ON THE HISTORICAL SOURCE OF IMMEDIATE CONSTITUENT ANALYSIS

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It is of importance as much for its elegant demonstration that traditional grammar was not what most twentieth century American linguists have taken it to be, as for its demonstration that immediate-constituent analysis was a conscious innovation by Wundt and became a part of the American linguistic tradition by being lifted bodily from Wundt's works into Bloomfield's. Percival's paper heavily influenced the discussion of traditional grammar in my paper (1973a) on William Dwight Whitney's conception of syntax.

There is at present a widespread view that immediate constituent analysis is a modern version of traditional syntactic analysis.[1] Zellig Harris, for example, has recently asserted (1965, p. 363):

"Traditional grammar established various distinguished segments of sentences which were hierarchically subdivided into smaller

segments (in a manner made explicit by Leonard Bloomfield, as the method of immediate constituents)". Similarly, John Lyons sees "an obvious parallelism between immediate constituent analysis and the traditional procedure of parsing sentences into subject and predicate, and each of these, where appropriate, into words, phrases, and clauses of various types" (1968, p. 210). I shall argue in this paper that traditional grammar and immediate-constituent analysis are logically incompatible, and that immediate-constituent analysis has a non-traditional origin.

Traditional grammar is the family of linguistic theories represented in the grammars written before the advent of scientific linguistics. I use the expression "family of theories" rather than the word "theory", since traditional grammar is not a single, unchanging conceptual object. I assume, however, that it has certain fairly constant defining features. For convenience I take many of my examples from the Latin grammar of Allen and Greenough (1931) and the Greek grammar of H.W. Smyth (1916), since both these works are still in print and can be consulted by interested readers.

The aim of traditional syntactic description is, to quote Smyth, to show "how the different parts of speech and their different inflectional forms are employed to form sentences" (1956, p. 255). The sentence, it may be noted, is regarded here as a combination of words, i.e., it is defined synthetically. In fact, the four basic units of traditional grammar - letter, syllable, word, and sentence--form a straightforward ascending hierarchy,[2] and the Greek word "syntaxis" itself suggests the idea of arranging things in an ordered array.[3]

Thus, sentences are thought of in traditional grammar as combinations of words, not combinations of phrases. However, certain phrasal elements are recognized by most traditional grammarians. For instance, periphrastic verb forms of the type *amatus est* 'he was loved' are treated as single words for morphological purposes and are listed in paradigms along with forms consisting of single words like *amatur* 'he is loved'. It is as if such periphrastic forms are considered to be substitutes for nonexistent single words. In grammars of the vernacular languages, this notion is sometimes made explicit. For example, Adelung in his "Deutsche Sprachlehre für Schulen" defines auxiliary verbs as "diejenigen Verba. welche die mangelhafte Deutsche Conjugation in Vergleichung mit den vollständigern anderer Sprachen ergänzen helfen" (those verbs that help to make up for the deficiency of the verb morphology of German in comparison with the more complete morphologies of other languages) (1806, p. 263).

Another type of phrasal constituent that has been recognized by traditional grammarians, especially in the last century or so

can be exemplified by the English expression *near the window* in a sentence such as *He was standing near the window*. This type of expression is said to function as a single syntactic unit but to consist formally of a preposition and a noun. It is useful to draw a distinction between "form" and "function" since the same form may have several different functions. Prepositional phrases, for instance, occur as predicate complements (as in *the carriage is in good condition*), as objective complements (as in *he found the carriage in good condition*), and as adjectival modifiers (as in *the lass with the delicate air*).

But note that in traditional grammar, the head and its attribute are not said to constitute a phrase. In the last example quoted, *with a delicate air* may be called a phrase, but neither *the delicate air* nor *delicate air* are referred to as phrases. There is in fact no such thing in traditional grammar as a noun phrase in the sense this term is used today by professional linguists. Traditional grammarians do not divide sentences into phrases without residue; traditional grammar knows nothing of phrase structure.

