ɣa- sə- b- koy
 1s NEG IMP go
 ‘I wasn’t going.’ / ‘I don’t (habitually) go.’
- b. Nimsətkəl-a.
 ni- m- sə- ətkəl- a
 2s SBJ NEG lift 3s
 ‘You shouldn’t pick it up.’
- c. ɣasəbɣwa ha aɣo!
 ɣa- sə- b- ɣwa ha aɣo
 1s NEG IMP eat thing DEM
 ‘I don’t eat that (habitually).’

⁶ The prefix *ən-* is an allomorph of the second-person singular prefix *ni-*. It occurs before the future tense *tə-* and the negations *sə-* and *nə-*.

2.1.3. TAM in Tagdal

Tagdal has three prefixes which serve as its TAM system, and the absence of a prefix, which serves as a completive aspect or, in stative verbs, a present-tense state of being.⁷

- (3) a. *Yəkoy.*
 ya- koy
 1s go
 ‘I went.’
- b. *Yəzumbu.*
 ya- zumbu
 1s go down
 ‘I came down’
- c. *Yəyitkəl-a.*
 ya- ətkəl- a
 1s lift 3s
 ‘I lifted him/her/it.’
- d. *Yəyiḏəz.*
 ya- əḏəz
 1s tired
 ‘I am tired.’
- e. *Ahossay!*
 a- hossay
 3s beautiful
 ‘She is beautiful!’

The prefix *tə-* functions as the future tense⁸ in Tagdal, as in the following examples.

- (4) a. *Yətəkoy.*
 ya- tə- koy
 1s FUT go
 ‘I will go.’
- b. *Yətəzumbu.*
 ya- tə- zumbu
 1s FUT go down
 ‘I will come down.’
- c. *Yətəkimma-a.*
 ya- tə- kimma- a
 1s FUT find 3s
 ‘I will find it.’

⁷ Some researchers (e.g. Christiansen and Christiansen n.d.) have propose a ‘zero-morpheme’ for the completive aspect in Songhay.

⁸ In most narrative discourse in Tagdal, the future *tə-* and the modal *m-* (see below) occur most often in subordinate clauses. This is similar to the way in which the future tense and modal function in Berber languages.

The prefix *m-* functions as the subjunctive (SBJ, for the purposes of this article) in Tagdal, as in the following examples.

- (5) a. Yaṃkoy.
 ya- m- koy
 1s SBJ go
 ‘I should go.’
- b. Yaṃzumbu.
 ya- m- zumbu
 1s SBJ go down
 ‘I should come down.’
- c. Amhurru wayen n kibay!
 a- m- hurru way- en n kibay
 3s SBJ search woman PL GEN find
 ‘She should look for the (place where the) women are gathered!’

Finally, the prefix *b-*, the imperfective or incomplete aspect, functions to indicate habitual actions; actions that were occurring in the past, which may or may not be occurring in the present; and, in non-stative verbs, actions that are occurring presently.

- (6) a. Jaṃji kullu, yaḃkoy yaabu.
 jaṃji kullu ya- b- koy yaabu
 day all 1s IMP go market
 ‘I go to the market everyday.’
- b. Giš yaṃ, yaḃzumbu!
 giš yaṃ ya- b- zumbu
 let go 1s 1s IMP descend
 ‘Leave me alone, I’m coming down!’
- c. Alwaq aṃo, iribda lakol.
 alwaq aṃo iri- b- da lakol
 moment DEM 1p IMP do school
 ‘At that time, we used to go to school.’

Now, I will discuss the derivational sub-system in Tagdal.

2.2. *Derivational morphology*

The derivational morphological system in Tagdal comprises principally three sets of valence-changing prefixes: the causative prefix, the passive prefix and the reciprocal prefix. All of these are of Berber origin, and can be attached only to verb roots of Berber origin.⁹ In this section, I will describe the prefixes mentioned above, as well as a number of syntactic constructions with the same functions as the passive and reciprocal prefixes.

