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The Annual Proceedings of the Berkeley Linguistics Society is published online via eLanguage, the Linguistic Society of America's digital publishing platform.
"Subordination" in Universal Grammar
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1 Introduction

The labels "subordinate" and "coordinate" are as familiar and comfortable for those of us with Western grammatical training as any that have come down to us in this tradition. However, experience with the linguistic literature in recent years suggests that linguists have often either taken the term "subordination" as a primitive requiring no definition, or attempted to establish a set of criteria according to which a "subordinate clause" can be identified. Both of these approaches to "subordination" have had unfortunate consequences. If the term is taken as a primitive, then it is typically not made clear just what clauses or clause types within a given language it is intended to cover. At best, it can be assumed that it is meant to include all clauses which are non-"main". But then we know of no attempt in the literature to define "main".

The more rigorous attempts to establish criteria, however, seem not to have been much more fruitful. In fact, the traditional criteria for "subordination", including dependence, reduction, back grounding, and preposability, among others, seem to be at best ex post facto rationalizations of our own (Western educated) "intuitions", which renders them completely circular. Moreover, they are often inconsistent or language specific. The reason for this, we think, is that "subordinate clause" does not seem to be a grammatical category at all. That is, there does not seem to be a single function or even a group of functions that we can think of this category as having been designed, as it were, to serve. It is for this reason that we are suspicious of another notion which has proven to be insightful in certain other cases (see, e.g., Comrie (1981), Givón (1979), Hopper and Thompson (1980), and Hopper and Thompson (1984)) , that of the prototypical exemplar of the grammatical category.

Some linguists, such as Kuno (1973:209) and others, have suggested that the coordination/subordination dichotomy should be replaced by a continuum. Appealing as this suggestion may seem, however, adopting this approach would still involve treating as unidimensional a phenomenon which, as we will try to show, is essentially a multidimensional one.

For these reasons, then, because the term "subordination" seems to be at best a negative term which lumps together all deviations from some "main clause" norm, and thus treats as unified a set of facts which we think is not a single phenomenon, we have found it more fruitful to tease it apart into its
component parts. We applaud previous attempts in this direction (e.g., Andersson's distinction between "semantic" and "syntactic" subordination (1975)), but our own approach will be quite different: we will show that there are a number of different properties involved in what people have heretofore called "subordination", and that a better understanding of clause combining phenomena can be achieved if we consider each of them separately, and abandon the notion of "subordination" entirely. Note that this is not to say that there is no distinction between clauses which have traditionally and recently been labeled as "subordinate" and "coordinate", but rather that what has been called "subordinate" may be more appropriately viewed as a composite of factors.3

Teasing apart these factors, then, could be done in several ways. In future research we plan to consider semantic and discourse relationships between clauses; what we would like to do in this paper is to propose that there are at least seven independent formal properties that are often associated with clause combinations designated as "main - subordinate". The list is by no means intended as exhaustive; we simply want to show what types of factors we think underlie the compositeness of the notion "subordination".4

1. Identity between the two clauses of subject, tense, or mood
2. Reduction of one of the clauses
3. Grammatically signalled incorporation of one of the clauses
4. Intonational linking between the two clauses
5. One clause is within the scope of the other
6. Absence of tense iconicity between the two clauses
7. Identity between the two clauses of speech act perspective

2 Properties of Non-coordinate clause combinations

2.1 Identity between the two clauses of subject, tense, or mood

Identity of subject, tense, or mood may lead to a reduction of one clause. This property is exemplified by same-subject participials such as in English

Leaving her family behind, she fled
in which the subject, tense, and mood of the two clauses are identical; 
this identity then allows these categories in the participial clause to be 
unspecified. Although the clauses reduced under identity in such 
combinations have often been described as "subordinate" (see, e.g., 
Underhill (1976) for Turkish -lp clauses and Kuno (1973) for Japanese -te 
clauses), there is considerable cross-linguistic evidence, assembled in 
Haiman (1983), that the mechanism for the reduction involved with this type of 
identity is exactly the same as that found with "gapping" and is thus 
characteristic of coordinate constructions as well. That is, WHICH clause is 
reduced may depend less on the "subordinate" nature of one clause as 
opposed to the other than on the linear order of the identical element. 
Moreover, in a variety of languages, among them Japanese (Martin (1975)), 
Hindi (Davison (1981)), Lenakel (Lynch (1978), (1983)), Turkish (Lewis (1967), 
Underhill (1976)), and Hua (Haiman 1980)), the range of meanings of such 
reduced participial clause combinations seems to parallel that of ordinary 
coordinate clauses. 

