SESSION SEGMENT AND WORD GROUPS: BASIC CONCEPTS OF JAVANESE SYNTAX

E.M. Uhlnebeck

Introduction

The main aim of this article is to show that sentence segment and word group are concepts indispensable for the description of the syntactic structures of Javanese. As the concept of sentence segment is less widely known than the concept of word group, more attention will be given to the former than to the latter. Both concepts have a place in a more general theoretical framework which has been used in the description of Modern Javanese by the present author. Before entering into a discussion of some Javanese data, it seems therefore necessary first to give some idea at least of those features of this theoretical framework which are of special relevance for the study of syntax.

Characteristic for the theoretical position adopted here is the point of view that the Swissian terms langue and parole should not be taken as referring to two distinct domains, but rather to two different sides of one and the same coin. Langue and parole are so intimately fused that the one cannot be studied in isolation from the other. This view implies that the distinction between competence and performance as proposed in transformational generative grammar is considered to be more of a hindrance to a fruitful study of lingual phenomena than an advantage, because it suggests a possibility of separation which actually cannot be effected and because it makes us believe that the object of linguistic study is only la langue, to be described as a system open to direct inspection and stored somewhere inside the brain of the native speaker neatly ordered in the way a linguist would like to describe it in a grammar. 1)

Closely connected with this appreciation of a close relationship between language and language use is the view that in the study of lingual phenomena one has always to do not with one but always with two basic units, namely words and sentences. 2) All linguistic efforts finally have to accept this basic duality. Language in its aspect of use is bipolar in its structure, that is, it is characterized by the simultaneous presence of two units equally fundamental, irrediscible and indefinable in terms of each other. Words are linguistic signs, that is they are unique entities of form and meaning, grammatically as well as semantically different from morphemes and having the property of combining with other words or word-like elements to groups. Grouping is a universal grammatical phenomenon which finds its raison d'être in the semantic consequences it has. A large area of syntax is concerned with describing the categorial rules which govern this phenomenon of grouping. Sentences on the other hand are characterized by the presence of two differently organized components, an intonational or melodic component and a phatic component, minimally consisting of one word, but in most cases of a number of words or word-like elements which always follow each other in time. For the study of syntax it is important to note that the universality of grouping and the linearity principle to be observed in this phatic component of the sentence, necessitate a distinction between sequence and order, the term sequence reflecting the linearity principle, the term order reflecting one of the means used in all languages to indicate groupings. The linearity principle is a general condition imposed on all languages. It merely says that within a sentence word A follows word B, which is again followed by word C and so on, without any implication as to structural relationships obtaining between them. The term order, however, refers to a syntactically relevant position of a word relative to another one or to a group within a sentence.

It is clear that this conception concerning word and sentence as correlative units operative in every instance of language use, is in several respects at variance at least with classical transformational theory which considers sentences to be strings of words or morphemes, which does not grant intonation the important status it has in our conception of the sentence, and which fails to appreciate the word as a unit with unique syntactic and semantic properties.

For the study of syntax it is of the utmost importance to realize that sentences always display a melodic dimension. If this dimension is neglected, the analysis of sentences becomes in our opinion simply impossible.

A third important aspect of our theoretical conception is that it is not assumed a priori that a linguistic description should have the form of one integrated system of rules. This would be too restrictive a view, not so much because of the fact that next to rules one has to reckon with the presence of exceptions as a language is always the result of a previous historical development, but mainly for the following three reasons. First of all it can be shown that a language is not a homogeneous and closed system. The often made comparison with a code which is perhaps acceptable for the phonological subsystem of a language, is highly misleading for characterizing a language as a whole, as especially its semantic aspect depends for its functioning on the ever-present extralinguistic sources of information. In the second place the correlative aspects of language, the grammatical and the semantic are not at all necessarily governed by the same type of rules. In fact, it is far from certain whether and to what extent it is permitted to speak of semantic rules at all, and the term semantic structure, so easily used in the current linguistic literature and often woefully empty of content, is very much in need of a critical examination. In the third place - and this is a circumstance of particular importance for the study of syntax - one finds in language both freedom and restraint, or to be more precise: there is combinatorial semantic freedom within a framework defined by obligatory syntactic and morphological rules. In this respect my position is very similar to the views recently expressed by Haas. 3) The importance of the distinction between what is obligatory and what is optional leads us to the methodological guideline that in syntactic analysis one should first try to find out and to describe as exhaustively as possible in the form of rules all that is absolutely obligatory.

