

## CHAPTER 1

# Coordinating constructions

## An overview

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### 1. Coordination: Basic concepts and terms

#### 1.1 Coordination

This volume contains seventeen papers on **coordinating constructions** in languages from different families and different continents (see p. vii for a world map showing the most important languages treated in this book). The definition of the term *coordination* will be discussed in some detail in § 11 below. For the moment we take it for granted that coordinating constructions can be identified on the basis of their symmetry: A construction [A B] is considered coordinate if the two parts A and B have the same status (in some sense that needs to be specified further), whereas it is not coordinate if it is asymmetrical and one of the parts is clearly more salient or important, while the other part is in some sense subordinate. In practice, we

typically suspect that a construction will be coordinate if it is systematically used to render English constructions with the coordinating particles *and*, *or* and *but*.

The contributions to this volume often use the terminological conventions proposed by Haspelmath (to appear a), so they should be recapitulated here briefly. Illustrations in this chapter mostly come from the papers in this volume.

## 1.2 Basic patterns

A coordinating construction consists of two or more **coordinands**, i.e. coordinated phrases. Their coordinate status may be indicated by **coordinators**, i.e. particles like *and*, *or* and *but*, or affixes like Chechen *-ii* (e.g. *shyyr-ii dik-ii* ‘thick and good’; Jeschull°, ex. 15).<sup>1</sup> If one or more coordinators occur in a coordinating construction, it is called **syndetic**. **Asyndetic** coordination consists of simple **juxtaposition** of the coordinands. An example is (1).

- (1) Lavukaleve (Terrill°, ex. 9)  
*nga-bakala*                      *nga-uia*                      *tula*  
 1SG.POSS-paddle(M) 1SG.POSS-knife(F) small.SG.F  
 ‘my paddle and my small knife’

Two types of syndesis can be distinguished: **monosyndetic** coordination, which involves only a single coordinator (when not more than two coordinands are present), and **bisyndetic** coordination, which involves two coordinators. Examples are given in (2) and (3). (Here and elsewhere in this volume, the coordinators are boldfaced in the examples.)

- (2) monosyndetic: Iraqw (Mous°, ex. 29)  
*kwa/angw* ***nee*** *du’uma*  
 hare                      and leopard  
 ‘the hare and the leopard’
- (3) bisyndetic: Upper Kuskokwim Athabaskan (Kibrik°, ex. 1)  
*dineje* ***ʔił*** *midzish* ***ʔił***  
 moose with caribou with  
 ‘moose and caribou’

In addition to binary coordinating constructions with two coordinands, languages also allow **multiple coordinands**, i.e. more than two. In such constructions, “bisyndetic” coordination in fact means one coordinator per coordinand (cf. ex. 5), while monosyndetic coordination has one coordinator fewer (cf. ex. 4).

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1. A small circle after an author’s name means that the author’s contribution to this volume is referred to. Thus, “Jeschull°” stands for “Jeschull (this volume)”.

- (4) monosyndetic: Iraqw (Mous<sup>o</sup>, ex. 16)  
*Kwermuhl, nee Tlawi, nee Dongobesh, nee Haydom nee Daudi*  
 Kwermuhl and Tlawi and Dongobesh and Haydom and Daudi  
 ‘Kwermuhl, Tlawi, Dongobesh, Haydom, and Daudi [place names]’
- (5) bisyndetic: Upper Kuskokwim Athabaskan (Kibrik<sup>o</sup>, ex. 3)  
*maladija ?il jamena ?il denk'a ?il leka mama? ?il*  
 tent with stove with gun with dog food with  
 ‘a tent, a stove, a gun, and dog food’

In many languages, all but the last coordinator can be omitted in monosyndetic constructions, as in the English translation of example (5) (e.g. in Iraqw: Mous<sup>o</sup>, ex. 15–18; in Hausa: Abdoulaye<sup>o</sup> §3.1; in Hakha Lai NP conjunction: Peterson & VanBik<sup>o</sup>, ex. 9; Lavukaleve: Terrill<sup>o</sup>, ex. 14). However, there are also quite a few cases where coordinator omission has been reported to be impossible (e.g. in Hakha Lai clauses; Peterson & VanBik<sup>o</sup>, ex. 8). It seems that in bisyndetic constructions, coordinator omission is generally not possible with multiple coordinands.

The coordinator usually combines with one of the coordinands, so that the construction is not entirely symmetric. If it precedes this coordinand, it is called **prepositive**; if it follows this coordinand, it is called **postpositive**. The evidence for prepositive status is clearest when the coordinator is a prefix or a proclitic (e.g. 6), and for postpositive status when the coordinator is a suffix or enclitic (e.g. 7).

- (6) prepositive: Lenakel (Moyse-Faurie & Lynch<sup>o</sup>, ex. 28a)  
*I-em-va m-am-angən.*  
 1SG-PAST-come and-PAST-eat  
 ‘I came and ate.’
- (7) postpositive: Japanese (Ohuri<sup>o</sup>, ex. 16)  
*hon-to zasshi*  
 book-and magazine  
 ‘a book and a magazine’

### 1.3 Semantic types of coordination

Three different semantic types of coordination are usually distinguished: **conjunction** (= conjunctive coordination, ‘and’ coordination, e.g. 8), **disjunction** (= disjunctive coordination, ‘or’ coordination, e.g. 9), and **adversative coordination** (‘but’ coordination, e.g. 10).

- (8) conjunction: Persian (Stilo<sup>o</sup>, ex. 25)  
*tir=o kæman*  
 arrow=and bow  
 ‘bow and arrow’

- (9) disjunction: Iraqw (Mous<sup>o</sup>, ex. 17)  
*tsíiyáhh laqáa tám laqáa tsár*  
 four or three or two  
 ‘four or three or two’
- (10) adversative coordination: Lavukaleve (Terrill<sup>o</sup>, ex. 40)  
*Oina sou fale-re kini a-e-ve-meon taman*  
 other.SG.M rise stand-NONFIN ACT 3SG.M.O-SBD-go-SURP but  
*lake ga e-nua-ri-re...*  
 road(N) SG.N.ART 3SG.N.O-be.amiss-CAUS-NONFIN  
 ‘He stood up, but he took the wrong path...’

Sometimes an additional type “causal coordination” is distinguished (e.g. English constructions involving *for*, or German constructions involving *denn* ‘for, because’), but causal constructions much more often make use of subordinate clauses. In non-European languages, causal constructions are rarely described as involving coordination (see, however, van den Berg<sup>o</sup> §2.2.4 for causal coordination in Dargi).

The coordinands of a conjunction are also called **conjuncts**. In the older literature, the term *conjunction* is often used as a cover-term for coordinators and subordinators, but this usage is avoided in this volume to minimize confusion.

## 2. The position of the coordinator(s)

In monosyndetic coordination, there are four logically possible types, which are listed in (11) in descending order of cross-linguistic frequency. In the formulas in (11), *A* and *B* stand for two coordinands, and *co* stands for the coordinator.

- (11) a. [A] [co B] e.g. Hausa *Abdù dà Feemì* ‘Abdu and Femi’  
 (Abdoulaye<sup>o</sup>, ex. 14a)
- b. [A co] [B] e.g. Lai *vòmpii=leé phèntee* ‘a bear and a rabbit’  
 (Peterson & VanBik<sup>o</sup>, ex. 4)
- c. [A] [B co] e.g. Latin *senatus populus-que romanus*  
 ‘the senate and the Roman people’
- d. [co A] [B]

The fourth type seems to be unattested, and the third type is very rare — it does not occur in the languages discussed in this volume.

Distinguishing between the first and the second type is often not straightforward, and there is the additional logical possibility of a symmetrical tripartite structure [A] [co] [B]. However, there is a broad consensus that English and other European languages have the bracketing [A] [and B], and it seems to be generally assumed that all languages have an asymmetry one way or the other (especially in the recent

generative literature, cf. Progovac 2003). The following kinds of criteria have been mentioned for determining the constituency of coordinating constructions:

(i) **Clisis**: In some languages, the coordinator is clearly phonologically attached to one of the coordinands, either as a proclitic or as an enclitic (or even as a prefix/suffix — the difference between clisis and affixation is not relevant in the present context). For instance, in Hunzib (and in some other languages of the Tsezic branch of Nakh-Daghestanian), the shape of the coordinator is *-no* after a consonant (e.g. *kid-no* ‘girl and’) and *-n* after a vowel (e.g. *ože-n* ‘boy and’) (van den Berg°, ex. 49, and van den Berg 1995:51).<sup>2</sup>

(ii) **Intonational phrasing**: When the coordinators are short, a coordinating construction *A co B* is pronounced as a single intonational phrase, but when they are longer (e.g. two full clauses), there is usually an intonation break between them (cf. Stilo° § 1.4.2), and the coordinator is then either attached at the beginning of the second phrase (as in 12), or at the end of the first phrase (as in 14b below). The intonation break is indicated by a comma.

- (12) Chechen (Jeschull°, ex. 80)  
*So hwan gospodin vu, tq’a hwo san jalxoo vu.*  
 I YOU.GEN master be.PRES and you I.GEN servant be.PRES  
 ‘I am your master, and you are my servant.’

For Hausa, Abdoulaye° (§ 3.1) observes that constructions with multiple coordinands can have separate intonational phrases for each coordinand (e.g. *Abdù, dà Bàlki, dà Muusaa, dà Mořù* ‘Abdu and Balki and Musa and Moru’).

(iii) **Extrapolation**: Many languages allow extraposition of coordinands to the end of the clause, so that the construction is no longer continuous. In English, such extrapositions seem to occur mostly in afterthought constructions, but in German, they are perfectly natural even in carefully planned utterances because of the rigid object-verb order in certain constructions (cf. 13a). (13bc) show examples from Iraqw and Hausa (and Ohori°, ex. 42, cites one from Old English).

- (13) a. German  
*Schröder hat mit Fischer telefoniert **und** mit dem Agenten, der das Waffengeschäft aufgedeckt hat.*  
 ‘Schröder spoke to Fischer on the phone and to the agent who uncovered the weapons deal.’

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2. However, Hunzib conjunction is bisyndetic (*ože-n kid-no* ‘a boy and a girl’), so that the question of deciding between [A co] [B] and [A][co B] does not arise for this language.

- b. Iraqw (Mous<sup>o</sup>, ex. 35)  
*nee masoomo bir-ta doog-iyé' laqáa dasi...*  
 with youth COND-REC:PERF meet-3PL:PAST OR girl  
 'If he meets a youth or a girl, ...'
- c. Hausa (Abdoulaye<sup>o</sup>, §3.1)  
*Abdù nee dà Muusaa sukà tàfi.* (= *Abdù dà Muusaa nèe sukà tàfi.*)  
 Abdu COP and Musa 3PL.PFV go  
 'It is Abdu and Musa who went.'