We see, then, that identity between clauses of subject, tense, or mood 
may be reflected by the relative reduction of one of the clauses, but may not 
be a property that we should assume is characteristic of "subordinate" 
clauses.

2.2 Reduction of one of the clauses

We have already seen several ways in which reduction may be 
associated with identity of subject, tense, and mood. It is important to 
emphasize, however, that identity and reduction are often independent of 
each other. Reduction results, we maintain, from "discourse redundancy": 
the speaker does not say what isn't necessary for the communicative 
purposes at hand.

There are two formal ways in which clauses can be reduced. The first is 
what is known as "ellipsis", where material can be missing which could be 
restored in a fully specified version of the same clause. The second is what 
we might term "opposition loss", where oppositions associated with 
prototypical verbs (see Hopper and Thompson (1984)) are neutralized, 
resulting in what is often referred to as a "non-finite" verb form. The 
discourse factor underlying both of these types of reduction is the same: 
discourse redundancy. And discourse redundancy includes both 
predictability and irrelevance; both seem to be involved in both types of 
reduction.

For example, a Mandarin clause with a missing agent, such as 2, can be 
used either when the identity of the agent is known from context or when it 
doesn't matter who the agent is; in both cases, it would be redundant to 
mention it:
By the same token, in a pair of clauses of which one is reduced, a missing argument can be found under the same conditions of discourse redundancy: either its identity is known or is irrelevant, as illustrated in the English 3:

I recommend submitting a proposal immediately (see Thompson (1973) for discussion of the interpretation of missing subjects in such gerund complements).

Example 3 is also an illustration of what we are terming "opposition loss", in that the non-finite verb form submitting does not specify tense. Discourse redundancy also underlies this type of reduction: given the meaning of a verb such as recommend, the tense of the gerund is irrelevant since it is irreals.

However, it is clear that neither ellipsis of arguments nor non-finiteness is restricted to clauses which might be designated as "subordinate". Missing arguments occur in all types of clauses in languages with abundant zero-anaphora, which probably includes the majority of the world's languages, and a glance at languages such as the "chaining languages" of Papua New Guinea, like Hua (Haiman (1980)), Chuave (Thurman (1978)), Barai (Olson (1981)), and Tauya (MacDonald (to appear)), shows that non-finiteness resulting from identity is found only in clauses which can be shown to be coordinate: those which are typically tense-iconic and in the same tense and mood as the clause with which they are conjoined.

A second way, then, in which clause combinations can be distinguished is in terms of whether one of them is reduced, either by eliding arguments or by losing verbal oppositions. While reduction, especially opposition loss, has often been associated with clause types which have been labeled as "subordinate", it is clear that there is no correlation between them.

### 2.3 Grammatically signalled incorporation of one of the clauses

By "grammatically signalled incorporation", we mean a relationship between a pair of adjacent clauses such that one can be shown to be a part of the other by grammatical criteria. As with morphological incorporation, where the incorporated word loses its integrity as a word, clausal incorporation involves a clause losing its integrity as an independent speech act. Morphological incorporation is, of course, typically not marked, while clausal incorporation typically is marked: there are two useful criteria which provide evidence for grammatical incorporation: (1) one clause can be contained within the other, that is, surrounded by material from the other, as illustrated by the schema shown in 4:
(2) one clause can bear grammatical morphology which marks it as being a constituent of the other.

A simple and familiar example of grammatically signalled incorporation by the surroundability criterion would be a relative clause of the type found in many languages, as in the Mandarin 5:

wǒ bu xǐhuan chōu-yān de xuésheng
'I don't like tobacco student'

where chōu-yān de is surrounded by material from the other clause.

An example of grammatically signalled incorporation of type (2), where one clause is marked morphologically as being a constituent of another would be a complement clause marked for case, as is found in a number of languages. Yuman languages are rich with examples of this type of incorporation; here is an illustration from Mojave (Munro (1974:220)):

?inyep ? - u:co: - ĉ kw ny mi: - k
me 1 - make - SUBJ different-TNS
'I do it different'; 'My doing of it is different'

where the ĉ marks the first clause as the subject of the second.

Grammatically signalled incorporation, then, is incorporation of one clause within another where this incorporation is signalled by material of one clause surrounding another or by grammatical morphology marking one clause as being a grammatical part of another.