⁹ Compare, for example, with the derivations below with Berber derivations from Tamajaq spoken in neighboring Burkina Faso, in Sudlow (2001).

2.2.1. Causatives

2.2.1.1. Morphological causativization

Adding the causative prefix *sə-* to a verb root of Berber origin is a productive process in Tagdal. The causative prefix before the verb root indicates that the subject is either causing the action of the verb, or is making someone else perform the action, as in the following examples.

verb root	causative verb
ənfər ‘move aside’	sənfər ‘push aside, shove’
ərkəb ‘pull’	sərkəb ‘cause pull’
ətəkəl ‘take, lift’	sətəkəl ‘cause to be taken, lifted’
əntəg ‘push’	səntəg ‘cause to push’
ədru ‘work together’	sədru ‘cause to work together’
əkəbəl ‘hold up’	səkəbəl ‘cause to hold up’
əzri ‘replace’	zəzri ‘cause replace’
əšək ‘doubt’	šəšək ‘cause doubt’
əlkəm ‘follow’	səlkəm ‘cause follow’

As in Tamajaq (Berber), the causative prefix is attached to the verb root, forming a causative verb. Tagdal then adds inflectional affixes of Songhay origin to the stem, in order to form a clause or sentence. The verbs in both their causativized and non-causativized forms are perfectly recognizable as Tamajaq verbs, unchanged from their Berber counterparts.

2.2.1.2. Causativization through suppletion

Another very common process for forming causatives in Tagdal is that of suppletion. The causative morpheme *sə-* cannot be affixed to verb roots of Songhay origin. Therefore, in order to derive causative verbs from verbs of Songhay origin, a causativized verb of Berber origin suppletes any verb of Songhay origin.¹⁰ The example below illustrates this process. The non-causative Songhay verb meaning ‘fear’ (*hambara*) is replaced by its causative correlate of Berber origin (*sərmay*).

Non-causativized verb root

- (7) Yab**hambara** aljinnien.
 ya- b- **hambara** aljinni- en
 1s IMP fear genie PL
 ‘I am afraid of genies.’

Causativized Berber verb

- (8) Aljinnien **isərmay** γay.
 aljinni- en i- **sə- ərmay** γay
 genie PL 3p CAUS fear 1s
 ‘Genies scare me.’

Since a preponderance of basic verbs in Tagdal are of Songhay origin, suppletion is a very productive strategy for deriving causative verbs, as illustrated in the examples below.

¹⁰ Christiansen and Christiansen (2002) attest to this process in Tadaksahak, the other nomadic Northern Songhay language.

verb root of Songhay origin

koy ‘go’
 jin ‘grab’
 zuuru ‘run’
 nin ‘drink’
 dumbu ‘slaughter (animal)’
 hanga ‘hear’
 hambara ‘be afraid’

causative form

səglu ‘cause to go’
 sətkəl ‘cause to grab’
 səwəqəs ‘cause to run’ (lit. ‘cause to flee’)
 šəšəwa¹¹ ‘give (someone) a drink’
 zəgzəm¹² ‘get (someone else) to slaughter (an animal)’
 sədərgən ‘listen’
 sərmay ‘scare’

For obvious functional reasons, the Berber verbs which replace Songhay verbs in suppletion do not exist in their non-causativized form. For example, the Tamajaq (Berber) verb *əšəwa* ‘drink’ does not exist in Tagdal, because the verb ‘drink’ in Tagdal is the Songhay verb *nin*. Similarly, the Tamajaq verb *əglu* ‘go’ is not a verb in Tagdal; rather, the Tagdal verb is *koy*. In other words, in the case of suppletion, the causativized Berber verb entered into the language already lexicalized.

Unlike Tasawaq (see Ousseina 1988:50-51), Tagdal does not normally have any causative forms of Songhay origin. However, I was able to find one exception. The Songhay verb *kan* ‘fall’, when causativized is *kanda* ‘cause to fall’ (derived from the Songhay *kan nda* ‘make fall’), not the Berber causativized verb *səggədəl* ‘cause to fall’. There is a good explanation for this, as *səggədəl* in Tagdal does not mean ‘cause to fall’; rather, it means ‘limp’. Nevertheless, this single exception does bring up some very interesting questions concerning the genesis of Tagdal.