This criterion for constituency would be even more convincing if we had examples of extraposition with postpositive (i.e. [A co][B]) constructions in which the postposed coordinator stays behind together with the first coordinand, but I know of no such cases (though van den Berg<sup>o</sup>, ex. 56, cites an example of extraposition with a bisyndetic construction, resulting in a pattern "... [A co] verb [B co]").

These three criteria often yield an unambiguous constituent structure, but occasionally they do not. Some languages have coordinators which may go either way in intonational phrasing. Kibrik<sup>o</sup> (§5) reports for Upper Kuskokwim Athabaskan that the adversative coordinator *ʔedinh* 'but' can belong either to the first or to the second coordinand:

- (14) Upper Kuskokwim Athabaskan (Kibrik<sup>o</sup>, ex. 33–34)
- a. *hiyoko tsildilghwsr, ʔedinh mikwl*  
 for.her they.are.sobbing but she.is.gone  
 'The are bemoaning her but she is gone.'
- b. *sileka ch'ildon' nich'i toghedak ʔedinh,*  
 my.dogs part too they.fell.in.water but  
*ch'ildon' chu?da tinh k'its' ʔohighet'a ts'e?...*  
 part still ice on they.are.there and  
 'While some of my dogs fell into the water, the others still stayed on the ice, and...'

Similarly, Peterson & VanBik<sup>o</sup> note that Hakha Lai =ʔii 'and' can occur clause-finally or clause-initially (ex. 1–3), and Terrill<sup>o</sup> (§4.1) finds for Lavukaleve that "pauses before coordinators are roughly equal in frequency to pauses after the coordinator". In these cases, a symmetrical bracketing (i.e. [A] [co] [B]) may well be justified.

Even more problematic for the criteria in (i)–(iii) above are cases of mismatch between them. One such case is cited by Stilo<sup>o</sup> from colloquial Persian, where the coordinator =ð 'and' is enclitic to the preceding element (e.g. *tir=o kæman* 'arrow and bow', ex. 25). However, when a conjunct is extraposed, =ð is extraposed along with the conjunct and encliticizes onto whatever happens to precede it:

- (15) colloquial Persian (Stilo<sup>o</sup>, ex. 10)  
*Xoda ye (dune) bæradær dad beh=éš=o ye xahær.*  
 God one CLF brother gave to=3s.OBL=and one sister  
 ‘God gave him a brother and a sister.’

Stilo argues that this shows that the syntactic bracketing is [A][co B], and that the encliticization is purely phonological. Allowing syntax-phonology mismatches amounts to discarding the first two criteria for determining syntactic constituent structure, leaving us only with the extraposition criterion. It thus appears that the constituent structure of coordinating constructions is much more problematic than has been generally thought.

In the great majority of cases (including all examples we have seen so far), the coordinator is in a peripheral position with respect to the coordinand that it links. However, when the coordinands are long, and especially when they are clauses, the coordinator may occasionally stand in an internal position. For example, Dargi has the conjunctive suffix *-ra* which occurs bisyndetically in NP conjunction (*A-ra B-ra*). When this suffix is used to conjoin clauses, it occurs just once, following the first NP of the last conjunct clause:

- (16) Dargi (van den Berg<sup>o</sup>, ex. 15)  
*Il nu-ni abit'=aq-un-ra idzala-ra Gaybik-ib.*  
 this I-ERG remove=CAUS-AOR-1 disease(ABS)-and stop-AOR(3)  
 ‘I had it (viz. the tooth) removed and the pain stopped.’

In the distantly related language Chechen, the clitic =’a also occurs bisyndetically in NP conjunction (*A=’a B=’a*), but when it links finite clauses, it occurs twice as well (contrasting with Dargi). Its position is immediately before the finite verb, and it cliticizes to the word preceding it:

- (17) Chechen (Jeschull<sup>o</sup>, ex. 48)  
*as sialxana wovdalalla ’a lieliira, hwuuna xala ’a*  
 I.ERG yesterday foolishly and behave.WP you.DAT difficult and  
*xietitira.*  
 let.seem.WP  
 ‘Yesterday I behaved like a fool and offended you.’

When a conjoined clause has an intransitive verb and thus no argument that =’a could cliticize onto, a “copy” of the verb is produced for =’a to cliticize onto:

- (18) Chechen (Good 2003: 134; see also Jeschull<sup>o</sup>, ex. 51–52)  
*Maalik viela=’a viilara vialxa=’a vilxara.*  
 Malik laugh=and laugh.WP cry=and cry.WP  
 ‘Malik laughed and cried.’

A surprisingly similar construction is found in Hakha Lai, where *zónŋ* ‘also’ is used bisyndetically for emphatic conjunction (*A zónŋ B zónŋ* ‘both A and B’). In clausal emphatic conjunction, *zónŋ* follows the object NP (see 19a), and when the verb is intransitive, a verb copy is produced (see 19b).

- (19) Hakha Lai (Peterson & VanBik<sup>o</sup>, ex. 46–47)
- a. *Làwthlawpaa=ni?* *ʔaàr zónŋ ʔa-tsook vok zònŋ ʔa-zuár.*  
 farmer=ERG chicken also 3SG.SUBJ-buy<sub>2</sub> pig also 3SG.SUBJ=sell<sub>2</sub>  
 ‘The farmer both bought a chicken and sold a pig.’
- b. *Làwthlawpaa ʔa-tluuk zónŋ ʔa-tluú, ʔa-thi? zonŋ*  
 farmer 3SG.SUBJ-fall<sub>2</sub> also 3SG.SUBJ-fall<sub>1</sub> 3SG.SUBJ-die<sub>2</sub> also  
*ʔa-thii.*  
 3SG.SUBJ-die<sub>1</sub>  
 ‘The farmer both fell and died.’

### 3. Category-sensitivity of coordinating constructions

In English and other European languages, the coordinators ‘and’ and ‘or’ can link a diverse range of categories: noun phrases, verb phrases, clauses, adjective phrases, prepositional phrases, and others. The coordinator ‘but’ is mostly confined to clauses, but this seems to be for semantic reasons.

But many languages have category-sensitive coordinating constructions (see also the discussion in Ohori<sup>o</sup> § 2.2). In particular, about half of the world’s languages show different conjunctive constructions for nominal and verbal/clausal conjunction (see Haspelmath to appear b). For example, in Upper Kuskokwim Athabaskan, noun phrases are conjoined by means of bisyndetic postpositive *ʔil* (cf. 3), while clauses are conjoined by means of the particle *ts’e?* (cf. 20).

- (20) Upper Kuskokwim Athabaskan (Kibrik<sup>o</sup>, ex. 19)  
*“hondenh ghwla? sidadza?” yinezinh ts’e? hwts’its’ay’nelghwt*  
 where unknown my.sister he.thought and he.took.off.pulling.a.sled  
 ‘He wondered where his sister was and took off with a sled.’

Identity of nominal and verbal conjunction is found throughout Europe and southwestern Asia, most of Southeast Asia, and Mesoamerica, while differentiation (as in Upper Kuskokwim) is found throughout Africa, in eastern Asia, and many areas of the Pacific and North and South America (see the map in Haspelmath to appear b). In this volume, identity is represented by Iraqw, Chechen, Dargi (and other Daghestanian languages), Western Iranian, Sgaw Karen, and Riau Indonesian, while differentiation is represented by Koyraboro Senni (Heath<sup>o</sup>), Fongbe, Hausa, Lai, and Lavukaleve.

In Haspelmath's (to appear b) cross-linguistic survey, the notion "verbal conjunction" lumps together clauses and verb phrases, because in many cases they cannot be easily distinguished (for instance, in (20) it is quite unclear what criteria one would use to argue that we are dealing with clausal or verb-phrase conjunction). But in some languages they can be distinguished, and then we sometimes find that VPs are conjoined like NPs, not like clauses. This seems to be particularly common in the Oceanic languages (cf. Moysse-Faurie & Lynch<sup>o</sup> § 3.1). An example comes from Xârâcùù (a language of New Caledonia).

- (21) Xârâcùù (Moysse-Faurie & Lynch<sup>o</sup>, ex. 5, 19, 22)
- a. NP conjunction  
*gu mē gè*  
 2SG and 1SG  
 'you and I'
  - b. VP conjunction  
*Ru cha mē mara.*  
 3DU clear.bush and work.in.fields  
 'They cleared the bush and worked in the fields.'
  - c. clausal conjunction  
*È nā fādē nā è nā bare tēpe.*  
 3SG IMPF walk and 3SG IMPF also talk  
 'He speaks as he is walking.'

Some languages even show three different conjunction strategies for NPs, VPs and clauses (e.g. Somali, cf. Haspelmath to appear a). However, there do not seem to be any languages with the same strategy for NP and clause conjunction and a different strategy for VP conjunction.

Thus, we can set up an implicational sequence "NP – VP – clause", such that each conjunction strategy covers a contiguous segment. The four different language-particular distributions are shown in (22).

- (22) 

NP	VP	clause	English
NP	VP	clause	Upper Kuskokwim Athabaskan
NP	VP	clause	Xârâcùù
NP	VP	clause	Somali

The implicational sequence can be enlarged by bringing adjective phrases (APs) into the picture. In some languages, these are conjoined like NPs (e.g. Mandarin Chinese, Ohori<sup>o</sup> ex. 12–14; Chechen, Jeschull<sup>o</sup> ex. 15), while in other languages they are conjoined like VPs (e.g. Japanese, Ohori<sup>o</sup> ex. 16–18). In Hausa, some adjectives are conjoined like NPs, while others are conjoined like VPs (Abdoulaye<sup>o</sup> § 3.1).

Thus, adjective phrases are intermediate between NPs and VPs, and we get the implicational sequence NP – AP – VP. (23) again shows various language-particular distributions:

- (23) 

NP	AP	VP
----	----	----

 English, Sgaw Karen
- |    |
|----|
| NP |
|----|

AP	VP
----	----

 Japanese
- |    |    |
|----|----|
| NP | AP |
|----|----|

VP
----

 Chinese, Chechen
- |    |                 |
|----|-----------------|
| NP | AP <sub>1</sub> |
|----|-----------------|

AP <sub>2</sub>	VP
-----------------	----

 Hausa

Payne (1985:5) proposes an even longer implicational sequence also involving adpositional phrases (NP – PP – AP – VP – clause), but does not provide much evidence for it. Some counterexamples have been noted, but they mostly concern languages in which one of the intermediate categories cannot be conjoined at all. Thus, Koyraboro Senni does not permit the conjunction of PPs (Heath° §3), Lavukaleve does not permit the conjunction of APs (Terrill° §6), and Tiri does not permit the conjunction of VPs (Moyses-Faurie & Lynch° §3.1.1, ex. 24–26).

