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Comitative-based Causative Constructions in Zarma¹

Abstract

This paper argues that varieties of Songhay in Niger and Nigeria, in particular Zarma, have both a morphological causative marked with *-andì* and a comitative-based causative where the verb combines with the particle *ndà*. Indeed, in appropriate contexts, Verb + *ndà* sequences can be interpreted with a comitative meaning, such as ‘walk with’, or a causative meaning, such as ‘walk/take (somebody)’. Given that Hausa (Chadic) also has comitative-based causatives and is in close contact with these Songhay varieties, we assume an areal feature affecting the two languages, particularly since the particle *ndà* has lost its comitative function in the Songhay varieties spoken in Mali, which are not in contact with Hausa.

1. Introduction

A number of studies have now established the fact that in many languages, causative constructions are linked to or are derivable from comitative structures (cf. Heine & Reh 1984: 137; Maslova 1993; D. Payne 2002;

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This paper uses the official orthographies of Zarma and Hausa with some modifications: Long vowels are marked in all positions with a double letter, low tone is marked with a grave accent (àa), falling tone with a circumflex accent (âa) and rising tone with a flipped circumflex accent (ãa), while the high tone is unmarked. The abbreviations are: 1, 2, 3, 4 ‘1st, 2nd, 3rd, (impersonal) 4th person’; CAUS ‘causative’; DF ‘definite’; EFF ‘efferential’; F ‘feminine’; FOC ‘focus’; INF ‘infinitive’; IPF ‘imperfective’; ITR ‘intransitive’; M ‘masculine’; NEG ‘negative’; PL ‘plural’; PF ‘perfective’; RP ‘relative perfective’; SG ‘singular’; SBJ ‘subjunctive’.

Shibatani & Pardeshi 2002: 148–149; and others). Zarma² and Hausa are two languages that have comitative-based causatives, though this fact has not been clearly recognized for both languages. Indeed, in previous descriptions (cf. Hamani 1981; Oumarou Yaro 1993; Bernard & White-Kaba 1994), causative meaning in Zarma is thought to be marked with the suffix *-andì* and only three monosyllabic verbs (*koy* ‘go’, *kâa* ‘come’ and *yêe* ‘return’) have been noted to exhibit an alternative causative form where they combine with a particle *ndà*. Both causative types are illustrated next in (1–2):

- (1) a. *Zànk-ey gòro taabùl-òo bôŋ.*
 child-DF.PL sit table-DF on
 ‘The children sat on the table.’
- b. *Fàati nà zànk-ey gor-andì taabùl-òo bôŋ.*
 Fati PF child-DF.PL sit-CAUS table-DF on
 ‘Fati seated the children on the table.’
- (2) a. *Hiimù koy ndà ngà cor-ey Iisà mè.*
 Himu go with 3SG friend-DF.PL river shore
 ‘Himu went to the river with his friends.’
- b. *Hiimù koy ndà zànk-ey Iisà mè (= Hiimù kò-nda zànkey Iisà mè).*
 Himu go CAUS child-DF.PL river shore
 ‘Himu took the children to the river.’

In (1), the base verb *gòro* ‘sit’ can take the suffix *-andì* (a tone-integrating affix with the tonal pattern “...HL#”, i.e., with all high tones and a final low) to express a causative meaning ‘cause to sit, seat’, as seen in (1b). In (2), the verb *koy* ‘go’ is followed by the particle *ndà* with a comitative sense in (2a) or a causative meaning in (2b). The causative interpretation alone is possible when the verb is morphologically fused with the particle, as indicated in the alternate sentence in parentheses in (2b). In previous

² Zarma (or Zarma Chiine [zarma ci:nè] ‘language of the Zarma’) is the most important Songhay language in terms of number of speakers (Nicolai 1983). It is located in Western Niger, along a section of the Niger river and in a large swath of territory east of the river, the *Zarmaganda*, the Zarmaland proper, but also in the *Zarmataray* (lit. ‘relating to the Zarma’), an area of further expansion (cf. Gado 1980) that puts the Zarma people in contact with other linguistic groups. The Zarma language is also present in emigration areas in northwestern Nigeria and in some of the major West African towns.

descriptions of Zarma, the causative construction in (2b) is thought to be restricted and apply only to the three verbs *koy* ‘go’, *kâa* ‘come’ and *yêe* ‘return’. It may also be noted that comitativity marking is overall a restricted function of *ndà* in Zarma. For these reasons, it is only recently (cf. Abdoulaye & Sidibé 2012) that the link between comitative and comitative-based causative constructions has been explicitly established for Zarma, despite the availability of relevant data in published sources (cf. Section 2.2, discussion of examples (14–15) below).

The first aim of this paper is to survey the comitative-based causative constructions in Zarma and document the little-reported spread of the construction from the three monosyllabic verbs to other verbs in Zarma and other Songhay varieties in Niger and Nigeria. To this end, the paper adopts the verb classification system proposed in Van Valin (2007) and examines the behavior of the aspectual verb classes with respect to the two causatives. Secondly, the paper also posits a link between the situation in Zarma and in Hausa. Indeed, Hausa (Chadic) actually has a more extensive use of comitative-based causative constructions, which come in two varieties. In the most frequent construction, the verb takes an affix *-aŕ* and is also followed by the particle *dà* (except when the causee nominal is displaced or omitted). In the second case, the verb is simply followed by the particle *dà*. The two causative constructions and a plain comitative sentence are illustrated in the following:

- (3) a. *Sun gusàa dà buhuuwà-n cikin zaurèe.*
 3PL.PF move CAUS sack.PL-DF in hall
 ‘They moved up/pushed further the sacks into the entrance hall.’
- b. *Taa zaun-aŕ dà bàakii cikin ðaakii.*
 3F.SG.PF sit-CAUS CAUS guest.PL in room
 ‘She seated the guests inside the room.’
- c. *Muusaa yaa daawoo (tàare) dà ða-n-sà.*
 Musa 3M.SG.PF return together with son-of-3M.SG
 ‘Musa returned (together) with his son.’

In (3a), the base verb *gusàa* ‘move up’ is followed by the particle *dà* with a clear causative meaning. In (3b), the base verb *zaunàa* ‘sit’ has an added suffix *-aŕ* and is then followed by the particle *dà*. Hence, both causatives are associated with *dà*, which also functions as the comitative marker in Hausa. For this reason, we take them both to be comitative-based causative

constructions (it should be noted that both constructions can have non-causative meanings, as will be seen in Section 3, see discussion of examples 23–24 below).

The basic assumption underlying our discussion is that a causative form expresses causation, i.e., it is a grammatical form where the intervention of a causer is regularly marked on the verb or very near to it (cf. Haspelmath 1993). We take the causer as the argument instigating or carrying out the action through the mediation of the causee and, consequently, the causee is the argument carrying or undergoing an action under the induction of a causer. This would be the crucial difference between a (comitative-based) causative construction and a regular comitative structure. In the comitative structure, the two participants are animate and, typically, have equal access or control over the event, or the issue of who is in control may be either pragmatically determined or simply be irrelevant to proper interpretation.

The paper uses grammaticalization theory (Bybee & Pagliuca 1987; Hopper & Traugott 1993; and others). In particular, we assume that various grammaticalization processes can apply to constructions over time, usually in different contexts, and lead to polysemy, in this case the various functions of a comitative particle (cf. Abdoulaye 2004; Abdoulaye & Sidibé 2012). Also, of particular importance is the idea that a construction engaged in a given grammaticalization path can continue its grammaticalization course and spread to new contexts that can take it further away from its original form and function. For this reason, we will see that some comitative-based causative constructions do not imply a co-action; that is, they do not entail a situation where both causer and causee are animate and perform the same action together. Also, a construction that starts with independent words may progressively undergo fusion, where a formerly independent word becomes an affix, such as when the comitative particle becomes an affix on the verb both in Hausa and in Zarma (see discussion of example 2b above). The data for this study came from various sources. First, we looked at the available literature (dictionaries, folktale collections and scholarly papers). We also carried out grammaticality judgments and discussion with university students and other speakers. Finally, we collected texts in Bankanu (Sokoto, Nigeria) using the pear story film.