One of the tasks of syntactic study has already been mentioned: to discover the rules which govern the grouping of words in the sentence. Some of our syntactic efforts, as far as Javanese is concerned, were directed towards this goal. It turned out, for instance, that given sufficient knowledge of the morphology of the language, the structure of nominal grouping could be described as governed by obligatory rules of order. 4) However, syntax comprises more than just this. It is also faced with the task to analyse the sentence itself as a unit. It turns out that sentences are
not undivided wholes, but, at least in Javanese, very often consist of sentence segments, each of them like the sentence itself, characterized both by an intonational and a phatic component, which may be a single word or a complicated word group. It is certain that Javanese syntax has as its domain the study of the complicated interplay between these two differently structured types of units. This does not imply that all syntactic phenomena lie within this domain. It would be a serious error to assume that they would always find their full explanation within the framework of the sentence. There are other syntactic facts which clearly transcend the sentential framework. As far as Javanese is concerned, this is more than obvious for anyone who has tried to interpret a Javanese text. That there are certain rules of topic-conservatism, for instance, cannot escape the attention of a careful reader. In the present article, however, these and other syntactic regularities pertaining to multientential complexes, will not come up for discussion.

Finally a few words must be said about so-called school-grammar and immediate constituent analysis which as is well known is closely related to traditional parsing procedures. In our present syntactic research of Javanese it was not found attractive to accept a priori the usefulness of ill-defined and Proteus-like concepts such as subject, predicate and object, in contrast to the distinction between topic and comment which has to play a central role in the syntactic description of Javanese, witness for instance the various types of topicalization constructions with ‘’ and ‘’. As for immediate constituent analysis, our attitude towards this descriptive device is even more cautious. Our main objection against it is that this rigid type of hierarchical analysis which pays little attention to intonational phenomena, is simply not capable of fulfilling the task of describing the often quite complicated network of relations existing between the words within a sentence or sentence segment.

The Javanese data

The data to be discussed in this article have been obtained in the following way. Passages taken from a story written in a genuine colloquial style by two Javanese authors for Javanese schoolchildren served as a starting point for extensive discussions with our informants, adult native speakers of the language. What was attempted was to explore as exhaustive-ly as possible the various syntactic possibilities of grouping and segmentation in order to determine the existing structural contrasts and to discover the semantic differences which might accompany them, with constant attention to the intonational dimension. It is a fact well-known in phonetics that the registration, let alone the description of intonational patterns, is still beset with many difficulties, theoretical as well as practical. Therefore no attempt has been made in this article to give an impressionistic description in terms of intonational contours or pitch levels. Given the fact that it proved to be possible for a non-native speaker of the language to adequately produce the required intonational patterns, to the satisfaction of the native speakers of the language, it was assumed that somehow these patterns were such that they could be learned, which again implies that they are describable in principle. It was an important advantage that as a result of previous research a fair amount of knowledge concerning the other subsystems (phonology, morphophonology and morphology) was available. Without such knowledge it is difficult to conceive how the study of syntax as envisaged here with its difficult problems of finding out what is obligatory and what is optional, could have been undertaken with any measure of success.

The Javanese story just mentioned opens with the following sentence:

(1) ndelioqi, Mêt, sabaqmu
     let (me) see, Mêt, your slate

This sentence turns out to consist of three sentence segments, each characterized by an intonational component and one word: ndelioqi, Mêt and sabaqmu. The first word within the first segment is an active verb form and means: to see; it is regularly used in informal speech, when speaker and hearer have the same social status. Mêt is formed according to a productive process of abbreviation, from the full name ‘slante'; while sabaqmu consists of sabag- 's'ate' and ‘mu the non-polite form of the possessive suffix of the second person. There are potential pauses between ndelioqi and Mêt, and between Mêt and sabaqmu, as is always the case between neighboring sentence segments, while the segment boundaries are also the place where paralinguistic voice phenomena, as discussed by Crystall and Quirk, may occur. The analysis into three segments is corroborated by the fact that the three segments if given the appropriate intonation-contour may in any order constitute a sentence. They are the sentences numbered (2) - (6):

