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## NP coordination in Kxoe (Central Khoisan)\*

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### 1. Introduction

KXOE is a Khoisan language belonging to the Non-Khoekhoe branch of Central Khoisan (Khoe) (Vossen 1997). It is spoken by approximately 8.000 people in the Caprivi strip of Namibia and the neighboring regions of Botswana, Zambia and Angola, as well as in Schmidtsdrift (South Africa) (Brenzinger 1998). The research on KXOE is inseparably connected to Oswin Köhler who dedicated decades to the study of the KXOE language and culture. He has published the only KXOE grammar so far (Köhler 1981).

In this paper the different mechanisms of nominal coordination in KXOE will be analysed from a synchronic and diachronic perspective. The text collections of Kilian-Hatz (1999), Heine (1997) and Köhler (1989) serve as the corpus of the analysis.<sup>1</sup> Where appropriate I will also refer to data from Brenzinger & Naude (1999) as well as some sentences elicited by M. Brenzinger. Nominal coordination in Köhler's texts will be contrasted with the findings in the data of Kilian-Hatz and Heine. Typological literature on coordination and works on grammaticalization will provide a better understanding of KXOE constructions.

KXOE is a verb-final language (SVO or OSV), it has postpositions, and in the noun phrase the head is preceded by its modifiers (e.g. demonstratives, adjectives, possessor). Three persons, genders (masculine, feminine, and common) and numbers (singular, dual, and plural) are distinguished and signalled by so-called person-gender-number suffixes (pgn) on the noun.

\* I would like to thank John Brutnell, Bernd Heine and Conny Seck for valuable comments on earlier versions of this paper.

<sup>1</sup> The interlinear morphemic translation of the cited examples from Kilian-Hatz (1999) and Heine (1997) are adjusted to my interpretation.

The examples from Köhler's and Heine's texts are adapted to the orthography of *The Kxoe Alphabet* (1997). The tone-marking of Köhler is simplified according to Kilian-Hatz & Schladt (1997). I provide the interlinear glosses and the English translation for Köhler's examples.

## 2. Typological Frame

By 'coordination' we refer to the "process whereby two or more similar units are grouped together to form a larger unit of the same type" (Grover 1994:762). The units may differ in size and syntactic category, e.g. sentences, clauses, NPs, nouns. Coordination usually links units of equal status. This paper will concentrate — strictly speaking — on a sub-class of coordination, namely conjunction (with 'and') (Payne 1985).<sup>2</sup> Disjunction (with 'or') will be excluded here for the most part. We restrict the analysis to constructions with two or more coordinated nouns or NPs. These nouns or NPs are found in sentences describing a single occurrence of an event, which is simultaneously predicated of these two or more referents. The referents are conceived of as separate individuals (Stassen *forthc.*).

Before turning to coordination in a particular language an impression on the cross-linguistic variation of coordinating constructions should be given in the following. The typologies of Payne (1985), Mithun (1988) and Stassen (*forthc.*) will be sketched and the reader is referred to the entries in Heine & Kuteva's grammaticalization lexicon. The construction types found in the literature of the different authors correspond only partly, each typology provides its unique types.

In his typology of NP-coordination Payne discusses the following types (1985:25-37): asyndetic strategy, 'and' strategy, 'with' strategy; pronoun strategy and 'dual strategy'. Languages applying the asyndetic strategy simply juxtapose the conjuncts. In many languages this strategy exists as a normal (cf. 1a) or stylistically marked alternative (cf. ENGLISH) to other strategies with overt marking, in few languages this is the most common way to conjoin NPs (cf. 1b)<sup>3</sup>.

### TURKISH (Altaic)

- (1a) **sen, ben ve kardeşin ~ sen, ben Ø kardeşin**  
 you I and brother your ~ you I Ø brother your  
 'you, I and your brother' (Payne 1985:25)

### PACOH (Mon-Khmer)

- (1b) **Nháng tiráp [NP tilét, callóh, acóq]**  
 we prepare baskets spears knives  
 'We prepare baskets, spears and knives' (Payne 1985:26)

<sup>2</sup> 'Coordination' and 'conjunction' are often used synonymously.

<sup>3</sup> cf. Mithun (1988:33): example (18)-(19).

A strategy whereby the same coordinator is used for phrasal or sentential conjunction – a common phenomenon in the Indo-European language family (cf. ENGLISH) – is called 'and' strategy.

Payne speaks of 'with' strategy, if in a language the coordinator and the comitative adposition are identical, or if one of the conjuncts is inflected with a comitative case. Nevertheless, languages often have devices for keeping the two constructions apart, e.g. the conjoined NPs trigger plural marking on the verb (cf. 2a, b) or the conjoined NPs share a case marker, whereas this is not the case with the 'pure' comitative (cf. 3a, b).

## WALAPAI (Amerindian)

(2a) *ɲa-č ɲikwái-č-a avon-a-m taθ-k-wíl*

1-NOM clothes-PL-DEF soap-DEF-with wash-1-CONTINUOUS

'I washed the clothes with soap.'

(2b) [*NP Hátθáù-a-č hmaj-m*] *mwák tíáitavm yú-č-k-yu*

puppy-DEF-NOM boy-with two very:happy be-PL-3-PROG

'The puppy and the boy are both very happy.' (Redden 1966:160-1 cited after Payne 1985:30)

## JAPANESE

(3a) [*NP John to Mary*] *ga kekkonsita*

John with Mary SUBJ married

'John and Mary married'

(3b) *Mary ga John to kekkonsita*

Mary SUBJ John with married

'Mary married John' (Kuno 1973:116 cited after Payne 1985:30)

Payne could also find languages in which the 'with' strategy is not restricted to NP coordination – as is generally the case, but the strategy had extended to other categories (cf. SHUSWAP (British Columbia)). In languages which allow the use of the 'with' strategy side by side with the 'and' strategy for NP coordination, the 'with' strategy is (syntactically and/or semantically) restricted in use, the 'and' strategy is the general one (cf. RUSSIAN<sup>4</sup>).

In the pronoun strategy the NPs are merely linked by a plural pronoun indicating number and person of the conjoined NP (cf. 4a). In an even simpler construction (cf. 4b), which is common among languages employing the pronoun strategy, the pronoun expresses the overall

<sup>4</sup> s 'with' can't conjoin more than two conjuncts and it demands that the conjuncts are acting together or are near to each other.

number and person of the conjoined NP. The pronoun is thus functioning as the first conjunct and as the link simultaneously.<sup>5</sup>

## TAHITIAN

(4a) 'Ua reva ātu [NP **Peu rāua 'o Terii**]

PFV leave away Peu 3:DU ART Terii

'Peu and Terii left'

(4b) 'Ua reva ātu [NP **māua 'o Peu**]

PFV leave away I:DU:EXCL ART Peu

'Peu and I left' (Tryon 1970:67 cited after Payne 1985:35)

Payne demonstrates the use of the rare 'dual' strategy by an example from NENETS. Each conjunct is marked with the dual, the result is a conjoined NP.

## NENETS (Samoyed)

(5) [NP **ńakaxa' papaxa'**]

older:brother:DU younger:brother:DU

'the older brother and the younger brother' (Tereščenko 1973:19 cited after Payne 1985:36)

Mithun (1988) deals with coordination from a diachronic perspective. The sources of coordinators and coordinating constructions are often still transparent. In the chapter on nominal coordination (pp. 336-343) she exemplifies the use of the pronoun strategy and the asyndetic strategy and she demonstrates how NP-coordinators develop from comitatives/comitative verbs and adverbials ('also', 'too'). Only the grammaticalization of 'also'/'too' will be sketched here, a source that is first mentioned by Mithun (1988). (6a) exemplifies the use of **hni'**, which establishes a semantic, not a syntactic link, to the former discourse. Potentially ambiguous contexts served as the starting point for the grammaticalization of **hni'** (cf. 6b) into a syntactic conjunction. The last NP could be interpreted as an afterthought ('X, Y, Z – squash also') or –if the pause is shortened – as ('X, Y, Z and squash'). (6c) represents a context where the original meaning of **hni'** is completely lost, it can only be interpreted as 'and'.

## CAYUGA (Mithun 1988:341f.)

(6a) **Akitakrá hni' shē nyó: n'atō:tá:ke:**

I:fell also as far I:came:back

'I fell on the way back, too.'

(6b) **A:yē:' akwé:, onēhē' osahe'tā ohōn'atá'ō hni'**

it:seems all corn bean potato-guess also

'Oh, I guess everything, corn, beans, potatoes and squash'.<sup>6</sup>

<sup>5</sup> cf. Mithun (1988:337f.).

- (6c) **Junior, Helen, Hercules *hni***  
'Junior, Helen, and Hercules.'<sup>7</sup>

Founding his typology on a semantic definition of NP coordination, Stassen (forthc.) dedicates his study to the analysis of the formal variation found cross-linguistically. He basically differentiates the coordinate strategy and the comitative strategy according to their syntactic properties. Whereas the coordinate strategy assigns the NPs an equal structural rank, the same thematic role and the same case, the NPs of the comitative strategy are unequal in structural rank, they are not part of the same constituent and one of the NPs is the head of an oblique NP. The NPs of the coordinate strategy trigger dual or plural agreement on the predicate, which is typically not the case for the NPs of the comitative strategy.