In fact, we think it is possible to talk about degrees of grammatically signalled incorporation as well, making use of the tagmemic distinction between nucleus and periphery (see, e.g., Elson and Pickett (1983:64)). The nucleus of any clause consists of the verb and those arguments whose case functions are governed by the verb; the periphery, of those arguments whose case functions are independent of the verb, and which are not necessary for the sentence to be understood. The ambiguity of 7 is a common minimal contrast pair:

We jumped on the table

The table is a nuclear constituent where it is the object of the directional verb jump on(to); it is a peripheral constituent where it is the object of the preposition on. In the first case, the clause suggests jumping from somewhere else onto the table, while in the second case, the clause suggests jumping up and down on the table.8

The notion of degrees of incorporation is nicely exemplified in many Indo-European languages, where we can find a contrast between "absolutive" clauses (ablative in Latin, genitive in Greek, dative in Balto-Slavic, nominative in English), which are peripheral and "conjunct
participles", which are clausal nuclear arguments of their verbs. We will use Latin, a language with a rich overt case morphology, to illustrate the contrast:

a. Aristide patriā pulsō, Persae Graecōs 8
   Aristides:ABL country:ABL expelled:ABL Persians Greeks
   aggressī sunt
   attacked AUX
   "Aristides having been exiled, the Persians attacked the Greeks"

b. Aristidem patriā pulsum vidērunt
   Aristides:ACC country:ABL expelled:ACC saw:3PL
   "They saw Aristides, who had been exiled"

In 8a., we have an ablative absolute construction, which by our definition of incorporation is a peripheral member of the entire sentence: that is, it is case-marked as being a part of the adjacent clause, but the important thing to note about the case of this clause is that it is ablative, that is, that it is absolute, which means that it is not governed by the verb.

In 8b., on the other hand, the conjunct participial clause is the object of the verb 'see'. Since it is a nuclear constituent, marked with an accusative case marker, it is more tightly incorporated into the sentence than the absolute construction.

Degree of incorporation might be expected to correlate with other indices of "closeness" between two adjacent clauses. In this particular case, degree of incorporation correlates with one of our other parameters: identity of subject. To oversimplify somewhat, the ablative absolute construction in Latin (as in 8a.) is used where no NP in the adjacent clause is identical with the subject of the absolutive clause, while the conjunct participle is used where some NP in the surrounding clause is identical with the subject of the incorporated clause. Thus, while the underlined constituents of both 8a. and 8b. are incorporated within the sentences where they appear, as signalled by their respective case marking, the degree of incorporation is greater in 8b., and it is precisely there that we find identity of subject. Thus, in this case, degree of incorporation indeed correlates with at least one other parameter of closeness between clauses.

Grammatically signalled incorporation, then, is yet another way in which a pair of adjacent clauses can be related. Like all of our parameters, it overlaps with what various grammarians would want to label as "subordinate", but in no way correlates directly with that notion.
2.4 Intonational linking between the two clauses

"Intonational linking" refers to the absence of an intonation break (generally a pause or falling intonation) between the two. If two adjacent clauses have no intonation break between them, they can be said to be "intonationally linked".

Intonational linking versus intonational breaking, of course, often correlates with a difference in communicative intent. Thus, for example, in Japanese, Martin (1975) shows that whether a structure S1-te S2 is taken as one clause or two depends on whether there is an intonation break between S1-te and S2:

9
hon o to - te (PAUSE) mimasi - ta
book OBJ take-PART'PLE
look - PST
a. (with pause) 'I took the book and read in it'
b. (without pause) 'I tried reading the book (to see what would happen')

With a pause 9 means something like translation a.; that is, the two verbs correspond to two events. Without the pause, as suggested by translation b., the second verb functions as a conative auxiliary with a meaning close to 'try to' (Martin 1975:541).

A similar distinction is made in Russian between what Rappaport (1979) has called "detached" and "non-detached" participial clauses. "Detached" participials are set off by pauses, and have phrase stress and a convex pitch contour, just like a separate clause. The invariable participial suffix -ja indicates that the subject, tense, and mood of the reduced clause are identical with those of the full clause with which it goes, but whether the participial clause plays the role of a manner adverb or of a separate clause is signaled by the presence or absence of an intonation break between the two clauses, as shown in 10:

Alik ne xodit (PAUSE) spottykajas' 10
Alik NEG walk stumbling

a. (with pause)'Alik doesn't go, because he stumbles'
b. (without pause)'Alik doesn't walk with a stumble'

p. 147

With the pause, 10 means something like what is indicated in the a. translation, where the two clauses suggest two separate events. Without the pause, the sentence has a message more like that shown in translation b., and the two verbs express one event.

Presence or absence of intonation breaks between two adjacent clauses, then, is another parameter in terms of which the relationship between two adjacent clauses in discourse can be described. (For further discussion of this parameter, see Chafe (this volume).)
2.5 One clause is within the scope of the other

When one of a pair of adjacent clauses is within the scope of the other, at least the following two types of options become available which are not possible when neither clause is within the scope of the other: (1) denying or questioning one of them also serves to deny or interrogate the other; (2) certain word order variations are available.

