

## Shared features between Hausa and Zarma: A quest for areal features in Niger languages

### 1. Introduction

Why study areal features in Niger?

- The languages share similar structural metaphors, proverbs, idioms, expressions, lexical items, lexical organization as well as phonological, morphological and grammatical items and patterns. This is expected since the speakers of these languages share the same environment and culture and their ancestors have been in contact for many centuries.
- Research and knowledge of these shared features can allow a move from a (still partially implemented) French-centered bilingual education system to a multilingual education system in Niger.
- The knowledge will also be relevant to the practice of translation.
- Focus first on Hausa and Zarma: The level of commonality between the two languages is substantial.
- Previous studies: Claude Gouffé, Bernard Caron, Petr Zima, Sergio Baldi
- Wider issues to connect to later on: What are people saying about the areal features in African languages. What are people saying about language contact phenomenon in general.

This talk presents three features: Two are general process that languages anywhere may have. But we will see that there are reasons to think that they were influenced by the language contact factor.

### 2. The languages in Niger



- Niger has about twelve indigenous languages, five major ones, which are: Hausa, Songhay-Zarma, Fulfulde, Tamajaq, and Kanuri; and seven minor ones, which are: (local dialectal) Arabic, Buduma, Gulmancema, Tadaksahak, Tagdal, Tasawaq, and Tubu.
- The twelve indigenous languages represent three of the four Greenbergian African families: Afroasiatic (Arabic, Buduma, Hausa, Tamajaq), Niger Congo (Fulfulde, Gulmancema), and Nilo-Saharan (Kanuri, Songhay -with its many varieties-, Tubu).

- Hausa is the majority language, spoken by more than 80% of the country's population), Zarma is the second major language, spoken by 30% of the population.
- Hausa and Zarma share some grammatical features (example: split negation, comparative constructions based on the verb for 'surpass', comitative-based causative construction, particles with the same functions in the two languages. The particles *dà* in Hausa and *dà/ndà* in Zarma fulfill nearly the same functions in the two languages, as seen in the following table (see Yansambou 2014):

Table 1: Functions of *dà* and *dà/ndà* and variants in Hausa and Zarma

Functions	Hausa	Zarma
coordination 'with, and' and related functions	Abdù dà Muusaa 'Abdu and Musa'	Abdù ndà Muusà 'Abdu and Musa'
Possessive predication	Abdù yanàa dà goonaa 'Abdu has a farm'	Abdù goo-ndà fari 'Abdu has a farm'
Temporal conjunction	dà yâara sukà zoo 'when the children came'	daa zànkéy kâa 'whenever the children come'
Conditional	dâa yâara sun zoo... 'had the children come...'	daa zànkéy kâa 'if the children come'
Causative marker	fitar dà 'take out'	fatta ndà 'take out'

### 3. Comitative-based causatives constructions

Zarma has a pervasive morphological causative but is also developing a comitative-based causative.

#### 3.1 Morphological causative with *-andi* in Zarma (and Songhay)

Sate verbs:

- (5) a. Ni jindà ga bàanù.  
 2s voice ipf be.soft  
 'Your voice is soft.'
- b. Ni jindà baan-andi!  
 2s voice soft-caus  
 'Soften your voice!'

Activity verbs:

- (6) a. Gàadinyêe gà fuw-òo bàtu.  
 watchman ipf house-df watch  
 'A watchman looks after the house.'
- b. Ay gà zànk-ey bat-andi mootà do.  
 1s ipf child-df.p watch-caus car place  
 'I (usually) make the children attend to the car.'

Punctual achievement verbs:

- (8) a. Cim-oo ø bangay  
 thruth-df pf appear  
 'The truth came out.'
- b. May ka sanno bang-andi?  
 who foc.pf matter appear-caus  
 'Who revealed this matter?'

Semelfactive (iterative) verbs:

- (9) a. Muusà gà tissò.  
Musa ipf sneeze  
'Musa is sneezing.'
- b. Taabà nòo gà bòro tiss-andi.  
tobacco cop ipf people sneeze-caus  
'It is tobacco that makes people sneeze.'