Stassen further divides the coordinate strategy into sub-types according to the linking device, the number and position of the linkers used. For illustrative examples the reader is referred to his article.

Figure 1. Stassen's Sub-types of the Coordinate Strategy (Stassen forthc.)

- juxtaposition /asyndeton
- overtly marked NP-coordination
  - one marker
    - medial position
    - postposed./ suffixed
      - postposed/suffixed to the first NP
      - postposed/suffixed to the second NP
    - preposed connective
      - preposed to the first NP<sup>8</sup>
      - preposed to the second NP
  - more than one marker
    - postposed / suffixed
    - preposed / prefixed

The typological variation in the coordinate strategy is attributed to the diachronic sources. Citing Mithun (1988) Stassen adds other possible sources to her list: numerals ('two', 'both', 'all'), pronouns, non-finite forms of 'to be'- verbs (cf. 7) and focus particles.

<sup>6</sup> In the Cayuga sentence the NP 'squash', that can be found in the English translation, is missing.

<sup>7</sup> Mithun (1988:342) provides the following context for the utterance: A guest had been watching three children play, and asked what their names were.

<sup>8</sup> Not attested in Stassen's sample.

CHOCTAW (Muskogean)

(7) **Ano micha sashki**

1:SG be:DS my:mother

'My mother and I' (Nicklas 1972:257 cited after Stassen forthc.)

Stassen's comitative strategy encompasses constructions with dependent marking (oblique marker on one of the NPs) and in few cases constructions with head marking (comitative marker on the verb) or with a comitative NP as a direct object of a verb 'to accompany'.

WITH-languages are defined as languages in which "the only way to encode a situation in which a single event is ascribed simultaneously to two different participants is to use a non-balanced, non-constituent, construal of the two NPs involved (...) coordination of noun phrases, in the structural sense, is not an option." (Stassen forthc.) AND-languages exhibit a clear differentiation between the comitative and the coordinate encoding.

Heine & Kuteva (forthc.) provide only a restricted set of NP-and sources, among them the well-known comitative source. Dual and the numeral 'two' as sources for NP-and are exemplified by data from unrelated languages, whereby the two sources are difficult to be kept apart, since the numeral often developed into NP-and via a dual marker.

### 3. NP coordination in Kxoe

Whereas in many languages we are familiar with only part of the above mentioned strategies used for nominal coordination (e.g. 'and' and asyndetic strategy in ENGLISH), Kxoe provides a wealth of different coordinators and different constructions. It will be demonstrated that almost all of the strategies which occur cross-linguistically also seem to be observable in KXOE.

#### 3.1. 'with' strategy

##### 3.1.1. |xòà(-xa)

The 'with' strategy is very common cross-linguistically and it can also be found in KXOE. Here, one of the NP coordinators is identical with the postposition |xòà 'with' or – in the words of grammaticalization theory – the comitative postposition developed into 'NP-and'. The comitative (cf. 8a, b) and the coordinating use (cf. 9) of |xòà are demonstrated in the following examples:

- (8a) **Pòò tàñ-é-tè náxani-lxoá †qóéré-na-kò kǐ kǐ kǐ kǐ kǐ kǐ**  
 jackal stand:up-I-PRES náxani:fruit-COM start-II-CONV *jackal's laughter*  
 'Jackal stands up with the náxani-fruit and starts [to laugh] kǐ kǐ kǐ kǐ kǐ kǐ [...].'  
 (KH:240)
- (8b) **Qóro cì-llòè á-m ǎ ǎ |xòà**  
 cock go-sleep DEM-3:M:SG thirst COM  
 '[So] Cock has to sleep thirsty.' (lit.: "with thirst") (KH:103)
- (9) **ǎ'éu-m |xòà kyaánù-m |xòà té-kò kx'ó-ró-hǐ**  
 (fish-3:M:SG COM sheat:fish-3:M:SG COM be-CONV eat-II-PAST)  
 'Sie aßen den Fisch und den Wels.' (K89:196)  
 ('They ate the fish and the sheat-fish.')

The stimulus of the development from comitative to coordinator can probably be found in the semantic proximity of comitatives and NP conjunctions (Payne 1985:29). Ambiguous cases might have served as the starting point (X and Y left vs. X left with Y). Constructions with an NP conjoining |xòà can no more be said to be purely comitative, but they are hybrids between Stassen's comitative and coordinate strategy. Stassen and Payne describe the phenomenon that languages applying the 'with' strategy seek to keep the comitative and the coordinate strategy apart. Both authors mention devices by which the NPs gain an equal structural rank and by which a formal difference between comitative and coordinate strategy is established. Among other devices the doubling of the comitative marker and plural marking on the verb are mentioned.

This statement also applies to KXOE. Here the morpheme is reduplicated. In the context of coordination it appears as a 'correlative pair' (Grover 1994:763), i.e. the morpheme follows each conjunct, no matter whether there are two (cf. 9) or more (cf. 10).

- (10) **tc'áo-ǎ'e-mà náxani-m |xòà |qóm |xòà †qòyé-m |xòà |x'óánà-m |xòà**  
 (bush-fire-3:M:SG náxani-3:M:SG COM |qóm COM †qòyé-3:M:SG COM |x'óánà-3:M:SG COM  
 |x'án dàò-rò-hǐ  
 very burn-II-PAST)  
 'Ein Buschfeuer richtete unter náxani-Bäumen, qóm-Bäumen und unter †qòyé-Bäumen sowie k'óánà-Bäumen großen Schaden an.' (K89:286)<sup>9</sup>  
 ('A bush-fire burnt and severely damaged the náxani-trees, qóm-trees, †qòyé-trees and k'óánà-trees-')

|xòà ... |xòà and |xòà-xa ... |xòà-xa<sup>10</sup> can be used interchangeably to coordinate nouns. So far no conditioning factors for the use of one or the other pair could be found. The extended form

<sup>9</sup> Köhler provided a very free translation for the sentence.



*lxòà-xa* can equally be used as a comitative postposition. The following examples should demonstrate their occurrence in equal contexts.

- (11a) *Kxóé-ṅ lxòà-xa Ḑní-kxòè-ṅ lxòà-xa Bògá-kxòè-ṅ lxòà-xa úũ-ku-a-ḥòè*  
 (Kxóé-3:C:PL COM Ḑní-kxòè-3:C:PL COM Bògá-kxòè-3:C:PL COM marry-REC-I-HAB)  
 'Kxóé und Ḑníkxòè und Bògá-kxòè heiraten untereinander.' (K89:195)  
 ('Kxóé and Ḑníkxòè and Bògá-kxòè intermarry.')
- (11b) *Kxóé-ṅ lxòà Gòyá-ṅ lxòá té úũ-ku-t-a-ḥí kx'éí 'à*  
 (Kxóé-3:C:PL COM Gòyá-3:C:PL COM be marry-REC-FREQ-II-PAST how)  
 'Wie die Kxóé und Gòyá untereinander heirateten.' (K89:395)  
 ('How the Kxóé and the Gòyá intermarried.')

Every conjunct in a *lxòà(-xa) ... lxòà(-xa)*-construction can independently be marked for gender and number. The use of the pgn-markers is very frequent, but not obligatory (cf. 8b).<sup>11</sup> *lxòà(-xa) ... lxòà(-xa)* is predominantly found with subject NPs (cf. 12a), but also with object NPs (cf. 12b)<sup>12</sup>.

- (12a) *càá-mí 'à Kxóé-ṅ lxòà-xa góé-m lxòà-xa té kx'áà-t-a-ḥí*  
 (water-3:M:SG OBJ Kxóé-3:C:PL COM cattle-3:M:SG COM be drink-FREQ-II-PAST)  
 'Das Wasser tranken die Kxóé und auch das Vieh.' (K89:243)  
 ('Both the Kxóé and the cattle drank the water.')
- (12b) *lú-ḥùà Qúwa-ḥù 'm góé-m lxòà míní-mí lxòà gù-mí lxòà*  
 (some-3:C:PL white:man-3:C:PL POSS cattle-3:M:SG COM goat-3:M:SG COM sheep-3:M:SG COM  
 ḥáé-ka-ra-ma-à-ḥòè  
 chew-CAUS-II-BEN-I-HAB)  
 'Einige (Männer) hüten Rinder, Ziegen und Schafe für die Weißen.' (K89:262)  
 ('Some (men) tended cattle, goats and sheep for the white men.')

Attention has to be paid to the fact that *lxòà(-xa) ... lxòà(-xa)* cannot coordinate postpositional phrases (Pps), as *tama-xa* (§ 3.2.) does<sup>13</sup>. The diachronic source of the morpheme – a postposition itself – explains why such a restriction is not surprising, since sequences of postpositions do not occur. The following sole example of its type (cf. 13a) shows, however, a context where *lxòà(-xa) ... lxòà(-xa)* can be used to coordinate instruments, which are usually fol-

<sup>10</sup> *lxòà-xa* has to be analysed as postposition plus adverbializer.