Therefore, the normal process of causativization in Tagdal goes as follows: if the verb root is of Berber origin, the causative prefix *sə-* is added in order to form a causativized verb. If the verb is of Songhay origin, the default strategy is to supplete the Songhay verb root with one of Berber origin, already causativized.

2.2.2. Passives

Tagdal uses a morphological passive prefix of Berber origin, and related suppletive forms, to form passive constructions. In this respect passive verbs in Tagdal are derived from active verbs in much the same way as causative verbs.

Unlike causative constructions, there is no distinctly Songhay passive construction. However, as in Songhay languages, Tagdal uses a syntactic construction, which may be used to promote or place focus on the semantic patient or undergoer (direct object).

2.2.2.1. Morphological passives

The passive voice in Tagdal is marked by the prefix *tuw-* attached to a verb of Berber origin.

active

ənfər ‘move aside’
 ərkəb ‘pull’
 ətkəl ‘take, lift’

passive

tuwənfər ‘moved aside’
 tuwərkəb ‘pulled’
 tuwətkəl ‘taken, lifted’

2.2.2.2. Suppletion

The passive prefix *tuw-* cannot be affixed to Songhay verbs. To derive a passive verb from an active verb of Songhay origin, the Berber verb suppletes one of Songhay origin.

¹¹ *šə-* and *zə-* are allomorphs of *sə-*.

¹² *Ibid.*

Songhay active voice	Berber passive voice
Yabbaay-a. ya- b- bay- a 1s IMP know 3s ‘I know it.’	Abtuwasən. a- b- tuwasən 3s IMP known ‘It is known.’
Anin aššahi. a- nin aššahi 3s drink tea ‘He drank the tea.’	Aššahi tuwəšuw aššahi tuw- əšuw tea PASS drink ‘The tea was drunk.’
Ajin turagat. a- jin turagat 3s take contract ‘He took the contract’	Turagat atuwətkəl. turagat a- tuw- ətkəl contract 3s PASS take ‘The contract was taken.’

The Berber verbs which supplete Songhay verbs in Tagdal are lexicalized and do not exist in their active Berber forms. For example, the Berber verb *sən* ‘know’ does not exist in Tagdal (without derivational prefixes attached). Instead, the Songhay verb *bay* is used.

2.2.2.3. Functional inverse constructions

Sometimes, rather than employing passive prefixes to change voice, Tagdal uses a change in basic constituent word order to downplay the centrality of the agent and bring the patient into focus.¹³ While technically the number of arguments is not changed, it functions in much the same way as a passive construction.

In simple Tagdal transitive clauses, SVO is the default word order. When utilizing an inverse construction, in order to bring the patient into focus, the complement precedes the subject, as in the following example.

simple transitive clause	object focus clause
Illias abɣwa taasu. Illias a- b- ɣwa taasu Illias 3s IMP eat sauce ‘Illias is eating the food.’	Taasu Illias abɣwa. taasu Illias a- b- ɣwa sauce Illias 3s IMP eat ‘The food is being eaten by Illias.’

2.2.3. Reciprocal constructions

Tagdal uses both analytic and morphological constructions in order to form reciprocals. Morphological reciprocals insert the Berber prefix *nəm-* before verbs of Berber origin. Tagdal also has two syntactic constructions with the same function as the reciprocal prefix—a calque which copies Berber syntax (with Songhay vocabulary) and another of Songhay origin.

2.2.3.1. Morphological reciprocals

Nəm- functions as a reciprocal prefix which affixes onto verbs of Berber origin.

- (9) a. Hanšen inəmərkəb jifa.
 hanši- en i- nəm- ərkəb jifa
 dogs PL 3p RECP pull carcass
 ‘The dogs pulled at the carcass.’

¹³ This construction is of Songhay origin.