#### 4. Semantic distinctions in conjunction

In English and other European languages, there is a single conjunctive coordinator ‘and’ whose use is independent of the meaning of the conjuncts or any semantic nuances of conjunction that might be conveyed. But many languages have different conjunctive constructions depending on semantic factors (see also Ohori° §3.2).

One factor is the **animacy** of the conjuncts. In Takia (an Oceanic language of Papua New Guinea), noun phrases with human referents are conjoined by means of the comitative postposition *da* (e.g. *oŋ ŋai da* [2SG 1SG COM]) ‘you and I’, *Meit Kabun da* ‘Meit and Kabun’), whereas non-human NPs are conjoined by juxtaposition (e.g. *mau dabel fud* ‘taro, yam and banana’; Ross 2002:228). Animacy is also relevant for the distinction between *me* and *ma* in Nêlêmwa (Bril° §2.1–2), and for the distinction between *men*, *o* and *ma* in Nemi (Moyes-Faurie & Lynch°, ex. 12).

Another factor is the distinction between **proper names** and **common nouns**. In Asmat (West Papua), the coordinator *enërim* ‘and’ is only used to link proper names (e.g. *Pisim enërim Wasí* ‘Pisim and Wasí’), whereas other NPs are conjoined by bisyndetic *A-am B-am* (e.g. *onów am, ós am* ‘thatch and wood’; Voorhoeve 1965:171–2). This distinction is also relevant, for instance, in Tamabo (Oceanic; northern Vanuatu; Jauncey 2002:614), and for eastern Polynesian languages such as Maori (Moyes-Faurie & Lynch°, ex. 15).

In some languages, different conjunctive constructions are used when the conjuncts form a **conceptual unit** and when they are thought of as **separate entities**.

This is how Jeschull<sup>o</sup> (§ 2.1.2–3) describes the difference between Chechen *A-ii B-ii* and *A 'a B 'a* (e.g. *shish-ii stak-ii* ‘a bottle and a glass’ (ex. 14); *waerzha mazh 'a, q'eegash shi bwaerg 'a* ‘a black beard and two shining eyes’ (ex. 38)).

This distinction seems to be related to the distinction between **tight and loose coordination** that is made by Moyse-Faurie & Lynch<sup>o</sup> (especially § 2.1) for several Oceanic languages. Tight coordinators are used with items that can be thought of as couples or pairs which are closely associated in the real world. Loose coordinators are used with items which are less closely associated. An example is Lenakel tight *m* (as in *nəmataag m nihin* ‘wind and rain’) vs. loose *məne* (as in *kuri məne pukas* ‘a dog and a pig’). Wälchli (2003) uses the terms **natural coordination vs. accidental coordination** for the semantic distinction, and *loose vs. tight coordination* for the corresponding formal distinction. Wälchli observes that tight coordination often implies less explicit formal means, typically simple juxtaposition, and two juxtaposed conjuncts are often treated as **coordinative compounds**. A language showing such an asyndetic/syndetic contrast is Sgaw Karen (Lord & Craig<sup>o</sup> § 3): for instance, *jə-mo jə-pa* [my-mother my-father] ‘my parents’ requires no overt coordinator, but ‘my mother and my brother’ does (*jə-mo dɔʔ jə-we, \*jə-mo jə-we*). In Dargi, juxtaposed combinations such as *neš-dudeš* [mother-father] ‘parents’, *berhi-dugi* [day-night] ‘day and night’, and *šalbar-ħewa* [trousers-shirt] ‘clothes’ are described as “compounds” (van den Berg<sup>o</sup> § 2.1.1). In Iraqw (Mous<sup>o</sup> § 2) and in Hausa (Abdoulaye<sup>o</sup> § 3.1), natural coordination is not formally different from accidental coordination, but Abdoulaye observes that conjunctions such as *uwaa dà ìbaa* [mother and father] are more integrated and would not be used in two different intonational phrases, for instance. Such pairs of naturally coordinated items often develop idiomatic meanings (cf. Sgaw Karen *haʔ dɔʔ lokwe* ‘go and play’ vs. *haʔ lokwe* [go play] ‘go for a stroll’ (Lord & Craig<sup>o</sup>, ex. 62–63); Hausa *bàakii dà hancii* [mouth and nose] ‘very close’ (Abdoulaye<sup>o</sup> § 3.1)).

Clause coordinators are often translated as ‘and’, ‘and then’, ‘then’ (e.g. Lavukaleve *aka* and *hano*, Terrill<sup>o</sup> § 7.1). It is difficult to judge to what extent this **sequential meaning** is part of the coordinators’ meaning and to what extent it simply derives from contexts in which sequences of events are reported. Lefebvre<sup>o</sup> (§ 1) notes that Fongbe *bɔ̀* and *bó* are translated as ‘and then’ when they occur in perfective clauses, and as ‘and’ when they occur in imperfective clauses. She concludes that the sequential sense is a contextual, not an inherent, property of these coordinators.

A semantic distinction that is sometimes conveyed by clause coordination is **switch-reference**, i.e. the distinction between **same-subject** and **different-subject** clause combinations. The term *switch-reference* is typically used for constructions in which one clause is dependent on another clause (see Stirling 1993:6), and for some reason independent coordinating particles that signal a same-subject/different-subject contrast have not been prominent in the literature. However, such a

contrast is described in detail by Lefebvre<sup>o</sup> for Fongbe *bó* (same-subject) and *b̀* (different-subject):

- (24) Fongbe (Lefebvre<sup>o</sup>, ex. 5–6)
- a. *Ũn wá bó yì.*  
1SG arrive COORD leave  
'I arrived and then left.'
- b. *K̀kú wá b̀ Àsibá yì.*  
Koku arrive COORD Asiba leave  
'Koku arrived and then Asiba left.'

Similarly, in Nêlêmwa the clausal coordinator *xa* requires subject identity in both clauses (cf. 25a), whereas *me* also allows different subjects (cf. 25b).

- (25) Nêlêmwa (Bril<sup>o</sup>, ex. 71–72)
- a. *I oda Teâ Pwayili shi Teâ Ovaac xa (i) khabwe*  
3SG go.up Teâ Pwayili side Teâ Ovaac also (3SG) say  
*ushi-n ...*  
BEN-POSS.3SG  
'Teâ Pwayili goes up to Teâ Ovaac and tells him...'
- b. *I oda Teâ Pwayili shi Teâ Ovaac me i khabwe ...*  
3SG go.up Teâ Pwayili side Teâ Ovaac and 3SG say  
*ushi-n a Teâ Ovaac...*  
BEN-POSS.3SG AGT Teâ Ovaac  
'Teâ Pwayili goes up to Teâ Ovaac and Teâ Ovaac tells him...'

Also, van Klinken (2000) reports that Tetun (Timor; Central Malayo-Polynesian) has a clause coordinator *-odi* that requires subject identity between the clauses.

## 5. From comitative to conjunctive marker

As was noted by Stassen (2000), many of the world's languages use the same marker for expressing conjunctive ('A and B') and comitative ('A with B') relations (he calls these languages "WITH-languages"). Quite a few of the languages discussed in this volume are WITH-languages in Stassen's sense: Iraqw, Fongbe, Haitian Creole, Hausa, Vafsi, Sgaw Karen, Riau Indonesian, Nêlêmwa and most other Oceanic languages, as well as Japanese (discussed by Ohori<sup>o</sup>) and Koyraboro Senni (discussed by Heath<sup>o</sup>). Examples from Fongbe and Riau Indonesian are given in (26)–(27).

- (26) Fongbe (Lefebvre<sup>o</sup>, ex. 53a, 49) (note: *kpódó...kpó* is a circumposition)
- a. *Àsibá yì àxì mè [kpódó K̀kú kpó].*  
Asiba go market in with Koku with  
'Asiba went to the market with Koku.'

- b. *Àsíbá [kpóḍó Kòkú kpó] yì àxì mè.*  
 Asiba with Koku with go market in  
 ‘Asiba and Koku went to the market.’
- (27) Riau Indonesian (Gil<sup>o</sup>, ex. 9, 3)
- a. *Damsir beli celana sama si Man sudah bulu-bulu.*  
 Damsir buy trousers sama PERS Mansudir PFCT DISTR~feather  
 ‘The trousers that Damsir bought with Mansudir are already all frayed.’
- b. *Doni sama Amat mau di-tumbuk dia.*  
 Doni sama Amat want PAT-hit 3  
 ‘He wants to hit Doni and Amat.’

There are at least two different ways in which this formal identity can be understood. On the one hand, one can argue that the comitative/conjunctive markers in WITH-languages have just one single function, which happens to be rendered in two different ways in AND-languages like English that must differentiate between ‘and’ and ‘with.’<sup>3</sup> This is what Lefebvre and Gil claim for their languages. On the other hand, one could argue that the comitative marker and the conjunctive marker are different synchronically, both semantically and syntactically, and that the identity of their shape is due to a very common semantic-syntactic change from comitative marker to conjunctive coordinator. Of course, it is quite possible (and actually very likely) that some WITH-languages are of the former type, while others are of the latter type.

Both Gil and Lefebvre argue that the single-function (or **monosemy**) description should be the default, to be replaced by a multiple-function (or **polysemy/ambiguity**) description only if relevant differences in the object language are discovered (differences in the translations to other languages obviously do not qualify as arguments against a monosemic description). In the following, a list of types of semantic and syntactic differences is provided that could be used to argue that the comitative and conjunctive markers/constructions are different in a given language.

(i) **Semantics:** Abdoulaye<sup>o</sup> (§4.2) describes the difference between *and* and *with* in English: *A and B act* suggests that both A and B are equally in control of the action, but not necessarily simultaneously or in the same place, whereas *A acts with B* entails that A and B are in the same place and their involvement is simultaneous, but it does not suggest that they are equally in control (A could be in full control,

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3. Lefebvre actually translates (26b) (her ex. 49) as ‘Asiba with Koku went to the market’, in order to underline her claim that (26a–b) do not differ semantically, but the translation given here sounds much more natural in English.

with B as a co-actor, or vice versa). Thus, the following English sentences are odd for semantic reasons:

- (28) a. #*Pedro watched the world cup final with Yumiko, but Pedro was in Cordoba, and Yumiko was in Kumamoto.*  
 b. #*Clelia watched The Tin Drum with Niklas, but Clelia watched it in 1986, and Niklas in 2004.*
- (29) #*In the 2000 election campaign, Gore ran for U. S. president with Bush.*

Sentence (29) is fine only if (contrary to fact) Bush is Gore's running mate (i.e. candidate for vice president) and thus has less control, not if Gore and Bush are both candidates for the presidency.