<sup>11</sup> The reduced form (Köhler's "verbundene Form") of the pgn's is used: -ṅ (3:C:PL), -m (3:M:SG), cì (3:F:SG) for -nà, -mà, -hè. Table 1 (§3.4.) gives an overview of the pgn-markers.

<sup>12</sup> In the case of *lxòà(-xa) ... lxòà(-xa)*, coordinated objects are not marked with 'à, which is usually added to objects.

<sup>13</sup> As a possible exception see ex. (14).

lowed by the postposition *kà*<sup>14</sup>: To the verb stem an instrumental derivative affix *-kà* is added, the instrumental postposition deleted. This makes the use of *lxòà ... lxòà* possible. Compare the sentence with ex. (13b), in which the NP-coordinator *tama-xa*<sup>15</sup> can be used after the instrumental postposition.

- (13a) *lú-mí ávuru-m lxòà lú-mí 'áò-m lxòà lé góé-m 'à*  
 (some-3:M:SG things-3:M:SG COM some-3:M:SG money-3:M:SG COM 1:M:PL cow-3:M:SG OBJ  
*ʔũũ-kà-t-a-hĩ*  
 buy-INS-FREQ-II-PAST)  
 'Mit einem Teil der Sachen und mit einem Teil des Geldes haben wir ein Rind gekauft.' (K89:560)  
 ('With part of the things and part of the money we bought a cow.')
- (13b) *khòó-mí kà tama-xa tcáo-m kà tama-xa ʔũ-wà-hĩ*  
 (skin-3:M:SG INS also tail-3:M:SG INS also buy-II-PAST)  
 'Sie kauften ihn mit einem Fell oder auch mit einem Wildschweif.' (K89:454)  
 ('They bought it with a skin or with a tail.')

In the following example we might be dealing exceptionally with a coordinated PP, but in this case the postposition is the comitative *lxòà*, which seems to be simultaneously functioning as the comitative marker and the coordinator.

- (14) *bèyé-mí lxòà kóróyi-ca lxòà yà-hĩ*  
 (horse-3:M:SG COM cart-2:F:DU COM come-PAST)  
 'Er kam mit Pferden und zwei Wagen.' (K89:495)  
 ('He came with horses and two carts.')

In §2. it was mentioned that if a language has several coordinators the one with a comitative source is often semantically or syntactically restricted. It was already demonstrated that *lxòà(-xa) ... lxòà(-xa)* is not confined to two conjuncts. It is not restricted to a particular group of nouns as the following examples show, but it can be used with persons (cf. 11a, b), animals (cf. 12b) and inanimate things (cf. 15). But so far it cannot yet be excluded that there is a semantic restriction – similar to the RUSSIAN case – for the use of the comitative strategy.

<sup>14</sup> Kxoe differentiates instrumental 'with' and comitative 'with' formally (*kà* vs. *lxòà*).

<sup>15</sup> The NP-coordinator *tama-xa* is discussed in §3.2.

- (15) **‡ámí-kuri lé Kxóé-llè Báha nú ó-kà kúũ-wa-hĩ róthò-m̄ |xòà-xa**  
 (in:the.past 1:M:SG Kxóé-1:M:SG Báha land LOC go-II-PAST lead-3:M:SG COM  
**dínínà-m̄ |xòà-xa ‡ũũ-ca**  
 mould-3:M:SG COM buy-FIN)  
 'In der alten Zeit gingen wir Kxóé-Männer nach Báha-Land, um Blei und Kugelformen zu kaufen.' (K89:463)  
 ('In the past we Kxóé men went to Báha land to buy lead and bullet moulds.')

Differentiating comitative and coordinate contexts is sometimes a problem that cannot be solved easily, but most often the semantic context and the reduplication of the comitative element point to the fact that we are not dealing with a comitative construction but with coordination. Although there is no number agreement on the verb to show whether we are dealing with a singular subject and a comitative PP or whether we are dealing with a coordinated subject, sometimes the use of the reciprocal *-ku* on the verb leads one to assume that the NPs are no more unequal in rank, since reciprocal demands a plural subject (cf. 11a, b). Sentences in which the comitative *|xòà(-xa)* follows only one NP, but in which the verb carries the reciprocal affix (cf. 16) might represent ambiguous cases which possibly led to the interpretation of the comitative as coordinator. In a later stage of grammaticalization the reduplication of *|xòà(-xa)* helped to keep comitative and coordinate strategy apart.

- (16) **tc'áó-m̄ ó-kà té tòè-xu-á-kò cì té-kò**  
 (bush-3:M:SG LOC 1:C:PL move:away-COMP-II-CONV go be-CONV  
**‡Ání-kxòè-ñ |xòà-xa té dàrà-ku-t-a-hĩ**  
 ‡Ání-kxòè-3:C:PL COM be visit-REC-FREQ-II-PAST)  
 'Nachdem wir in den Busch gezogen waren, besuchten wir und die ‡Áníkxòè uns gegenseitig.' (K89:338)  
 ('After we had moved into the bush, we and the ‡Áníkxòè visited each other.')

The 'with' strategy is exclusively confined to NP coordination (unlike *nò*; cf. 3.3.). There is no sign yet for the spread to other contexts like attributive adjectives, VPs or clauses. The results of the analyses of each coordinator in KXOE are summarized in table 2 at the end of this article.<sup>16</sup>

<sup>16</sup> It has to be mentioned that the analysis of *|xòà(-xa) ... |xòà(-xa)* is primarily based on Köhler (1989), where it is the most frequent strategy, whereas the strategy is almost absent in Kilian-Hatz (1999). The rare use of the comitative strategy (exceptions: KH:58, 143, 327) can be attributed to the low number of coordinated NPs in the fairy tales in general.

I would like to close this section by a statement found in Stassen (forthc.) which has to be revised after looking at the KXOE examples:

With the possible exception of Khoisan [sic!], all the languages of Africa in and below the Sahara exhibit (some degree of) WITH-encoding.

### 3.1.2. cĕĕ(-ta)

This strategy is a marginal one in the corpus, but it is presented here to complete the picture of the 'with' strategy. The construction cĕĕ(-ta) ... cĕĕ(-ta) seems to derive from a comitative, the source of the comitative itself probably being the verb cĕĕ (1. take, seize. 2. fetch, accept (what is offered). 3. marry (of man, used by woman); DIC:9). A possible (but certainly hypothetical) scenario for the development of this coordinator is the following (Note that the second stage is not documented in the corpus): I. 'take' (cf. 17) → II. comitative<sup>17</sup> → III. coordinator.

- (17) **Kúũ ná cì-ix'áa-can-a-xu-a-kò tí kópi-à cĕĕ!**  
 go and go-wash-REFL-II-COMP-II-CONV 1:SG cup-OBJ take  
 'Go and wash your [hands! Then] you may take my cup!' (KH:74)

In the following examples cĕĕ ... cĕĕ can only be interpreted as a coordinator. The reduplication of the morpheme and the use of the reciprocal on the verb leads to the assumption that we are dealing with a construction similar to lxòà(-xa) ... lxòà(-xa).

- (18a) **Káamutcóòngà-m cĕĕ Cádjuku-i cĕĕ lúu-ku-a-hã**  
 (Kámùtcóòngà-3:M:SG COM Cádjuku-3:F:SG COM be:near-REC-II-PERF)  
 'Kámùtcóòngà und Cádjuku liegen nahe beieinander.' (K89:336)  
 ('Kámùtcóòngà and Cádjuku are close to each other/are neighboring settlements.')

<sup>17</sup> The development from 'take'-verbs to comitatives and/or instrumental is documented e.g. in the Kwa languages. (Lord 1973:288)

<sup>18</sup> Pay attention to a minimal pair using lxòà instead of cĕĕ:

**Mùkwé-i lxòà Rùyòngó-ci lxòà lúu-ku**  
 Mùkwé-3:F:SG COM Rùyòngó-3:F:SG COM be:near-REC

'Mùkwé und Rùyòngó sind eng benachbart.' (K89:322)

('Mùkwé and Rùyòngó are close to each other/are neighboring settlements.')

- (18b) *lám-xa-ca Àndàrà cùrè yà ki ù-ku Djuúnú-ci cêê Xóm-ci cêê*  
 (two-ADJ-3:F:DU Àndàrà school? LOC be-REC Djuúnú-3:F:SG COM Xóm-3:F:SG COM)  
 'Zwei sind (noch) in der Àndàrà-Schule, und zwar Djuúnú und Xóm.' (K89:529)  
 ('Two are still in the Àndàrà school, in fact Djuúnú and Xóm.')

Although there are few *cêê(-ta)*-examples, its use as a coordinator of objects can also be proven by the following example.

- (19) *dú-m 'm khòó-m cêê-ta láò-m 'm khòó-m cêê-ta n'í-ya-xu nò (...)*  
 (eland-3:M:SG POSS skin-3:M:SG COM buffalo-3:M:SG POSS skin-3:M:SG COM cut-II-COMP CONJ)  
 'Nachdem er aus Elenhaut und Büffelhaut Riemen geschnitten (...) hatte (...)'  
 (K89:490) / ('After he had cut eland and buffalo skin (...).')<sup>19</sup>

The *cêê(-ta) ... cêê(-ta)* strategy cannot be found in Kilian-Hatz, i.e. it is only present in Köhler (1989). Unfortunately Köhler does not comment in his otherwise detailed annotations on the (unusual) use of *cêê*. The variation of *cêê* (cf. 18a, b), *cêê-ta* (cf. 19) and *cêê-u* (Köhler 1989:303) has to be left unexplained, the origins of the extended forms are unknown.

