A brief history of structure

# Introduction

Finding the origins of the notion of a phrase is not easy. Most who write on the subject of the history of linguistics either don’t find it an interesting topic or take it for granted as already known. It is not even easy to find when the term first entered linguistics. Moreover, there are difficulties in investigating the issue even when we know that some school of thought used the term or a related one as it isn’t always clear that the notion that the term referred to in one framework is the same thing that we consider phrases to be. In this class I will try to trace the notion back to its origins.

# What a phrase is

## What a phrase isn’t

A phrase is NOT just a set of connected words in a sentence.

It is also NOT a set of words that holds together in a sentence or across a range of related sentences.

It is NOT DEFINED as a set of words that has the same distribution – though distribution is obviously taken as evidence that something is a phrase

## The definition of a phrase

Phrases are something that are defined and manipulated by the grammar.

This is clear from simple phrase structure rules:

(1) S 🡪 NP VP
 VP 🡪 V NP
 NP 🡪 Det N

The third rule defines the NP as something constructed of a determiner followed by a noun. The other two rules place NPs in certain positions.

We will see that this view of a phrase is only just over 50 years old. Although it is supposed to have come out of American structuralisms which itself started at the beginning of the 1900s, the notion of a ‘constituent’ which existed before was not the same.

# Signs of phrases in antiquity and post-classical studies

It is perhaps not surprising that the classical studies of language did not seem to come up with a notion of a phrase given that their main emphasis seemed to be on morphology (because the language was morphologically complex and free word order made ‘phrases’ difficult to identify).

Moreover, because of the nature of Greek learning, the study of language was often undertaken as part of the study of other phenomena, such as logic or physics. This makes it difficult to find out exactly what was understood as linguistic discussions are interspersed with those of things that we wouldn’t think of as being relevant today. This also lead to a more semantic bias in their view of language.

However Robins claims that Apollonius (C 200 BC) came up with something which might be construed as equivalent to immediate constituent analysis: *paralambdnesthai* = to be taken together and *symparalambdnesthai* = to be taken along in addition

e.g. *tachy elthon paidion onesen hemas* (quickly coming up, the boy helped us)

quickly *tachy* is associated with the verb come *elthon* which in turn is associated with the verb helped *onesen*

But this doesn’t amount to the notion of a phrase: it is a statement of semantic connections more like a dependency description than a structural analysis.

Robins also reports on an early middle-age grammarian, Thomas of Erfurt (early 1300s) in whose notions he also sees the foretelling of structural ideas. It seems he came up with the distinction between a ‘supposition’ and an ‘apposition’ which is similar to a head-complement relation. The supposition and the apposition are directly related to each other but only indirectly related to the sentence as a whole. However, again it doesn’t seem that this amounts to more than a recognition of dependency relations.

This kind of analysis hit its peak in traditional ‘school’ grammars, where parsing is a matter of categorising words and accounting for the relationships between them. Words, not phrases, are said to hold grammatical relations, such as subject, object, etc.

There is one unit of possible structure which seems to have been around for a long time, which is the sentence. Syntax is traditionally seen as the organisation of words into sentences. The notion of subordinate clauses must also have been apparent from the earliest of grammatical studies: once one has a notion of sentence, it would be very difficult to miss the fact that sentences occur inside sentences. However, I am not convinced that, even though subordination was recognised, that this introduced even the rudiments of structural analysis into grammatical thinking and perhaps this is because the sentence was more likely to be defined semantically (as a complete thought) than syntactically. Thus although it was seen as a unit of something, it perhaps was not thought to be a unit of syntax or structure.

Even as late as 1913, linguists were still coming up with notions which resembled constituent structure, but which were not exactly the same. Jesperson’s analysis of linguistic elements into 3 ‘ranks’ is a case in point. These (primary, secondary and tertiary) again seem to be nothing more than the identification of dependency relations with the primary rank being the root element, the secondary rank being the dependent of the root and the tertiary one being dependent on the dependent.

# American Structuralism

Bloomfield’s classic textbook *Language* (1933) was perhaps the first place that the structuralist notion of ‘Immediate Constituent Analysis’ is promoted (in his textbook of 1914 there is no mention of this and the term ‘phrase’ is only used to describe ‘set phrases’ (idioms). Indeed, syntax is described as the study of “the interrelations of words in the sentence”, which sounds very similar to the dependency kind of approach we have seen above: the subject is defined as a WORD “of the category noun or pronoun”).

By 1933, however, Immediate Constituent Analysis had taken off, though it was probably Bloomfeild’s students (Hockett, Gleason, Wells, Hill, Joos and Harris) who really took it to the formal level that enabled current linguistics to develop along the lines it has. The main principle of ‘discovery’ used by Bloomfield was distribution. This had been worked out in the areas of phonology and morphology and worked very efficiently as a tool for analysing languages without the linguist actually learning it first (this was important for historical reasons – the recording of Amer-Indian languages). In syntax, the notion could be straightforwardly applied to word categories, but for phrases it wasn’t quite the same. Consider distribution in phonology:

 two sounds are considered instanced of the same phoneme if they have complementary distribution. Two sounds which have the same distribution are considered different phonemes.

In syntax of phrase structure, this principle is inapplicable: two phrases which are in complementary distribution are not considered to be related and two phrases which have the same distribution are not considered to be distinct. Therefore, distributional analysis of phrases continues along very different lines to the distributional analysis of other aspects of language.

This distinction was perhaps not made much of due to the philosophical background of American structuralism (operationalism), which meant that it was important to see a strong connection from phonetics to phonology, from phonology to morphology and from morphology to syntax.

However, despite the main ideas behind IC analysis, it is also not clear cut that an immediate constituent amounts to the same thing as a phrase as it is seen today. There are a number of reasons for claiming this.

First has to do with the nature of grammar as envisaged in the American Structuralist framework – adopting a behaviourist stance, they eschewed any notion of a mental grammar and instead saw grammars as simply descriptions of linguistic phenomena. The immediate constituent was therefore seen merely as a tool for description rather than a real unit of the linguistic system, which was presumably a set of conditioned behaviours ruled by stimulus and response parings. Note that under these ideas, there are no rules which manipulate phrases and hence phrases may well be epiphenomena in such a system

The second is that it still is not entirely clear that all the ‘phrases’ that were identified were not more instances of dependency relations. For example, Bloomfield identified two kinds of phrase: exocentric and endocentric, depending on whether they contained words which could stand for the whole. Obviously endocentric phrases have heads – the main element to which other elements in the phrase are related. It is only the exocentric phrases which are linked together by nothing other than the notion that they form a syntactic unit that constitute something which is recognisably different to the kinds of dependent relationships that have been identified since ancient times.

Thirdly we see in the development of Bloomfield’s ideas after 1947 that much was accepted as possible with phrase structure analysis that would not be today. Discontinuous and overlapping constituents while uncommon were not ruled out.

# Phrase structure grammar