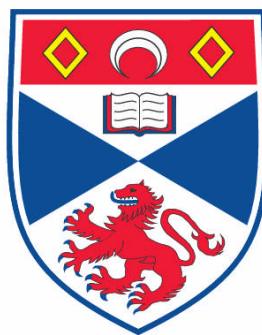


SYNTACTIC RELATIONS IN SAN MARTÍN QUECHUA

Angela Howkins

**A Thesis Submitted for the Degree of PhD
at the
University of St. Andrews**



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SYNTACTIC RELATIONS IN
SAN MARTIN QUECHUA

Angela Hawkins

Ph. D Thesis.
St. Andrews, 1976



Linguistic description has been defined as "the application of a particular linguistic theory to a selected field of linguistic phenomena"¹. The thesis presented here offers a partial application of Axiomatic Functionalism (partial because its concern is with syntax only) to data collected on the San Martín dialect of Quechua.

Proportionate to the whole body of Quechua studies, there has been little produced on the syntax of any Quechua dialect. Most syntactic studies, as do the large majority of phonological and morphological studies, use American methodology, be it based on Bloomfieldian linguistics, or be it based on those of Chomsky. The present methodology stands diametrically opposed to both schools of American linguistics cited above, and as a result introduces a fresh approach to the study of the syntactic aspect of Quechua. With Axiomatic Functionalism, a new way of looking at Quechua grammar is presented and thus much of what is accepted "fact" reappraised. For this reason, while the concern of the thesis is with producing a description of syntactic relations in San Martín Quechua under the terms of Axiomatic Functionalism, reference is made to descriptions of other Quechua dialects, most notably where the application of Axiomatic Functionalism produces statements concerning certain phenomena which are quite different from statements made on equivalent phenomena in other dialects using a different linguistic theory. Moreover, Axiomatic Functionalism is a deductive theory, and so statements regarding the data contained in the description are not statements of "fact",

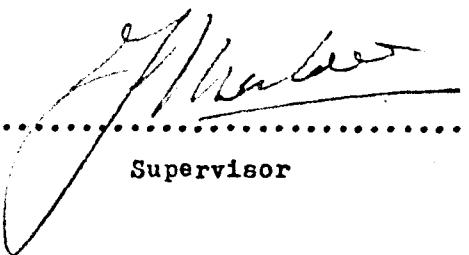
¹ Mulder, "Linguistic Theory, Linguistic Descriptions and the Speech-Phenomena", La Linguistique (1975)

but are hypotheses which may stand as valid hypotheses regarding the data unless they can be refuted.

Given that the theoretical base on which the description rests is different from that used in other descriptions of Quechua dialects, and so that the hypotheses made regarding syntactic relations in San Martín Quechua may be tested, Part I of the thesis is given over to the theoretical side of the work: to explaining the relation between theory and description in Chapter 1, to giving brief explications of those notions in the theory which have particular relevance for a syntactic description in Chapter II, and in noting some of the limits set to the selection of the data for description in Chapter III. The axioms and definitions of the theory are given in Appendix A. Part II of the thesis, which is in six chapters, deals with the description proper. Structures which may stand as sentences are established and analysed into their constituent structures, the relations between each constituent being ascertained. Analysis is carried through to the stage where there are no constituents analysable in syntactic terms left.

CERTIFICATE

I HEREBY CERTIFY that the conditions of the Ordinance
and Regulations concerning the submission of a Ph.D. thesis
have been fulfilled by Ms. A. Hawkins. ~



.....
Supervisor

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 Ph.D., was begun in October, 1970.

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

A. Hawkins.

A. Hawkins

12th, September, 1976

FOREWORD

Hitherto, little has been written using a modern linguistic theory, on aspects of Quechua syntax. This is perhaps understandable in a language which only recently has caught the attention of linguists and has become a subject for description. Linguistic descriptions of Quechua in the forties, fifties and sixties concentrated on phonology and, more especially, on morphology which, apart from its appeal as the most 'interesting', even exotic, aspect of an agglutinating language like Quechua, was relatively tractable in terms of the linguistic theories of the Bloomfieldian and neo-Bloomfieldian schools which were then dominating the field of Quechua studies. Statements on Quechua syntax in descriptions produced in this period tend to be limited to the listing of the sentence and clause types which have been isolated for the dialect under description. This bias towards morphology is evident even in Lastra's Cochabamba Quechua Syntax which devotes a good half of its space to a morphological analysis of this dialect. At present, the neo-Bloomfieldian approach has been eclipsed in favour of that of transformational grammar (following the adoption by Parker of the transformational approach to description in the early seventies, from whom many other Quechua scholars take their lead). Consequently, the syntactic aspect of Quechua has come to the fore for description, and several articles have been published, though these tend to concern themselves with one particular area in the whole field of syntax, rather than give a fuller syntactic description of a Quechua dialect.

The description of syntactic relations in San Martín Quechua offered here has little in common with any other description of a Quechua dialect on account of the theory used (Axiomatic Functionalism) which is based on a different philosophical principle and linguistic outlook. For this reason, Part I of the work is mostly concerned with the theoretical side of the description, i.e. with the theory which has been applied to the linguistic data collected for description in San Martín. Chapter I deals with the relation between theory and description as perceived by Mulder and the requirements of each if they are to achieve their purpose. In Chapter II, those notions in Mulder's Axiomatic Functionalism theory which have particular relevance for syntax are briefly explained, while Chapter III discusses the selection of the data which has taken place to effect the description. Part II gives a description of the syntactic relations which have been established in San Martín Quechua. The description does not pretend to be exhaustive, i.e. it does not set out to establish every single syntactic relation, but rather to describe the basic structures, i.e. the basic syntactic relations in San Martín Quechua.

With the application of a theory such as Axiomatic Functionalism, which defines its terms rigorously, many of the accepted "facts" regarding Quechua have been questioned. For example, under the terms of Axiomatic Functionalism, the distinction between 'plereme' (word) and 'moneme' (morpheme) is crucial, since a syntactic analysis does not proceed beyond the level of plereme. To distinguish between plereme and moneme gives the demarcation line between syntax and morphology; in syntax, we are not

concerned with the combinability of monemes, but with the combinability of pleremes into larger structures and the relations between them. Moreover, as 'plereme' and 'moneme' have been rigorously defined, it is possible that elements which have hitherto been regarded as having moneme status only, are in fact pleremes. This has happened in the case of "...ta" (traditionally the object marker) and relational elements such as "pi" (in, at, on), hitherto regarded as indisputably of moneme (morpheme in American descriptions) status. These are just two examples from the description where the application of Mulder's Axiomatic Functionalism has produced statements concerning the syntactic aspect of the dialect quite distinct from those which have been produced in the terms of another theory.

Every description, and so every statement in it, is a tentative one, i.e. it can be no more than a hypothesis, produced from the application to the data of a theory. Through testing, a hypothesis may be improved upon, but it can never be proved; it may even be refuted in the light of new data. The aim in the present description has been to forward hypotheses regarding syntactic relations in San Martin Quechua in such a way that they may be tested and where necessary, improved upon. Moreover, by challenging some of the accepted "facts" regarding Quechua, it is hoped that an interest and an incentive to further enquiry be stimulated.

The linguistic data described in this work were collected in the months of June, July and August of 1971 in the town of Sisa, Department of San Martin, N.E. Peru. The body of data consists of thirty-five stories, four lengthy accounts of the life and history of Sisa and a fair amount of random recorded

conversation. The stories and accounts were transcribed and checked with the informants in Sisa.

Without Axiomatic Functionalism, this thesis would not have been possible, so my deepest gratitude is to my supervisor, Professor J.W.F. Mulder of the Department of Linguistics, not only for providing the tools with which to make the description, but also for his patient and helpful supervision of my research throughout all its stages. Likewise, the thesis would not have been possible without the invaluable help of Don Benigno Tapullima who, bed-ridden as a result of an accident he had suffered some twenty-three years before, spent many hours telling stories and something of the history of Sisa. The transcriptions and translations of these recorded stories and accounts were checked with the help of Don Victor Cenepo who also acted as an informant on his own account. To both Benigno and Victor I am greatly indebted, as I am to Miss Marinell Park of the Summer Institute of Linguistics who introduced my husband, with whom the data were collected in Sisa, and myself to our informants and who gave us access to her own work on the dialect.

I should also like to acknowledge Mr. Leslie Hoggarth whose course of lectures on Cuzco Quechua delivered in St. Andrews (1970-71) for the Department of Spanish I attended, and which aroused in me an interest in Quechua. Finally, I thank my husband whose phonological description of the San Martín dialect of Quechua provides the orthography used in the ^h_A syntactic description, who made available to me all his, as yet unpublished, work on the morphology of the dialect, and who has encouraged my research and has, amidst the noise of family and tenement

life, typed out this presentation copy of the thesis.

The first years of research, which included the field trip to Sisa, were made possible by a Parry studentship awarded by the Department of Education and Science.

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PART ONE

CHAPTER 1

THEORY AND DESCRIPTION

1. The relation between theory and description.

Since the base upon which the present description of syntactic relations in San Martín Quechua rests is quite distinct from that of any other modern linguistic description of a Quechua dialect, a rough explanation is given in this chapter of the philosophical principles which underlie Mulder's axiomatic functionalist theory.

Mulder defines the aim of linguistics as "to make possible the scientific description of any chosen field of speech phenomena"¹, for which purpose a theory is essential. No phenomena, including the speech-phenomena, can be described entirely objectively, but are interpreted according to a pre-conceived idea or theory. In other words, phenomena are interpreted in the light of a theory. The theory dictates the type of phenomena taken and determines the relevant aspects of the phenomena for description. The linguist, however, must select the field of speech-phenomena to be described, given that the entire field of speech-phenomena is so diverse and cannot be taken as one unit, or universe, for description. (Although it would be theoretically possible to do this, the resultant description would be so complicated as to be of little or no practical interest.) The field of speech-phenomena chosen by the individual linguist is limited arbitrarily by him, depending

¹ Mulder, "Linguistic Theory, Linguistic Descriptions and the Speech-Phenomena", La Linguistique(1975).

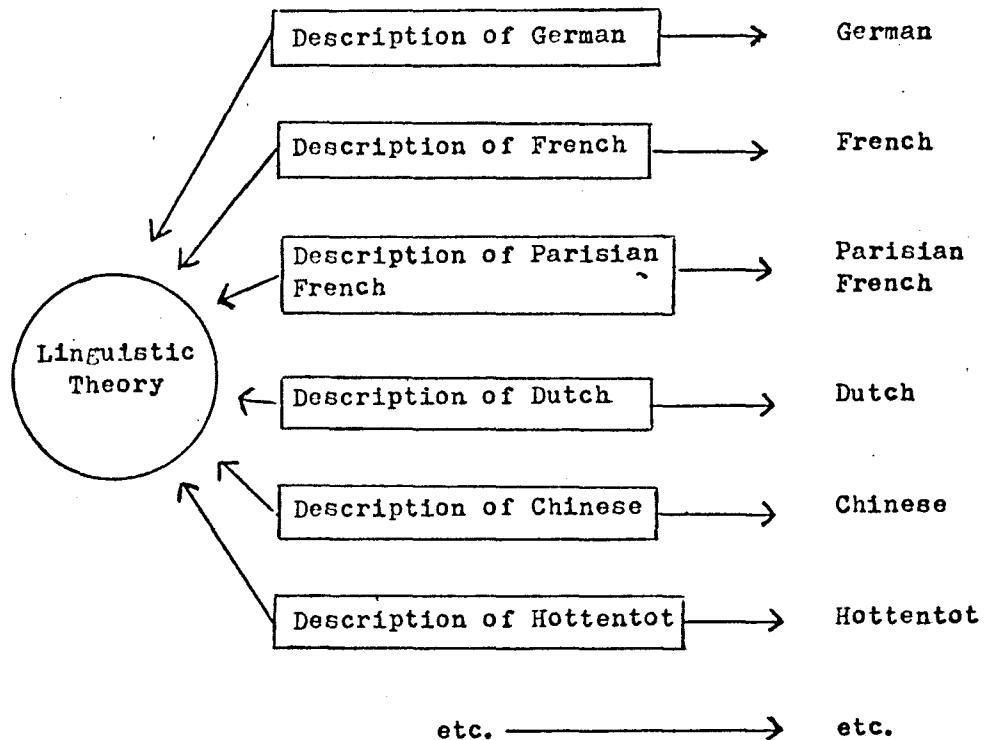
upon his specific objective. The theory provides the means for describing any one of the fields of speech-phenomena which may have been taken for description. Thus unlike other sciences, a linguistic theory does not yield just one description, but a multiplicity of descriptions given that the fields of speech-phenomena which may be selected are potentially infinite, ranging from descriptions of languages and dialects through to the description of one individual's speech. The relation between linguistic theory, linguistic descriptions and speech-phenomena may be shown as in the diagram on the following page, where the arrows mean "implies" or "presupposes".¹ It is possible that a certain field of speech-phenomena may never be described, and similarly a linguistic theory may never be applied to a field of speech-phenomena to produce a description, but a description presupposes the existence of the other two. A description of German, for example, presupposes both a field of speech-phenomena which we may call "German" and a linguistic theory. Thus we may say that a linguistic description is "the application of a particular linguistic theory to a selected field of linguistic phenomena".²

2. The requirements of a good description.

A description, to have scientific value, should be consistent,

¹ Mulder, op. cit., p91. For this chapter the reader is also referred to "From Sound to Denotation", Folia Linguistica(1973), and "Descriptive Adequacy in Phonology and the vowel phonemes of the Scottish dialects of Angus and Perthshire compared with the Southern English System", La Linguistique(1974).

² Mulder, "Linguistic Theory, Linguistic Descriptions and the Speech-Phenomena", La Linguistique(1975).



adequate and simple - that is, it should account for the speech-phenomena, or data, in a consistent, adequate and simple way. Moreover, it should do so in terms of the theory used. If statements regarding the data are made without the backing of a given theory, they are devoid of descriptive content. There is no way, for example, that the statement that "mikurkaN" (he ate) in San Martín Quechua is a word and not a moneme can mean anything if the terms 'word' and 'moneme' are not part of a unified theory behind the description. To say that "mikurkaN" is a word is not meaningful unless 'word' and 'moneme' are terms defined in the theory used to produce the description. If there is in the description a statement which cannot be

justified by the theory, then the statement is an arbitrary one and the description is arbitrary in that it contains arbitrary statements.

Not only should every statement in a description be consistent with the theory used, but every statement should also be consistent with every other statement of the description. If one statement contradicts another, although each is justified by the theory, then both are rendered meaningless as descriptive statements on the data. Similarly, any statement derived from a previously judged inconsistent, and therefore meaningless, statement is also rendered meaningless.

The requirement of adequacy demands that a description should account for all the data which have been selected for description. By the act of describing, a structure or 'model' is established which is held to account not only for all the actual data presented for description, but also for all the potential data which may be presented for description in the terms of the theory used. Thus if the data presented for description is so limited that the structure established is not sufficient to account for any future data, then the description will quickly be shown to be inadequate. On the other hand, it may be that in a description which attempts to cover as wide a field of data as possible there are a few elements which cannot be described adequately in the terms of the theory used. In such cases adequacy(i.e. that all the data should be accounted for) should not be achieved at the expense of consistency. If descriptive statements consistent with one another and with the terms of the theory account for a large body of the data at hand then this central description should

not be sacrificed for the sake of a marginal element which can only be described by the formulation of a statement which relies on criteria outside the theory. Such a statement would be an arbitrary statement and if included in the description would render the description arbitrary for containing arbitrary statements.

Descriptive adequacy implies not only that all the relevant data should be covered but that the statements made should be consistent with the data. That is, that the description of what is said should be in keeping with what is said; it "should account for the actual or potential semantic realisation, i.e. for the reference of that message"¹. Such statements are arrived at via the hypothetico-deductive method of testing about which something will be said below in section 4 of this chapter.

The requirement of simplicity in a description is not so easily measured as those of consistency and adequacy. Mulder states that "there should be no redundant elements in a description, and the number and complexity of statements it contains should be reduced as much as satisfying the conditions of consistency and adequacy(the latter including "clarity")allows"². If a description is consistent, adequate and simple then the statements of that description should be easily testable in the terms of the theory used.

3. Requirements of a linguistic theory.

A good description, i.e. one which is consistent, adequate

¹ See Mulder, "Descriptive Adequacy in Phonology, and the vowel phonemes of the Scottish Dialects of Angus and Perthshire compared with the Southern English System", La Linguistique(1974).

² Mulder, "Linguistic Theory, Linguistic Descriptions and the Speech-Phenomena", La Linguistique(1975).

and simple presupposes a consistent, adequate and simple theory. Of the last, it may be said that a certain amount of simplicity may be sacrificed in the theory if the net result is greater simplicity in the descriptions based on it.

Just as the statements of a description should be consistent with one another, so the statements of a theory should be consistent with one another, i.e. there should be no contradictions. More will be said regarding the statements of the theory in the following section.

A linguistic theory which is adequate is one which produces consistent, adequate and simple descriptions. If it is found that a particular linguistic theory cannot yield even a partial description of a particular field of speech-phenomena, then the theory is deemed to require revision or rejection.

4. The relation between theory and description(cont).

As has been stated above, a linguistic theory dictates the type of speech phenomena taken for description and determines the relevant aspects of those phenomena. In this it is arbitrary, the arbitrariness being tempered by the fact that what is selected is appropriate to the aim of the theory, in the case of Axiomatic Functionalism to enable descriptions of the communicative aspect of speech-phenomena.