### 3.1.3. #áã(-ta)

There is a third coordinating strategy derived from a comitative which can be observed in Köhler's as well as Kilian-Hatz's texts. It is so far unknown from which source the comitative is derived, the homophonous verb #áã 'go in', 'enter', 'put in' is semantically too distant to be considered as a source concept.<sup>20</sup> The following sentences demonstrate the use of the comitative postposition #áã(-ta).

- (20a) *tà-xú-nò tcàrà-m ó-kà Kxóé-m #áã kúù-wà-llòè*  
 (then garden-3:M:SG LOC Kxòé-3:M:SG COM go-I-HAB)  
 'Dann geht er mit dem Kxóé-Mann zum Garten.' (K89:417)  
 ('Then he goes to the garden with the Kxóé man.')
- (20b) [...] *té khóé-tè #áã-tà, xamá Qóro té-é-hí.*  
 1:C:PL human-1:C:PL COM 3:M:SG cock live-II-PAST  
 '[...] He, Cock, lived in our camp together with us, the humans.' (KH:103)

A combination of the comitative postposition and the morpheme *-xa* (analogous to *lxòà ~ lxòà-xa*, cf. §3.1.1.) is also attested.

<sup>19</sup> The English translation is more literal than the one provided by Köhler.

<sup>20</sup> The source of the second morpheme *-ta* is also unclear (cf. also *-ta* in *cêê-ta*; §3.1.2.). It could be the past tense suffix *-ta* or the verb *ta* 'to be:thus'. If it is the past tense suffix, the above mentioned verb #áã can be

- (21) **tà-xú-nò dàmàcí-tcà**      **lèé-khoe-dji**      **ʃãã-ta-xa Qáráti kà**      **kx'ó-xò-m 'à**  
 (then      younger:sibling-2:M:DU      female-person-3:F:PL COM      Qáráti      LOC      game-3:M:SG OBJ  
**gùni-ná-hĩ**  
 hunt:from:the:bush:camp-II-PAST)  
 'Später gingen die beiden jüngeren Brüder zusammen mit ihren Frauen nach Qáráti, um vom Buschlager aus zu jagen.' (K89:279)  
 ('Later the two younger brothers went to Qáráti together with their wives in order to hunt from the bush camp.')

If the semantics of **lxòà(-xa)** and **ʃãã(-ta)** are compared, it seems that the latter is more emphatic than the former ('with' vs. 'together with').

In case of coordination, **ʃãã(-ta)** is reduplicated and each noun is followed by the coordinator.<sup>21</sup> As is generally the case with postpositions, the nouns preceding the coordinator take the reduced pgn-suffixes ("verbundene Form")<sup>22</sup>. The number of conjuncts seems to be restricted to two, at least only this possibility is attested in the corpus (but this still needs further investigation). Only animate or even only human nouns<sup>23</sup> were found to be coordinated by **ʃãã(-ta)**. In all the examples the conjuncts are the subject of the sentence.

- (22a) **té Kxóé-tè ʃãã**      **l'Ání-kxòè-ñ ʃãã**      **Cádjuku-ci 'm l'Xóm-kx'am ki**  
 (1:C:PL Kxóé-1:C:PL COM      l'Ání-kxòè-3:C:PL COM      Cádjuku-3:F:SG      POSS      river-bank      LOC  
**Mũũ-tc'i-ku-ci 'm kyákyàrè-m ki té kóó-kà-xa l'án-a-ko té-hĩ**  
 Mũũ-tc'i-ku-3:F:SG      POSS      bank-3:M:SG      LOC      1:C:PL      all      settle-II-CONV      be-PAST  
 'Wir Kxóé und die l'Áníkxòè, wir wohnten früher alle am Fluß bei Cádjuku und am Ufer bei Mũũtc'iku.' (K89:337)  
 ('In the past we Kxóé and the l'Áníkxòè, we all lived by the river at Cádjuku and on the bank of Mũũtc'iku.')

- (22b) [...] **tááci-m**      **Kúí-m ʃãã-ta Kyáré-can-m ʃãã-ta tc'áo-m 'à**  
 ([...] older:sibling-3:M:SG      Kúí-3:M:SG COM      Kyáré-can-3:M:SG COM      bush-3:M:SG ?  
**ũ-wá-hĩ**  
 go:for:food-II-PAST)  
 '[...] gingen der ältere Bruder Kúí und Kyárécan in den Busch, um Beute zu suchen.' (K89:279)  
 ('[...] the older brother Kúí and Kyárécan went into the bush for food.')

excluded out of morphological reasons, since it would demand the juncture **-na-** to add a past tense suffix.

<sup>21</sup> For combinations of **ʃãã(-ta)** with other coordinators the reader is referred to §4.

<sup>22</sup> The pgn-suffixes seem not to be obligatory, there is at least one example where none is used on the noun preceding **ʃãã(-ta)** (cf. KH:86).

<sup>23</sup> The animals act, think and speak like humans in the fairy tales.

Constructions with a kind of syncretism are also to be found. On the one hand only one  $\#áã(-ta)$  is used (like in comitative contexts), on the other hand a verb with reciprocal derivation appears. Maybe these cases could be regarded as intermediate stages in the development from comitative to coordinator (parallel to the situation of  $\#xòà$ ; §3.1.1.).

- (23) [...] **tí**  $\#áãatà$  **tcá** **cií-'ò-ku-a-gò** **vée!**  
 [...] 1:SG COM 2:M:SG reach-LOC-REC-I-FUT NEG  
 [...] 'you can never compete with me!' (KH:92)

As a first conclusion it can be said that the development from the comitative  $\#áã(-ta)$  to the coordinating  $\#áã(-ta)$  ...  $\#áã(-ta)$  probably took place recently. The coordinating  $\#áã(-ta)$  ...  $\#áã(-ta)$  has retained some characteristics of a comitative: It is restricted to the combination of two (animate/human) entities functioning as subject, whereas  $\#xòà(-xa)$  ...  $\#xòà(-xa)$  can more generally be used. It is obvious that the former is less grammaticalized, it has kept more semantic content.

### 3.2. 'also' strategy

From the fact that only Mithun (1988) deals with the 'also'-strategy in her typology of coordination one has to deduce that this strategy is either cross-linguistically rare or that it has been neglected. KXOE reflects the same diachronic development like CAYUGA where an adverbial particle meaning 'also, too, as well' was grammaticalized into 'NP-and' (Mithun 1988:340-3 and §2. above). The following example shows the use of the adverbial particle **tama-xa** in KXOE.

- (24) **Gòává-ñ** **tama-xa** **ll'án-a-ko** **té-hĩ**  
 (Mbúkùshù-3:C:PL also settle-II-CONV be-PAST)  
 'Auch Mbúkùshù wohnten dort.' (K89:268)  
 ('Mbúkùshù also lived there.' [previous sentence: 'In former times Kxoe lived there.'])

**tama-xa** sets a semantic link between the content of the cited statement and the rest of the discourse. Ambiguous contexts probably served as the starting point for the development of **tama-xa** to a coordinator (a process similar to the one sketched in §2.). The course of the development from the adverbial particle to the coordinator remains hypothetical, but the repeti-

tion of **tama-xa** after every noun phrase shows that we are no more dealing with the adverbial particle and that the two NPs are assigned an equal rank.

**tama-xa** consists of two morphemes, the latter being the well-known adverbializing/adjectivizing suffix **-xa**, which is also part of **lxòà-xa** (§3.1.1.). According to (DIC:74) **tama** and **tama-xa** can be used interchangeably, but in Köhler (1989) only the latter could be found. Apart from one exception (cf. 25) the use of 'also' to coordinate nouns is surprisingly restricted to the texts of Köhler, but there it is used extensively. In (25) I want to present the only example in which the unextended **tama** is used and the only example of the 'also' strategy outside the texts of Köhler (1989). Unfortunately the English translation does not include the first NP which is found in the KXOE sentence (a more appropriate translation might be: 'With my big eyes, I'm used to standing at the entrance of antbear's burrow or at the springhaas's burrow, the mouse-hole or in bushes.'). In the example two different coordinators can be found: **tama ... tama** coordinating the 'home of the springhaas', 'the home of the mouse' and the 'bush' and the disjoining coordinator **rè** (probably etymologically related to the homophonous question particle) which connects the first with the second (or all of the following) NPs.

