NP coordination in KXOE (Central Khoisan)\footnote{I would like to thank John Brutnell, Bernd Heine and Conny Seck for valuable comments on earlier versions of this paper.}

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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.\footnote{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 & Schlacht (1997). I provide the interlinear glosses and the English translation for Köhler's examples.} 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.
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).\(^2\) 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)\(^3\).

TURKISH (Altaic)
(1a) sen, ben ve kardeşim ~ sen, ben ɔ kardeşin
you I and brother your ~ you I  ɔ brother your
'you, I and your brother' (Payne 1985:25)

PACOH (Mon-Khmer)
(1b) Nhang tiráp [NP tilét, callôh, acôq]
we prepare baskets spears knives
'We prepare baskets, spears and knives' (Payne 1985:26)

\(^2\) 'Coordination' and 'conjunction' are often used synonymously.
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) na-č nikwái-č-a avon-a-m taθ-k-wil
1-NOM clothes-PL-DEF soap-DEF-with wash-1-CONTINUOUS
'I washed the clothes with soap.'

(2b) [NP Hátóáú-a-č hmap-m] mwák tíaítavm yú-č-k-yu
puppy-DEF-NOM boy-DEF, 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).4

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

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4 '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.⁵

TAHITIAN
(4a) 'Ua reva ātu [NP Peu rāua 'o Teri]  
PFV leave away Peu 3:DU ART Teri  
'Peu and Teri left'
(4b) 'Ua reva ātu [NP māua 'o Peu]  
PFV leave away 1: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 šakasxa' papasxa']  
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 and the asymmetric 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) Akitakrä hni' shē nyō: n'atō:tá:ke:  
Iffell also as far I:come:back  
'I fell on the way back, too.'
(6b) Ax:ye: akwe: onēhē' osahetá ohōn'atá'ō hni'  
It:seems all corn bean potato-guess also  
'Oh, I guess everything, corn, beans, potatoes and squash'.⁶

⁵ cf. Mithun (1988:337f.).
(6c) **Junior, Helen, Hercules hni**
'Junior, Helen, and Hercules.'

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
      - 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.

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6 In the Cayuga sentence the NP 'squash', that can be found in the English translation, is missing.
7 Mithun (1988:342) provides the following context for the utterance: A guest had been watching three children play, and asked what their names were.
8 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. lxòà(-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 lxòà '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 lxòà are demonstrated in the following examples:
(8a) Pòo tân-é-tè náxani-ixoa ṭqóéré-na-kò kí kí kí kí kí kí
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] kí kí kí kí kí kí [...].' (KH:240)

(8b) Qóro cl-lòe á-m ñá ixoà
cock go:sleep DEM-3M:SG thirst COM
'[So] Cock has to sleep thirsty.' (lit.: "with thirst") (KH:103)

(9) ñóù lóù kyaànù-m ixoà té-kò kx’ó-ró-hí
(fish-3M:SG COM sheat:fish-3M: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 ixoà 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) te’áö-e-mà náxani-m ixoà lqóm lxoà ṭqóyë-mí ixoà l’x’óánà-m ixoà
l’x’áñ dàö-ró-hí
very burn-II-PAST)
'Ein Buschfeuer richtete unter náxani-Bäumen, lqóm-Bäumen und unter ṭqóyë-Bäumen sowie l’x’óánà-Bäumen großen Schaden an.' (K89:286)
('A bush-fire burnt and severely damaged the náxani-trees, lqóm-trees, ṭqóyë-trees and l’x’óánà-trees-')

ixoà ... ixoà and ixoà-ixa ... ixoà-ixa" 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

9 Köhler provided a very free translation for the sentence.
lxɔa-qa can equally be used as a comitative postposition. The following examples should demonstrate their occurrence in equal contexts.

(11a) Kxóé-ù lxɔa-qa l oluşan-kxóé-ù lxɔa-qa Bógá-kxóé-ù lxɔa-qa úu-ku-a-ãòè
(Kxóé-3:C:PL COM lünün-kxóé-3:C:PL COM Bógá-kxóé-3:C:PL COM marry-REC-I-HAB )
'Kxóé und lünün-kxóé und Bógá-kxóé heiraten untereinander.' (K89:195)
('Kxóé and lünün-kxóé and Bógá-kxóé intermarry.')