The Axiomatic Functionalist school of linguistics is that branch of Functionalism where the basic tenets of functionalists, such as the double articulation of language and the functional principle¹, have been incorporated into six axioms. These axioms

¹For 'double articulation' and 'functional principle', see the following chapter, p 11-14.

are propositions, or statements, which are accepted in advance as being reasonable and as being appropriate. The axioms may contain primitive terms or terms which require definition for the axiom to be fully interpreted. Thus after each axiom of the theory which is not stated in primitive terms alone, there ensues a list of definitions whereby the terms used in the axiom and any terms used in the definitions which are not primitive terms are defined until there are only primitive terms left. Both the axioms and the definitions constitute statements of the theory along with the theorems which are not an actual component of the theory since they are statements implied by the axioms and definitions.

The terms which are introduced by the definitions constitute the "notions" of the theory. The describer uses these notions to make a description of his selected field of speech-phenomena. Some of the notions relate more to processes which may be established in the description, e.g. 'simultaneity', 'ordering relations'; others, such as 'syntagm', 'word' may be related via the description to entities in the speech-phenomena. These last provide the theoretical models, or meta-models, for the models of the description. It goes without saying that each new term which is introduced as a statement of the theory should be rigorously defined not only so that the consistency and adequacy of the theory may be judged but also so that the consistency and adequacy of the descriptive statements made of speech-phenomena can be tested in terms of the theory.

Statements made in the description regarding the particular field of speech-phenomena under description should, in every

case, be allowed by the theory. That is, there should be a notion in the theory which will account for a descriptive statement made and so justify it. The descriptive models which are set up relate entities in the data to notions in the theory, thereby enabling meaningful statements about the data to be made. Unlike the statements of the theory, the statements of the description are not arbitrary. Rather, they are hypotheses concerning the data and formulated in the terms of the theory which are arrived at by the hypothetico-deductive method of testing. A descriptive model is set up and then tested to ascertain whether or not it accounts adequately for all the data it purports to describe. If it is found to be adequate, then it is forwarded as a hypothesis. It is hypothetical in that it may be refuted by any future relevant data for which it does not account and it is arrived at via a process of negation, i.e. in our setting up and testing of a model, we reject all those alternatives which account the least adequately for, or are in direct conflict with, the message conveyed.

Within the description certain terms may be introduced and defined, such as 'adjective', 'transitive', 'nominal'. These definitions belong solely to the description and are language-specific. They are labels which are introduced in the description as an aid to classification and which have status only within the description.

5. A note on the present description.

The present description, in that its purpose is to describe syntactic relations in San Martín Quechua, reflects only a

partial application of the theory, i.e. that part which deals with the syntagmatic aspect of language.

In the description, I have given as many examples as possible from the data of those entities to which a descriptive statement is held to apply.¹ The amount of exemplification may seem excessive at times, but after suffering the frustrations of finding too little data forthcoming with which to test statements made on other dialects of Quechua, I have preferred to err on the side of too much rather than too little. Moreover, and particularly with a language such as Quechua about which relatively little is known, descriptive statements are not testable unless accompanied by examples from the data they purport to describe.

The present work is intended primarily as a contribution to Quechua linguistic description, but since it follows the principle that one cannot have a linguistic description without a linguistic theory, it is also an exposition of an application of a linguistic theory, namely Mulder's Axiomatic Functionalism theory, to a selected field of speech-phenomena - San Martín Quechua.

6. A note on the orthography used in this description.

In those languages which have no literary tradition, the question of what orthography to use arises. As far as Quechua is concerned, no lasting decision has been reached despite a number of conventions on the subject, and each dialect tends to

¹In the translations of the examples given, I have tried to keep as close to the Quechua as possible.

its own particular orthography.¹ Generally speaking, in works not based on a modern linguistic theory, an orthography which resembles Spanish orthography is used, while in works of a modern linguistic nature, it is customary to use an orthography derived from a phonological analysis of the dialect being described.

In this description of syntactic relations in San Martín Quechua, the orthography used is derived from the phonological analysis of System A of the dialect as made by Howkins² following Mulder's axiomatic functionalist approach to the description of speech.³

¹ Parker recently attempted to establish a single alphabet for all Quechua dialects in his Sugerencias para un alfabeto general del Quechua, but this too has tended to be disregarded by Quechua scholars.

² Howkins, Phonology of San Martín Quechua, St. Andrews Ph.D Thesis, 1972. For a list of the phonemes and their realisations, see Appendix B of this work.

³ Mulder, Sets and Relations in Phonology: an Axiomatic Approach to the Description of Speech, hereafter abbreviated to Sets and Relations.

CHAPTER 11

SOME NOTIONS OF THE THEORY

1. Introductory remark.

The basic axioms and definitions of the theory are given in Appendix A. They form a revised set of postulates for Axiomatic Functionalism, having been considerably amplified out of the incipient set of axioms and definitions as found in Sets and Relations¹, where the possible application of the theory to syntax is implicit rather than explicit. The theory as it stands now enables not only phonological descriptions, but morphological, syntactic and/or semantic descriptions as well, since it contains all the axioms and definitions which are necessary for performing a linguistic description of a natural language². In the following pages brief explanations will be given of those parts of the theory which are important to a syntactic description.

2. The double articulation of language.

The double articulation is what distinguishes language from all other semiotic systems. A semiotic system may be defined as "any system of CONVENTIONS for communication, i.e. any system that contains signa".....A 'system' is a self-contained set of

¹ p10-12.

² The axioms and definitions relevant for a semantic description are not included in Appendix A.

³ For a discussion on signa within the wider context of indices of which they are a subspecies, see Mulder and Hervey, "Index and Signum", Semiotica, IV, 4(1971), and Mulder and Hervey, Theory of the Linguistic Sign. This section represents a vastly compressed version of what is stated in these two works, particularly in Theory of the Linguistic Sign.

functional entities, i.e. entities that are separately relevant to the purport of the whole (Mulder, 1968, p10).¹ The purport of a semiotic system is 'communication', i.e. the the conveying of information".²

Semiotic systems may be subdivided into systems which contain signs and systems which contain symbols, systems in which the elements are of a discrete, or of a non-discrete nature, or into systems which contain simple or complex elements. This last type of classification is the one which is of most interest for the study of language for it is via this that the definition that language has a double articulation is arrived at.

Language contains signs and symbols (proper names are symbols in language), has discrete and non-discrete units (intonation being regarded as a non-discrete system), but these do not, on their own, contribute to making it distinct from other semiotic systems. The distinction, and the definition, is arrived at by an analysis of semiotic systems into systems which contain simple elements and into systems which contain complex elements. By 'simple' is meant that elements may not be combined into higher level elements, i.e. elements analysable on a higher level. Complex systems may be subdivided into unordered and ordered complex systems. Unordered complex systems contain elements which occur in simultaneous bundles (i.e. there is simple co-

¹ The 'double articulation' and 'functional principle' are notions basic to all neo-Prague linguistics. The 'functional principle' differs from the fundamental principle of Bloomfieldian linguistics in its insistence on difference rather than similarity as the criterion for establishing units. It may be summarized: no linguistic item is functional unless it is opposed to another or to its absence in equivalent contexts.

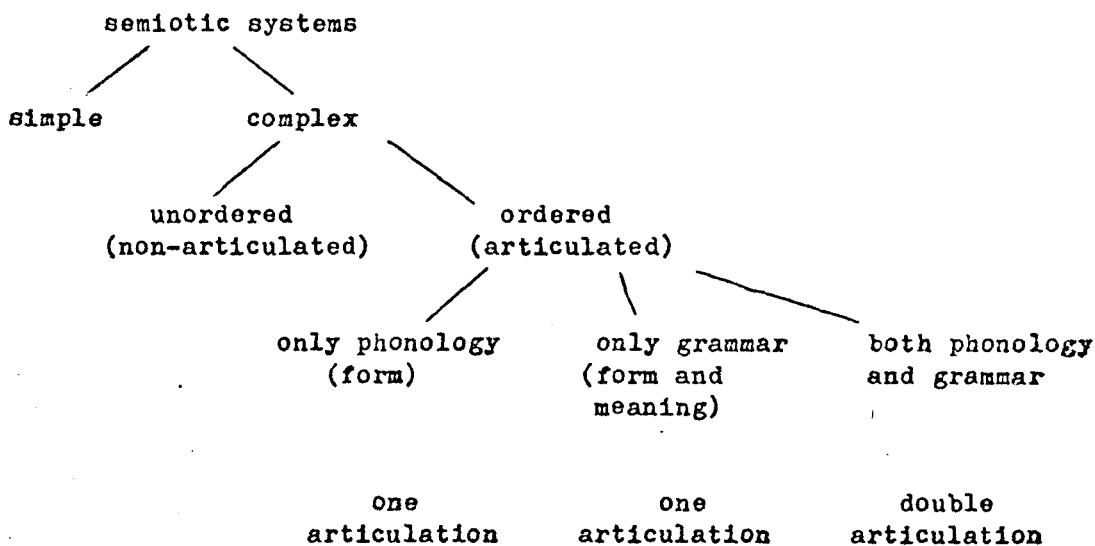
² Mulder and Hervey, Theory of the Linguistic Sign.

occurrence of the elements) which constitute higher level elements. Examples in language are phonemes when regarded as simultaneous bundles of distinctive features, and words as simultaneous bundles of monemes. The phoneme /m/, for example, is said to have the distinctive features 'labial, nasal'. Whether we state these features as 'labial, nasal' or 'nasal, labial' is irrelevant; there is simple co-occurrence of the features 'labial' and 'nasal' to constitute the phoneme /m/. Similarly the ordering of the monemes "walk" and "ed" in "walked", for example, cannot^{be} shown to be functional in the same way that the ordering of "John", "hit" and "Paul" in "John hit Paul" as opposed to "Paul hit John" can. In the former example, it is a case of simultaneity(simple co-occurrence), while in the latter, the functional ordering of the elements is significant.

Ordered complex systems are systems which contain elements between which there are ordering relations and which combine into higher level elements. There are two types of ordering possible: a phonological ordering(form alone) and a grammatical ordering(form and meaning). Language has both orderings or articulations. Phoneme complexes are examples of phonological ordering, while elements such as "John", "hit" and "Paul" are elements which combine into units that have a formal and a grammatical(meaningful) ordering. The two articulations have been termed by Martinet as "first" and "second"; the grammatical (meaningful) units of language, i.e. units with both form and meaning, comprise the first articulation, the phonological units, i.e. units with only formal aspect, comprise the second

articulation¹. The implication of the terms "first" and "second" is that there is a follow-on of one from the other, i.e. from the first to the second. Mulder, however, regards the two articulations as independent of each other.²

The inverted tree diagram below is a simplification of the table given in Theory of the Linguistic Sign³:



3. The Linguistic Sign.

The concept of the linguistic sign, after de Saussure⁴, forms the basis of grammatical analysis in functional linguistics. Briefly, de Saussure's concept implies that the sign (*S*) is the conjunction of a given signifiant, or expression (*E*), and a given signifié, or content (*C*). The conjunction is inseparably united,

¹ Martinet, Functional View of Language, p24; Elements of General Linguistics, p22-4; La Linguistique Synchronique, p21 *et seq.*

² See Hervey, "Mulder's 'Axiomatic Linguistics': A reply to C. Bailey's review in Language, Vol. 46, No. 3", Lingua(1972) for a discussion of the differences between Mulder's concept of 'double articulation' and that of Martinet.

³ p22

⁴ de Saussure, Course in General Linguistics.

i.e. E and C mutually imply each other. If we have a certain E, then we shall have a certain C, and vice versa. We may show the relationship as $E \longleftrightarrow C$, where \longleftrightarrow indicates that the terms mutually imply each other, i.e. there is an equivalence relation. A particular S implies a particular expression and a particular content which mutually imply each other. Thus:

$$S \longleftrightarrow (E \& C) \text{ and } E \longleftrightarrow C$$

Mulder's concept of the sign does not differ in principle from that of de Saussure, but the implications of the relationship have been clarified, especially with respect to homonymy, synonymy and allomorphy¹. Central to the concept is the notion of 'distinctive function' in the theory, which is defined as 'the set of commutants in which a semiotic entity may partake', or alternatively 'the set of oppositions into which a particular semiotic entity enters' (Def. 7a³). In the notation, distinctive function in grammar is s, and in phonology it is d. A particular linguistic unit stands in a relation R with a particular distinctive function in phonology or grammar according to the linguistic unit in question, R showing the relation "in its capacity of having". For example, a phonetic form f may stand in a relation R with a particular d (distinctive function in phonology), notationally fRd, which is read as "a particular phonetic form in its capacity of having a particular distinctive function in phonology". There may be more than one phonetic form which stands

¹ Mulder, Sets and Relations; "On the art of definition, the double articulation of language and some of the consequences", Forum for Modern Language Studies(1969); "Linguistic Sign, Word and Grammateme", La Linguistique(1971); "From Sound to Denotation", Folia Linguistica(1973); Mulder and Hervey, Theory of the Linguistic Sign. See also Appendix A, Axiom E, and the ensuing definitions for the terms used in this section.

in a relation R with a particular distinctive function d . That is, we may have: $\underline{f}^1 \underline{Rd}^1$, $\underline{f}^2 \underline{Rd}^1$, $\underline{f}^3 \underline{Rd}^1$ etc., in which case we may say that those phonetic forms which have a particular distinctive function in common form a class $\{\underline{f}\}$. The class of phonetic forms $\{\underline{f}\}$ in $\{\underline{f}\} \underline{Rd}$ is the union of all the phonetic forms \underline{f} which stand in a relation R with the same distinctive function d , (i.e. $\{\underline{f}\} = \underline{f}^1 \underline{U} \underline{f}^2 \underline{U} \underline{f}^3 \dots \underline{U} \underline{f}^n$), and notationally $\{\underline{f}\}^1 \underline{Rd}^1$ is read as "a particular class of phonetic forms in its capacity of having a particular distinctive function in phonology". The class $\{\underline{f}\}$, in its capacity of having a particular distinctive function in phonology, i.e. $\{\underline{f}\}^1 \underline{Rd}^1$, constitutes a phonological form p , where each member of that class ($\underline{f}^1 \underline{Rd}^1$, $\underline{f}^2 \underline{Rd}^1$, $\underline{f}^3 \underline{Rd}^1$ etc.) is an allophone.

In grammar, phonological forms are considered in conjunction with their distinctive functions in grammar. That is, a particular phonological form p stands in a relation R with a particular distinctive function in grammar s , notationally $p \underline{Rs}$. Where more than one p stands in a relation R with a particular s , that is, where we have $\underline{p}^1 \underline{Rs}^1$, $\underline{p}^2 \underline{Rs}^1$, $\underline{p}^3 \underline{Rs}^1$ etc., we may talk of a particular class of phonological forms in its capacity of having a particular distinctive function in grammar, notationally $\{\underline{p}\}^1 \underline{Rs}^1$. The class $\{\underline{p}\}$ is the union of all the phonological forms \underline{p} which have a particular distinctive function s in common. Thus the notation $\{\underline{p}\}^1 \underline{Rs}^1$ is an abbreviation for $\underline{p}^1 \underline{Rs}^1 \underline{U} \underline{p}^2 \underline{Rs}^1 \underline{U} \underline{p}^3 \underline{Rs}^1 \dots \underline{U} \underline{p}^n \underline{Rs}^1$. Each member of the class can represent the class, and one of the members, but not the only member, or we may not then talk of a class, may be "zero".

A sign is the conjunction of a formal aspect, or expression,

with functional aspect, or content, so we may say that when considering a particular class of phonological forms in its capacity of having a particular distinctive function in grammar, we consider the formal aspect of a particular sign, or its expression. Expression(E), then, is regarded as being a class of phonological forms in its capacity of having distinctive function in grammar, or put notationally:

$$E = \{p\} R \underline{s}$$

Since a particular class of phonological forms may be the form of a sign, then, on the assumption that all members are equivalent, it follows that each member of that class may represent the form of the sign in question. That is to say, a phonological form p in its capacity of having a distinctive function s, where it is a member of a class {p}Rs, is an allomorph of the sign which is expressed by that particular {p}Rs, or, put another way, a particular class {p} in its capacity of having a particular distinctive function in grammar, i.e. {p}Rs, constitutes the expression of a sign, where each member of that class (i.e. each Rs of {p}Rs) is an allomorph. From this, we may say that expression is a class of allomorphs. Further, since each member p of a class {p}Rs is itself a class of phonetic forms {f}Rd, we may say that expression is a class of phonetic forms which has distinctive function in phonology which in turn is a member of a class of phonological forms which has a particular distinctive function in grammar, i.e.

$$E = \{ \{f\} R \underline{d} \} R \underline{s}$$

The content(C) of a sign(S) is expressed as the converse of E, because, as stated above, a particular E and a particular C

mutually imply each other, and a particular S implies, and is implied by a particular E and C. That is, $E = \{p\}Rs$, and $C = \underline{sR}\{p\}$ where \underline{R} indicates the converse of R and

$$S \longleftrightarrow (\{p\}Rs \& \underline{sR}\{p\}).$$

While it may not always be the case that the form of a particular sign is a class of allomorphs (i.e. we may not have $E = \{p\}^1Rs^1$, but $E = \underline{p}^1Rs^1$ in one particular instance), to have regard to this potentiality enables us to indicate allomorphy. It would follow that if we were to state that $E = \underline{pRs}$ only, that is, that a particular phonological form in a relation R with a particular distinctive function in grammar represents the form of a particular sign, then we would have as many different signs as we have different forms and would have to regard the different phonological forms of the sign for plural in English, for example, as different signs. This would clearly be unsatisfactory, as it would be to regard, in San Martín Quechua, the forms /Nki/, /iki/ and /ki/ as separate signs and not as different phonological forms which each stand in a relation R with "second person". Without the concept of expression as a class of allomorphs, we would not be able to state in such a simple and adequate way that /Nki/ R "second person", /iki/ R "second person" and /ki/ R "second person" form a class $\{/Nki/, /iki/, /ki/\} R$ "second person", where each member of that class is an allomorph of the sign for "second person" in San Martín Quechua.