In most traditions, both classical and vernacular, the sentence is said to contain two necessary elements, namely, a subject and a predicate, or in some traditions three - subject, verb, and object. However, there has always been a persistent tendency to think of these essential elements as single words, not as strings of words. For instance, Allen and Greenough (1931, p.164) cite *canis currit* 'the dog runs' as a minimal complete sentence, and similarly, Smyth (1956, p. 255) quotes *ēlthe kēryx* 'a herald came'. At the same time, however, the terms "subject" and "predicate" are usually defined semantically - the subject as the person or thing spoken about, and the predicate as that which is said about the subject.[4] One might reasonably expect, therefore, that where the subject noun or predicate verb is accompanied by modifiers, the entire resultant phrase would constitute the subject or predicate, as the case might be. But this has for the most part not been the case.[5] In a sentence such as *vir fortis patienter fert* 'a brave man endures patiently', the subject is the word *vir* 'man', not the phrase *vir fortis* 'a brave man', and the predicate is *fert* 'endures', not *patienter fert* 'endures patiently'. Quoting this sentence Allen and Greenough (1931, p. 166) state "the adjective *fortis* 'brave' modifies the subject *vir* 'man'." Thus, not only is the expression *vir fortis* not a subject, it is not a phrase either, a phrase being defined by Allen and Greenough (1931, p. 166) as "a group of words, without subject or predicate of its own, which may be used as an Adjective or an Adverb." *Vir fortis* is a group of words without subject or predicate of its own, but it is being used

here neither as an adjective nor as an adverb. Similar arguments apply to the expression *patienter fert*; it is neither a predicate nor a phrase.

It should also be noted that a subject is a subject with respect to some finite verb, not with respect to the sentence as a whole. Thus, a student attempting to construe an unfamiliar Latin sentence is told to "look for the finite verb, and then find its subject". Note that he is not invited to try dividing the sentence in two and to call one portion the subject and the other the predicate.

In addition to these principal sentence elements, other subordinate elements are recognized in traditional grammar, namely, the so-called modifiers and complements. Adjectives are said to be modifiers when they appear attributively in close association with a substantive; direct objects are considered complements, as also are most prepositional phrases.

The notion of modification has an interesting peculiarity. An adjective is said to modify the substantive it accompanies, and an adverb the adjective it accompanies. In certain circumstances, therefore, an adverb may modify an attributive adjective, i.e., an adjective that itself modifies another word. Thus, in an expression such as *very hot water*, the adverb *very* is said to modify *hot*, which itself modifies *water*. The result, then, in cases of this type is a hierarchy of modification. But it is also possible for a word to be modified by several words between which no relation of modification exists. For example, in the expression *an old man with leprosy*, the substantive *man* is said to be modified by the adjective *old*, by the indefinite article *an*, and by the prepositional phrase *with leprosy*. In such cases, no hierarchical structure of modification is recognized.

So much for traditional syntactic theory. Let us now examine immediate-constituent analysis as developed for the first time in Bloomfield's "Language" (1933, p. 161) and further elaborated by Wells (1947) and Bazell (1953). In particular, I should like to focus attention on what are, I believe, three fundamental characteristics of this kind of syntactic analysis. These are the notions:

1. That any sentence breaks down or can be split binarily into a subject part and a predicate part. Thus, the sentence *poor John ran away* breaks down into *poor John*, the subject part, and *ran away*, the predicate part.

2. That some groups of words are syntactically equivalent to single words. Thus the group of words *very rich* is equivalent syntactically to the single word *poor* in the expressions *very rich man* and *poor man*.

3. That the analysis of a sentence yields a single unbroken hierarchy of groups. For example, the sentence *poor John ran away* is analyzed first into *poor John* and *ran away*. The first of these two constituent parts of the sentence is in turn analyzed into *poor* and *John*, and the second into *ran* and *away*. In no instance are discontinuous constituents recognized, say *poor... away*, nor do any constituents overlap, as they would if we posited *poor John* and *John ran* as constituents. Note also that two constituents are recognized each time the process of analysis is applied to a sequence. To divide a sentence such as *John loves Mary* into three immediate constituents (*John*, *loves*, and *Mary*) would not be considered a normal analysis by the practitioners of this theory.

