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ABSTRACT

The purpose of this thesis is a syntactic description of French relative syntagms from an Axiomatic Functionalist point of view. The theory used here is Axiomatic Functionalism. The present work is divided into six parts.

CHAPTER ONE provides a theoretical background.

CHAPTER TWO deals with these areas of a linguistic theory relevant to this work.

CHAPTER THREE is a statement of syntactic analysis from an Axiomatic Functionalist point of view.

CHAPTER FOUR is a statement of relative pronouns.

CHAPTER FIVE is concerned with the syntax of French.

CHAPTER SIX gives the actual syntactic description of French relative syntagms.

MOURAD ALLAOUA

A SYNTACTIC DESCRIPTION
OF FRENCH RELATIVE SYNTAGMS
FROM AN AXIOMATIC FUNCTIONALIST
POINT OF VIEW

M. Litt. thesis

St. Andrews 1979.



CERTIFICATE

I hereby certify that the conditions of the ordinance and regulations concerning the submission of an M. Litt thesis have been fulfilled by Mr. M. Allaoua.

DECLARATION

I hereby declare that the present work has been composed by myself, and that the research, of which it is a record, has been performed by myself.

The research for the degree of M. litt. began in October 1978.

This thesis embodies work which is being made public for the first time, and which has not been accepted previously for any degree.

M. Allaoua.

DEDICATION

This thesis is dedicated to my family.

ACKNOWLEDGEMENTS

My deepest gratitude goes to Dr. Roberts for his helpful discussions, patient supervision and whose advice guided me through the composition of this dissertation. I would also like to thank Professor Mulder for his kind support and understanding, Dr. Hervey and M. Lamb.

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CHAPTER ONE

FUNCTIONALISM AND AXIOMATIC FUNCTIONALISM

1.1. The Functionalist Approach

For Functionalists the all pervading principle is embodied in A. Martinet's dictum, "function is the main criterion of linguistic reality"¹.

The original base of Axiomatic Functionalism is founded on the Prague School and especially Neo-Prague Functionalism, in the sense that Mulder's first axiom "all features in semiotic sets are functional", clearly states his functionalist point of view.

Followers of Functionalism believe that the identity of any linguistic entity is entirely dependent on its capacity of being distinguished from, or opposed to another entity. In other words, the identity of any linguistic entity is determined by its distinctive function, i.e. the set of commutations in which a semiotic entity may participate. An entity which is identified as being functional, i.e. "separately relevant to the purport of the whole of which it is a part"², is a linguistic entity which has a distinctive function. It is the criterion called function or functionality that gives the functional movement its name.

1.2. The Axiomatic Functionalist Conception of Semiotics and the Linguistic Sign

Mulder's conception of linguistics as a branch of semiotics is a direct link with De Saussure's definition of semiology as the science and study of signs in general, of which, linguistics is only one subdivision. De Saussure believes that linguistics is

¹A. Martinet: "A Functional View of Language".

²Mulder: "Postulates for Axiomatic Functionalism" Axiom A.

only a part of semiology, a general science which would be the study of the various systems of conventions for communication.

Mulder defines a semiotic system as "a system of conventions for communication"³. That is to say, all the features in a semiotic system are conventional and their purpose is communication.

Mulder's concept of the linguistic sign does not differ from that of De Saussure in principle, but the focal point in Mulder's concept of the linguistic sign is distinctive function. For both scholars, the linguistic sign is the conjunction of a particular expression and a particular content which mutually imply one another. The Saussurian concept of the linguistic sign remains a very useful one, but its possible interpretations led to contradictions which made it necessary to reconsider it.

For Mulder the first thing that needed to be clarified was "form" or "signifiant" or "expression", and what precisely it must mean, and its relation to phonological form. In Mulder's sense, "a particular expression is a particular set of phonological forms p of which one may be zero, but at least one must not be zero, standing in a relation with a certain distinctive function (i.e. it is functionally opposed to other such sets)⁴. In other words, a particular class of phonological forms, each member in its capacity of contracting a relation with a particular distinctive function, is the expression of the sign. The converse of expression is content. That is to say, a particular distinctive function, in its capacity of being the particular distinctive function of each member of a particular class of phonological forms is the content of a linguistic sign.

³Mulder: "Postulates for Axiomatic Functionalism" Def. 1c.

⁴Mulder: "Linguistic Sign, Word and Grammateme", *La Linguistique* 7 (1971), Page 95.

1.3. The Doctrine of Double Articulation

The property that accounts for the high efficiency of language as a semiotic system, has been summed up in Martinet's dictum, that language differs from all other conventional systems of communication by the property called double articulation. The doctrine of the double articulation is conceived of as an articulation into elements with both form and meaning (first articulation) and an articulation into elements with form alone (second articulation).

The term articulation, such as Martinet used it, is explained but not defined, whereas Mulder defines articulation as: "set of ordering relations between constituents in combinations"⁵ and "potential for functional ordering of constituents".⁶

In Axiomatic Functionalism, the term "ordering", which is of relevance to the notion "articulation", implies that the relation between the constituent elements of a complex cannot be termed an articulation unless the complex in question is analysed into functionally ordered constituents. This does not necessarily mean linear sequence. In Axiomatic Functionalism, ordering is completely opposed to simultaneity, the latter being the counter-part of the former (see Chapter Two, Section 2.2. for full discussion of the ordering-simultaneity dichotomy).

From an Axiomatic Functionalist point of view, articulation manifests itself on two different planes. The two sequences are not distinguished by their sequence because they are logically

⁵Mulder: "Sets and Relations" p.11. (1968).

⁶Mulder and Hervey: "Language as a System of Systems" p.1.

independent of one another, but by the nature of the elements into which a given complex is articulated. Mulder talks about a grammatical articulation into elements with both form and meaning (Martinet's first articulation), and a phonological articulation into elements with forms alone (Martinet's second articulation). The ultimate atomic elements of the first articulation are pleremes, that is to say, the minimum syntagmatic entities in grammar (by syntagmatic is meant the ordering aspect of semiotic entities). The ultimate atomic elements of the second articulation are phonemes (that is to say, the minimum syntagmatic entities in phonology). The two articulations are syntax and phonotactics.

Having examined the principle of double articulation we may now take a look at the systems of language.

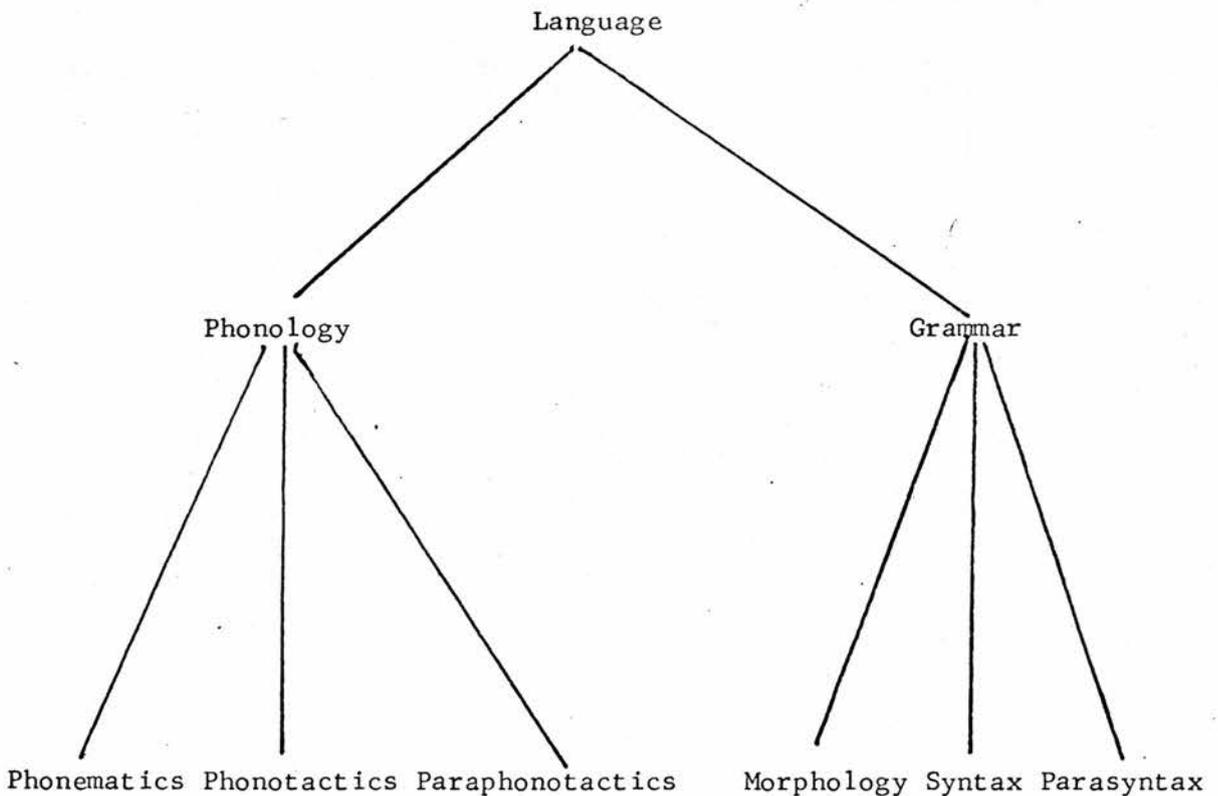
Mulder defines a proper language as "a semiotic system with a cenology containing both a cenematics and a cenotactics and a grammar containing both a morphology and a syntax." (for definitions of these terms, see below) One essential point to bear in mind, is that a natural language differs from a proper language, in that, the former incorporates a paraphonotactics and a parasyntax (see below) , while the latter does not.

A proper cenology (in the case of natural languages, a proper phonology) is a compound system constituted by the interlocking of a cenematics (phonematics) and a cenotactics (phonotactics). Cenematics (phonematics) is a complex unordered cenological system in the sense that, it is a complex system without ordering relations, i.e. asymmetrical relations between entities in combinations. Cenotactics (phonotactics) is a complex ordered cenological system, i.e. a system with ordering relations between elements.

Grammar is a compound system constituted by the interlocking of a morphology and a syntax. Morphology is a complex unordered grammatical system, in the sense that it is a complex system without ordering relations.

Syntax is a complex ordered grammatical system, that is, a system with ordering relations between elements. The two systems (phonology and grammar) are interlocking in such a way that the phonological elements provide the forms for the grammatical elements (signa).

In phonology and grammar, another level, which deals with the prosodic features, i.e. accent, tone, intonation, pitch, etc., is added. The level which deals with the prosodic features in phonology is called paraphonotactics, that is to say, the prosodic features accompanying phonotagms. The level which deals with the prosodic features in syntax is called parasyntax, that is to say, the prosodic features added to syntagms.

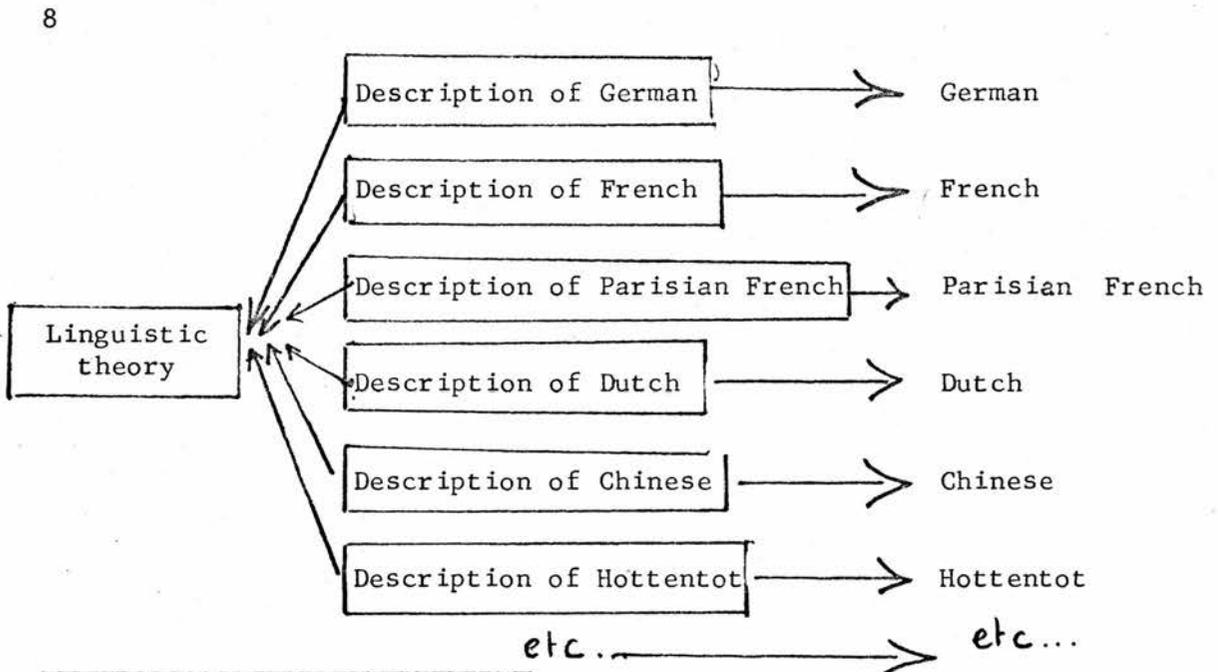


1.4. The Axiomatic Functionalist Approach to Science

1.4.1. Linguistic Theory, Linguistic Description and Speech Phenomena

Mulder defines a linguistic description as "the application of a particular theory to a selected field of speech phenomena"⁷. In other words, a theory is needed as a device in order to make possible the description of a chosen field of speech phenomena.

Unlike theories in natural sciences, a linguistic theory may be applied to a multiplicity of selected fields of speech phenomena. For instance a linguistic theory, such as Axiomatic Functionalism, when applied to Chinese, yields a description of Chinese. The relation between a linguistic theory and linguistic description, such as understood here, is a one-to-many relation, but the relation between a particular description and a particular field of speech phenomena is a one-to-one relation. These dependencies can be shown diagrammatically as follows:-



⁷ Mulder: "Linguistic theory, linguistic descriptions and the speech phenomena", *La Linguistique* 11, 1975, p. 87.

⁸ Mulder: "Linguistic theory, linguistic descriptions and the speech phenomena", *La Linguistique* 11, 1975, p.91.

It is possible that a linguistic theory may have never been applied to a chosen field of speech phenomena to produce a description, or that the particular field of speech phenomena may have never been described under that theory, but the prerequisites of a linguistic description remains a linguistic theory in terms of which the description is carried out to approach the speech phenomena, and a selected field of speech phenomena. Every descriptive method is based upon a certain philosophy of science, e.g. hypothetico-deductive method.

1.4.2. Hypothetico-Deductive Method

When setting up a linguistic description, one must make use of a linguistic theory. The hypothetico-deductive method consists of using a theory in the observation and selection of the phenomena by formulating hypotheses and finally subjecting the hypotheses to eventual refutation if there is counter-evidence from the data. This process yields a description of the phenomena.

Whereas for Popper, theory and description are an undifferentiated whole, Mulder insists on a sharp distinction between theory and description. This leads to splitting up the hypothetico-deductive method and assigning the two parts differently. That is to say, the deductive part is distributed to the theory and the hypothetical part is distributed to the description.

1.4.3. Axiomatic-Deductive Theory

Mulder's theory may be called Axiomatic-deductive as it unfolds from the basic axioms. The theory itself contains three types of statements namely axioms, definitions and theorems.

(i) Axioms are statements accepted in advance and may contain terms which require definitions to be fully interpreted. Axioms are meaningless divorced from definitions

(ii) Definitions are statements whereby the terms used in axioms and other definitions are interpreted until we are only left with primitive terms.

(iii) Theorems are the only type of statements implicit in the theory. They are derivable from axioms and definitions. As an Axiomatic Functional^{theory}ist^{is} rich in theorems, there is no need to incorporate these in the presentation, as they are implied in the theory.

Both the theory and description are guided by certain requirements. In other words, the theory and description are evaluated in terms of these requirements namely consistency, adequacy and simplicity.

In the first place a theory should be consistent. The statements of the theory should be consistent with one another, that is, the theory should not contain any contradictory statements. A linguistic theory should also be adequate. The requirement that a theory is adequate implies that the descriptions based on it are consistent adequate and simple. A linguistic theory should also be simple. In other words a certain amount of simplicity is required as the result of simplicity in the theory can be greater simplicity in the description based on it.

1.5. Description and the Hypothetical Approach

The whole description, so to speak, can be said to be hypothetical in the sense that, it is a body of hypotheses governed by an axiomatic-deductive theory. It is based on a hypothetico-deductive method by which we derive statements from a particular theory on the one hand, and a selected field of speech phenomena on the other. These statements are launched as hypotheses, i.e. mere assumptions about facts, as they can be refuted by finding counter-evidence in the data.

A linguistic description should be consistent with the theory

based on it. The statements of the description should be consistent with one another and not contradictory with the data.

A linguistic description should also be adequate. The requirement of the adequacy of a description implies that the description in question should account properly for all the relevant features within the chosen field and not account for redundant features.

A linguistic description should also be simple. That is to say, in order to test the conditions of consistency and adequacy, the statements of the description should be kept as simple as possible.

In connection with the statements of the description, it should be remembered that they are theory dependent, in that, they make use of statements and notions from the theory. Examples of notions in Axiomatic Functionalism are. "opposition", "commutation", "distinctive function" etc..

In view of the fact that a description is dependent on the theory, in the sense that the statements of a description must be justified by the theory, it is inevitable that a description makes use of certain models from the theory. That is, within the set of statements of a theory, there are certain statements which contain terms that have a special status within the theory, called models. Models have a direct application to observable phenomena, in that they are items of which instances are supposedly to be found in speech. Examples of models in Axiomatic Functionalism are "content", "expression", "phonological form", "allomorph" etc.. These models in the theory are linked with models in the description in a one-to-one relation of isomorphism.

CHAPTER TWO

THE THREE SECTIONS OF THE THEORY AND CRITERIA

FOR THE IDENTIFICATION OF MORPHOLOGICAL COMPLEXES

FROM SYNTACTIC COMPLEXES

In this chapter the following points will be discussed:-

- 2.1. The three sections of the theory.
- 2.2. The ordering-simultaneity dichotomy.
- 2.3. Criteria for the identification of morphological complexes from syntactic complexes.

2.1. The Three Sections of the Theory.

Mulder divides a linguistic theory into three sub-sections, namely sign-theory, semantics and systemology.

a) Sign Theory

The sign theory provides the ontology essential to every science. The ontology is the compartment of a science in which we distinguish between different levels of abstraction.

The Axiomatic Functionalist sign theory has one primitive, which is image (represented as i), i.e. model of the unique form of a single sound realization, from which, by repeated application of the notions distinctive function and the member-to-class relations, all the ontological levels and relevant distinctions (e.g. those between phonological forms and their allophones, and between signa and their allomorphs) are derived.

As a preliminary manoeuver, we note that a class of natural images $\{i\}$ is a phonetic form (represented as f). A phonetic form, in its capacity of contracting a distinctive function is an allophone (represented as $f R d$). A self-contained class of allophones is a phonological form. Particularly

interesting in this respect is the fact that a phonological form, which contracts a relation with a distinctive function in grammar (represented as d), is an allomorph, and a self-contained class of allomorphs is a signum.

b) Semantics

The link between the sign and its meaning is arrived at via semantics. The most one can say here is that the capacity to provide information about entities, or entities other than the sign itself or its realizations is roughly what is meant by "meaning".

c) Systemology

The section of a linguistic theory that deals with the analysis of phonological forms and signa, their combination into complex forms and signa, is systemology. On the basis of ontological distinctions, systemology is itself subdivided into phonology and grammar, i.e. phonology and grammar are ontological distinctions. In phonology, as in grammar, the relations between the entities in combinations may be an ordering relation or a relation of simultaneity (see Section 2.2. for full discussion of the ordering-simultaneity dichotomy).

Both the phonological level and the grammatical level manifest two aspects:-

(i) A systemological aspect concerned with the constructional aspect of entities, their possible combinations or internal structure, itself sub-dividable into:-

- (a) the articulation aspect
- (b) the feature analysis.

(ii) A realizational aspect concerned with the realization of phonological forms (allophones) on the phonological level, and the realization of signs (allomorphs) on the grammatical level.

Let us now examine these aspects in phonology and grammar separately.

Systemological Aspect of Phonology

The articulation aspect in phonology is concerned with phonemes and how they combine into self-contained ordered strings: the phonotagms, e.g. /p/ in /pit/

The feature analysis aspect in phonology is concerned with the analysis of phonemes into distinctive features in a relation of simultaneity, e.g. /labial/, /occlusive/, /voiced/ in /b/.

The Realizational Aspect of Phonology: Allophony

The realizational aspect in phonology is concerned with assigning phonetic values to phonological elements. Allophonic variance belongs to this level, e.g. /p/ may be realized as [p] or [p^h]. Side by side with this interest in the study of allophony goes a concern in the distinction between contextual or combinatory variants and free-variants. The former are realizations of the same phoneme occurring in different contexts and governed by contexts. The latter, i.e. free-variants, are realizations of the same phoneme occurring in the same context.

Systemological Aspect of Grammar

a) Articulation Aspect of Grammar

On this level we are dealing with pleremes and how they combine into ordered complexes, i.e. the plereme "fully" in "fully detailed".

b) Feature Analysis Aspect

On this level we analyse pleremes into their functionally simultaneous components; monemes, e.g. "ly" in "fully".

Allomorphy: Realizational Aspect of Grammar

Given that all the elements of grammar are signa, from an Axiomatic Functionalist point of view, allomorphy is regarded as the realizational aspect of the whole of grammar, i.e. syntax and morphology.

On the grammatical level, we are assigning phonological values to grammatical entities. Allomorphic variance belongs to this level, e.g. /tsaɪld/ and /tʃɪld/ are alternative realizations of the grammatical element "child".

The allomorphs, i.e. variants with regards to their phonological forms, of signa are combinatory (or contextual) variants or free-variants. A combinatory variant is a particular variant conditioned by its environment, e.g. the variant dep < deep, which occurs before the suffix "th" in "depth".

Combinatory variants cannot be regarded as different signa in the sense that they are not opposed to one another, in other words, they do not commute with another. To explain this, we must point out that sign identity depends, in the first place, on the distinctive function of a sign, and in view of the fact that

the distinctive function of a sign is determined by the set of signs with which it commutes, or to which it is opposed, in equivalent contexts, we may conclude that combinatory variants of signs cannot be considered as different signs, as they are not opposed to one another and do not commute with one another, i.e. they do not have a different distinctive ^{function} from each other.

With regards to free-variants, e.g. /felow/ "fellow" and /blouk/ we can say that they are variants which are not conditioned by their environment, that is to say, they are in free variation. These are to be regarded as synonyms, i.e. different signs, because they are formally opposed, (although they are not denotationally different), in the sense that they have a different distinctive function from one another. By contrast two signs which are formally different, but cannot be opposed to one another, nor be denotationally different are to be regarded as one and the same sign, i.e. combinatory variants.

Allomorphy manifests other characteristics, for instance, in certain cases there may be a zero allomorph. An example of a zero allomorph in English is "sheep" in which the moneme plural has no overt moneme distinction.

In some cases the realization of two signs may be amalgamated in one fused realization. This can be exemplified in French by the two signs "a" + "le" which can be realized as /o/. The two signs "a" and "le" are realized in such a way that we cannot find separate realizations. In this particular case the realization of the two signs "a" and "le" is amalgamated.

2.2. The Ordering-Simultaneity Dichotomy

Simultaneity and ordering relations between elements in combinations are, according to Mulder, mutually exclusive subtypes of relations

By relation of simultaneity Mulder means , "symmetrical relations between entities in combinations"⁹. By ordering relations Mulder means, "asymmetrical relations between entities in combinations"¹⁰.

a) Simultaneity

If a relation of a to b is the same as a relation of b to a, then we can state that aRb is the same as bRa , that is the converse of the relation aRb is the same as the relation itself. This is what is meant by symmetrical relations, i.e. relation of simultaneity, e.g. the grammatical constructions ("to talk" + "past") and ("past" + "talk") are not functionally different, but are the same simultaneous bundle "talked". The relation (talk R past) is the same as its converse (past R talk). The way in which the constituents "talk" and "past" are arranged is not in itself, separately relevant to communicative potential.

b) Ordering Relations

If a relation of a to b is not the same as a relation of b to a, then aRb and bRa are not the same and are therefore asymmetrical relations, i.e. ordering relations. The elements in combinations appear with respect to each other in such a way that their ordering is separately relevant to communicative potential. One element in a given construction is prior, i.e. of greater importance, to another element(s).