- b. Bararan aḡonen ibnəmənḡa.
 barar- an aḡo- en i- b- nəm- ənḡa
 child PL DEM PL 3p IMP RECP murder
 ‘Those boys are fighting among themselves.’
- c. Irinəməsəsləm.
 iri- nəm- səsłəm
 1p REFL greet
 ‘We greeted each other.’

2.2.3.2. Analytical reciprocals

Tagdal forms analytical reciprocals with the reciprocal pronoun *caren*, and with the syntactic construction *n ga kan*. Both constructions can be used with either Songhay or Berber verbs. I will treat each construction separately.

caren

The reciprocal pronoun *caren* comes from the plural noun *caren*, meaning ‘friends’ (singular, *caray*).¹⁴ When *caren* immediately follows a verb it indicates a reciprocal relationship, as in the examples below. This syntactic construction is of Songhay origin.

- (10)a. Aren ibsəsləm **caren**.
 aro- en i- b- səsłəm caren
 man pl 3p IMP greet RECP-PRN
 ‘The men are greeting each other.’
- b. Ifur tonjen **caren**.
 i- fur tonji- en caren
 3p throw rock PL RECP-PRN
 ‘They threw rocks at each other.’
- c. Isəqərət **caren**.
 i- səqərət caren
 3p scream RECP-PRN
 ‘They screamed at each other.’

n ga kan

Another reciprocal construction uses a possessive locative phrase below.

- (11) n ga kan
 GEN POSTPOSITION (on) POSTPOSITION (at)

This is most likely a calque, taken from the Tamajaq construction *garay* + PRON.¹⁵ In Tagdal, the Songhay postposition *kan* is a locative phrase marker and indicates most generally ‘at’. The postposition *ga* is more specific and indicates that something is ‘against’ or ‘on’ something. This construction forms an expression which could be roughly translated as ‘among’. However, in many

¹⁴ *Caren* [tʃa'ren] is the pronunciation utilized in the Aïr (northernmost) dialect group of Tagdal. In the Azawagh (southernmost) dialect group, it would be *šarayen* [ʃa'rejen]. For the purposes of this article, I have chosen the Aïr pronunciation.

¹⁵ The preposition *garay* in Tagdal means ‘in the middle’, whereas in Tamajaq it means ‘inside’ or ‘among’.

cases, both constructions—those with *n ga kan*, and those with *caren*—may be used interchangeably. Whether the meaning is exactly identical requires more research.

(12)a. Iriharhor **irin ga kan**.

iri- harhor iri- n ga kan
 1p play 1p GEN POST POST
 ‘We played among ourselves.’

b. Izoq **in ga kan**.

i- zoq i- n ga kan
 3p hit 3p GEN POST POST
 ‘They fought among themselves.’

c. Isəqərət **in ga kan**.

i- səqərət i- n ga kan
 3p scream 3p GEN POST POST
 ‘They screamed at each other.’

d. Isəsləm **in ga kan**.

i- səsləm i- n ga kan
 3p greet 3p GEN POST POST
 ‘They greeted each other.’

Therefore, Tagdal has three ways to express reciprocal relationships. One is morphological, and involves affixing the Berber reciprocal prefix *nəm-* to a verb stem of Berber origin. Similar to the case of causative and passive, if the verb in question is of Songhay origin, then the reciprocalized verb of Berber origin may supplete that of Songhay origin.¹⁶ If the verb in question is already of Berber origin, *nəm-* is simply affixed onto the verb root. In addition, Tagdal has two syntactic constructions with the same basic function as the morphological reciprocal—one of Berber origin, and another of Songhay origin.

3. Interpretation of the data

Before going any further, I must insert a caveat. In the absence of written records from the region of modern-day northern Niger and eastern Mali, especially between the 15th to the 17th centuries, it is impossible to know with complete certainty what led to the genesis of Tagdal. Nor is it possible to know with certainty what motivated certain Berber tribes to adopt the Songhay language (or at least not to maintain their former Berber language). We also do not know with exactitude what relations existed between the various Berber communities (which, just like now, were anything but united). Because of this, we can make some informed deductions, but no definitive conclusions.