- (25) **Goó dì tc'ómí-càó ki rè wánda ||'áé ki tama yèú ||'áé ki tama**  
 antbear POSS entrance-burrow LOC or springhaas home LOC also mouse.home LOC also  
**llxú óo ki tama tí nlgōãí yà tí té-é-||òè!**  
 bush inside LOC also 1:SG big:eyed while 1:SG stand-I-HAB  
 'With my big eyes, I'm used to standing at the entrance of the springhaas's burrow, also at the mouse-hole, or in bushes!' (KH:71)

The coordinators appear after every conjunct as **lxòà(-xa)**, **cĕĕ(-ta)** and **ǎǎ(-ta)** do. There is definitely no restriction on the number of conjuncts, their number reaching from two to twenty-one<sup>24</sup> (K89:562). **tama-xa ... tama-xa** can conjoin subject (cf. 26) and object NPs (cf. 27a, b), adverbial phrases (cf. 28a, b), postpositional phrases (cf. 29a-c) and so-called "quotative" objects (cf. 30).

<sup>24</sup> It has to be doubted whether the extreme example of 21 conjuncts was ever uttered spontaneously or whether it was a construction of the analyst, but many other sentences with more than two nominal conjuncts are found in the corpus.



- (26) |Gíríku-n tama-xa Kwángari-n tama-xa Kxóé-*n* 'à v<sup>à</sup>Ámà taá #í-yé-llòè  
 (Gíríkù also Kwángàli also Kxóé-3:C:PL OBJ v<sup>à</sup>Ámà QUOT call-I-HAB)  
 'Die Gcíríkù und die Kwángàli nennen die Kxóé "v<sup>à</sup>Ámà". (K89:182)  
 ('The Gcíríkù and the Kwángàli call the Kxoe "v<sup>à</sup>Ámà".')
- (27a) Bwátà-kxòè-nà lqóm tama-xa tcéú tama-xa n<sup>à</sup>xani tama-xa  
 (Bwátà-kxòè-3:C:PL mangetti also shivi also n<sup>à</sup>xani also  
 té gùnì-t-á-hĩ  
 be collect:from:the:bush:camp-FREQ-II-PAST)  
 'Die Kxóé von Bwátà sammelten (dort) vom Buschlager aus Manketti-Nüsse, Shivi  
 und auch n<sup>à</sup>xani-Früchte.' (K89:255)  
 ('The Kxóé of Bwátà collected mangetti, shivi and also n<sup>à</sup>xani-fruits from the bush  
 camp.')
- (27b) lgàrà-mí 'à tama-xa #í-mí 'à tama-xa tí té lláé-can-a-hĩ  
 (carve-3:M:SG OBJ also call-3:M:SG OBJ also 1:SG be teach-REFL-II-PAST)  
 'Ich lernte das Schreiben und das Lesen.' (K89:525) / ('I learned to write and read.')
- (28a) lgámbara-kuri tama-xa còm-kuri tama-xa Tcìkè xú-m kà té xàro-t-a-hĩ  
 (hunger-time also ordinary-time also Tcìkè thing-3:M:SG INS be give-FREQ-II-PAST)  
 'In Hungerjahren und (auch) in anderen Jahren schenkte Tjìkè immer wieder etwas.'  
 (K89:523)  
 ('In years of hunger and (also) in ordinary years Tjìkè always gave us something.')
- (28b) n<sup>à</sup>-tá #x'óá-xo-ro-xu-a-kò tcóo-khòè-nà ll'ée-ta í tcà-khóé-hè  
 (thus go:out-CAUS-II-COMP-II-CONV medicine-person-3:C:PL inform-PAST DEM sick-person-3:F:SG  
 khoámá-na-xa tama-xa úi-'e tama-xa tcóò-m 'à cíi nò tòm-ti ti  
 early:in:the:morning also afternoon also medicine-3:M:SG OBJ go and swallow-PAST? MOD)  
 'Als sie sie so entließen, teilten die Heilkundigen (ihnen) mit, daß die Kranke am Mor-  
 gen und am Nachmittag Medizin schlucken solle.' (K89:543)  
 ('When she was thus discharged, the nurses told (them) that the patient has to swallow  
 medicine in the morning and in the afternoon.')
- (29a)<sup>25</sup> ll'áè-m kà tama-xa dòvè-mí kà tama-xa #ú-khoava-m kà tama-xa  
 (flour-3:M:SG INS also salt-3:M:SG INS also roast-millet-3:M:SG INS also  
 Qúwa-gãã kà tama-xa té xàró-t-a-hĩ  
 white:man-leaf INS also be give-FREQ-II-PAST)  
 'Sie schenkte immer wieder Mehl und Salz und Brot ("Röst-Hirse") und auch Gemüse  
 ("Blatt der Weißen").' (K89:523)  
 ('She kept on giving flour, salt, bread ("roasted millet") and also vegetable ("leaf of the  
 whites").')
- (29b)<sup>26</sup> tà-xú-nò n<sup>à</sup>-mí tcóò-m 'm bèrè-mí 'à óm-kyao-m ki tama-xa  
 (then DEM-3:M:SG medicine-3:M:SG POSS rest-3:M:SG OBJ abdomen-3:M:SG LOC also  
 kx'úu-m ki tama-xa ll'óá-xu-t-a-fĩ  
 back-3:M:SG LOC also pour-COMP-FREQ-II-PAST)  
 'Den Rest dieser Medizin goß er (ihr) auf den Unterleib und auch auf das Kreuz.'  
 (K89:541)  
 ('He poured the rest of this medicine on the abdomen and also on the back.')

<sup>25</sup> PP with instrumental postposition (expressing the recipient).

<sup>26</sup> PP with locative postposition.

- (29c)<sup>27</sup> Nlólé-ŋgyàò kà tama-xa Wée-dòm 'ò tama-xa tí múũ-wa-hĩ  
 (Nlólé-ŋgyàò LOC also Wée-dòm LOC also 1:SG see-II-PAST)  
 'Ich sah (ihn) in Nlólé-ŋgyàò und auch in Wée-dòm.' (K89:486)  
 ('I saw (him) in Nlólé-ŋgyàò and also in Wée-dòm.')  
 (30) Gòává-nà Kányóndò taá tama-xa Mányóndò taá tama-xa hí-yé-llòè  
 (Gòává-3:C:PL Kányóndò QUOT also Mányóndò QUOT also call-I-HAB)  
 'Die Gòává nennen (den Platz) Kányóndò oder Mányóndò.' (K89:293)  
 ('The Gòává call (the place) Kányóndò or Mányóndò.')

If **tama-xa ... tama-xa** appears in negated clauses it has to be interpreted as 'neither ... nor'.

- (31) lèé-xa Kxóé-ń tama-xa Gòává-ń tama-xa Bátà ki hámbe  
 (now Kxóé-3:C:PL also Mbúkùshù-3:C:PL also Bátà LOC exist:NEG)  
 'Jetzt gibt es in Bátà weder Kxóé noch Mbúkùshù.' (K89:250)  
 ('Now there are neither Kxóé nor Mbúkùshù in Bátà.')

The semantics of **tama-xa ... tama-xa** are dealt with after considering the formal characteristics. The coordinator is sometimes interpreted as 'or' (cf. 13b, 25), whereas in many examples an interpretation as a disjoining coordinator can be excluded (e.g. 29b). I would consider 'and/or', 'and ... respectively' (or the GERMAN 'beziehungsweise') an adequate translation for **tama-xa ... tama-xa**. The exact interpretation is provided by the context. The ambiguous interpretation of the coordinator has a parallel in the polysemy of the adverbial particle, which can be interpreted as 'also' and 'but', two interpretations that seem to exclude each other, but it is the context and the position that provide the clue for the appropriate interpretation.

- (32) xà-má yaá-a-gòè tá mí-é-tà tama-xa yaá-ŋa-à-tè  
 (DEM-3:M:SG come-I-FUT QUOT say-II-PAST but come-NEG-I-PRES)  
 'He said that he will come, but he didn't come.' (DIC:74)

### 3.3. nò

In this section coordinating constructions of the following type will be dealt with:

- (33) Kx'áí nò Kyamí  
 vulture and korhaan  
 'Vulture and Korhaan' (KH:43)

These constructions are frequently found in the headings of the fairy tales (Kilian-Hatz 1999) (cf. 33), but rarely in spontaneous utterances (cf. 34). They are absent from Köhler (1989).

<sup>27</sup> PPs with two different locative postpositions.

- (34) **kóó domíoro-llùà nò qaáoro-llùà**  
 many omuramba-3:M:PL and rain:water:pool-3:M:PL  
 'many omurambas and rain-water pools' (KH:46)

The use of **nò** reminds one of the coordinating constructions common in Indo-European languages, e.g. ENGLISH, where the coordinator **and** is also found between two conjuncts. The ENGLISH **and** is not only used as an NP-coordinator, but it is a general coordinator for all kinds of syntactic units. A similar observation holds true for the KXOE **nò**. It is a very common coordinator of clauses. In this function it can be found everywhere in the corpus, even in Köhler (1989) (cf. 35).

- (35) **ó-tuvu llgaánà-m 'à Búma-kxòè-tè té càó nò kx'áà-t-a-hĩ**  
 (PRIV-deep water:hole-3:M:SG OBJ Búma-kxòè-1:C:PL be dig CONJ drink-FREQ-II-PAST)  
 'Wir Búmakxòè-Leute gruben flache Wasserlöcher und tranken (daraus).' (K89:190)  
 ('We Búmakxòè digged shallow water-holes and drank (from them).')