(2) Ndelioqi / sabaqmu / Mêt
     let me have a look, at your slate, Mêt
(3) Mêt / ndelioqi / sabaqmu
     Mêt, let me have a look, at your slate
(4) Mêt / sabaqmu / ndelioqi
     Mêt, your slate, let me have a look (at it)
(5) Sabaqmu / Mêt / ndelioqi
     your slate, Mêt, let me have a look (at it)
(6) Sabaqmu / ndelioqi / Mêt
     your slate, let me have a look (at it), Mêt

It is this freedom of position relative to each other which is characteristic for sentence segments in general. As in the set of the six ndelioqi-examples each of the three segments contains only one word, they are not suitable for illustrating the difference between sentence segments and word groups. For this purpose the following four sets of six trisegmental sentences may serve:

I

Kuwat / ora biob / mangsuli
male name neg. can answer
Kuwat could not answer (him)

Ora biob / mangsuli / kuwat
Kuwat / mangsuli / ora biob

II

Bapak-ne / rumungso pintur / dadi tani
father-his feel clever being farmer
His father felt clever as (a) farmer

Bapak-ne / dadi tani / rumungso pintur
Bapak-ne / dadi tani / rumungso pintur
Bapak-ne / dadi tani / rumungso pintur
Bapak-ne / dadi tani / rumungso pintur
Dadi tani / bapaqê / rumbogê pîntêr
Dadi tani / rumbogê pîntêr / bapaqê

III
Ananê / wis kêpêngin / bali mênjarg sabrang
child his / already longing / return to / overseas
His children were longing to return to overseas
Ananê / bali mênjarg sabrang / wis kêpêngin
Wîs kêpêngin / bali mênjarg sabrang / ananê
Wîs kêpêngin / ananê / bali mênjarg sabrang / ananê
Bali mênjarg sabrang / ananê / wis kêpêngin
Bali mênjarg sabrang / wis kêpêngin / ananê

IV
Mas Di karo Mas No / sâbbên dînb / mangan bandêng
Mas Di and Mas No every day / eat bandêng
Mas Di and Mas No eat bandêng every day
Mas Di karo Mas No / mangan bandêng / sâbbên dînb
Sâbbên dînb / mangan bandêng / Mas Di karo Mas No
Sâbbên dînb / Mas Di karo Mas No / mangan bandêng
Mangan bandêng / Mas Di karo Mas No / sâbbên dînb
Mangan bandêng / sâbbên dînb / Mas Di karo Mas No

Here there are many segments which contain two or more words: orâ bisô in I, rumbogê pîntêr and dadi tani in II, wis kêpêngin and bali mênjarg sabrang in III and finally all the three segments of IV. In all these cases the rule holds that within each segment the word order is fixed. It is important to note then that sentence segments and word groups follow opposite principles: sentence segments are free as to order in relation to each other, while the formation of word groups is governed by strict rules of order.

The first question which presents itself is whether there are any differences corresponding with the six different orders of the segments within each sentence. In order to give an answer to this question, it is necessary also to take into account the following two sentences:

(7) ndîloqi / sabaqmu / Mêt
   let me have a look at your slate, Mêt
(8) Mêt / ndîloqi / sabaqmu
   Mêt, let me have a look at your slate

In contrast to the sentences (1) - (6), these two sentences (7) and (8) consist only of two segments, namely ndîloqi sabaqmu, and Mêt.

Comparing now respectively sentence (2) with sentence (7), and sentence (3) with sentence (8), one notices that the syntactic difference of the members of each pair exclusively resides in the fact that in the sentences (2) and (3) the word sabaqmu is the phatic component of a sentence segment standing in an intonational contrast to the other two segments in the sentence, while in the sentences (7) and (8) the word sabaqmu is part of a word group ndîloqi sabaqmu within one and the same sentence segment.