(11b) Kxóé-ù lxɔá Góává-ù lxɔá té úu-ku-t-a-ãli kxéi 'ã
(Kxóé-3:C:PL COM Góává-3:C:PL COM be marry-REC-FREQ-II-PAST how)
'Wie die Kxóé und Góává untereinander heirateten.' (K89:395)
('How the Kxóé and the Góává intermarried.')

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

(12a) caá-mì 'à Kxóé-ù lxɔa-qa góê-ãm lxɔa-qa té kx'ãa-t-a-ãli
(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) lù-lùã Qúwa-lù 'm góê-ãm lxɔa mínì-mì lxɔa guì-mì lxɔa
lãé-ka-ra-ma-ã-ãôè
chew-CAUS-II-BEN-I-HAB)
'Einige (Männer) hüten Rinder, Ziegen und Schafe für die Weißer.' (K89:262)
('Some (men) tended cattle, goats and sheep for the white men.')

Attention has to be paid to the fact that lxɔa(-xa) ... lxɔa(-xa) cannot coordinate postpositional phrases (Ps), as tama-xa (§ 3.2.) does13. 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 lxɔa(-xa) ... lxɔa(-xa) can be used to coordinate instruments, which are usually fol-

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10 lxɔa-qa has to be analysed as postposition plus adverbializer.
11 The reduced form (Köhler's "verbundene Form") of the pgn's is used: -ù (3:C:PL), -ãm (3:M:SG), ci (3:F:SG) for -ãà, -ãì, -ãè. Table 1 (§3.4.) gives an overview of the pgn-markers.
12 In the case of lxɔa(-xa) ... lxɔa(-xa), coordinated objects are not marked with 'à, which is usually added to objects.
13 As a possible exception see ex. (14).
lowed by the postposition ká: To the verb stem an instrumental derivative affix -ká is added, the instrumental postposition deleted. This makes the use of l xoà ... l xoà possible.

Compare the sentence with ex. (13b), in which the NP-coordinator tamà-xa can be used after the instrumental postposition.

(13a) lú-mí ávuru-m l xoà l ú-mí l’áó-mí l xoà l’é gôé-mí ’á
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) khoó-mí kà tamà-xa tcaó-mí kà tamà-xa ńú-wá-hí
(skin-3:M:SG INS also zil-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 l xoà, which seems to be simultaneously functioning as the comitative marker and the coordinator.

(14) bęvé-mí l xoà kóróyi-ca l xoà yá-hí
(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 l xoà(-xa) ... l xoà(-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.

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14 K xoee differentiates instrumental 'with' and comitative 'with' formally (ká vs. l xoà).
15 The NP-coordinator tamà-xa is discussed in §3.2.
(15)  ámb-kuri lé Kxôé-ë Bãáha ŋú ó-kà kúu-wa-hi róthô-mi lxôâ-xa
   dinâ-mi lxôâ-xa tû-ru-ça
   mould-3:M:SG COM buy-FIN)
   'In der alten Zeit gingen wir Kxôé-Männer nach Bãáha-Land, um Blei und Kugelformen zu kaufen.' (K89:463)
   ('In the past we Kxôé men went to Bãáha 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 coordi-
nation. 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 lxôâ(-xa) follows only one NP, but in which the verb carries the re-
ciprocal affix (cf. 16) might represent ambiguous cases which possibly led to the interpreta-
tion of the comitative as coordinator. In a later stage of grammaticalization the reduplication
of lxôâ(-xa) helped to keep comitative and coordinate strategy apart.

(16)  tc'âô-mi ó-kà té tuê-xu-ô-kò ci té-kô
   (bush-3:M:SG LOC 1:C:PL move:away-COMP-II-COMV go be-COMP
   làní-kxôé-à lxôâ-xa té dârá-ku-t-a-hi
   làní-kxôé-3:C:PL COM be visit-REC-FREQ-II-PAST)
   'Nachdem wir in den Busch gezogen waren, besuchten wir und die làníkxôé uns ge-
genseitig.' (K89:338)
   ('After we had moved into the bush, we and the làníkxôé visited each other.)