Let us illustrate ordering relations with an example from English, given the construction "plant pot", it is possible to say that the relation of "plant" to "pot" is not the same as the relation of "pot" to "plant", because the construction "plant pot" is different from "pot plant", in the sense that the two constructions convey different messages. It follows that the

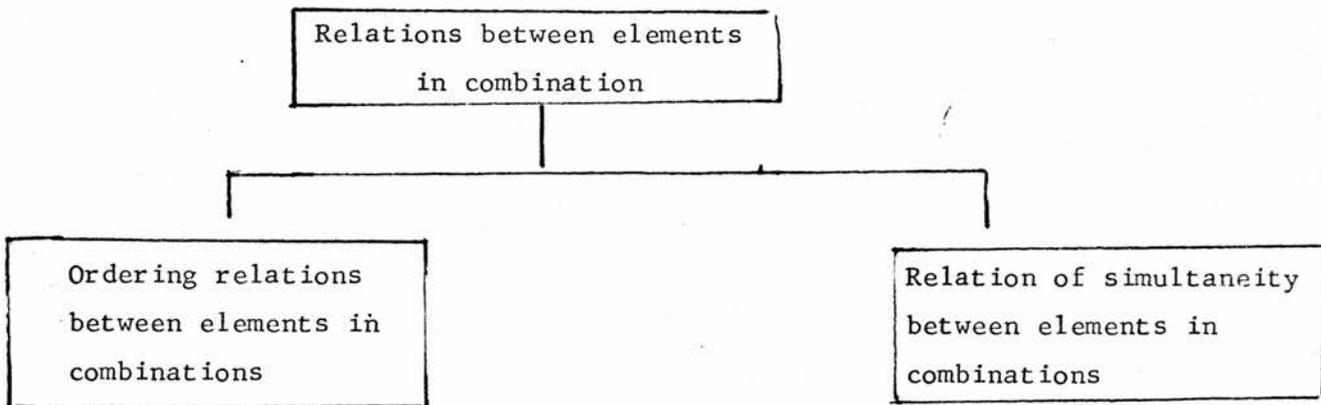
⁹Mulder: "Postulates for Axiomatic Functionalism" Def. 6b.

¹⁰Mulder: "Postulates for Axiomatic Functionalism" Def. 6a.

relation that holds between the constituents of "plant pot" is an asymmetrical relation, i.e. the constituents are asymmetrically organized (and this does not necessarily mean linear sequence).

Knowing that the type of relation establishes the type of entity we must bear in mind that an entity standing in ordering relations with other entities is a syntagmatic entity. In this respect distinctive features (minimum phonematic entities) and monemes are not syntagmatic entities, in that, they are not capable of standing in ordering relations with other other entities, or exhibiting in their structure something that allows them to have orderable constituents. By contrast phonemes or pleremes are syntagmatic entities.

It is also essential to remember that relation of simultaneity is characteristic of morphology, in the sense that, the relations in morphology are by definition symmetrical relations. This leads us to represent diagrammatically the ordering-simultaneity dichotomy as follows:-



Given that signs may be in construction with one another, and that we recognize two types of constructional relations, i.e. ordering relations and relation of simultaneity, we need some means of establishing whether a complex is morphological, i.e. a self-contained simultaneous bundle of two or more monemes in a relation of simultaneity, or a syntactic complex, i.e. a complex sign consisting of, at least, two constituent signs in a syntactic relation to one another.

2.3. Criteria for the Identification of Morphological Complexes from Syntactic Complexes

The hypothesis that a complex sign is a simultaneous bundle of two or more minimal signs (or monemes) in a relation of simultaneity, i.e. a morphological complex, implies that:

- a) the complex sign P is a potential constituent
- b) the complex sign P is complex. Unless we can show that P contains at least two signs, each constituent sign identifiable as a sign with a sign in another context, it could not be said to be complex.
- c) each of the signs is simple. It should be borne in mind that monemes are simple signs. The significance of this is, that any complex containing any set, one of whose constituents is a complex sign, can, in no instance, be considered a simultaneous bundle of monemes. *between*
- d) the relation/the constituent signs is a relation of simultaneity.

From these implications follows a methodology:-

- a) commutation with other signs in a context to show that it is a potential constituent, e.g. "cart horse" (in "the cart horse") where it commutes with " man".
- b) Commutation of other signs in another context, that is, in order to show that it is a complex we must show that each of the constituent signs appear in a different context, ensuring that we preserve the identity of denotation, e.g. "cart horse",

"cart" appears in "cart wheel" and "horse" appears in "racehorse".

c) Each of the constituent signs is a simple ^{Sign}. Our major task here is to show that no sub-sequence can be analysed as two signs. To restate the problem in other words, the immediate constituents of a morphological complex must be at the same time its ultimate constituents, i.e. no further analysable.

Given a complex like "walking stick", one can state that each constituent should be separately relevant to the whole, i.e. each constituent should commute with another sign or with zero to produce a well-formed complex. Thus, while it seems possible to commute "walk" and "stick" with other elements such as in:-

"walk" "ing" "stick"

"shoot" "ing" "stick"

"walk" "ing" "tour"

the element "ing" can never be shown to be a separately relevant immediate constituent of "walking stick":-

*"walk" "?" "stick"

*"walk" "∅" "stick"

We should, therefore, on these grounds, reject the solution that "walk", "ing" and "stick" are immediate constituents of the complex "walking stick". Thus the ultimate constituents are not "walk" + "ing" + "stick", hence the complex "walking stick" is not a morphological complex.

d) Evidence of simultaneity can be shown by applying two tests:-

(i) permutation

(ii) commutation

(i) Reversibility is one alternative operation to determine functional ordering. Given a complex like "garden flower", asymmetrical relations between "garden" and "flower", can be shown by demonstrating that there is a distinct complex, e.g. "flower garden", in the sense that, the complex "flower garden" is different from "garden flower". This is sufficient to show that

the relation between the two constituents is asymmetrical, and hence "garden flower" is not a morphological complex.

(ii) Given a complex whose constituents are A and B, if we can show that A commutes validly with C and if C is syntactically complex, such that CB is a syntactic complex, then we have demonstrated that the complex AB is a syntactic complex. On considering the complex "the car", we can show "the" (in "the car") commutes validly with "one or the other", the latter being syntactically complex, we conclude that "one or the other car" is a syntactic complex. As "one or the car" in "one or the other car", commutes validly with "the" in "the car", we have demonstrated that "the car" is a syntactic complex.

CHAPTER THREE

SYNTACTIC ANALYSIS

3.1. Pre-Requisites for a Syntactic Analysis

The maximum entities that figure in the morphological section of a linguistic description are pleremes (the minimum entities of this section being monemes). The minimum entities that figure in the syntactic section of a linguistic description are pleremes. The maximum entities of this section are syntagms. A syntagm can consist of syntagms and be itself a constituent of a higher level syntagm. In other words a syntagm can have constituents at different hierarchial levels.

In syntax, it should be remembered that we are able to recognize morphological complexes from syntactic ones. In the first place, we must be able to identify a syntagm and the pleremes it consists of, that is, the string of pleremes as being a syntagm in the sense that, it is the realization of this syntagm. It is also assumed that, we are able to identify constructional relations between parts of the syntagm. In other words, the investigator must be able to distinguish between direct and indirect relations (which will be discussed at a later point).

These are the pre-requisites for a syntactic analysis. Thus, in syntax, we are concerned with the analysis of a syntagm into lower syntagms. This process is carried out until we reach the ultimate constituents: the pleremes. At this point, it can be said pleremes and syntagms are syntagmatic entities.

Before we proceed to the discussion of the analysis of a syntagm into immediate constituents, two important notions in syntax must be discussed, namely position and syntagm.

3.2. Position and Syntagm

The model 'position' is used to describe the functions of the elements which occur in a syntagm, that is, we establish the positions in order to account for the functions of the elements of a given syntagm. 'Position' is defined as "divisions within a

chain such that in every such division, an entity, as an immediate constituent of that chain, can stand and alternate, i.e. commute, with other entities"¹¹.

It is understood that a position is a place in which a syntagmatic entity can stand and can be substituted for a similar element or zero. One regards it as a paradigmatic point on the syntagmatic axis.

It goes without saying that, in syntax, the linguist is interested in identifying the different types of chain, hereafter referred to as syntagms.

Every element which occurs in a particular syntagm is assigned to a position, that is to say, the positions in which the elements of a given syntagm occur, describe the functions of the constituents of the syntagm in question. In this respect it is important to establish the correct numbers of positions in a syntagm. Therefore, in syntax, the syntagm is the model with which we work for a syntactic analysis. The model, i.e. a model for a particular syntagm, is set up to account for every instance of the syntagm in question. If it fails to do so, the model is refuted. If it accounts adequately for all the phenomena it purports to describe, it is forwarded as a hypothesis.

Faced with a syntagm, our primary task is to analyse it into its immediate constituents. The basic principle of immediate constituent analysis stipulates that syntagms are not just linear sequences of elements, but are composed of different levels of immediate constituents.

¹¹Mulder: "Postulates for Axiomatic Functionalism" Def. 7g.

3.3. Immediate Constituent Analysis

When setting up a syntactic analysis, our primary objective is to analyse a syntagm into its immediate constituents. The process of grouping entities together in order to recognise immediate constituents is determined by the establishment of syntactic relations (see Section 3.4.)

In the first place the immediate constituents are purely hypothetical. It is only by means of the determination of types of relations (syntactic relations) that we may test them. To rephrase it, it is the establishment of syntactic relations that enables us to test the statement of immediate constituents.

Our first step is a good guess as to where the cuts should be and launch this as a hypothesis. If this hypothesis is in agreement with what we observe to be direct relations and indirect relations (see below) within the construction, our hypothesis is corroborated, otherwise it is refuted.

As to the distinction between direct and indirect relations, it is important to know that direct relations are "relation between constituents (not necessarily immediate constituents) that is, not a relation via something else".¹²

Direct relations hold between a nuclear immediate constituent and a peripheral immediate constituent. In "the tall man" the relations between "man" and "the", "tall" and "man" are direct relations, i.e. not via other constituents. But the relation between "the" and "tall" is an indirect relation as it holds via "man".

¹²Mulder: "Postulates for Axiomatic Functionalism" Def. 15.

The nuclear immediate constituent, is the element of a syntagm which governs the functions of all the other elements, i.e. peripheral elements. A peripheral element is, in this case, the governed element of the syntagm whose function is dependent on the nucleus. The nucleus is the immediate constituent in a syntagm which determines the distributions, i.e. set of occurrences of an entity in constructional relations with other entities, of the syntagm in the hierarchy and identifies the syntactic functions of the other elements of the syntagm in question. Each element which occurs in a given syntagm relates for its function to the same point of reference. This point of reference is the nucleus of the syntagm. To rephrase it, a nucleus has two different functions:-

- a) external function which involves the distribution of the syntagm.
- b) internal function which is to determine the functions of the members of the syntagm.

In what follows we shall show how immediate constituent analysis follows the establishment of direct and indirect relations. Given the example "the young boy has eaten his lunch".

We shall begin the analysis of this syntagm by launching the hypothesis that the immediate constituents of this syntagm are "the young boy", "has eaten" and "his lunch". In the first place there is a direct relation between "the young boy" and "has eaten", as it is a relation that does not hold via other constituents. Similarly there is a direct relation between "his lunch" and "has eaten", as the relation is not via something else. But the relation between "the young boy" and "his lunch" is an indirect relation, as both immediate constituents relate via "has eaten".

We can now state that the construction "the young boy has eaten his lunch" is a subordinative construction, i.e. a construction

which consists of a nuclear immediate constituent and one or more peripheral immediate constituents, of which "has eaten" is the nuclear immediate constituent, and "the young boy" and "his lunch" are the peripheral immediate constituents.

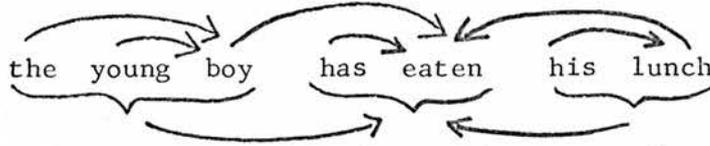
On a lower level of analysis the immediate constituent "the young boy" is analysable into the immediate constituents "the", "young" and "boy". From the point of view of direct and indirect relations, it is possible to say that the relation between "the" and "boy" is a direct relation. Similarly the relation between "young" and "boy" is a direct one. But "the" and "young" relate via the nuclear entity "boy". Here again we have a subordinative construction which consists of a nuclear immediate constituent, i.e. "boy", and two peripheral immediate constituents, i.e. "the" and "young".

"Has eaten" can, in turn, be analysed into the immediate constituents "has" and "eaten". The relation between "has" and "eaten" is a direct relation. "Has eaten" is a subordinative construction, in which "eaten" is the nuclear immediate constituent and "has" is the peripheral immediate constituent.

"His lunch" can itself be analysed into the immediate constituents "his" and "lunch". There is a direct relation between "his" and "lunch". This is another subordinative construction of which "lunch" is the nuclear immediate constituent and "his" is the peripheral immediate constituent.

At the first stage of applying direct and indirect relations, there are three nuclei, i.e. "boy", "eaten" and "lunch". It appears that some nuclei may be more nuclear than others. The ultimate nucleus is called a nucleus nucleorum. In our example "eaten" is the nucleus nucleorum of the syntagm "the young boy has eaten his lunch" in the sense that "boy" and "lunch" relate

via "eaten". The hierarchical segmentation of the syntagm in terms of direct relations emerges as follows:-



Direct relations are here indicated by means of arrows. The entities the arrows point to are nuclei.

Particularly interesting in this respect is the fact that direct relations may be tactic and non-tactic. Tactic relations are constructional relations between syntagmatic entities that are immediate constituents in combinations. Non-tactic relations are relations between constituents.

Tactic relations may be direct or indirect relations;

A direct tactic relation is a relation between a nuclear immediate constituent and a peripheral immediate constituent, e.g. the relations between "the young boy" and "has eaten", "has eaten" and "his lunch" are direct tactic relations.

An indirect tactic relation is a relation between the peripheral immediate constituents of a subordinative construction, e.g. the relation between "the young boy" and "his lunch" is an indirect tactic relation.

A direct non-tactic relation holds between the nucleus of a peripheral constituent and the nucleus of the corresponding syntagm on the higher level, e.g. the relation between "boy" and "eaten" is a direct non-tactic relation.

The other type of relation, i.e. indirect non-tactic, is of no interest and should not be included here.

The most important type of the aforementioned relations is the direct tactic relation. There are three possibilities for this type of relation, namely: relation of subordination, relation of co-ordination and relation of inter-ordination.

3.4. Syntactic Relations

Relations between entities in combinations are dependencies. The relation in question may be a relation of functional dependency or a relation of occurrence dependency.

3.4.1. Functional Dependency

A relation of functional dependency is a relation in which an immediate constituent in combination with another immediate constituent depends for its function on the other immediate constituent in the chain in question, e.g. "these houses", in which the immediate constituent "these" is, for its function, dependent on "houses". The item "houses" is said to be independent for its function, as it can stand on its own.

Mulder recognizes three possibilities for functional dependencies, namely relation of subordination, relation of co-ordination and relation of inter-ordination. The most common type of syntactic relation is a relation of subordination.

(i) Relation of Subordination is defined as "direct tactic asymmetrical relation of functional dependency"¹³. In this type of relation an immediate constituent is dependent for its function on another immediate constituent in the chain in question, but not vice versa. An example of this type of relation is "the man", in which "the" is a peripheral immediate constituent standing in a direct relation with "man" (the governing entity). "The" is said to be dependent for its function on "man". "The", in this case, is subordinated to "man".

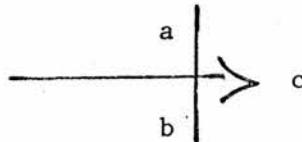
It must be remembered in this context that every syntagm which exhibits a relation of subordination must have a nuclear element, i.e. the element in a syntagm, which governs the functions of all

¹³ Mulder: "Postulates for Axiomatic Functionalism" Def. 11a.

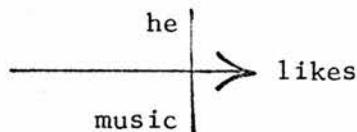
other elements which occur in the syntagm in question.

Subordination can be represented as $a \rightarrow b$ (where a is subordinated to b). Within subordination Mulder maintains a distinction between diverse determination and parallel determination.

a) Diverse determination is defined as "complex tactic relation such that two or more peripheral immediate are subordinated to the same nucleus but in different ways"¹⁴. This simply means that when two or more peripheral immediate constituents can be shown to stand in a different relation to the same nucleus, they are said to be in diverse determination. Diverse determination can be shown as follows:-



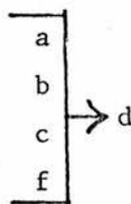
where a and b are filling the positions of peripheral elements and c is filling the position of nucleus of the syntagm in question. Let us replace the symbols by a concrete example from English, e.g. "he likes music". We can state that "he" and "music" are peripheral immediate constituents in the sense that they derive their functions from the relation in which they stand to the nuclear immediate constituent "likes". In this particular case, the immediate constituents "he" and "music" are subordinated to the same nucleus "like," but in different ways. This relation of diverse determination can be represented as follows:-



¹⁴Mulder: "Postulates for Axiomatic Functionalism" Def. 11a.

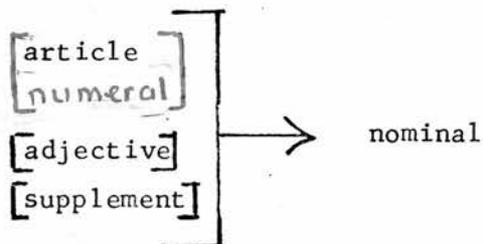
In this representation "he" and "music" are standing in peripheral positions, whereas "likes" stands in nuclear position.

b) Parallel determination is defined as "complex tactic relation such that two or more peripheral immediate constituents are subordinated to the same nucleus, but it cannot be ascertained that they are so in different ways."¹⁵ There is a relation of parallel determination when different relations cannot be demonstrated for each of the peripheral immediate constituents subordinated to the same nucleus. In other words, two or more peripheral immediate constituents (subordinated to the same nucleus) determine the same nucleus in a parallel way, such as shown in the following representation:-



in which a, b, c and f are standing in peripheral positions, whereas d fills in the nuclear position. The elements a, b, c and f are subordinated to the same nucleus, but we cannot demonstrate that they are so in different ways.

An example of parallel determination is the nominal syntagm plural in French. A nominal syntagm is a syntagm in which a nominal fills in the nuclear position. The representation set up for the nominal syntagm plural in French is as follows (the positions are here filled by convenient labels):-



¹⁵Mulder: "Postulates for Axiomatic Functionalism" Def. 14b.

The elements enclosed here between square brackets are said to be expansions, i.e. peripheral immediate constituents that commute with zero. The entity the arrow points to is standing in nuclear position.

(ii) Relation of Co-ordination is defined as "direct tactic (by implication symmetrical) relation of mutual functional independency"¹⁶ An example of co-ordination is "a big blue bag". In this case "blue" is for its function independent of "big" and "big" is for its function independent of "blue". In this respect "big" and "blue" are said to be functionally independent and therefore co-ordinated. Co-ordination can be represented as follows:-



(iii) Relation of inter-ordination is defined as "direct tactic (by implication symmetrical) relation of mutual functional dependency"¹⁷ In this type of relation of functional dependency, one immediate constituent is dependent for its function on the second immediate constituent, and the second immediate constituent is dependent for its function on the first. In order to illustrate this type of relation let us examine the following example from English, "the sooner the better". In this inter-ordinative construction the immediate constituent "the sooner" is for its function dependent on "the better" and reciprocally the immediate constituent "the better" is dependent for its function on the immediate constituent "the sooner". In this case the immediate constituents "the sooner" and "the better" are said to be inter-ordinated in the sense that we need both immediate constituents to have a well formed syntagm. We can now represent this type of relation as follows:-



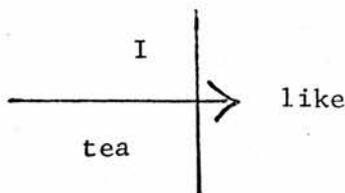
¹⁶ Mulder: "Postulates for Axiomatic Functionalism" Def. 11b.

¹⁷ Mulder: "Postulates for Axiomatic Functionalism" Def. 11c.

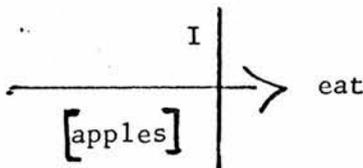
3.4.2. Occurrence Dependency

Mulder maintains a distinction between functional dependency and occurrence dependency. In Axiomatic Functionalism we can avail ourselves of Martinet's notion of expansion, i.e. a peripheral element of a given construction that may be replaced by zero, and what Mulder calls a bound peripheral element, i.e. a peripheral element that cannot be replaced by zero. We can simply indicate expansion by using square brackets, e.g. [a] the entity a between square brackets is an expansion.

Let us now examine an example from English to illustrate this distinction. Given a construction such as "I like tea" we note that the syntactic relation, i.e. relation of functional dependency, between "like" and "tea" can be regarded as the same as that between "eat" and "apples" in "I eat apples" with the only difference being that in the first construction ("I like tea"), "tea" is a bound peripheral element, whereas in the second construction ("I eat apples") "apples" is an expansion. The distinction between the two types of constructions can be shown as follows:-



as opposed to:-



in which the entity between square brackets is an expansion.

Mulder distinguishes between three types of occurrence dependency, namely occurrence interdependency, unilateral occurrence dependency and bilateral (or mutual) occurrence independency.

(i) Occurrence interdependency or bilateral occurrence dependency is defined as "relation such that neither of two entities in direct relation, which are immediate constituents of a chain, can occur in the chain in question while the other is zero."¹⁸ In symbols $\underline{a} \underline{b}$. Occurrence interdependency can be either a case of subordination or inter-ordination.

The following example from English illustrates this type of relation, "the girl walks". In this construction the immediate constituent "the girl" is dependent for its occurrence on the immediate constituent "walks", and reciprocally the immediate constituent "walks" is dependent for its occurrence on the immediate constituent "the girl". This is clearly the case that neither of the two immediate constituents "the girl" and "walks" can occur in the chain in question while the other is zero.

(ii) Unilateral occurrence dependency is defined as "relation such that one of two entities in direct relations which are immediate constituents of a chain can occur in the chain in question whilst the other is zero, but the other one cannot".¹⁹ In symbols $a [b]$, the square brackets indicate the occurrence dependent entity.

The following examples from English illustrate this type of relation, e.g. "the man". In this construction the immediate constituent "man" can occur in the construction in question, but "the" cannot occur while "man" is zero. We can have "man", but never "the" on its own. It is the case that the immediate constituent "the" requires the occurrence of "man" for its occurrence. Unilateral occurrence dependency is always a case of subordination.

¹⁸Mulder: "Postulates for Axiomatic Functionalism" def. 12a.

¹⁹Mulder: "Postulates for Axiomatic Functionalism" Def. 12b.

(iii) Bilateral (or mutual) occurrence independency is defined as "relation such that each of two entities in direct relation which are immediate constituents of a chain can occur in the chain in question while the other is zero".²⁰ An example of bilateral occurrence independency from English is "the big blue bag". In this construction each of the immediate constituents "bag" and "blue" can occur in the chain in question while the other is zero, e.g. the $[\emptyset]$ blue bag
the big $[\emptyset]$ bag
in which the entity between square brackets commutes with zero. Neither of the immediate "blue" and "big" is for its occurrence dependent on the other. Bilateral occurrence independency is always a case of co-ordination, in symbols $[a][b]$.

Having examined these types of occurrence dependencies, we can now establish a correlation between functional dependency and occurrence dependency.

Given that a bilateral occurrence independency $[a][b]$ is always a case of co-ordination (but never of subordination or inter-ordination), that bilateral occurrence dependency is always a case of subordination, and that occurrence inter-dependency is either a case of subordination or inter-ordination, we can draw the following parallel:-

Bilateral occurrence independency	$[a][b]$	$a \leftrightarrow b$ (co-ordination)
Unilateral occurrence dependency	$[a] b$ $[b] a$	$a \rightarrow b$ $a \leftarrow b$ } subordination
Occurrence inter-dependency	$\underline{a} \underline{b}$	$a \leftrightarrow b$ (inter-ordination)

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Mulder, "Postulates for Axiomatic Functionalism" Def. 12c.

CHAPTER FOUR

NOTE ON THE RELATIVE PRONOUNS

In this chapter we shall give a brief statement of the data to be covered in this study. For convenience, the following presentation is based on that of the traditional descriptions of French and in particular that of Maurice Grevisse.

4.1. Relative Pronouns

Relative pronouns serve to indicate a relation between a noun or a pronoun, called antecedent, and a subordinate clause, e.g.
le jeune homme qui travaille à l'université
(the young man who works at the university)

In this example the relative pronoun qui relates the relative clause qui travaille à l'université to homme.