If we scrutinize these three basic notions of immediate-constituent analysis from the vantage point of traditional gammar, we must conclude that the two theories are fundamentally incompatible. Let us consider first the notion of a binary split of the sentence into a subject and a predicate. This would make terminological sense to a traditional grammarian only for sentences consisting of two words (such as *Canis currit*). In all other instances, the traditional grammarian would baulk since he applies the terms "subject" and "predicate" to single words. Moreover, he has no way of referring to the constituents the immediate-constituent analyst calls by these same terms. This is because his terminology in the area of phrasal constituents is rudimentary.[6] Moreover, for the traditional grammarian, word order and syntax are separate topics. In Latin, for example, word order is relatively independent of syntactic relations, and the operation of isolating the constituents that the immediate-constituent analyst calls subjects and predicates would be a useless exercise in the few cases where it can be done. It is, therefore, no accident that immediate-constituent analysis does not form part of traditional syntax.

As for the syntactic equivalence of word groups and single words, this has some support in traditional grammar. Prepositional phrases are considered equivalent to adverbs or adjectives functionally, and periphrastic verb forms equivalent to nonperiphrastic ones. It is also noteworthy that periphrastic forms consist in most cases of two words, as do prepositional phrases (minus any modifiers, of course). But, as I have already pointed out, equivalence of noun to noun phrase or of verb to verb phrase is absent from traditional grammar.

Finally, let us consider the hierarchical features recognized in traditional grammar. While there is some conceptual affinity between the traditional notion of

hierarchies of modification and the hierarchical principle basic to immediate-constituent analysis, the two are nevertheless separate notions and lead to different analyses in concrete cases. In a phrase such as *very cold beer*, the grammatical tradition says merely that *beer* is a substantive, that *cold* is an adjective modifying the substantive *beer*, that *very* is an adverb modifying the adjective *cold*, and therefore that the same relation of modification that obtains between *cold* and *beer* obtains also between *very* and *cold*. Implied in the traditional theory is, of course, the notion that *cold* is the locus of two relations, one obtaining with *beer* and the other with *very*. In immediate-constituent analysis, on the other hand, *cold* has no relation to *beer* whatever, but rather the phrase *very cold* has a relation to the word *beer*, which parallels the relation holding between the single words *very* and *cold*.

These two analytical solutions are, I should like to suggest, logically incompatible. Either there is a relation of modification between the single word *beer* and the phrase *very cold*, or there is a similar relation between the single word *beer* and the single word *cold*. Both analyses cannot be true, one of them (or possibly both of them) must be false. I conclude, therefore, that immediate-constituent analysis is not a more explicit version of traditional syntactic theory but that the two are logically separate and distinct. Hence, immediate-constituent analysis, when it was first thought of, must have constituted a break with the grammatical tradition. I said above that immediate-constituent analysis was first formulated by Bloomfield in his 1933 monograph "Language". But was Bloomfield really the earliest spokesman for this type of analysis?

If we examine his earlier book, "An Introduction to the Study of Language" (1914a), what we notice first of all is that instead of giving the sentence its traditional synthetic definition as a combination of words, Bloomfield defines it analytically as "an utterance analyzing an experience into elements" (1914a, p.60). The relation between the various sentence elements has, according to Bloomfield, a special "psychological tone called the logical or discursive relation" (p.60). This special psychological tone "consists of a transition of the attention from the total experience, which throughout remains in consciousness, to the successive elements, which are one after another focused by it" (p.60). The picture is then the following: A sentence corresponds psychologically to a total experience, and each word in it to a constituent element of this total experience. The experience remains in consciousness as a totality while the sentence is being uttered, but the attention is focused on each successive

constituent word as it is uttered. Bloomfield proceeds as follows: "We can attend to but one thing at a time. Consequently the analysis of a total experience always proceeds by single binary divisions into a part for the time being focused and a remainder. In the primary division of an experience into two parts, the one focused is called the *subject* and the one left for later attention the *predicate*. . If after this first division, either subject or predicate or both receive further analysis, the elements in each case first singled out are again called subjects and the elements in relation to them, attributes" (1914a, p. 60).