Several observations, however, can be made. First, it is fairly clear from the linguistic evidence that Tagdal is not the result of regular language transmission (at least not at first, during its initial formative period); rather, it is the result of contact between speakers of two very different languages. In the case of verb morphology, Tagdal’s inflectional sub-system is completely Songhay, while its derivational sub-system came from Berber. This would make Tagdal a good candidate for being identified as a contact language. Thomason and Kaufman (1997:3) define *contact language* as “a language that arises as a direct result of language contact and that comprises linguistic material which cannot be traced back primarily to a single source language.” If Tagdal is a contact language, then it could be placed more or less in the same category as creoles and pidgins, though, as we will see, Tagdal has a very different genesis from that of creoles and pidgins.

¹⁶ In the case of reflexive constructions, suppletion is possible, though relatively rare. It is more common to utilize syntactic constructions with verbs of Songhay origin.

The second fairly safe statement that we can make is that, despite being a contact language, Tagdal is not a creole or pidgin, for various reasons. First, Tagdal is a mother tongue, so it is not a pidgin. Second, it has a heavy, well-developed system of inflectional affixation. Third, derivational affixation tends to be fairly semantically regular (though, of course, like all derivations, one will run into an occasional surprise).¹⁷ Furthermore, Tagdal does not seem to demonstrate any of the distortions one would expect to find in a situation where imperfect learning of a superstrate language played a role.¹⁸ Quite the opposite, the grammatical subsystems of both Songhay and Berber are quite intact and recognizable to anyone who knows either a Songhay or a Berber language.¹⁹ So we need to search elsewhere for the genesis of a language such as Tagdal.

The third fairly safe statement that we can make is that the data demonstrate that the Igdalan's ancestors must have been bilingual (or diglossic) in both their original Berber language and in Songhay.²⁰ One of the most common results in mixed languages, where bilingualism played a role, is entire easily recognizable portions of one language placed with entire, easily recognizable, portions of the other (Thomason 2001:204-205), as we see in Tagdal. If this was a case of bilingualism, then extensive bilingualism led to code-switching.²¹ Over time, code-switching (probably the primary mechanism of language intertwining, at least in this case), likely fueled by speaker attitudes, eventually became encoded as part of a new language.

Further, the data point to an abrupt genesis, rather than a gradual development, of Tagdal.²² Mous (2003), Bakker and Mous (1994) and Thomason (2001) point to other mixed languages in which bilingualism played a role. They indicate two types of geneses for mixed languages: first that of (usually minority) groups who refuse to assimilate culturally or linguistically (for example, Kormakati Arabic, Anglo-Romani and Ma'á). In such cases, the groups in question have held out for sometimes hundreds of years,²³ and have maintained their cultural identity. In other words, all of the above are cases of *intended language maintenance*. In such cases, the most common result is mixing throughout the various subsystems.

On the other hand, in the case of languages which arose due to abrupt genesis, the language normally symbolizes a new ethnic group or subgroup (Thomason 2001:205). These languages tend to have divided subsystems (in the case of Tagdal, the inflectional sub-system of Songhay origin, and the derivational sub-system of Berber origin). As Thomason (2001:206) states:

[W]hereas the mixed languages of persistent ethnic groups are massively affected throughout all their subsystems... the mixed languages that arise as symbols of new ethnic groups have compartmentalized sets of structures... noun phrases vs. verb phrases (and sentential syntax) in Michif, finite verb morphology vs. everything else in Mednyj Aleut, and lexicon vs. grammar in Media Lengua. Although the particular mix... is unpredictable, it can at least be predicted safely that the language will not reflect pervasive interference throughout the language's systems.

¹⁷ For a fuller discussion of the prototypical features of creole languages, see Bickerton (1981), and especially McWhorter (1998).

¹⁸ There is some disagreement (see Mufwene 2001, Chaudenson 1979) as to whether creole languages are actually the result imperfect learning of a superstrate language, or instead slightly reduced versions of their lexifier languages. However, this is beyond the scope of this paper.