Just as allomorphy can be established adequately and simply where \underline{p}^1Rs^1 , \underline{p}^2Rs^1 can be shown, homomorphy is established where \underline{p}^1Rs^1 , \underline{p}^1Rs^2 can be shown and where we can show $\{p\}^1Rs^1$, $\{p\}^1Rs^2$, then we are on the way to establishing homonymy, though for its

actual establishment, semantic criteria must be invoked. Similarly, with synonymy where $\{p\}^1 \underline{Rd}^1$, $\{p\}^2 \underline{Rd}^1$, semantic criteria are necessary for its actual establishment.¹

While these issues are not central to a syntactic description, it is important for such a description that signs and their allomorphs are properly identified, since syntactic relations are relations between signs and not between allomorphs of signs.

4. 'Word' or 'grammateme'.²

'Word' or 'grammateme', either of which is a 'plereme' (see Def. 8b), is defined as 'self-contained (by definition: simultaneous) bundle of one or more monemes as its immediate (and at the same time: ultimate) constituents', or alternatively as 'minimum syntagmatic element in grammar' and 'minimum syntactic entity' (Def. 8b¹). A word or grammateme is, then, an element which can enter into ordering relations with other elements, and as it is the 'minimum syntactic entity' it is the ultimate constituent of a syntactic analysis. On the syntactic level, there is no analysis beyond the word or grammateme; this is the ultimate constituent of a syntactic analysis³. The two terms 'word' and 'grammateme' are equivalent notions in the theory - they do not reflect any difference between the types of sign but are, rather, different ways of representing, in terms of its allomorphs, a certain sign in the description.

The term 'grammateme' is useful in description to represent

¹ See Mulder, "From Sound to Denotation", p174.

² See Mulder, "Linguistic Sign, Word and Grammateme".

³ It is perhaps useful to stress this since modern descriptions of Quechua dialects which follow the transformational model, e.g. Snow, Bills, are concerned with producing transformational rules for elements which here are regarded as having morphological status only.

the form of a sign which is discontinuous, i.e. the phonological form of the sign in question is non-continuous (see Def. 29b). For example, in San Martín Quechua "manaN iačaniču" (I do not know) can be analysed for syntactic purposes as "manaN...ču" (negative) and "iačani" (I know), that is, in terms of grammatemes, or as "manaN" and "iačaniču", that is, in terms of words, or discrete linear units (see Def. 29a). The first analysis reflects that the sign for negative in San Martín Quechua has an allomorph "manaN...ču", while in the second the form of the negative is merely "manaN", and "iačaniču" must be treated as a combinatory variant of "iačani" (I know) in the context of "manaN" (negative). The two types of representation, however, do not alter the syntactic analysis made, i.e. the account of the ordering relations between the sign for "negative" and the sign for "I know", since the difference is not discreteness on the sign level but ^{that of} on the allomorph. The difference between the two types of presentation, and the advantage of the term 'grammateme', is more apparent in a language which shows many cases of concord, French and Spanish being examples. In San Martín Quechua only a few signs have allomorphs with non-continuous phonological form, and so it could be argued that the syntactic description should be presented using discrete units, i.e. words, only. I have, however, taken advantage of the notion 'plereme' which embraces 'word' and 'grammateme' so that where the form of a sign is better represented as a grammatememe this may be done. In this way, and in the absence of a morphological description as companion to this syntactic description, aspects of the morphological analysis, which has been taken as given for the syntactic description, may become apparent.

Generally, in a morphological analysis, the monemes of a language or dialect are established and their possible combinations into pleremes stated. That is to say, the signs which correspond to pleremes have been established in morphology; in syntax we are not concerned with pleremes as such, i.e. their internal structure, but with the relations that hold between pleremes and their possible combinations into larger complexes. Pleremes are self-contained bundles of one or more monemes - between the monemes no syntactic relations, i.e. no ordering relations, can be established. It happens from these definitions that the status of certain monemes in Quechua which have commonly been accepted as combining with other monemes to constitute single pleremes, has had to be re-examined. If functional ordering can be proved between monemes which have hitherto been regarded as combining to form single pleremes, then these monemes have the status of pleremes in the description. Usually functional ordering can be proved without difficulty, but there are cases in any language, and Quechua is no exception, where it is difficult to distinguish between 'morphological complexes', i.e. simultaneous bundles of one or more monemes (see Def. 8b²) and 'syntactic complexes', i.e. signs which can be analysed into at least two smaller constituent signs which are in a syntactic relation to one another¹, without the aid of rigorous and clear-cut criteria. Hervey and Mulder² have set up the criteria necessary for the identification of 'morphological complexes' as opposed to 'syntactic

¹ Hervey and Mulder, "Pseudo-composites and Pseudo-words: sufficient and necessary criteria for morphological analysis", La Linguistique (1973).

² *ibid.*

complexes'. While these criteria are relevant essentially to a morphological analysis, they are included here in synopsis since there are points in the description where although the elements of a complex have been identified as signs, it has not been made apparent in the morphological analysis whether these complexes are morphological or syntactic.

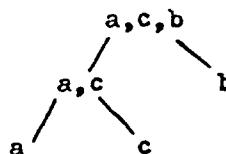
The criteria for demonstrating the nature of the relation between the constituents of such complexes are the following:

1. Criterion of Asymmetry. The relation of simultaneity between elements is a relation of symmetry (see Def. 6b). A symmetrical relation is a relation where there is no functional ordering of the elements only simple co-occurrence, i.e. they are simultaneous. For example, in a grammatical complex composed of two constituents a and b, if a is simultaneous with b, which implies that b is simultaneous with a, then there is a symmetrical relation between the elements and the complex of which a and b are constituents must be regarded as a morphological complex. If it can be demonstrated, however, that there is a functional ordering of the constituents a and b of the complex, then the hypothesis that there is a symmetrical relation between a and b is refuted. Asymmetry, which provides a sufficient criterion for demonstrating functional ordering, or ordering relations (see Def. 6a), can be demonstrated by the reversibility of a and b. If a in a relation with b is functionally distinct from b in the same relation with a (i.e. if $(a R b)$ is functionally distinct from $(b R a)$), then it is demonstrated that the relation which holds between a and b is not one of simultaneity, or symmetry, but one of asymmetry. An asymmetrical relation between

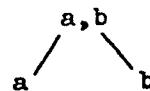
elements is a syntagmatic relation, and so the constituents a and b of the complex must be regarded as syntagmatic elements which are assignable to syntactic positions. Thus the complex in question must be treated as a syntactic and not as a morphological complex.

2. Criterion of commutation with syntactic entities. In determining whether a complex is syntactic, only internal evidence may be used, i.e. evidence which pertains to the internal structure of the complex and which is not elicited from evidence of the nature of the complex taken as a whole as a constituent of a larger structure. The possible reversibility of the ordering of the constituents of a complex to produce a distinct complex is one operation which may be performed on the internal structure of a complex to ascertain its nature. That is, reversibility is a sufficient, but not a necessary, criterion for establishing a complex as being syntactic; it cannot always be applied. Another criterion which is sufficient for establishing a complex as being syntactic is that of finding valid commutations for one of the constituents of the complex in question with other signs which are demonstrably syntactic entities. If the constituent commutes with a syntactic entity, then it may itself be established as a syntactic entity. For the commutations to be valid, they must be in contexts which are equivalent to that of the complex in question; in other words, one of the constituents of the complex must remain constant while the commutation tests are performed. If a valid commutation can be demonstrated, then we have evidence that the complex in question is syntactic and not morphological since morphological entities may not contain syntactic entities.

Using symbols, in a complex with the constituents a and b in that order, and keeping b constant, if we can introduce an element c to produce a complex a,c which commutes with a such that the constituents a and c of the complex a,c, while each standing demonstrably in a position with respect to the other (i.e. there is a syntactic relation between a and c)¹, are together one constituent in a possible complex (a,c),b, then we must regard the complex a,b as being a syntactic complex since one of its constituents (a) can commute with a syntactic complex, and is indeed a syntactic entity within that complex. The complex a,c, being syntactic, stands in a position with respect to b in the complex a,c,b, and likewise a, being a syntactic entity, stands in a position with respect to b in the complex a,b. The analysis of the complex a,c,b may be shown thus:



that is, syntactic relations between the immediate constituents of the complex can be shown on three levels. The complex a,b may be analysed:



If a constituent of a complex commutes with an element which stands demonstrably in a position with respect to the other

¹See below p31 and p42 for 'position' and 'syntactic relation' respectively.

constituents of the complex, then this constituent must also stand in a position with respect to the other constituent, and thus there is a syntactic relation between the constituents of the complex. If, in a complex with constituents a and b, a is kept constant and there is a valid commutation of b with a complex (x,y) where there is a syntactic relation between the constituents x and y (i.e. they stand in positions) making the complex (x,y) syntactic, then (x,y) being a syntactic entity must stand in a position with respect to a, i.e. there is a syntactic relation between a and (x,y) in a possible complex a,(x,y). Since (x,y) is a valid commutant of b the relation between a and b in a complex a,b is equivalent to the relation between a and (x,y) in the complex a,(x,y). That is, a,b is a syntactic complex.

The foregoing may be synthesized in the theorem: "P is a simultaneous bundle of monemes a and b (simple signs) if, and only if, none of the constituents (from immediate to ultimate) of any valid commutant of a or b in P stands demonstrably in a position with respect to any other constituent in the same complex. It is sufficient to show that one of the constituents of P (or any constituent in a valid commutant of either a or b) stands in a position in order to demonstrate a syntactic structure in P, i.e. that P is not a simultaneous bundle of monemes a and b".¹ Where positions cannot be established for the constituents of a complex, that is, where functional ordering of the constituents of a complex cannot be demonstrated, then we may make the hypothesis that the complex is morphological and analyse it on the morphological plane. If functional ordering can be

¹ Hervey and Mulder, op.cit.

demonstrated by one or other of the means given above, then the complex is syntactic and is analysed on the syntactic plane.

Pleremes are the ultimate constituents of a syntactic analysis, that is, they are the lowest order of entities between which functional ordering exists. It is essential that they should be clearly defined if the syntactic description is to be adequate, for the analysis of a complex as morphological rather than syntactic or vice versa can have repercussions on that level of analysis which in turn are reflected back into other levels and in statements of the distribution of elements. The effect of differences in description on this level can be seen in Chapter IV of Part Two of this work which deals with the internal analysis of the nominal syntagm, i.e. the elements which stand in positions of that syntagm type, where the problem of morphological complexes as opposed to syntactic complexes is patent. A syntactic complex is of greater extent than one plereme, and accordingly the model which is set up to account for its occurrence, and the occurrence of similar complexes, must have sufficient positions to which the elements of the complex can be assigned and their functions adequately described. A morphological complex as a plereme is never assignable to more than one position in a model.

5. 'Paradigmatic' and 'syntagmatic' aspect.

A basic theorem of the theory is "language has a syntagmatic and paradigmatic aspect"¹.

¹ Mulder, Sets and Relations, p7.

'Paradigmatic' is defined as 'the oppositional or distinctive aspect of semiotic entities' (Def. 7a). Elements - in this case grammatical elements since we are interested in the notions 'paradigmatic' and 'syntagmatic' only in so far as they are relevant for a syntactic analysis of natural language - which oppose one another in equivalent contexts are members of the same paradigmatic set; they are 'paradigmemes' (see Def. 10a).

Taking some San Martin Quechua examples:

pai mikurkaN	he ate
ñuka mikurkani	I ate
pai ka'uaN	he sees
ñuka ka'uani	I see

we see that "pai"(he) and "ñuka"(I) are two elements in opposition occurring in equivalent contexts, i.e. they have equivalent function and can, therefore, commute with each other. They are members of the same paradigm or paradigmatic set. Similarly, "mikurkaN", "mikurkani", "ka'uaN" and "ka'uani" stand in opposition to each other in equivalent contexts and are members of another paradigmatic set. In syntax, we deal only with those paradigmemes which stand in positions, i.e. which correspond to pleremes. The functional oppositions between "miku" and "ka'ua", "rka" and " \emptyset "¹, "N" and "ni" are not the

¹The notation ' \emptyset ' stands for "zero". The absence of an element here is functional since there could be something: "rka"(roughly denoting past time) is opposed to its absence; the absence of an element in "ka'uani" signifies the general time aspect. The denotations for the monemes may be roughly given as "miku"(eat), "rka"(past time), "N"(third person), "ka'ua"(see), "ni"(first person).

concern of a syntactic analysis since these are morphological elements, i.e. no ordering relations can be demonstrated between "miku", "rka" and "N" on the one hand, and "ka'ua", 'Ø' and "ni" on the other, to give these elements the status of pleremes. Ordering relations can be demonstrated between "pai" and "mikurkaN", "ñuka" and "ka'uani" for example, however, and thus these elements can be assigned to positions in the chain. Elements which are assigned to the same position in the chain are members of the same position class. They can commute with one another and are, therefore, members of the same paradigmatic set. In the two examples above, "pai" and "ñuka" are assigned to the same position in the chain and are, therefore, members of the same position class. The elements "mikurkaN" and "ka'uani" are assigned to another position in the chain and are members of a different position class.

'Syntagmatic' is defined as 'the ordering aspect of semiotic entities' (Def. 7b). An element which stands in a position can enter into ordering relations, i.e. functional relations with other elements in other positions in the chain (for 'chain', see Def. 9). For example, "pai"(he) as a paradigmeme standing in a position is in a functional relation with "mikurkaN", a paradigmeme standing in another position in the chain "pai mikurkaN"(he ate). The definition of 'syntagmeme' is 'ordered pair consisting of a paradigmeme and the position in which it stands, i.e. member of a chain(cenotagm or syntagm)' (Def. 10). The point of reference for a syntagmeme is the syntagm; if, in the syntactic description, we wish to give the analysis of a particular syntagm in terms of syntagmemea, we would give the

elements of that syntagm together with the positions in which they occur. For example, if we take "pai mikurkaN" (he ate) as an instance of a certain syntagm type in which "pai" stands in the pronominal position and "mikurkaN" in the predicative position, the analysis of the syntagm in terms of syntagmemes would be as follows: (pronominal, "pai"; predicative, "mikurkaN") in a non-transitive syntagm type.¹ Strictly speaking, it is also necessary to indicate the type of syntagm when giving the analysis of that syntagm in terms of syntagmemes.

The two aspects, syntagmatic and paradigmatic, may be presented in the following way:

paí	mikurkaN	(he ate)
ñuká	ka'uani	(I see)

where the vertical line symbolizes the paradigmatic aspect, i.e. the functional opposition of elements, and the horizontal line symbolizes the syntagmatic aspect, i.e. the functional ordering of elements. Syntax is concerned with the syntagmatic aspect, though the paradigmatic aspect, where paradigmemes coincide with pleremes, cannot be disregarded.

Functional ordering is not synonymous with formal ordering. For there to be functional ordering between elements implies that a syntactic relation can be demonstrated between the elements (see below p 42 for syntactic relations). Formal ordering is the sequential order in which elements, i.e. pleremes, are realised in the chain. It may be that the formal ordering of the elements reflects the functional ordering, that is, that

¹ For the definition of 'non-transitive', see Part 11, Chapter 1, p 86.

the syntactic relations between the elements are marked by the order in which they occur in realisation. In English, for example, the functional relations between subject elements (elements which stand in the subject position), object elements and predicative elements are marked by their sequence. In "the man sees the boy" we know from the formal ordering of the elements that "the man" stands in the subject position and "the boy" in the object position. If the order were to be reversed to "the boy sees the man", the utterance takes on a different meaning with "the boy" acting as the subject to the predicative "sees" and "the man" as the object. In Quechua, formal ordering seldom bears any relation to the functional ordering of elements. It is a feature of the language that there are elements, pleremes, which indicate the syntactic relation which exists between the syntagms they govern and other syntactic entities. If we take the San Martín Quechua equivalent to "the man sees the boy", "užku ka'uaN uaNbrata", the element "...ta" of "uaNbrata"¹ indicates that the syntagm "uaNbrata" stands in the relation of object to the predicative "ka'uaN" (he sees). The absence of "...ta" in "užku" (man) is functional indicating that "užku" stands in subject position. If we wished to say "the boy sees the man", then "...ta" would mark "užku" giving "užkuta", i.e. "uaNbra ka'uaN užkuta". The ordering of the elements here follows that of the English;

¹The term for "boy" in San Martín Quechua is "užku uaNbra" (lit. male child), but here only "uaNbra" (child) is used to avoid any confusion which may occur with the repetition of "užku" (man, male) within the same example.

equally a Quechua may say "uaNb̄ra užkuta ka'uaN" or "ka'uaN uaNb̄ra užkuta". Given that the function of a syntagma is indicated by the appropriate marker (in the above examples "...ta" indicates the object relation), or by its absence (the absence of a marker on "užku" (man) and "uaNb̄ra" (child) indicates that these elements stand in subject position in their respective examples), then the positioning of the syntagma in a larger complex is not relevant syntactically.¹

6. 'Position'.²

'Position' is an important notion in syntax, since syntactic relations hold between elements or groups of elements standing in different positions within the same group of interdependent positions. That is, an element which stands in a position has function in syntax. '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, or with zero', or alternatively as 'points on a chain corresponding to relata of direct tactic relations', and 'points of intersection between paradigms (visualised as a vertical straight line, called paradigmatic axis) and a chain (visualised as a horizontal straight line, called syntagmatic axis)' (Def. 7g).

'Chain' is defined: 'self-contained bundle of positions' (Def. 9) and 'instance of a chain' is defined: 'self-contained bundle

¹ See the description proper, Part 11 of this work, for a full exposition of this aspect of Quechua.