The paper is structured as follows. Section 2 presents the two main direct causative forms in Zarma and the spread of the comitative-based causative construction. Section 3 presents the comitative-based causative

constructions in Hausa. Section 4 sketches the grammaticalization processes involved in the switch from a comitative structure to a comitative-based causative construction and briefly compares the situation in Zarma and Hausa. Since in the main Songhay varieties spoken in Mali the particle *ndà* has lost its comitative usage (cf. Heath 1998: 132, 1999: 152), this paper claims that Zarma and Hausa share a productive comitative-based causative construction as an areal feature. Indeed, the two languages, albeit genetically unrelated, have nonetheless been in contact for many centuries and share many other areal features (cf., amongst others, Gouffé 1970–1971; Zima 1992, 1997).

2. Two direct causative forms in Zarma

As seen in the introduction, Zarma has a typical *-andì* morphological causative and a comitative-based causative. We will see that both causatives can express direct causation in the sense that the causer has control over the causee in carrying out the action; that is, the causer is physically and instantly responsible for the action (cf. T. Payne 1997: 181; Shibatani & Pardeshi 2002: 140). In the appropriate contexts, both causatives can also express indirect causation where the intervention of the causer is spatially and/or temporally removed and typically is mediated through verbal means. However, it should be noted that indirect causation in Zarma is chiefly expressed with a periphrastic causative construction using the verb *daŋ* ‘put’, a construction that will not be dealt with in this paper.³

In this section, we survey the two causatives and document the comitative-based causative construction in the language.

2.1 The morphological *-andì* causative form

The *-andì* form is the Zarma general causative strategy, spanning various types of verbs, including transitive and intransitive verbs, unaccusative and unergative verbs, etc. To illustrate its coverage, we will test it against the verb classes put forth by Van Valin (2007: 9–13), following the original

³ Beside this periphrastic construction, Zarma also has the causative expression *kãa taray* (= *kaataray*, *kà taray*) ‘publish, make known, make appear’ based on the verb *kaa* ‘take out/away’ (cf. *dèenà kà taray* ‘pull the tongue out’, *tirà kà-taray* ‘publish a journal/book’; cf. Bernard & White-Kaba 1994: 283).

proposals in Vendler (1967) and Dowty (1979). This classification takes into account the aspectual properties of verbs and distinguishes six groups. In the classification, the main contrast is between state verbs, which are [+static], and all other verbs, which are [-static]. State verbs code a non-happening and include verbs expressing conditions (*be + NP/Adj*, *be broken*), localization, existence, emotions, and non-volitional perception and cognition verbs (*see*, *hear*), etc. State verbs are chiefly intransitive, though some can be syntactically transitive. Among the [-static] verbs, the activity verbs are also [+dynamic] because they involve an action. They also express an unbounded action. They include verbs coding body action (*cry*, *sleep*, *drink beer*), volitional perception, and atelic motion verbs (*walk*, *run*), etc. Active accomplishment verbs are similar to activity verbs, but they are bounded and hence have a [+telic] feature. They include consumption verbs (*drink one beer*), creation and destruction verbs, etc., but they also include activity motion verbs used in telic contexts (*run to the park*). Activity and active accomplishment verbs contrast with achievement verbs and plain accomplishment verbs that are [-static] but are also [-dynamic]. Achievement verbs are essentially state verbs augmented with an INGR(essive) operator in their logical structure; i.e., they express the (punctual) entry into a state/ condition. They include change of state verbs (intransitive *break*, *pop*) and volitional perception verbs (*notice*). Accomplishment verbs differ from achievement verbs by being durative and incorporating in their logical structure the predicate BECOME, stressing a durative change of condition. They include verbs such as *freeze* (= become frozen), *learn something*, *grow*, *die*, etc. Finally, the sixth class is that of semelfactive verbs, which are like achievement verbs, but can be dynamic (cf. *flash*, *blink*, *sneeze*). The classes are summarized next in (4) (from Van Valin 2007: 9).

- | | | |
|------------------------|--------------------------|-----------------------|
| (4) State verbs: | [+static], [-dynamic], | [-telic], [-punctual] |
| Activity verbs : | [-static], [+dynamic], | [-telic], [-punctual] |
| Active accomplishment: | [-static], [+dynamic], | [+telic], [-punctual] |
| Achievement verbs: | [-static], [-dynamic], | [+telic], [+punctual] |
| Accomplishment verbs: | [-static], [-dynamic], | [+telic], [-punctual] |
| Semelfactive verbs: | [-static], [+/-dynamic], | [-telic], [+punctual] |

According to Van Valin, all six verb classes have a causative counterpart. The associated causative classes include verbs that are overtly marked (as per our definition; cf. *be afraid* and *frighten*) and verbs that are only notionally causative (cf. *the water froze* and *he froze the water*).

Regarding Zarma, the causative *-andì* can apply to all aspectual verb classes. To illustrate this point, this subsection uses the base verbs and their corresponding *-andì* forms and examples given in Bernard and White-Kaba's (1994) dictionary. One notices that state verbs are well represented and include verbs such as: *bakàr* 'have pity', *bakarandì* 'cause to have pity'; *banjì* 'be naked, lack', *banjandì* 'undress s.o.'; *bàanù* 'be/become soft, flexible', *baanandì* 'soften'; *bay* 'know', *bayandì* 'inform'; *bèje* 'desire, long for, hope, want, cherish', *beejandì* 'give envie for, make desire'; *beerì* 'be big, great, grow', *beerandì* 'make big, widen, respect, honor'; *bîi* 'be black, dark', *biibandì* 'darken, make black'; *bòori* 'be beautiful, good', *booriyandì* 'improve, cause to succeed'; *cangare* 'be colorful, have stripes', *cangarandì* 'color'; *dògon* 'be easy, be light', *dogonandì* 'facilitate, lighten'; *dòonâ* 'use to, be used to', *doonandì* 'domesticate, habituate'; *dukùr* 'be angry, outraged', *dukurandì* 'anger'; *dùgù* 'be warm, on nerve', *dungandì* 'warm, re-heat'; *fàabù* 'be/become thin', *faabandì* 'make thin'; *kayna* 'be small', *kaynandì* 'belittle'; etc. As one may notice, some of these state verbs (static and unbounded process) express qualities and would correspond to adjectives in other languages. They can easily be the basis for an *-andì* causative formation, as illustrated next with *bàanù* 'be soft':

- (5) a. *Ni jindà ga bàanù.*
 2SG voice IPF be.soft
 'Your voice is soft.'
- b. *Ni jindà baan-andì!*
 2SG voice soft-CAUS
 'Soften your voice!'

As shown in (5b), the causative verb is fully transitive, taking the causee (here *jindà* 'voice') as a direct object before the verb.