¹⁹ My Tamajaq-speaking friends from Songhay-speaking areas find it very amusing to hear perfectly good Tamajaq verbs with Songhay inflectional morphology. A Tuareg friend once asked me: 'How can you work with this language without laughing after every sentence?'

²⁰ It is reasonable that the ethnically Berber Igdalan (as well as the Idaksahak of Mali) would have spoken a Berber language prior to speaking a Northern Songhay language, especially since their ancestors predated the Songhay Empire in the region by several hundred years.

²¹ By code-switching, I am using the definition in Myers-Scotton (1993a&b), which includes the phenomenon often referred to as code-mixing.

²² Nicolaï (2003) also suggests an abrupt genesis for all Northern Songhay languages – something which needs to be verified with respect to the sedentary varieties, Tasawaq and Kora-n-ji.

²³ It should be noted that there is some theoretical disagreement (see Thomason 1997, Mous 2001) concerning the genesis of Ma'á – essentially, whether Ma'á is the result of gradual bantuization of a Cushitic language, or whether Cushitic vocabulary was reinserted into Ma'á after a language shift had already taken place.

In the case of Tagdal, the Berber inflectional subsystem was replaced with Songhay inflectional morphology. The abruptness of the change did not leave enough time for each subsystem to assimilate itself to the other's structures, especially in such typologically different languages as Berber and Songhay. Therefore, the easiest thing to do was to utilize Berber vocabulary with Berber derivations, while maintaining Songhay inflectional morphology for most basic operations (i.e. continue the regular pattern of code-switching which existed before).

Unlike the mixed languages of persistent ethnic groups, in which the situation is one of *intended language maintenance*, I would like to make another proposal for the genesis of Tagdal: that of an *intended language shift*. A brief look into the history of the region (Adamou 1979, Hamani 1989) may shed some light on what motivation proto-Tagdal speakers could have had for shifting from Berber to Songhay (or at least for not maintaining their previous Berber language). The following can be verified historically: 1) the Igdalan and their sister Northern Songhay-speaking tribe, the Idaksahak, were among the first Berbers to migrate to sub-Saharan Africa, sometime between the 8th and 9th centuries (probably coming from modern-day Morocco and following the Niger River south and then, in the case of the Igdalan going east, along then-existing trade routes). 2) The Igdalan and Idaksahak were among the first tribes in the region to adopt Islam, and they were (and are still) known for their religious adherence.²⁴ 3) Many other Tuareg tribes arrived in the region of modern-day northern Niger between the 12th and the 17th centuries, mostly from the region of Cyrenicia in modern-day Libya. 4) Many of these Tuareg newcomers were not Muslims—they followed either traditional pre-Islamic religions or were Christian in background.²⁵ 5) In the late 1500s, the Songhay Empire conquered the region of modern-day northern Niger. 6) The 16th through the 19th centuries (especially after the fall of the Songhay Empire) saw internecine warfare between the various Berber tribes, and some of these wars took on jihadist overtones.

In this sort of environment, it is easy to imagine how a language such as Tagdal could have emerged. The ancestors of the Igdalan spoke a Berber language, but Berber languages were largely associated with many of the Igdalan's enemies. Therefore, the ancestors of the Igdalan shifted to Songhay, a language which they already spoke well, and which they associated more with their religious affiliation. The new language served both the purpose of in-group vernacular, and that of a symbol of a new ethnic sub-group.

4. Conclusion

The data indicate a number of factors with respect to Tagdal. First, it is a contact language—with structures coming directly from two sources: Songhay and Berber. Second, the data demonstrate that the ancestors of the Igdalan were at one time bilingual (or diglossic) in both Songhay, which served as a language of wider communication in the region until recently, and their original Berber language. Further, the data demonstrate that the ancestors of the Igdalan at some point shifted to proto-Tagdal (or what eventually became proto-Tagdal), and that the change occurred quickly, most likely as a symbol of the differences between the Igdalan and other people around them. As historical sources demonstrate, the ancestors of modern-day Igdalan might have felt that they had ample reason for differentiating themselves from speakers of other Berber languages in the region.