² The notion 'position' is a key concept of the theory which contributes to making Mulder's axiomatic branch of functionalism unique. 'Position' is not in any way related to the sequential positioning, or ordering of words as they are realised (spoken) in an utterance.

of syntagmemes' (Def. 10b).

One of the first steps in a syntactic analysis is to identify the different types of chain, hereafter referred to as 'syntagms'. 'Syntagm' is an equivalent notion to 'chain' being defined as 'self-contained bundle of positions in grammar' (Def. 9b). It is a distributional unit, or field of relations: the functions of the elements pertaining to a syntagm may be described completely and exhaustively without reference to any elements outside the syntagm, while the syntagm as a whole may contract ordering relations with other syntagms. Every element which occurs in a particular syntagm is assigned to a position of that syntagm. The functions of the elements of a syntagm are described in relation to the positions in which they stand. Thus it is important for statements of distribution of syntactic elements to establish the correct number of positions in a syntagm. If the syntagm has too few positions to account for the functions of all the elements which can occur in that syntagm, it is inadequate in its description of the syntactic function of the elements. That is, the model which is set up to account for every instance of a particular syntagm remains hyper-hypothetical until it has been fully tested and the field of relations, or positions, set up within it found to be adequate. The model must be able to account for every instance of the syntagm which it is purported to describe by allowing for all possible relations within that syntagm. That is, there must be as many positions in the syntagm model as are necessary to account for the whole field of relations which are in it. We may, for example, posit a three position

model to account adequately for instances of the nominal-governed syntagma in San Martín Quechua.¹ This means that the three position model should account adequately for every instance of the nominal-governed syntagma; not all the positions need be filled in every instance - there may be zero realisations of some of the positions in certain instances - but the model must be able to account for an instance of the nominal-governed syntagma in its maximum extent. If it fails to do this it is refuted and a new model must be set up and tested. The following, as instances of the nominal-governed syntagma, illustrate the testing procedure involved in setting up working models:

1	2	3	
∅	∅	uasi	(house)
∅	iurak	uasi	(white house)
čai	∅	uasi	(that house)
čai	iurak	uasi	(that white house)

2

The three positions account for all the instances of the nominal-governed syntagma only if "čai iurak uasi"(that white house) is an example of such a syntagma in its maximum extent, i.e. the

¹This is a purely hypothetical model and is here simply a means of illustration. A full statement of the nominal-governed syntagma, as arrived at by the hypothetical-deductive method, is given in the description, Part II, Chapter III.

²The vertical divisions between the elements represent the positions in the syntagma. /∅/ stands for every empty position, i.e. zero realisation. If zero were ignored then the above could not be regarded as different realisations of the same syntagma type. Strictly speaking, the first example "uasi"(house) is not an instance of a syntagma, namely the nominal-governed syntagma, but is an instance of a plereme, namely "uasi". For the purposes of the description, however, inasmuch as there is a nominal-governed syntagma underlying it, it is regarded as an instance of that syntagma type.

maximum extent of relations possible within this syntagma type. If instances of syntagms which must be classified as instances of the nominal-governed syntagma are found in the data of greater extent than "čai iurak uasi" - there are a greater number of elements between which there exist ordering relations than in the above example - then the working model which has been hypothesised for the nominal-governed syntagma must be revised to include as many further positions as are required to account for the elements.

The positions in the model have been numbered 1, 2 and 3. To 1, we may give the label "demonstrative", to 2, "adjectival" and to 3, "nominal", regarding these as function indicators for the positions. Traditional terminology has, by and large, been retained in the labelling not only of the positions of a syntagma, but also of the syntagma type, since it is most widely understood and accepted.

7. 'Syntagma' and 'sentence'.

'Syntagma' is defined as 'self-contained bundle of positions in grammar', or 'instance of a self-contained bundle of positions in grammar' (Def. 9b). That is, the term 'syntagma' may refer not only to the theoretical model, or meta-model, and to the descriptive model, but also to instances of, or realisations of the model which we discern in the data. In the preceding section, a hypothetical model of three positions was set up for the nominal-governed syntagma in San Martin Quechua. That is, the nominal-governed syntagma in San Martin Quechua is a self-contained bundle of three positions. The element or elements which may occur in

these positions (e.g. "uasi" (house), "čai uasi" (that house), "čai iurak uasi" (that white house)) are all regarded as instances of the nominal-governed syntagma, i.e. they are possible realisations of that syntagma type, and may each be referred to as a nominal-governed syntagma in the description.

A syntactic element stands in a position of a syntagma, but it is not the position per se which gives the element function; rather the element standing in a position stands in a functional relation, or ordering relation, with another element standing in a position, or with other elements standing in different positions. There is a limit to the extent to which the function of one element may directly determine or be dependent on the function of another, and the syntagma marks the limits such that the functions of the elements (or the relations of the elements one to another) which may occur in the syntagma can be described completely and exhaustively without reference to any element outside the syntagma. Where there is co-ordination or inter-ordination, the elements of the syntagma stand in a direct relation with each other. Where there is subordination¹, each element in a syntagma may not stand in a direct relation with each other element, but each one has a common point of reference for its function. This common point, or element, is called the 'nucleus' of the syntagma², and the syntagma is labelled in accordance with that given to the class of elements the members of which fulfil the function of 'nucleus' in any one instance of the syntagma,

¹ For 'co-ordination', 'interordination' and 'subordination', see Defs. 11b, 11c and 11a respectively in Appendix A or section 10 below.

² For 'nucleus' see Def. 13a in Appendix A or section 11 below.

i.e. which can be assigned to the nuclear position of the syntagm. The positions of the syntagm are labelled according to the functions of the classes of elements which occur in them.

'Syntagm' is the model with which we work in a syntactic analysis. On the highest level of analysis, a syntagm is a structure which may correspond to the base of a sentence in the data (see below), and which is then analysed down in successively lower levels of analysis to the last, or ultimate, constituents of a syntactic analysis, the pleremes. A syntagm may, depending upon the level in the syntactic hierarchy on which it occurs, be an immediate constituent of a larger syntagm, i.e. be an element in a 'field of relations' or 'syntagm' of a higher level, or conversely, an element of a syntagm may itself be a syntagm, i.e. analysable as a field of relations, or syntagm, in its own right on a lower level. A description of the distribution of syntactic elements cannot be given until we have not only determined all the syntagm types in which they can occur, but also the distribution of these syntagm types themselves in the syntactic hierarchy.

The maximum sign in any semiotic system is the 'sentence'.¹ 'Sentence' is defined in the theory: 'signum with such features that it cannot be a feature (constituent, or other feature) of another signum', or alternatively: 'signum such that it is a self-contained vehicle for conveying messages' (Def. 20). In syntax, we take for analysis an ordered combination of elements, syntagm, where it corresponds to a sentence (see below). This is the largest

¹ Mulder and Hervey, Theory of the Linguistic Sign, p23.

combination of elements taken in any one instance for analysis. A combination which corresponds to an utterance of greater extent than the sentence is not analysed as a single construction.

The criteria for delimiting a sentence are not purely syntactic, i.e. the criterion of functional ordering is not sufficient in itself to define the sentence, since the notion 'sentence' is not purely syntactic. A sentence is not only an ordered combination of elements, but an ordered combination together with features such as intonation, pause, accent. The ordered combination of elements is regarded as the 'sentence-base' ('base' for 'in a para-tactic unit, the total complex of those features that corresponds (on another level) to tactic entities' (Def. 20b), while intonation, pause, accent etc. are para-syntactic features (see Axiom C and ensuing definitions) which together with the sentence-base constitute the sentence. That is to say, 'sentence' is an example of a 'para-tactic unit' (see Def. 19).

Para-syntactic features play an important part in defining the boundaries of sentences (since a 'sentence' consists partly of para-syntactic features), and thus by implication in determining the extent of the syntagm which corresponds to the sentence. They belong, however, to a different level from the syntactic level.

The notion 'sentence', which includes by implication para-syntactic features, is independent of the notion 'syntagm'. However, 'syntagm' and 'sentence' may be connected via 'sentence-base', i.e. a sentence, or ordered combination of elements, without para-syntactic features. For practical reasons, usually

only the sentence-bases of sentences to which there correspond well-formed syntagms are taken for analysis in a syntactic description; generally ignored are those sentences to which no well-formed syntagm corresponds, as the syntagmatic elements of their bases - if being themselves syntagms - are analysed elsewhere in the description as constituents of well-formed syntagms that do correspond to sentences. This is not always a mere matter of ellipsis as a well-formed sentence may not be well-formed syntactically. We may say, then, that a syntactic analysis is an analysis of sentence-bases, i.e. maximum signs, in the case of the present description the maximum signs of San Martin Quechua, in so far as they are corresponded by well-formed syntagms. It is in terms of syntagms that the syntactic relations which hold between the syntactic entities of a language are determined and described. In the present description, only those sentences which are corresponded by well-formed syntagms, the nuclei of which are predicative-governed syntagms, are taken for analysis. The syntagms which are analysed are termed sentence-bases where they correspond to sentences.

8. Immediate Constituent Analysis.

The notion 'immediate constituent' (hereafter abbreviated to I.C.) is important to syntax, and it is this notion together with that of 'syntagm' which enables the analysis of sentence-bases, or syntagms which correspond to sentences.

The basic principle of an I.C. analysis is the view that sentences are not just linear sequences of elements but are composed of levels of I.C.s, the higher level I.C.s being

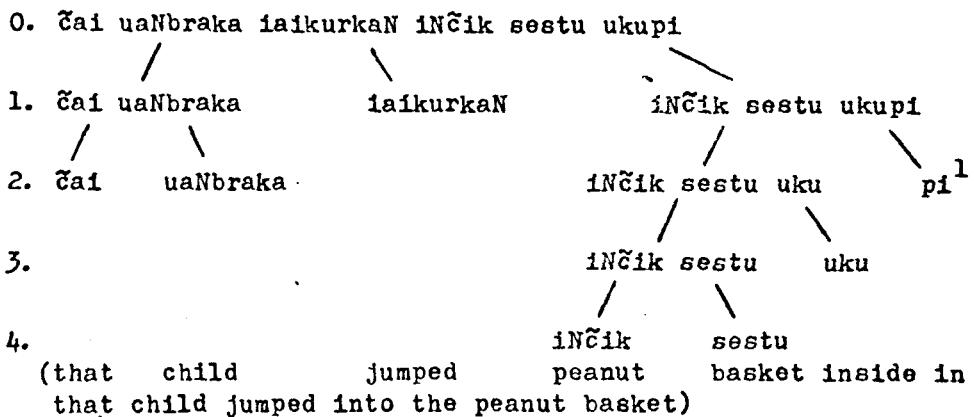
analysable into lower level I.C.s and ultimately into pleremes.¹ In other words, language is hierarchically structured on the syntactic plane. A sentence-base(i.e. a syntagm where it corresponds to a sentence) is composed of constituents between which there are syntactic relations(see Defs. 7c³ and 7d¹, and the following section below). The procedure for a syntactic analysis is to analyse a well-formed syntagm(which constitutes or is part of a sentence-base) into its I.C.s, i.e. into 'constituents that are not constituents of constituents within the combination in question'(Def. 7f^{1a}). On the highest level of analysis these constituents may be, and generally are, syntagms. That is, an I.C. on the highest level of analysis usually corresponds to a syntagm. This syntagm is then analysable into its I.C.s on the next level of analysis, and if further syntagms stand as I.C.s of that syntagm, then these are further analysed on successively lower levels until only ultimate constituents remain. Ultimate constituents are 'the last analytical entities

¹ It should be noted again that in this the Axiomatic Functionalism approach to syntactic analysis, of which I.C. analysis is an integral part, is distinct from other approaches, especially the Bloomfieldian and Transformational ones, these being the two schools of linguistics which dominate Quechua studies. With these latter, the analysis of sentences into their ultimate constituents is the analysis into morphemes. In terms of the present theory, there are no ordering relations between monemes (morphemes in American terminology) - monemes constitute pleremes (words) and it is between these that there are syntagmatic, and so, syntactic relations. This is just one aspect of the Axiomatic Functionalism approach to I.C. analysis which produces results quite different from those of other approaches. Indeed, it may be said that the only thing they have in common is that they recognise a hierarchical layering of constituents which are I.C.s on any one single level of the analysis.

of a self-contained combination of entities' (Def. 7_f^{1b}); in a syntactic analysis, the ultimate constituents are pleremes.

Taking as an illustration of the method the sentence-base "čai uaNbraka iaikurkaN iNčik sestu ukupi" (that child jumped into the peanut basket), on the first level of analysis three syntagms can be recognised as I.C.s of the sentence-base (i.e. the syntagm which corresponds to the sentence): "čai uaNbraka" (that child), "iaikurkaN" (jumped) and "iNčik sestu ukupi" (into the peanut basket). In each case, on this level of analysis, they are 'constituents which are not constituents of constituents'. For example, the constituent "čai" (that) of "čai uaNbraka" (that child) is not, on the first level of analysis an I.C. of the sentence-base since any relation which exists between it and other constituents of the sentence-base is via "uaNbraka" (child). The element "uaNbraka" cannot be considered separately as an I.C. of the sentence-base (i.e. it is not an I.C. on the first level of analysis) since it is inextricably bound up with "čai". That is, the two elements are units in the same field of relations or syntagm, and it is the syntagm as a whole, i.e. "čai uaNbraka", which stands in an ordering relation with the other I.C.s of the sentence-base "čai uaNbraka iaikurkaN iNčik sestu ukupi" (that child jumped into the peanut basket). On a lower level, the syntagm "čai uaNbraka" can itself be analysed into its I.C.s, but these lower level I.C.s should not be confused with higher level I.C.s. Inverted tree diagrams are a useful way of showing the levels of analysis and thus the hierarchical ordering of elements and combinations of elements, though they cannot, from their very nature, indicate the type of syntactic

relation which exists between the I.C.s on any particular level of the analysis. The inverted tree diagram given below shows the analysis of the sentence-base "čai uaNbraka iaikurkaN iNčik sestu ukupi":



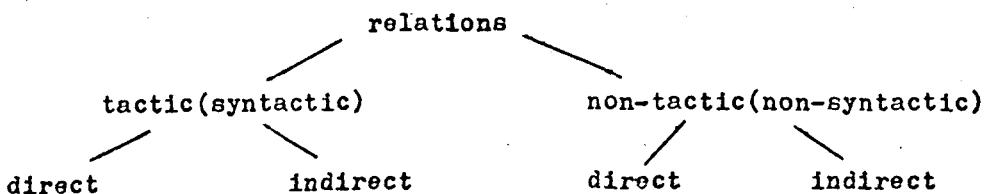
On every level of analysis the type of syntactic relation which exists between the I.C.s must be determined. In the first instance, the I.C.s are purely hypothetical and must be thoroughly tested to ascertain that those elements which are grouped together as I.C.s on a particular level are completely self-contained, i.e. that they are syntagms. The testing of the I.C.s is inextricable from the determination of the type of relation which exists between them. By I.C. analysis, the different syntagm types are established, i.e. the different constructions possible in the language under study, and the different relations which hold between the different syntagm types, their distribution plus the distribution of their constituents in the hierarchical order are ascertained. This is

¹ For an analysis of the syntagms on the second level, see Part II, Chapter III, and for the analysis of "iNčik sestu ukupi", see Chapter IV.

the procedure for a syntactic analysis - the establishment of syntactic relations between the constituents or syntagmatic elements (see Def. 7b²), in the last instance between the minimum syntagmatic elements, between pleremes.

9. Syntactic relations.

'Syntactic relations' are defined: 'tactic relations in grammar' (Def. 7d¹), 'tactic relations' being 'constructional relations (whether ordering or not) between syntagmatic entities¹, as immediate constituents, in combinations' (Def. 7c³). Between syntactic entities, there may be tactic or non-tactic relations. Tactic relations may be direct or indirect, and non-tactic relations may likewise be direct or indirect. The types of relation possible may be tabulated in the following way:



'Direct relation' is defined: 'relation between constituents (not necessarily immediate constituents) that is not a relation via other constituents' (Def. 15). A direct tactic relation, and an ordering relation, in syntax is the relation between each peripheral I.C. and the nucleus of the syntagm (i.e. between I.C.s where one stands in a relation of subordination to another)

¹ For 'syntagmatic entity', see Def. 7b² of the Axioms and Definitions, Appendix A.

and between I.C.s which stand in a relation of co-ordination or interordination with each other.¹ The relation between one peripheral I.C. and another where they are not in co-ordinative or interordinative constructions, is a tactic relation (it is a relation between I.C.s) but it is not a direct relation, and thus not an ordering relation, since the functions of the peripheral I.C.s are derived via the nuclear I.C. It is an indirect tactic relation. Where a syntagm may have as a peripheral I.C. another syntagm, i.e. the I.C. is a syntagm analysable on a lower level, a direct non-tactic relation exists between the nucleus of the syntagm which stands as a peripheral I.C. on the higher level and the nucleus of the higher level syntagm. On the one level of analysis, the higher level, the nucleus of the peripheral syntagm is a constituent but not an immediate constituent (it is the peripheral syntagm as a whole which forms the immediate constituent) of the higher level syntagm, and thus the relation is not a tactic one. Indirect non-tactic relations are not of interest for a syntactic analysis.