Activity verbs (dynamic and unbounded) are also well represented in the *-andì* formation. Some examples are: *bàtu* 'attend to, watch', *batandì* 'make s.o. attend to s.th.'; *cahã* 'hurry, be under pressure', *cahandì* 'set under pressure, speed up s.o.'; *caanù* 'warm oneself', *caanandì* 'dry near fire'; *caw* 'read, study', *cawandì* 'teach (make read)'; *dangay* 'keep quiet', *dangandì* 'console, make quiet'; *deebe* 'stand on toes', *deebandì* 'make stand on toes'; *deesi* 'fly up', *deesandì* 'make fly'; *dìrà* 'walk, go away', *dirandì* 'make go, chase'; *fàr* 'plow, cultivate', *farandì* 'make cultivate'; *fèela* 'fly over, Hoover', *feelandì* 'make fly, Hoover'; *haaru* 'laugh',

haarandi ‘make laugh, i.e., be risible’; *zùru* ‘run’, *zurandi* ‘make run’. The verb *bàtu* ‘watch, wait’ is illustrated next:

- (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.*
 1SG IPF child-DF.PL watch-CAUS car place
 ‘I (usually) make the children attend to the car.’

According to Van Valin (2007: 10), the basic verb and its causative counterpart encode the same *aktionsart*, the difference being that the causative form involves a causer who brings about the event. This is clearly the case in (6).

Active accomplishment verbs (dynamic and telic) are also frequent with *-andi* formation. Some examples are: *àlcirkă* ‘have breakfast’, *àlcirkàarandi* ‘make (someone) have breakfast’; *bisa* ‘pass, pass by’, *bisàndi* ‘make pass’; *curkusù* ‘lunch’, *curkusandi* ‘prepare lunch’; *dàŋ* ‘cross river’, *daŋandi* ‘make cross, cross’; *dàaru* ‘jump over’, *daarandi* ‘make jump’; *dòndòn* ‘learn, imitate’, *dondonandi* ‘teach’; *dùmbù* ‘cut self, be cut, cut s.th.’, *dumbandi* ‘cut, across’; *fatta* ‘go out’, *fattandi* ‘make go out’; *gòro* ‘sit’, *gorandi* ‘seat’; *fay* ‘separate, divorce’, *fayyandi* ‘make separate, divorce’; *filla* ‘do again, re-tell’, *fillandi* ‘make repeat’; *furò* ‘enter’, *furandi* ‘make enter’; *kani* ‘lie’, *kanandi* ‘lay’; *to* ‘become full, arrive, reach’, *tonandi* ‘fill’; *tun* ‘rise’, *tunandi* ‘raise’. As noted earlier, many activity verbs have bounded counterparts that belong to the active accomplishment class of verbs. These verbs, too, in Zarma undergo the *-andi* formation, as illustrated next with the verb *zùru* ‘run’:

- (7) a. *Zànk-ey zùru hab-oo mè.*
 child-DF.PL run market-DF edge
 ‘The children ran to the market.’
- b. *Hayni nooyan nà zànk-ey zur-andi hab-oo mè.*
 millet gift PF child-DF.PL run-CAUS market-DF edge
 ‘[The perspective of receiving] cereal gifts makes the children run to the market.’

Because of the specification of a goal (the market), the active accomplishment verb *zùru* ‘run’ in (7a) and its causative form in (7b) are both telic.

The achievement class of verbs (non-action, telic, and punctual) in Zarma has a few members, some of which are: *bangay* ‘appear’, *bangandì* ‘reveal, make known’; *băay* ‘renounce’, *baayandì* ‘make renounce’; *daray* ‘disappear’, *darandì* ‘make disappear’. The case of *bangay* ‘appear’ is illustrated next:

- (8) a. *Cim-oo bangay.*
 thruth-DF appear
 ‘The truth came out.’
- b. *May ka sanno bang-andì?*
 who FOC.PF matter appear-CAUS
 ‘Who revealed this matter?’

These verbs, too, can undergo the *-andì* formation, as illustrated in (8b).

Semelfactive verbs, like achievement verbs, are punctual, however, they are atelic and can be dynamic; i.e., involving an action with an animate participant (as in *blink*, *sneeze*) or not (as in *flash*). Bernard and White-Kaba (1994) list equivalent verbs in Zarma, such as *nàlàw* ‘flash (lightning)’, *môo kàmîi* (lit. ‘blink eye’), and *tissò* ‘sneeze’, which is illustrated next:

- (9) a. *Muusà gà tissò.*
 Musa IPF sneeze
 ‘Musa is sneezing.’
- b. *Taabà nôo gà bòro tiss-andì.*
 tobacco be IPF people sneeze-CAUS
 ‘It is tobacco that makes people sneeze.’

It may be noted that of all the semelfactive verbs taken from Bernard and White-Kaba (1994), only *tissò* ‘sneeze’ is listed with a corresponding *-andì* form, though further testing with informants may extend the list.

Accomplishment verbs (telic and durative) also take the *-andì* causative formation. Some examples are: *bàkà* ‘soak, make soak (= French “faire tremper”)', *bakandì* ‘make soak, soak’; *bòoka* ‘ruin self, be ruined’, *bookandì* ‘ruin’; *bòosu*, ‘boil with foam, be arrogant’, *boosandì* ‘make boil, make bloom’; *dîi* ‘burn (ITR), be lit’, *diyandì* ‘lit, make burn, start (fire)’;

dirɲâ ‘forget’, *dirɲandì* ‘make forget’; *fàham* ‘understand’, *fahamandì* ‘explain to, make understand’; *fàndì* ‘wash ashore, land (leaves, logs)’, *fandandì* ‘land, wash ashore (canoe)’. The verb *fàndì* ‘wash ashore (ITR), land’ is illustrated next:

(10) a. *Sùb-õo kàa kà fàndi jab-oo gà.*
 grass-DF come INF land shore-DF at
 ‘The grass floated and washed ashore.’

b. *Zànk-ey na hi-yoo fand-andì.*
 child-DF.PL PF canoe-DF land-CAUS
 ‘The children brought the canoe to the shore.’

It may be noted that with accomplishment verbs, one sometimes finds a transitive and a corresponding *-andì* form co-existing with the same meaning. For example, intransitive *dabu* ‘connect, tie, articulate’ has a transitive *dabu* and a derived *dabandì* form, both meaning ‘string, connect, tie’. Similarly, *bàkà* ‘soak’ can be transitive or intransitive, but also has, *bakandì* ‘soak’. In this section, the assignment of the verbs to the various classes was based on a check of their values relative to the features listed in (4). As shown in Van Valin (2007: 10), there are also some further semantic and syntactic tests that can help in the assignment, but these are not needed here given the scope of this paper.

It should be noted that *-andì* formation, as one could expect of a causative morphology, has some features characteristic of a derivation, despite its productivity and its overall morphological regularity. For example, some forms are based on non-verbs such as nouns (*àlcirkă* ‘have breakfast’, *àlcirkàarày* ‘breakfast food’, *àlcirkàarandì* ‘make (someone) have breakfast’; *bùrcín* ‘free man’, *bùrcinandì* ‘set free, ennoble’) and adverbs (*bòobò* ‘much, many’, *bòobàndì* ‘increase in number’). The meaning of the derived form is also not always predictable (cf. *barandì* ‘unwind a thread, weave’ listed by Bernard & White-Kaba (1994: 22) under the verb *barè* ‘change’; *dàaru* ‘be lying, jump over’ with a derived form *daarandì* ‘make cross, make jump’ and ‘pray, sacrifice’; or *deedandì* ‘try, measure, aim at, compare’, listed without a base, verb or otherwise). The formation can apparently also apply to loanwords (see *daahir* (<Arabic) ‘tell the truth’ and *daahirandì* ‘confirm/make something true, believe (in God)’).