The 'with' strategy is exclusively confined to NP coordination (unlike nô; 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 arti-
cle. 16

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16 It has to be mentioned that the analyses of lxôâ(-xa) ... lxôâ(-xa) is primarily based on Köhler (1989), where it is
the most frequent strategy, whereas the strategy is almost absent in Killian-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. ceē(-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 ceē(-ta) ... ceē-(ta) seems to derive from a comitative, the source of the comitative itself probably being the verb ceē (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$^{17}$ → III. coordinator.

(17) Kūnā ci-lx'āa-can-a-xu-a-kō tī kōpi-ā ceē!

go and go-wash-REPL-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 ceē ... ceē 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 lōx(a-xa) ... lōx(a-xa).

(18a) Kāamutcōōngā-m ceē Códjuk-i ceē lūn-ku-a-hā

(Kāamutcōōngā-3:M:SG COM Códjuk-i-3:F:SG COM b:near-REC-II-PERF)

'Kāmūtcoōngā und Códjuku liegen nahe beieinander.' (K89:336)

('Kāmūtcoōngā and Códjuku are close to each other/are neighboring settlements.'){\footnote{18}}

\footnote{17} The development form 'take'-verbs to comitatives and/or instrumental is documented e.g. in the Kwa languages. (Lord 1973:288)

\footnote{18} Pay attention to a minimal pair using lōx(a instead of ceē:

Mūkwé-i lōx(a Rūyōngō-cl lōx(a lūn-ku


'Mūkwé und Rūyōngō sind eng benachbart.' (K89:322)

('Mūkwé and Rūyōngō are close to each other/are neighboring settlements.')
Although there are few cē(-ta)-examples, its use as a coordinator of objects can also be proven by the following example.

(19) dú-mì ’m khoó-mí cē(-ta) lò-mì ’m khoó-mí cē(-ta) ní-ya-xu nó (...) (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 geschlitten (...) hatte (...).' (K89:490) / 'After he had cut eland and buffalo skin (...)'.

The cē(-ta) ... cē(-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 cē. The variation of cē (cf. 18a, b), cē(-ta) (cf. 19) and cē-u (Köhler 1989:303) has to be left unexplained, the origins of the extended forms are unknown.

3.1.3. ŋáa(-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 ŋáa 'go in', 'enter', 'put in' is semantically too distant to be considered as a source concept. The following sentences demonstrate the use of the comitative postposition ŋáa(-ta).

(20a) tà-xú-nō tcára-mi ó-kà Kxóé-mi ŋáa kúuí-wà-lòé (then garden-3:M:SG LOC Kxóé-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 khoé-tè ŋáa-tà, xàmá Qóro té-é-hi. 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 toixon ~ lixon-xa, cf. §3.1.1.) is also attested.

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19 The English translation is more literal than the one provided by Köhler.
20 The source of the second morpheme -ta is also unclear (cf. also -ta in cē(-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 ŋáa can be
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(21) tå-xú-nò dàmâcî-tcà làê-khoë-dji tåâ-ta-xa Qårâti kà kx’ô-xô-mù ’à
gùnî-nà-lii
hunt:from:the:bush:camp-II-PAST'
'Später gingen die beiden jüngeren Brüder zusammen mit ihren Frauen nach Qårâti, um vom Buschlager aus zu jagen.' (K89:279)
('Later the two younger brothers went to Qårâti together with their wives in order to hunt from the bush camp.')

If the semantics of l>xô(-xa) and tåâ(-ta) are compared, it seems that the latter is more emphatic than the former (‘with’ vs. ‘together with’).

In case of coordination, tåâ(-ta) is reduplicated and each noun is followed by the coordinator.\(^{21}\) As is generally the case with postpositions, the nouns preceding the coordinator take the reduced pgn-suffixes ("verbundene Form")\(^{22}\). 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\(^{23}\) were found to be coordinated by tåâ(-ta). In all the examples the conjuncts are the subject of the sentence.