4.2. Forms

For Maurice Grevisse there are two basic relative pronouns:-

a) the relative pronoun qui, which manifests simple forms /ki/, /kə/, /kwa/, ... /dø/ and /u/ and which for reason of convenience will be represented as their normal written forms:- qui, que, quoi, dont and où.

b) the relative pronoun lequel which appears to be constituted of le + quel, manifests complex forms /ləkɛl /, /dɛkɛl / and /okɛl /, which for reason of convenience will be represented as their written forms, lequel, duquel and auquel.

4.3. Nature of the Antecedent

The antecedent is the element related by the relative pronoun to the relative clause. The antecedent may be:-

a) a noun as in, le livre que je t'ai donné
the book I gave you.

b) a pronoun (personal, possessive, demonstrative, indefinite)
as in:-

- (i) Lui qui pretend tout savoir
(he who pretends to know everything)
- (ii) Il en est qui pretendent tout savoir
(there are people who pretend to know everything)
- (iii) Tel qui pretend tout savoir meurt ignorant
(he who claims to know everything dies ignorant)
- (iv) Ceux qui pretendent tout savoir ne savent rien du tout
(those who claim to know everything, don't, in fact, know anything at all)

4.4. Function of the Relative Pronoun

Relating a relative clause to an antecedent is not the unique function of a relative pronoun, for, it also (as will be seen at a later point) fulfills a second function within the relative clause, namely:- subject, direct object, indirect object etc.. In the following paragraphs we will draw particular attention to these functions.

4.4.1. Qui

(i) the relative qui serves as a subject and refers to persons or things such as in:-

- a) l'homme qui travaille à la poste
(the man who works in the post office)
- b) le livre qui se trouve sur la table
(the book which is on the table)

(ii) the relative qui serves also as a complement when it is preceded by a preposition, e.g. à qui, de qui, etc., as in the

following examples:-

- a) le directeur d'études à qui je parle
(the supervisor to whom I speak)
- b) le directeur d'études pour qui je travaille
(the supervisor for whom I work)

4.4.2. Que

(i) the relative que serves as a direct object and refers to animates²¹ or inanimates such as in:-

- a) l'homme que je vois
(the man I see)
- b) la table que je vois
(the table I see)

(ii) Que is also used sometimes to indicate time, place, manner etc., as in the following examples:-

- a) C'est la première fois que je l'ai vu
(this is the first time I have seen him)
- b) Il se comportait de la manière que ses professeurs lui avaient si bien recommandé
(his behaviour reflected his professors' recommendation)

²¹It is interesting to note that in popular French there is a tendency to use que as a general relative pronoun instead of qui, quoi and dont. Let us look at the following examples taken from Parisian French:-

- a) la chose que j'ai besoin (dont)
(the thing I need)
- b) c'est moi que je suis arrivé le premier (qui suis arrivé)
(it is I who arrived first)
- c) Y a rien a que je m'intéresse (de quoi)
(there is nothing to be interested in)

Note here the introduction of "je" in every example.

(iii) There is a further point that needs clarification, that is the opposition qui/que in French is maintained in terms of the distinction subject(qui)/object(que).

4.4.3. Quoi/Qui

Whereas, as pointed out earlier, the distinction qui/que is maintained in terms of the opposition subject/object, the differentiation between quoi/qui can be drawn on the grounds that quoi can only refer to inanimates, while qui can refer to animates and inanimates. As will be shown in the following examples qui preceded by a preposition is the relative used when the antecedent is animate (a person) and quoi is the relative used when the antecedent is inanimate.

- a) l'homme à qui je parle
(the man to whom I speak)
- b) Une migraine à quoi il n'attachait aucune importance
(a migraine to which he paid no attention)

4.4.4. The Question of Dont/ De Qui, De Quoi, Duquel, De Laquelle Desquelles

The relative dont serves as a complement of a noun such that in a non-relative clause there would be a prepositional phrase introduced by de in that position. The great significance of this is that dont can be replaced by de in certain instances as in the following examples:-

- a) L'homme dont je connais le fils/Je connais le fils de l'homme
(the man whose son I know)
- b) Le vin dont je remplissais mon verre/Je remplissais mon verre de vin
(the wine with which I was filling my glass)

According to Grevisse dont may be replaced by de qui, de quoi, par lequel and avec lequel. As shown below dont can be replaced by such forms.

- a) l'homme dont il s'agit / l'homme de qui il s'agit
(the man in question)
- b) le livre dont je connais l'auteur / le livre duquel je connais l'auteur
(the book whose author I know)

While it is true that dont can be replaced by the aforementioned forms, there is, however, one respect in which the substitution of dont for such forms is not possible. Let us examine the following examples in which we have substituted dont:-

- a) l'homme dont la maison a été vendu / the man whose house has been sold
- b) l'homme de qui la maison a été vendu
- c) L'homme duquel la maison a été vendu
- in which b) and c) are unacceptable.

In the same fashion dont cannot be replaced by any of the aforementioned relatives when the antecedent is *ce, cela, rien*, as the following shows:-

- a) ce dont il s'agit / ce de quoi il s'agit (unacceptable)
(the matter in question)
- b) c'est de cela dont il s'agit / c'est cela duquel il s'agit (unacceptable)

4.5. Où

This relative is considered by most grammarians (to name but a few, Pichon, Grevisse, Levitt and Vaugelas) as a relative adverb that can only refer to inanimates. Où serves to indicate a location, or time as in the examples below:-

- a) le pays où j'habite
(the country where I live)
- b) les temps où nous sommes
(the times in which we live)

4.4.6. The Question of Lequel/Qui

Under this heading we ought to mention that lequel as opposed to qui, has the advantage of marking distinctions of gender and

number. Lequel refers to animates and inanimates. It should also be noted that lequel serves as a subject and complement when preceded by a preposition. Particular attention should be drawn to the fact that lequel is preferred to qui where the latter could be ambiguous, as shown in the following example :-
 "Une édition de ce livre qui^{se} vend très bien".

(i) The first alternative is that qui refers to "édition", i.e. the edition sells very well.

(ii) The second alternative is that qui refers to "livre", i.e. the book sells very well.

The use of lequel clears all doubts as regards the ambiguity in question, as the gender and number of the relative lequel corresponds to the gender and number of the antecedent, as in:-

a) il y a une édition de ce livre laquelle se vend très bien.

b) il y a une édition de ce livre lequel se vend très bien.

Lequel is always used instead of qui after parmi and entre, e.g. parmi lesquelles (not parmi qui) and entre lesquelles (not entre qui). In another respect lequel is also used instead of qui, to avoid an inconvenient repetition of qui when the antecedent is inanimate as in:-

"Une lettre qui m'apportait la bonne nouvelle laquelle (not qui) m'a fort rejouit". (a letter which brought me good news that cheered me up).

Auquel, A Laquelle, Auxquels(lles)/Qui

The forms auquel, à laquelle, auxquels and auxquelles are used instead of qui when the latter is preceded by a preposition, in the sense that, these forms (as opposed to qui) distinguish between gender and number.

a) Le chien auquel (not à qui) j'ai jetté l'os (the dog to whom I threw the bone)

b) La chienne à laquelle (not à qui) j'ai jetté l'os.

- c) Les chiennes auxquelles (not à qui) j'ai jetté l'os.
 d) Les chiens auxquels (not à qui) j'ai jetté l'os.

Duquel, De Laquelle, Desquels(les) / Dont

The forms duquel, de laquelle, desquels(les) are used instead of dont to avoid an ambiguity, especially when the antecedent is complement of a noun preceded by a preposition. Let us examine the following examples:-

- a) Les amis pour le bonheur duquel (not dont) je travaille
 (the friends whose happiness I work on)
 b) Le problème à l'étude duquel (not dont) je consacre ma vie.
 (I have consecrated my life to the study of this problem).

Lequel, Laquelle, Lesquelles / Quoi

Lequel is also preferred to quoi in certain cases as shown in the following examples:-

- a) Les crayons avec lesquels (not avec quoi) j'écris.
 (the pencils I write with)
 b) C'est une question de principe sur laquelle (instead of sur quoi) on s'interroge.
 (it is a question of principle that is in question nowadays).

On the General Use of Lequel / Qui

There has been much debate as to the specific use of lequel and qui, but from the aspect of day-to-day use, there is no clear-cut distinction and precise criterion for the use of lequel and qui, except that, for stylistic reasons, lequel seems to offer a stronger demonstrative value, in the sense that, it indicates the precise relationship between the antecedent, especially when the relative clause is separated from its antecedent, and the relative clause, and that besides distinguishing between gender and number of the antecedent.

To conclude, let us summarize the various forms of qui and lequel and their respective functions in the following table,

REFERS TO	SUBJECT	OBJECT	PREPOSITIONAL	COMPLEMENT OF A NOUN
<u>ANIMATES</u> Masculine Feminine Plural	lequel laquelle { lesquels lesquelles }	lequel laquelle { lesquels lesquelles }	lequel laquelle { lesquels lesquelles }	lequel laquelle { lesquels lesquelles }
	QUI	QUE	QUI DONT*	DONT
<u>INANIMATES</u> Masculine Feminine Plural	lequel laquelle { lesquels lesquelles }	lequel laquelle { lesquels lesquelles }	lequel laquelle { lesquels lesquelles }	lequel laquelle lesquels lesquelles
	QUI	QUE OU	QUOI DONT	DONT

*Dont is taken as the preposition de relative here.

CHAPTER FIVE

SYNTAX OF FRENCH

In this chapter we shall give a brief statement of French syntax and especially of those models necessary for the proposed description, e.g. model for the nominal syntagm, verbal syntagm, etc..

Further Note on the Syntagm

The label which is given to the syntagm, e.g. nominal, transitive, intransitive etc., is given according to the class of elements which fill the positions of the syntagm. Every constituent which occurs in a particular syntagm is assigned to a position of that syntagm. The establishment of positions is made in terms of the functions of the elements which occur in a particular syntagm. By setting up a model for a particular syntagm, our main purpose is to account for every instance of the syntagm in question. If it fails to do so it is refuted. However, if the model accounts adequately for all the phenomena it purports to describe, it is forwarded as a hypothesis. We assume that these hypotheses are adequate for our description.

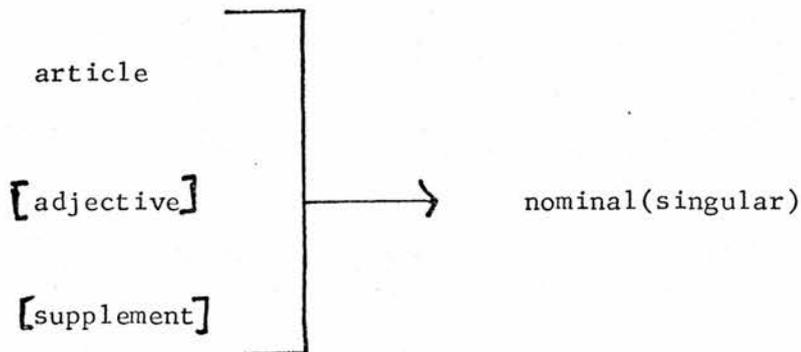
5. Note on the Nominal Syntagm

As a preliminary to the discussion of the nominal syntagm in French, it is relevant to point out that a nominal syntagm is a syntagm whose nucleus is a nominal. The term nominal is a descriptive label for entities that are traditionally known as nouns (animates or inanimates) e.g. "homme", "table", "cheval", "ville", "arc-en-ciel", "livre" etc., and are said to fill the nuclear position of a nominal syntagm. All the other elements that occur in the syntagm relate for their function to the nominal, i.e. the nucleus of the nominal syntagm.

In French the nominal syntagm singular differs from the nominal syntagm plural. The distinction will become clearer in the course of this chapter. We shall examine the nominal syntagm singular and plural separately.

5.1 Nominal Syntagm Singular

For the nominal syntagm singular, the following model is set up:-



The entity the arrow points to is said to be standing in nuclear position. The item standing in article position is a bound peripheral element of a syntagm, in the sense that it can never commute with zero. This model for the nominal syntagm singular in French, is set up to account for every instance of the syntagm, as there are as many positions as necessary to account for the whole field of relations in the syntagm. In some cases a position may not be filled. It should be noted that, in this structure of the nominal syntagm singular of French we have given the positions convenient labels, e.g. article, adjective and supplement. The entities between square brackets are said to be positions of expansion.

5.1.1. On the Article Position

We have chosen the term article for the first peripheral position. Our first task is to test the hypothesis that we need an article position in French. Given the example "la voiture", we can, by valid commutation, with a syntactic complex show that "la" occurs in a syntactic position, i.e. article position. We can commute

"la" with "l'une ou l'autre", producing the complex "l'une ou l'autre voiture". On the first level of analysis "l'une ou l'autre" has the immediate constituents "l'une" and "ou l'autre". On a further level of analysis "ou l'autre" is analysable into the immediate constituents "ou" and "l'autre".

On the lowest level of analysis "ou" and "l'autre" stand in separate positions and hence "l'une" and "ou l'autre" stand in separate syntactic positions. The point here is that "l'une ou l'autre" and "voiture" are in a syntactic relation. This is demonstrably the case that "l'une ou l'autre" commutes validly with "la" we have also demonstrated that "la voiture" is a syntactic complex. We can now conclude that "la" occurs in article position (note that "la" does not commute with zero, as "voiture" is ill-formed).

The reason for having only set up one position to account for definite articles, e.g. "le", "la" and "les", indefinite articles (un, une,) and numeral, e.g. "un", is due to the fact that we can never tell whether "un" in "un homme" is an indefinite article or a numeral, i.e. un as opposed to deux. In fact not only definite article and indefinite article, but also possessive adjectives, e.g. mon, ton, son, ses, etc. and demonstrative adjectives (cette, ces etc.) can stand in that position. Definite and indefinite articles, demonstrative and possessive adjectives are standard terms from traditional grammar and included here for the purpose of classification.

5.1.2. Adjective Position.

The term adjective is a label for elements such as "splendide", "miticuleux", "ridicule", "petit", "t[^]tu", "d[^]testable", "m[^]prisable", "moche", "jaloux" etc. which fill this position.

5.1.3. Supplement Position

This third and last peripheral position of the nominal syntagm singular is set up to account for functional syntagms that occur in a nominal syntagm. We need to know, however, that a functional syntagm is a syntagm whose nucleus is a functional and in which such a functional is determined by a complement, i.e. the peripheral item of the functional syntagm. A functional denotes a relation between a nucleus and a peripheral syntagm, that is to say the functional relates the complement of the functional syntagm to a nucleus, e.g. nominal. The structure of a functional syntagm can be represented as follows:-

functional ← complement

(in which the functional is the entity standing in nuclear position and the complement is the entity standing in peripheral position.)

Within the class of functional syntagms, we may differentiate between two types of functional syntagms, namely prepositional syntagms and relative syntagms.

(i) a prepositional syntagm is a syntagm whose nucleus is a preposition and in which such a preposition is determined by a nominal syntagm. The term preposition is a label for entities such as "sur", "dans", "à", "de", "dessous", "par" and "derrière". In this respect, a prepositional syntagm is a functional syntagm in which the functional is a preposition and the complement is a nominal syntagm, the structure of which can be shown as follows:-

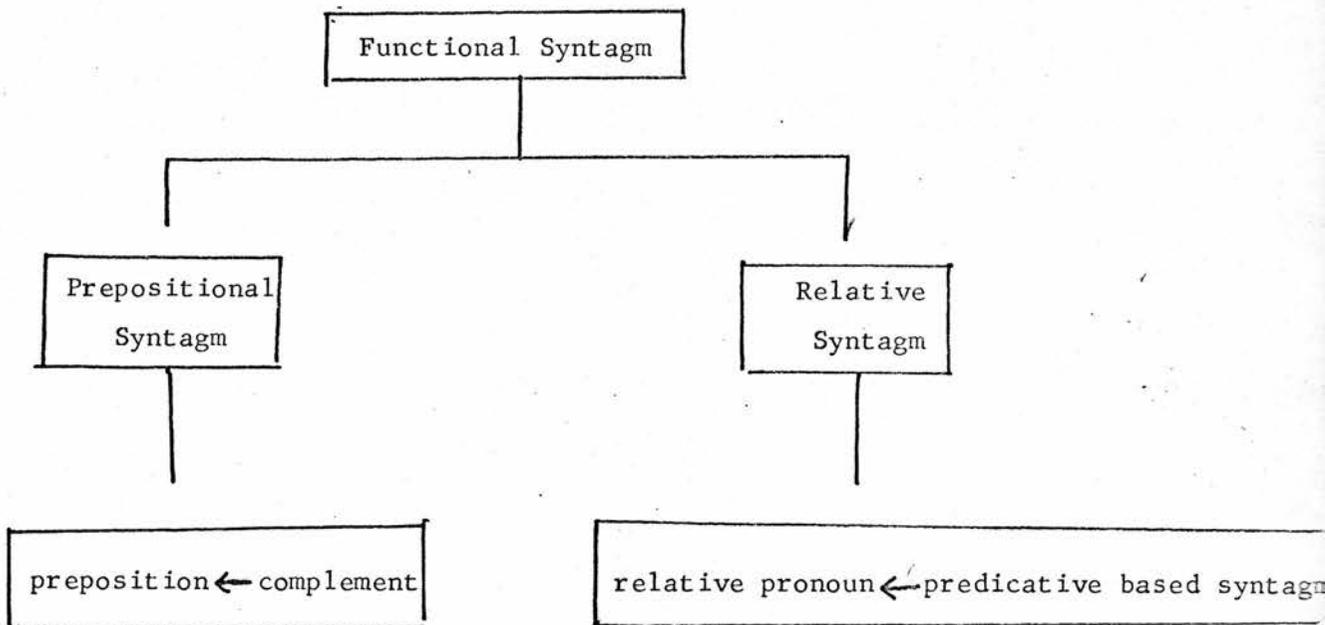
preposition ← nominal syntagm
(functional) (complement)

(ii) with respect to the second category of functional syntagm, i.e. relative syntagm, the most we can say here is formulate the hypothesis (to be tested at a later point) that a relative syntagm is a syntagm whose nucleus is a relative pronoun and in which such

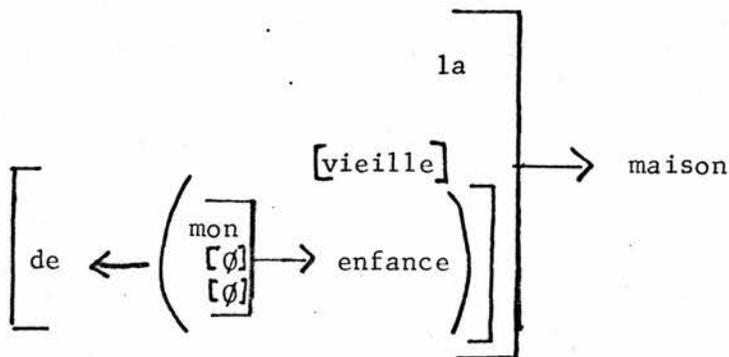
a relative pronoun is determined by a predicative based syntagm (as opposed to a prepositional syntagm in which a preposition is determined by a nominal syntagm). In other words, a relative syntagm is a functional syntagm in which the functional is a relative pronoun and the complement is a predicative based syntagm the structure of which can be shown as follows:-

relative pronoun ← predicative based syntagm

The different types of functional syntagms can be diagrammatically represented as follows:-

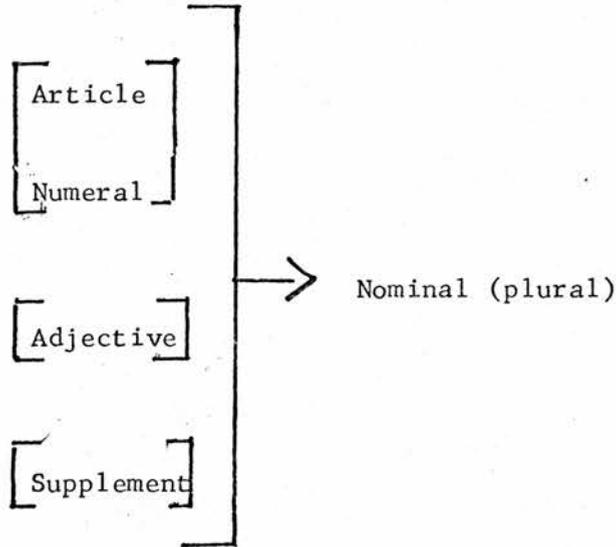


An example of a nominal syntagm singular with all positions filled is "la vieille maison de mon enfance",



Nominal Syntagm Plural

The model for the nominal syntagm plural in French is the following:-



The nominal syntagm singular of French differs from the nominal syntagm plural, in that, while in the former the article is a case of actualization, i.e. a case in which the presence of a non-zero peripheral element is required by a nuclear immediate constituent, in the latter either the article or the numeral position must be filled. In other words, in "^{trois}les petits freres", we can have either "les petits freres" (in which "trois" commutes with zero)

or

"trois petits freres" (in which "les" commutes with zero)

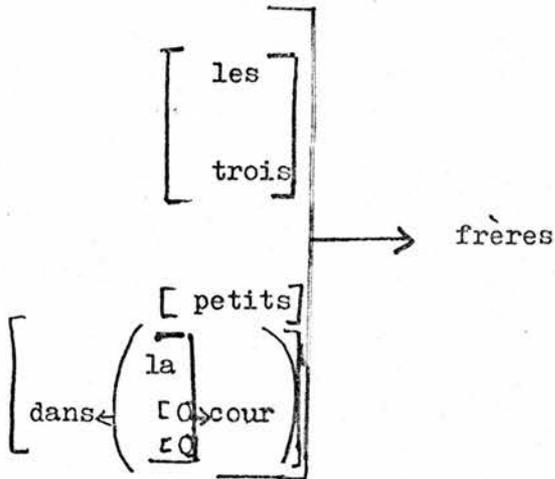
but never

"petits freres" (syntactically ill-formed).

This simply means that we must always have, by necessity, either an article, e.g. "les" or a numeral (trois, quatre etc.). There can be no instance of a nominal syntagm plural where both article and numeral commute with zero.

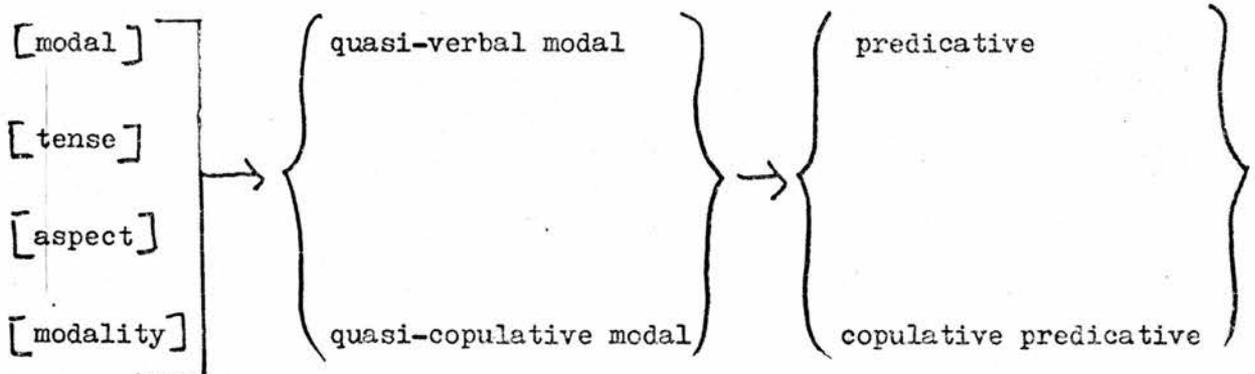
For the adjective and supplement position of the nominal syntagm plural we shall refer to our previous discussion of the adjective and supplement position of the nominal syntagm singular.

An example of a nominal syntagm plural in French with all positions filled is, "les trois petits freres dans la cour".



5.3 Model for the Verbal Syntagm of French

The model for the verbal syntagm of French is the following:-



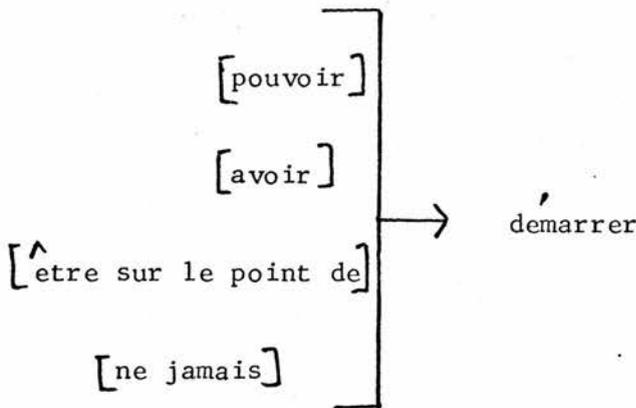
The "{ }" in the above scheme indicates an either/or relation between the terms enclosed in brackets. The terms enclosed between square brackets are said to be expansions. The entities the arrows point to fill nuclear position.