(ii) **Topicality:** Abdoulaye° (§4.1) also notes that in Hausa, subject NPs are topics and must be referred to as pronouns in the following clause:

- (30) Hausa (Abdoulaye°, ex. 21)  
*Abdù yaa tàfi makařantaa dà Bálki an bâa \*Abdù/Bálki*  
 Abdu 3SG.M.PFV go school with Balki 1MPS.PFV give Abdu/Balki  
*àlloo.*  
 board  
 'Abdu went to school with Balki, and a [writing] board was given to \*Abdu/Balki.'

Here the full NP *Abdù* is not possible in the second clause, and it would have to be replaced by an anaphoric pronoun. By contrast, *Bálki* is possible because it is not a topic in the first clause. When *Abdù* and *Bálki* are conjoined with *dà*, they are both jointly the topic of the sentence, and each can be repeated individually in the next clause:

- (31) Hausa (Abdoulaye°, ex. 22)  
*Abdù dà Bálki sun tàfi makařantaa an bâa Abdù/Bálki*  
 Abdu and Balki 3PL.PFV go school 1MPS.PFV give Abdu/Balki  
*àlloo.*  
 board  
 'Abdu and Balki went to school and a board was given to Abdu/Balki.'

(iii) **Word order.** In many SVO languages with relatively rigid word order, such as Hausa and English, the verb generally follows the subject immediately and any adpositional-phrase adjuncts come after the verb. This makes it fairly easy to distinguish comitative *dà* from conjunctive *dà* in Hausa sentences like (30)–(31). In SOV languages like Iraqw, however, this criterion does not help:

- (32) Iraqw (Mous<sup>o</sup>, ex. 11)  
*Muu-dá' nee dama-r-ín ta-ri waráahh.*  
 people-DEM4 and calf-F-3PL.POSS IMPs-NAR PASS:PAST  
 'Those people and their calf passed.'  
 Or: 'Those people passed with their calf.'

In addition to functioning as clausal adjuncts, comitative phrases may also occur adnominally in many languages, cf. (33):

- (33) Hausa (Abdoulaye<sup>o</sup>, §3.3)  
*Wata màcè dà jàariirìn-tà ta-nàa zàune wàje.*  
 one woman with baby-3SG.POSS 3SG.F-CONT sit outside  
 'A woman with her baby is sitting outside.'

Thus, word order only differentiates conjuncts from clausal comitative phrases.<sup>4</sup> (However, additional semantic criteria often easily exclude the adnominal comitative reading, e.g. with proper nouns as in (26b), (27b), and (31); proper nouns are extremely unlikely to have an adnominal modifier.)

It is an interesting question which comitative construction is the diachronic source of the conjunctive construction in those WITH-languages that clearly have a separate conjunctive construction. Stassen (2000: 26) seems to presuppose that it is the clausal comitative construction (he appeals to "movement" of the comitative phrase from its canonical position in the sentence), but it may well be that the adnominal construction (as in 33) is the source construction in most languages.

(iv) **Bisyndetic conjunction.** In several languages, comitative-derived conjunction markers are used bisyndetically, thus showing that they occur in a new construction. For instance, the comitative postposition *?il* in Upper Kuskokwim Athabaskan occurs on both conjuncts when it is used as a coordinator (see ex. 3 above; Kibrik<sup>o</sup> §2.1–2). Hausa *dà* may also be used bisyndetically with an emphatic sense (*dà Abdù dà Bàlki* 'both Abdu and Balki', Abdoulaye<sup>o</sup> §3.1). In Hakha Lai, the comitative enclitic =*heè* is only used bisyndetically in emphatic conjunction (e.g. *?aàrpìi=heè ?a-faà=leé=heè* [hen=COM 3SG.POSS-children=COLL=COM] 'both the hen and her children', Peterson & VanBik<sup>o</sup>, ex. 43); it is not used for non-emphatic conjunction.

(v) **Multiple conjuncts.** When a marker occurs in a construction with multiple noun phrases, this shows that the construction does not involve clausal adjuncts, because there can be only one comitative clausal adjunct. A construction such as

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4. A clausal comitative interpretation is also excluded when the expression is the complement of an adposition, e.g. Koyraboro Senni *X nda Y še* [X with/and Y for] 'for X and Y' (Heath<sup>o</sup> §3). This kind of structure could conceivably be an adnominal comitative phrase (if the language allows prenominal PP modifiers), but it could not be a clausal comitative phrase.

“A co-B co-C co-D” could in principle represent nested adnominal comitative phrases (as in *a father with a child with a doll with a red dress*), but this occurs only in extremely specialized circumstances. Normally such a construction represents conjunction. Comitative-derived conjunction markers that are used with multiple conjuncts are found in Hausa, Iraqw (ex. 4 above), Upper Kuskokwim Athabaskan (ex. 5 above), and many Oceanic languages (e.g. West Uvean, Moysse-Faurie & Lynch<sup>o</sup>, ex. 74).

(vi) **Coordinator omission.** Many languages allow non-final coordinators to be dropped when there are three or more coordinands. When these coordinators have the same shape as a comitative marker, the possibility of coordinator omission is a sure indication that we are dealing with a different construction. Coordinator omission for comitative-derived coordinators is reported, for instance, for Iraqw (Mous<sup>o</sup>, ex. 16) and Hausa (Abdoulaye<sup>o</sup> §3.1).

(vii) **Use of independent pronouns.** It is a general property of coordinating constructions that personal pronoun coordinands appear as independent pronouns, not as clitic or affixal pronouns. In those languages that use clitic/affixal pronouns with their comitative marker, the formally identical conjunctive marker typically requires the independent pronoun. This can be illustrated by Hausa and Upper Kuskokwim Athabaskan (see also Moysse-Faurie & Lynch<sup>o</sup>, note 16, on Polynesian languages).

- (34) Hausa (Abdoulaye<sup>o</sup>, ex. 12b, §2.2)
- a. *Naa ganee =shì dā àbikkìyà-ṙ-shì.*  
1SG.PFV see =3SG.M.OBJ with friend-of-3SG.M  
‘I saw him with his friend.’
  - b. *Naa ga shii dā àbikkìyà-ṙ-shì.*  
1SG.PFV see he and friend-of-3SG.M  
‘I saw him and his friend.’

- (35) Upper Kuskokwim Athabaskan (Kibrik<sup>o</sup>, ex. 8, 2)
- a. *nut si-ʔil ton daltʂenh-na*  
here me-with town they.stay-those.people  
‘the people who live in town with me’
  - b. *Timothy ʔil se ʔil kayih tsʔideghiltsʔeʔ.*  
Timothy with me with house we.stayed  
‘Timothy and I stayed at home.’

(viii) **Number agreement.** Conjunctive constructions often contrast with comitative constructions in requiring nonsingular agreement on the verb, e.g.

- (36) East Uvean (Moysse-Faurie & Lynch<sup>o</sup>, ex. 77)
- Né'e momoe te kiu mo te fo'i uga i Vaitupu.*  
PAST sleep.PL DEF egret and DEF CLF hermit.crab OBL Vaitupu  
‘The egret and the hermit-crab slept at Vaitupu.’

This criterion is also discussed for Iraqw by Mous<sup>o</sup> (§4), but he concludes that it is not decisive, because Iraqw also shows plural agreement when the meaning is clearly comitative. (See also the unexpected nonsingular agreement in Hausa as in Abdoulaye<sup>o</sup>'s example 30, and in Tolai as in Brill<sup>o</sup>'s example 99.)

(ix) **Use with non-NP categories.** Many conjunction markers that are formally identical to comitative markers can conjoin non-NP categories such as adjective phrases and clauses, where the comitative meaning/construction cannot be involved. This is the case in Iraqw, Sgaw Karen, and many of the Oceanic languages, for instance.

(x) **Extraction and focusing.** Clausal comitative modifiers can be extracted and focused, but individual conjuncts cannot in general be extracted and focused (see §9 below). Thus, in the East Uvean sentence (37a), only *te tama* 'the boy' can be focused (as shown in 37b), not *te tama mo koe* 'the boy with you', because this does not form a constituent.<sup>5</sup>

(37) East Uvean (Moyse-Faurie & Lynch<sup>o</sup>, ex. (78a–b))

- a. 'E 'alu te tama mo koe.  
NS go.SG DEF boy with you  
'The boy went off with you.'
- b. Ko te tama 'e 'alu mo koe.  
PRED DEF boy NS go.SG with you  
'It's the boy who went with you.'

Extraction and focusing is also discussed for Hausa by Abdoulaye<sup>o</sup> (§4.1).

Thus, there are a fair number of properties that can distinguish between comitative and conjunctive constructions even when the marker is the same in both constructions. It appears that when a comitative marker changes semantically to become a conjunction marker, there is strong pressure for it to adopt the formal properties that are associated with conjunctive constructions. What the source of this pressure might be is an intriguing question that I will not try to address here.

Before leaving this section, we should briefly consider the question whether the change from comitative to conjunctive is unidirectional, or whether the reverse change is also possible and might account for some of the synchronic cases of comitative-conjunctive marking identity. An interesting case in point is the unusual construction described for Dargi by van den Berg<sup>o</sup> (§5, "conjunctive-comitative construction"). Dargi has bisyndetic postpositive conjunction (*A-ra B-ra*), and one way of expressing the comitative role is by conjoining the comitative NP with the reflexive pronoun *say/sari/sabi*:

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5. It could be a constituent if the language allows adnominal comitative phrases, but this would be a pragmatically implausible expression.

- (38) Dargi (van den Berg<sup>o</sup>, ex. 86a)  
*Ḫunul-ra say-ra udzi šadi-w arq'-uli say.*  
 wife-and self.M-and brother(ABS) walk-M leave-GER be.M  
 'My brother went for a walk with his wife.'

Literally, this seems to mean 'My brother went for a walk, his wife and himself', but it cannot be an apposition construction synchronically, because the part 'his wife and himself' does not agree in case with the subject (this can be seen in sentences like van den Berg<sup>o</sup>'s example 87a, where the subject is in the ergative case). Thus, this is a special construction that comes close to being an example of a change from conjunctive construction to comitative construction.

## 6. Semantic maps

Coordinators often have other meanings/functions besides the function of marking coordinating constructions. In the last section we discussed this for the two functions 'comitative' and 'conjunctive', and in this section we will take an even broader view.

When one looks at the patterns of polyfunctionality (or *macrofunctionality*, to use Gil's<sup>o</sup> term) across languages, one notices that there are many differences, but also recurrent patterns. Some examples are given in (39).