(22a) té Kxóë-tè tåâ l>Ánî-kxôè-ù tåâ Cádjuku-ci ’m lXôm-kx’am ki
(1:C:PL Kxóë-1:C:PL COM l>Ánî-kxôè-3:C:PL COM Cádjuku-3:F:SG POSS river-bank LOC
Mùû-tc’î-ku-ci ’m kyákýâ-rè-m ki té kóó-kà-xa l’ân-a-ko té-lii
Mùû-tc’î-ku-3:F:SG POSS bank:3:M:SG LOC 1:C:PL all settle-II-CONV be-PAST
'Wir Kxóë und die l>Ánikxoè, wir wohnten früher alle am Fluß bei Cádjuku und am
Ufer bei Mùûtc’iku.' (K89:337)
('In the past we Kxóë and the l>Ánikxoè, we all lived by the river at Cádjuku and on the
bank of Mùûtc’iku.')

(22b) [...] táâ-ci-m Kùî-mù tåâ-ta Kyårë-can-m tåâ-ta tc’àö-mù ’à
ú-wâ-lii
go:for:food-II-PAST'
'[...] gingen der ältere Bruder Kúi und Kyârécâ in den Busch, um Beute zu suchen.'
(K89:279)
('[...] the older brother Kúi and Kyârécâ went into the bush for food.')

\(^{21}\) For combinations of tåâ(-ta) with other coordinators the reader is referred to §4.

\(^{22}\) The pgn-suffixes seem not to be obligatory, there is at least one example where none is used on the noun preceding tåâ(-ta) (cf. KH:86).

\(^{23}\) 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 ْتُلَّا−(تَا) 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 ْتُلَّا; §3.1.1.).

(23) [...] ْتُلَّا−تاُتَّا جَلَفْ−بُع−رَا−جَوْ ْتُلَّا
[...] 1:SG COM 2: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 ْتُلَّا−(تَا) to the coordinating ْتُلَّا−(تَا) ... ْتُلَّا−(تَا) probably took place recently. The coordinating ْتُلَّا−(تَا) ... ْتُلَّا−(تَا) has retained some characteristics of a comitative: It is restricted to the combination of two (animate/human) entities functioning as subject, whereas ْتُلَّا−(خَا) ... ْتُلَّا−(خَا) 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 adverbal 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 adverbal particle ْتَا−خَا in KXOE.

(24) ْتَا−خَا ْتَا−خَا ْتَا−خَا ْتَا−خَا ْتَا−خَا ْتَا−خَا
(Mbukkushù:3:C:PL also settle-II-CONV be-PAST)
'Auch Mbukkushù wohnten dort.' (K89:268)
('Mbukkushù also lived there.' [previous sentence: 'In former times Kxoe lived there.'])

ْتَا−خَا 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 ْتَا−خَا to a coordinator (a process similar to the one sketched in §2.). The course of the development from the adverbal 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 xòà-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 disjunctive 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 di te'õmí-càó kí rè wànda ll'áé kí tama yèú ll'áé kí tama antbear POSS entrance-burrow LOC or springhaas home LOC also mouse home LOC also
lxú òó kí tama tì nlogòà-vì yà tì tè-è-loè! bush inside LOC also 1SG bigeyed while 1SG stand-1-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 xòà(-xa), cèè(-ta) and òáà(-ta) do. There is definitely no restriction on the number of conjuncts, their number reaching from two to twenty-one²⁴ (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).