This leaves a number of questions still open, all of which require more research, or are beyond the scope of this paper. First, did the other Northern Songhay languages (Tadaksahak also, but especially Tasawaq and Kora-n-ji, the sedentary NS languages) undergo the same process of genesis as Tagdal? Second, if Tagdal was the result of bilingualism and code-switching, then there were certain rules that governed the interactions between the two languages (see Myers-Scotton 1993a&b). What, then, were the various interactions between Berber and Songhay structures (e.g. which was the matrix language, which was the embedded language, where did islands of the embedded language occur, etc...)?

²⁴ Even today, the Igdalan and Idaksahak are maraboutic tribes – that is, they function as religious experts for the people in their region.

²⁵ According to a very widespread theory, the term 'Tuareg' (typically used to refer to all nomadic Berbers in West Africa) came from the Arabic *tawarik* 'rejected', because God rejected the Tuaregs due to their lax Islamic practices.

The third question is more of a theoretical concern with respect to mixed languages as a whole. It is clear that mixed languages of persistent ethnic groups (those resisting assimilation) are the result of *intended language maintenance*, regardless of whether or not the intended language maintenance is indeed successful. However, in the case of a language such as Tagdal, the purpose seems to be quite the opposite—that of an *intended language shift*. What about other mixed languages that arose due to abrupt genesis? Does *intended language shift* apply in such cases? The fact that mixed languages which arose due to abrupt genesis typically serve as symbols of new ethnic groups or sub-groups may indicate that this is the case.

Finally, Tagdal's viability for future generations needs to be verified. The existing data point to a prolonged period of very intense contact which, according to Nicolai (1990a), still continues today with the relexification of Berber vocabulary into Tagdal and other Northern Songhay languages. Contact between the Igdalan and Idaksahak with Tamajaq speakers continues and even intensifies (Rueck and Christiansen: 1999). At the same time, population pressures are driving Hausa speakers farther north, into areas once exclusively populated by nomads (Hamani: 1989). In the same way, persistent drought and competition over the few wells in the desert are driving many Igdalan to the city where they must speak Tamajaq and to a lesser extent Hausa in order to survive. Any future research and language development work in Northern Songhay languages must take this into account.

References

- Adamou, Aboubacar. 1979. Agadez et sa région. [Études nigériennes 44]. Niamey, Niger: Institut de recherches en sciences humaines.
- Bakker, Peter. 1997. "A language of our own": The genesis of Michif, the mixed Cree-French language of the Canadian Métis. [Oxford Studies in Anthropological Linguistics 10]. New York: Oxford University Press.
- Barth, Heinrich. 1851. An Outline chrestomathy of Emghedeshie, 'the language of Agadez.' Reprinted in Kirk-Greene. 1972. Collection of vocabularies of central-african languages, compiled and analyzed by Heinrich Barth. 2nd edition. AHM London: F. Cass.
- Bickerton, Derek. 1981. Roots of language. Ann Arbor, Michigan: Karoma Publishers.
- Chaudenson, Robert. 1979. Les créoles français. Paris: Fernand Nathan.
- Christiansen, Niels and Christiansen, Regula. nd. Parts of a grammar of tadaksahak. Unpublished manuscript.
- Christiansen, Niels and Christiansen, Regula. 2002. Some verb morphology features of Tadaksahak: Berber or Songhay, this is the question. SIL Electronic Working Papers 2002-005. Dallas, Tex: SIL International. <<http://www.sil.org/silewp/2002/005/>>
- 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.
- Hamani, Djibo M. 1989. Au carrefour du soudan et de la berbérie: Le sultanat touareg de l'Ayar. [Études nigériennes 55]. Niamey, Niger: Institut de recherches en sciences humaines.
- Heath, Jeffrey. 1998. Grammar of Koyraboro (Koroboro) Senni, the Songhay of Gao. Köln: Rüdiger Köppe Verlag.
- Heath, Jeffrey. 1999. A grammar of Koyra Chiini: The Songhay of Timbuktu. New York: Mouton de Gruyter.
- Liebrecht, Mathias. 1996. Report of a sociolinguistic survey on the Songhai of Mali. SIL-Mali: Pre-publication draft.
- Lacroix, Pierre F. 1968. L'ensemble songhay-jerma: Problèmes et thèmes de travail. Actes du 8e congrès SLAO. Ann. Université d'Abidjan, série H, 87-99.
- Lacroix, Pierre F. 1975. Emghedeshie – Songhay language of Agadez. Doc. Tr. RCP 322. Paris.
- McWhorter, John. 1998. Identifying the creole prototype: Vindicating a typological class. Language 74.788-818.
- Mous, Maarten. 2003. The making of a mixed language. [Creole Language Library 26]. Amsterdam: John Benjamins Publishing Company.
- Mufwene, Salikoko. 2001. The ecology of language evolution. Cambridge: Cambridge University Press.
- Myers-Scotton. 1993a. Social motivations for codeswitching: Evidence from Africa. Oxford: Clarendon Press.
- Myers-Scotton. 1993b. Duelling languages: Grammatical structure in codeswitching. Oxford: Clarendon Press.
- Nicolai, Robert. 1979. Les dialectes du songhay (Contribution à l'étude des changements linguistiques). Doctoral dissertation, University of Nice.