If we take the English syntagm "the little boy broke the toy", we may exemplify the types of relation which exist between the constituents. On the first level of analysis, the I.C.s of the syntagm, between which direct relations can be shown, are: "the little boy", "broke" and "the toy". "The little boy" stands in a direct relation with "broke", and "the toy" also stands in a direct relation with "broke", i.e. "broke" is the nucleus of

¹ For relations of subordination, co-ordination and interordination see Defs. 11a, 11b and 11c respectively, and the following section in this chapter. For 'nucleus' and 'peripheral entity', see Defs. 13a and 13b respectively and section 11(below).

the syntagm and "the little boy" and "the toy" are peripheral I.C.s. There is a direct tactic relation between the nuclear I.C. "broke" and each peripheral I.C. The relation between "the little boy" and "the toy" is an indirect tactic relation (tactic because the constituents are I.C.s on the level of analysis in question). That is, the relation between "the little boy" and "the toy" is an indirect one via "broke" which stands as the nucleus of the syntagm. Both "the little boy" and "the toy" are syntagms analysable on a lower level. In the case of "the little boy", a direct tactic relation can be established between "the" and "boy" and "little" and "boy" and an indirect tactic relation between "the" and "little", these being the peripheral I.C.s of the syntagm, "boy" being the nuclear I.C. "Boy" as the nucleus of a syntagm which stands as a peripheral I.C. of a higher level syntagm stands in a direct non-tactic relation with "broke" which is the nucleus of the higher level syntagm, and also with "toy" which stands as the nucleus of another syntagm, i.e. "the toy", which is a peripheral I.C. of the higher level syntagm.

10. Types of syntactic relation.

There are three logical possibilities for the types of direct relation:

1. 'Relation of subordination' or 'determination' for 'direct tactic asymmetrical relation of functional dependency' (Def. 11a), where one element determines the syntagm, all the other elements of the syntagm being dependent on this element for their function. Such a relation is symbolized: a → b. An example of the

subordinating relation can be seen in the syntagma "čai sumak Šipaš"(that beautiful maiden) where "Šipaš"(maiden) determines the function of the syntagma and the elements "čai"(that) and "sumak"(beautiful) are dependent on it for their function. This type of relation will be discussed in greater detail below in the following section.

2. 'Relation of co-ordination' for 'direct tactic(by implication: symmetrical)relation of mutual functional independency'(Def. 11b). Where two or more elements form a constituent, but are independent of one another for their function, they are said to stand in a relation of co-ordination. For example, in "tataini mamaini mana munarkaNču"(my father, my mother did not like(her)), "tataini mamaini"(my father, my mother) forms one constituent, i.e. one immediate constituent of the syntagma, which stands in a direct relation with "mana munarkaNču"(did not like(her)). As an immediate constituent itself analysable, "tataini"(my father) is not dependent on "mamaini"(my mother) for its function or vice versa. There is a relation of co-ordination between the two elements, i.e. functional independency, where "tataini" and "mamaini" stand in identical relation of subordination to "mana munarkaNču". In an English example "the big black box", "big black" is an example of co-ordination where "big" and "black" are functionally independent: neither one has recourse to the other for the determination of its function, and both are assigned to the same position class in the syntagma "the big black box". Co-ordination is symbolized: a ↔ b.

3. 'Relation of interordination' for 'direct tactic(by implication: symmetrical)relation of mutual functional dependency'(i.e.

functional interdependency) (Def. 11c). If an element, where there are two I.C.s, is dependent on the other for its function, and the other is equivalently dependent on the first for its function, the two elements are said to be in a relation of interordination. That is, if the one occurs then the other must also occur. This is not like co-ordination where one element may be regarded as an expansion (see Def. 13c and the following section) of the other and vice versa; a relation of interordination implies that the elements of the constructions are bound (see Def. 13d and the following section) to each other. The relation is symbolized: a ↔ b. This type of relation is not very common - the most obvious examples of interordination being found between the constituents of idiomatic phrases such as "no love, no money", and between the constituents of "either...or..." constructions.

There is another type of relation which is not strictly syntactic; that is:

4. 'Relation of apposition' or 'quasi-syntactic relation' for 'direct non-constructional - and, therefore, non-grammatical - relation between, qua tactic function, equivalent immediate constituents of a chain or of a sentential entity' (Def. 11d), where a 'sentential entity' is a sentence or clause. An example of apposition in San Martín Quechua is "paikuna uaNbra puru kiparirkaN" (they, the children, remained). Here, by reference to para-syntactic features, we can ascertain that "paikuna" (they) and "uaNbra puru" (the children) are not two elements in co-ordination but that "uaNbra puru" (the children) is a parenthesis of "paikuna". That is, they convey the same information value in the utterance, being separate ways of referring to the

same set of people. The element "uaNbra puru" is a separate I.C. in relation to the other I.C.s of the syntagma, but it is equivalent in function to "paikuna" - therefore it is an equivalent I.C. There is no syntactic relation between "paikuna" and "uaNbra puru", only apposition.

11. Relation of subordination.

Relations of subordination are perhaps the most common type of syntactic relation to be found in the description, i.e. 'direct tactic asymmetrical relation of functional dependency' (Def. 11a), where one or more elements are dependent on another element for their function in the construction in question. The element, or immediate constituent, which governs the functions of the other elements, or immediate constituents of the syntagma, is called the 'nucleus'. 'Nucleus' or 'governing entity' is defined: 'entity in nuclear position' (Def. 13a). It is the immediate constituent in the syntagma which determines the distribution of the syntagma in the hierarchy and which identifies the syntactic functions of the other elements of the syntagma. The governed elements or immediate constituents of the syntagma, i.e. those elements which depend on the nucleus for their functions are called peripheral elements. 'Peripheral entity' or 'governed entity' or 'determinant entity' is defined: 'entity in peripheral position' (Def. 13b). The correlation between nuclear and peripheral elements can be shown thus:

periphery: in relation of subordination / function determination
nucleus : " " " " superordination / " government

A peripheral element is subordinated to the nuclear element and

determines it, i.e. $\underline{a} \rightarrow \underline{b}$ where \underline{a} is peripheral and \underline{b} is nuclear. The symbol \rightarrow shows the relation of the determining element (on the left hand side) to the governing element (on the right hand side). The nuclear element is superordinate to its peripheral elements and governs the function of those elements in the syntagma. If we talk of a nuclear element, we imply that there are peripheral elements; a relation of superordination has its converse - if an element governs then it also may be determined.

Every syntagma in which there is a relation of subordination between the I.C.s must have a nuclear element, i.e. the position to which the nuclear element is assigned in a syntagma must be filled in every instance.¹ The label which is given to the syntagma, e.g. nominal, predicative, is given according to the class of elements, i.e. the paradigmatic set, which fills this position. The peripheral positions of the syntagma may or may not be filled, i.e. there may or may not be 'zero' realisations, according to the nature of the nucleus. If the nuclear element can occur on its own and be regarded as a well-formed syntagma on that particular level of analysis, it is a 'free nucleus', i.e. it is a 'nuclear immediate constituent that does not require the presence of a non-zero peripheral constituent' (Def. 13e). An example of a free nucleus is "uaNbraka" (child) in "čai uaNbraka"; on its own particular level of analysis it is a well-formed syntagma and can function on a higher level as an immediate constituent, e.g. "uaNbraka iaikurkaN" ((the) child entered). All

¹ The phenomenon of ellipsis may mean that in realisation the nuclear position is not filled, but this is on the level of realisation, and does not, therefore, alter the underlying structure of the utterance. Ellipsis will be dealt with more fully below, in section 15 of this chapter.

the elements peripheral to a free nucleus are expansions.

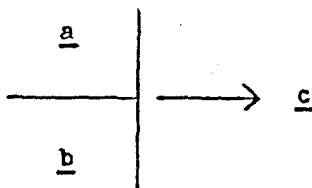
'Expansion' is defined: 'immediate constituent that commutes with zero' (Def. 13c). An expansion can be omitted without detriment to the form of the syntagma: "čai"(that) in "čai uaNbraka"(that child) is an example of a peripheral element which is an expansion.

A peripheral element which may not be omitted without causing the remainder of the syntagma to cease from being well-formed is called a 'bound element' or 'actualizer'. It is defined as 'peripheral immediate constituent that does not commute with zero' (Def. 13d). A bound element 'actualizes' the nucleus, i.e. the 'nuclear immediate constituent requires the presence of a non-zero peripheral constituent' (see Def. 13f). An example in San Martín Quechua is "uasi"(house) in "uasipi" (in the house) where the nucleus "...pi"(in) is actualized by the peripheral element "uasi"; "...pi" occurring on its own without the presence of a peripheral element would not constitute a well-formed syntagma; "uasi" in "uasipi" is a non-zero peripheral constituent - it must be realised. An example in English is "the" in "the man" where "man" is actualized by "the"; "the" is a bound element, "man" is not a free nucleus.

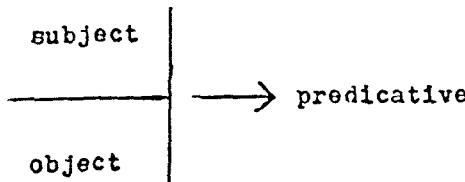
12. Disjunctive or diverse determination.

Elements derive their function from the relation in which they stand to the nuclear element of the syntagma. Where different relations can be shown to exist between the peripheral elements in relation to the nucleus, i.e. where we have a 'complex tactic relation such that two or more peripheral immediate constituents

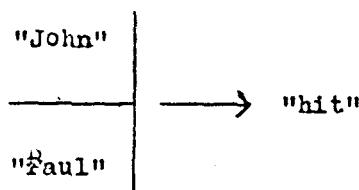
are subordinated to the same nucleus, but in different ways', it is called 'disjunctive or diverse determination' (Def. 14a). Disjunctive determination can be conveniently diagrammed in the following way, where a and b are peripheral elements, and c is the nucleus of the syntagma:



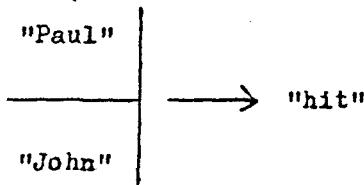
Taking the English example "John hit Paul", it can be demonstrated quite readily that "John" does not stand in the same relation to the nucleus "hit" as does "Paul"; "Paul hit John" gives a different meaning and demonstrates that there is a difference in relations - "John" and "Paul" do not stand in the same relation to "hit" in each example. Their formal ordering around the nuclear element "hit" reflects different functions. The representation of disjunctive determination is given with reference to the underlying structure which has been established. 'Underlying structure' is defined: 'abstract representation of a chain in terms of positions with or without indication of functional dependencies, or occurrence dependencies' (Def. 14c). The positions are usually indicated by labels such as 'subject', 'predicative', 'adjectival', 'nominal'. The syntagma "John hit Paul" is one manifestation of the underlying structure:



where the element in the subject position stands in a different relation to the element of the nuclear predicative position from the element of the object position. Thus we may diagram the relations in the syntagma "John hit Paul":



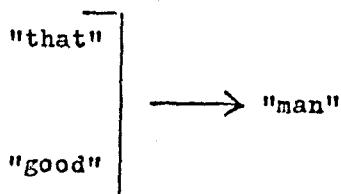
which is different from "Paul hit John":



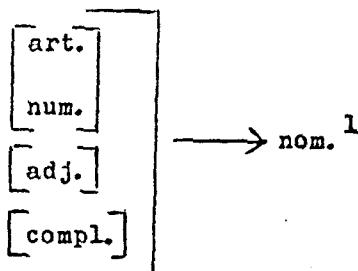
13. Conjunctive or parallel determination.

Where different relations cannot be demonstrated for each of the peripheral immediate constituents with respect to the nucleus of the syntagma, we have 'conjunctive or parallel determination'. 'Conjunctive or parallel determination' is defined: 'complex tactic relation such that two or more peripheral immediate constituents are subordinated to the same nucleus, but it cannot be ascertained that they do so in different ways' (Def. 14b). For example, in "that good man" there is a direct relation between "that" and "man" and between "good" and "man", but it cannot be demonstrated that the relations are different as is possible with the example "John hit Paul", i.e. it cannot be demonstrated that the relation between "that" and "man" is different from the relation between "good" and "man". Conjunctive

determination is shown in the following way:



The underlying structure of the syntagm is presented in the same way:



San Martín Quechua uses only parallel determination and not diverse determination. Thus in the present description the above form of representation of underlying structures is used to show the relations between elements, and also a linear representation of the relations between elements, especially where the elements concerned span a unit of greater extent than one syntagm type. By the linear representation, a certain degree of hierarchical ordering can be shown while, ^{in addition to this,} the relations between the constituents is also given. This type of diagram has the advantage over tree^{inverted} diagrams which only show

¹ 'Art.' is an abbreviation for 'article position', 'num.' for 'numeral position', 'adj.' for 'adjectival position', 'compl.' for 'complement position' and 'nom.' for 'nominal position'. The square brackets indicate that an element standing in that position may be replaced by 'zero'. In the case of the 'article/numeral position', either the article or the numeral, but not both, may be replaced by 'zero'. In the case of "that good man", only three positions of the syntagm are filled.

hierarchical ordering of elements. An example of linear diagramming is as follows:

([čai], [sumak] → Šipaš) → rirkaN

(čai sumak Šipaš rirkaN - that beautiful maiden went)

The square brackets signify that the element(s) standing within them are expansions; the round bracket signifies that the element(s) within form one field of relations, one syntagma. The comma between square brackets, in this instance between "[čai]" and "[sumak]", shows parallel determination. From the above, we see that the syntagma "čai sumak Šipaš"(that beautiful maiden) is subordinated to the predicative "rirkaN"(went), and that within the syntagma, i.e. on a lower level of analysis, the elements "čai"(that) and "sumak"(beautiful) are expansions to, and therefore peripheral to "Šipaš"(maiden) which is the nucleus of that syntagma. Each type of representation, be it a tree diagram to show hierarchical ordering of elements, or a way of showing determination of elements in vertical or linear form, has its own particular value in different parts of the description.

14. Occurrence dependency.

The occurrence of elements in constructions may depend on the occurrence of certain other elements. That is, elements may depend upon the presence of other elements in the chain for their own occurrence. This type of dependency, occurrence dependency, is not an indication of function, i.e. it makes no reference to the function of elements, but is simply a statement

of the conditions in which elements can occur. Three types of occurrence dependency or independency can be distinguished.

1. 'Occurrence interdependency' or 'bilateral(or mutual) occurrence dependency' which is defined: 'relation such that neither of the two entities in direct relation which are immediate constituents of a chain can occur in the chain in question whilst the other is zero'(Def.12a). An example of occurrence interdependency in San Martin Quechua is that of the occurrence of the neutral complement which cannot occur without the presence of a transitive predicative, while a transitive predicative cannot, by definition, occur without a neutral complement¹; e.g. "kažarirkaN uakakuita"(she began to cry) where "kažari..."(begin to) is classifiable as an example of a transitive predicative which must have a neutral complement, and "uakakuita"(to cry) by virtue of the neutral complement marker "...ta" must occur with a transitive type of predicative. English offers an analogy in a transitive predicative requiring an object, and an object requiring a transitive predicative; e.g. "I met the mayor". There is a mutual occurrence dependency (or alternatively referred to as occurrence interdependency) between "met" and "the mayor". There is also occurrence interdependency between "I" and "met" of the same example. A predicative cannot, in English, occur without a separately expressed subject, and a subject cannot occur without a predicative. A statement can be made regarding the occurrence of a predicative

¹The terms 'transitive' and 'neutral complement' are discussed in full, and defined, in Chapter 1 of Part II.

that it cannot occur without a subject, nor can a subject occur without a predicative, and a transitive predicative and object similarly show bilateral occurrence dependency. In the underlying structure "transitive predicative, neutral complement" in Quechua, a transitive predicative cannot occur without a neutral complement nor can a neutral complement occur without a transitive predicative, i.e. the one cannot occur while the other is zero. The occurrence relation can be symbolized: a b.

2. 'Unilateral occurrence independency' or 'unilateral occurrence dependency' which is defined: 'relation such that one of two entities in direct relation which are immediate constituents of a chain can occur in the chain in question whilst the other is zero, but the other one cannot' (Def. 12b). The relation of peripheral element to nucleus offers an example of this type of occurrence dependency. Free nuclei can occur in the chain without the presence of peripheral elements, i.e. the peripheral positions of a syntagma which has a free nucleus can have zero realisation; however, peripheral elements require the presence of a nucleus¹. In San Martín Quechua for example, the nominal nucleus of the nominal-governed syntagma can occur without the presence of a peripheral element, but when a peripheral element of the syntagma occurs then the nominal nucleus must also occur. For example, in "sumak ẽipaš"((the)beautiful maiden), "ẽipaš" (maiden) as an element assigned to the nominal(nuclear)position can occur in the nominal-governed chain on its own, but "sumak" (beautiful) as an element in a peripheral(adjectival)position

¹ Here a statement of occurrence dependency underlines the function of the elements.

cannot; we have an example of unilateral occurrence dependency where "Šipas" as a free nucleus can occur without "sumak", but "sumak" requires the occurrence of "Šipas". Another example of unilateral occurrence independency is in the occurrence of a non-transitive predicative¹ with or without a neutral complement. The neutral complement always occurs with a predicative which is transitive in type², but a non-transitive predicative, while it may occur with a neutral complement, can also occur when this is zero. Once again analogies can be found in English. In the nominal chain "a good man", for example, "man" as the nucleus can occur without "good" but "good" may not do so. It requires the occurrence of "man", i.e. the nuclear element in the 'nominal' chain may occur without an element in the adjectival position but not vice versa. We have here a case of unilateral occurrence dependency. In the non-transitive predicative chain, where a non-transitive predicative, which by definition may or may not have an object³, occurs with an object, this object offers an example of unilateral occurrence dependency. That is, the object element which occurs as an I.C. of the chain can be replaced by zero, but the non-transitive predicative cannot. For example, in "I eat soup", "soup" cannot occur without "eat", but "eat" as an example of a non-transitive predicative can. We may have "I eat in the kitchen", for example, or simply "I eat". In the

¹ 'Non-transitive' is defined in Chapter 1, Part II, p 97.

² 'Transitive' types of predicative include 'transitive', 'non-transitive' and 'complementary transitive'. These are all discussed in detail in Chapter 1 of Part II.