²⁴ 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) |Gíríkú-n tama-xa Kwángari-n tama-xa Kxóé-ù 'à válÁmà taá ți-yé-lóë
(Gíríkú also Kwángari also Kxóé-ù:C:PL OBJ válÁmà QUOT call-I-HAB)
'Die Geórikú und die Kwángâli nennen die Kxóé "válÁmà".' (K89:182)
('The Geórikú and the Kwángâli call the Kxo "válÁmà").
(27a) Bwátà-kxóé-nà iyómi tama-xa tcéú tama-xa náxani tama-xa
(Bwátà-kxóé-ù:C:PL mangetti also shivi also náxani also
té gúni-t-á-hi
be collect:from:the:bush:FREQ-II-PAST)
'Die Kxóé von Bwátà sammelten (dort) vom Buschlager aus Manketti-Nüssle, Shivi
und auch náxani-Früchte.' (K89:255)
('The Kxóé of Bwátà collected mangetti, shivi and also náxani-fruits from the bush
camp.'
(27b) bágà-mí 'à tama-xa ți-ní 'à tama-xa tí té láé-can-a-hi
(carve:3:SG OBJ also call:3:SG OBJ also 1:SG be-teach-REFL-II-PAST)
'Tch lernte das Schreiben und das Lesen.' (K89:525) / ('I learned to write and read.')
(28a) bágàbà-kuri tama-xa cóní-kuri tama-xa Tcícë xu-m kà té xáru-t-a-hi
(hunger-time also ordinary-time also Tcícë thing:3:SG INS be give:FREQ-II-PAST)
'In Hungerjahren und (auch) in anderen Jahren schenkte Tjikè immer wieder etwas.'
(K89:253)
('In years of hunger and (also) in ordinary years Tjikè always gave us something.')
(28b) nà-tá tx’óá-xo-ro-xu-a-kó tcóó-khóë-nà l’é-ta i tcà-khóë-hë
(thus go:cont-CAUS-II-COMP-II-CONV medicine-person-3:C:PL inform-PAST DEM sick-person-3:SG
khoámà-na-xa tama-xa úl-e tama-xa tcóó-m ìài nó tútní-t tí
early:inthemorning also afternoon also medicine-3:SG OBJ go and swallow-PAST? MOD)
'Als sie sie so entließ, 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)25 lláé-m kà tama-xa dové-ní kà tama-xa úk-khoa-và m kà tama-xa
(flower:3:SG INS also salt:3:SG INS also roast-millet:3:SG INS also
Quwa-ïgàá kà tama-xa té xáru-t-a-hi
white:mean-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)26 t’a-xu-nó nlá-ní tcóó-nà ‘m bèré-mí ‘à óm-kyao-m mi tama-xa
(then DEM-3:SG medicine-3:SG POSS rest-3:SG OBJ abdomen-3:SG LOC also
kx’üû-m kà tama-xa ì’óá-xu-t-a-fí
back-3:SG LOC also poor:COMP:FREQ-II-PAST)
'Den Rest dieser Medizin goss er (ihr) auf den Unterleib und auf das Kreuz.'
(K89:541)
('He poured the rest of this medicine on the abdomen and also on the back.')
NP coordination in Kxoe

(29c) Nlóé-ngyàò kà tama-xa Wée-döm 'ò tama-xa ti múii-wa-li
(Nlóé-ngyàò LOC also Wée-döm LOC also 1:SG see-II-PAST)
'Ich sah (ihn) in Nlóé-ngyàò und auch in Wée-döm.' (K89:486)
('I saw (him) in Nlóé-ngyàò and also in Wée-döm.')

(30) Góyá-ná Kányóndò taá tama-xa Mányóndò taá tama-xa ti-yé-lòò
(Góyá-3:CL Kányóndò QUOT also Mányóndò QUOT also call-I-HAB)
'Die Góyá nennen (den Platz) Kányóndò oder Mányóndò.' (K89:293)
('The Góyá call (the place) Kányóndò or Mányóndò.')

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

(31) léé-xa Kxóé-n tama-xa Góyá-n tama-xa Báta ki hâmbe
(now Kxóé-3:CL also Mbuñshù-3:CL also Báta LOC exist:NEG)
'Jetzt gibt es in Báta weder Kxóé noch Mbuñshù.' (K89:250)
('Now there are neither Kxóé nor Mbuñshù in Báta.')

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 yaa-a-gòè tá mí-é-tà tama-xa yaa-ña-á-tè
(DEM-3:MSG 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'ái nò Kyaní
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).

27 PPs with two different locative postpositions.
(34) kóó do móro-lùá nò qaáoro-lùá
   '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 l̥gaañá-mí 'á Búma-kxòè-tè te caó nò kx'áà-t-a-lí
   (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 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 it 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.

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28 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 mò) precedes each conjunct. This construction cannot yet be explained.

(36) gua-m kyaánd-a-tè nû úéé-m-à nû xâm-m-a nû qau-m-à
nu tcâmbá-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) tcâmbá-e-luà nò ūá-e-luà nò kyè-hè
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. 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.'
Dávítì nò Matiyási ta kû-á-tè ú-cà.
David and Matthias go-1-PRES hunt-FIN
(39) 'The men hunt duiker and eland.'
Kx'ákòhè-luâ kúnì 'à nò ûú ú 'à ta lám-á-tè.
duiker-3:M:PL hunt-OBJ and eland-OBJ hunt-1-PRES
(40) 'The woman bought white and black cloth.'
 Igákhòhè-hè tû-á-tà léci nò négú ava 'à.
woman-3:F:SG buy-II-PAST white and black cloth-OBJ
(41) 'The house of John and Mary broke down.'
Jôn nò Mári-khà 'u ngú-hè khò-ña-fì.
John and Mary-3:C:DU POSS house-3:F:SG break-II-PAST (M. Brenzinger, p.c.)