We have chosen the term modal to label the first peripheral position. In this position we can have items such as "falloir", "devoir" ... etc..., e.g. "il faut partir" in which the item "falloir" is modifying partir, and stands in modal position.

The term tense has been chosen to label the second peripheral position in which items such as "avoir" and "être" can stand in this position. The items "être" and "avoir" express the tense of a predicative copulative predicative in terms of completed action, e.g. "il est parti", "il a mangé", in which "est" and "a" fill in the tense position and express that the action of "partir" and "manger" is completed.

We have labelled the third peripheral position aspect position, but in fact the items which fill this position, e.g. "être sur le point de", "venir de", "continuer à", "finir de" etc. express the aspect of a predicative or a copulative predicative in terms of its conception, duration etc.

We have chosen the term modality to label the fourth peripheral position as items such as "ne pas", "ne guère", "ne point", "ne jamais" and "ne que" can fill this position. An example with all positions filled is "ne jamais pouvoir avoir été sur le point de démarrer",



An example of a copulative predicative is "il est grand", in which the copula être is modified by "grand". Examples of quasi-verbal modals in French are "avoir l'habitude", "avoir l'intention de", "avoir le plaisir de". A quasi-verbal modal modifies a predicative

or a copulative predicative, e.g.

"il avait l'habitude de mentir"

"il avait l'intention d'être fâ meux"

in which the quasi-verbal modals "avoir l'habitude de" and "avoir l'intention de" modify respectively "mentir" and "être(fâ meux)".

An example of a quasi-copulative modal in French is "être capable de" or "être obligé de". These quasi-copulative modals modify a predicative or a copulative predicative such as in:-

"il est capable de jongler" and

"il est disposé à être allègre".

More could have been said about the verbal system of French, but for the purpose of our discussion this will suffice.

5.4. Subcategorization of Verbs in French

As it is impossible to discuss within the space available all the different categories of verbal constructions in French, we shall only examine those types of constructions relevant to our study.

Let us first replace the term verb by the functional term predicative and mention that, the terms subject, object, transitive, intransitive are labels introduced here for reason of convenience as an aid to the classification of certain entities in the data.

For our current purpose it is important to remember that a predicative is the element which fills the nuclear position of a predicative based syntagm. We shall call a predicative based syntagm a syntagm actualized by a nominal syntagm, and for reason of convenience let us call the nominal syntagm which actualizes a predicative a subject, the subject here taken as a non-zero peripheral element, i.e. cannot commute with zero, required by the predicative. As will be shown some predicatives require the presence of another nominal syntagm, which for reason of convenience will be called object.

According to whether these predicatives take an object or not, one can, in a language like French, distinguish between transitive and intransitive. Transitive predicatives may be direct, non-direct or indirect transitive ("non" is used here as a prefix equivalent to "optional" and "in" as a prefix equivalent to "not" except in the case of intransitive). In what follows we shall take a look at an intransitive predicative and discuss these categories of transitive predicative.

5.4.1. Intransitive Predicative

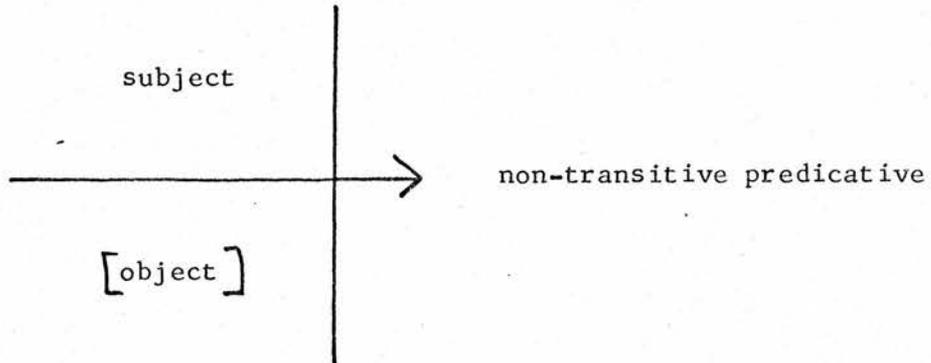
An intransitive predicative is a predicative that does not take an object but requires the presence of an actualizer, i.e. subject. For example "passe" in "le temps passe" is an intransitive predicative actualized by the subject "le temps". The following model for the intransitive predicative based syntagm can be set up:-



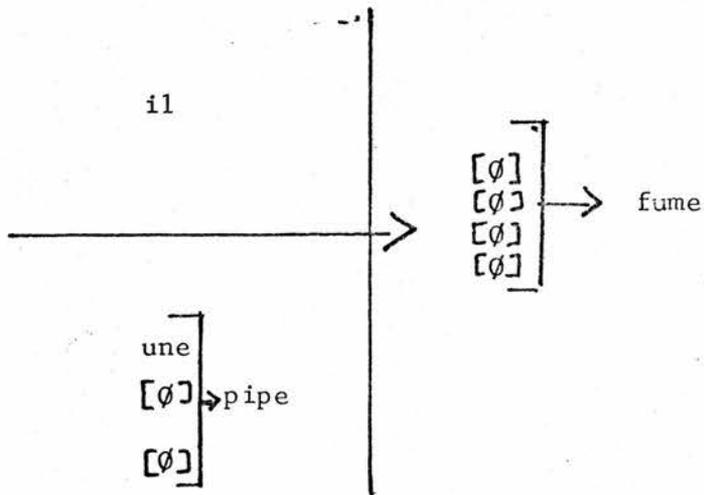
5.4.2. Non-Transitive Predicative

A non-transitive predicative is a predicative that takes an optional object, i.e. a nominal syntagm which fills in the other peripheral position that is not the subject position of a non-transitive predicative and in which the item standing in this position (object position) commutes with zero, without causing the syntagm to be syntactically ill-formed. The following examples from French illustrates this type of construction, e.g. "il fume une pipe". In this syntagm "une pipe" is an optional object, i.e. commutes with zero without affecting the structure of the syntagm, that is "il fume" is syntactically well-formed.

The following model for non-transitive predicative syntagms can be set up:-



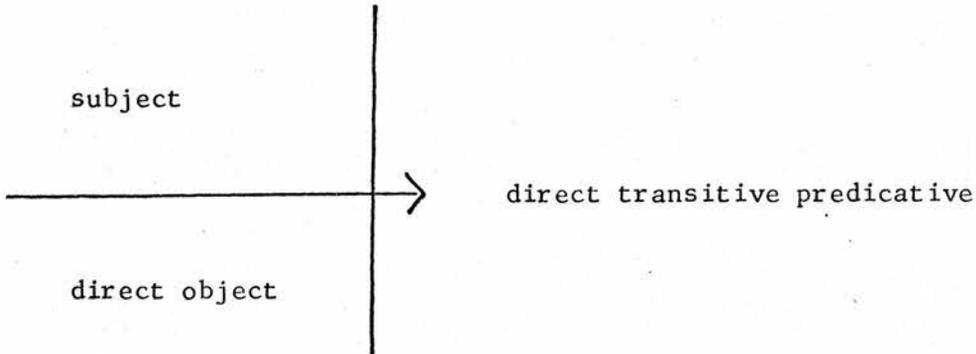
In this configuration the entity commuting with zero is enclosed between square brackets. The entity the arrow points to stands in nuclear position. An example of this type of construction with all positions filled is:-



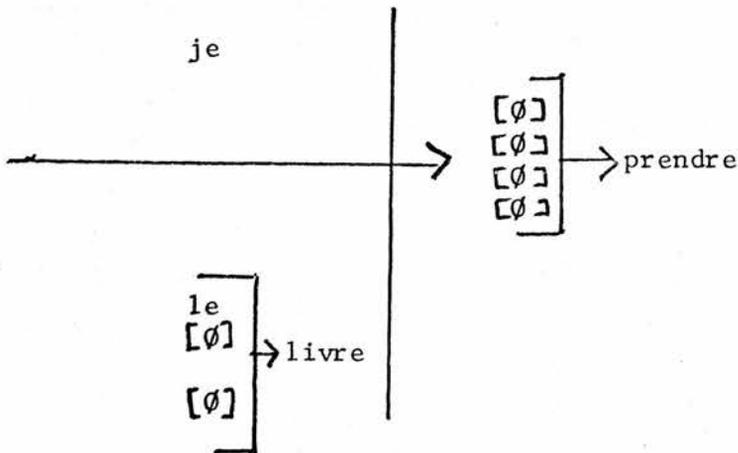
5.4.3. Direct Transitive Predicative

A direct transitive predicative is a predicative that requires the presence of a bound direct object, that is to say, the nominal syntagm (which is not subject) which fills in a peripheral position of a direct transitive predicative syntagm and in which that item is a bound element of the syntagm, i.e. cannot commute with zero.

For the direct transitive predicative based syntagm in French the following model has been set up:-



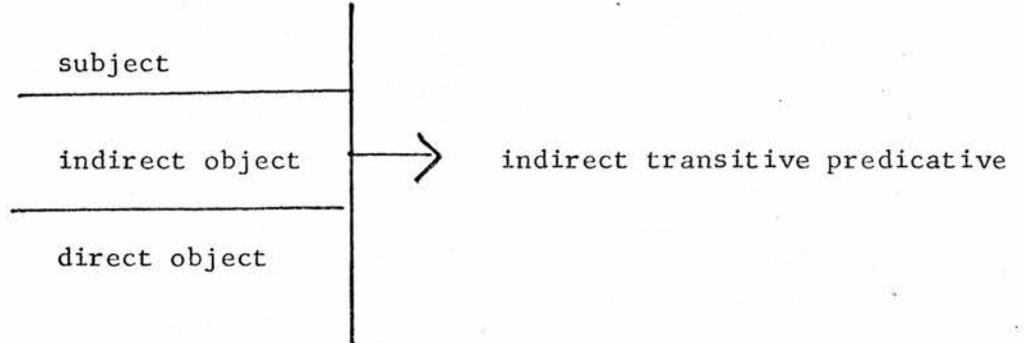
An example of this type of construction from French is "Je prends le livre" which we shall represent as follows:-



The relation between the immediate constituent standing in direct object position (le livre) and the immediate constituent standing in nuclear position (prendre) is a relation of mutual occurrence dependency. Neither of the two immediate constituents "prendre" and "le livre" can occur in the chain in question while the other is zero.

5.4. Indirect Transitive Predicative

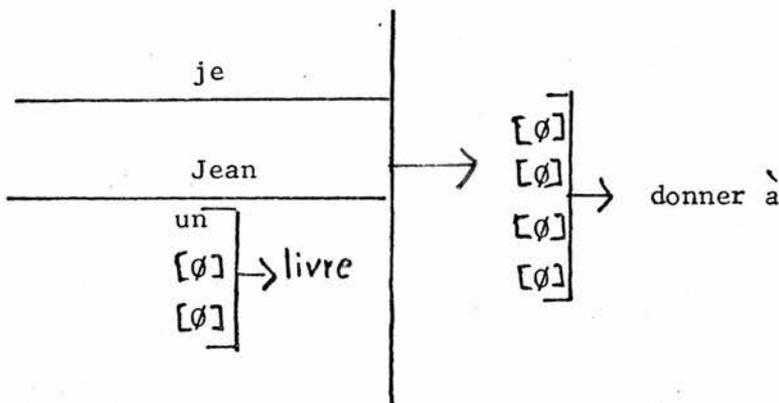
Let us call an indirect transitive predicative, a predicative which requires for its occurrence the presence of a bound direct object and a bound indirect object. For reason of convenience we shall call the nominal syntagm which occurs in the third peripheral position in an indirect transitive predicative based syntagm an indirect object. The model for an indirect transitive predicative based syntagm is:-



An example of indirect transitive predicative in French is "donner à" as in "je donne un livre à Jean." First of all we must test the hypothesis that "à" is part of the plereme "donner-à" i.e. "à" itself is not a sign. On the basis that sign-identity depends in the first place on having a distinctive function of a sign, and given that distinctive function of a sign is determined by the set of signs with which it commutes, or to which it is opposed, in equivalent contexts, one can observe that "à" is part of the plereme "donner-à" and this being corroborated by the fact that "à" does not commute with other signs in "donner à", as the following commutations

donner vous	}	are not acceptable in French
donner derriere		
donner sur		
etc.		

The syntagm "je donne un livre à Jean" can finally be represented as follows:-



It is interesting to note, as shown in the following indirect transitive predicative, that the preposition - like forms are part of the predicative (which means that none of these prepositions commute with other signs)

"rendre à" (as in "je rends a mon voisin sa visite")

"payer à" as in ("j'ai payé a mes creanciers une somme importante")

"envoyer à" (as in, "j'envoie a ma soeur un colis")

However when the indirect object is expressed by personal pronouns, e.g. lui, leur, en, y, these predicatives occur without a preposition,

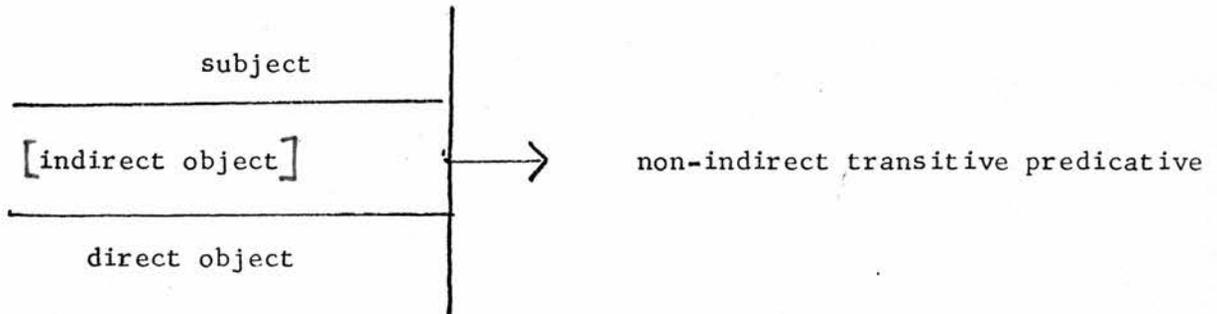
"je lui rends visite"

"je leur ai payé une somme importante"

"je lui ai envoyé un colis".

5.5. Non-Indirect Transitive Predicative

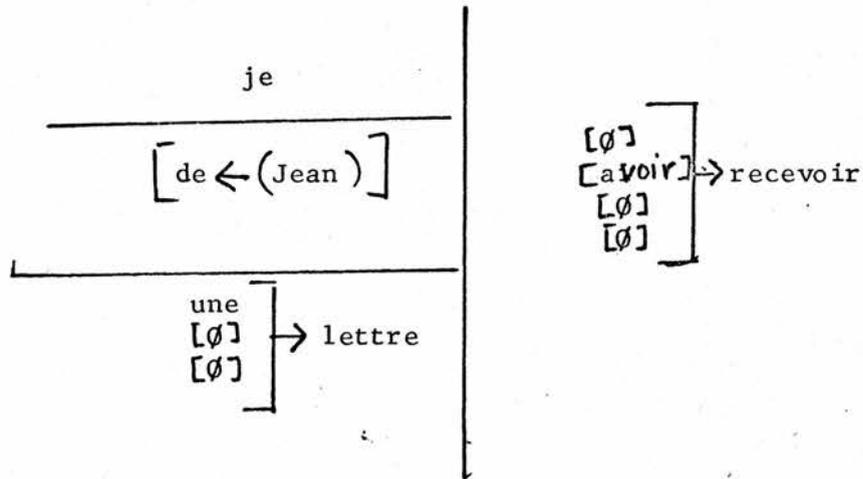
A non-indirect transitive predicative is a predicative which requires for its occurrence a bound direct object but may take an optional indirect object. For the non-indirect transitive predicative based syntagm we shall set up the following structure:-



An example of this type of construction is:-

"j'ai reçu une lettre de Jean" (note here "de" is not part of the plereme "recevoir" but a sign as it commutes with "par" as in "j'ai reçu une lettre par Jean") in which "de Jean" is an indirect object which can commute with zero, as in:-

"j'ai reçu une lettre (syntactically well-formed). In terms of its position this syntagm can be represented as follows:-



We can now state that the difference between an indirect transitive predicative and a non-indirect transitive predicative is made in terms of the indirect object, that is to say, the indirect object of an indirect transitive predicative based syntagm is always a nominal whereas the optional indirect object of a non-indirect transitive predicative based syntagm can be either a nominal syntagm or a functional syntagm.

CHAPTER SIX

SYNTACTIC DESCRIPTION OF THE FRENCH RELATIVE SYNTAGM

Our main concern in this chapter is a full syntactic description of relative syntagms in French. For each of the forms of the relative pronouns recognized in Chapter Four we shall have to establish its positions in the models set up, and then attempt to decide how many signs we are in fact dealing with, giving a brief statement of their distribution and of any allomorphic variation.

The following syntagms are examples selected from the data of French in order to set up the relevant models.

6.1. The Distribution of Où

Let us start by analysing the following syntagm:-

"la cachette où j'ai mis les documents"
(the hiding-place where I have put the documents)

First of all we launch the hypothesis that the immediate constituents of the syntagm are:-

"la", "cachette" and "où j'ai mis les documents". If the determination of the types of relation which exist between the immediate constituents "la", "cachette" and "où j'ai mis les documents", that is to say, if the establishment of direct and indirect relations is in agreement with the hypothesis, it is corroborated, otherwise it is refuted.

One can observe that the relations between the immediate constituents "la" and "cachette", "cachette" and "où j'ai mis les documents" are direct tactic relations, i.e. they do not relate via other constituents. The immediate constituents "la" and "où j'ai mis les documents" are in indirect tactic relation, i.e. they relate via their nuclear immediate constituent "cachette".

On the basis of these tactic relations we can state that the syntagm "la cachette où j'ai mis les documents" is a subordinative construction in which the peripheral immediate constituents "la" and "où j'ai mis

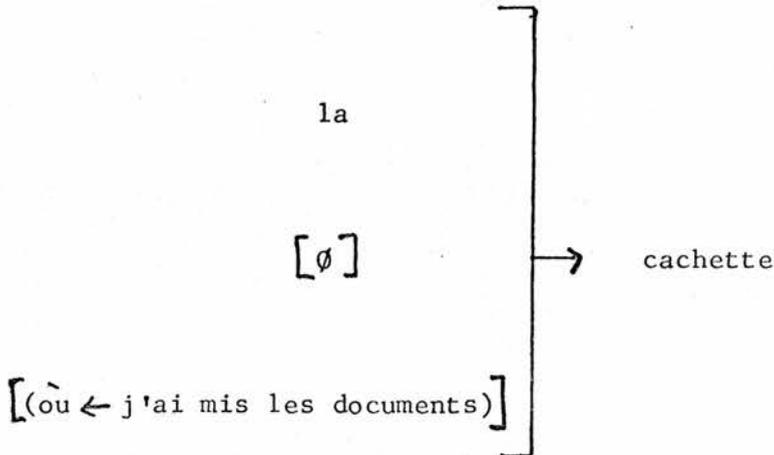
les documents" are subordinated to the same nucleus "cachette".

Our next task here is to assign these immediate constituents to their respective positions. The article and the nuclear position are filled by "la" and "cachette" respectively. Thus "où j'ai mis les documents" may either fill adjective or supplement position, or it may require the setting up of a fourth peripheral position. Note that in French we can have the adjective position filled by "intime" and still have a syntagm like "où j'ai mis les documents". However it is possible to have the supplement position filled by a functional syntagm like "de mon cellier" and still have a syntagm like "où j'ai mis les documents". What we need to show here is that "où j'ai mis les documents" is a functional syntagm and therefore assignable to supplement position.

The point to be made here is that "où" is in direct relation with the nominal nucleus "cachette" and "mettre". "Je" and "les documents" are in direct tactic relation with "mettre". It would appear then as if we are dealing with two syntagms, one with "mettre" as the nucleus and one with "où" as the functional in which case "j'ai mis les documents" is the complement of "où". Given that "où" fulfills the conditions for being a functional, i.e. it relates the whole of "j'ai mis les documents" to the nominal "cachette", the hypothesis that "où j'ai mis les documents" occurs in supplement position is corroborated.

Given that ("de ← mon cellier") and ("où ← j'ai mis les documents") are functional syntagms relating to the same nucleus "cachette" via their respective functional, in the sense that the former is a prepositional syntagm independent for its function of the latter which is a relative syntagm (and vice versa), we have also corroborated the hypothesis that a prepositional syntagm and a relative syntagm in a relation of coordination can occur in supplement position to the same

nominal²³. Thus the analysis of the nominal syntagm "la cachette où j'ai mis les documents" at this point is:-



A further account of "j'ai mis les documents" reveals that we are dealing with a syntagm whose nucleus is the indirect transitive predicative "mettre" as the direct tactic relations between the pairs of immediate constituents (on this lower level of the analysis) show, i.e.

"je" and "mettre"
 "les documents" and "mettre"

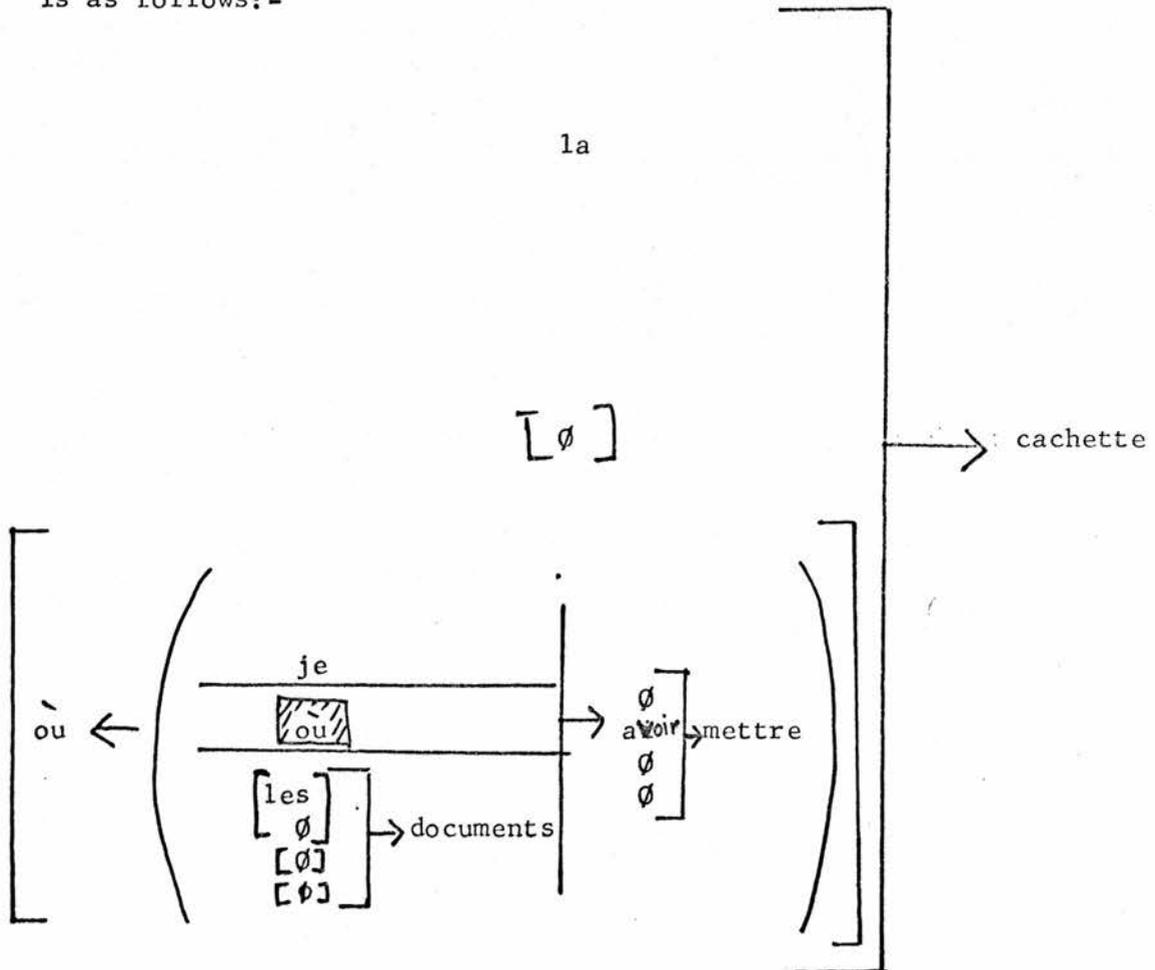
Such being the case "je" fills in subject position and "les documents" fills in direct object position.