I hardly need to point out that the notion of binary splits, the bipartite sentence, the hierarchical principle, the analytical approach from the sentence down to the individual syntactic units are all clearly expressed in this passage. It is also noteworthy that the terms "subject", "predicate", and "attribute" are used in ways at variance with their traditional meanings. This idiosyncratic use of traditional terms raises a further question. Where did Bloomfield get this analysis from if not from the grammatical tradition?

The answer is clear. The immediate source of Bloomfield's syntactic theory was Wilhelm Wundt. In the preface to his 1914 monograph Bloomfield writes: "It will be apparent that I depend for my psychology, general and linguistic, entirely on Wundt; I can only hope that I have not misrepresented his doctrine. The day is past when students of mental sciences could draw on their own fancy or on popular psychology for their views of mental experience" (1914a, p. VI).

Let us accordingly turn to Wundt's monumental "Völker-psychologie". The section we are concerned with bears the title "Die Sprache" and first appeared in two parts in 1900. In the second of these two parts, Wundt defines the sentence as "den sprachlichen Ausdruck für die willkürliche Gliederung einer Gesammtvorstellung in ihre in logische Beziehung zueinander gesetzten Bestandteile" (1900, p. 240), that is, "the linguistic expression for the arbitrary division of a total idea into its constituent parts placed in logical relations to one another". Here, then, we have an explicit analytical definition of the sentence, in contrast to the traditional synthetic one.

But one may ask at this point whether Wundt was aware that he was breaking with traditional grammatical theory in this regard. The answer again is clear. He devotes several pages to a critique of what he calls "die Definitionen der alten Grammatik" (1900, p. 222-226). There he argues against the traditional definition of the sentence as a combination of words on the following grounds. First, a sentence may

consist of a single word. Second, not just any combination of words is a sentence. For example, an enumeration of the signs of the zodiac is a combination of words but can hardly be said to constitute a sentence. Whether a combination of words qualifies as a sentence depends on how they are put together: "es müsste also hinzugefügt werden, wie das Ganze beschaffen sein muss, um als Satz zu gelten" (Wundt, 1900, p. 224). Third, the notion of "thought" that is normally invoked in traditional definitions ("A sentence is a combination of words that expresses a complete thought") is inherently vague (1900, p. 225).

Nor does it help to replace the notion "word" by "concept" and define the sentence as a combination of concepts. Hermann Paul in his "Prinzipien der Sprachgeschichte" (1880, p. 197) had offered such a definition, which reads as follows: "Das wesen des satzes besteht darin, dass mehrere vorstellungscomplexe in beziehung zu einander gesetzt werden durch nebeneinanderstellung der wörter, an die sie sich angeschlossen haben" ("The nature of the sentence consists in the fact that several conceptual complexes are placed in relation to one another by juxtaposition of the words with which they have become associated"). According to Wundt, this definition suffers from the first two defects mentioned in connection with the traditional definition and from a number of additional ones. One of these is the fact that the definition is worded in terms of the thought that generates the sentence. But the thought and the sentence are separate phenomena, since what one person thinks while he is uttering a particular sentence may be quite different from what another person might think when uttering the same sentence. Wundt draws the following conclusion: "Der Satz ist in erster Linie ein sprachliches Gebilde, ein psychologischer Vorstellungverlauf nur insofern, als dieser wirklich im Satze ausgedrückt wird, und vollends ein logisches Urteil nur unter der Bedingung, dass er direkt eine Aussage enthält" (The sentence is first and foremost a linguistic formation; it is a sequence of psychological concepts only insofar as such a sequence is in fact expressed in the sentence; and finally, it is a logical judgment only if it directly contains an assertion).

Indeed, Wundt prefers the traditional definition to the psychological one suggested by Hermann Paul, arguing that while in most cases a sentence is a combination of words, it is false to call a sentence a combination of concepts. For while a speaker is uttering a sentence the constituent concepts do not patiently wait to turn up in his consciousness until the corresponding words are about to be uttered. On the contrary, the sentence is a psychological unit present in the speaker's mind throughout the time he is uttering it. It is true that the word actually being uttered is usually in the

focus of attention ("im Blickpunkt des Bewusstseins"), but the other word-concepts, or at least those essential for the meaning of the whole sentence, are in the middle ground of attention ("in dem weiteren Umfang des Bewusstseins"). Moreover, the principal constituent concepts of a sentence are already in consciousness the minute one starts uttering it.