Durative accomplishment verbs:

- (22) a. Zànk-ey ø dònndon cawyaŋ  
child-df.p pf learn reading  
'the children studied/ read/ learned reading.'  
(= zànk-ey nà cawyaŋ dònndon)
- b. Ay nà zànk-ey dondon-andi cawyaŋ.  
1s pf child-df.p learn-caus reading  
'I taught the children/ I taught the children how to read.'  
(cf. \*Ay nà cawyaŋ dondon-andi zànk-ey)

- Intransitive *dabu* 'connect, tie' > transitive *dabu* and causative *dabandi* 'connect, tie'
- Intransitive *bàkà* 'soak' > transitive *baka* and causative *bakandi* 'soak'.
- It can apply to nouns: *bùrcin* 'free man', *bùrcinandi* 'set free, ennoble'
- It can apply to borrowings: *daahir* (<Arabic) 'tell the truth' and *daahirandi* 'confirm, believe (in God)'
- It also shows features characteristic of derivational processes: causative forms without basic verbs, unpredictable meaning, etc.

There is also a productive periphrastic causative using the verb *daŋ* 'put' (*ay na Musa daŋ a na moota hanse* 'I made Musa repair the car').

### 3.2 Comitative-based causatives in Southern Songhay

The pan-Songhay comitative-based causative: Only three verbs: *koy* 'go', *kâa* 'come' and *yêe* 'return'

- (11) a. ø koy ndà ni beer-òo!  
imp go with 2s elder-df  
'Go with your elder brother!' (Translated from French original 'Va avec ton aîné!')
- 'Take your elder brother'
- b. ø ko-ndà ni beer-òo!  
imp go-caus 2s elder-df  
'Take your elder brother!'

*Kaa* 'come' > *kanda/ kande* 'bring'; *Yee* 'return' > *yenda* 'return (sth.)'

The three verbs have a causative use in all (Southern) Songhay languages (cf. Heath 1998, 1999 for Koyra Chiini and Koyraboro Senni, respectively). It is a typical case of a grammaticalization process (with loss of flexibility and morphological fusion; see Abdoulaye and Buba 2014).

It is a real causative, and the construction sometimes has no motion semantics:

- (13) a. Adamu Ide kànde tirà wôo.  
Adamu Ide bring book this  
'Adamu Ide published this book'.
- b. Zàmaa haaray nòo ga kànde bòro mà tun zaa susùbay.  
because hunger cop ipf bring person sbj rise since morning  
'Because it is hunger that makes [brings] a person rise early in the morning.'

However, only in Zarma do we have an expansion to other motion and stance verbs: (data (xxa) from

Bernard and Kaba, 1994: 12 and (xxb-c) from Sibomana 2001: 234 #105, 226 #96, data (xxd-e) from field notes):

- (14) a. Azal-*ōo* day nòo kàŋ dirà nd-a.  
 fate-df indeed cop that walk caus-3s  
 'It is just destiny that took him away.'  
 (Original French translation: 'C'est juste le destin qui l'a emporté'.)
- b. Yoo nà bùukwâa sambu gà dirà nd-aa.  
 camel pf corpse take inf walk caus-3s  
 'A camel took the body and carried it away'  
 (Original French translation: '[Un] chameau prit le cadavre et l'emporta.')
- c. Irkòy bangand àa se bàngù da !waa zèenà...  
 Irkòy bangay ndà a sè bàngù ndà wãa zèenà-a.  
 God appear caus 3s for pond with milk old-df  
 'God materialized a pond for her with the same milk [as previously].'  
 (Original French translation: 'Dieu lui fit apparaître un lac avec le même lait.')
- b. À furò ndà bari-yoo har-oo rà.  
 3s enter nda horse-df water-df in  
 'He entered the water with [riding] the horse.'  
 'He made the horse enter the water.'