In view of the fact that all the peripheral elements of an indirect transitive predicative based syntagm are bound elements, we need one more position, namely indirect object position to be filled. Particularly relevant to this discussion is the fact that "où" is not only in direct non tactic relation with "mettre" in its status as the functional, but is also in direct tactic relation with "mettre", and to account for this, we assume that "où" stands in the, yet unfilled, bound peripheral position of indirect object.

²³Note that, in French, no two relative syntagms can occur in supplement position as immediate constituents (on the same level of analysis) to the same nominal. In the same way, no two prepositional syntagms can occur in supplement position as immediate constituents (on the same level of analysis) to the same nominal.

Given that two functions means two distinct positions, it would appear that we are dealing with two signs "ou", one occurring in functional position and one occurring in indirect object position. The fact that only one of these signs has a realization suggests that we are dealing with a case of amalgamation, that is to say, the allomorphs of the two signs "ou" amalgamate in one phonological form. Such amalgamation is marked in the full syntagm by a square around one of the two signs. Let us bear in mind that this marking of one of the two signs is arbitrary, but reflects the realization.

Thus the full analysis of "la cachette où j'ai mis les documents" is as follows:-



In connection with "ou", we also need to recognize another structure in which "ou" can occur. Given the syntagm, "le pays où j'habite" (the country where I live) and the hypothesis that the syntagm consists

of the following immediate constituents:-

"le", "pays" and "ou j'habite"

one can point out the following direct tactic relations between the immediate constituents,

"le"; "pays".

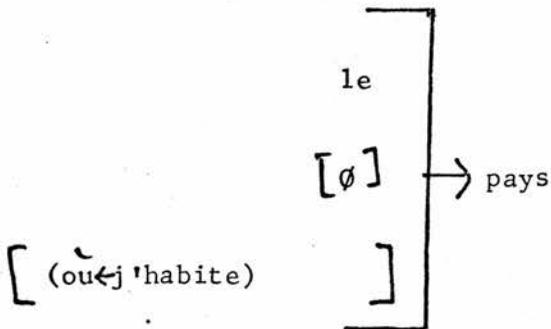
"ou j'habite"; "pays"

and the following indirect tactic relation between

"le" and "ou j'habite".

(both immediate constituents correlates via their nucleus "pays").

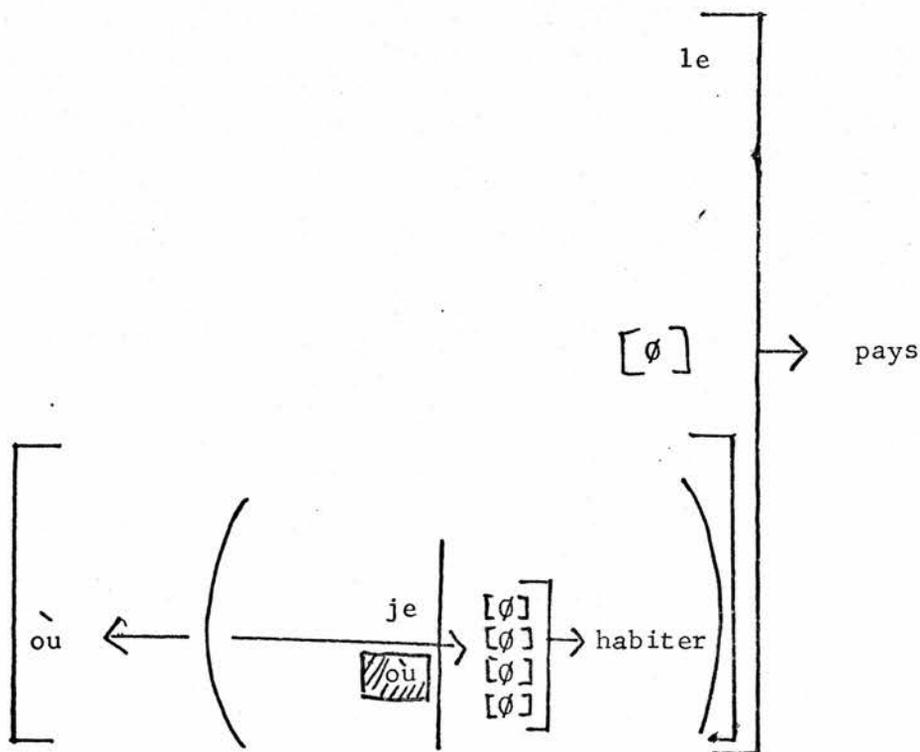
"le pays ou j'habite" appears to be a nominal syntagm similar to that analysed previously. If this is the case then "le" stands in article position. The nuclear position is filled by the nominal "pays", while "ou j'habite" fills the supplement position, this being corroborated by the fact that "ou j'habite" can be shown to be a functional syntagm, as "ou" is not only in direct relation with the nominal nucleus "pays", but it is also in direct non tactic relation with "habiter", in its capacity as the functional which relates "j'habite" to the higher nucleus "pays". Thus "ou" is a functional while "j'habite" is its complement. This leads us to represent the syntagm "le pays ou j'habite" as follows:-



A quick look at "j'habite" will reveal that it is a direct transitive predicative, that is, in its capacity as the nucleus, "habiter" is the nucleus of a direct transitive predicative based syntagm in which the actualizer "je" occurs in subject position.

It should also be noted that "ou" is in direct tactic relation with "habiter". This is shown in the description, by "ou" occurring in direct object position to "habiter".

Now that all the positions of the direct transitive predicative based syntagm are filled, it should be noted, in view of the fact that "ou" occurs in two distinct positions, that we are dealing with two signs "ou", the allomorphs of which amalgamate in such a way that we have only one phonological form, this being indicated in the full syntagm by a square around one of the signs. The full analysis of the syntagm "le pays ou j'habite" and that of "ou j'habite" can finally be shown as follows:-



Summary:

To sum up the main points raised in the course of this first section, one needs to recognize that the sign "ou" occurs in:-

a) functional position, both in "ou j'ai mis les documents" and in

"ou j'habite".

b) indirect object position in the indirect transitive predicative based syntagm, "ou j'ai mis les documents".

c) direct object position to "habiter".

The important thing to note as far as "ou" is concerned is that, in the above syntagms, and in fact, in all its uses, the nominal nucleus (to which "ou" relates) is, what we may call a locative noun, i.e. denotes a location, or a noun which denotes time.

6.2. The Distribution of Qui

The first example to be analysed is

"le vieil homme qui abandonna sa maison".

(the old man who left his home).

As a start we launch the hypothesis that the above syntagm is a nominal syntagm in which the peripheral immediate constituents "le", "vieil" and "qui abandonna sa maison" are subordinated to the same nominal nucleus "homme".

From the aspect of syntactic relations the direct tactic relations are as follows:-

"le" and "homme"

"vieil" and "homme"

"qui abandonna sa maison" and "homme".

(These immediate constituents do not relate via any other constituent)

There are indirect tactic relations between

"le" and "qui abandonna sa maison"

"vieil" and "qui abandonna sa maison"

(These immediate constituents relate via their nuclear immediate constituent "homme").

To all appearances, the syntagm "le vieil homme qui abandonna sa maison" exhibits the structure of a nominal syntagm of which "homme" is the nominal nucleus in its capacity as the nominal, furthermore the article position is filled by "le" and the adjective position is filled by "vieil".

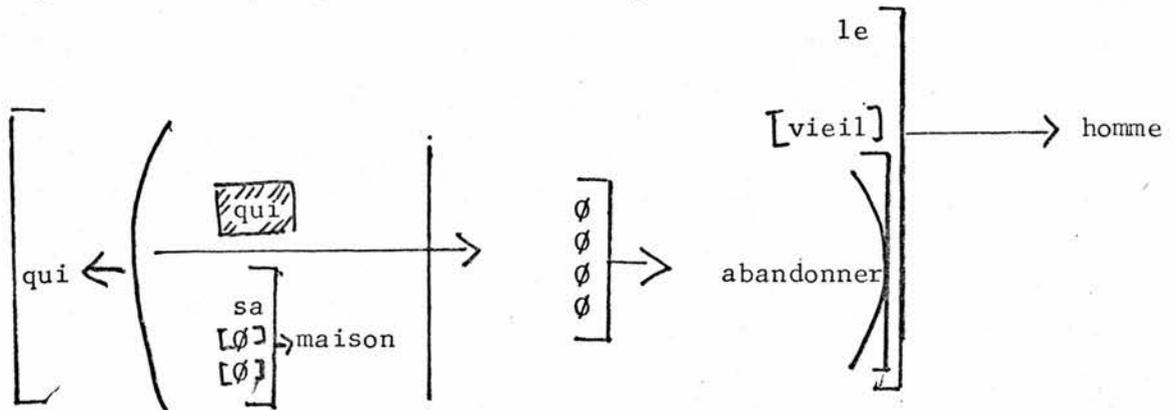
And to account for the yet unfilled supplement position, our main concern is to show that "qui abandonna sa maison" is a functional syntagm.

To corroborate the hypothesis that "qui abandonna sa maison" is a functional syntagm, one can start by indicating that "qui" is direct non tactic relation with "abandonner" (in its status as functional) and in direct relation with the nominal nucleus "homme" and its capacity as the functional it relates the complement "abandonna sa maison" to the nucleus (of the nominal syntagm) "homme". Such being the case, and given that "qui" is functional (and therefore nucleus of the functional syntagm "qui abandonna sa maison") the hypothesis that "qui abandonna sa maison" occurs in supplement position (in its status as a functional syntagm) is corroborated.

We can go on to observe that "abandonner" is a direct transitive predicative, in the sense that "abandonner" is the predicative which fills the nuclear position of a direct transitive predicative based syntagm. It should be added to this, that "abandonner" requires the occurrence of a subject and a direct object (both elements being bound peripheral entities). The direct object position is here filled by "sa maison". With respect to the subject position which must be filled (in order to have all the positions of the predicative based syntagm filled) and in view of the fact that "qui" is in direct tactic relation with "abandonner" one can assign "qui" to the subject position of the direct transitive predicative based syntagm. Note also that "qui" is in direct non tactic relation with "abandonner" in its status as a functional.

So just as with "ou", so with "qui" we are dealing with a case of amalgamation. This simply means that, we are dealing with two signs "qui", i.e. given that two functions implies two distinct positions, one sign "qui" occurring in functional position and one sign "qui" occurring in subject position. The allomorphs of the signs are amalgamated in one phonological form. We shall indicate this by

enclosing one of the two signs in a shaded square. Thus the full analysis of the syntagm "le vieil homme qui abandonna sa maison" is:-



To conclude this analysis one can finally observe that a sign "qui" occurs in functional position and a sign "qui" occurs in subject position in the complement of the functional syntagm.

In connection with the distribution of "qui", one must examine another structure in which the sign "qui" occurs. The second syntagm to be analysed is "la belle adolescente à qui il donna son coeur" (the young adolescent to whom he gave his heart). The hypothesis to be tested here is that the immediate constituents are "la", "belle", "adolescente" and "à qui il donna son coeur". From the point of view of syntactic relations nothing can refute this hypothesis as we register the following direct tactic relations between the immediate constituents:-

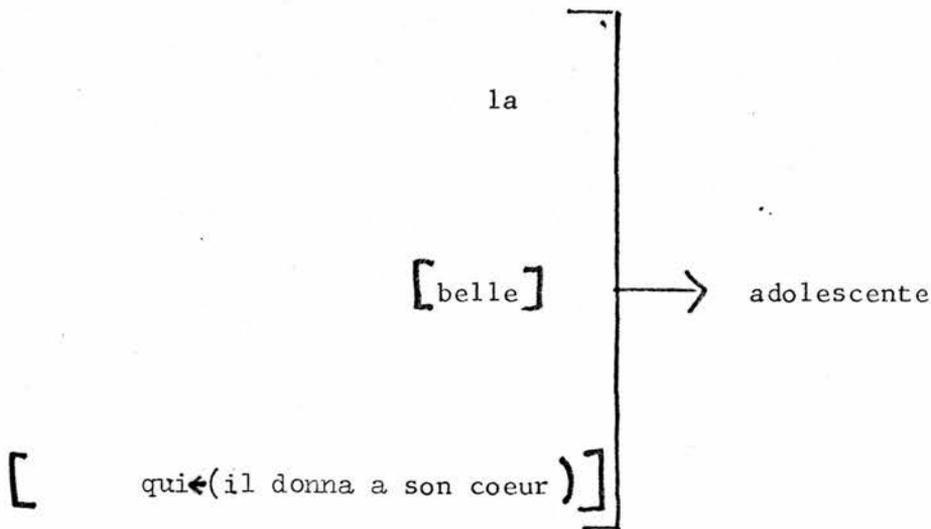
"la" and "adolescente"

"belle" and "adolescente"

"à qui il donna son coeur" and "adolescente"

At this point of the analysis, one can indicate that the syntagm we are dealing with is, in its structure, parallel to "le vieil homme qui abandonna sa maison", in that "la belle adolescente à qui il donna son coeur" is identifiable as a nominal syntagm whose nucleus is "adolescente". We shall assign the immediate constituent "la" to article position, the immediate constituent "belle" to adjective

position. Given that we have only one position left to be filled, namely supplement position, our next task is to test the hypothesis that "à qui il donna son coeur" is a functional syntagm, and as such occurs in supplement position, this being supported by the fact that "qui" is in direct relation with the nominal nucleus "adolescente", and, in its capacity as the functional, "qui" relates the complement "il donna-à son coeur" to the nucleus (of the nominal syntagm) "adolescente". Thus "à qui il donna son coeur" in its status as a functional syntagm occurs in supplement position. The structure of the nominal syntagm can be represented as follows for the time being:-



As regards the complement "il donna-à son coeur" the central point of interest is that "donner-à"²⁴ is an indirect transitive predicative (we have analysed "donner à" in Chapter Five, Section 5.4.4.) which

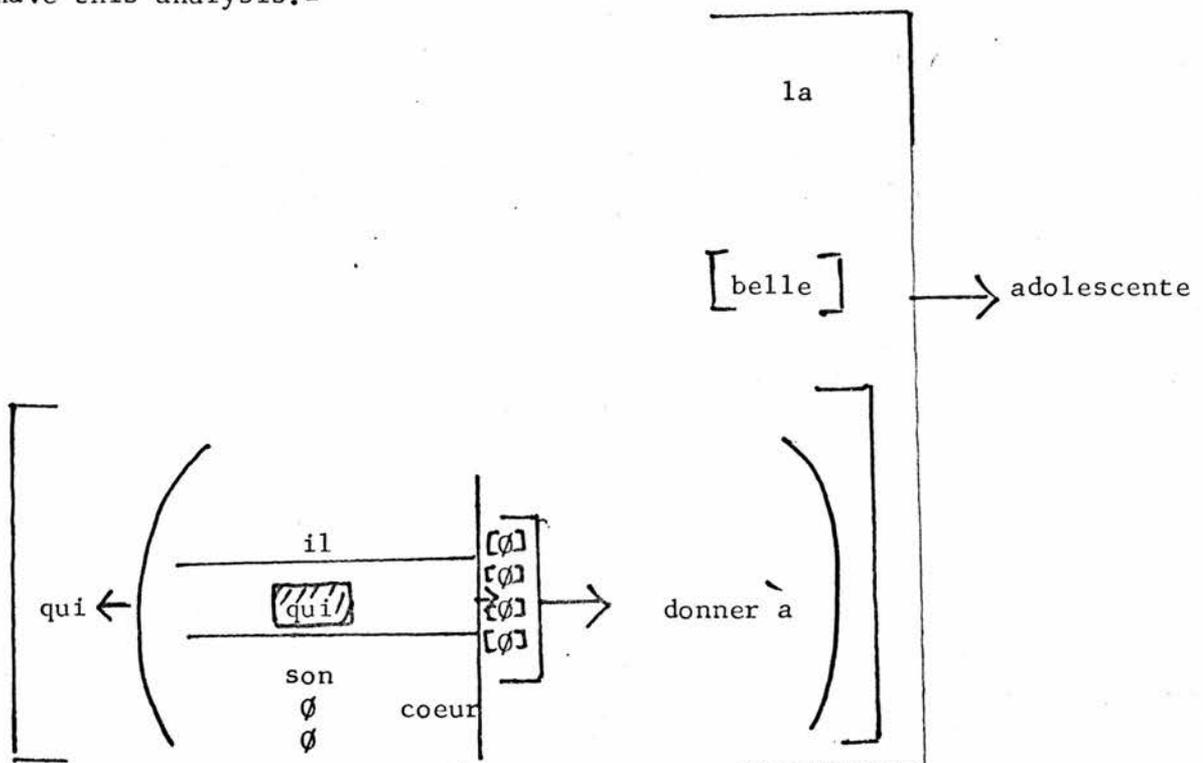
²⁴"à" here is taken as part of the plereme "donner", in the sense that we cannot regard "à" as a sign, as any possible commutation of "à" with other signs occurring in the same position will leave us with ill-formed constructions, e.g. "donner sur" and "donner derriere". (See Section 5.4.4.)

requires the presence of a subject, a bound direct object and a bound indirect object.

"Il" fills in subject position in its capacity as the actualizer of the predicative "donner-a", i.e. "il" is in direct tactic relation with "donner-a". "Son coeur" is in direct tactic relation with "donner-a" and occurs in direct object position.

Bound up with this analysis of the complement "il donna-a son coeur" is the evidence that "qui" exhibits a double function. On the one hand, in its property as the functional "qui" is in direct non tactic relation with "donner-a". On the other hand "qui" is in direct tactic relation with "donner-a" in its function as the indirect object of "donner-a". Thus, bearing in mind that two functions implies two positions, we must recognize two signs "qui", one occurring in functional position and the other occurring in indirect object position. The realization of the two signs is fused in one amalgamated phonological form. This means that in the full syntagm we will have one of the signs arbitrarily enclosed in a square.

Putting the analysis of the nominal syntagm "la belle adolescente a qui il donna son coeur" and that of "a qui il donna son coeur", we have this analysis:-



Summary

In the course of the analysis of the syntagms "le vieil homme qui abandonna sa maison" and "la belle adolescente à qui il donna son coeur" we have seen that the sign "qui" occurs in nuclear position, i.e. functional position. However, in the complement of the functional syntagm "qui abandonna sa maison", "qui" occurs in subject position, whereas in the complement of the functional syntagm "à qui il donna son coeur", "qui" appears in indirect object position. Note here that indirect object position may also be filled by "ou". We shall return to this at a later point and look at all the implications.

6.3. The Distribution of "Que"

The syntagm to be analysed is:-

"l'homme que je connais"

(the man I know).

This syntagm looks very much like a nominal syntagm. If this is the case, then the immediate constituents are "l'", "homme" and "que je connais" and the direct tactic relations between these immediate constituents are:-

"l'" and "homme"

"que je connais" and "homme"

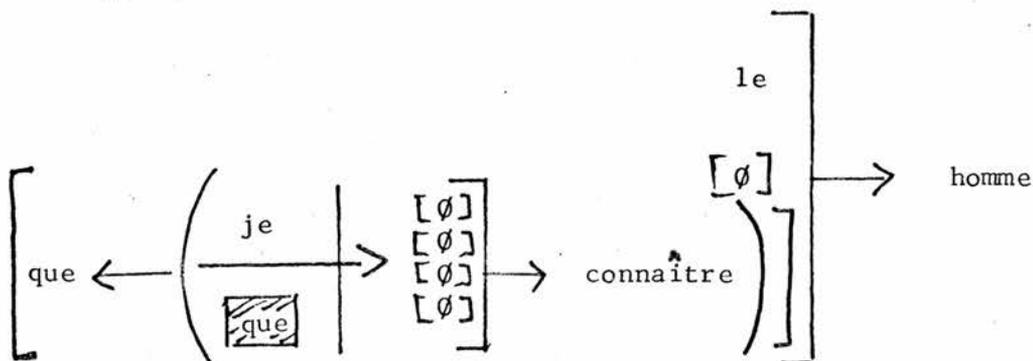
We can also observe that "l'" and "que je connais" are in indirect tactic relation. The two immediate constituents inter-relate by way of the nominal nucleus "homme".

"L'homme que je connais" is then a nominal syntagm whose nucleus is "homme" (the immediate constituents "l'" and "que je connais" being subordinated to the same nominal "homme"). With reference to the positions in which these constituents occur, one can stipulate that "le" stands in the first peripheral position of the nominal syntagm, namely article position and launch the hypothesis (to be tested immediately) that "que je connais" occurs in supplement position.

Note that we can have the adjective position filled by "jeune" and still have a syntagm like "que je connais". In order to corroborate the hypothesis that "que je connais" stands in supplement position, we need to justify the analysis of "que je connais" as a functional syntagm. One can remark that "que" is in direct relation with the nominal nucleus "homme" and in direct relation with "connaître", and in its capacity of relating "je connais" to the nucleus (of the nominal syntagm) "homme", "que" is functional. Therefore "que je connais" is a functional syntagm whose nucleus is "que" determined by "je connais" ("je connais" at this stage is taken as the complement of the functional).

A further analysis of "que je connais" is required as we note that we are here dealing with a sign "que" standing in two distinct positions. Firstly it must be recognised that "connaître" is a direct transitive predicative, i.e. "connaître" is the nucleus of the direct transitive predicative based syntagm, in which "je", standing in a direct tactic relation with "connaître", fills the subject position. The direct object position is here filled by "que" since "que" is in direct tactic relation with "connaître" (note that "que" is also in direct non tactic relation with "connaître" in its status as the functional). Bearing in mind that two functions means two distinct positions, one can say that we are dealing with two signs "que", one occurring in functional position and one occurring in direct object position in the predicative based syntagm. This suggests that we are dealing with a case of amalgamation. The two signs "que" are synthesized in one fused phonological form.

The full analysis of "l'homme que je connais" can be given in the following way:-



Summary

At this point in the discussion the following points must be kept in mind:-

"ou" occurs in

- a) functional position
- b) direct object position
- c) indirect object position

"qui" occurs in

- a) functional position
- b) subject position
- c) indirect object position

"que" occurs in

- a) functional position
- b) direct object position

As the matter stands, the important thing to remember is that "ou", "qui" and "que" seem to have a common characteristic; that of occurring in functional position.

Of equal importance is the fact that the direct object position is a position filled by "ou" and "que", the indirect object position is a position filled by "ou" and "qui" and the only element which occurs in subject position, so far, is "qui".

6.4. The Distribution of "Quoi"

The example from French to be examined here is:-

"Les choses futiles à quoi je ne songe guère"
(the futile things I hardly think about).

The immediate constituents of the syntagm are:-

"les", "choses", "futiles" and "à quoi je ne songe guère".

The direct tactic relations (between these immediate constituents) are as follows:-

"les" and "choses"

"futiles" and "choses"

"à quoi je ne songe guère" and "choses".

The indirect tactic relations are:-

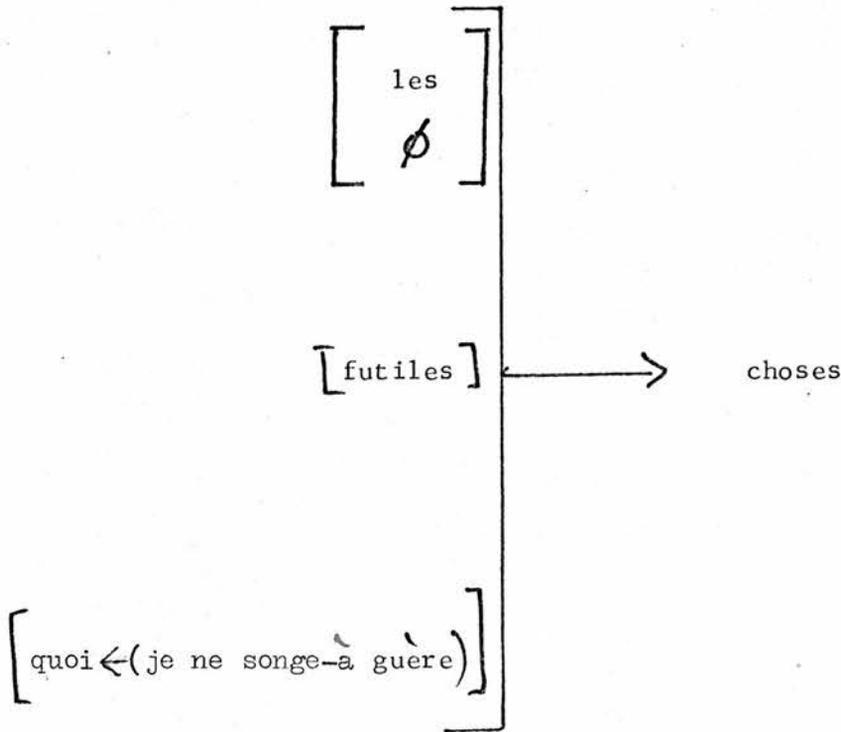
"les" and "à quoi je ne songe guère"

"futiles" and "à quoi je ne songe guère"

(these immediate constituents relate via their nucleus "choses")

Given that "choses" is a nominal, it would appear that we are dealing with a nominal syntagm parallel to that exemplified by "la belle adolescente à qui il donna son coeur". Such being the case, "choses" is the nucleus of the nominal syntagm "les choses futiles à quoi je ne songe guère". Thus the article position is filled by "les" and the adjective position is filled by "futiles". We need one more position, i.e. supplement position, to be filled.