This difference in syntactic structure which is signaled by intonational means, has consequences as to the way the information inherent in the sentence is presented. The sentences (7) and (8) are explicit requests or friendly invitations (depending on the presence or absence of certain intonational or paralinguistic features) to the addressee to show his slate. In the sentences (1), (2) and (3), however, sabaqmu is added as an independent element by the speaker, as a kind of afterthought as it were, serving the purpose of avoiding any possible misunderstanding about what the speaker wants to see. The addition of the segment sabaqmu is something quite optional, as can be shown by comparing the sentences (2) and (3) with the shorter, more implicit segmental sentences:

(9) ndîloqi / Mêt
   let me have a look, Mêt
and
(10) Mêt / ndîloqi
   Mêt, let me have a look

In using these last two sentences the speaker assumes that the situation presents the addressee with sufficient clues for finding out what the speaker wants to see. The "last minute" adding of the segment sabaqmu may have been motivated in various ways. It may be that the speaker observed some doubt or hesitation on the part of the addressee as to what the speaker wants to see. It also may be that the speaker became slightly irritated or impatient, because in his opinion the addressee is reacting too slowly to his request, and there are surely other possible shades in emotional attitude. I have to add that in this case of a first sentence of a written dialogue sabaqmu may have been added for the benefit of the reader of the story who, having no direct access to the speech situation, assumed to be present by the writer, needs more information, a circumstance which forces the writer to report the dialogue in a more explicit form than would have been necessary in oral use of the language.

The comparison between the sentences (2) and (3) on the one hand against (7) and (8) on the other, only differing as to segmental structure, allows us to observe that (7) and (8) are simply flat requests which do not presuppose any special emotional overture on the part of the speaker. They are the unmarked sentences standing in contrast with the six trisegmental sentences which - be it not in the same way - are all marked, all containing a special feature of foregrounding of information, emphasis and/or emotional attitude. They also are in contrast with the sentences (9) and (10) by their greater explicitness.

Looking now into the six trisegmental sentences (1) - (6), one observes the following differences. First of all there are the pairs of sentences which only differ as to whether the segment which contains the proper name follows or precedes the segments containing the actual request. These are sentence (2) versus sentence (9), and (6) versus (4), and also of course (5) versus (7) and (10) versus (8). It is not surprising to find that there is only a very slight, barely perceptible difference between them. However, this does not mean that there is no difference at all. By letting Mêt precede the request, the speaker has an opportunity to set the tone as it were for his request, by superposing certain intonational features over Mêt, so that it becomes immediately clear to the addressee what the speaker's attitude towards him is. By beginning with the segment Mêt, the directness of the request is somewhat diminished. It is true that if the request precedes the "vocative" segment, it may still be a friendly one, but in general the sentences with Mêt in second position are more consonant with a stern, harsh or pressing request or demand than with a coaxing or cajoling invitation.

Much more clearcut is the difference between the sentences which only differ as to the position of the segment sabaqmu relative to the ndîloqi segment, namely the sentences (1) versus (5), (2) versus (6) and (3) versus (4).
Whenever the sabamu-segment precedes, it is emotionally highlighted as the primary topic of the sentence: your slate, Mêt, let me see it, the slate is what the speaker wants to inspect. While in (1), (2) and (3) the sabamu-segment may be viewed as an elaboration or specification - considered necessary by the speaker - of the request he has already made, in the sentences (4), (5) and (6) it is the slate which is of foremost importance. Or to use the terminology of the functional sentence-perspective theory, sabamu is to be viewed, in the sentences in which it precedes, as the intensified theme.\(^{10}\)

Comparison with the six trisegmental sentences shows that differences in the position of sentence segments have little to do with what one may call the cognitive-semantic content of the sentence. In all six sentences a request is made to see the slate of the addressee. Using traditional terminology, the interpretation of all six sentences requires that sabamu is considered to be the object of the verb n gàlóig, in all six sentences Mêt indicates the addressee. However, one should be careful here, because of the presence of the bisegmental sentences (7) and (8). Also in these sentences sabamu may be considered the object of n gàlóig, but the use of the same terminology should not make us blind to the fact that there is another factor involved. Sabamu as a word in the word group n gàlóig sabamu as in (7) and (8) is not at all to be identified with the sentence segment sabamu in the trisegmental sentences. It appears then that the mechanism of segmental mobility serves quite different functions than does word grouping. One hesitates to call them semantic functions. They can be characterized as supplementary to the semantic information which finds its source in the word and the word group. Differences in segmental order influence the way in which the semantic content of the sentence is built up, and presented: more neutral or highly emotionally coloured, with highlighting of some part at the expense of other parts, or more evenly spread, contextually dependent or contextually independent.