³ See Sets and Relations, p77 and p 86 of this work.

underlying structure "non-transitive predicative, object" (for San Martín Quechua, 'neutral complement'), 'non-transitive predicative' can occur without 'object', but 'object' cannot. The relation of unilateral occurrence independency, or dependency, is symbolized: a b or a [b], the square brackets indicating that the entity in question depends for its occurrence on the other entity not in square brackets.

3. 'Bilateral (or mutual) occurrence independency' is defined: 'relation such that each of two entities in direct relation which are immediate constituents of a chain can occur in the chain in question whilst the other is zero' (Def. 12c). Two elements which stand in a relation of co-ordination show this type of bilateral occurrence independency. They do not depend on one another in any way for their occurrence. Thus in San Martín Quechua, in the chain "maN̄aibasapa raku kapunkuna" (enormous, fat castrated pigs), for example, "maN̄aibasapa" (enormous) and "raku" (fat) are immediate constituents which stand in a direct relation with each other and which are independent of each other as regards their occurrence. The occurrence of "maN̄aibasapa" does not depend on the occurrence of "raku" in the chain or vice versa; they are independent of each other for their occurrence. That is, immediate constituents of the adjectival chain in San Martín Quechua which stand in a direct relation of co-ordination offer an example of bilateral occurrence independency; "maN̄aibasapa raku" being an instance of the adjectival chain. Similarly in English, elements which stand in a relation of co-ordination in the adjectival chain show bilateral occurrence independency. For example, "big black" as an instance of the adjectival chain shows

two elements which are independent of each other for their occurrence; "big" can occur without "black" and "black" without "big". The relation of bilateral, or mutual, occurrence independency is symbolized: [a][b].

15. Ellipsis.

'Ellipsis' is defined: 'defective realisation of a syntagm, such that one or more of its constituents are not realised at the utterance level' (Def. 21). The utterance level, i.e. the level at which the syntagm is realised in speech, represents the superficial manifestation of the underlying structure, the syntagm. At this level, i.e. the speech level, elements may be placed in a context of greater extent than that of the sentence and reference to these elements once made may not be repeated although the underlying structure demands it. That is, on the speech level we may have utterances such as "I did", or "yes, I will", or "not that one" which at that level are meaningful (from our knowledge of utterances made previous to them) and are regarded as well-formed sentences, but at the syntactic level do not correspond to well-formed syntagms. For a syntactic analysis, the sentence-base must be well-formed, the sentence-base being a syntagm as it corresponds to a sentence (see above p 37). Thus while it is not an issue on the syntactic level (it does not occur on this level but on the utterance level, i.e. on the level of the sentence), it is necessary to recognise ellipsis when it occurs; that is, to recognise that a sentence-base as it corresponds to a syntagm is defective. Failure to recognise ellipsis on the level of realisation would have

repercussions on the syntactic level, i.e. on the syntactic analysis, since the proper identification of syntactic entities would be affected.

With regard to establishing the corresponding syntagm, we may distinguish between two types of ellipsis. With 'contextual' or 'proper' ellipsis, the syntagm which corresponds to the sentence cannot be established. That is, we cannot construct, with reference to the context in which the sentence occurs, a well-formed syntagm for analysis on the syntactic plane. With 'conflation', however, the corresponding syntagm can be established, i.e. the element or elements necessary for it to be well-formed but not realised on the utterance level can be supplied.¹

Conflation is recognisable in many places in the linguistic data collected on the San Martín dialect of Quechua, the following giving an example of its occurrence:

di'ia domiNku purikuk rišpa tarirkani omikuita//
omikuita taríspa bali'iarkani// bali'iaptiini čupa'uaN
 uarkunakumurkaN// uarkunakumuktiN rimarkani urmamuNnami
 lograškanina// kargakunainikama eskopetainita kaškaN
 kuska'iarkaN// kuska'iaptiN ka'uarkani ti'iakuptiN
kaspi sa'uaNpi²

(on Sunday when I was going hunting, I found a monkey//
 on finding the monkey, I shot// as I shot, it hung by
 its tail// as it hung, I said, "It may fall now; I

¹ For 'contextual ellipsis' and 'conflation' see Def. 21 of the Axioms and Definitions in Appendix A.

² The double slant lines indicate sentence boundaries.

I have succeeded// as I was about to load my gun
 again, it straightened up// when it straightened
up, I saw(it)there at the top of the tree)

The element "omikuita"(monkey) has been underlined as this is the one which we can identify as the "missing" element in the following sentence-base. If we take for analysis the sentence-base of the underlined sentence, i.e the syntagm as it corresponds to the sentence "kuska'iaptiN ka'uarkani ti'iakuptin kaspi sa'uaNpi"(when it had straightened up, I saw(it, the monkey)there at the top of the tree), the defective realisation of the syntagm "ka'uarkani"(I saw(it)) as an I.C. of the sentence-base would have to be righted and the missing element "omikuita"(monkey) supplied to give a well-formed sentence-base. The element "ka'uarkani"(I saw) does not, on its own, constitute a well-formed syntagm - the syntagm cannot be analysed satisfactorily without, in this case, the element "omikuita". Conflation on the realisation level is easily recognised in this example.

In the sentence "bali'iaptiini čupa'uaN uarkunakumurkaN" (as I shot, it hung by its tail) taken from the same extract above, we may have another example of conflation. That is, on the syntactic level the syntagm "bali'iaptiini"(as I shot) as an I.C. of the sentence-base may not be well-formed, requiring the addition of "omikuita" to enable a satisfactory analysis. If the addition of an element to a syntagm which we suspect to be defective, in this case the addition of "omikuita" to "bali'iaptiini", changes the denotation of the syntagm, i.e. the message conveyed with the additional element differs from

that conveyed without it, then it is shown that there is no ellipsis. The additional element is, in fact, an expansion to the syntagma in question and not a "missing" element in its realisation. In the above example, if "bali'iaptiini" and "bali'iaptiini omikuita" have different denotations, we have shown that there is no ellipsis; "bali'iaptiini" constitutes a well-formed syntagma on the syntactic level, and the element "omikuita" as a peripheral I.C. would be an expansion.

16. An order of procedure in a syntactic analysis.

Mulder has given the following as being an order for carrying out a syntactic analysis. The immediate constituents are hyper-hypothetical until stage five is reached. If they do not pass stage five then they are refuted as immediate constituents and the syntagma in question must be re-analysed and the immediate constituents of the new analysis be subjected to the same testing.

1. Analysis into I.C.s.
2. Establishing whether the relation between these I.C.s is subordinative, co-ordinative, interordinative or none of these, i.e. in the case of apposition.
3. If subordinative, establishing which of the constituents is nuclear and which is peripheral.
4. In case there are more than one peripheral constituent, establishing whether and if so, how they stand in a different relation to the nuclear constituent.

¹ As delivered in a lecture in the Department of Linguistics, University of St. Andrews, Spring, 1971.

5. Establishing whether a peripheral element is 'bound', or whether it is an 'expansion'. This operation is simultaneous with the other operations, as the outcome of 1 and 2 may partly depend on it, but itself depends on 1 and 3. As a classificatory device, however, it comes after 5. We may say that until all five operations have been applied, each of the results remains hyper-hypothetical and cannot be launched as a hypothesis concerning the phenomena. That is, until stage 5 has been passed, each hypothesis has to be considered as a mere working hypothesis.

6. Making an inventory of all types of syntagm that can be distinguished on this basis, and further classifying them according to the hierarchical levels on which they occur. It is, for instance, clear that a syntagm such as "very old" is generally speaking of a lower hierarchical type than "the old man" is, because it commutes with one of the constituents of the latter, but not vice versa. The same is true for "the old man" versus "John hit Paul", as the former commutes with elements in the latter but not vice versa. In a similar way we can classify pleremes as to their syntactic potentials, e.g. "very" is of a different(i.e. lower)order than "old" and so on.

CHAPTER III

THE DATA TAKEN FOR DESCRIPTION

1. The selected field of speech phenomena.

A linguistic description is defined as 'the application of a particular linguistic theory to a selected field of linguistic phenomena'¹. The selected field of linguistic phenomena which is described in the present work does not embrace the whole body of data on the San Martin dialect of Quechua collected in Sisa.

The whole body of data includes those data collected from bona fide Quechua Indians, and those data collected from those Quechua Indians who are mestizados. The former group are what we may regard as pure Quechuas in that they have retained Quechua as their first language, using Spanish only when it is absolutely necessary (for selling their crops and buying goods from the mestizos²). The latter group comprises those Indians whose first language is Spanish. In the speech of both groups there are present many elements which someone with a knowledge of Spanish would discern as being of Spanish origin. These are lexical items borrowed from Spanish, such as "eskuela"³ (school), "autoridarkuna" (authorities), "komersiaNtikuna" (businessmen), "aros" (rice), for objects and concepts which have been assimilated into the Quechua culture from the Spanish, and also other items, for which there may once have been Quechua

¹ Mulder, "Linguistic Theory, Linguistic Descriptions and the Speech Phenomena", La Linguistique (1975).

² 'Mestizo' is the term applied to that group of people with mixed Spanish and Indian blood whose first language is Spanish.

³ The orthography used here is in accordance with that used for the description proper, Part II.

equivalents, which have been taken over into Quechua often with a change of meaning from the original Spanish, e.g. "mediku" (Spanish: doctor; Quechua: shaman), "gana..." (Spanish: win; Quechua: challenge, make a bet), "tio..." (Spanish: uncle; Quechua: friend, mate). Elements such as these and the previously mentioned, although intuitively Spanish, are part of the Quechua system in that in grammar they do not function any differently from bona fide Quechua elements, i.e. they are totally assimilated into the Quechua system although they are formally similar to Spanish elements.

In the speech of the Quechua mestizado, a degree of interference from Spanish may be discerned which is not present in the speech of bona fide Quechua Indians. While the number of lexical items formally similar to Spanish found in the speech of the Quechua mestizado is an indication that we may in fact distinguish two parallel universes¹ for description in the data, this cannot be the sole criterion for the reason stated above - that there is a large number of elements which are formally similar to Spanish elements found in Quechua. Rather, the speech of the Quechua mestizado contains structures which, on an intuitive basis, we would describe as Spanish originated. Such utterances as the following are found in the data collected from Quechua mestizados:

"maN uañuduču karkaN aragaN sino kausak sino de mui aragaN" (the idler was not dead, but alive, but a real idler)

"aragaN karkaN siridu de kostadu" (the idler was lying on his side)

¹ Mulder, op. cit. and "From Sound to Denotation", Folia Linguistica (1973) and Chapter 1 of this work.

"suk siudarpimi ti'iaN suk rei uNkudu"(in the city there is a sick king)

"siN metešpa ni fuersa"(without applying any strength)

"iNti'uaN uaira tiNkunakurkaN"(the wind met the sun, lit. with the sun the wind met),

which can be translated directly, virtually word for word, into acceptable Spanish:

"no fue muerto el aragán sino vivo sino de muy aragan"

"el aragán fue echado de costado"

"en la ciudad hay un rey enfermo"

"sin meter ni fuerza"

"el viento se encontró con el sol"

respectively.

The last example is particularly indicative in that the predicative "tiNku..."(meet) in the speech of a bona fide Quechua is classifiable as a transitive, i.e. it must have an object. An element which stands in the object relation to a predicative in Quechua is marked by "...ta"¹. Thus the example "iNti'uaN uaira tiNkunakurkaN"(the wind met the sun) would be rendered "iNtita uaira tiNkurkaN" by a bona fide Quechua in accordance with the following examples attested in the data: "tiNkurkani suk užkuta"(I met a man), "tiNkurkaN suk uarmita"(he met a woman). As has been said above, the example "iNti'uaN uaira tiNkunakurkaN" is a rendering in Quechua of the Spanish "el viento se encontró

¹For the purpose of this discussion, I shall call "...ta" the object marker, though in the description proper this term is rejected. See Part II, Chapter 1, especially p 88 *et seq.*

con el sol"(the sun met with the wind) where "tiNkunakurkaN" is equivalent to "se encontró" and "iNTi'uaN" to "con el sol". The Quechua is a complete rendering of the Spanish to the point of including in the predicative "tiNku..."(meet) the element "...naku..." which is the Quechua element most nearly corresponding to Spanish "se", and in using the relational element "uaN"¹ which corresponds to Spanish "con"(with) as opposed to the object marker "...ta" which is what a bona fide Quechua would have chosen in conjunction with the predicative "tiNku...".

Further evidence of Spanish interference in the speech of a Quechua mestizado is to be found in his formal ordering of "subject, predicative, object". In Spanish, the element which stands in the subject relation to the predicative may or may not precede it, but the object element always follows directly after the predicative. In the speech of a Quechua mestizado this formal ordering, which is also functional in Spanish, is reflected; e.g. "uaira uižarkaN iNTita"(the wind told the sun) and to the point where the formal ordering also becomes functional in that the object marker "...ta" is excluded from the element standing in the object relation; e.g.

"palomakuna ka'uarkaN urkututu(the doves saw the owl)

In the speech of a bona fide Quechua, the formal ordering of the subject and object elements in relation to the predicative is not functional, the function of these elements being marked by the presence of "...ta" in the case of the object element, and its

¹For 'relational element', see Part II, Chapter III, p 186.

absence in the case of the subject element.¹

These are only a few examples from the speech of the Quechua mestizado which is distinct from that of the bona fide Quechua. Thus, within the whole body of data collected from both groups, two parallel universes may be discerned: that of the Quechua mestizado and that of the bona fide Quechua. In the present work, I have chosen to describe the speech phenomena of the bona fide Quechua Indian.²

2. The elements "likidu" and "puru".

Generally speaking, those elements in bona fide Quechua speech which are formally similar to Spanish do not present particular problems for a grammatical analysis, but are fully assimilated into the Quechua system. The elements "likidu" and "puru", however, which may be regarded as formally similar to Spanish elements, are exceptions to this.

The element "likidu" seems to be an emphatic conveying a meaning of "complete" or "thorough", and occurs with elements which stand in the nuclear position of the adjectival syntagma.³ Examples of the occurrence of "likidu" attested in the data are:

baratu likidu	really cheap
daño likidu	really damaging
fuersas likidu	really strong

¹ See Part II, Chapter 1, p 109.

² This is not to say that the whole body of data could not be described as one universe, but such a description would be of less interest or use than a description of either one taken separately.

³ See Part II, Chapter IV, p 255.

traga likidu	thorough glutton
traNperu likidu	trap-setting mad
aragaN likidu	really lazy

ia'uar likidu	completely bloody
uakča likidu	thorough child
su'ua likidu	really thieving

The element "likidu" occurs most commonly with elements which are formally similar to Spanish. Examples of such co-occurrences are those listed above the dotted line. In these cases, with the one exception of "aragaN likidu"(really lazy) there are no valid commutations for the elements to establish each one separately as a sign. For example:

baratu likidu
 daño likidu
 *baratu X
 *daño X

We may commute "baratu" with "daño", but there is no valid commutation for "likidu"; "baratu" and "daño" and indeed all the other elements formally similar to Spanish, with the exception of "aragaN", do not occur with any other element or on their own in this position. They always co-occur with "likidu". Because there are no valid commutations, elements such as "baratu likidu"(really cheap), "daño likidu"(really damaging) and "fuersas likidu"(really strong) must be treated as single signs in the description.

Where the element "likidu" occurs with a bona fide Quechua element, as in the above examples given below the dotted line, or with the element "aragaN"(lazy), the element "likidu" commutes

with 'zero': viz:

aragaN likidu	(really lazy)
aragaN Ø	(lazy)
su'ua likidu	(really thieving)
su'ua Ø	(thieving)

Presuming that the "aragaN" of "aragaN likidu" belongs to the same denotation class as "aragaN" when it occurs on its own, and that "su'ua" in "su'ua likidu" and "su'ua" on its own belong to the same denotation class, i.e. that they are realisations of the same sign, we may demonstrate with the above commutation test that "likidu" has identity in grammar, i.e. it is a sign.

The implication of this is that when "likidu" co-occurs with certain elements, i.e. with elements formally similar to Spanish, it cannot be set up as a sign, but when it co-occurs with bona-fide Quechua elements, or with "aragaN", it may be given sign status such that in these cases we would be dealing with complexes such as "aragaN likidu"(really lazy) and "su'ua likidu"(really thieving) which may be morphological or syntactic. In the present description such complexes are treated as not syntactic since ordering relations between the elements cannot be demonstrated.

The element "puru" also seems to be an emphatic, having the rough meaning of "totalness" or "completeness". It occurs with the nominal element(i.e. nuclear element)of the nominal syntagm¹, and may be regarded as the nominal counterpart to "likidu". Examples of its occurrence in the data are:

¹ See Part II, Chapter IV, p 264.

čušik puru	owl through and through
ia'uar puru	nothing but blood
mižua puru	all feathers
maNčakui puru	complete fear
kušikui puru	complete happiness

The element with which "puru" co-occurs is, in every case, a bona fide Quechua element, and like "likidu" in such instances it may be opposed to its absence in commutation tests and, presuming for example that "čušik" in "čušik puru" and in "čušik" on its own can be shown to belong to the same denotation class, the element "puru", like "likidu", would be established as a sign. Since ordering relations cannot be demonstrated between the elements of these complexes, these complexes are not treated as syntactic elements in the present description.

While it is not possible to find an analogue to "likidu" in Spanish, "puru" bears a resemblance to Spanish "puro/a" and the complexes in which they occur have the same meanings, e.g.

ia'uar puru	nothing but blood
and pura sangre	nothing but blood

Thus on an intuitive basis, it could be said that "puru" in "ia'uar puru", for example, is an extraneous, Spanish, element, and that by analogy "likidu" is also extraneous. In the Spanish structure "pura sangre"(nothing but blood), the element "pura" determines "sangre"(blood). If the element "puru" of "ia'uar puru"(nothing but blood) is regarded as an extraneous element, then it may be said, by analogy with the Spanish complex, that "puru" determines "ia'uar". Such an analysis would be intuitively

satisfactory, though if, in fact, such a relation between the elements could be demonstrated, then the formal ordering of governed and governing elements in Quechua would be reversed in these particular instances.