29 I would like to thank Matthias Brenzinger for eliciting sentences while doing his own research in Namibia.
30 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 Khun (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 portmanteau-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.\[31\]

<table>
<thead>
<tr>
<th></th>
<th>singular</th>
<th>dual</th>
<th>plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:M</td>
<td>tī / -rà</td>
<td>tcāmí</td>
<td>lē</td>
</tr>
<tr>
<td>F</td>
<td>cānī</td>
<td>cé</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>khāmí</td>
<td>té</td>
<td></td>
</tr>
<tr>
<td>2:M</td>
<td>tcā / -tcl</td>
<td>tcāo</td>
<td>lāb</td>
</tr>
<tr>
<td>F</td>
<td>hā / -cī</td>
<td>căō</td>
<td>có</td>
</tr>
<tr>
<td>C</td>
<td>-</td>
<td>khāo</td>
<td>tō</td>
</tr>
<tr>
<td>3:M</td>
<td>xā-mā / -mà or -m</td>
<td>xā-tcā / -tcā</td>
<td>xā-lūā / -lūà or lù</td>
</tr>
<tr>
<td>F</td>
<td>xā-hē / -hē or -(c)ī</td>
<td>xā-cā / -cā</td>
<td>xā-dji / -dji</td>
</tr>
<tr>
<td>C</td>
<td>(xā’ā) / 'ā or -ā[32]</td>
<td>xā-khā / -khā</td>
<td>xā-nā / -nà or -n</td>
</tr>
</tbody>
</table>

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

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\[31\] In the third person plural the free personal pronouns consist of the demonstrative xā 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).

\[32\] The interpretation of ’ā 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) Xàò-tcà
  lâ-É-tcà
  hippo-3:M:DU fire-3:M:DU
  'Hippo and Fire' (KH:83)

(43a) nuû xamá ûâ yaá nu ꚴóé-tcà guá-i-tcà
  and 3:M:SG hare come when tortoise-3:M:DU hyena-COLL-3:M:DU OBJ come when
diní-mí
  kà qam-t-à-hî.
  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) Tátènò xàtcà kũû-a nà yaá-à-tè — Cámi-tcà Córó-tcà.
  and:then 3:M:DU go-II and come-1-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), Kùcãmú-ca is enough to refer to Kucamu and her sister Asi, Thóvò-i-tcà in (44b) to Thòvò and the before-mentioned Kàrákàráni, xàmí-tcà in (44c) to lion and his companion baboon.

(44a) tí múi-è-kò múi 'à goé’ a á-mí goé-mà mbórôngà
  'ucán-cá
taà-à-hî
  Kùcãmú-ca.
  '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 xàtcà — yâ-ngyé-è-tè nò lũû-mì 'à toá-à-tè.
  'Thòvò and him (i.e. Kàrákàráni) pass now and follow their father.' (KH:302)

(44c) Xàtcà ‘a ú-à-mà-ca — xàtcà xàmí-tcà ‘à.
  '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).
(45) **Mí ló sá mí lúí !ôá mí.**
1:SG older brother 3:DU 1:SG older sister 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 difixa-tò (cf. 46) refers to the patient and his only implicitly mentioned wife.

(46) **difixa-tò 'á kx'éíá-xà xo djoángá-hè ū.**
owner-2:C:PL3 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.34

(47a) **Ú ![Xóa-e-dji ![haní-a-tè ve Xélé-ci 'mì**
morning roan-antelope-COLL-3:F:PL come:near-I-PRES tsesseby-3:F:SG POSS +x'ôa-mì 'a [...] question-3:M:SG OBJ 'In the morning, Roan-antelope and her friends come to ask Tsesseby [...].' (KH:20)

(47b) **Karákárâni-ìhà**
Karákárâni-3:M:PL 'Karákárâni and his friends' (KH:295)

---

33 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.).