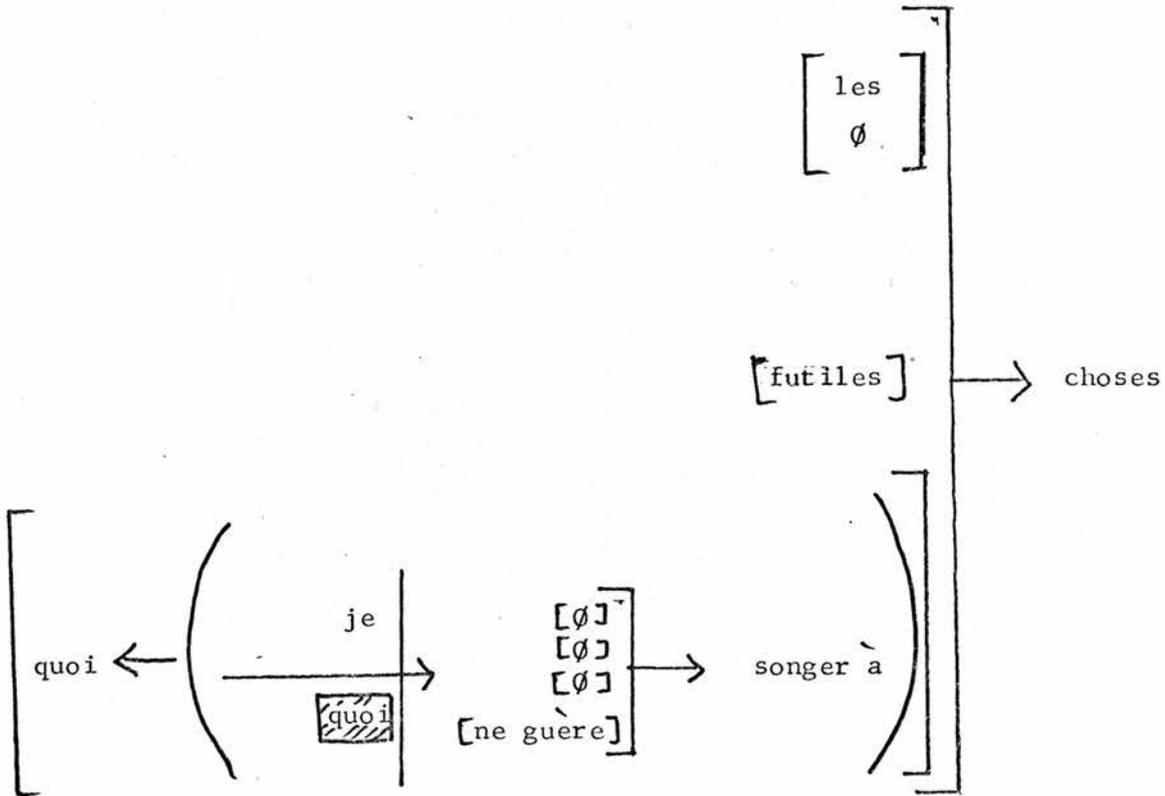
Our major concern is to justify that "à quoi je ne songe guère" is a functional syntagm (in order to show that it can occur in supplement position). Considering that "quoi" is in direct relation with "choses", and in its capacity of relating "je ne songe-à guère" to the nominal nucleus "choses", is functional and hence nucleus of the functional syntagm "à quoi je ne songe guère". This analysis enables us to note that "à quoi je ne songe guère", in its status as a functional syntagm can occur in supplement position and thus the analysis of the nominal syntagm, at this stage, can be illustrated as follows:-



The nucleus of the complement "je ne songe-à guère" is "songer-à" in its capacity of being a direct transitive. Equally relevant is the fact that "à" in "songer-à" is not a sign, but part of the plereme "songer-à", and this being supported by the fact that "à" does not commute with other signs, that is to say, we cannot have in French predicatives such as "songer dans", "songer dessous", "songer par" etc.. This being the case that "à" in "songer-à" is not functional. Referring back to the analysis of "je ne songe-à guère", we can go on to say that "je" is in direct tactic relation with "songer-à" and is assigned to subject position.

Just as with "où", "qui" and "que" it seems that "quoi" fulfills a double function. Firstly in its status as the functional "quoi" in is in direct non tactic relation with "songer-à" and secondly "quoi" is in direct tactic relation with "songer-à". This second function is captured by assigning "quoi" to the direct object position of the direct transitive predicative based syntagm. Thus we are dealing here with two signs "quoi", one filling the functional position and one filling the direct object position. The realization of the two signs "quoi" interlaces in the same phonological form.

This leads us to represent the full syntagm "les choses futiles à quoi je ne songe guère" as follows:-



At this stage of our discussion, we need to recognize that "quoi" may occur in another syntagm as exemplified by "Ce à quoi il attache une grande importance" (he attaches a great importance to that).

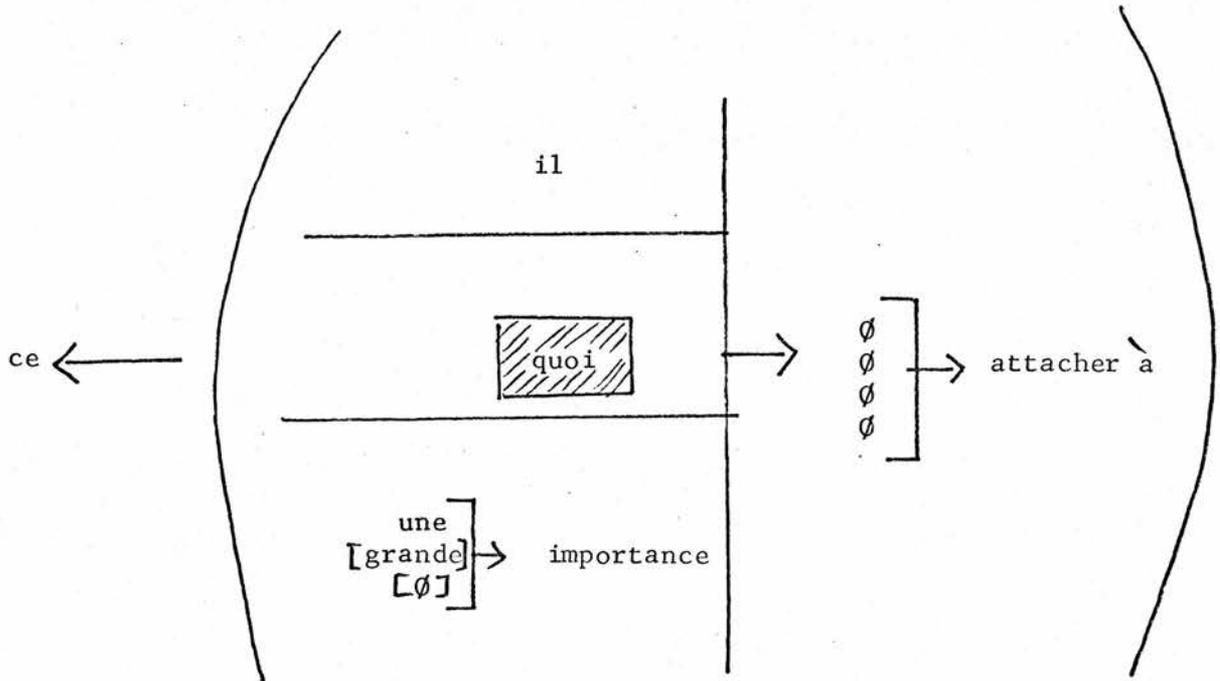
The immediate constituents of the syntagm are "ce" and "à quoi il attache une grande importance", standing in a direct relation.

We shall begin this analysis by examining the immediate constituent "ce". It appears that "ce" is a nominal which does not require an article or adjective position, in the sense that, constructions like "le ce" or even "le beau ce" are not acceptable in French. The hypothesis to be adopted here is that "ce" belongs to a class of nominal,

which only require a supplement, and the supplement to "ce" being "à quoi il attache une grande importance". We are not very sure whether this supplement is a bound peripheral or not. For reasons of space and time we cannot go into such details here, we shall just assume that this supplement is a bound peripheral element to "ce", as this occurrence of "ce" requires "à quoi il attache une grande importance", where "ce" on its own is ill-formed.

The supplement "à quoi il attache une grande importance" is itself a functional syntagm in which the functional "quoi" in direct relation with "ce" relates the complement "il attache-à une grande importance" to the nominal "ce", and is also in direct relation to "attacher-à". The complement "il attache-à une grande importance" looks very much like an indirect transitive predicative based syntagm whose nuclear position is filled by "attacher-à" (in which "à" is not functional, i.e. "à" is part of the plereme "attacher-à" where it does not commute with other signs). "Il" and "une grande importance" are in direct tactic relation with the indirect transitive predicative "attacher-à" and occurs respectively in subject and direct object position. In fact we are here facing a situation similar to our first exemplification of "quoi", in the sense that "quoi" is firstly in direct non tactic relation with "attacher-à" as a functional, and secondly "quoi" is in direct tactic relation with "attacher-à". And since it is in direct tactic relation with the nucleus "attacher-à" we assume that "quoi" stands in the bound indirect object position of the indirect transitive predicative based syntagm. This corroborates the hypothesis that "quoi" has a double function, namely functional and indirect object. In realization the two signs "quoi" are fused in one amalgamated phonological form.

The full analysis of the syntagm "ce à quoi il attache une grande importance" can now be shown as follows:-



Summary

To sum up this analysis, the sign "quoi" as seen throughout the two examples, "les choses futiles à quoi je ne songe guère" and "ce à quoi il attache une grande importance" occurs in the following positions:-

- a) functional position
- b) direct object position
- c) indirect object position

(note that the direct object position can also be filled by "que")

The important thing to note here is that, in all its uses, the nominals to which "quoi" relates are inanimate. We shall consider this implication in the section dealing with the identification of the signs we are treating.

6.5. On the Distribution of Dont

In what follows we shall examine the following syntagms featuring an occurrence of "dont":-

- 1) "l'homme dont je parle"
- 2) "la personne dont j'ai reçu le livre".

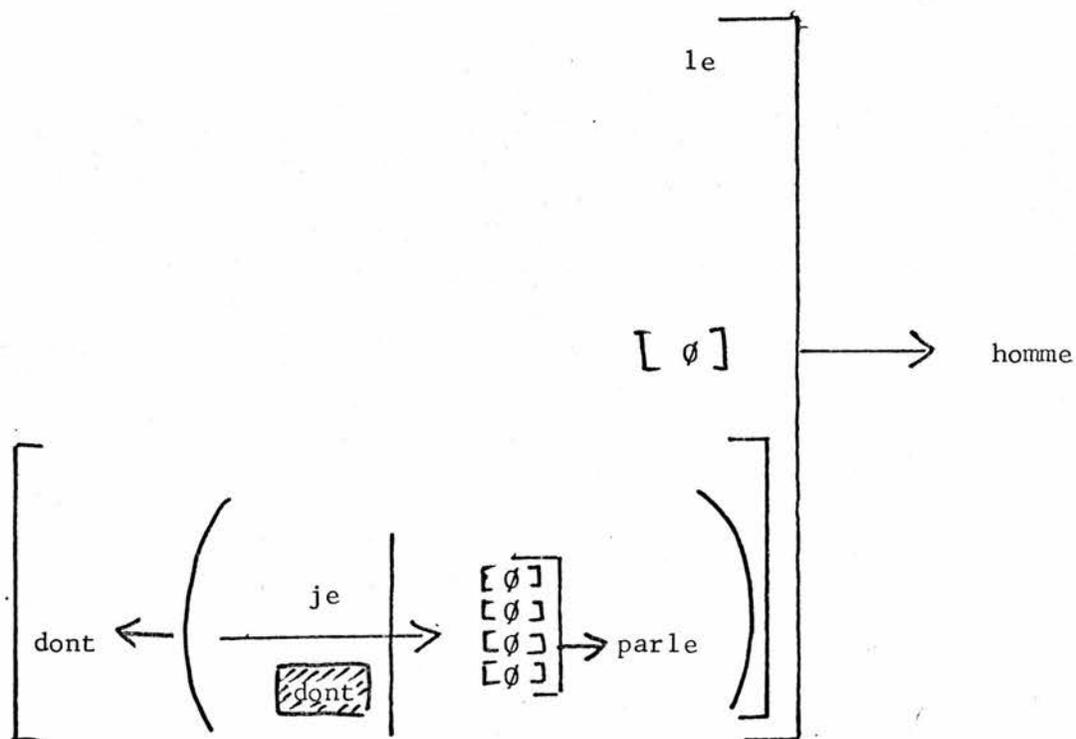
5.5.1. Analysis of "L'homme Dont Je Parle"

A quick glance at this example will reveal that "l'homme dont je parle" is a nominal syntagm as we can observe that the immediate constituents "l'" and "dont je parle" are in direct tactic relation with the nominal "homme" (which has already been established as a nominal in previous sections). Such being the case, "l'" is the immediate constituent which fills the article position, but to support putting "dont je parle" in supplement position we need to show that "dont je parle" is a functional syntagm.

"Je" is in direct tactic relation with "parler". The latter is in direct relation with "dont" which in turn is in direct relation with the nominal nucleus "homme". Thus we have two syntagms, one with "parler" as the nucleus and one with this syntagm ("je parle") in peripheral position to the nucleus "dont", which relates "je parle" to the higher nucleus "homme". "Dont" seems to fulfill the conditions for being a functional while "je parle" is its complement. This corroborates the hypothesis that "dont je parle" occurs in supplement position. Furthermore we can go on to observe that "parler" is a direct transitive predicative which requires for its occurrence a bound direct object and a subject. The immediate constituent (on this level), which is in direct tactic relation ^{with "parler"} and assigned to subject position, is "je". "Dont", in its capacity as the functional is in direct non tactic relation with "parler", but as it is also in direct tactic relation with "parler", it must be the case that this occurrence of "dont" is attributed to the, yet unfilled, direct object position.

Thus, again, we appear to have a syntagm which is best described in terms of occurrences of one sign standing in two positions, i.e. "dont" appears in functional position and also in direct object position, while in realization we have one amalgamated phonological form.

Thus the full analysis of "la personne dont je parle" is:-



6.5.2. Analysis of "La Personne Dont J'ai Reçu Le Livre".

The above syntagm is ambiguous, as we seem to have two distinct messages,

- (i) the person from whom I have received the book.
- (ii) the person whose book I have received.

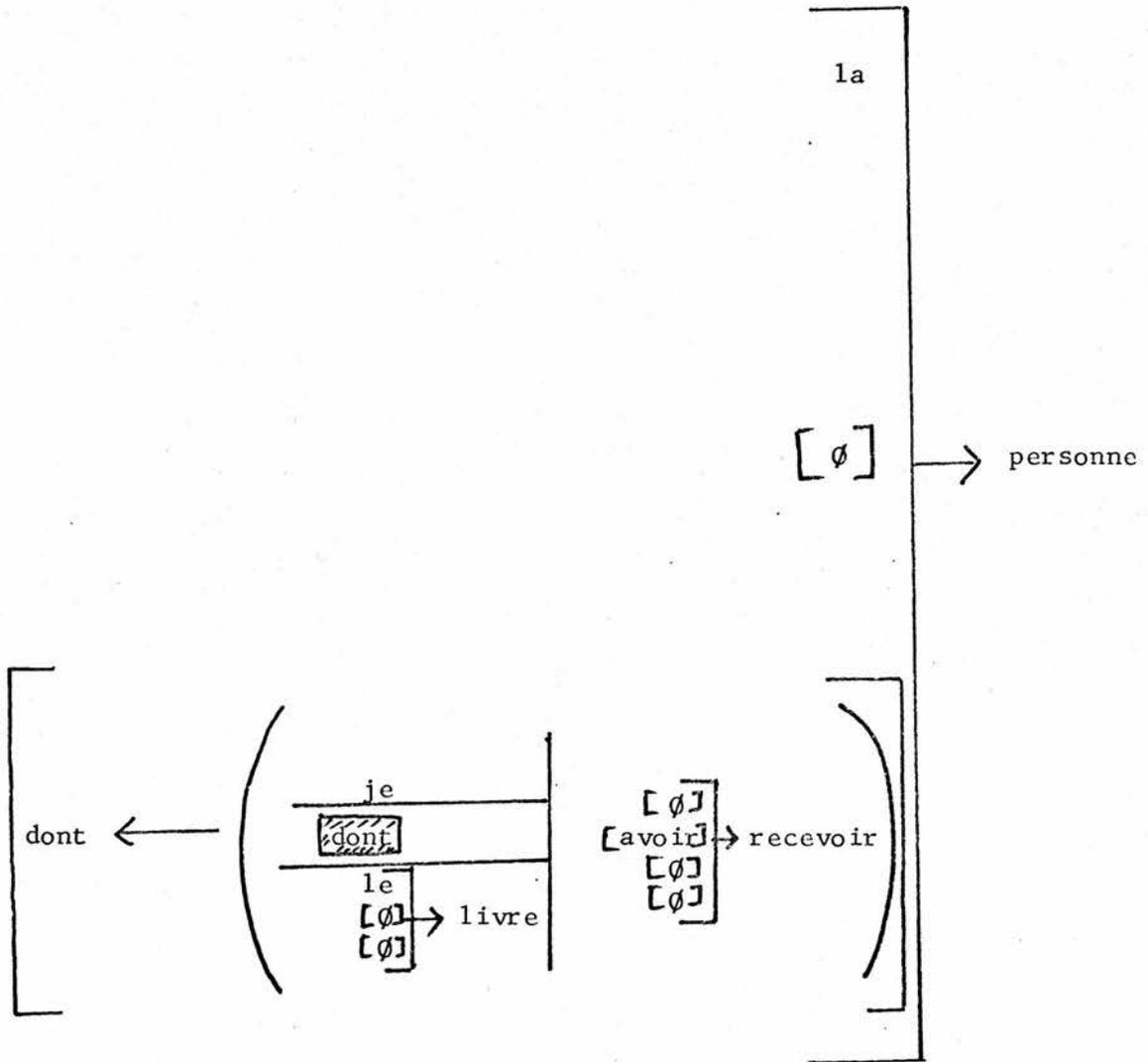
The following discussion concerns the first of the two messages. What we have here, in fact, is a nominal nucleus "personne", determined by the immediate constituents "la" and "dont j'ai reçu le livre" (both standing in direct tactic relation with "personne") with "la" filling in article position. As regards "dont j'ai reçu la personne", we shall have to test the hypothesis that the syntagm in question is a functional syntagm, before we can state that it occurs in supplement position. As a starting point we note that "dont" is in direct relation with "recevoir" and "personne". The whole of "j'ai reçu le livre" relates to the nominal nucleus "personne" via "dont", which suggests that "dont" is a functional determined by the complement ("j'ai reçu le livre").

The hypothesis that "dont j'ai reçu le livre" stands in supplement position being corroborated, we can now give this analysis of "la personne dont j'ai reçu le livre".



It appears at this stage that we are dealing again with two signs "dont", occurring in two distinct positions. The first "dont" occurring in functional position and the second "dont" being in direct tactic relation with the non-indirect transitive predicative (see analysis of recevoir, Section 5.5.) is assigned to the indirect object position of the non-indirect predicative based syntagm. The other peripheral positions, namely subject and direct object, are filled respectively by "je" and "le livre" (the two being in direct tactic relations with "recevoir"). Thus we have a case of amalgamation; the realization of the two signs "dont" fused in one phonological form.

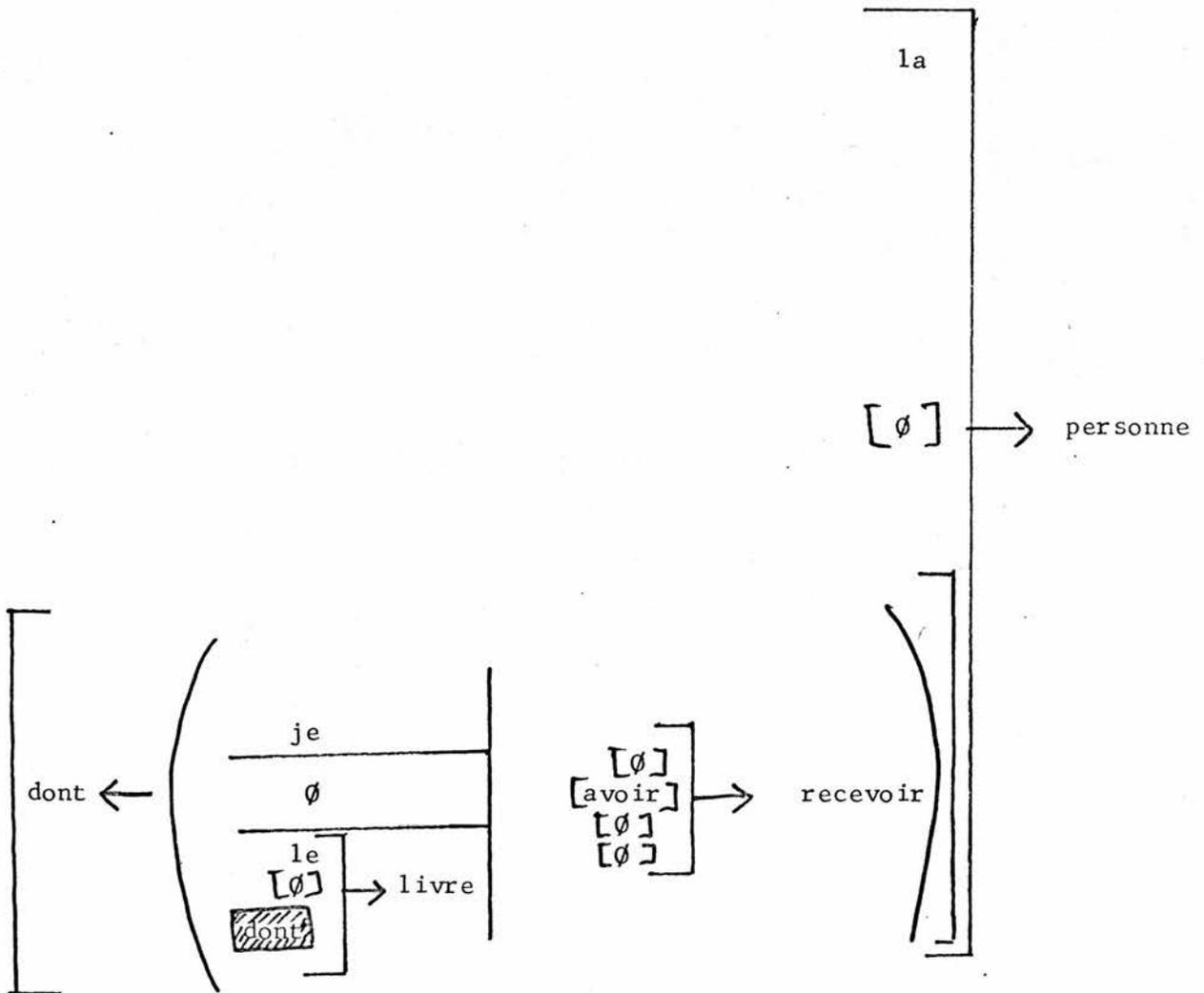
The full analysis of "la personne dont j'ai reçu le livre" is the following:-



On considering the second message, we can observe that just as in the preceding message, we have a nominal syntagm, whose nucleus is "personne", the article and supplement positions respectively filled by "la" and "dont j'ai reçu le livre".

However, "dont", here, is also in direct tactic relation with "livre". We assume that this occurrence of "dont" stands in supplement position of the lower nominal syntagm "le livre", which itself stands in direct object position to "recevoir". The rest of the syntagm is analysed as above with "je" in subject position and "le livre" in direct object position.- :

The full analysis of the syntagm "la personne dont j'ai recu le livre" is represented as follows:-



To bring this analysis of "dont" to an end, let us sum up the various positions in which it occurs:-

- (i) "dont" occurs in functional position.
- (ii) "dont" occurs in direct object position.
- (iii) "dont" occurs in indirect object position.

6.6. The Distribution of "Quel"

6.6.1. Introductory Note

What we have in mind when we are talking about "lequel" is an entity which is constituted of "le" + "quel". To explain this let us point out that /l/ is a definite article (the /e/ here being probably parasitic), that is, the sign "/l/" is distributed before "livre" and "quel", as in:-

"le livre" and "lequel".