Despite its similarities with 'and' of the Indo-European languages the KXOE case is more complicated. Although **nò** is often translated as 'and' when conjoining clauses, syntactic tests show that it usually belongs to the preceding clause and serves as a subordinating conjunction. A reordering of the clauses doesn't change the sequence of the events — there is no temporal iconicity between the clauses — thus providing evidence that we are not dealing with coordination, but subordination (Treis 2000). In most cases **nò** sets up a temporal relation of anteriority between the subordinate clause(s) and the main clause.

It is worth emphasizing that — apart from one exception (discussed below, cf. 36) — a single **nò** is found between the conjuncts<sup>28</sup> in contrast to the position and the reduplication of the other KXOE NP-coordinators. At first sight this phenomenon does not seem to fit in the general characteristics of a head-final language and demands further investigation. Besides, the development from clause-coordinator to NP-coordinator or vice versa still needs to be explained. Probably the use as a clause-coordinator is the earlier one, since this is the most common use in Kilian-Hatz (1999) as well as in Köhler (1989). The use of **nò** for NP-coordination could be a recent innovation due to areal contact with European languages like AFRIKAANS and ENGLISH.

<sup>28</sup> Further investigations will have to find out whether the complex NP has to be bracketed [NP] [**nò**] [NP] or [NP **nò**] [NP].

It has to be added that generally valid rules cannot yet be stated. An example from Heine (1997) contradicts the above hypothesis that *nò* appears only between two conjuncts. In this unique sentence of the corpus *nò* (or more precisely its dialectal variant *nù*) precedes each conjunct. This construction cannot yet be explained.

- (36) **gúa-m kyaán-a-tè nù úéè-m-à nù xàm-m-a nù qau-m-á**  
 hyena-3:M:SG run-I-PRES and leopard-3:M:SG-OBJ and lion-3:M:SG-OBJ and cheetah-3:M:SG-OBJ  
**nu tcám̄ba-m-à.**  
 and genet-3:M:SG-OBJ  
 'The hyena ran to the leopard, to the lion, to the cheetah, and to the genet cat.' (Heine 1997:9)

*nò* is not confined to the coordination of two nouns only, the corpus provides one example with three conjuncts (cf. 37). This is not surprising, since the clausal conjunction *nò* can also conjoin several clauses.

- (37) **tcám̄ba-e-||ùà nò úã̄-e-||ùà nò kyèhé**  
 genet-COLL-3:M:PL and hare-COLL-3:M:PL and every  
 'the genets, the hares, (and) all (other beings)' (KH:247)

*nò* seems to be the "default coordinator" in elicited sentences. In translations of sentences containing coordinated NPs, the construction provided first by the informant was always the *nò*-construction.<sup>29</sup> Nouns with subject (cf. 38) and object function (cf. 39) as well as modifiers (attributive adjectives and possessors) (cf. 40-41) were coordinated with *nò*.

- (38) 'David and Matthias go hunting.'  
**Dáviti nò Matiyási ta kúũ-à-tè ú-cà.**  
 David and Matthias ?<sup>30</sup> go-I-PRES hunt-FIN
- (39) 'The men hunt duiker and eland.'  
**Kx'ákhòè-||ùà kúní 'à nò dùú 'à ta ||ámí-á-tè.**  
 man-3:M:PL duiker OBJ and eland OBJ? hunt-I-PRES
- (40) 'The woman bought white and black cloth.'  
**||gákhòè-hè ðũ-à-tá !éci nò n†gú ava 'à.**  
 woman-3:F:SG buy-II-PAST white and black cloth OBJ
- (41) 'The house of John and Mary broke down.'  
**Jón nò Mária-khà 'u ngú-hè khóã-na-fí.**  
 John and Mary-3:C:DU POSS house-3:F:SG break-II-PAST

(M. Brenzinger, p.c.)

<sup>29</sup> I would like to thank Matthias Brenzinger for eliciting sentences while doing his own research in Namibia.

<sup>30</sup> See §3.6. for a discussion of the morpheme *ta*.

### 3.4. Dual and pronoun strategy

According to Payne (1985) the dual strategy is a cross-linguistically rare strategy – he exemplifies the strategy with data from the Samoyed languages (cf. 5). Heine & Kuteva (forthc.) exemplify the development from the dual or the numeral 'two' to 'NP-and' by examples from e.g. ALYAWARRA (Pama-Nyungan), WAROPEN (Malayo-Polynesian), ARANDA (Pama-Nyungan), VAI (Mande, Niger-Congo) and !XUN (Khoisan). In KXOE — as in probably all the languages — the dual strategy is restricted to NP-conjunction, more precisely to the conjunction of two nouns. This restriction derives from the source of the coordinators, the dual-suffix. In KXOE the so-called "pgn-suffixes" are portemanteau-morphemes which differentiate three persons, three genders (masculine, feminine, common) and three numbers (singular, dual, plural) on the noun. They correspond to a large degree to the free personal pronouns. The following table — a modified version of a table from Köhler (1981:519-22) — gives an overview of the pgn-markers, or personal pronouns respectively.<sup>31</sup>

	singular	dual	plural
1:M	tí / -rà	tcámì	llé
F		cámì	cé
C		khámì	té
2:M	tcá / -tcì	tcáo	lláo
F	há / -cì	cáo	có
C	-	kháo	tó
3:M	xà-má / -mà or -m	xà-tcá / -tcà	xà-llúá / -llùà or llù
F	xà-hé / -hè or -(c)ì	xà-cá / -cà	xà-djí / -dji
C	(xà'á) / 'à or -à <sup>32</sup>	xà-khá / -khà	xà-ná / -nà or -n

Table 1. *Pgn-markers and personal pronouns in Kxoe*

The dual of the third person is suffixed to each of the juxtaposed nouns to express 'N and N'. The dual strategy is rarely found in texts (cf. 43a, b), but is frequently found in the titles of the fairy tales in Kilian-Hatz (1999) (cf. 42). The strategy is completely absent from the texts of Köhler (1989). It is restricted to the coordination of nouns thought of as acting or belonging

<sup>31</sup> In the third person plural the free personal pronouns consist of the demonstrative *xà* plus the pgn-suffix. When free and bound forms differ from each other, the first form in the table represents the free, the second form after the slash the bound morpheme. If there are two forms after the slash, the second one represents the reduced form (Köhler's "verbundene Form").

For details on pgn-marking see Heine & Kilian-Hatz (1998).

<sup>32</sup> The interpretation of 'à as a pgn-marker is controversial.

together and forming a pair. From the use of *-tcà* (3:M:DU) in (42) it can be deduced that 'hippo' as well as 'fire' are masculine nouns.

- (42) **Xáò-tcà** |'É-tcà  
hippo-3:M:DU fire-3:M:DU  
'Hippo and Fire' (KH:83)
- (43a) **nuú xamá úà yaá nu** ||goéé-tcà **gúá-i-tcà** 'à yaá nu  
and 3:M:SG hare come when tortoise-3:M:DU hyena-COLL-3:M:DU OBJ come when  
**díní-mí** **kà qam-t-à-hĩ.**  
honey-3:M:SG INS dupe-FREQ-II-PAST  
'And when the hare came, he used to outwit the tortoise and the hyena with honey.  
(Heine 1997:12)'
- (43b) **Tátèno xàtcá kũũ-a nà yaá-à-tè** — **Cámi-tcà** **Córo-tcà.**  
and:then 3:M:DU go-II and come-I-PRES polecat-3:M:DU rock:monitor-3:M:DU  
'And then, they walked and they arrive (there), Polecat (and) Rock-monitor.' (KH:117)

The picture gets more complicated when we consider the following examples, where the second conjunct does not need to be mentioned obligatorily. A dual suffix on a single noun does indicate that we are dealing with coordination. The second conjunct can be inferred from the context — it was either mentioned earlier or it is somebody usually appearing in combination with the explicitly expressed referent. In (44a), **Kùcàmú-ca** is enough to refer to Kucamu and her sister Asi, **Thóvò-i-tcà** in (44b) to Thóvò and the before-mentioned **Kàràkàràni**, **xámí-tcà** in (44c) to lion and his companion baboon.

- (44a) **tí mĩĩ-è-kò mĩĩ 'á goé 'a á-m** **goé-mà mbóróngà**  
1:SG say-II-CONV say ? cattle ? DEM-3:M:SG cattle-3:M:SG problem  
**||'ucán-cá** **taò-à-hĩ** **Kùcàmú-ca.**  
child:of:brother-3:F:DU be:angry-II-PAST Kucamu-3:F:DU  
'I said that the problem with the cattle were the two angry children (of Yowire's) brother, Kucamu and (Asi).' (Brenzinger & Naude 1999:59)
- (44b) **Thóvò-i-tcà** **xàtcá** — **ya-nyé-è-tè nò** ||úũ-m 'à †oá-á-tè.  
Thóvò-COLL-3:M:DU 3:M:DU come-pass-I-PRES CONJ father-3:M:SG OBJ follow-I-PRES  
'Thóvò and him (i.e. **Kàràkàràni**) pass now and follow their father.' (KH:302)
- (44c) **Xàtcá 'à** **ũ-á-mà-ca** — **xàtcá xámí-tcà 'à.**  
3:M:DU OBJ hunt-II-BEN-FIN 3:M:DU lion-3:M:DU OBJ  
'They have to hunt for the two: for Lion (and Baboon).' (KH:247)

A structurally similar coordinating strategy is found in the neighboring, but only remotely related, !XUN language (Northern Khoisan). In contrast to KXOE, the dual marker does not appear on each of the conjuncts, but only after one of them (cf. 45).