34 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).
NP coordination in K xo e

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 K xo e examples.

(48a) Dúú-mà Xámí-mà xàtcá lôekò háá.
'Lion and Hyena, they are both still walking.' (KH:199)

(48b) Kx’áí — Kyam — xàkhá lìxúi-ku-a-kò tè-z’áí.
vulture korhaan 3:G:EU hate-REC-III-CONV stay-III-PAST
'Vulture (and) Korhaan — the two hated each other.' (KH:43)

3.5. Asyndetic strategy

The K xo e corpus also provides examples in which nominal conjuncts are simply juxtaposed without any additional coordinator. The asyndetic strategy is relatively frequent in Kiliani-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) [...] xàhúá á xo-di, dinií tciíde, tci’ípa — xàhúá ci-llx’áó [...] 
"[...] they chop the dinií-honey, the tciíde-honey, the tci’ípa-honey [...]." (KH:248)
(lit.: "They chop the things — the dinií-honey, the tciíde-honey, the tci’ípa-honey.")

(50) tà-xú-ñò kx’éí-m kí ʔ–mí kí ♦xèí-tcaò-m kí ♦túni-m kí
áa-m kà tèhó
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.')
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).36

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

(52a) lúí l'ee tée-lúí ñá-m táá póò-m táá gúá-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) ñóeé-m táá áa-m táá tée-lúí.
    tortoise-3:M:SG and hare-3:M:SG and stay-PAST
    'The tortoise and the hare lived together.' (Heine 1997:24)

(53) lúí l'ee tée-lúí ñgáa-kxóe-he xaci ní loá-má 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.

35 The comma indicates a pause.
36 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 collectivily 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) [...] córō-lōā tama tcá gū vēé lgoē-lōā tama tcá gū vēé!
 [...] 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) Xátcá kyáxō 'à *
áxo-ro-hī. Xátcá *
áxo-ro-hī  lgoō 'à.
'They took out double-edged knives [of the forge]. They took out a spear.'
Xátcá *
áxo-ro-hī  lxáō-nī 'à. Xóá tà *
ĩ-loē-mā  lxáō-nī.
'They took out a spear. The spear which is [also simply] called "iron".'
Xátcá *
áxo-ro-hī. Bó-nt 'à, xátcá *
áxo-ro-hī.
'They took it out. They took out an axe.'
Gyā-nt 'à xátcá *
áxo-ro-hī.
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\(^{37}\), 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.

\[\text{e.g. } \text{nò ... ta} \quad (\text{cf. 38, 39})\]
\[\text{nò ... DU} \quad (\text{cf. 41})\]
\[\text{†áá ... DU}\]

\[(\text{56}) \quad \text{Wuú-mì} \quad \text{†áá ñá-tcà}\]
\[\text{hyena-3:M:SG COM hare-3:M:DU}\]
\[\text{Hyena and Hare} \quad (\text{KH:187})\]

\[\text{nò ... †áá}\]

\[(\text{57}) \quad \text{Pòo nò Xàmì-á} \quad \text{†áá}\]
\[\text{jackal and lion-? COM}\]
\[\text{Jackal and Lion} \quad (\text{KH:219})\]

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 (monosynthetically or polysynthetically) 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

\(^{37}\) 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 ǂáā(-ta) is an
emphatic alternative of ǂxɔ̀ː(-xa), that ǂáā(-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 ceê, ǂáā(-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 ǂXOM-KXOE. Heine recorded texts of ǂXOM- and ǂXOO-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 dis-
tribution (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 sponta-
neously uttered, Köhler's are almost exclusively descriptive, mechanical and repeatedly re-
vised.

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 se-
matic 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 Kxoé coordinators and the conjuncts they are conjoining.38

<table>
<thead>
<tr>
<th>variant forms</th>
<th>lxàà</th>
<th>cefè</th>
<th>tāà</th>
<th>tama-xa</th>
<th>nò</th>
<th>DUAL</th>
<th>⁰</th>
<th>tāà</th>
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<td>⁰</td>
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38 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.

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

39 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.

39 Apart from tonal variation.

40 There is no example of coordinated objects with tāà ... tāà, but in combination nò ... ta is attested for the coordination of objects.
5. References


DIC see Kilian-Hatz & Schladt 1997.


**Abbreviations**

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