3. The elements "ideN" and "ni".

The element "ideN" is an alternative realisation of the comparative "ideN... ſina" (just like), which may also be realised "ſina". In realisation, "ideN" occurs before the element(s) compared and "ſina" occurs after.¹ For example:

ideN suk uaNkana ideN suk animal (just like a hog, just like an animal)

ideN sukamaN siNči uNkudu ſina (just like an extremely sick person)
ñuka ſina (like me)

The element "ideN... ſina" is the only relational element in bona fide Quechua which is realised in discontinuous form. All other relational elements are realised after the element(s) they govern. For example:

ZaktamaNta (from the town)

uasipi (in the house)

tataNuaN (with his father)

In this, the element "ſina" manifests itself as a bona fide Quechua element, while the element "ideN" is counter to the Quechua pattern and, intuitively, is more in accordance with the

¹ See Part 11, Chapter V, p 186.

Spanish system where relational (prepositional) elements occur before the element(s) they govern. Moreover, it is formally similar to Spanish.

The element "ni" usually occurs with the bona fide Quechua negative element "mana" (not) and roughly means "nor"¹. As with "ideN" its occurrence is intuitively more in accordance with Spanish than with Quechua, in which system it appears to be an extraneous element which at times is superfluous to the meaning conveyed in the utterance in which it occurs. For example:

mana pue^{di}k^ču ni čaisapata moNtoN xeNte kaptiNkuna (he could not (do) those things (lit. he could not (do) nor those things), there being lots of people)

maN karana'iaknaču ni mama ni tata ni uakiNkuna (neither his mother nor his father nor his brothers wanted to feed (him))

In both examples, the element "ni" could be regarded as being superfluous to the meaning conveyed in the utterance, and indeed its omission would, intuitively speaking, be more in keeping with bona fide Quechua.

While in the above examples the inclusion of "ni" could be regarded as extraneous, in other examples of its occurrence in the data it appears to occur in lieu of the bona fide Quechua negative element "manaN...ču". For example:

mana remediota ruraptiNkuna uañurkaN čai uarmiNka/ ni biuda'iašpa kutirkaNču žaktamaNka (their not making a remedy his wife died/

¹ See Part II, Chapter V, p281.

nor being a widower did he return to the town)

which may be compared with:

čaimanta// dueñuNkuna maN ui'uaNsapaču čikarupi/ maN karakuNsapaču
(then// their owners did not brood(them)in the pig sty/ nor did
they feed(them))

In examples such as the above "ni...ču" would be analysed in the same way that "manan...ču" is. Intuitively speaking, "ni" of "ni...ču" is an example of interference from Spanish. In the following example, its resemblance to Spanish appears more clearly, where "ni...ču...ni..." may be said to correspond to Spanish "no...ni...ni..."(not...neither...nor...):

ni mikuNsapaču ni porotota ni arosta(they do not eat either beans or rice)

While the element "ni...ču" may be regarded as occurring instead of Quechua "manan...ču" the subsequent occurrences of "ni" may be regarded as being superfluous in the Quechua system and, intuitively speaking, are the result of Spanish interference.

4. The "relative pronoun".

The 'relative pronoun' and 'relative adverb', as they are understood in traditional grammar, could be said not to exist in Quechua; that is, in the bona fide Quechua system there are no elements which translate as "whose", "which", "that" etc. In Quechua, the relation of the subordinate predicative-governed syntagm to the governing syntagm is evidenced in the form of

the predicative nucleus of the subordinate syntagm.¹ The subordinate predicative-governed syntagm may stand in a direct relation with the superordinate syntagm, as in "ka'uani užkutaka' mikuikaptiN"(I see the man(who is)eating), where the relation of "mikuikaptiN"(eating - subordinate non-transitive syntagm where only the predicative nucleus is realised) to "ka'uani užkutaka"(I see the man. - superordinate transitive syntagm) is self-evident from the form of "mikuikaptiN", or it may stand in an indirect relation as in the following examples:

manaN iu'ianiču kačarimuškainita ramumaNta(I do not know(cannot think)how I let go of the branch)

manaN iu'ianiču uasiinipi ča'iači'uaškaNkunata(I do not know how they brought me home)

bersukurkaN tukui iačaškaNta(he chanted all he knew)

In these examples, the subordinate predicative-governed syntagm is governed by the element "...ta"(in the description proper, the neutral complement marker²); the 'ta-syntagm', which is underlined in each example, is subordinate to the superordinate predicative(not underlined) and the subordinate predicative-governed syntagm, as the peripheral I.C. of the 'ta-syntagm', stands in an indirect relation with the superordinate predicative via the element "...ta". For example, in "manaN iu'ianiču kačarimuškainita ramumaNta"(I do not know how I let go of the branch), the syntagm "kačarimuškainita"^{ramumaNta}(how I let go of the branch), the syntagm "kačarimuškainita"(how I let go of the

¹ For 'subordinate predicative-governed syntagm', see Part II, especially Chapters II and III.

² See Part II, Chapter I, p96.

branch) stands subordinate to the superordinate predicative "iu'iani"(I know). The subordinate predicative-governed syntagm "kačarimuškainita ramumaNta"(I let go of the branch) as the bound peripheral I.C. of the ta-syntagm is governed by "...ta"¹, i.e.

((kačarimuškaini ramumaNta) → ta) → iu'iani

From the form of "kačarimuškaini", we may recognise it as a subordinate predicative which stands in the peripheral position of a complement syntagm.

Both in the examples given immediately above and the example of "ka'uani užkutaka mikuikaptiN"(I see the man(who is)eating) given further above, the constructions can be said to be bona fide Quechua, and the fact that a translation into English or, more pertinent to the discussion, into Spanish, requires a relative pronoun or adverb is irrelevant to the Quechua. There are in the data, however, examples such as the following:

ñukami iačani imašnami salbanakuša(I know how I shall save myself)

mana iačaksapaču tataN mamaNka ſipašpa imaraikumi ēa'iaN(the maiden's father and mother did not know why he arrived)
paimi iačaN imašnami ruraNka(he knows how he will do(it))

In each example, the underlined syntagm stands in a relation of subordination to the superordinate predicative. In the last example, for example, "imašnami ruraNka"(how he will do(it)) is subordinate to the superordinate predicative "iačaN"(he

¹This anticipates the description of the neutral complement syntagm, Part II, Chapter II, p106 et seq.

knows). The element "imañnami"(how) governs the syntagm "imañnami rurañka", and the predicative "rurañka"(he will do (it)) is related to "iañan" via "imañnami", i.e.

(rurañka → imañnami) → iañan

In this example, as in the other two given above, there are two points of interest:

- a) that "iañan"(know) as a transitive predicative must have a neutral complement, i.e. a syntagm marked by "...ta"¹ which does not occur in the example; and
- b) that "rurañka"(he will do) as a predicative standing subordinate to another element, in this case "imañnami"(how) does not have a form which makes it identifiable as a subordinate predicative. Rather, it is identifiable as a superordinate predicative.

In the bona fide Quechua system, one could reasonably expect "paimi iañan ruraita". Intuitively speaking, a degree of Spanish interference has produced an utterance such as "paimi iañan imañnami rurañka"(he knows how he will do(it)). Elements such as "imañnami", "imaraikumi", which can be regarded as bona fide Quechua elements, usually occur as interrogatives², e.g. "imatata rurañkañki uañbrainikunataka"(what have you done with my children?). That they occur here as relational elements affords a parallel with Spanish where we have "¿qué?(what?) and "que"(which, that), for example, but this in itself is not sufficient for even an intuitive statement that there is influence

¹ See Part II, Chapter I, p 97.

² See Part II, Chapter V, section 7.

from Spanish in the above examples, since there is nothing in the bona fide Quechua system which does not allow elements such as "imañnami"(how), "imata"(what) to occur as relationals. The predicatives they govern, however, would show subordinate form.¹ This does not happen in the above examples, as the case of "rurañka"(he will do) shows; rather a Spanish model is followed: "sabe cómo lo hará"(he knows how he will do it).

If examples such as "paimi iačaN imañnami rurañka"(he knows how he will do(it)) are included as data for description, then the hypothesis that superordinate and subordinate predicatives have distinctive form, a hypothesis which is central to the description, is refuted, as "rurañka"(he will do) offers an example of a predicative standing in a relation of subordination which has the same form as a superordinate predicative. Also refuted is the hypothesis that a transitive predicative must have a neutral complement which is indicated by the neutral complement marker "...ta". In the present description, I have chosen to regard phenomena of the type exemplified above as not central to the bona fide Quechua system, but as marginal and therefore not to be included for description.²

¹ An example from Middendorf, Gramática Keshua, p341, shows this clearly: "ima'hina 'kiputa paskananta yachachirkancu"(they showed (him)how to undo knots).

² This follows one of the basic tenets of functionalism not to include marginal elements if the inclusion of those elements distorts the description as a whole in their favour at the expense of what is really vital and central to that description. See Martinet, A Functional View of Language, p20, and Mulder "Linguistic Theory, Linguistic Descriptions and the Speech Phenomena", La Linguistique(1975).

PART TWO

INTRODUCTORY NOTE TO THE DESCRIPTION

The maximum sign in a syntactic analysis is the 'sentence' (see Def. 20.). 'Sentence', however, is not a purely syntactic notion in that para-syntactic features, especially those of 'sentence-intonation' (see Defs. 18 and 18b), must be considered when determining the extent of any particular sentence taken from the data for analysis. They provide the necessary markers which syntactic criteria alone cannot, and cannot be ignored when a syntactic analysis is undertaken. As far as the present work is concerned, however, I do not include within its scope a description of the types of para-syntactic feature discernible in the data, although their identification has been essential to the analysis. The description begins at a point where the boundaries of the sentences of the data have already been marked, and where these 'sentences', once abstracted from the data, are regarded in purely syntactic terms as syntagms which correspond to sentences (i.e. without intonation etc.).¹ Thus the concern of the work is with syntagms as they correspond to sentences found in the San Martín dialect of Quechua, and with the constituent syntagms of these syntagms, with establishing the types of syntactic relation which exist between the constituent syntagms, and so, inversely, with the combinability of constituent syntagms into syntagms which correspond to sentences in the data.

¹ Only sentences the corresponding syntagms of which are well-formed are abstracted for description. Those sentences to which no well-formed syntagms correspond are ignored. However, the syntagmatic elements of the bases of sentences such as these, where they are themselves syntagms, will be covered in the description as constituents of well-formed syntagms which correspond to sentences.

In the presentation of the description it is not possible to reflect with complete verisimilitude the analytical procedure where, in effect, several operations are carried out simultaneously. To present the checking and re-checking which is necessary before the merely working hypotheses (i.e. they are hyper-hypothetical until they have been tested and found to be the most consistent and adequate analyses in relation to the rest of the analysis) can be forwarded as hypotheses, would make for cumbersome, if not very obscure, reading. Thus there is a gap between the actual performance of the analysis and the presentation of the description resulting from that analysis. The widest gap occurs in those descriptions where only what may be regarded as the final statements or hypotheses are given; that is, where one is presented with a list of the sentence and clause types established in the language by the descriptivist, with perhaps one or two examples of each type. The present work offers an attempt at narrowing this gap, and in so doing attempts to point to the problems, only tentatively soluble given the existing knowledge of the Quechua language, which arise in the process of analysis. Some of the steps involved in formulating the hypotheses are illustrated, though for reasons stated above, much has had to be taken as given - for example, the very first tentative groupings of the words of the syntagms corresponding to sentences into constituent syntagms, and in some cases the testing which is required to establish what is the 'nucleus' and what is the 'periphery' of the syntagm. The relations which exist between the constituents of syntagms and between constituent syntagms are stated explicitly, and not just implicitly.

via labels and categories, as happens in those descriptions of Quechua dialects which do little more than present lists of the sentence and clause types established.¹

In its ordering, arbitrary decisions have had to be made in the presentation of the description, and a hypothesis put forward at one point may presuppose knowledge of a hypothesis which is not given in the description until a later stage.

Briefly, those syntagms which correspond to sentences are analysed into immediate constituents(I.C.s), and the relations which hold between these I.C.s ascertained. Obviously not every syntagm corresponding to a sentence which is found in the data is presented for individual analysis in the description; rather, a representative sample of the syntagm types which have been identified is used to provide prototypes. In the first chapter, the nuclei of the different syntagms which correspond to sentences have been abstracted and described. These nuclei I call superordinate predicative-governed syntagms, or minimum sentence-bases, and from these the syntagm can be expanded in different ways. The two following chapters deal with the three main types of expansion: predicative, nominal and complement. These types of syntagm are then analysed into their I.C.s, and where these I.C.s are also syntagms, then these syntagm types are further analysed until the ultimate constituents(U.C.s) of the analysis are reached. In a later chapter, syntagm types which have not fallen into the above pattern are isolated and described. Finally,

¹For example, Lastra in Cochabamba Quechua Syntax, Escribens and Proulx in Gramática del Quechua de Huaylas.

an inventory of the syntagm types analysed in the description is given together with statements of the syntactic relations which exist between them, and of the levels on which they occur in the hierarchy. From this the syntagms which have been progressively broken down as the description has proceeded, can be built up to the syntagms which correspond to sentences.

CHAPTER I

THE PREDICATIVE-GOVERNED SYNTAGM

1. Some terminology and definitions.

As has been noted in Part I, a fundamental notion for syntax is that of 'sentence-base'. By 'sentence-base' is meant a syntagm as it corresponds to a sentence. On the first level, all syntagms which are presented for analysis are sentence-bases. For the purpose of this description, the term 'sentence-base' applies only to syntagms which have as their nuclei predicative-governed syntagms. Excluded from the notion, and so from the analysis, are single word utterances such as "ariža" (yes) and "mana"(no)¹ which are not only to be regarded as elliptical realisations for "ariža ka'uani"(yes, I see(it)), and "mana manaN ka'uaniču"(no, I don't see(it)), in answer to the question "ka'uaNkiču"(do you see(it))², for example, but also

¹The variants of the negative "manaN...ču"(the dots indicating the occurrence of the negated element which may be a single word or a whole syntagm)are as follows: "manaN", "mana...ču", "mana". These must be regarded as elliptical realisations of "manaN...ču" since there is no evidence to support a hypothesis of contextual determination. The form of the negative used in any particular instance appears to depend solely on the speaker, with perhaps some regard to euphony and connotation. Traditional grammars state that "...ču" in "manaN...ču" serves to emphasise that part of the utterance which is being negated. Certainly, as its occurrence is not obligatory, it could be regarded as having connotational value of this type. The form "manaNču" corresponding to English "no" may be realised elliptically as "mana". This can be distinguished from "mana..."(not)by different intonational features: [mana](no), [mana](not).

²Question, without recourse to interrogative words such as "ima" (what?), "pi"(who?), "imapa"(why?), is denoted by "...ču", not to be confused with the "...ču" of "manaN...ču", which may never occur on its own denoting "negative".

in the fully expanded forms of "ariža ka'uani" and "mana manaN ka'uaNkiču" the forms "ariža" and "mana" are examples of sentential apposition. Thus while it is interesting to note their occurrence, they are not strictly relevant to the description of syntactic relations, there being no grammatical relations demonstrable between these elements and the rest of the utterance. Similarly excluded, but not for the same reason, are salutations which, in San Martín Quechua, are doubtlessly Spanish-derived, e.g. "ola ti'iu buenos di'ias"(hello, friend, good morning) and other interjections and ejaculations.

The nucleus of a sentence-base in San Martín Quechua is a predicative-governed syntagma, the nucleus of which is a predicative. In Quechua, this predicative has a particular form not repeated in any predicative found in a position other than that of 'nucleus' of the sentence-base. Predicatives which stand in a relation of subordination to the nucleus of the sentence-base are identifiable as such by morphological features which are distinct from those of predicatives which stand in the nuclear position of a sentence-base. This is distinct from English, for example, where it is possible that the form of a predicative does not vary according to its syntactic relation with other predicatives in the sentence-base. That is to say, the form of the superordinate predicative is identical to the form of the subordinate predicative in, for example, the sentence-bases "I saw him" and "When I saw him, I cried out". In the first example, the predicative "saw" stands as the nucleus of the syntagma; in the second example, it stands in a relation of subordination to "cried out". The examples rendered into

San Martín Quechua would be: "ka'uankani paita" (I saw him) and "paita ka'uašpa kaparirkani" (when I saw him, I cried out). The forms of the predicative "ka'ua" (see), underlined in the two examples, give immediate identity to their respective functions.¹ Thus in San Martín Quechua, the identification of the predicative-governed syntagm which stands as the nucleus of a sentence-base is greatly facilitated. A syntagm which has as its nucleus a superordinate predicative, I call a superordinate predicative-governed syntagm, or the nucleus of a sentence-base, where it is necessary to distinguish it from a subordinate predicative-governed syntagm. The difference lies in the form of the predicative; the structure of a predicative-governed syntagm remains the same regardless of whether the predicative nucleus is a superordinate or a subordinate predicative, since it is determined by the type of predicative which stands in the nuclear position, not by the form of the predicative. In this chapter, the examples given of predicatives and predicative-governed syntagms are examples of superordinate predicative-governed syntagms. These form the nuclei of sentence-bases, or can stand on their own as sentence-bases.