As discussed in Abdoulaye (2008: 11), the *-andì* causative verbs have a strict SOVX word order. Although some non-causative transitive verbs in

Zarma can be SOVX or SVOX, corresponding *-andì* forms always surface with the SOVX word order, no matter the word order of the base verb (cf. Abdoulaye 2008: 11). Also, the causee appears always as the direct object before the causative verb. This fact is important for the correct analysis of the data (15) to be discussed in the next subsection. Finally, morphologically, the tone pattern is the only difference between causative *-andì* and a similar nominalizing *-àndì* formation, with a low tone on all syllables (see *bàna* ‘pay’, *banandì* ‘make pay’, *bànàndì* ‘salary’). Although there are occasional varying tone patterns (cf. *àlcìrkàarandi* ‘make someone have breakfast’) the causative *-andì* formation is morphologically very regular when one takes into account general morphological processes in Zarma (such as the addition of a reduplicated epenthetic consonant between CV(V) monosyllabic bases and formatives; see *bûi* ‘be black, dark’, *biibandì* ‘blacken, darken’).

2.2 The comitative-based causative constructions

Although in most (southern) Songhay languages (cf. Prost 1956; Hamani 1981; Oumarou Yaro 1993; Bernard & White-Kaba 1994; Heath 1998, 1999) the three motions *kăa* ‘come’, *koy* ‘go’, and *yêe* ‘return’ have been noted to combine with *ndà* to express a causal meaning, the resulting causative construction has not been linked with the comitative function of *ndà* ‘with’. The chief reason for this situation is probably the fact that the comitative function of *ndà* has essentially disappeared or weakened in some Songhay languages (cf. Heath 1998: 132, 137 for Koira Chiini and Heath 1999: 152–154 for Koroboro Senni), or is of limited use in others, such as Zarma (cf. Abdoulaye & Sidibé 2012 for Zarma). For Zarma, the relevant data has been reported, as illustrated in the following (data 11a adapted from Bernard & White-Kaba 1994: 237):

- (11) a. *Koy ndà ni beer-õo!*
 go with 2SG elder-DF
 ‘Go with your elder brother!’ (Translated from French original ‘Va avec ton aîné!’)
 ‘Take your elder brother!’
- b. *Ko-ndà ni beer-õo!*
 go-CAUS 2SG elder-DF
 ‘Take your elder brother!’

In (11a) the base verb *koy* is followed by a separate particle *ndà*, while in (11b) the verb and the particle are fused into one word as shown by the reduction in the verbal root. Some references such as Bernard and White-Kaba (1994), which is the source of (11a), focus their discussion on examples like (11b) and say nothing about examples like (11a). Hamani (1981: 190) and Prost (1956: 119) on the other hand do discuss the relation between the two constructions in (11); however, they ignore the comitative sense of (11a), and they claim that the two sentences have the same causative meaning. In fact, sentence (11a), as we indicate, is ambiguous and can express a comitative and a causal meaning. The other two verbs, *kăa* ‘come’ and its fused causative form *kànda/kànde* ‘bring’ and *yêe* ‘return’ and its fused causative form *yendà* ‘return (sth.)’, function in the same way. Nonetheless, there are differences between the analytical Verb + *ndà* constructions in (11a) and the fused Verb-*ndà* form in (11b).

Thus, the basic function of the Verb + *ndà* structure is the expression of comitative meaning, and in some contexts that is the only available function. As suggested in Abdoulaye (2004: 183), the basic feature of a comitative construction is that the two arguments are participating in (or are affected by) the event at the same place or at the same time. This is illustrated next (data 12a adapted from Sibomana 2001: 224, 12b from Abdoulaye & Sidibé 2012):

- (12) a. *Ni si koy ndà ây. Zàmaa ây sindà kàmbè dà cè.*
 2SG NEG go with 1SG because 1SG not.have arm and leg
 ‘You are not going with me. Because I have no arms and no legs.’
- b. *Ïgudù koy habu ndà Zàara.*
 Igudu go market with Zara
 ‘Igudu went to the market with Zara.’

In the story context in (12a), the speaker is emphasizing the fact that she could not follow the hearer, given her handicap, as indicated in the second sentence. In example (12b), the verb *koy* is separated from the comitative phrase by the locative phrase. In this syntactic context, the causal meaning is not possible.

With all three fused Verb-*ndà* causative forms, there are two possible interpretations: either the form expresses co-action, or it implies one participant alone doing or undergoing the verb’s action. The first case is illustrated in (11b), where both the addressee and his brother are instructed to go somewhere. When animate participants are involved, this is the most

natural meaning. However, when one or both participants are inanimate, there is no co-action and the causee alone may be doing or undergoing the action denoted by the verb. This is illustrated in (13) (data adapted from Ide 2003: 5, 7):

- (13) a. *Adamu Ide kànde tirà-a wôo.*
 Adamu Ide bring book-DF this
 ‘Adamu Ide published this book.’
- b. *Zàmaa haaray nòo ga kànde bòro mà tun zaa susùbay.*
 because hunger be IPF bring person SBJ rise since morning
 ‘Because it is hunger that makes [brings] a person rise early in the morning.’

In both sentences in (13), the form *kànde* ‘bring’, based on the verb *kâa* ‘come’, has no literal motion component in its semantics. In (13a), only the causee *tirà* ‘book’ undergoes the verb’s action (example taken from the preface of the book). Similarly, in (13b), there is no motion component, and the verb form *kànde* here essentially has the meaning ‘cause, bring about’.

Later in Section 4, we will return to this point and see that, compared to the comitative structure, the causative constructions, even when they look at the surface like comitative structures, have in fact undergone a grammaticalization process (with a more rigid syntax and phonological reduction).

As we said earlier, all three causative verbs (*kànda/kànde* ‘bring’, *kondà* ‘take’, and *yendà* ‘return’) have a monosyllabic base and are pan-Songhay (i.e., they are reported for all the southern Songhay languages so far described). However, besides these three verbs, there are in Zarma other disyllabic or polysyllabic verbs that can be followed by *ndà* to express a causative meaning. This is illustrated in (14) below (data 14a adapted from Bernard & White-Kaba 1994: 12, 14b adapted from Sibomana 2001: 234, #105):

- (14) a. *Azal-õo day nòo kàŋ òrò nd-a.*
 fate-DF indeed be that walk CAUS-3SG
 ‘It is just destiny that took him away.’
 (Original French translation: ‘C’est juste le destin qui l’a emporté.’)

- b. *Yoo nà bùukwâ-a sambu gà òrò nd-aa.*
 camel PF corpse-DF take INF walk CAUS-3SG
 ‘A camel took the body and carried it away.’
 (Original French translation: ‘[Un] chameau prit le cadavre et l’emporta.’)

In these examples, the motion verb *òrò* ‘walk’ is followed by a free particle *ndà* with a causal meaning. One may note that both examples are remote from a comitative meaning in that there is no co-action and one rather has a typical direct causative meaning. Another published example involves an appearance verb in the form *bangand* ‘make appear’, as illustrated in (15) (extracts from Sibomana 2001: 222, #62, 226, #96):

- (15) a. *Da hàrày n’ à dì, Ir!koy m’ bangand àa sè wà... Kàl àa m’ kungu, waa m’ daray.*

Daa haray nà à dìi, Irkoy mà bangay ndà a sè wăa.
 when hunger PF 3SG catch God SBJ appear CAUS 3SG for milk
Kàla à mà kungu, wă-a mà daray.
 till 3SG SBJ satiated milk-DF SBJ disappear
 ‘When she feels hunger, God materializes milk for her. When she is satiated, the milk would disappear.’
 (Original French translation: ‘Quand elle avait faim, Dieu lui faisait apparaître du lait. Dès qu’elle était rassasiée, le lait disparaissait.’)

- b. *Irkòy bangand àa se bàngù da !waa zèenà...*

Irkòy bangay ndà a sè bàngù ndà wăa zèenà-a.
 God appear CAUS 3SG 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.’)