What we are facing here is a question of concord, in other words, correspondence of one entity with another as to gender, number, case, person etc.. An example of concord in French is "la belle vue", where "la" and "belle" are both feminine to agree with "vue". To return to "lequel", let us note that the contextual variance of /l/ and /kel/ is governed by the nominal nucleus. Examining the following example from French "la soeur de mon ami laquelle vient d'arriver", one can notice that the contextual variance of /l/ + /kel/ is governed by the nominal nucleus "soeur", i.e. the contextual variance of /l/ and /kel/ is governed in terms of gender and number by the constituent "soeur".

In the same manner the contextual variance of /l/ and /kel/ in "lesquelles" is governed by "soeurs" in "les soeurs de mon ami lesquelles viennent d'arriver", in the sense that /l/ and /kel/ agree with the gender and number of the nominal nucleus "soeurs".

One can go on to observe that "duquel" is a complex of the forms "du" + "quel". The former being itself an amalgamation of "de" + "le", in the sense that the two signs "de" + "le" are realized in such a way that we cannot find separate realizations, i.e. in realization "de" and "le" are amalgamated in the same phonological form /du/. Along the same lines one would regard "de laquelle" as a complex of the forms "de" + "la" + "quel".

As far as "auquel" is concerned, the most one can say here is that we are dealing with a complex of the forms "au" + "quel". The former, is itself an amalgamation of "a" + "le", that is, the two signs "a" and "le" are fused in the same phonological form /o/ on the realizational level.

6.6.2. Analysis of "Quel"

In what follows we shall take a look at the variety of positions in which "quel" occurs. To begin with let us examine its occurrence in subject position as featured in the following syntagm:-

"la soeur de mon ami laquelle vient d'arriver"

(My friend's sister who has just arrived)

The immediate constituents of this syntagm are "le", "soeur", "de mon ami" and "quel vient d'arriver" as is shown by the following direct tactic relations between the pairs of immediate constituents:-

"la" and "soeur"

"de mon ami" and "soeur"

"quel vient d'arriver" and "soeur"

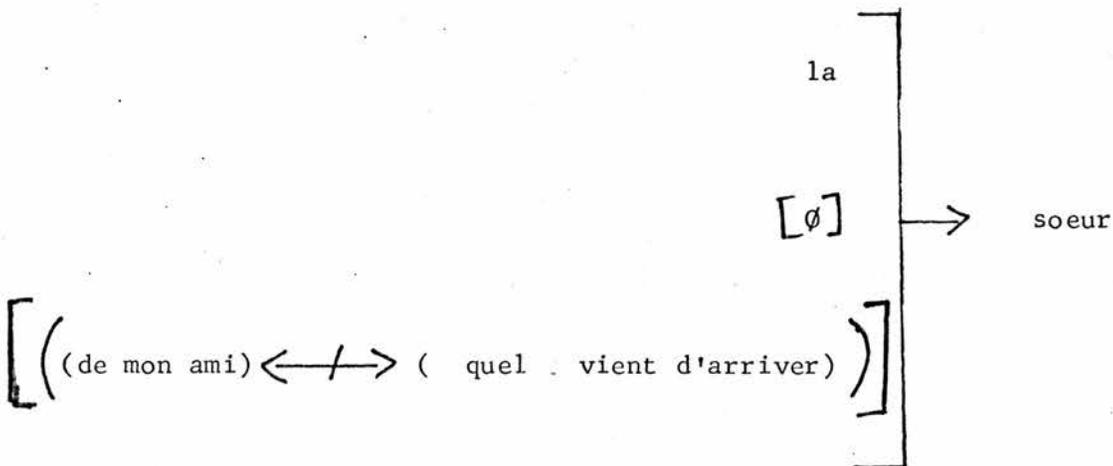
(these immediate constituents do not relate via other constituents)

Apparently we have a situation in which three peripheral immediate constituents are subordinated to the same nucleus "soeur", which, to all appearances looks to be a nominal. In this case the immediate constituent "la" fills the article position and the immediate constituent "soeur" fills in nuclear position of the nominal syntagm, i.e. fills in nominal position.

Our next task is to test the hypothesis that the syntagms "de mon ami" and "quel vient d'arriver" are functional syntagms (standing in a relation of coordination) relating to the same nucleus "soeur", and therefore assignable to supplement position.

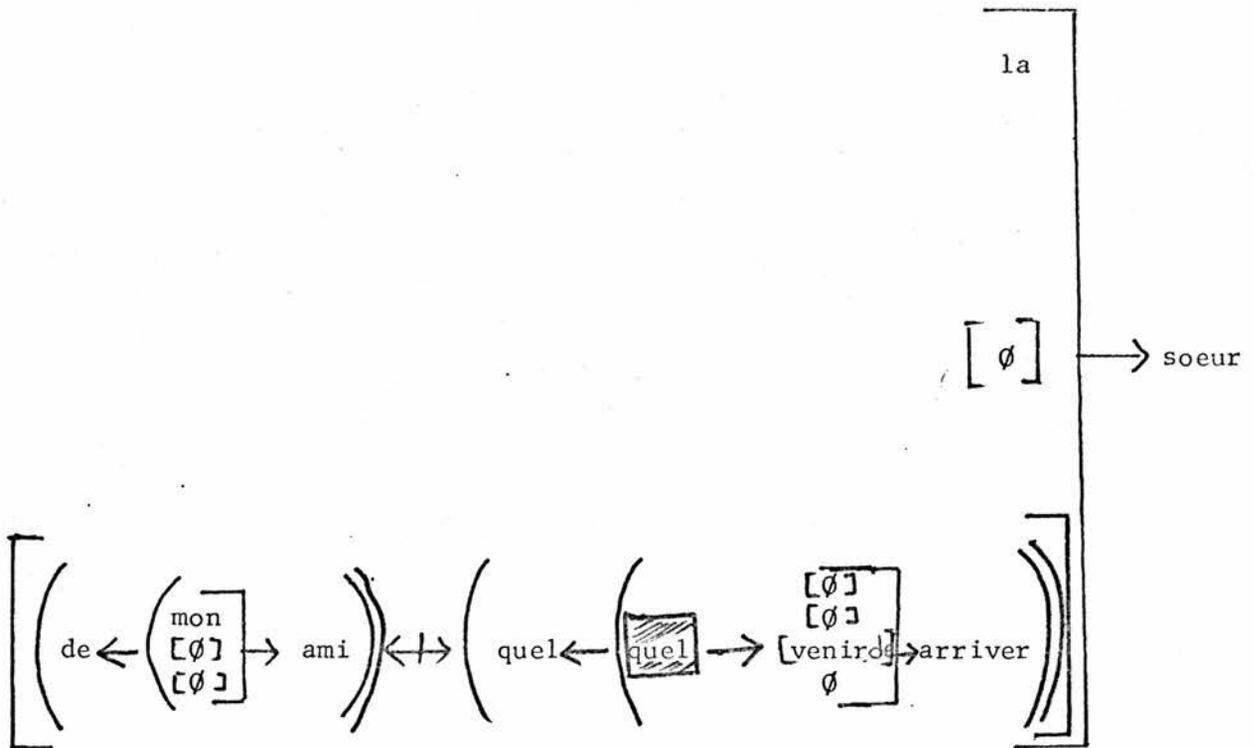
In "de mon ami", "de" is in direct relation with "soeur" and in its capacity of relating "mon ami" to the nominal nucleus "soeur", "de" is a functional and hence "de mon ami" is a functional syntagm and "mon ami" is peripheral to "de", i.e. "mon ami" is the complement to the functional "de". Thus in a syntagm like "la soeur de mon ami", "de mon ami" can occur in supplement position.

In "laquelle vient d'arriver", one can assert that "quel" is in direct relation with "soeur" and as "quel" relates "vient d'arriver" to the nominal nucleus "soeur", one can conclude that "quel" is a functional, and hence the syntagm "laquelle vient d'arriver" is a functional syntagm (in which the functional "quel" is determined by the complement "vient d'arriver") occurs in supplement position. Note that "laquelle vient d'arriver" if, for its function, independent of "de mon ami" (and vice versa). As both functional syntagms relate to the same nucleus, in the sense that, they are both subordinated to the same nucleus, we shall adopt the hypothesis that "de mon ami" and "laquelle vient d'arriver" fill the supplement position of the nominal syntagm "la soeur de mon ami laquelle vient d'arriver", the structure of which can be illustrated at this stage as follows:-



As with all the signs we have dealt with ("ou", "qui", "que", "quoi" and "dont") we are, once more, faced with a sign having a double function, as shown by the fact that "quel" is firstly a functional in its capacity of contracting a direct non tactic relation with the intransitive predicative "arriver" and relating this latter to the nominal nucleus "soeur", and secondly, "quel" fills the subject position of the intransitive predicative based syntagm in its capacity of contracting a direct tactic relation with "arriver". Thus we are dealing with two signs "quel", one occurring in functional position and one occurring in subject position. On the realizational level, the two signs "quel" are combined in one amalgamated phonological form.

Thus the full analysis of the syntagm "la soeur de mon ami laquelle vient d'arriver" can now be fully represented as follows:-



This brings us to examine another occurrence of "quel" as exemplified by:-

"la soeur de mon ami le quel vient d'arriver".

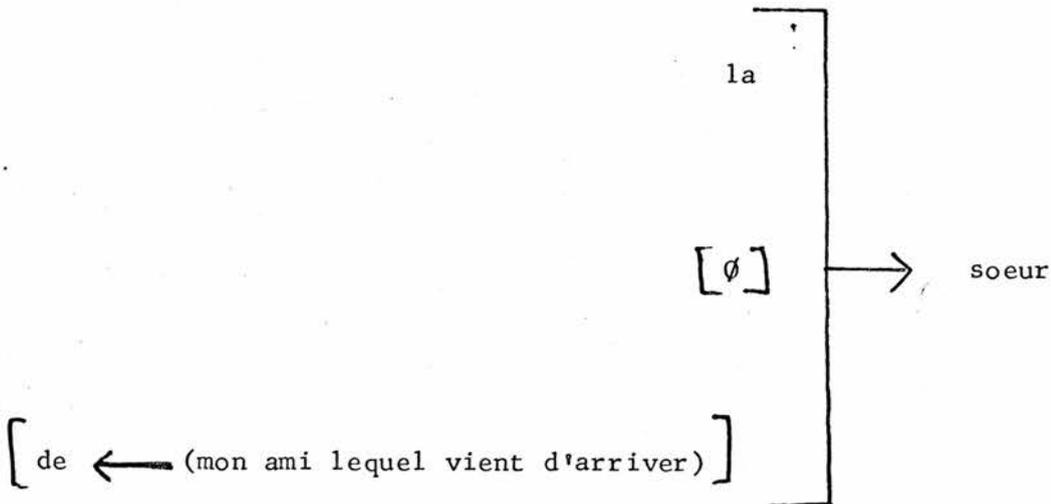
The syntagm has the immediate constituents "la", "soeur" and "de mon ami le quel vient d'arriver".

Direct tactic relations hold between the following pairs:-

"la" and "soeur"

"de mon ami le quel vient d'arriver" and "soeur".

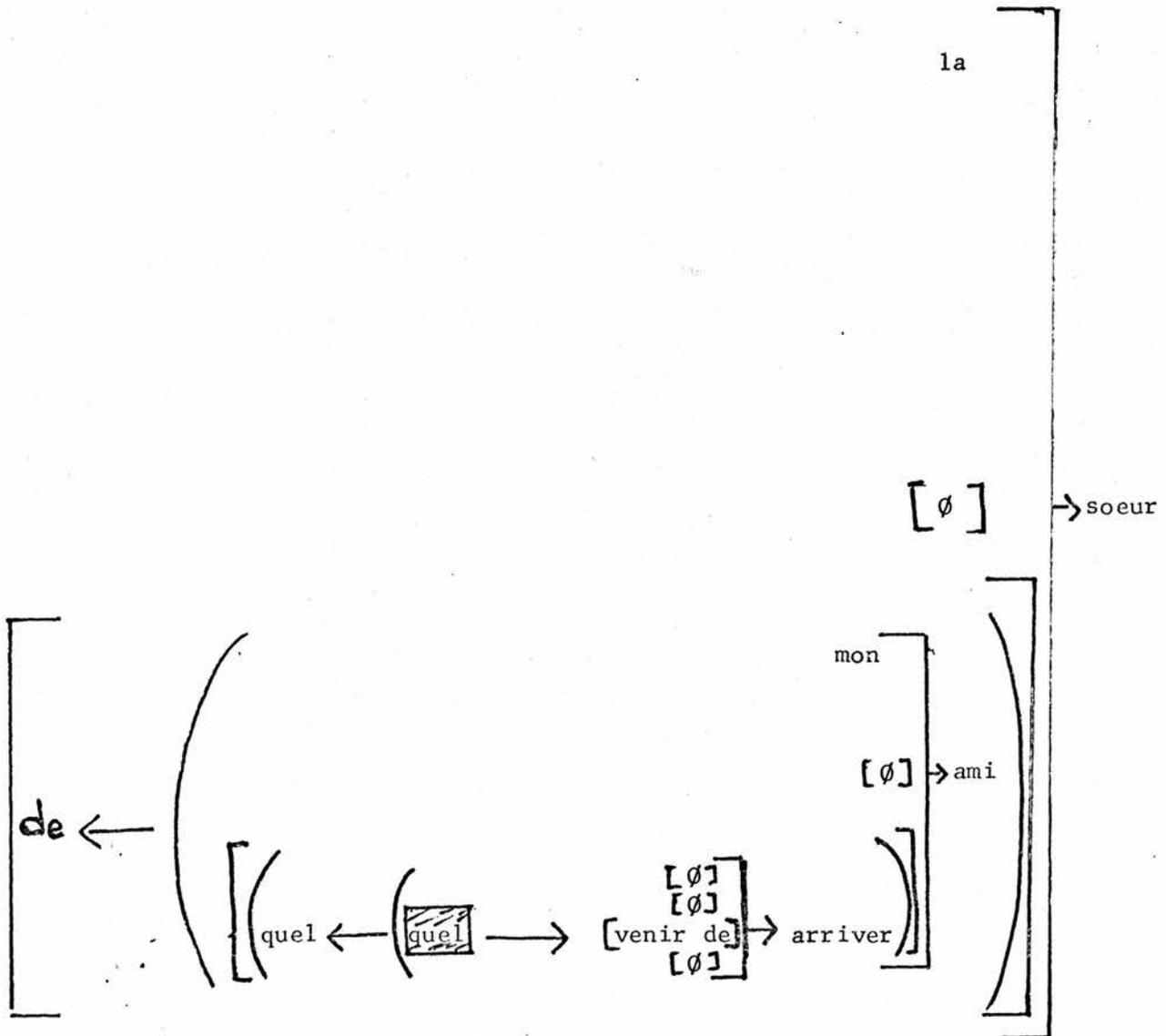
There can be no doubt that this syntagm is a nominal syntagm, whose nuclear position is filled by the nominal "soeur", the article position being filled here by "la". In "de mon ami le quel vient d'arriver", "de" is in direct relation with the nominal nucleus "soeur". As it relates "mon ami le quel vient d'arriver" to this nominal nucleus ("soeur"), we conclude that "de" is a functional, and hence the syntagm "de mon ami le quel vient d'arriver" is a functional syntagm, and occurs in supplement position. This enables us to represent temporarily the nominal syntagm as:-



The complement "mon ami lequel vient d'arriver" is apparently a nominal syntagm whose nucleus is "ami", as the immediate constituents "mon" and "lequel vient d'arriver" are in direct tactic relation with "ami". Thus the article position is here filled by "mon". To support assigning "lequel vient d'arriver" to supplement, it is necessary to show that "lequel vient d'arriver" is a functional syntagm. To start with, one notes that "quel" is not only in direct relation with "ami", but also is in direct relation with "arriver", and in its capacity of relating "vient d'arriver" to the nominal nucleus "ami", "quel" is a functional and hence "vient d'arriver" is complement to "quel". Thus "quel vient d'arriver" is a functional syntagm and fills in supplement position to "ami".

We can go on to observe that "arriver" is an intransitive predicative which requires for its occurrence a subject. The point one has to bear in mind here is that "quel" is not ^{only} in direct non tactic relation with "arriver" in its capacity as the functional, but is also in direct relation with "arriver". We shall account for this occurrence of "quel" by assigning it to subject position. This leaves us with two signs "quel" (one occurring in functional position and one in subject position), amalgamating in actual realization in one fused phonological form.

Thus the full analysis of the syntagm "la soeur de mon ami lequel vient d'arriver" is as follows:-



Summary

We have a sign "quel" which again occurs in functional position, but this time, "quel" also occurs in a functional syntagm which itself is part of a nominal syntagm, which itself in turn, is the complement of a functional syntagm standing in supplement position to the higher nominal nucleus "soeur".

We shall carry on this discussion of the distribution of "quel" by taking a look at another syntagm featuring another occurrence of "quel". The example to be analysed is "le problème à l'étude duquel il a consacré sa vie" (he has consecrated his life to the study of this problem).

To begin with, let us start with the hypothesis to be tested, i.e. "le problème à l'étude duquel il a consacré sa vie" is a nominal syntagm. Our immediate task here is to indicate the direct tactic relation between the following pairs of immediate constituents:-

"le" and "problème"

"à l'étude duquel il a consacré sa vie" and "problème"

bearing in mind that the immediate constituents "le" and "à l'étude duquel il a consacré sa vie" relate via their nuclear immediate constituent "problème" and are in indirect tactic relation.

The description of the functions of these immediate constituents in terms of their respective positions is then as follows:-

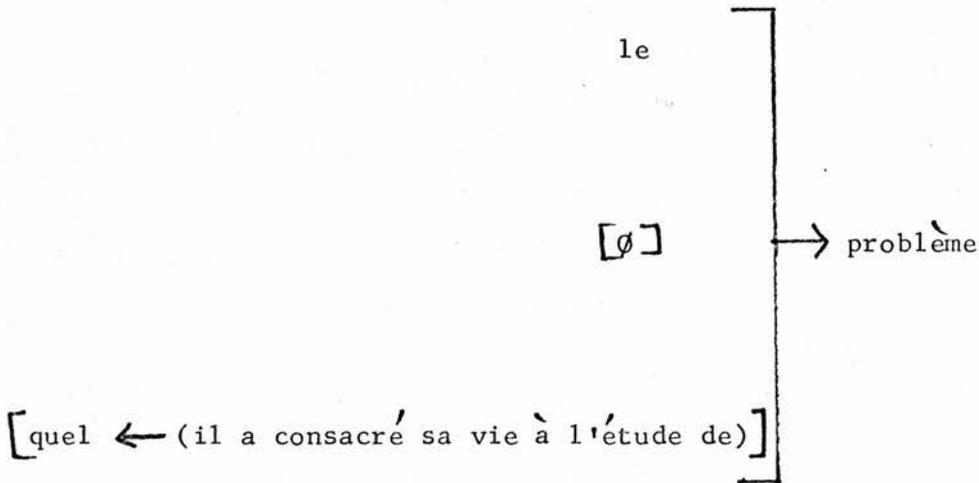
(i) in its capacity as the nominal, "problème" fills in nominal position, i.e. nuclear position.

(ii) "le" is assigned to article position.

(iii) the statement that "à l'étude duquel il a consacré sa vie" occurs in supplement position remains hyper-hypothetical until we have shown that the syntagm in question is a functional syntagm.

With respect to "à l'étude duquel il a consacré sa vie", we can observe that "quel" fulfills the condition for being a functional, as it is in direct relation with the nominal nucleus "problème" and "consacrer-à" in the sense that the whole of "il a consacré sa vie l'étude de" relates to the nominal nucleus "problème" via "quel". Thus we conclude that "il a consacré-a sa vie l'étude de" is complement to "quel" and the functional syntagm quel(← il a consacré-à sa vie l'étude de) occurs in supplement position to

"problème". This leads us to represent the syntagm as follows:-



While this analysis is in progress, we must point out with regards to "consacrer à" that "à" is not itself a sign, as we cannot commute "à" with other signs. Note that the following constructions in which we have commuted "à" with other signs, e.g. "dans", "dessous", "par" and "derrière" are syntactically ill-formed in French,

"consacrer dans"

"consacrer par"

"consacrer dessous"

"consacrer derrière"

Thus "à" is part of the plereme "consacrer à".

To come back to our discussion, the complement "il a consacré-à sa vie l'étude de" is analysable into the immediate constituents "il" "a consacré à", "sa vie" and "l'étude de".

The following pairs of immediate constituents are in direct tactic relation with "consacrer à":-

"il" and "consacrer à"

"sa vie" and "consacrer à"

"l'étude de" and "consacrer à"

When it comes to assigning these immediate constituents to their respective positions, one would probably need to recognize that "consacrer-à" is an indirect transitive predicative, and in its capacity as the nucleus, it fills in indirect transitive predicative position, in other words the nuclear position of the indirect transitive predicative based syntagm "il a consacré-à sa vie l'étude de" is filled by "consacrer à". The constituent "il" is assigned to subject position. "Sa vie" fills in direct object position and "l'étude de" is in indirect object position.

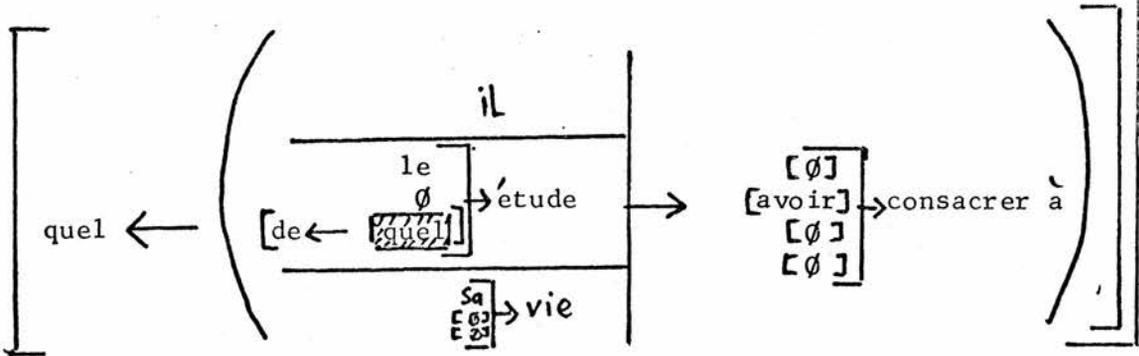
The immediate constituent "l'étude de" looks like a nominal syntagm whose nucleus is "étude". "L'" is in direct tactic relation with "étude" and is assignable to article position. The important thing to note here is that "quel" is also in direct tactic relation with "de", this latter being in direct relation with "étude", we assume that this occurrence of "quel" fills in the complement of the functional syntagm de←quel (this being supported by the fact that "de" is in direct relation with "étude" and in its capacity as the functional it relates "quel" to "étude") which in turn occurs in supplement position to "étude". Thus it appears as if we are again dealing with a case illustrating a sign "quel" which occurs in two distinct positions, i.e. functional and supplement position. In realization the two signs amalgamate in one phonological form.

The full analysis of "le problème à l'étude duquel il a consacré sa vie" is the following:-

le

[∅]

→ problème



To sum up this analysis, we have a sign "quel", which occurs in

- a) functional position
- b) complement position in the functional syntagm which occurs in supplement position of the nominal syntagm, which itself occurs in indirect object position in the predicative based syntagm

This brings us to examine another syntagm in which "quel" occurs:-
"le cousin de mon amie auquel j'ai donné le livre"

We shall begin this discussion by launching the hypothesis that the syntagm is a nominal syntagm. If this is the case, then there are direct tactic relations between the following pairs of immediate constituents:-

"le" and "cousin"

"de mon amie" and "cousin"

"auquel j'ai donné le livre" and "cousin"

The following pairs of constituents are in indirect tactic relation:-

"le" and "de mon amie"

"de mon amie" and "auquel j'ai donné le livre".

These immediate constituents relate via their nuclear immediate constituent "cousin", which also happens to be the nucleus of the nominal syntagm "le cousin de mon amie auquel j'ai donné le livre". The article position of the nominal syntagm is here filled by "le".