- (39) a. Karen *dɔʔ* (Lord & Craig<sup>o</sup>):  
 conjunctive, comitative, instrumental  
 b. Iraqw *nee* (Mous<sup>o</sup>):  
 conjunctive, comitative, instrumental, agent  
 c. Hausa *dà* (Abdoulaye<sup>o</sup>):  
 conjunctive, comitative, instrumental, existence  
 d. Fongbe *kpóqó ... kpó* (Lefebvre<sup>o</sup>):  
 comitative, instrumental, manner  
 e. Upper Kuskokwim Athabaskan *ʔil* (Kibrik<sup>o</sup>):  
 conjunctive, comitative, 'instrumental', 'also'  
 f. Dargi *-ra* (van den Berg<sup>o</sup>):  
 conjunctive, 'also', 'even'  
 g. Riau Indonesian *sama* (Gil<sup>o</sup>):  
 conjunctive, comitative, instrumental  
 h. English *with*:  
 comitative, instrumental  
 i. Russian *-om/-oj/-ju* (=instrumental case):  
 instrumental, agent

None of these particles or affixes has exactly the same range of functions, but some uniform pattern can be detected within the diversity: Certain combinations of meanings/functions of a polysemous/polyfunctional element do not occur. For instance, there are no particles that express ‘also’ and ‘comitative’, but not conjunctive, and no markers that express verbal conjunction and comitative, but not nominal conjunction.

An elegant way of expressing these regularities is by drawing a **semantic map** that consists of meanings linked by connecting lines (see Croft 2001, Haspelmath 2003 for the concept of “semantic map”). A very tentative semantic map for conjunction and related meanings is given in Figure 1.

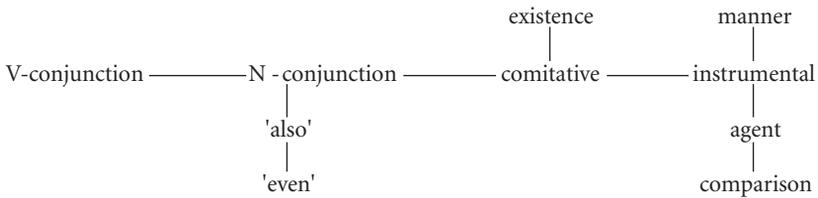


Figure 1. A semantic map for conjunction and related notions

Semantic maps express universals of polysemy because they are associated with the **connectivity hypothesis**: Every language-particular element or category occupies a connected region on the semantic map. This is illustrated in Figures 2–10, which show the regions occupied by each of the elements in (39a–i).

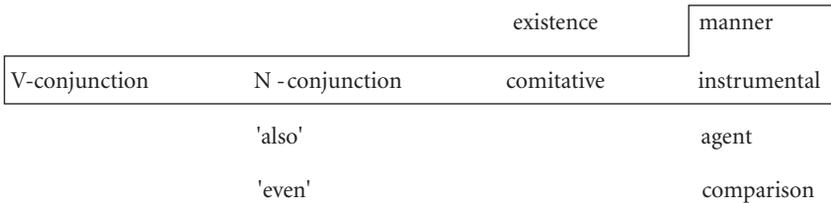


Figure 2. Karen *dɔʔ*

None of these particles/markers is exactly like any of the others, but the striking similarities between them are expressed in a salient way by the semantic-map notation. Of course, Figure 1 and Figures 2–10 are only partial representations: Many of the particles/markers have additional functions not shown here, and the main map in Figure 1 could be enlarged by adding further items. For instance, one could easily add the implicational sequences that we saw in (22)–(23) above. It is only for the sake of expository convenience that the two sets of facts are described separately here.

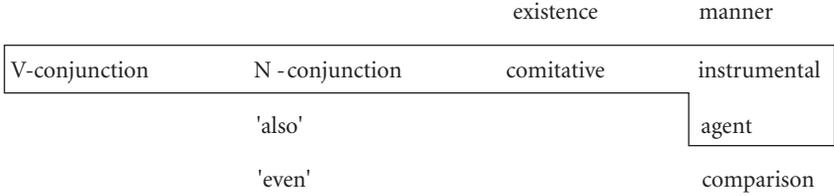


Figure 3. Iraqw *nee*

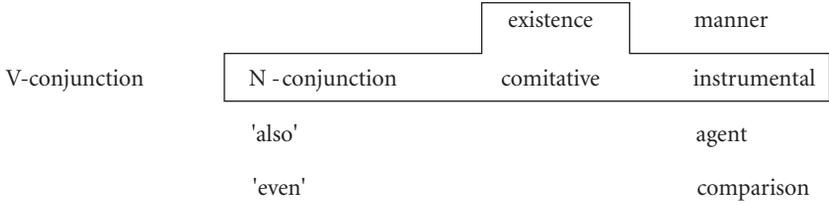


Figure 4. Hausa *dà*

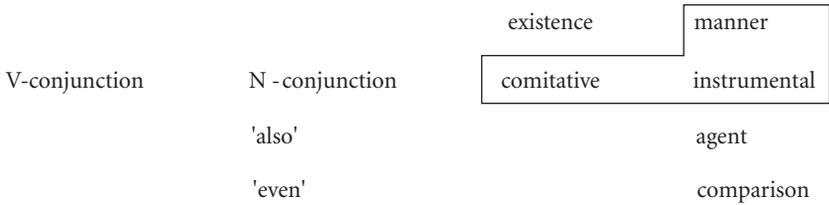


Figure 5. Fongbe *kpóǵó ... kpó*

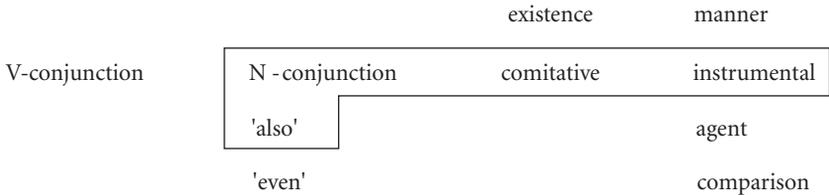


Figure 6. Upper Kuskokwim Athabaskan *?il*

The only contribution to this volume that makes use of semantic maps is Gil<sup>9</sup>, who argues that the various uses of Riau Indonesian *sama* are not different meanings, but just different ways of translating the unitary meaning of *sama* ('togetherness') in different contexts. Thus, he argues for **monosemy** rather than **polysemy** of markers that seem to have a broad range of different uses from the point of view of another language.

The semantic-map notation is neutral between these two ways of looking at polyfunctionality. It is compatible both with a polysemic view that regards the

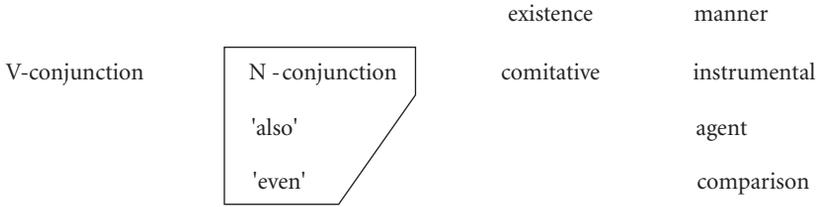


Figure 7. Dargi *-ra*

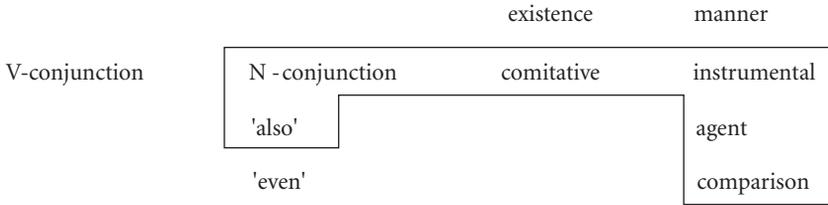


Figure 8. Riau Indonesian *sama*

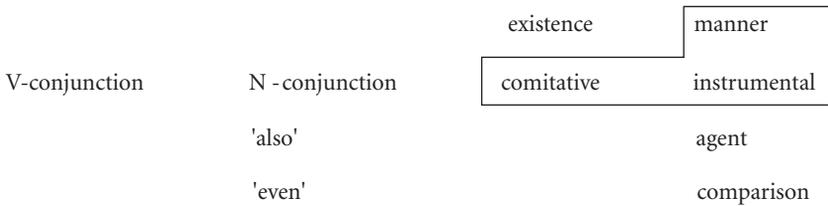


Figure 9. English *with*

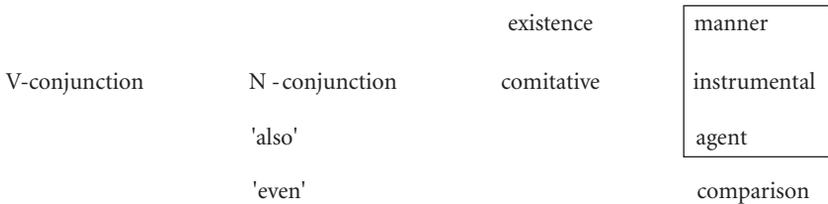


Figure 10. Russian instrumental case

nodes in the network of a semantic map as distinct meanings, and with a monosemic view claiming that each of the connected regions in Figures 2–10 has just a single, unified meaning. The challenge for the polysemic approach is to show that speakers really make all the distinctions that the linguists make, because, as both Gil<sup>o</sup> (§ 2) and Lefebvre<sup>o</sup> (§ 1) point out, the default hypothesis in the description of an individual language should be that of monosemy. The challenge for the monosemic approach is to show how the exact boundaries of each element can be derived from

the single unified meaning. Single unified meanings (or “Gesamtbedeutungen”) are generally very abstract (like Gil’s ‘togetherness’), and it is often difficult to see how one gets from the abstract meaning to the various concrete uses.

Semantic maps express universals of polyfunctionality, but like many other universals, they may have exceptions. A possible exception to the map in Figure 1 comes from Welsh (cf. Stolz 1998), where the conjunction marker is *a* [a] (*ac* [ag] before vowels), and the instrumental preposition is *â* [a] (*ag* [ag] before vowels). These two are different orthographically, but not in pronunciation, and they are etymologically identical as well. Given the semantic map in Figure 1, we expect that *a(c)/â(g)* also occurs in the comitative function, but the modern comitative preposition is *gyda(g)* in most cases. As Stolz (1998) shows, older Welsh had a single preposed element for conjunctive, comitative and instrumental functions, but at a later stage this element was replaced by *gyda(g)* (originally *yn nghyd â* ‘in unison with’), so that now we have a situation where conjunction and instrumental are expressed by the same marker (pronounced [a(g)]), while comitative is expressed by a different marker. This constitutes a synchronic exception to the connectivity claim of Figure 1.