These extracts show a causative form *bangand* (in the original data) meaning ‘make appear, materialize’ that we analyzed as being a (fast speech-)shortened form of *bangay ndà*, where *bangay* is the base verb meaning ‘appear’. It should be noted that Sibomana, in a lexicon appended to the texts, seems to analyze “*bangand àa se*” ‘materialize for her’ as being a short form for “*bangandì a sè*” (cf. Sibomana 2001: 244); i.e., an *-andì*-based causative form. However, as seen in Section 2.3 (cf. also Abdoulaye 2008: 11), causative *-andì* verbs are strict S-Aux-O-V-X verbs and cannot be involved in data (15), where the direct object causee *wăa* ‘milk’ is placed after the verb (in fact after the indirect object phrase *a sè* ‘for her’ in both 15a–b). If Sibomana were to be right, one would have to assume that an unlikely mistake happened twice in the same text.

According to Sibomana, the texts he collected came from Niamey speakers. It is clear that some Niamey speakers do produce the construction. In fact, many informants claimed to understand and accept the construction, but not to produce it themselves. The construction is most frequent with the following dynamic verbs: *dira* ‘walk, go’, *fatta* ‘go out’, *bisa* ‘pass’, *gòro* ‘sit’, *kani* ‘lie’, *zùru* ‘run’, *daray* ‘disappear’, *furò* ‘enter’, *kamba* ‘steer’, *to* ‘arrive, reach’, *tun* ‘stand up, rise’. The verbs *bisa* ‘pass’ and *furò* ‘enter’ are illustrated in (16) from a speaker in Niamey:

- (16) a. À *bisa ndà farkă-a susùbo.*
 3SG pass nda donkey-DF morning
 ‘He passed by with the donkey this morning.’
 ‘He took away the donkey this morning.’
- b. À *furò ndà bari-yoo har-oo rà.*
 3SG enter nda horse-DF water-DF in
 ‘He entered the water with [riding] the horse.’
 ‘He made the horse enter the water.’

When the verbs are immediately followed by the particle *ndà* (and its object NP), as illustrated in (16a–b), the sentences are ambiguous being between a simple comitative and a causative meaning; only the context can help resolve the ambiguity. The causative meaning is however restricted and is not allowed with some verbs that can otherwise appear in the comitative structure. For example, verbs such as *goy* ‘work’, *zùru* ‘run’, and *nôo* ‘give’, when directly followed by *ndà*, only take a comitative sense and, sometimes, a comparative sense as well, but not a causative meaning, as seen next in (17):

- (17) a. *Fàati goy ndà beer-òo.*
 Fati work nda elder-DF
 ‘Fati works with her elder sister.’
 ‘Fati works more than her elder sister.’
- b. *Muusà zùru ndà torkà-a.*
 Musa run nda cart-DF
 ‘Musa runs away with the cart.’
 ‘Musa runs faster than the cart.’

- c. *Taalib-oo nôo ndà àlfagã-a.*
 student-DF give more.than teacher-DF
 ‘The student gives more than the teacher does.’

It should be noted that sentence (17c) only has the comparative sense (the verb *nôo* ‘give’ can appear in a comitative structure only if followed by its objects, as in the equivalent of “the students gave food to the people with (the help) of the teacher”).

In the Zarma of Bankanu and in Dandi Sanni (another Songhay language spoken around Gaya town in South-Western Niger), one sees the same dynamic verbs taking *ndà* with a causative meaning: *tun* ‘rise’, *dira* ‘walk, go’, *gòro* ‘sit’, *furò* ‘enter’, *fatta* ‘go out’, *zùru* ‘run’. Speakers in both Bankanu and Gaya also point out the difference between *-andì* and *V + ndà* causatives and say that, for example, *gorandì* and *fattandì* mean, ‘make sit’ and ‘make go out’ respectively, without co-action, while the forms *gorò ndà* and *fatta ndà* imply co-action and would mean, respectively, ‘make sit with’ and ‘make go out with’ (for the Gaya dialect data, see Daouda Mamane 2010).

Besides the interpretation, there are some further indications that *V + ndà* structures are formally ambiguous congruent with their double comitative and causative semantics, as represented next:

- (18) a. Comitative structure: Verb + [Prep + NP]
 Example: *à bìsa [ndà fàrkãa]* ‘he passed by [with the donkey]’
 b. Causative structure: [Verb + Particle] + NP
 Example: *à [bìsa ndà] fàrkãa* ‘he [passed by with] the donkey’

As will be argued for in Section 4, the causative construction in (18b) developed from the comitative structure in (18a) through grammaticalization, whereby the verb and particle *ndà* form a syntactic constituent, probably a complex predicate [*Verb + ndà*]_v. One piece of evidence supporting this claim is the fact that for the causative meaning to be possible, nothing should intervene between the verb and the particle *ndà*, as seen in the next example, where only a comitative interpretation is possible:

- (19) *À bìsa susùbo ndà farkã-a.*
 3SG pass morning with donkey-DF
 ‘He passed by with the donkey this morning.’
 Not: ‘He took away the donkey this morning.’

This sentence, where an adverbial follows the verb, only has the comitative (instrumental) meaning, contrary to sentence (16a). Conversely, if something intervenes between the particle *ndà* and the following NP, then only the causative sense is possible. For example, in (15a–b), the dative phrase *a sè* ‘for her’ appears between the particle and the NP causee. According to speakers, the sentence cannot have a comitative interpretation. Similarly, contraction between comitative *ndà* and its pronominal object is regular in normal speech, but not between the causative *ndà* and a pronominal causee, as seen in:

- (20) a. *Koy ndà ni beer-õo!*
 go nda 2SG elder-DF
 ‘Go with your elder brother!’
 ‘Take your elder brother!’
- b. *Koy d-ìn beer-õo!*
 go with-2SG elder-DF
 ‘Go with your elder brother!’

When *ndà* is fully separate from the object pronoun, as in (20a), both the comitative and the causative meanings are possible. In (20b), *ndà* is fused with the pronoun and only the comitative sense is available. It is in fact more frequent for object pronouns to fuse with comitative *ndà* (the other contracted forms are: *ndà+ây* ‘1SG’ → *ndây*; *ndà+à* ‘3SG’ → *ndâa*; *ndà+îr* ‘1PL’ → *ndir*; *ndà+aràn* ‘2PL’ → *ndaràn*; and *ndà+i* ‘3PL’ → *ndîi*). Conversely, in causative constructions, contraction happens between the verbal root and particle *ndà*, although this is most frequent with the three pandialectal causative verbs (see discussion of data 11 above). Indeed, the three pandialectal comitative-based verbs have undergone a process of fusion where, for example, the verb *kâa* ‘come’ displays various levels of fusion from initial *kâa ndà*, to *kànda*, to *kànde* ‘bring’. In Zarma, only this verb changes its final vowel, from [a] to [e]. It may also be noted that in Niamey, the three pandialectal *kònda*, *kànda* and *yendà* can take the general gerundial nominalization suffix *-yaŋ* as in: *kondàayaŋ* ‘taking away’, *kandàayaŋ* ‘bringing’ and *yendàayaŋ* ‘returning’. In this sense, these derived verbs behave like basic or *-andi* causative verbs (cf. *tun* ‘rise’ and *tunyaŋ* ‘rising’; *tunandi* ‘raise’ and *tunandiyaŋ* ‘raising’). There is no evidence that gerundive formation is possible with other comitative-based causative verbs.

Besides these formal aspects, comitative and causative constructions that appear similar on the surface may differ in their compatibility with further extensions of a sentence such as a goal or a benefactive phrase, as illustrated next:

- (21) a. *Faati fatta ndà zànk-ey Ami doo.*
 Fati go.out nda child-DF.PL Ami place
 ‘Fati went out with the kids to Ami’s place.’
 ‘Fati took the kids out to Ami’s place.’
- b. *Faati fatta ndà zànk-ey Ami sè.*
 Fati go.out CAUS child-DF.PL Ami for
 ‘Fati took the kids out to/for/on behalf of Ami.’