It is clear that here also the distinction between marked and unmarked may be fruitfully applied. Of the six tri- and bisegmental sentences those in which sabamu follows the n gàlóig-segment are the unmarked sentences, those in which it precedes, the marked ones. The marked sentences are the normal, the less emotional, the more frequently used; the unmarked sentences the special, less frequent and the emotionally coloured ones. Basically the same can be found with the four other sets of trisegmental sentences presented above. The sentences in which the nominal segment precedes the verbal one are in all cases the unmarked ones.\(^{11}\)

As stated earlier, the principle of segmental mobility is a very striking way coupled with the principle that word grouping is governed by strict rules of order. The combination of these two principles implies that in Javanese as a rule no groups are permitted consisting of non-adjacent elements. Sentences such as English: he called me up yesterday or in German: Er ist Leute wieder nach Haus gegangen, are very rarely found in Javanese.

It is an obvious line of research to look closer into these two principles and to find out whether the principle of segmental mobility is limited to a certain extent, and conversely whether the principle of strict order does not allow a certain degree of freedom in special constructions. It turns out that both principles are indeed not absolute: the mobility has certain constraints, the principle of strict order does not reign under all circumstances. We will discuss here some of the constraints of the mobility principle.

It is useful to realize at the outset that the number of possible segmental permutations rapidly increases with the number of segments per sentence. With trisegmental sentences one has 6, with four segmental sentences 24 and with five segmental sentences theoretically already 120 possible combinations. Although it is difficult to say anything definite on the maximum number of segments within a sentence, our experience is that sentences with two, three, and four segments are by far the most frequent sentence types. Sentences, especially in written language, become more complicated by a more involved structure of word groups within the segments rather than by a sharp increase in the number of segments. However, we have collected many sentences consisting of 4 segments which allow all the 24 different orderings of their segments.

Looking into the matter of constraints, there are as far as we can see two different types: first of all there are constraints which pertain to certain types of segments. For instance segments containing words belonging to certain word classes are not allowed to appear in certain positions. These are absolute restraints. An example of this is that segments containing conjunctions are favor allowed in final position. There are also relative restraints, or to use a better formulation: there are also tendencies. There is for instance a strong and not surprising tendency to have a segment containing an exclamation in first position. It is interesting to note that in sentences which have such a segment in first position, the order of the other segments also tends to be in harmony with this sentence segment which contains an exclamation. See for instance the sentences (11) - (16):

\[
\begin{align*}
(11) & \text{wah/} \quad \text{ora énåq/} \quad \text{yb kàng/} \quad o, (it is) not pleasant, isn't, older brother, \quad \text{ora sugih kəẉi} \quad \text{to be not rich} \\
(12) & \text{wah/} \quad \text{āngḷ/} \quad \text{sung kędęngin sugih kəẉi} \quad o, (it is) archaous, if one wants to be rich \\
(13) & \text{wah/} \quad \text{bändjūr kędęng̣/} \quad \text{kędęng̣?} \\
(14) & \text{wē phaḅ/} \quad \text{pantti̞n pandjăng-pundjang loh-dinaẉi} \quad \text{o,} \quad \text{really overflowing with milk and honey, tanah sabrang kəẉi (is) that country across the sea} \\
(15) & \text{wah/} \quad \text{mānṭī̞/} \quad \text{atikulḅ} \quad o, (relieved), (was), my heart! \\
(16) & \text{wah/} \quad \text{héng̣/} \quad \text{ki̞} \quad o, (how) pleasant (is) this
\end{align*}
\]