However, this Welsh case still shows connectivity at the **diachronic level**: The marker [a(g)] presumably first expressed comitative and was then extended to instrumental and finally to conjunctive function. It was later replaced by a renewed comitative marker, but in its original development it did not jump over the comitative function. Semantic maps can also be looked at as sets of diachronic pathways, and the synchronic polyfunctionality of a marker is then simply the result of its diachronic extension along the permitted paths. Some of these pathways are unidirectional, i.e. changes are possible only in one direction. Such unidirectional pathways can be indicated by an arrow connecting two functions on a semantic map. A first hypothesis of the diachronic version of the map in Figure 1 is shown in Figure 11.

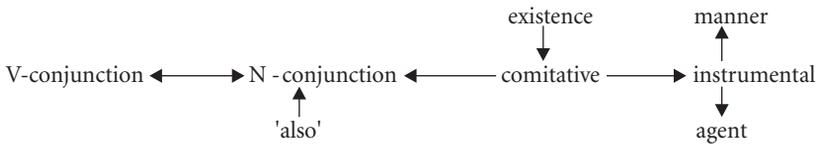


Figure 11. Diachronic links between conjunction and related functions

## 7. Inclusory constructions

Many languages have constructions that are notionally like conjunction and are rendered by ‘and’-conjunction in English, but that are crucially different from ordinary conjunction in that one of the constituents has the same reference as the entire construction. This is best explained with some concrete examples:

- (40) a. Koyraboro Senni (some dialects; Heath<sup>o</sup>, § 10)  
*ir nda ni*  
 we with you.SG  
 ‘you and I’
- b. Hausa (Abdoulaye<sup>o</sup>, ex. 2b)  
*muu dà shii*  
 we with he  
 ‘he and me’ (or: ‘he and us’)
- c. Nêlêmwa (Bril<sup>o</sup>, ex. 15)  
*hla ma Kaavo*  
 3PL with Kaavo  
 ‘they (two) and Kaavo’
- d. Lavukaleve (Terrill<sup>o</sup>, ex. 26)  
*el Mima*  
 1DU.EXCL Mima  
 ‘Mima and I’
- e. Mparntwe Arrernte (Ohuri<sup>o</sup>, ex. 31. from David Wilkins)  
*kake ilerne*  
 elder.brother 1DU  
 ‘elder brother and I’
- f. Old English (Bhat<sup>o</sup>, ex. 6, from Edgerton 1910: 112)  
*wit Scilling*  
 1DU Scilling  
 ‘Scilling and I’

In the first example *ir nda ni* ‘you(SG) and I’, literally ‘we and you(SG)’, the reference of the first constituent (*ir* ‘we’) includes the reference of the second constituent (*ni* ‘you(SG)’). This construction type is called **inclusory construction** in this volume (following Lichtenberk 2000). The first constituent is almost always a nonsingular pronoun, typically first or second person (called the **inclusory pronoun**), and the second constituent (called the **included NP**) can be juxtaposed (as in ex. (40d–f)), or it can be linked by a particle, often a particle that also means ‘and’, ‘with’ (as in (40a–c)). The inclusory pronoun most often precedes the included NP, but it can also follow it (as in (40e)).

In those languages where the linking particle is identical to the ‘and’ coordinator, these constructions may be ambiguous. Thus, in Hausa, *muu dà shii* (lit. ‘we and he’) can have both an inclusory meaning (‘he and me’) and an additive meaning (‘he and us’). And since Hausa does not make a distinction between dual and plural, there are actually two translations of the inclusory reading: if *muu* ‘we’ refers to two people, *muu dà shii* is translated as ‘he and me’, but if it refers to more than two, it is translated as ‘he and us’. In this latter case, the inclusory and the additive meanings are not differentiated in the English translation. In a language with a dual-plural contrast such as Nêlêmwa (cf. Bril<sup>o</sup>, ex. 14), it is clear that an inclusory construction like *yaman ma axaleny* [1DU.EXCL and this.man] must be translated as ‘me and this man’, not ‘us and this man’.

In the examples in (40), the inclusory pronoun and the included NP occur as a contiguous constituent and form a **phrasal inclusory construction**. In these cases, the inclusory pronoun is always an independent pronoun. But the inclusory pronoun may also be a bound pronoun, and then the included NP does not form a constituent with it. This construction is called **split inclusory construction**. Two examples are given in (41).

- (41) a. Hausa (Abdoulaye<sup>o</sup>, ex. 2a)  
*Mun jee kàasuwaa dà Abdù.*  
 1PL.PFV go market with Abdu  
 ‘Abdu and I went to the market.’
- b. Polish (Bhat<sup>o</sup>, ex. 4, from Schwartz 1988:52)  
*Posz-li-śmy z matką do kina.*  
 go-PAST-1PL with mother to movies  
 ‘Mother and I went to the movies.’

In these examples, the bound pronoun is a verbal argument. Split inclusory constructions may also occur with bound possessive pronouns on nouns, as in (42).

- (42) Nêlêmwa (Bril<sup>o</sup>, ex. 17)  
*mwa-wa ma kâama-m ma axomoo-m*  
 house-POSS.2PL and father-POSS.2SG and mother-POSS.2SG  
 ‘your(SG) house and your father’s and your mother’s’

(It appears that the included NP in this example is itself a coordinated phrase; i.e. the first *ma* serves as inclusory particle, and the second *ma* serves as ordinary additive coordinator.)

Inclusory constructions are discussed from a general perspective by Bhat<sup>o</sup>, and detailed discussion of inclusory constructions in particular languages is found in Abdoulaye<sup>o</sup>’s and Bril<sup>o</sup>’s contributions.

## 8. Disjunction

Disjunctive ('or') coordination is much less prominent in this volume than conjunctive coordination, and this is not surprising because it is also less prominent in language use. Ohori<sup>o</sup> (§3.2) observes that 'and' words are much more frequent in discourse than 'or' words. Thus, we also expect that 'or' words are typically longer (and rarely shorter) than 'and' words. A few examples illustrating this trend are given in (43).

(43)		'and'	'or'
	German	<i>und</i>	<i>oder</i>
	Russian	<i>i</i>	<i>ili</i>
	Hausa	<i>dà</i>	<i>koo</i>
	Iraqw	<i>nee</i>	<i>laqáa</i>
	Persian	=ò	<i>ya... ya...</i>
	Lavukaleve	<i>o</i>	<i>ve</i>
	Dargi	<i>...-ra ...-ra</i>	<i>ya(-ra)... ya(-ra)...</i>

Ohori<sup>o</sup> (§3.2) also notes that disjunctive coordinators tend to be more autonomous (i.e. they are more often free words rather than clitics or affixes), and that disjunction less often differentiates between NP coordinands and clause coordinands. All this can probably be explained as due to the lower frequency of disjunction markers.

In some languages, there does not seem to be any grammaticalized way of expressing disjunction at all. Ohori<sup>o</sup> (§3.1) describes cases of neutralization between 'and' and 'or'. According to Kibrik<sup>o</sup> (§4), who describes coordination in Upper Kuskokwim Athabaskan, "there does not seem to exist any native way to express disjunction" in this language, only the English borrowing *o* is sometimes used. In general, disjunction markers are fairly easily borrowed (see Matras 1998 for the borrowing hierarchy 'but' > 'or' > 'and'); another example is Dargi *ya... ya...*, borrowed ultimately from Persian.

In Lai, there is a native conventional way to express disjunction, but this is rather complicated and seems to be quite young. An example is (44).

- (44) Hakha Lai (Peterson & VanBik<sup>o</sup>, ex. 12a)
- |                                       |  |             |                           |
|---------------------------------------|--|-------------|---------------------------|
| <i>lãwthlawpaa=ni<sup>?</sup> vok</i> | <i>?a-sii-lãw=leè</i>                  | <i>?aàr</i> | <i>?a-tsook</i>           |
| farmer=ERG                            | pig 3SG.SUBJ-be <sub>2</sub> -NEG=COND | chicken     | 3SG.SUBJ-buy <sub>2</sub> |
- 'The farmer bought a pig or a chicken.'

Originally, the word for 'or' (*?asiilãwleè*) was analyzable as *?a-sii-lãw=leè* [3SG.SUBJ-be<sub>2</sub>-NEG=COND] and the literal translation of (44) is 'The farmer, if it wasn't a pig, bought a chicken.' This is not a possible synchronic analysis because =leè is not used as a conditional marker anymore, but it is clear that the disjunctive marking strategy must be of very recent origin.

Like conjunction markers, disjunction markers are often polyfunctional, and it should be possible to draw a semantic map of the various uses that ‘or’ words can have (see Haspelmath 1997: 164–69 for some relevant observations). The papers in this volume give too little information on disjunctive markers to start drawing a semantic map, but some other meanings of ‘or’ words are noted, e.g. doubt or possibility in Iraqw (Mous<sup>o</sup>, ex. 13–14), and question tag in Nêlêmwa (Bril<sup>o</sup> § 1.2).

## 9. Extraction from coordinating constructions

Since Ross 1967 [1986], constraints on extraction from coordinate structures have been discussed in the literature. Ross (1967:89) formulated the following constraint (cited here after Schachter 1977:94; see also Kazenin & Testele<sup>o</sup> § 2.2).

(45) The Coordinate Structure Constraint

In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct.

The first part of this constraint explains the ungrammaticality in English of sentences like (46a–b). In (46a), the second conjunct has been fronted, and in (46b), the first conjunct has been fronted. (In this and the following examples, the extraction site is signaled by \_.)

- (46) a. \**What sofa will he put the chair between some table and \_?*  
 (Schachter 1977:94)  
 b. \**What records did you buy \_ and books on civil engineering?*

Since English allows (and often prefers) preposition stranding, one might expect (46a) with “coordinator stranding” to be possible, but it is not. Coordinator pied-piping (i.e. movement of the coordinator along with the questioned phrase) is not possible either (\**And what sofa will he put the chair between some table \_?*).

The Coordinate Structure Constraint is sometimes used as a test for coordinatehood where there might be some doubt over the coordinate status of a construction. Thus, Abdoulaye<sup>o</sup> (§ 4.1) invokes it to argue that in Hausa, the element *dà* occurs in a coordinate construction when it is translated as ‘and’, and in a dependent prepositional phrase when it is translated as ‘with’. (47a) shows *dà* in its ‘with’ meaning, and (48a) shows it in its ‘and’ meaning. The (b) sentences show fronting of the *dà*-phrase, and the ungrammaticality of (48b) is due to the Coordinate Structure Constraint, showing that the two different *dàs* behave differently syntactically.

- (47) a. *Yaa zoo nanniyà (tàare) dà yàara-n-shì.*  
 3SG.M.PFV come here together with children-of-3SG.M  
 ‘He came here with his children.’