!XUN (Jul'hoan dialect)

- (45) **Mí !ó sá mí !úi !óá mí.**  
 1:SG older:brother 3:DU 1:SG older:sister tell 1:SG  
 'My older brother and my older sister told me.' (Dickens 1992:33)

Interestingly, the dual markers of KXOE and !XUN seem to be etymologically related. Heine (2000) shows that the dual personal pronoun and the dual suffixes on the nouns in all the dialects of the !XUN cluster are historically derived from the numeral \**tsā* (supposed grammaticalization chain: 'two' → dual personal pronoun → dual suffix). In contrast there seems to be no connection between the KXOE dual markers (cf. table 1) and the KXOE numeral 'two' *lám*. A thorough explanation for this coincidence cannot be presented. It is possible that KXOE borrowed its dual markers from !XUN or that they represent a common Khoisan heritage (the KXOE numeral 'two' being an innovation).

In KXOE, coordinate interpretation is not restricted to single nouns with a dual-suffix, but such an interpretation can also be gained from nouns with plural-suffixes. The noun *díxa-tò* (cf. 46) refers to the patient and his only implicitly mentioned wife.

- (46) **díxa-tò 'á kx'éfà-xà xò djoángá-hè è.**  
 owner-2:C:PL<sup>33</sup> know long:time:ago-ADV thing illness-3:F:SG OBJ  
 'The sick person ["the owner (of the sickness)"] and his wife know that the illness had started a long time ago.' (Brenzinger & Daude 1999:37)

Often but not obligatorily an affix *-e/-i-* — called "collective" by Kilian-Hatz — is inserted between noun stem and plural pgn-suffix to express that we are dealing with somebody including his mate(s)/relative(s)/companion(s) etc. (cf. 47a). The conditions for the use or the omission (cf. 47b) of *-e/-i-* are unknown.<sup>34</sup>

- (47a) **Ú ||Xóá-e-dji ||hamí-a-tè ve Xéi-ci 'm̄**  
 morning roan:antelope-COLL-3:F:PL come:near-I-PRES EMPH tsesseby-3:F:SG POSS  
 †x'óá-m̄ 'a [...]  
 question-3:M:SG OBJ  
 'In the morning, Roan-antelope and her friends come to ask Tsesseby [...]' (KH:20)
- (47b) **Kàràkàràni-||ùá**  
 Kàràkàràni-3:M:PL  
 'Kàràkàràni and his friends' (KH:295)

<sup>33</sup> In this example the use of the dual suffix is prohibited. Its use would be an insult, since this would mean that the two persons (the patient and his wife) were together by chance, i.e. not married. (Brenzinger, p.c.).

<sup>34</sup> Note that *-e/-i-* is not only used in front of the plural pgn-suffix but also in front of the dual pgn-suffix (cf. 43a, 44b).

There are sentences in which two nouns are only juxtaposed, but are taken up by a free dual personal pronoun before the verb. In this case we are no more dealing with a dual strategy – according to the types to be found in the typology of Payne –, but a pronoun strategy. Payne understands dual strategy as a mechanism by which "two NPs are conjoined by marking each with the ending of the dual number" (1985:36). The above cited description applies to the examples (42)-(43). In contrast the pronoun strategy is defined as follows:

[...] the conjuncts are simply linked by a plural pronoun which indicates the number and person of the conjoined NP. [...] The pronoun strategy [...] uses a pronoun as a link, which adds no further information, between two already fully specified conjuncts. (Payne 1985:35)

This description applies to the following KXOE examples.

- (48a) **Dùú-mà Xám-mà xàtcá lèkò háã.**  
 eland-3:M:SG lion-3:M:SG 3:M:DU still walk  
 'Lion and Hyena, they are both still walking.' (KH:199)
- (48b) **Kx'áí — Kyámí — xàkhá l'xúí-ku-a-kò té-é-hí.**  
 vulture korhaan 3:C:DU hate-REC-II-CONV stay-II-PAST  
 'Vulture (and) Korhaan — the two hated each other.' (KH:43)

### 3.5. Asyndetic strategy

The KXOE corpus also provides examples in which nominal conjuncts are simply juxtaposed without any additional coordinator. The asyndetic strategy is relatively frequent in Kilian-Hatz (1999), whereas it is almost absent in Köhler (1989), i.e. it seems to be restricted to spontaneous uttered speech. The asyndetic strategy is common in appositions (cf. 49), enumeration (cf. 50) and afterthoughts (cf. 51a, b) – typical elements of spontaneous utterances.

- (49) [...] **xàllúá á xó-djì, dìníí tcínde, tc'ípa — xàllúá cì-l'x'áo [...]**  
 [...] 3:M:PL DEM thing-3:F:PL honey:sp honey:sp honey:sp 3:M:PL go-chop [...]  
 '[...] they chop the dìníí-honey, the tcínde-honey, the tc'ípa-honey [...]' (KH:248)  
 (lit.: "They chop the things – the dìníí-honey, the tcínde-honey, the tc'ípa-honey.")
- (50) **tà-xú-nò kx'éí-m ki á-mí ki †xéí-tcao-m ki †'úni-m ki**  
 (then face-3:M:SG LOC forehead-3:M:SG LOC eye-?-3:M:SG LOC temple-3:M:SG LOC  
**áà-m kà tcóo**  
 chalk-3:M:SG INS rub)  
 'Zunächst streicht er Medizinkreide auf das Gesicht, die Stirn, die äußeren Augen-  
 seiten und die Schläfen.' (K89:424)  
 ('First he rubs medical chalk on the face, the forehead, the outer sides of the eye (and)  
 the temples.')



- (51a) *khurí-na-xu nuú, ti boó-he, xwáá-hè tí gùí-á-tè.*<sup>35</sup>  
 end-II-COMP when 1:SG axe-3:F:SG spear-3:F:SG 1:SG take-I-PRES  
 'When that was finished, I took an axe and a spear.' (Heine 1997:38)
- (51b) *Xàkhá lxúí-ku-a-kò té-é-hĩ nĩ-hè Kyamí, Kx'áí.*  
 3:C:DU hate-REC-II-CONV be-II-PAST DEM-3:F:SG korhaan vulture  
 'The two hated each other; this one, Korhaan(-woman) (and) Vulture.' (KH:43)

### 3.6. táá

Apart from some examples employing the asyndetic strategy, one example using the 'S-and', one example using the dual strategy, the *táá ... táá* strategy can be found twice in the fairy tales of Heine (1997). The diachronic origin of this coordinator is doubtful. One possible source can be excluded for syntactic reasons: the adjective *tá* 'other, different' always precedes the noun, whereas the coordinator *táá* is following each conjunct. Another possible source is the ubiquitous verb *tá* 'be:thus' whose bare and extended forms (e.g. *tákò, tá-xú-nò*) serve as sentence adverbials ('so', 'then' cf. 20a, 21). So far, no hypothesis for the development from the sentence adverbial to the NP coordinator in KXOE could be proposed, but a similar process is described for Iroquoian languages in the literature (Mithun 1988: 343-349).<sup>36</sup>

- (52a) *lúí 'ee téé-hĩ úá-m táá pòò-m táá gúà-m táá (...)*  
 one day stay-PAST hare-3:M:SG and jackal-3:M:SG and hyena-3:M:SG and (...)  
 'Once upon a time there was the hare, the jackal, and the hyena (...). (Heine 1997:8)
- (52b) *lloéé-m táá úá-m táá téé-hĩ.*  
 tortoise-3:M:SG and hare-3:M:SG and stay-PAST  
 'The tortoise and the hare lived together.' (Heine 1997:24)

Example (53) supports the hypothesis that a verb is the source of the coordinator, since here it combines with the converb-suffix *-kò*.

- (53) *lúí 'ee téé-hĩ ǁgàá-kxoe-he xací mí lóá-mà táá-kò.*  
 one day stay-PAST female-person-3:F:SG 3:F:SG POSS child-3:M:SG and  
 'Once upon a time there was a woman and her son.' (Heine 1997:29)

*táá ... táá* is discussed here in a separate section despite its rare occurrence, because it can be assumed that the second element in (38) and (39) (cf. §3.3.) is related to the coordinator just mentioned.

<sup>35</sup> The comma indicates a pause.

<sup>36</sup> cf. also the grammaticalization of 'to be' in Choctaw described by Stassen (§2. above).

## 3.7. Avoidance of NP coordination

Compared to coordinated clauses, there are relatively few examples of coordinated noun phrases to be found in the texts of Kilian-Hatz (1999) and Heine (1997). This observation corresponds to findings of Mithun (1988).