Sentence (21a), with a goal argument, can have a comitative or a causative interpretation. However, in (21b), with a benefactive phrase, only the causative interpretation is normally possible (cf. also data 15 above and Sibomana 2001: 222, #54). Similarly, only the causative reading is available when the causer is inanimate or an abstract reference. For example, in (14a) “destiny” is the causer, while in (15) God is the causer causing the appearance of the pond (see also further examples in Sibomana 2001: 224, #85 and Saydu Hanfiiyu 2004: 188).

2.3 Comparing *-andì* and *ndà* causatives

The most remarkable difference between *-andì* and *ndà* causative forms is their productivity. As seen in Section 2.1, the overwhelming majority of Zarma verbs undergo the *-andì* derivation. In particular, we have seen that verbs of all aspectual classes can take the causative suffix. Also, except for the verbs *koy* ‘go’, *kâa* ‘come’, and *yêe* ‘return’, all verbs that can undergo the *ndà* causative formation also take the *-andì* causative suffix. Some of these verbs are given in Table 1.

Table 1. Verbs having both an *-andì* and a *ndà* causative form

Verbs	<i>-andì</i> form	<i>ndà</i> construction
<i>bisa</i> ‘pass’	<i>bisandì</i> ‘make pass’	<i>bisa ndà</i> ‘make pass with’
<i>dîra</i> ‘go, walk’	<i>dirandì</i> ‘walk, chase away’	<i>dîra ndà</i> ‘make walk with, take’
<i>zûru</i> ‘run’	<i>zurandì</i> ‘make run, chase away’	<i>zûru ndà</i> ‘make run with’
<i>daray</i> ‘get lost’	<i>darandì</i> ‘lose’	<i>daray ndà</i> ‘make disappear with’
<i>bangay</i> ‘appear’	<i>bangandì</i> ‘make appear’	<i>bangay ndà</i> ‘make appear’

Verbs	-<i>andì</i> form	<i>ndà</i> construction
<i>fatta</i> ‘go out’	<i>fattandì</i> ‘make go out’	<i>fatta ndà</i> ‘take out’
<i>furò</i> ‘enter’	<i>furandì</i> ‘make enter’	<i>furò ndà</i> ‘make enter with’
<i>gòro</i> ‘sit’	<i>gorandì</i> ‘seat’	<i>gorò ndà</i> ‘make sit with’
<i>tun/tùnu</i> ‘rise’	<i>tunandì</i> ‘raise’	<i>tùnu ndà</i> ‘make rise with’
<i>too</i> ‘arrive, reach’	<i>toonandì</i> ‘fill up’	<i>too ndà</i> ‘make arrive/reach’

As reported earlier, Niamey and Bankanu speakers, as well as the speakers of Dandi Sanni, insist that the *ndà* causative implies co-action, in contrast with the *-andì* form, as reflected in the translations in Table 1. This intuition is confirmed by the fact that the verbs concerned are intransitive motion, stance, or (dis)appearance verbs that prototypically allow entrainment by a causer of a causee in a common action. It is no surprise then that the most prototypical motion verbs, the generic *koy* ‘go’, *kâa* ‘come’, and *yêe* ‘return’ pandialectally accept the *ndà* construction and have no *-andì* forms. Nonetheless, it must be noted that despite the insistence by native speakers and in conformity with the nature of grammaticalization processes, there is evidence showing that causative *ndà* constructions can shed away their co-action semantics and appear in contexts that exclude the possibility for both participants doing the same action (cf. Section 2.2, discussion of 13–15 above).

Syntactically, too, the two causatives are different. For example, only the *-andì* causative can apply to transitive verbs to give double transitive verbs where the causee is the pre-verbal direct object. This is illustrated next (adapted from Hamani 1981: 411):

- (22) a. *Zànk-ey dòndon cawyaŋ.*
 child-DF.PL learn reading
 ‘The children studied/read/learned reading.’
 (= *Zànkey nà cawyaŋ dòndon.*)
- b. *Ay nà zànk-ey dondon-andì cawyaŋ.*
 1SG PF child-DF.PL learn-CAUS reading
 ‘I taught the children / I taught the children how to read.’
 (cf. **Ay nà cawyaŋ dondon-andì zànkey.*)

As seen in (22a), the base verb *dòndon* ‘learn’ is transitive and can take its direct object pre- or post-verbally. The causative form can take two direct objects, although there are clear restrictions in their order, with the causee obligatorily appearing pre-verbally, as already indicated in Section 2.1. By

contrast, the comitative-based causative construction only applies to intransitive verbs, and the causee cannot appear before the verb.

However, given the morphological (synthetic) nature of all *-andi* forms and the syntactic (periphrastic) nature of most *ndà* forms, one may wonder whether that may imply other differences between the two causative forms. For example, according to Haiman (1983, cited in T. Payne 1997: 182–183), a coding principle governs the expression of cause and effect in languages, whereby a smaller causative morpheme (say, a suffix on the verb) would be used for direct causation and a longer one (say, a periphrastic construction) would be used for indirect causation. We have seen that both causative constructions are used to express direct causation, even if in slightly different ways. Haiman’s coding principle seems not to apply to the *ndà* construction. In fact, in the next section we will see that in Hausa, given the lack of an original, primary causative morpheme on verbs, a comitative-based causative construction has taken over the expression of the domain of direct causation (see end of this Section for why we think that *-ar̂*, at best, is on its way to becoming a causative morpheme).⁴

3. Comparing comitative-based causative constructions in Zarma and Hausa

As seen in the introduction, Hausa has two types of direct causative constructions (besides a periphrastic *sâa* ‘make’ indirect construction), although only one of these direct causatives, the *V-ar̂ + dâ*, as illustrated in (3b), has standardly been recognized in Hausa descriptions (see Newman 2000; Jaggar 2001). This section compares the two constructions with regard to their semantics and their morphosyntactic properties. It will be concluded that both are comitative-based causative constructions (for the origin of the comitative use of *dâ* see Abdoulaye 2006).

Semantically, both *V + dâ* and *V-ar̂ + dâ* constructions express direct causation, in the sense that causer is physically or temporally in contact

⁴ Hausa has verbalizing suffixes such as *-anta*, *-ta*, *-aCa* (where “C” is a reduplicated consonant), etc., that derive verbs from adjectives and nouns, sometimes with a causative meaning (cf. *bàakoo* ‘guest’ and *baakùntaa* ‘be guest of’; *tsawoo* ‘length’ and *tsawàitaa* ‘lengthen’; see Newman 2000: 722–725). Causativization can also be marked lexically (cf. *mutù* ‘die’ and *kashèe* ‘kill’) or through shifting from intransitive to transitive verb classes whose function however is not dedicated to causative marking (cf. *cika* ‘be full’ and *cikà* ‘fill’). All these processes are not dealt with in this paper.

with the causee. However, the $V + d\grave{a}$ structure applies only to a comparatively few motion and transfer verbs, most of which are intransitive. When a verb allows for both causative constructions, the $V + d\grave{a}$ form typically implies that the causer also undergoes the action, as seen next in (23):

- (23) a. *Sun gusàa d\grave{a} buhuuhuw\grave{a}-n cikin zaur\grave{e}.* (= 3a)
 3PL.PF move CAUS sack.PL-DF in hall
 ‘They moved up/took further the sacks into the entrance hall.’
- b. *Sun gus-a\hat{r} d\grave{a} buhuuhuw\grave{a}-n.*
 3PL.PF move-CAUS CAUS sack.PL-DF
 ‘They moved/pushed off the sacks.’