- b. (Tàare) *dà yâara-n-shì fa, yaa zoo nanniyà* \_.  
 together with children-of-3SG.M indeed 3SG.M.PFV come here  
 ‘With his children (indeed), he came here.’
- (48) a. *Abdù yaa kashè kàree dà mussàa.*  
 Abdu 3SG.M.PFV kill dog and cat  
 ‘Abdu killed the dog and the cat.’
- b. \**Dà mussàa kàm, Abdù yaa kashè kàree* \_.  
 and cat indeed Abdu 3SG.M.PFV kill dog  
 ‘And the cat, Abdu killed the dog \_.’

The second part of the Coordinate Structure Constraint is responsible for the impossibility of extraction from clausal conjuncts, as illustrated in (49).

- (49) a. \**What did Maria sell \_ and Robert got angry?*  
 b. \**Who did Robert sleep too long and Maria phoned \_?*

The Coordinate Structure Constraint as formulated in (45) only bans extraction out of coordinate structures, but questions (and other focusing constructions) targeting an element of a coordination are often disallowed even if the focused phrase is not displaced. Thus, in Tsakhur, sentence (50) is impossible, even though the question word occurs in situ:

- (50) Tsakhur (Kazenin & Testelets°, ex. 24b)  
 \**Rasul-ē hižōn al,a<sup>2</sup>-u, mašin ališ<sup>3</sup>-u?*  
 Rasul-ERG what(4CL) build-COORD(4CL) car(4CL) buy-PFV(4CL)  
 (lit.) ‘Rasul built what and bought the car?’

Again, these phenomena have often been cited in arguing for the coordinate status of clause combining constructions. The ungrammaticality of (49a) can be taken as evidence that the second constituent is not a subordinate clause, because extraction from a main clause that is followed by a subordinate clause is possible (cf. *What did Maria sell \_ so that Robert got angry?*). However, (49a) says nothing about the status of the first constituent, because in general it is not possible to extract from a finite subordinate clause either (cf. \**What did Robert get angry because Maria sold \_?*). Sentence (49b) is even less useful in distinguishing between subordination and coordination, because extraction would be impossible anyway even if one or the other constituent were a subordinate clause (*Since Robert slept too long, Maria phoned X; Robert slept too long so that Maria phoned X*; in both these sentences, X cannot be replaced by *who* and fronted). Thus, the impossibility of extraction from a clause in a complex sentence is not an automatic argument for coordinate status — first it has to be demonstrated that extraction from a corresponding subordinate structure would be possible. Baker (1996: 459–60) claims that (51a) is a coordinate structure, despite its English translation.

- (51) Mohawk (Iroquoian; Baker 1996:460)
- a. *S-hon-ahtáty-u*                      *s-hon-ather-unyá-hn-u*.  
 ITER-M.PL.O-move-STAT ITER-M.PL.O-basket-make-PURP-STAT  
 ‘They have gone home to make baskets.’
- b. \**Nahóta s-hon-ahtáty-u*                      *s-a-hun-unyá-hn-e’?*  
 what ITER-M.PL.O-move-STAT ITER-FACT-M.PL.S-make-PURP-PUNC  
 ‘What have they gone home to make?’

Baker’s main argument for the coordinate status of (51a) is the impossibility of (51b), which contrasts with the grammaticality of the English translation (involving a non-finite subordinate structure). But this argument is convincing only if we know that extraction from corresponding subordinate structures is possible in Mohawk, as it is in English (note that even a closely related language like German does not allow such extraction: \**Was sind sie nach Hause gegangen, um zu machen?* ‘What have they gone home to make?’).

Conversely, when extraction is possible in a construction whose English counterpart is coordinate and disallows extraction, this is usually taken as proof that we are not dealing with coordination, but with subordination. Thus, in Lai extraction is possible from the second constituent clause, as shown in (52) (which is similar to 49b):

- (52) Hakha Lai (Peterson & VanBik°, ex. 28)
- Zày=da? làwthlawpaa=ni? tihaàŋ ?a-dín-di?-naa?in*  
 what=INTERR farmer=ERG soup 3SG.SUBJ-drink<sub>2</sub>-COMP-CONCESS  
*sayaâpaa=ni? ?a-?ay-ʃhiamʃhiam?*  
 teacher=ERG 3SG.SUBJ-eat<sub>2</sub>-still  
 ‘What did the farmer drink all the soup but the teacher still ate \_?’/  
 ‘What, although the farmer drank all the soup, did the teacher still eat?’

Peterson & VanBik take this as showing that the Lai construction is not coordinate, but shows subordination of the first constituent (cf. the second translation). However, it is not clear whether the Coordinate Structure Constraint is a true universal, because extraction from coordination has not been studied systematically for very many languages. Perhaps there are languages with constructions that look like coordinations by all other criteria, but that still allow extraction freely.

A widespread view is that the Coordinate Structure Constraint can be subsumed under the general requirement that coordinated categories should be of the same syntactic type (Schachter 1977, Gazdar 1981). However, this view of the Coordinate Structure Constraint as a syntactic constraint has recently been challenged by Culicover & Jackendoff 1997 and Yuasa & Sadock 2002. These authors argue that the Coordinate Structure Constraint is a semantic constraint. Some observations made in this volume (Peterson & VanBik°, § 2.5.4, and Kazenin & Testelets°, § 4.1.2, § 4.2) seem to confirm this view because they show that the acceptability of extraction sometimes depends on the interpretation of the complex sentence.

## 10. Ellipsis in coordination

Whenever two elements are coordinated that are smaller than complete clauses, one can suspect that we are dealing with special constructions allowing ellipsis (or “deletion”, or “reduction”) in coordinate structures. Consider the examples in (53), where possible ellipsis sites are indicated by “Ø”.

- (53) a. (English) *Robert is at home but Ø has no time.*  
 b. (German) *Maria möchte einen roten Ballon und einen weißen Ø.*  
 ‘Maria wants a red balloon and a white one.’  
 c. (Hausa) *rikirkitaccen dookii dà Ø jàakii*  
 confused.SG horse and donkey  
 ‘confused horse and confused donkey’  
 (Abdoulaye°, ex. 16a)

However, in many cases of apparent ellipsis, a description in different terms is clearly preferable. Thus, for (53a) one would say that we are not dealing with two coordinated clauses (one of which has an ellipted subject), but with two coordinate verb phrases: [<sub>NP</sub> *Robert*]<sub>[VP]</sub>[<sub>VP1</sub> *is at home*] *but* [<sub>VP2</sub> *has no time*]]. Terrill° discusses a similar case in Lavukaleve (her ex. 16):

- (54) *solo-al o kofitaol vo-na*  
 mountain-PL and valley.PL 3PL-in  
 ‘over mountains and valleys’

Here the structure could conceivably be [<sub>PP</sub> [<sub>PP</sub> *soloal* Ø] *o* [<sub>PP</sub> *kofitaol vona*]], with an ellipted postposition in the first PP, but the evidence of number agreement shows that it must be [<sub>PP</sub> [<sub>NP</sub> [<sub>NP1</sub> *soloal*] *o* [<sub>NP2</sub> *kofitaol*]] *vona*]: When both conjuncts are singular, the postposition still shows plural agreement, so it must combine with a conjoined NP (e.g. *ovulita o ki’kile vo-na* [his.shield and axe 3PL-in] ‘on his shield and axe’).

Another alternative to coordinate ellipsis is simple discourse ellipsis (or “anaphoric ellipsis”). Many languages allow discourse ellipsis more freely than the European languages, and this makes it more difficult to find true cases of coordinate ellipsis. As (53b) shows, there are even cases where German is different from English in allowing discourse ellipsis: Headless NPs with adjectives may be used in balloon anaphoric contexts (e.g. *Welchen Ballon möchtest du? Den roten.* ‘Which balloon would you like? The red one’). Thus, the ellipsis construction in (53b) has nothing to do with coordination.<sup>6</sup>

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6. Abdoulaye° cites a similar example from Hausa (his ex. 17), which should probably be analyzed like the German example as well (cf. Newman 2000: 32, § 3.2.4).

But there are of course genuine examples of ellipsis that occur only in coordinating constructions. An example of this kind is (53c) from Hausa. This cannot be an example of coordination of a smaller constituent (say, [<sub>NP</sub> rikìrkitaccen<sub>A</sub> [<sub>N</sub> dookii<sub>N</sub> dà jàakii<sub>N</sub>]]) because the adjective *rikìrkitaccen* shows singular agreement, and a conjoined agreement controller [*dookii dà jàakii*] would require plural agreement. It cannot be simple anaphoric ellipsis either because there is no construction of anaphoric ellipsis of adjectives. Thus, it must be an example of **forward coordinate ellipsis** (or **analipsis**). An example of **backward coordinate ellipsis** (or **catalipsis**) in NPs is shown in (55).

(55) German

*Eine Stimme für Ø und drei Stimmen gegen den Kanzler waren ungültig.*  
 ‘One vote for Ø and three votes against the chancellor were invalid.’

This cannot be a coordination of a smaller constituent because *eine Stimme für* is not a constituent, and it cannot be cataphoric ellipsis because prepositional complements cannot be anaphorically omitted (let alone cataphorically).

Most of the discussion of coordinate ellipsis in the literature has concerned constituents of clauses rather than constituents of noun phrases. In clausal coordination, it seems that we most often find analipsis of a constituent in the second coordinand. If the constituent is in a clause-medial position (thus leaving a gap), this type of analipsis is called **gapping**, as in (56b).

(56) a. Basque (Saltarelli 1988:90)

*Gu-re herri-ko mutil-ak trakets-ak d-i-ra*  
 we-GEN village-REL boy-PL.ABS clumsy-PL.ABS 3ABS-PRES-be  
*neska-k ordea iaio-ak Ø.*  
 girl-PL.ABS however agile-PL.ABS

‘They boys in our village are clumsy, the girls, however, Ø agile.’

b. Gulf Arabic (Holes 1990:68)

*ʕali ʕaʕa ʔahmad galam u Ø Maryam kitaab.*  
 Ali gave Ahmad pen and Maryam book  
 ‘Ali gave Ahmad a pen and Ø Maryam a book.’

Catalipsis is largely restricted to the ellipsis of a constituent on the right periphery of the first constituent. In verb-final structures, the verb may be omitted in this way:

(57) German (subordinate clause)

*...dass Robert Saft Ø und Maria Bier trinkt.*  
 ‘...that Robert drinks juice and Maria beer.’

A similar construction is cited from Lai by Peterson & VanBik<sup>o</sup> (they also report an alternative construction analogous to 56a).

- (58) Hakha Lai (Peterson & VanBik<sup>o</sup>, ex. 68b)  
*Làwthlawpaa Falaám sayaàpaa Tidim ?àn-kal.*  
 farmer Falam teacher Tedim 3PL.SUBJ-go<sub>1</sub>  
 ‘The teacher went to Tedim and the farmer to Falam.’