Wundt, therefore, feels justified in asserting that the sentence has a twofold character - it is both simultaneous and successive. It is simultaneous in the sense that throughout its production the speaker is conscious of it in its entirety. It is successive in that the state of consciousness ("der Bewusstseinszustand") varies from moment to moment as particular constituent concepts pass into the focus of attention and others pass out.

According to Wundt, Hermann Paul's mistake was to carry over the outer grammatical form ("die äussere grammatische Form") into the area of consciousness, to assert that each particular grammatical form ("jede äussere Form") is a true reflection of the underlying psychological processes as they take place ("von Moment zu Moment ein treues Abbild der zugrunde liegenden psychischen Vorgänge"). When a sentence is uttered, it is, of course, the result of a set of psychological processes, but the latter are quite distinct from the sentence itself. Thus, Wundt advocates distinguishing between the psychological factors that bring about a particular concrete utterance and the external grammatical form ("die äussere grammatische Form") of the sentence in question, and he accuses Paul of confusing the latter with the inner psychological structure ("das innere psychische Gebilde"). Wundt's linguistic theory is, therefore, one of those in which the correspondence between inner form (in his case the psychological factors) and outer form is not one to one.

To recapitulate the argument so far, Wundt was the immediate source of Bloomfield's untraditional definition of the sentence, and he was fully aware that in this regard he was breaking with the long-standing synthetic definitions of sentencehood. Moreover, he presented psychological evidence to support his rejection of the grammatical tradition on this vital issue. But one may ask whether he was responsible for Bloomfield's notion of the binary sentence split and the idea of a single analytical hierarchy of sentence constituents. If we examine the further discussion in "Die Sprache" we find unmistakable evidence that he in fact was.

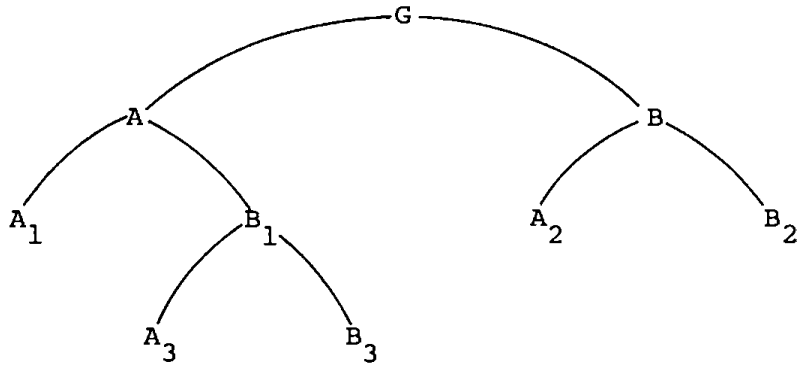
Having established the simultaneous character of the sentence, Wundt goes on to discuss its character of being a sequence of successive elements. Here he emphasizes that a sentence is a set of elements among which certain relations obtain; it is not merely an aggregate of individual items.

The basic relations among the words of a sentence are the ones familiar to the grammarian, i.e., subject, predicate, attribute, adverbial, direct and indirect object. If these relations are divested of their logical character and regarded from a purely formal point of view, it becomes obvious, according to Wundt, that they invariably obtain between two words: subject and predicate, verbal predicate and object, nominal subject or object and its attribute, and finally, verb and adverbial modifier. These combinations occur in their most typical form when the subject, or predicate, or object, etc. is a single concept. Then other concepts can be associated with these primary ones and be related to them by coordination or subordination.

Coordination introduces a new element into sentence formation in that it can be extended over indefinitely many members. All other grammatical relations are exclusively binary. If one asks why this is so, Wundt provides the following rationale. First, a logical relation is by its very nature restricted to the two concepts between which it obtains. Similar relations may, of course, obtain between some third concept and one of the two members of a logical relation. However, the process of establishing such a relation requires an extra act of thought that in turn is of the binary variety. Therefore, any analytical relation is a mental act that embraces two and only two members. This again follows from the duality of the principal syntactic constituents.