The comitative causative is not extended to other verbs, and not to transitive verbs:

- (17) a. Fàati  $\emptyset$  goy ndà beeròo.  
 Fati pf work nda elder-df  
 'Fati works with her elder sister.'  
 'Fati works more than her elder sister.'

### 3.3 Comitative-based causative in Hausa

All causative forms in Hausa ultimately rose from a comitative-based causative construction involving the preposition *dà*.

Clear comitative-based causative construction (cf: Abdoulaye1996: 123 and references cited there):

- (25) a. wà-n-dà a-kà koomoo dà shii mulkii  
 one-df-that 4-rp return caus 3m.s power  
 'he who was returned to power'
- b. Mii yat tahoo dà kee?  
 what 3m.s.pf come caus 2f.s  
 'What brought you here?' (i.e., 'Why are you here?')
- c. Allàh yà dadèe dà rā-n-ka!  
 God 3m.s.sbj last caus life-of-2m.s  
 'May God prolong your life!'

Some causatives, the "Grade 5" forms, though they involve the preposition *dà*, were not considered to be based on the comitative structure. But in fact they are:

- b. Taa zaun-aŋ dà bàakii cikin dāakii.  
 3f.s.pf sit-ar caus guest.p in room  
 'She seated the guests inside the room.'

The two forms can have the same efferential (action away) and causative meaning, as seen next:

- () a. Maariyaa taa **fitar dà** yaaròo. 'Maria took the boy out' (causative sense)

- b. Maariyaa taa **sayar dà** mootàa. 'Maria sold the car (away)' (efferential action away sense)
- c. Maariyaa taa **zoo dà** yaaròo. 'Maria brought (came-with) the boy' (causative sense)
- d. Maariyaa taa **aikàa dà** wàsiikàa. 'Maria send (away) the letter' (efferential sense)

However, with certain *motion* verbs, when the two sub-forms exist, the simple Verb+*dà* has a co-action meaning, while the linked form has no implication.

- (23) a. Sun gusàa dà buhuuhuwàn cikin zaurèe.  
 3p.pf move caus sack.p in hall  
 'They moved up/ took further the sacks into the entrance hall'
- b. Sun gus-ar dà buhuuhuwàn.  
 3p.pf move-AR caus sack.p  
 'They moved/ pushed off the sacks'

Conclusion: Hausa influenced Zarma, which, as a result (and contrary to its sister languages in Mali), extended its comitative-based causative construction to many more verbs.

However, there is a caveat: According to Heath (1999: 286), Koyraboro Senni does have the comitative-based causative construction; only it is not *nda* that is used but rather the infinitive *ka/ha*.

#### 4. Ditransitive constructions

- Same development as with the causative: A restricted Songhay construction is expanded in Zarma under the probable influence of Hausa, where the construction is ubiquitous.
- According to Heath (cf. Heath 1998 : 246-249 for Koyra Chiini) the ditransitive alternation exists in Mali Songhay, but it is limited to three verbs only: *noo* 'give', *cerbu* 'show' and *samba* 'send'. However, the ditransitive construction is possible only when the recipient NP is a pronoun, particularly a 1<sup>st</sup> or 2<sup>nd</sup> person singular. Zarma has extended the construction to more verbs and to object nouns.

- ( ) a. Ay ga ni noo kwàayi.  
 1s IPF 2s donner chemise  
 'I will give you a shirt.'
- b. Koyõo nà Abdù noo bàri gûu hânno fo.  
 chef PF Abdou donner cheval étalon beau.df un  
 'The chief has given Abdu an admirable stallion.'
- (5) a. Sorkãa Ø noo nòoru taalibõo sè.  
 pêcheur.df PF donner argent étudiant.df à  
 'The fisherman gave money to the student.'
- b. Sorkãa nà nòoru noo taalibõo sè.  
 pêcheur.df PF argent donner étudiant.df à  
 'The fisherman gave money to the student.'
- (6) Sorkãa nà taalibõo noo nòoru.  
 pêcheur.df PF étudiant.df donner argent  
 'The fisherman gave the student some money.'
- (7) Sorkãa Ø noo taalibõo \*(se) nòoru.  
 pêcheur.df PF donner étudiant.df à argent  
 'The fisherman gave money to the student.'