- Nicolai, Robert. 1980. Remarques sur la diversification dialectale et la propagation des innovations phonétiques en songhay. *Études linguistiques: Revue du Département de Linguistique* 2.2.53-78. Niamey, Niger: Université de Niamey.
- Nicolai, Robert. 1987a. Is Songhay a creole language? *Pidgin and Creole Languages*, ed. by Glenn Gilbert, 469-84. Honolulu: University of Hawaii Press.
- Nicolai, Robert. 1987b. Revernacularisation et déterminismes évolutifs: Songhay septentrional et dendi. *Current Approaches in African Linguistics*. Dordrecht Foris.
- Nicolai, Robert. 1990a. L'évolution 'problématique' du songhay septentrional (Analyse d'une situation de contact). [Travaux du Cercle Linguistique de Nice 10-11], 135-48. Nice.
- Nicolai, Robert. 1990b. Parentés linguistiques (à propos du songhay). Paris. Éditions du CNRS.
- Nicolai, Robert. 2000. La traversée de l'empirique. Paris: Ophrys.
- Nicolai, Robert. 2003. La force des choses ou l'épreuve 'nilo-saharienne': Questions sur les reconstructions archéologiques et l'évolution des langues. *Sprache und Geschichte in Afrika SUGIA – Beiheft 13*. Cologne: Rüdiger Köpe.
- Ousseina, Manou Alidou D. 1988. Tasawaq d'In-gall: équisse linguistique d'une langue dite «mixte». MA thesis, Univ. of Niamey.
- Prost, R.P. 1956. La langue sojay et ses dialectes. [Mémoire IFAN 47]. Dakar, Senegal.
- Prost, R.P. 1966. Premiers éléments de grammaire sojay-zarma. Niamey, Niger: Centre Culturel Franco-Nigérien..
- Rueck, Michael and Christiansen, Niels. 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>.
- Sudlow, David. 2001. The Tamasheq of North-East Burkina Faso : notes on grammar and syntax including a key vocabulary. Köln : Rüdiger Köppe Verlag.
- Tersis, Nicole. 1972. Le zarma (République du Niger). Étude du parler Djerma de Dosso. [Bibliothèque de la SELAF 33-34]. Paris.
- Thomason, Sara. Tom Kaufman 1997. Contact languages: A wider perspective. [Creole language library 17]. Philadelphia, PA: John Benjamins.
- Thomason, Sara. 2001. Language contact: An introduction. Washington, DC: Georgetown University Press.
- Tilmatine, Mohammed. 1991. Talelbala: Eine Songhaysprachinsel in der algerischen Sahara. [Afrikanistische Arbeitspapiere, Sondernummer]. Berlin: Freie Universität.

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