To illustrate (1), where scope can be shown by interrogation, we may cite a Hua utterance like 11, where the first clause is within the scope of the interrogative suffix on the second verb:

\[ p \quad \text{mi} \quad \text{na} \quad \text{de} \quad \text{ve} \quad \text{them-} \quad \text{give} \quad -3\text{SG:ANT.} \quad \text{eat} \quad -3\text{SG:INT.} \]

'Did she give it to them and eat?'

To protect the first clause from being in the scope of negation or interrogation on the second, a conditional desinence \text{-mamo} may be used, as in:

\[ p \quad \text{mi} \quad \text{mamo} \quad \text{de} \quad \text{ve} \quad \text{them-} \quad \text{give} \quad -3\text{SG:COND.} \quad \text{eat} \quad -3\text{SG:INT.} \]

'Given that she gave it to them, did she eat?'

In English, of course, there are minimal contrast pairs of the sort exemplified by the notorious 13:

a. They don't beat us because they love us

b. They don't beat us, because they love us

c. What did you walk along singing?

b. What did you stop playing tennis to look at?

c. What did she run out of the room hollering?

This freedom of word order, of course, is not found when neither clause is within the scope of the other:

\[ a. \quad \text{?What was it raining but you watched anyway?} \]

b. \text{?What did Sally make a phone call and George cook?}

\[ c. \quad \text{?What did George fix enchiladas although Sally can't eat?} \]

Similar evidence can be found in other languages. In Hindi, for instance, Davison (1981) points out that utterances whose first clause is a participial ending with the conjunctive participle \text{-kar} allow an element associated with the second clause, such as \text{ca\text{\textipa{yy}}} 'tea' in 16, to occur at the beginning of the utterance:
a. akeelei baiTh - kar caay pii
   alone sit - CONJ.PART. tea drink:PERF:FEM
   thii
   be:PST:FEM
   'He sat alone drinking tea'

b. caay akeelei baiTh - kar pii
   tea alone sit - CONJ.PART. drink:PERF:FEM
   thii
   be:PST:FEM  'He sat alone drinking tea'

which suggests that the kar participial is within the scope of the second clause. This option is, again, not available for a pair of clauses neither of which is within the scope of the other:

a. akeelei baiTh - aa aur caay pii
   alone sit - PERF. and tea drink:PERF:FEM
   thii
   be:PERF:FEM
   'He sat alone and drank tea'

b. ? caay akeelei baiTh - aa aur pii
   tea alone sit - PERF and drink:PERF:FEM
   thii
   be:PERF:FEM

What these facts about interrogation, negation, and word order suggest, we think, is that when one clause is within the scope of another, operators such as negation and interrogation and gaps which are associated with one of the clauses are also associated with the other. Being within the scope of another clause, then, is another parameter often associated with "subordination" which is best viewed as just one of several ways in which clauses can be related.

Incidentally, whether one clause is within the scope of another often correlates, at least in one direction, with presence or absence of intonation break, which we discussed just above. That is, if there is an intonation break between a pair of clauses, then the intended interpretation is likely to be one of two separate communicative acts, where neither clause is within the scope of the other, as we illustrated above for examples like 9, 10, and 13. However, with no intonation break between the two clauses, one of them may or may not be within the scope of the other. Thus the two parameters, like all of the seven which we are considering here, can be seen to correlate to some extent, but must be analyzed as independent of each other.
2.6 Absence of tense iconicity between the two clauses

Tense iconicity is a characteristic of certain types of coordinate clauses in which the order of clauses corresponds to the order of events. In pairs of clauses in which there is no tense iconicity, we might expect that one or the other of them could be moved, and in fact moveability is a function of the lack of tense iconicity in specific well-defined circumstances, at least in some languages (perhaps only those with long written traditions). Clauses in certain relationships appear to be moveable with respect to their associated clauses, we suggest, when these relationships can be manipulated for discourse purposes. So clauses which specify condition, time, place, manner, purpose, etc., for the associated clause are subject to the same discourse factors affecting their position as are other adverbial words and phrases, factors such as discourse continuity and thematicity. Thematicity has to do with the mode of development of a text or portion of a discourse: as Fries (to appear) and Thompson (to appear) have shown, initial position for such adverbial elements is reserved for those which provide orientation for the following material or guidance for the addressee's attention. So, in English, it can be shown that final purpose clauses as in 18a. are found under discourse conditions quite different from those in which initial purpose clauses, as in 18b., are found:

a. They took me into the market town to buy provisions
b. To pass the time, there was a shipboard craze for fancy rope work.