With other verbs, the new pre-verbal object nominal can have the following roles : dative (marked with *sè* 'to'), benefactive (marked with (*sàmbày*) *sè* 'for (the sake of)'), possessor and source (marked with *ga* 'from, on'): *hi* or *garaw* 'lend', *yàafa* 'pardon', *càbe* 'show', *bàna* 'pay'. *Bàna* 'pay' with a dative NP:

- (8) a. Hiimù Ø bàna zambàr fo Kàilu sè.  
Himou PF payer 5.000 Kailou à  
'Himu paid 5,000 CFA to Kailu.'
- b. Hiimù nà zambàr fo bàna Kàilu sè.  
Himou PF 5.000 payer Kailou à  
'Himu paid 5,000 CFA to Kailu.'
- c. Hiimù nà Kàilu bàna zambàr fo.  
Himou PF Kailou payer 5.000  
'Himu paid Kailu 5,000 CFA.'

The verb *cattu* 'throw':

- (9) a. Faatì Ø cattu goorò Hiimù sè.  
Fati PF lancer kola Himou à  
'Fati threw a kolanut to Himu.' (dative sense only)
- b. Faatì Ø cattu Hiimù ndà goorò.  
Fati PF percuté Himou avec kola  
'Fati threw a kolanut on Himu.' (locative sense only)
- c. Faatì nà Hiimù cattu ndà goorò.  
Fati PF Himou lancer/jetter avec kola  
'Fati threw a kolanut to Himu.' (dative sense)  
'Fati threw a kolanut on Himu.' (locative sense)

Many dative verbs without ditransitive construction : *sàmba* 'send', *cii/ har/ nee* 'say', *hàntum* 'write (a letter)', *yenda* 'return sth.', *yèti* 'return here', etc.

Benefactive NP: *wàsa* 'ne enough' and *hàsàraw* 'cause damage' "malefactive":

- (14) a. Dòonu Ø wàsa ay sè.  
bouillie PF suffire 1s pour  
'The porridge is enough for me.'
- b. Dòonu nà ay wàsa.  
bouillie PF 1s suffire  
'The porridge is enough for me.'

The following verbs do not allow the alternation: *day* 'buy', *du* 'obtain', *hina* 'prepare', *te* 'do', *wii* 'kill'.

- Possessor NPs : *haamay* 'wrest' et *zay* 'steal':

- (15) a. Abdù Ø zay [Màari saakò].  
Abdou PF voler Marie sac.df  
'Abdou a volé le sac à Marie.'
- b. Abdù nà [Màari saakò] zay.  
Abdou PF Marie sac.df voler  
'Abdou a volé le sac à Marie.'
- c. Abdù nà Màari zay saakò.  
Abdou PF Marie voler sac.df  
'Abdou a volé le sac à Marie.'

- Some verbs allow the alternation with source NPs : *hã* 'interrogate', *ɲwaaray* 'beg, claim', *tubu* 'inherit', *ɲwãa* 'win, get' :

- (16) a. Ziimăa Ø ηwăa nòoru wàybòrà ga.  
 charlatan.df PF gagner argent femme de  
 ‘The charlatan won some money with the woman.’
- b. Ziimăa nà nòoru ηwăa wàybòrà ga.  
 charlatan.df PF argent gagner femme de  
 ‘The charlatan won some money with the woman.’
- c. Ziimăa nà wàybòrà ηwăa nòoru.  
 charlatan.df PF argent gagner femme  
 ‘The charlatan won some money with the woman.’

- Zarma indeed has a limited ditransitive alternation.