For example, a sentence such as *Ein redlich denkender Mensch verschmäht die Täuschung* 'a sincerely thinking person scorns deception' (Wundt, 1900, p. 319) can be regarded in all its parts as nothing more than binary combinations whose members are in turn binary combinations. The two major constituents are related as subject to predicate, all other pairs exemplify the same relation in a more compressed form ("in verdichteter Form"). Thus the subject includes the assertion ("Aussage"): *ein Mensch denkt redlich* 'a person thinks sincerely', and the predicate the assertion *die Täuschung wird verschmäht* 'deception is scorned'.

Wundt then goes on to provide a geometrical diagramming system to mirror these relations. The formula $\overset{\frown}{A\ B}$ represents the close subject-predicate combination, and G stands for "Gesamtvorstellung", the total concept embodied in the whole sentence. Thus the sentence *A sincerely thinking person scorns deception* can be diagrammed thus:



A stands for *a sincerely thinking person,* B for *scorns deception,* A_1 for *a person,* B_1 for *thinks sincerely,* A_2 *deception,* B_2 for *is scorned,* A_3 for *thought,* and B_3 for *is sincere.*

It may be pointed out that Wundt thinks of the relation between the two members of a combination as logical rather than grammatical, for as he points out, it is necessary to subject the sentence to a variety of grammatical changes in order to bring out these underlying relations (e.g., the change of *scorns deception* to *deception is scorned*). The grammatical form of a particular combination depends on whether it is the principal assertion ("die Hauptaussage"), and, if not, in what relation it stands to the principal assertion.

That Wundt's linguistic theory is the source of Bloomfield's theory of immediate constituents is, I believe, too obvious to require further demonstration. Bloomfield may be complimented for relaying Wundt's theory so faithfully in his early book. The difference between the position he adopted in 1914 and the more familiar approach of the 1933 monograph deserves more study. Whether there are antecedents to Wundt's theory is another interesting question. It may be recalled that the primacy of the sentence over the word was emphasized by Wilhelm von Humboldt (see Leitzmann, 1907, p. 143). But it is not known at present whether Humboldt's ideas were in any way influential in Wundt's abandonment of the traditional synthetic definition of the sentence. It is clear, however, that Wundt did not develop his linguistic theory specially for his book on folk psychology. The same theory expressed in almost identical terms can be found in the first volume of his "Logik" (1880, p. 53-58). It would seem, therefore, that the gestation of the theory may have taken place around the time

when Baudouin de Courtenay was active in Kazan. If this is the case, we have one more reason to regard the 1870s as an unusually creative period in the history of linguistics.

NOTES

[1]I am grateful to many colleagues and friends for helpful comments and criticisms. Some time ago, for instance, James McCawley pointed out to me that Bloomfield's Wundtian conceptions of grammatical analysis are clearly reflected in two of his early articles, "Sentence and word" and "Subject and predicate", published in 1914 and 1916, respectively, now conveniently reprinted in Charles Hockett's "Leonard Bloomfield Anthology" (Hockett, 1970, p. 61-77).

[2]This notion was clearly expressed by Priscian (XVII, 2): "quem ad modum litterae apte coeuntes faciunt syllabas et syllabae dictiones, sic et dictiones orationem" (just as letters when they come together in an appropriate fashion constitute syllables, and syllables words, in the same way words constitute a sentence)(Keil, 1859, p. 108).

[3]Priscian explains the meaning of the term "syntax" as having to do with what he calls "ordinatione sive constructione dictionum" (the setting in order or arrangement of words) (Keil 1859, p. 108). In essence, Priscian, like Apollonius Dyscolus before him, approaches syntax from the parts of speech and aims at a set of restrictions on their combinability with one another. Thus, syntax started out as a crude calculus of word combinations; the question of sentence structure was not raised until the Middle Ages.