Thus, absence of tense iconicity is a feature of clauses which can be designated as "moveable", and the moveability is easily demonstrated to be subject to discourse concerns. Once again, there is clearly no correlation between absence of tense iconicity and what one might want to call "subordination".

2.7 Identity between the two clauses of speech act perspective

By "speech act perspective", we mean essentially the difference between direct and indirect speech. Munro (1982), in her investigation of this difference, takes as her point of departure Partee's (1973) observation that "the quoted sentence is not syntactically or semantically a part of the sentence which contains it", and shows how, in a variety of languages, indirect speech complements of verbs of saying differ from direct speech: direct speech cannot appear with complementizers, case-marking affixes, or other signs that indicate that the verb of saying is a transitive verb with the direct speech quote as its object.

By a wide variety of criteria, the indirect speech complement is widely assumed to be "subordinate" in a way that the direct quote is not. Yet there is
clearly no sense at all in which the direct quote of a sentence like 19 would be either more or less semantically "subordinate" than the indirect speech complement of 20:

Uncle Harry said, "I caught a four-foot-long fish" 19

Uncle Harry said that he'd caught a four-foot long fish 20

It is also just as clear that there is no semantic sense in which the effective verb said in 19 is less "transitive" than the indirect speech verb said in 20.

We maintain that the reason for the grammatical distinctions between these two types of clauses is that in the case of direct speech, the speaker of a sentence like 19 is actually assuming two different points of view, his/her own and that of the person being quoted. As Wierzbicka (1974) has correctly pointed out, direct speech is a kind of playacting, in which the speaker imagines himself or herself to be someone else. Another view of the same phenomenon is the familiar use/mention distinction. In either case, what we may have been thinking of as "subordination" actually reflects identity of speech act perspective rather than what the dictionary and common wisdom construe as "subordination".

3 Conclusions

What we have tried to do in this paper is to suggest that the notion of "subordinate clause" has caused a great amount of difficulty for grammarians, particularly those interested in language universals, because it refers to no single unitary grammatical category. Rather, the term encompasses a number of isolable and independent parameters, where each of these parameters involves a different relationship which two adjacent clauses in discourse can have with each other. Instead of assuming a simple binary distinction between "coordinate" and "subordinate" clause, therefore, we advocate the richer, more interesting, and more realistic approach of abandoning the notion "subordination" and instead determining which of the parameters of the sort we have suggested here seem to describe the relationship between the clauses in question and what the discourse factors might be that underlie each of these parameters. In this way, we think we can begin to understand some of the facts about clause combining in actual discourse.
We would like to thank the following people for their help in discussing various aspects of this paper with us: Wally Chafe, Matthew Dryer, Barbara Fox, Bill Mann, Jim Martin, Christian Matthiessen, Mickey Noonan, and Stephan Schuetze-Coburn. None of them necessarily agrees with the way we have made use of their input here. Authorship of this paper is shared equally.

Linguists working within the Systemic framework are exceptional in this respect: they have been careful to distinguish between "hypotaxis" (roughly, adverbial clauses) and "embedding" (roughly, sentential complements).

See also Pawley and Syder (ms) and Van Valin (this volume) for a similar line of reasoning.

Some of these factors are also discussed by Cumming (this volume) and (1984) and Van Valin (this volume).

To be sure, there is one very important further meaning that these "reduced coordinate clauses" are often mentioned as having which distinguishes them from "full" (i.e., unreduced) coordinate clauses: very frequently in discourse they mark simultaneity with the adjacent clause. This property seems to us iconically motivated by the diminution of linguistic distance (in the form of the reduction) between the two clauses. Two oft-noted correlates of this simultaneity are: (1) one clause comes to describe a concomitant activity, V1 and V2 then standing in a semantic relationship to each other of adverb and verb; (2) one clause comes to function as an auxiliary of tense, aspect, or mood, the two verbs then standing in a semantic relationship to each other as auxiliary and verb.

Our "reduction" seems to parallel Van Valin's "dependent" (this volume).

For discussion of morphological incorporation, see Hopper and Thompson (1984) and Mithun (1984)

In many languages, of course, such as German and Hungarian, 'the table' would be accusative in the former case, and in some oblique locative case is the second. In other languages like Mandarin, 'the table' would follow the verb in the former case, and precede it in the second. Such languages provide ample grammatical evidence for a nucleus/ periphery distinction.

REFERENCES


Pawley, Andrew and Frances Syder. Ms. "The One Clause at a Time Hypothesis". University of Auckland.