Whether coordination is overtly marked or not in a language, however, conjoined noun phrases are actually relatively rare in spontaneous discourse, especially in topic position. They are considerably rarer than conjoined clauses. (...) speakers typically introduce only one major piece of information into discourse at a time (...). Conceptually distinct entities are introduced by distinct intonation units, often separate clauses (...). Once they have been introduced individually, sets of entities can be referred to collectively by plural pronouns, so the need for conjoined noun phrases is bypassed. (1988:337)

How distinct entities are introduced by distinct intonation units will be exemplified by the following KXOE examples. Complex NPs are avoided in favour of combinations of several clauses each with simple NPs, e.g. instead of saying 'A caught X and Y', the expression 'A caught X, A caught Y' is used frequently. This might be made for dramaturgical reasons.

- (54) [...] córó-lǎ́ tama tcá gùì véé ||gòé-lǎ́ tama tcá gùì véé!  
 [...] rock:monitor-DIM even 2:M:SG take NEG tortoise-DIM even 2:M:SG take NEG  
 '[...] you don't even catch a small rock-monitor or small tortoise.' (KH:267)  
 (lit.: "[...] you don't even catch a small rock-monitor, you don't even catch a small tortoise.")
- (55) Xàtcá kyáxò 'à #'áxo-ro-hĩ. Xàtcá #'áxo-ro-hĩ ||gómì 'à.  
 3:M:DU knife OBJ take:out-II-PAST 3:M:DU take:out-II-PAST fish:spear OBJ  
 'They took out double-edged knives [of the forge]. They took out a fish spear.'  
 Xàtcá #'áxo-ro-hĩ ||xáó-mì 'à. Xóá tà #í-||òè-mà ||xáó-mà.  
 3:M:DU take:out-II-PAST spear-3:M:SG OBJ iron QUOT call-HAB-3:M:SG spear-3:M:SG  
 'They took out a spear. The spear which is [also simply] called "iron".'  
 Xàtcá #'áxo-ro-hĩ. Bó-mì 'à, xàtcá #'áxo-ro-hĩ.  
 3:M:DU take:out-II-PAST axe-3:M:SG OBJ 3:M:DU take:out-II-PAST  
 'They took it out. They took out an axe.'  
 Gyà-mì 'à xàtcá #'áxo-ro-hĩ.  
 nail-3:M:SG OBJ 3:M:DU take:out-II-PAST  
 'They took out long nails.' (KH:317)

#### 4. Conclusion

In this paper nine coordinate constructions from different diachronic sources — comitatives, 'also', 'be', dual-pgn and pronouns — were sketched. Although the source could most of time easily be determined<sup>37</sup>, the exact grammaticalization processes had to remain hypothetical. KXOE reflects almost as much variation as is cross-linguistically attested. In the typological literature there is no answer to the question how much variation can be expected within *one* language. Whether languages having as many different NP coordination types as KXOE are common or extremely rare can thus not be said. Not only does KXOE choose among the nine different strategies of NP coordination, but combinations of them are also possible.

- e.g. **nò ... ta** (cf. 38, 39)  
**nò ... DU** (cf. 41)  
**‡ãã ... DU**
- (56) **Wuú-m̄ ‡ãã ǔã-tcà**  
 hyena-3:M:SG COM hare-3:M:DU  
 'Hyena and Hare' (KH:187)
- nò ... ‡ãã**
- (57) **Pòò nó Xámí-à ‡ãã**  
 jackal and lion-? COM  
 'Jackal and Lion' (KH:219)

The major characteristics of all the NP-coordinating constructions are summarized in table 2.

Apart from **nò** (and the pronoun of the pronoun strategy) the coordinators appear in pairs, each conjunct being followed by one. The correlations between the position of the coordinator and the general word order which were formulated by Stassen (forthc.) also hold true for KXOE.

- a. If a language has a (monosyndetically or polysyndetically) post-posed coordination marker, then that language is verb-final.
- b. If a language is verb-initial, and if it has an overtly marked coordinate strategy for noun phrases, that strategy will involve a medial connective.

A question which immediately comes to mind after looking at NP-coordination in KXOE is why should a language have so many different constructions? The variation might be understandable if the choice were semantically or structurally determined. But so far virtually no

<sup>37</sup> Since the coordinators were not yet subject to erosion, one can assume that they have been recently grammaticalized.

conditioning factors for the choice are known. It could only be observed that #áã(-ta) is an emphatic alternative of xòà(-xa), that #áã(-ta) and the dual strategy seem to be confined to conjoining human/animate NPs, that prepositional phrases can only be coordinated by the 'also' and asyndetic strategy and that cêê, #áã(-ta) and the dual strategy are restricted to the coordination of two NPs. If these were all the conditioning factors, it would mean that the constructions could practically be used interchangeably. To falsify this statement one would have to find out in future which constructions are replaceable.

There are two other possible explanations for the wealth of coordinate constructions. It could be attributed to dialectal variation. Köhler's informants were all BUMA-KXOE, while Kilian-Hatz's informants are ||XOM-KXOE. Heine recorded texts of ||XOM- and ||XOO-KXOE speakers. Although the lexical variation between the different KXOE dialects is minimal (M. Brenzinger p.c.), it cannot be ruled out that they differ in grammatical structure. Dialectal variation seems at least to be more plausible than diachronic variation - Köhler's text were recorded only 20-30 years before Kilian-Hatz's texts — too short a time to think of major structural changes. Only the rise of nò to a NP-coordinating conjunction could be attributed to the exposure to European languages.

The distribution of the coordinators could also be determined by the text genre. It might not be accidental that the coordinate constructions are virtually in complementary distribution (what is rare or not attested in Kilian-Hatz (1999), is frequent in Köhler (1989), and vice versa). While Kilian-Hatz's texts - narrative texts - reflect the language as it was spontaneously uttered, Köhler's are almost exclusively descriptive, mechanical and repeatedly revised.

To give a more detailed overview in the future, it would be especially desirable to find out more about the conditioning factors for the use of the constructions. Besides, other semantic types of coordination, e.g. disjunction (cf. Payne 1985), and coordination of other syntactic units (coordination of clauses, VPs etc.) as well as coordination of complex NPs (e.g. Adj N and Adj N) could be dealt with in future. This article could only cover one part of the overall problem.

Table 2. Properties of Kxoe coordinators and the conjuncts they are conjoining.<sup>38</sup>

variant forms <sup>39</sup>	lxòà	cêê	ḥāā	tama-xa	nò	DUAL	Ø	táá
	lxòà-xa	cêê-ta cêê-ù	ḥāā-ta	tama	nù			ta
confined to nominal coordination position after each conjunct (A) between the conjuncts (B)	+ A	+ A	+ A	+ A	- B	+ A	-	+ A
restricted to 2 conjuncts	-	+	+	-	-	+	-	-
each conjunct independently marked for gender and number	+	+	+	+	+	-	+	-
pgn use obligatory	-	+	-	-	-		-	-
use of reduced pgn obligatory	+	+	+	+	-		-	-
coordination of subject NPs	+	+	+	+	+	+	+	+
coordination of object NPs	+	+	-	+	+	+	+	-/+ <sup>40</sup>
'à-marking on the object NP	-	-	-	+	+	+	?	-/+
coordination of PP-phrases	-	-	-	+	-		+	-
semantic restrictions known so far	-	-	animate / human	-	-	animate / human; conjuncts acting together or forming a pair	-	-
frequency (R=rare; F=frequent; Ø=not attested) in Köhler (1989)	F	R	R	F	Ø	Ø	R	Ø
in Kilian-Hatz (1999)	R	Ø	R	Ø	R	R	F	Ø

<sup>38</sup> Please note that the information on frequent coordinating constructions is certainly more reliable than on rare constructions. "-" does not necessarily mean that something is considered impossible, but as not attested in the corpus.

Empty cells indicate that the parameter is not relevant for the particular construction.

The pronoun strategy was not included in this table, since distinguishing it from the dual strategy on the one hand and the asyndetic strategy on the other was very difficult.

<sup>39</sup> Apart from tonal variation.

<sup>40</sup> There is no example of coordinated objects with táá ... táá, but in combination nó ... ta is attested for the coordination of objects.

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### Abbreviations

ADJ	adjective / adjectivizer	ex.	example	NP	noun phrase
ADV	adverbializer	EXCL	exclusive	OBJ	object
ART	article	F	feminine	PL	plural
BEN	benefactive	FIN	finalis	PAST	past tense
C	common gender	FREQ	frequentative	PERF	perfect
CAUS	causative	FUT	future	PFV	perfective
COLL	collective	HAB	habitual	POSS	possessive linker
COM	comitative	I	junction I	PP	postpositional phrase
COMP	completive	II	junction II	PRES	present tense
CONJ	conjunction	INS	instrumental	PRIV	privative
CONV	converb	K89	Köhler (1989)	PROG	progressive
DEF	definite	KH	Kilian-Hatz (1999)	QUOT	quotative
DEM	demonstrative	lit.	literally	REC	reciprocal
DIC	Kilian-Hatz & Schladt (1997)	LOC	locative postposition	REFL	reflexive
DIM	diminutive	M	masculine	SG	singular
DS	different subject	MOD	modal particle	sp.	species
DU	dual	N	noun	SUBJ	subject
EMPH	emphatic	NEG	negation	VP	verb phrase
		NOM	nominative		