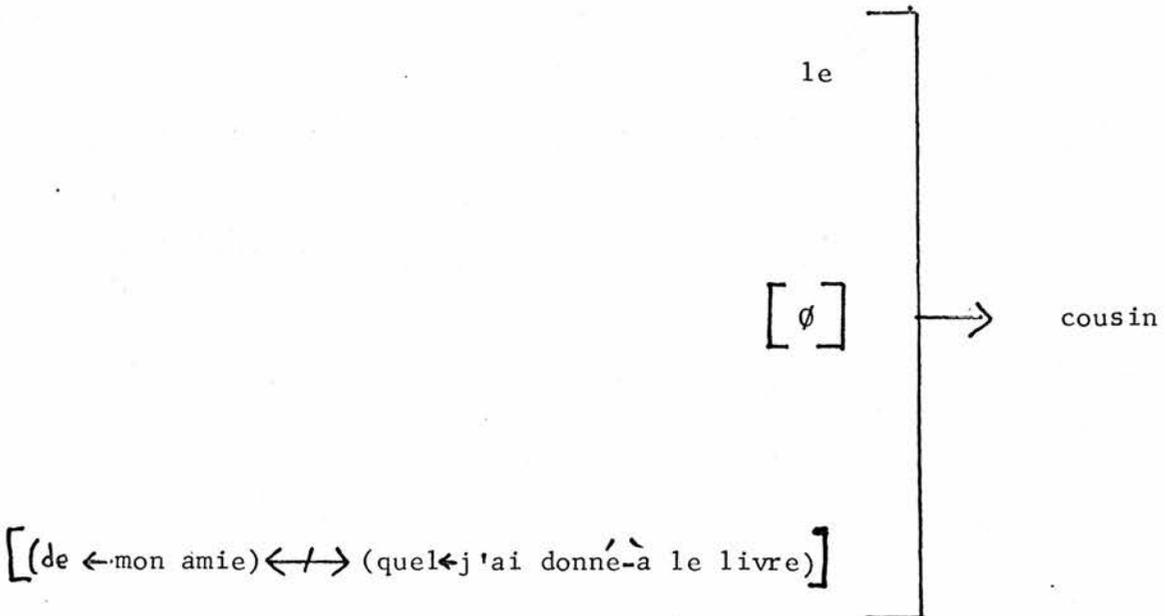
Our next task is to assign the immediate constituents "de mon amie" and "auquel j'ai donné le livre" to their respective positions.

Note here that we have a situation similar to that encountered in "la soeur de mon ami laquelle vient d'arriver", where two functional syntagms in a relation of coordination occurred in supplement position. Our primary concern is to show that "de mon amie" and "auquel j'ai donné le livre" are functional syntagms relating their respective complement to the same nucleus, before we can state that they occur in supplement position.

Let us first test the hypothesis that "de mon amie" is a functional syntagm. We can observe that "de" is in direct relation with "cousin" and given that "mon amie" relates to the nominal nucleus "cousin" via "de", one can state that "de" is functional. Hence "de mon amie" is a functional syntagm in which the functional "de" is determined by the complement "mon amie".

A quick look at the syntagm "auquel j'ai donné le livre" will reveal that "quel" is in direct relation with the nominal nucleus "cousin" and "donner-a" (note that we have already analysed "donner-a" and concluded that "a" is part of the plereme "donner à") and in view of the fact that the whole of "j'ai donné le livre" relates to the higher nucleus "cousin", we conclude that "quel" fulfills the conditions for being functional (while "j'ai donné un livre" is complement to "quel"). Therefore the syntagm $\text{quel} \leftarrow (\text{j'ai donné le livre})$ is a functional syntagm.

The two functional syntagms "de mon amie" and "auquel j'ai donné le livre", being in direct tactic relation with the nominal nucleus "soeur", in the sense that they are determining the same nucleus ("cousin") and both standing in a relation of mutual functional independency, occurs in supplement position to "cousin". Thus the structure of the syntagm is:-



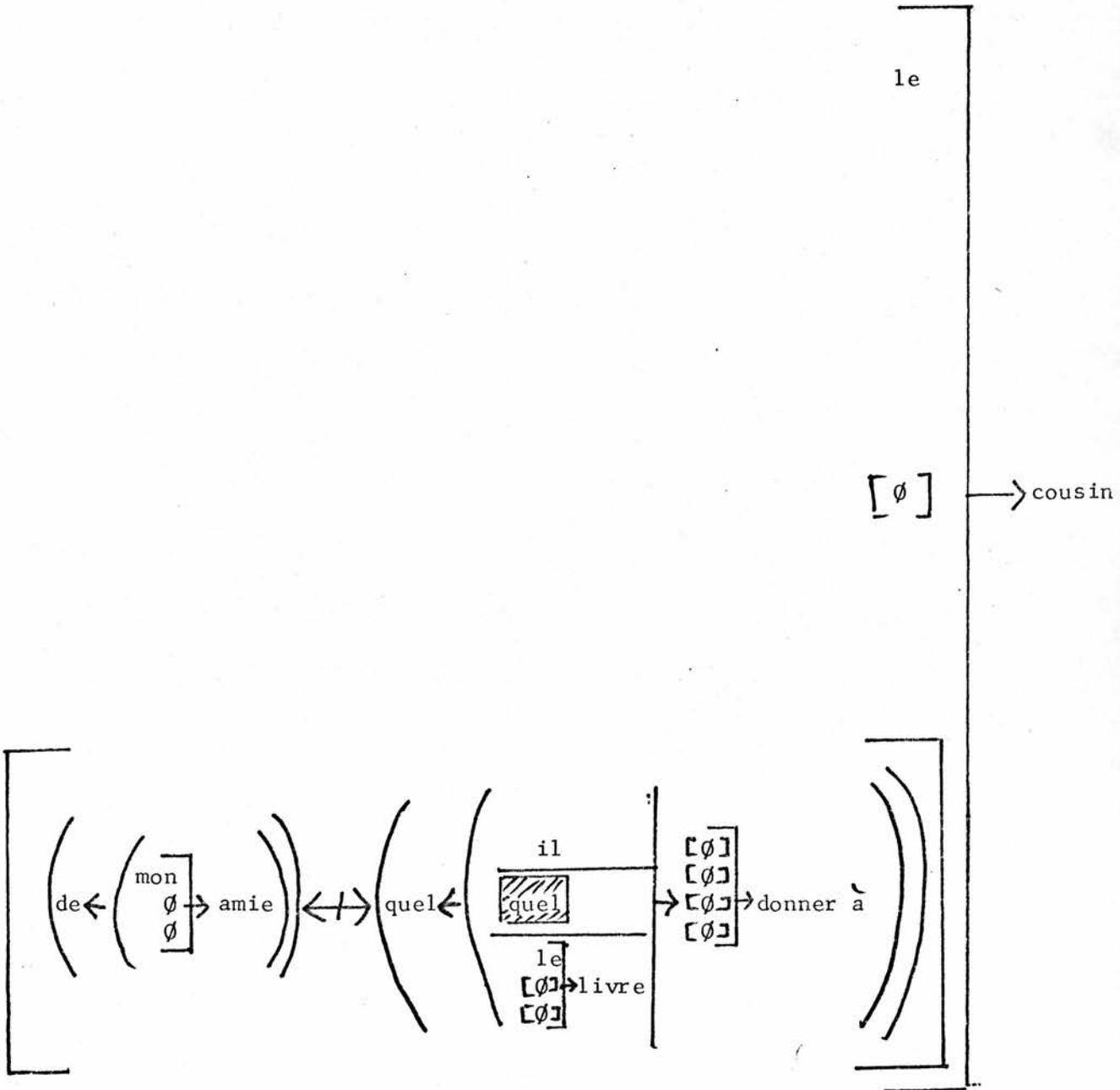
To complete this analysis, we need some further discussion on "de mon amie" and "auquel j'ai donné le livre".

The complement (mon amie) of the functional syntagm (de mon amie) appears to be a nominal syntagm, the nuclear position filled by "amie". "Mon" is in direct tactic relation with "amie" and is assigned to article position.

The complement "j'ai donné-à le livre" appears to be an indirect transitive predicative based syntagm. "Donner-à" (we have already analysed this predicative in an earlier section) is the indirect transitive predicative which fills the nuclear position of the predicative based syntagm. "Je" and "le livre" are in direct tactic relation with "donner-à" and are assignable to subject and direct object position respectively. While this analysis is in progress, it is interesting to note that "quel" is not only in direct non tactic relation with "donner-à" in its capacity as the functional, but "quel" is also in direct tactic relation with "donner-à" and we assume that this occurrence of "quel" fills in indirect object position to "donner-à".

Given that two functions imply two distinct positions, it appears that we are dealing with two signs "quel", one appearing in functional position, and one appearing in indirect object position. From the aspect of realization, the two signs "quel" are amalgamated into one unified phonological form.

Thus the full analysis of the syntagm "le cousin de mon amie auquel j'ai donné le livre" can now be represented as follows:-



To conclude this analysis, one needs to remember that here again "quel" occurs in functional position, however "quel" also fills in indirect object position.

We must also recognize another structure in which "quel" can occur.

The syntagm to be examined is:-

"le déshonneur auquel je ne pense point".

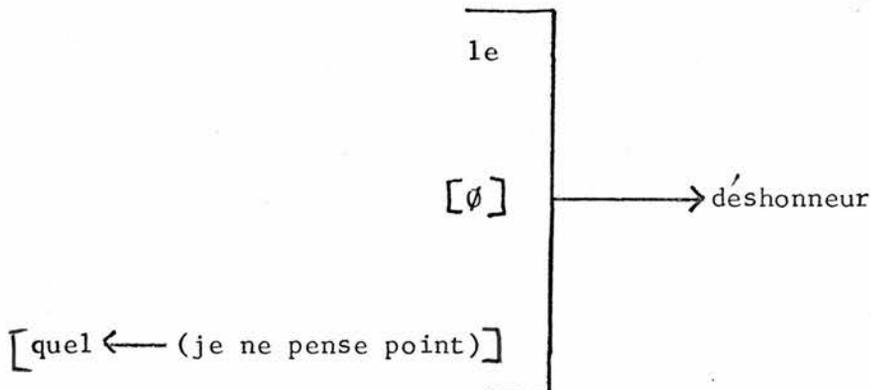
Our first task is to indicate the immediate constituents and the relations holding between them. The immediate constituents of this syntagm, in direct tactic relations are:-

"le" and "déshonneur"

"auquel je ne pense point" and "déshonneur".

Here the immediate constituents "le" and "auquel je ne pense point" relate via the nuclear immediate constituent "déshonneur".

The syntagm "le déshonneur auquel je ne pense point" appears to be a nominal syntagm of which "déshonneur" is the nucleus, hence the nuclear position is filled by "déshonneur". "Le" is assigned to article position. The syntagm "auquel je ne pense point" is demonstrably a functional syntagm as "quel" (in direct relation with "déshonneur") relates the constituent "je ne pense point" to the nominal nucleus "déshonneur", which suggests that "quel" is the functional, i.e. "je ne pense point" is complement to "quel". Hence "quel je ne pense point" occurs in supplement position (in its status as functional syntagm). The structure of the nominal syntagm, at this point is:

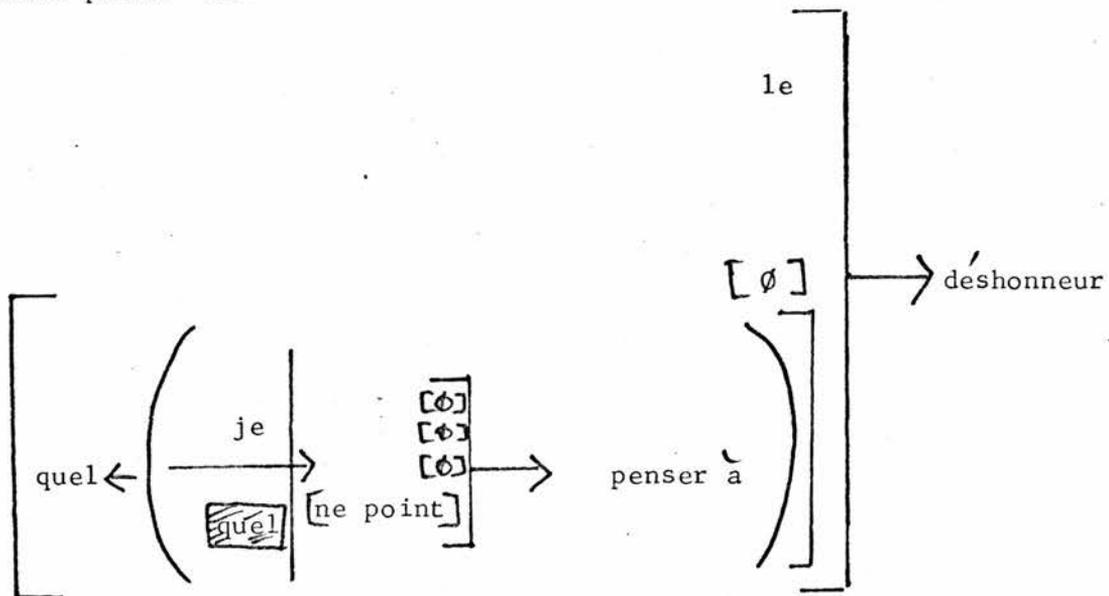


However, a further analysis of " quel je ne pense point" is essential. "Penser-a" (here being part of the plereme "penser-a" where it does not commute with other signs, i.e. we cannot have "penser dessous", "penser sur" etc.) appears to be a direct transitive predicative which requires for its occurrence a subject and a bound direct object. To restate this, we are dealing with a direct transitive predicative based syntagm, whose nucleus is "penser-a", in its capacity as the direct transitive predicative. "Je" is assignable to subject position, as it is in direct tactic relation with "penser-a".

We remember from earlier paragraphs that "quel" is functional, and therefore in its status as the functional, is in direct non tactic relation with "penser-a". It also turns out that "quel" is in direct tactic relation with "penser-a", with this point in mind, we shall adopt the hypothesis that "quel" occurs in object position.

The fact that we are dealing with two positions, namely functional and direct object positions, suggests that we are dealing with two signs "quel" (one occurring in functional position and one in direct object position) which, in realization, amalgamate in one phonological form.

Thus the full analysis of the syntagm "le d'ehonneur auquel je ne pense point" is:-



To conclude this analysis, we are dealing with a sign "quel", which occurs in functional position and direct object position in the predicative based synyagm.

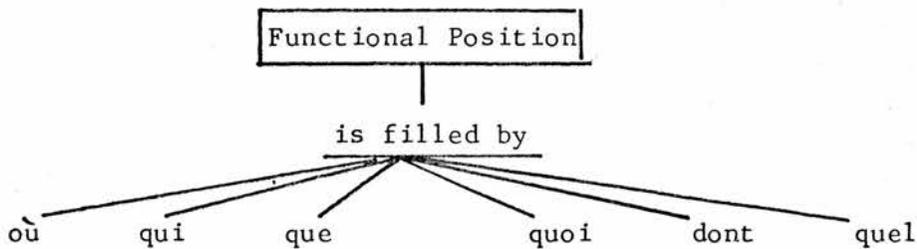
6.7. General Resume

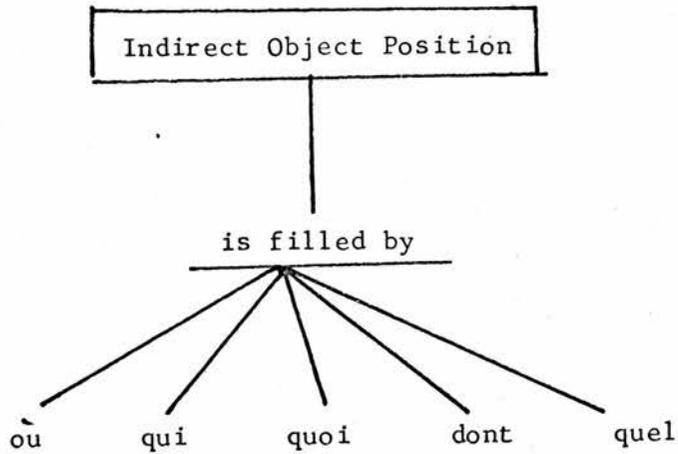
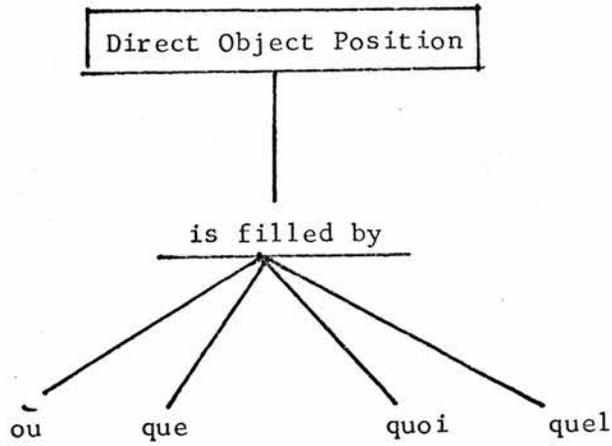
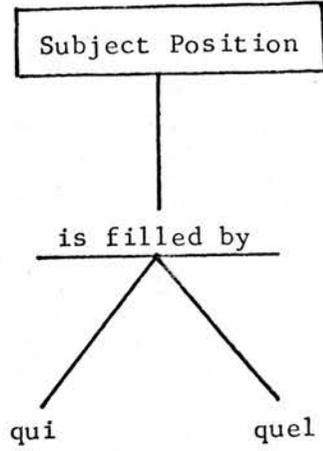
There follows a summary of the various points raised in the course of this syntactic description of relative syntagms. We shall give a full inventory of the various positions occupied by "où", "qui", "que", "quoi", "dont" and "quel" and a statement of the signs we are in fact dealing with.

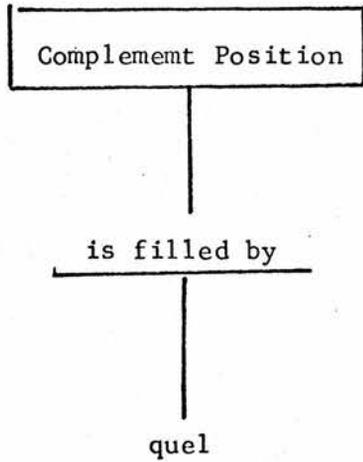
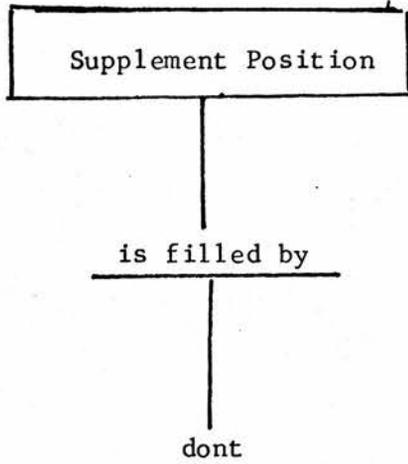
6.7.1. Inventory of the Positions

What emerges from this description is that in every syntagm we have come across, "où", "qui", "que", "quoi", "dont" and "quel" occur in functional position. This suggests that "où", "qui", "que", "quoi", "dont" and "quel" have a common characteristic, that of being nucleus of the syntagm in which they occur, i.e. are functionals.

We shall set up a diagram for each of the positions encountered so far:-







6.7.2. On the Matter of Sign-Identity

Having established the distributions of the forms, we must establish how many actual signs we are dealing with; this operation being a matter of commutation and denotation.

a) Qui/Que

As regards "qui"/"que" one must keep in mind that there is no syntactic environment in which "qui" or "que" may be substituted for the other, i.e. "qui" never appears in direct object position and conversely "que" never appears in subject or indirect object position.

Denotationally speaking, "qui" and "que" both relate to animates and inanimates, which suggests that they are not denotationally distinct. The conclusion to be drawn here is that /ki/ and /kə/ are allomorphs of the same sign "qui". In other words /ki/ and /kə/ are one and the same sign, i.e. they have the same denotation.

b) Quoi

In discussing "quoi" one must draw particular attention to the fact that, from a denotational point of view "quoi" can only be used if the nominal nucleus is inanimate, which implies that as soon as we are dealing with an animate nominal, the use of "quoi" is immediately excluded and in which case "qui" is used.

Let us now look at these examples:-

(i) "l'homme à qui je parle" (where "l'homme à quoi je parle" is syntactically ill-formed)

(ii) "Une migraine à quoi il n'attachait aucune importance" (where "une migraine à qui il n'attachait aucune importance" is ill-formed)

Given that "qui" and "quoi" are mutually exclusive, we need to look at further properties of their distributions, but let us first remember that "qui" and "que" occur with the same nominals in nuclear position and hence we have established them as allomorphs. However the matter is different when we examine "quoi" and observe that this latter is restricted to syntagms with inanimate nominals. Let us say that it

is property which distinguishes "quoi" from "qui". Thus the conclusion to be reached, bearing in mind that "quoi" is denotationally distinct from "qui", is that "quoi" is established as a sign.

c) Ou

From what we have observed in the course of our analysis of "ou", we can already state that "ou" can only occur with nominals denoting location or time. In other words the use of "ou" is restricted to nominal nucleus denoting location or time, and let us emphasize that this property is unique to "ou", on the basis of this property we shall establish "ou" as a sign (distinct from "qui" and "quoi") which denotes location or time.

d) Dont

To begin with let us point out that "dont" expresses a source, as in:-
"le livre dont il a tiré sa documentation" (where the use of "qui" is excluded), or possession as in:-

"l'homme dont j'ai vu le fils" (where "qui" is excluded) or a cause as in:-

"la maladie dont il est mort" (where "qui" is excluded)

All these considerations, plus the fact that any time we substitute "dont" by "qui", "quoi" or "quel", we no longer are dealing with the original message we intended to express by using "dont", enable us to establish "dont" as a distinct sign. Thus "qui" is distinct from "dont" as shown in the following commutations:-

(i) "l'homme dont je parle" (the man about whom I speak, in which case the subject of the discussion is actually present).

(ii) l'homme de qui je parle" (the man to whom I am referring, in which case the subject of the discussion is not present).

Exactly the same opposition is to be found if we substitute "quel" for "dont", as shown in the following examples:-

- (i) "le sujet dont je parle"
(the topic on which I speak)
- (ii) le sujet duquel je parle
(the topic to which I refer)

e) Quel/Qui

"Quel" is the only relative (apart from "qui") which appears in subject position. The distinction between "quel" and "qui" can be summed up as follows:-

When the relative syntagm is separated from its antecedent by another syntagm, namely a prepositional syntagm, the relative systematically used is "quel", as this latter can denote gender and member, in the sense that the variance of "quel" is actually determined by the nominal nucleus, to which it refers, and this property enables us to distinguish between "quel" and "qui".

On the basis of this distinction, we shall establish "quel" as a distinct sign (from "qui") which denotes animate and inanimate nominals in terms of their gender and number. To conclude, "quel" is typically used, firstly, as the nucleus of a functional syntagm when that syntagm is in coordination with another syntagm, both standing in supplement position as in:-

"la soeur de mon ami laquelle vient d'arriver" (see p.80).

and when the functional syntagm is part of a nominal syntagm, which itself is the complement of a functional syntagm as in:-

"la soeur de mon ami lequel vient d'arriver" (see p.84).

CONCLUSION

To conclude, let us take a brief look at the signs we have established so far and the respective positions they occupy.

the sign "qui" has
the allomorphs

- /ki/ (subject position, indirect object position)
- /kə/ (direct object position)

the sign "quoi" occurs in

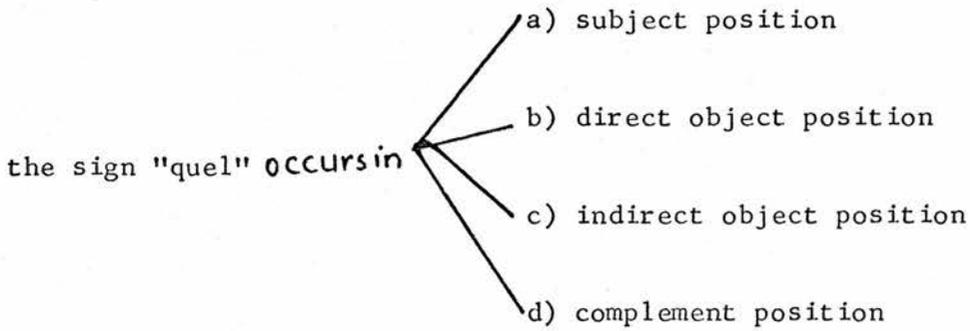
- a) direct object position
- b) indirect object position

the sign "ou" occurs in

- a) direct object position
- b) indirect object position

The sign "dont" occurs in

- a) direct object position
- b) supplement position



Throughout this description it has been drawn to our attention that all the relative pronouns have the same status, that of being functionals and therefore nucleus of the syntagm in which they occur. In their status as functionals they relate a peripheral syntagm to a nominal nucleus. We have also noticed that their allomorphs exhibit amalgamation.

Equally important, in the light of this conclusion, is the fact that all relative syntagms, in their status as functional syntagms, occur in supplement position. In other words they can be described as peripheral immediate constituents subordinated (and determining) a nominal standing in nuclear position.

As encountered in every syntagm, the structure of a relative syntagm is:

relative pronoun ← predicative based syntagm

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