Sentence (23a) implies that the causer moved with the causee to a particular destination in a way similar to the sentences (16a), above, for Zarma. By contrast, sentence (23b) typically implies different trajectories for the causer and the causee, or the causer may not even be moving (say if the causer just kicks the sack out of the way). In this example, the $V-a\hat{r} + d\grave{a}$ form, besides being causative, also has the efferential meaning (i.e., the verb denotes an action that sends the object away from the subject referent or away from some significant deictic center; see Parsons 1962: 268; Newman 1983). Nonetheless, some simple $V + d\grave{a}$ forms, too, can have the efferential meaning, as seen in:

- (24) a. *Abdu yaa aik\grave{a} kudii gida-n Muusaa.*
 Abdu 3M.SG.PF send money house-of Musa
 ‘Abdu sent (the) money to Musa’s house (as gift or for safe-guarding, etc).’
- b. *Abdu yaa aik\grave{a} d\grave{a} kudii gida-n Muusaa.*
 Abdu 3M.SG.PF send EFF money house-of Musa
 ‘Abdu sent money to Musa’s house (as gift).’

In (24), the noun *kudii* ‘money’ is the logical direct object in both sentences. The only difference between them, as the translation indicates, is the more permanent nature of the transfer in the $V + d\grave{a}$ constructions in (24b). This property was noted in Parsons (1962: 268). In both sentences there is also no idea of co-action. Another semantically causative $V + d\grave{a}$ construction that does not imply co-action is illustrated next (cf. Abdoulaye 1996: 123 and references cited there):

- (25) a. *wà-n-dà a-kà koomoo dà shii mulkii*
 one-DF-that 4-RP return CAUS 3M.SG power
 ‘he who was returned to power’
- b. *Mii yat tahoo dà kee?*
 what 3M.SG.PF come CAUS 2F.SG
 ‘What brought you here?’ (i.e., ‘Why are you here?’)
- c. *Allàh yà dadèe dà rà-n-ka!*
 God 3M.SG.SBJ last CAUS life-of-2M.SG
 ‘May God prolong your life!’

In the context of sentence (25a), international pressure and the presence of foreign troops allowed the return of a deposed president (Haiti’s Aristide). In this case, one does not really have the co-action usually implied in more typical comitative-based causatives. In sentence (25b), the causer is an abstract notion (the reason that caused the trip), and there is no co-action with inanimate (non-dynamic) causers. In (25c), the life to be prolonged alone is subject to the verb’s action. Hence, one sees the same grammaticalization process whereby comitative-based causatives can retain the co-action meaning characteristic of comitative structure, or they may lose the co-action meaning and become typical causative constructions where only the causee undergoes the action. This was also discussed for Zarma (cf. Section 2.2, discussion of examples 13–15 above).

Besides the semantic tendencies just described, the most important functional difference between the two causative constructions is the ability of the *V-ar̂ + dà* constructions to apply to all types of verbs, while the *V + dà* construction is limited to mostly intransitive motion and transfer verbs. The *V-ar̂ + dà* construction applies to state verbs (*tàbbatà* ‘be certain’, *tabbataŕ dà* ‘ascertain’); activity verbs (*gùdaanà* ‘be happening, be taking place’, *gudaanaŕ dà* ‘run, manage’); active accomplishment verbs (*ci* ‘eat’, *ciyaŕ dà* ‘feed’); achievement verbs (*bacèe* ‘get lost’, *bataŕ dà* ‘lead astray’); and accomplishment verbs (*gaanèe* ‘understand’, *gaanaŕ dà* ‘make understand’). By contrast, the *V + dà* construction applies to activity and active accomplishment motion and transfer verbs such as *gusàa* ‘move a bit’, *aikàa* ‘send’, *tahoo* ‘come’, etc., as seen earlier in this section. In some sense, the *V-ar̂ + dà* construction can be compared to the *-andi* causative formation of Zarma and the *V + dà* construction to the *ndà* comitative-based causative constructions. The *V + dà* is not only restricted with the verbal classes; our impression is that it is also textually less

frequent than the $V\text{-}a\hat{r} + d\grave{a}$ construction. For example, because of its rarity, it is only recently that the causative meaning of the $V + d\grave{a}$ construction has been fully appreciated (cf. Abdoulaye 1996, 2005: 91).

Formally, just like in the case of Zarma, the two comitative-based causative constructions in Hausa can be analyzed as complex predicates made up of the verb and the particle $d\grave{a}$ and so contrast with the regular comitative construction, as seen next in (26):

- (26) a. $V + [\text{Prep} + \text{NP}]_{\text{pp}}$
 b. $[\text{V} + \text{Particle}]_{\text{v}} + \text{NP}$
 c. $[\text{V-}a\hat{r} + \text{Particle}]_{\text{v}} + \text{NP}$

The structure in (26a) characterizes the basic comitative structures (such as illustrated in example 3c above), which contain a prepositional phrase headed by $d\grave{a}$. By contrast, the structures in (26b–c) characterize the causative constructions, where in both cases a verbal cluster is made up of the verb and the particle $d\grave{a}$. Indeed, Abdoulaye (1996) has adduced a number of tests showing that in the causative constructions the verb and $d\grave{a}$ form a constituent. The pattern of fronting in the normal comitative and the $V + d\grave{a}$ causative construction is illustrated in the following:

- (27) a. *Muusaa yaa zoo d\grave{a} yaar\grave{o}*.
 Musa 3M.SG.PF come da boy
 ‘Musa came with a boy.’
 ‘Musa brought a boy.’
- b. *Yaar\grave{o} nee Muusaa ya zoo d\grave{a} shii*.
 boy be Musa 3M.SG.RP come da 3M.SG
 ‘It is with a boy that Musa came.’
 ‘It is a boy that Musa brought.’
- c. *D\grave{a} yaar\grave{o} nee Muusaa ya zoo*.
 with boy be Musa 3M.SG.RP come
 ‘It is with a boy that Musa came.’

The sentences (27a–b), where the verb is followed by $d\grave{a}$, have both the comitative and the causative interpretation. However, when $d\grave{a}$ is shifted with its focused object noun as in (27c), then only the comitative reading is available. As noted in Abdoulaye (1996), in constituency test, the $V\text{-}a\hat{r} + d\grave{a}$ construction evidences a stronger syntactic bound than the $V + d\grave{a}$ construction. The $V\text{-}a\hat{r} + d\grave{a}$ also has more variation in its surface

form, having undergone various processes of clipping, fusion, and reanalysis into basic verbs. For example, the basic verb *ci* ‘eat’ can give the causative forms *ciyaŕ dà*, *cii dà*, *ciishee*, *ciisaŕ dà*, *ciyaasaŕ dà*, *ciidàa*, etc., all meaning ‘feed’ (see Parsons 1971/72; Newman 1973; for a summary table of various *-aŕ*-based causative forms see Abdoulaye 2005: 91). As one can see in these alternate forms, the *-aŕ* (or *-as*) suffix is not necessary for the causative meaning (although the suffix alone can mark causation when the causee nominal is moved or is understood, as in *yaarò nee ta ciyaŕ* ‘it is the boy that she fed’). According to Newman (2000: 651), the affix *-aŕ* in the *V-aŕ + dà* construction “is unique among the [verbal endings] (and most other Hausa suffixes) in that it ends in a consonant rather than a vowel”. Further (see Newman 2000: 654), he says that “[the *V-aŕ + dà* construction] is unusual among Hausa [verbal forms] not only in its internal morphological complexity, but also in the considerable dialectal variation that it exhibits”. Finally, Newman (2000: 651) also believes that the suffix *-aŕ*, as an original causative marker, would have no known cognate in other Chadic languages. For all these uncertainties, one cannot without qualification claim or imply that the suffix *-aŕ* alone marks the causative meaning (or the efferential “action away” meaning; see, for example, Jaggar 2001, 2014: 1). This leaves open the possibility that the *V-aŕ + dà* construction is indeed based on the comitative structure, just like the more transparent *V + dà*. In that case, the suffix may originally be *-ŕ*; that is, the (feminine) possessive linker which, besides marking possession, also binds words that form syntactically close-knit structures (cf. for example the syntactically rigid Adjective + Linker + Noun order as in *dooguwa-ŕ mootàa* ‘long car’, with the linker on the adjective, vs. the syntactically more flexible *mootàa dooguwa* ‘long car’, without the linker). This would explain why the *V-aŕ + dà* construction is syntactically more rigid than the *V + dà* construction.