It is remarkable that in all these sentences the order of the other two segments is the marked one, that is here the one which conveys some sort of emotion on the part of the speaker. Notice that this marked order is not at all obligatory, as can be seen from the sentences (17) - (22) in which the order of the segments is the converse of the one of the first six sentences:

\[
\begin{align*}
(17) & \text{wah/} \quad \text{ora sugih kəẉi/} \quad \text{ora énåq/} \quad \text{yb kàng} \\
(18) & \text{wah/} \quad \text{sung kędęngin sugih kəẉi/} \quad \text{āngḷ} \\
(19) & \text{wah/} \quad \text{kędęng̣/} \quad \text{bändjūr kędęng̣?} \\
(20) & \text{wē phaḅ/} \quad \text{tanah sabrang kəẉi/} \quad \text{pantti̞n pandjăng-pundjang loh-dinaẉi} \\
(21) & \text{wah/} \quad \text{atikulḅ/} \quad \text{mānṭī̞!}
\end{align*}
\]
They are also perfectly acceptable, but the order of segments found in the sentences (11) – (16) fits in better with the initial exclamation or even makes the exclamatory force of the whole sentence stronger. It is certainly no accident that the story which I mentioned earlier, contained all the sentences (11) – (16) but not the sentences (17) – (22) which were elicited from informants. It is clear that with these subtle differences between these two sets of sentences one comes close to what others have given the name of stylistics, but what actually lies within the domain of syntax.

The second type of constraints on the mobility of sentence segments is connected with the presence of certain larger syntactic constructions requiring certain fixed configurations of sentence segments. One of these configurations is the emotional concessive bisegmental construction with word doubling in the first segment. The sentences (23) and (24) are examples of this construction:

(23) gampang - gampang / bdjè gèmampang
   even if it is easy, don't consider it easy

(24) wèdòq - wèdòq / pante_s dadi dèwuané
   although she is a woman, it is proper that she
   pañabuhan
   becomes the head of the village

In sentences of this type there is no possibility of changing the order of the two segments and the intonational pattern which is characteristic for this construction covers both segments, although like in other bisegmental sentences there is a potential pause between the two segments.

It is now time to conclude, although many points raised in this short article still ask for more discussion and above all for more documentation. Especially the interesting and complicated mechanisms for topicalization existing in Javanese would add strong arguments for the need to distinguish between word group and sentence segment. However, we do hope that we have been able to make clear that these two fundamental entities differ from each other in four important respects. They are the following: First: sentence segments are syntagmatic units, while word groups are essentially paradigmatic units. By this we mean that sentence segments are always in contrast with other segments in the sentence, while word groups can be described without direct recourse to the sentence. Secondly: the information segment and group contribute to the content of the sentence is quite different; sentence segmentation is basically more concerned with the presentation of the semantic information, word grouping more with the semantic content itself. Thirdly: both entities are governed by opposite organisational principles which do not operate in an absolute way, but show certain still incompletely known limitations. Fourthly: the description of the rules which govern their occurrence are not of the same type: there are strict rules, but in the realm of sentence segmentation there are also tendencies and preferences.

University of Leiden

NOTES

* Revised text of a paper given at the Annual Meeting of the Societas Linguistica Europaea held in Jyväskylä, Finland, 30 and 31 May 1974.

1. In the writings of the generative semanticists, however, positions are reached which are somewhat closer to our own, for instance when McCawley declares that not only syntactic structure but also semantic structure involves the grouping of elements rather than just their linear order ("A program for logic", in: D. Davidson and G.H. Harman (eds.), Semantics of Natural Language, 1972, p. 502).

2. This does not imply – of course – that there are no other (universal) units.


4. For a short account see "Some Preliminary Remarks on Javanese Syntax", Lingua 15 (1965) p. 53-70. The present article is a sequel and partly a revision of this earlier study. The basic orientation of both articles is largely the same, but in the earlier article the fundamental nature of the distinction between word group and sentence segment (in 1965 called: clause) was not yet seen in the right perspective.

5. A description of these constructions may be expected to become available in the near future. Extensive materials on obhèh-constructions have been collected by Mrs. Siti Sundari-Tjiitrosobono.


7. We are especially indebted to Mrs. R. Widya and those native speakers of Javanese which participated in a seminar on Javanese syntax in the academic year 1972-1973.

8. See P. Lin, "Oh en sont les études sur l'intonation?", Proceedings of the 7th International Congress of Phonetic Sciences, held in Montreal, 1972, p. 113-136.


11. I am aware that the four sets of trisegmental sentences are in need of a more detailed discussion, but within the framework of a short paper this proved to be impossible.