[4]The history of the terms "subject", "predicate", and "object", is a vast topic that still remains largely unexplored. The commonly held belief that all definitions of these terms were couched in exclusively semantic terms is erroneous. In many medieval and renaissance grammars of Latin, for instance, the major sentence constituents (three of them) are defined positionally as if they occurred in the natural order, namely, subject-verb-object, the subject ("suppositum") being defined as whatever precedes the main verb, the verb as the constituent occurring after the subject, and the object ("appositum") as whatever occurs after the main verb. We find an example of this system in the "Regulae" of Giovanni da San Ginesio (fourteenth or fifteenth century): "Quid est suppositum? Est

illud de quo loquimur vel quicquid precedit verbum principale vel intelligitur precedere. Quid est verbum principale? Est illud quod ponitur post suppositum. Quid est appositum? Est quicquid ponitur post verbum principale vel intelligitur poni" (What is the subject? It is what we speak about or whatever precedes or is understood to precede the main verb. What is the main verb? It is what is placed after the subject... What is the object? It is whatever is placed or is understood to be placed after the main verb) (Venice, Museo Correr, "Cicogna 1123", f. 1^{v}-2^{r}).

[5]Note that I say "for the most part". Some traditional discussions of these terms explicitly involve the modifiers. In an anonymous fourteenth century grammatical manuscript, for example, there is an interesting discussion concerned with how to identify the subject of a verb: "Primo ergo in assignatione suppositi debemus invenire verbum principale, deinde ipsius suppositum et ab ipso incipere. Ex parte vero suppositi debet ordinari adiectivum suppositi, relativum eiusdem, et relativum sui adiectivi, dictio iuncta supposito per appositionem vel per coniunctionem" (First, therefore, in identifying the subject we should find the main verb, then its subject and begin with it. On the subject side, one should arrange the adjective of the subject, its relative, and the relative of its adjective, and any word linked to the subject in apposition or in terms of conjunction) (Florence, Biblioteca Nazionale, "Magliab.", I. 2., f. 7^{v}). Needless to say, there are traditional grammars of much more recent date that also divide the sentence into a subject and a predicate. In the early twentieth century, E.A. Sonnenschein, for instance, in a popular English grammar defined the subject as "the word or group of words which denotes the person or thing of which the Predicate is said" (underlines mine) (Sonnenschein, 1916, p. 12). This definition was in fact in perfect accord with the recommendations of the Joint Committee on Grammatical Terminology, which had been published five years previously. In the report of the committee, it was, among other things, suggested that "the first stage in the analysis of a sentence be to divide it into two parts, to be called the *Subject* and the *Predicate,* the *Subject* being the group of words or the single word which denotes the person or thing of which the Predicate is said, and the *Predicate* being all that is said of the person or thing denoted by the Subject" (Joint Committee, 1911, p. 8). It may be that linguists such as John Lyons have this recent school tradition in mind when they compare immediate-constituent analysis with traditional syntactic theory. As far as I can ascertain, however, this use of the terms "subject" and "predicate" does not reach very far back.

[6]It is interesting to note that many of the vernacular grammatical traditions have not developed separate terms for "sentence" and "clause", e.g., German "Satz", Russian "predlozheniye". A study of the history of such terms as "clausula", "oratio", "propositio", and their vernacular equivalents is an urgent desideratum. Note in this connection that in the Oxford English Dictionary the use of the term "phrase" in grammatical analysis is not attested before the middle of the nineteenth century.

MANUSCRIPTS CITED

Florence, Biblioteca Nazionale. Magliab., I, 2., 14th century. Begins f.1r: "Vocum alia literata, alia inlicterata." Ends f.35r" "Et sic ordo accipitur a Donato, de quo satis patet."

Venice, Biblioteca del Museo Correr. Cicogna 1123. 15th century. Begins f.1r: "Regule minores magistri Johannis de Sancto Genesio feliciter incipiunt. Quid est grammatica? Est scientia rette loquendi retteque scribendi origo et fundamentum omnium liberalium artium." Ends f.43r: "Que figura est excusabilis apud autores et substituenda (?) sed non imitanda. Magistri Johannis de Sancto Genesio Regule majores foeliciter expliciunt. Die xvi settembris 1464 in castro Vinci."