4. Further remarks on the grammaticalization of comitative-based causative forms

For Heine and Reh (1984: 137), “[o]ne of the most likely adpositions to undergo verbal attraction and to become a verbal derivative extension is the comitative preposition (‘with’).” Numerous studies have now shown that causatives are among the constructions that frequently derive from comitative constructions (Maslova 1993, cited in Lobben 2010: 390; D. Payne 2002: 502–503; Soubrier 2008). These types of causatives have been

referred to as sociative causatives, in which, according to Dixon (2000), “the causer is also involved in the activity”, and so they presuppose two animate participants acting together. This is also the reason why Shibatani and Pardeshi (2002: 147–153) proposed that comitative-based causatives are intermediary between direct and indirect causation. However, as per the gradual nature of grammaticalization processes, comitative-based causatives can evolve and drop the co-action semantics and imply that only the causee undergoes the verb’s action, in direct or indirect causation. For example consider the following Asheninka (Arawakan) data cited in D. Payne (2002: 489–490):

- (28) *r-atsipe-t-aka-ak-e-na*
 3M-suffer-&-CAUS-PF-MODE-1
 ‘he made me suffer’

According to D. Payne (2002: 489–490), the most natural reading of (28) implies that both causer and causee undergo the action (say, causer took causee out in rain and both suffered the downpour). This interpretation happens especially if the example is out of context and is more frequent. However, the example can also have an interpretation whereby the causee alone undergoes the action, giving a typical direct causative.

In the preceding sections, we have seen a similar development in both Zarma and Hausa. One may note that there seems to be a special affinity between the causative interpretation and the generic motions verbs, and not just any dynamic verb that may appear in a comitative construction (say, the verbs meaning ‘to work’ or ‘to dance’). Songhay illustrates this situation well, with the three verbs *koy* ‘go’, *kâa* ‘come’, and *yêe* ‘return’ being the only verbs that allow a causative interpretation in all (southern) Songhay varieties. One likely explanation will be that these verbs, besides being generic, are also the ones that are compatible with a direct physical control of the causee by the causer in the comitative action (say, causer perhaps taking causee’s hand and moving him in entrainment). Other verbs (say, *work*, *eat*, *drink*) will not easily allow a simultaneous action with a physical entrainment. As we have seen, in Zarma and Dandi Sanni the construction has expanded to other verbs. For example, the verbs that turn up frequently in our Zarma data that allow a causative reading with *ndà* are the specific motion verbs with meaning such as ‘go out’, ‘enter’, ‘walk’, ‘pass’, etc., all of which can also entail co-action and direct control of the causee by the causer in entrainment (cf. also Shibatani & Pardeshi 2002: 118, cited in Lobben 2010: 308–309). Other frequent verbs allowing

ndà-causative construction are stance verbs meaning ‘rise’, ‘sit’, ‘lie’, etc. However, with these verbs, co-action cannot combine with direct control by the causer since the causer typically can only invite the causee to sit down (in indirect causation, maybe while sitting himself) or force or assist the causee into position, but without co-action (direct causation). Just like in Asheninka, with all these verbs the context may weaken one or the other factor critical in the initial stage of grammaticalization. For example, in data (15) above, there is direct control (God make the pond appear), but no co-action. In data (25b), with an inanimate causer, there is no co-action, and the control is simply a motivation (the reason compelling the person into coming). Generally, this weakening of the initial co-action meaning goes hand in hand with formal reduction and fusion of the elements in the construction. For example, in sentences (14–15) in Section 2.2, where there is no co-action, the fused *kònda* ‘take’ cannot be replaced with the periphrastic source constructions *koy ndà* ‘go with, take’.

Compared with Zarma, Hausa seems to have gone further down the grammaticalization process, both semantically and formally. Semantically, the Hausa comitative-based causatives, especially the *V-aŕ + dà* forms, affect all verbs, not just intransitive motion verbs. With the non-motion verbs, the causative inference naturally takes precedence over the notion of co-action; i.e., the causer is no longer involved in the main action, and there is some kind of transfer to the causee, a *faire-faire* (make do) semantics. Formally, Hausa also exhibits a greater degree of integration, with the *V-aŕ + dà* giving rise to purely morphological variants that can be suffixed with other verbal extensions (for example, the verb *ci* ‘eat’, is the basis of the causative forms *ciyaŕ dà*, *cii dà*, *ciidàa* ‘feed’; however, *ciidàa* itself can be further extended with a ventive morpheme to give *ciidoo* ‘feed + movement towards deictic center’; see Abdoulaye 2005: 91).

Given this general use of comitative-based constructions to express causatives in Hausa, it is very likely that the Songhay varieties in Niger and Nigeria extended their use of comitative *ndà*-based causative construction to more verbs under the influence of Hausa. On the one hand, we have seen in Section 2.2 that in the main Songhay varieties of Mali, the particle *ndà* has lost its comitative function. Therefore, in these varieties, the forms *kondà* ‘take’, *kànde* ‘bring’, and *yendà* ‘return’ are no longer linked to the comitative constructions, which do not exist (the particle *ndà* in Koyra Chiine and Koyraboro Senni now expresses comparison, the instrumental function and a few other non-comitative functions; see the examples given in Heath 1998: 132, 137 and Heath 1999: 152, respectively). On the other

hand, the majority of the speakers of the Songhay varieties in Niger and Nigeria know Hausa. The residents of the main towns are in fact fluent Zarma-Hausa bilingual speakers. This is especially true of the residents of Niamey, Gaya, Dosso, and Bankanu. In fact, some previous studies have already pointed out many shared features between Hausa and Songhay (cf., amongst others, Gouffé 1970–1971; Zima 1992, 1997). This should not be surprising given the extensive contact between the Hausa and Songhay people stretching back centuries. It is also very likely that more languages in the area share the comitative-based causative so that one can indeed speak of an areal feature. For example, the spreading of the comitative-based causative construction to other motion verbs and to transitive verbs seems to have also happened in Tasawaq, a Northern Songhay language that is also well in contact with Hausa (cf. Sidibé 2010).

5. Conclusion

In this paper, we have seen that Zarma in Niger and Nigeria has a comitative-based causative construction that mostly involves dynamic activity and active accomplishment verbs that express motion, stance, and appearance/disappearance. In this respect, Zarma contrasts with the main Songhay varieties in Mali where the comitative-based causative constructions concern three generic motion verbs only. These three verbs have probably grammaticalized very early; i.e., before the particle *ndà* lost its comitative function in these varieties. By contrast, in Hausa all verb classes can form their causative constructions based on the comitative structure. Given the sociolinguistic situation in Western Niger and in Northwestern Nigeria, we have assumed that the Zarma belongs together with Hausa to an area characterized by the comitative-based causative feature. However, further studies are needed to delimit this area and determine all the languages involved.

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