What is unexpected here is the plural agreement on the verb: Ordinarily we expect plural subject agreement only if the subject is a conjoined NP. However, here only an analysis in terms of catalipsis seems to be possible (i.e. [<sub>S</sub> *Làwthlawpaa Falaám* Ø][<sub>S</sub> *sayaàpaa Tidim ?àn-kal*]), because the subject and the locational phrase are not a constituent (thus ruling out the analysis [<sub>X</sub> *Làwthlawpaa Falaám*] [<sub>X</sub> *sayaàpaa Tidim*] *?àn-kal*).

Much too little is currently known about coordinate ellipsis in the world’s languages. The phenomenon has been studied extensively for the major European languages (see Schwabe & Zhang 2000 for a recent collection of articles), but for non-European languages we know very little about it. Unfortunately, ellipsis is not widely discussed in the contributions to this volume either (but see Peterson & VanBik<sup>o</sup> §4, Abdoulaye<sup>o</sup> §3.2, Terrill<sup>o</sup> §4.3).

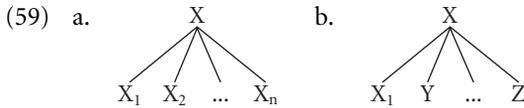
## 11. Coordination and subordination/dependency

In this section, we return to the question of how coordination should be defined in such a way that the notion can be applied cross-linguistically. In particular, it is often not immediately obvious whether a construction consisting of two constituents involves coordination or subordination/dependency.<sup>7</sup>

One possibility is to define coordination and dependency in a purely formal sense. Thus, one could say that a coordinating construction is one in which all of the constituents are of the same syntactic category and this is also the category of the whole construction (as shown in 59a). By contrast, a dependency construction would be one in which the category of the whole construction is determined only by one of the constituents (the head), while the other constituents (the dependents) play no role in this respect (as shown in 59b).<sup>8</sup> (The figures in (59a–b) were taken from Yuasa & Sadock 2002:90.)

7. The term *subordination* is generally restricted to clauses in the current literature (cf., e.g., Cristofaro 2003, who says nothing about other constituent types), while the term *dependency* is used more widely.

8. The structure in (59a) is close to the one traditionally assumed in generative grammar, but more recently, a rather different structure (looking much more similar to dependency) has been widely adopted. See, e.g., Johannessen (1998) and Progovac (2003) for discussion, and Borsley (1994) for a skeptical voice.



This definition of coordination is adopted by Gil (1991) and Gil<sup>o</sup> (§5.3), who claims that in Riau Indonesian, a simple sentence such as *makan ayam* [eat chicken] ‘chicken is eating, etc.’ is an instance of coordination. (This is so because in Gil’s analysis of Riau Indonesian, words like *makan* ‘eat’ and *ayam* ‘chicken’ belong to the same syntactic category (“S”) as sentences; see Gil 2000.) Appositive constructions like *Ms. Bannerjee, the teacher* (or *the teacher, Ms. Bannerjee*) would presumably also fall under this definition of coordination. However, it is not immediately clear that constructions like *Robert and Maria* would be classified as coordination by this definition, because they are generally thought to have the structure  $[[Robert] [and Maria]]$ , i.e. they are not perfectly symmetrical (see the discussion above in §2).

For these reasons, it seems that a semantic definition better captures the actual current usage among linguists. The following definition is given in Haspelmath (to appear a):

The term *coordination* refers to syntactic constructions in which two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements.

This definition entails that constructions with a comitative-derived coordination marker like Russian *Saša s Mašej* ‘Sasha and Masha’ are also considered as instances of coordination (see the discussion in §5 above), although they are syntactically asymmetrical in that only the first conjunct shows the case assigned to the entire NP, while the second conjunct shows a case assigned by the (preposition-derived) coordinator *s* ‘with; and’.

Similarly, complex sentences with two clausal constituents like (60) can be considered coordinations:

- (60) Japanese (Yuasa & Sadock 2002:92)  
*Ojii.san-ga yama-de hatarai-te, obaasan-ga mise-no*  
 old.man-NOM mountain-at work-COORD old.woman-NOM store-GEN  
*ban-o shi-ta.*  
 sitting-ACC do-PAST  
 ‘The old man worked at the mountain, and the old woman tended the store.’

Yuasa & Sadock (2002) mention five criteria that show that we are dealing with coordination here, and not with a sentence consisting of a subordinate and a main clause:

- i. **Reversibility:** Changing the order of the conjuncts does not affect the truth conditions.
- ii. Application of the **Coordinate Structure Constraint:** The constituents of one clause cannot be questioned separately (e.g. ‘The old man worked/working at the mountain, (and) who tended the store?’; such sentences are impossible).
- iii. **No backward anaphora:** A pronoun in the first clause cannot corefer with a full NP in the second clause (e.g. ‘His<sub>i</sub> wife worked/working at the mountain, (and) the old man<sub>i</sub> tended the store’; such sentences are impossible).
- iv. **Multiple conjuncts** are possible.
- v. All the conjuncts are **equally asserted**.

However, the Japanese *-te*-construction differs from the English *and*-construction in that the tense information on the verb is omitted from the first verb. In this respect, the construction is not symmetrical. Yuasa & Sadock (2002) propose that this state of affairs can be understood as a mismatch between the semantic and the syntactic properties of the construction. While (60) is a **coordinate** structure **semantically**, it is a **subordinate** structure **syntactically**. They make a similar argument with respect to the Russian comitative conjunction construction *Saša s Mašej* (or rather its very similar analog in Yiddish).

At first glance, it appears that this proposal is a perfect compromise between the two positions that we contrasted earlier in this section: Rather than asking ourselves whether coordination should be defined formally/syntactically (as in Gil 1991, Gil<sup>9</sup>) or semantically (as in Haspelmath, to appear a), we could say that coordination can be defined at both levels, and that some constructions show coordination both semantically and syntactically, while other constructions are semantically coordinate and syntactically subordinate (“pseudo-subordinate”).<sup>9</sup>

Unfortunately, the properties of constructions do not always line up so nicely. First of all, Yuasa & Sadock have to make the surprising claim that not only constraints on anaphora (cf. (iii) above), but also the Coordinate Structure Constraint is sensitive to the semantic structure rather than the syntactic structure. Second, they have to claim that agreement is semantically determined as well, because comitative-conjunctive constructions (which they claim are syntactically subordinate) typically show number and gender agreement with both conjuncts rather than just the purported syntactic head.<sup>10</sup>

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9. Constructions of the opposite type, showing semantic subordination and syntactic coordination, are also possible according to Yuasa & Sadock. They cite the example described by Culicover & Jackendoff (1997) as a case in point.

10. I give Polish examples rather than Russian examples here because Polish has gender agreement also in the plural.

- (61) Polish (Tomasz Bak, p.c.)  
*Jelena z Anią by-ł-y cały dzień na wycieczce.*  
 Jelena with Ania be-PAST-F.PL all day on excursion  
 ‘Jelena and Ania were all day on an excursion.’

Third, if restrictions on anaphora are sensitive to the semantic structure rather than the syntactic structure, one would expect that Polish *i*-conjunction (‘and’) and *z*-conjunction (‘with’) should behave alike. However, they do not: *i*-conjunction requires a non-reflexive possessive pronoun in the second conjunct, while *z*-conjunction requires a reflexive pronoun, like dependency constructions:

- (62) a. *Ania i jej nauczycielka były na wycieczce.*  
 Ania and her teacher were on excursion  
 ‘Ania and her teacher were on an excursion.’  
 b. *Ania ze swoją nauczycielką były na wycieczce.*  
 Ania with her.REFL teacher were on excursion  
 ‘id.’

Fourth, it is not so clear what exactly it means for a constituent to be category-determining — recall that this is the main criterion for establishing head status, and hence dependency structures. According to Yuasa & Sadock, in the Japanese example (60), we have syntactic subordination because only the second clause contributes the tense information of the sentence, i.e. the second clause is the syntactic head, and the first clause is the syntactic dependent. However, the omission of identical elements in one of the conjuncts is of course very common. For example, we have the following gapping construction in German, where the auxiliary verb is omitted in the second clause (the literal English translation seems to be ungrammatical):

- (63) *Die Frau hatte gearbeitet und der Mann Ø den Kindern das Essen gegeben.*  
 ‘The woman had worked and the man (had) given the children the food.’

As in the Japanese example, the conjunct that contains the coordination marker lacks the tense element. Presumably, Yuasa & Sadock would not want to say that this sentence is syntactically subordinate, or else they would have to regard all cases of coordinate ellipsis as subordinate, contrary to almost everything that has been said about these constructions in the past.

Fifth, Yuasa & Sadock’s discussion implies that differences in case-marking automatically lead to an analysis in terms of syntactic subordination/dependency. However, cases like the following are actually very common:

(64) Mari (Uralic; Wälchli 2001:46)

*Tide ača-m                      da    ava-m-lan                      pölek.*

this father-1SG.POSS and mother-1SG.POSS-DAT present

‘This is a present for my father and my mother.’

Wälchli (2001) (see also Wälchli 2003:§ 2.4) discusses the question whether there are reasons to regard these constructions, where only one of the conjuncts has the marking that applies to the whole coordinate construction, as “asymmetrical” (i.e. “syntactically subordinate” in Yuasa & Sadock’s terms). He concludes that this is not the case if one allows the possibility of affixes combining with phrases, so that the dative suffix *-lan* can be said to have scope over the entire coordinate phrase *ačam da avam*. Similarly, one could also say that the Japanese tense marker *-ta* in (60) has scope over the entire coordinate phrase [X-*te* Y], and the construction would then look formally symmetrical, i.e. coordinate syntactically as well as semantically.

Thus, it appears that the simple idea of semantics/syntax mismatches in coordination will not solve all the problems. It remains difficult to operationalize the basic undisputed intuition that coordination involves symmetry, while subordination involves asymmetry. There are many constructions showing mixtures of both, and we are only at the beginning of understanding what constraints there might be on such mixtures. It is hoped that the data and discussions of this volume will ultimately contribute to a deeper understanding of this and other puzzles about coordination.

## Abbreviations

ACT	action particle	INTER	interrogative
AGT	agent	ITER	iterative
CL	class (= gender)	NAR	narrative past
CLF	classifier	NONFIN	nonfinite
COLL	collective	O	object/patient-like argument
COM	comitative	PAT	patient
CONCESS	concessive	PERS	personal article
CONT	continuous	PUNC	punctual
COORD	coordinator	REC	reciprocal
COP	copula	SBD	subordinate
FACT	factual	STAT	stative
GER	gerund	SURP	surprise
IMPS	impersonal	WP	witnessed past

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