- Hausa, by contrast, has an applicative-like construction, overtly marked by a particle *mà* following the verb. The construction is essentially unrestricted, affecting almost all lexical verbs and a large array of semantic roles, including datives, benefactives, locatives, sources, malefactives and other residual roles (cf. Abdoulaye 1992 : 289-298):

- (5) a. Abdù yaa fasàa mà Bàlki kwalbaa (3 senses: benefactive, locative, possessor)  
 b. Sun yankàa mà Liimân naamàn àladèe dà wuƙaa (3 senses: benefactive, possessor, possessor)  
 c. Yaa yii mani ƙaryaa (2 senses: object, hearer)  
 f. Kàakaa taa macèe manà/ jaakii yaa macèe manà cikin gidaa (“die on us” meaning)  
 g. Yaa zoo mani da wasu matsaloolii. (“come to me” for solutions to his problems)  
 h. Yaa zoo yaa ganèe wà idàanunsà. (He saw “for his eyes”)  
 i. Sai kùreegee ya ruugoo makì gidaa... (a kind of narrative use, no semantic role for addressee)

### **Innovation in Songhay dialects:**

Zarma (along with Dendi) overall shows signs of being towards the conservative end compared with the Malian main varieties (Timbuktu, Gao).

- f/h alternation
- SAuxOVX syntax
- NP+VP vs. NP+Pro+VP
- Comitative *nda* (not in two major Mali varieties, but OK in the two minor ones)
- Purposive function of *ka/ga* (not in two major Mali varieties, but OK in the two minor ones)
- Tones
- Etc.

As suggested in Nicolai (1982), innovative features in Zarma are mostly due to language contact.

### **5. Formation of the Abstract Nouns of Sensory Quality (ANSQ)**

Parsons (1955) described in Hausa what he calls the “Abstract Nouns of Sensory Quality”, which are semantically and formally characterizable in Hausa. Semantically, as the label indicates, the nouns refer to “...quality or attributes of people, animals or things that are perceptible by one or more of the senses”. Formally, the nouns are (a) disyllabic, (b) have a heavy initial syllable, (c) end with the long high vowel *-ii*, (d) have an all high tone pattern, and (e) are all masculine nouns. The phenomenon was considered so deeply characteristic of Hausa that when it was discovered in other Chadic languages it was taken as a West Chadic feature reflecting a genetic relationship (Haruna 1996). Some representative nouns in Hausa and Guruntum, a West Chadic language, are given in Table 3. Nonetheless, Zarma also exhibits a very similar pattern, as can be seen in the table.

Table 3: Abstract Nouns of Sensory Quality in Chadic and Zarma

	Hausa	Guruntum	Zarma
coldness	sanyii	saanii	yeeeni 'coldness'
toughness	taurii	---	sandi 'toughness'
bitterness	d̥waacii	ngyooŋi	fotti 'bitterness'
bad smell	waarii	waabii	fumbi 'bad smell'
sourness	tzaamii	ʔaasii	moori 'sourness'
heat	zaafii	ʔaanii	konni 'heat'
heaviness	nauyii	giisii	beerii 'bigness'
sharpness	kaifii	goobii	gitti 'acridness'
viscosity	kaurii	huulii	doori 'pain'
strength	karfii	kwaamii	jandi 'length'
width	faadfi	wulŋii	kaari 'glimmer'

The Zarma forms, just like the Chadic forms, are not derived in any obvious way beside their semantic and formal similarity (i.e., there are no simpler bases from which to derive the forms). The short vowel in the Zarma forms is probably due to the general tendency of Zarma words to end in a short vowel (and Hausa borrowings are subjected to this tendency). It is clear that the abstract nouns of sensory quality can no longer be taken as an exclusively (West) Chadic feature. As is clear from the table, it is not the individual words that may have been borrowed, but a lexical pattern, no matter how this may have happened.

## 6. Conclusion

- Look at Fula, Tamajaq, and Kanuri, but especially the first two since, like Songhay, these languages have deep extensions out of Niger and away from Hausa area and comparisons can be made.
- This research can inform the global debate on the mega-zones in Africa.
- It can also the debates on language contact in the area.
- Attend to practical issues in education and translation