The type of predicative which stands as the nucleus of a sentence-base determines, either wholly or to a large degree, the nature of that sentence-base. It determines the syntagms which combine with it as I.C.s of the sentence-base, i.e. the

¹ From the form "ka'uan", we know that this predicative stands as the nucleus of the sentence-base; the element "...špa" of "ka'uašpa" in the second example indicates that the predicative stands in a relation of subordination to the nucleus of the sentence-base. For subordinate predicatives, see Chapter 11 of the description.

number and type of peripheral syntagms possible to the nuclear predicative syntagm. I am here talking of those peripheral syntagms which are bound I.C.s, i.e. which actualize the predicative and without which the sentence-base would not correspond to a well-formed utterance in realisation. There may occur I.C.s which are expansions to the predicative, i.e. which can be replaced by zero without the sentence-base ceasing to be well-formed, and whose presence or absence is not determined by the type of predicative nucleus. These I.C.s of the sentence-base which are expansions to the nuclear predicative will be dealt with in subsequent chapters. First, the models for what can be regarded as the minimum extent of sentence-bases will be established, i.e. the number and types of syntagm essential as I.C.s of a syntagm for it to be identified as a sentence-base. These minimum sentence-bases are predicative-governed syntagms where the nuclei are superordinate predicatives.¹ Statements regarding the identification of predicatives and the structure of predicative-governed syntagms made on the following pages are applicable both to superordinate and to subordinate predicative-governed syntagms, though, as has been stated above, examples given in this chapter are of superordinate predicatives and predicative-governed syntagms.

¹ In other words, a superordinate predicative-governed syntagm is the only syntagm which is essential to a sentence-base if that base is to be well-formed. Hence 'minimum sentence-base' which can be expanded into a larger sentence-base.

2. The identification of predicative types.

Listed below are definitions given by Mulder in Sets and Relations as regards transitivity of those (and only those) ¹predicatives which I have found relevant to San Martín Quechua and upon which the following discussion is based:-

1. Intransitive, for 'cannot have an object'.
2. Non-transitive, for 'may have an object' (Abbreviation for 'non-transitive' and 'non-intransitive').
3. Transitive, for 'must have an object' (Abbreviation for 'direct transitive').
4. Complementary transitive, for 'must have an object and a complementary object', the complementary object being introduced by an autonomous syntagm.²
5. Complementary intransitive, for 'cannot have a direct, but must have a complementary object'.

This represents a considerable increase on the three types of predicative generally distinguished in Quechua dialects: "transitive", "intransitive" and "equational"³, where "equational"

¹p77. Mulder distinguished seven types of predicative in English. Five are distinguishable in San Martín Quechua.

²Mulder, op. cit., p74 and p78. A 'complementary object' is an autonomous syntagm (i.e. one of its elements, the nucleus, is an unambiguous marker of its relation to the rest of the utterance) which is bound to the predicative. An example is English "on the table" in "I put it on the table". I should point out that Mulder now rejects Martinet's notion 'autonomous syntagm'. In so far as the definitions as regards transitivity of predicatives as given by Mulder in Sets and Relations are used here, the term has been kept.

³While the traditional descriptions give the same general classification, I specify here those descriptions of Quechua dialects supervised in Cornell University by Hockett. (See A Course in Modern Linguistics, especially p204, for explanation of the terminology).

corresponds for the most part to the term 'copulative' used in this work and discussed at a later stage; but the increase can be justified on several counts. The class 'non-transitive', for example, goes a long way towards ridding us of the necessity for statements such as:

"El verbo transitivo puede ocurrir mas no necesariamente en una cláusula que contiene un nombre regular con caso -ta".¹

(The transitive verb can occur, but not necessarily so, in a clause which contains a regular noun with -ta case.)

While disagreement over the members of the different classes (Parker² and Proulx³, for example, classify predicatives expressing movement and predicatives commonly described as 'impersonals' as 'transitives', while Escribens⁴ prefers to regard them as 'intransitives') can be overcome with a rigorous set of definitions. It must be remembered, however, that Mulder's definitions (which are only introduced as a method for labelling in the description, and are definitions belonging to the description, not definitions belonging to the theory) are intended as English-specific and that it is possible that a particular definition may not relate in toto to its foreign counterpart. This applies especially in San Martín Quechua with regard to the concept of 'object'.

¹ Parker, Gramática del Quechua Ayacuchano, p47.

² ibid., p47 et seq.

³ op cit., p68.

⁴ op cit., p33.

3. The concept 'object' with regard to Quechua.

In all the existing grammars and linguistic descriptions of Quechua dialects known to me, the element "...ta" is regarded as the object marker or accusative case, e.g.

tarirkani omikuita(I found a monkey)

tiNkurkani suk užkuta(I met a man)

kamižata rurarkaNsapa(they made a stretcher)

bruxu uarmiinita ñakarkaN(the witch cursed my wife)

ui'uaškaNsapa moNtoN uažpata(they reared lots of chickens)

ruNtuta sukamaN maskaNsapa(they search hard for eggs)

paika apirkaN pumata(he seized the puma)

tarpurkaNsapa plaNtanuta sarata rumuta(they planted bananas, maize, yuca)

paikunaka upiaNsapami bušikžata(they drink only bušik¹)

uirata mikuNsapa(they eat fat)

rupačirkaNsapa uasiNkunata(they set fire to their houses)

The above are straightforward examples of what, in traditional grammar, is called a verb-object relation, where the object is always a noun or noun phrase. On the evidence of these examples, we may be tempted to say that "...ta" is the direct object marker, but in San Martín Quechua not only the direct but also the indirect object is marked by "...ta"² e.g.

¹ A variety of herbal remedy.

² Snow, in his article "Nominalizations in Ancash Quechua", Papers in Andean Linguistics, 11, 1., notes the same feature: e.g. "taqay ičik wamra-ta kay pinkuliu-ta qu-ykU-ša-mi-r"(I will give that little boy this flute). However, I have it from Mr. L. (over)

aragantaka kurkaNsapa kužkita (they gave the idler money)
 uarmiinita omikuita apamurkani (I brought my wife a monkey)

An argument which may be forwarded is that the elements marked by "...ta" in the two examples above are in a relation of coordination, as is the case in another example given earlier: "tarpurkaNsapa plantanuta sarata rumuta (they planted bananas, maize, yuca) where all the underlined elements can be demonstrated to be in the same relation to "tarpurkaNsapa" - the omission of one or two of the elements marked by "...ta" does not affect the basic structure of the syntagma. This argument can be overruled as far as the two examples above are concerned on the grounds that both elements marked by "...ta" are bound to the predicative, i.e. neither one nor the other is dispensable. Similarly, it cannot be shown that one is an expansion of the other. It is often the case, where two "...ta" syntagms¹ co-occur in a syntagma, that one is an expansion of the

2(cont.) Hoggarth that in Cuzco Quechua the indirect object is marked by the element "...maN" e.g. "payman kay t'antata qonki" (you give him this bread) - lecture delivered in St. Andrews, 1970. Similarly, Parker, op. cit., p41, gives the example "ñuqaman qumuway" (give it to me). A detailed study of the denotations of "...maN" and "...ta" in the San Martín dialect lies outside the scope of this work. Suffice it to say that as far as San Martín Quechua is concerned, the element "...maN" has the rough denotation of "movement towards", e.g. "iakumaN" (to the river), "uasiNmaN" (to his house), and is not found as an indirect object marker.

¹ Henceforth, the occurrence of "...ta" is referred to as the "ta syntagma", although, strictly speaking, every occurrence of "...ta" is a realisation of such a syntagma type.

other, and as such is in an indirect relation to the predicative, e.g. "ka'uarkaN čai užku masika uarmitaka mižua puru lomo'iukta" (that fellow saw the woman whose back was covered with feathers). The underlined is governed by "uarmitaka"(the woman) which, in turn, is governed by the predicative "ka'uarkaN"(he saw). In the example "aragaNtaka kurkaNsapa kužkiتا"(they gave the idler money), "aragaNtaka"(the idler) cannot be shown to be in a relation of subordination to "kužkiتا"(money) and as such in an indirect relation to "kurkaNsapa"(they gave), nor can "kužkiتا" be shown to be subordinate to "aragaNtaka". The two elements are subordinate to, and bound to, the predicative "kurkaNsapa". The syntagm "kurkaNsapa kužkiتا"(they gave money) begs the question "pitatá"¹(to whom?), while the syntagm "kurkaNsapa aragaNtaka"(they gave the idler) invites, in this case, either "imatatá"(what?) or "pitatá"(to whom?) depending on whether "aragaNtaka" is regarded as a direct or indirect object. Both "aragaNtaka" and "kužkiتا" are indispensable parts of the syntagm if that syntagm is to be well-formed; a relation of coordination between the elements or a relation of subordination of one to the other cannot be demonstrated. A hypothesis may be put forward that the different relations of the ta syntagm to the predicative in the two examples "aragaNtaka kurkaNsapa kužkiتا"(they gave the idler money) and "uarmiinita omikuita

¹ The accentuated "...tá" is not to be confused with the object marker "...ta". In San Martín Quechua, "...tá" occurs in conjunction with interrogative words of the type which elicit an informative answer, as distinct from the affirmation or negation elicited by "...žu".

apamurkani"(I brought my wife a monkey), are shown in the formal ordering, the indirect object preceding the direct object.¹ It must be stressed, however, that this does not alter any hypothesis that the function of "...ta" is not limited simply to direct object marker. The above has shown that it also marks what in traditional terms is regarded as the indirect object.

The concept of 'object' in Quechua seems to be far less precise than that to which we are accustomed in European languages. While it is true that the term 'object' is as equally applicable to a (subordinate) predicative syntagm as to a nominal, e.g. "ka'uani suk užkuta", "ka'uani ſamunaNta"("I see a man" and "I see him coming" respectively), I do feel that to label "...ta" simply as 'object marker' or 'accusative case' is not sufficiently explicit of its function in relation to and as distinct from other functional elements in the language.² The following is a comprehensive selection of the occurrences of the element "...ta" in the data:

uarmiinita kačani čaipi/ u'iarik(I send my wife there/ to listen)
tari'uarkaNsapa moNtoN iſčimita sa'uainipi/ mikuikaptiN

¹ If there is indeed a formal ordering between the two ta syntagms to mark a difference in function, then the hypothesis made later in this work that there is only parallel determination in San Martín Quechua cannot stand, as this gives an example, albeit a unique one in the dialect, of diverse determination.

² It should be noted with respect to the majority of descriptions of Quechua, however, that only nouns can be objects. The statement made by Parker(p 87 of this work) is typical. Subordinate predicatives such as "ſamunaNta" in the example above are regarded as nominalised verbs, i.e. as nouns, in these descriptions.

siñkainita ña'uiinita ñimiinipi(they found me (with) lots of
ants on top of me/ eating my nose, my eyes, in my mouth)¹
čaipi uatata kausarkanisapa(we lived there a year)
ui'uaškaN sapa moNtoN uažpata(they have reared lots of chickens)
šamuškaN/ upianaNpa miškik iakuta(he has come/ in order to drink
fresh water)
uakiñtaka uaktaku'uañci besti'ia(our horses throw some of us)
čaimaNta/ sukamaN čai uainata maskačiksapa tukui maita kai
mu'iu uaira'uaN altuta ažpata(then/they really searched (for)
that young man everywhere, with this whirlwind, high (and) low)²
pierdiškani sukamaN aži kusainita(I have now lost my very good
husband)
manaN atipaniču tratabaxaita(I cannot work)
ñukapiš munanimi mediku'iaita(I too want to become a shaman)
munaiñkiču puša'uaita(do you want to take me?)
manaN iu'ianiču kačarimuškainita ramumaNta(I do not know how I
let go of the branch)
manaN iu'ianiču uasiinipi ča'iači'uaškaNkunata(I do not know
how they brought me(lit. made me arrive)home)
akuiči/ ganaipači žuičuta kažpaita(come/ let us challenge the
deer at running)

¹ The element "...ua..." in the predicative "tari'uařkařNsapa" is an abbreviatory first person object. A predicative which embodies such an abbreviation I call an abbreviated predicative. This type of predicative, and the problem it poses in analysis, will be discussed below, p/15 et seq.

² The moneme "...k" here is the narrative moneme. See the following chapter, p/60, for a note on this moneme.

bersukurkaN tukui iačaškaNta(he chanted all he knew)
 mana atipaNkiču ruraita kaita(can you not do this?)
 munani šamunaikita kaimaN(I want you to come here)
 manami munaniču čai la'ia'uaN kasaranaNtaka(I do not want her
marrying with that kind)
 rurapanki čai ruegaškainita(do what I have implored)
 čairaiku/ munani ūuka rekofiita čai runata(because of that/ I
want to get that man back)
 čaimaNta/ tatainita abisačimurkaN desgrasi'ia sosediškainita
(then/ they told my father (of) the misfortune which had befallen
me)
 uarmiinika sukamaN uakakuita kažarirkaN(my wife began to cry a
lot)
 sasikuNsapa tolda ukupi ažita(they diet well under a mosquito
 net)
 sasikuNsapa sukamaN ažita(they diet really well)
 mana kažpakču siNčita(he did not run with strength/strongly)
 pai ašuaN sukamaN siNčita kažpaN(he runs much more strongly)
 čaimaNta/ ašuaNta makanakušpa/ uaňučinakurkaNsapa(then/ fighting
 one another more/ they killed one another)¹
 ūukami moNtoNta maskaiki(I look for you a lot)
 ūami/ sukamaN ažita kausaNsapa tukui bariuna(now/ the whole
 district lives very well)

The last seven examples, where "...ta" occurs in conjunction
 with what are generally classified as adjectives, create a

¹ The moneme "...naku..." roughly denotes reciprocity, i.e. one
 another, each other.

problem for any description which states that "...ta" is the object marker, since in the sense that we understand the term 'object' from traditional grammar(a substantive word, phrase or clause 'governed by' a verb), it requires that a further statement be made to the effect that "...ta" gives adverbial quality to adjectives. Thus "...ta" is not only an object marker but an adverb marker as well.¹

If the relation of the ta syntagm as a whole(i.e. if its internal structure - what type of element(s) "...ta" governs within the syntagm - is forgotten for the moment)to the predicative to which it is subordinated is studied to ascertain how it contrasts with, and therefore has distinctive function from, the other syntagms with which it can commute, statements of the type "ta is an adverb marker as well as an object marker" need not be made. Making allowances for semantic considerations, ta syntagms commute with a set of syntagms the nuclei of which are what are generally called 'postpositionals' or 'relational'.² I favour the latter term in this work for referring to the following elements: "...pi"(in, on, at), "...uaN"(with), "...maN" (towards), "...maNta"(from), "...raiku"(because of), "...kama"

¹ Lastra does indeed state that "the accusative suffix signals that the substantive is the direct object of a verb. It may also indicate other relations." (Cochabamba Quechua Syntax, p29). It has already been noted in an earlier footnote that descriptions of Quechua dialects produced from Cornell University regard subordinate predicatives, e.g. "iačaškaNta" (what he knows), "sosediškainita" (what happened to me) as nouns derived from predicatives, i.e. nominalisations.

² These elements correspond to prepositionals in English, the difference being one of formal ordering. In Quechua they occur after the elements they govern and not before.

(until, up to), "...pa"(possession, purpose, benefactive).¹

Syntagms of which these elements are the nuclei, as well as ta syntagms, are all autonomous syntagms, i.e. the nuclei are unambiguous markers of the relation of their respective syntagms to the rest of the larger syntagms, of which they are I.C.s, under analysis. In formal realisation, they may occur anywhere in the larger syntagm, since their function does not have to be marked by formal positioning, the nuclear element indicating the function of the syntagm it governs. For example, all of the following are meaningful, and are translated into English as "he sells eggs in the town":

raNtičiN ruNtuta Žaktapi

ruNtuta raNtičiN Žaktapi

ruNtuta Žaktapi raNtičiN

Žaktapi raNtičiN ruNtuta

Žaktapi ruNtuta raNtičiN

where "raNtičiN" is rendered in English as "he sells", "ruNtuta" as "eggs(object)" and "Žaktapi" as "in the town". The syntagms

¹ When dealing with San Martín Quechua "...pa", the rough denotations "possession", "purpose" and "benefactive" can be used. It is for morphology and semantics to decide whether in fact this is a case of homonymy(two or more signs with the form /pa/)or of a single sign "pa". If we bear in mind that our English translations cannot provide a solution, it is not difficult to conceive of a single sign "pa", the denotation of which is neither "possession" nor "purpose" nor "benefactive" but merely 'directional' to a person or thing. It is always possible that there will exist areas of denotation which we cannot fully understand from a European point of view. Leaving aside this problem, for simplicity we shall continue with the labels "possession", "purpose" and "benefactive" where appropriate. For syntactic analysis, it is not relevant whether there is one or more than one sign "pa". What matters is that there is at least one sign "pa" which can be distinguished from the other 'relational' cited here.

"*zaktapi*" and "*ruNtuta*" are autonomous syntagms; all such autonomous syntagms may function as complements to the predicative. Any complement whose function in relation to the predicative is not marked by a relational element is marked by "...ta", i.e. its relation to the predicative cannot be expressed by one of the relational elements listed above. That is to say, any syntagm which complements the predicative in a relation which does not express time, situation, cause, purpose, possession etc., is governed by "...ta". These syntagms can be subordinate predicative, or adjectival, as well as nominal, all complementing the predicative in what can be regarded as a neutral, i.e. non-relational, way.¹ They may be obligatory complements to the predicative or not, depending on the type of predicative which they complement. As it may be necessary to distinguish between the types of complement, I shall call ta syntagms neutral complements, and syntagms of which a relational element is the nucleus, relational complements.

4. Identification of predicative types (continued).

As a result of the foregoing, it becomes necessary to alter the terminology of the definitions given on p86. in so far as the term 'object' is concerned. This does not alter the basic distinctions as regards transitivity of predicatives in San Martin Quechua. Thus:

¹ That is to say, the relation strikes us as a neutral one because we do not have, in English, a preposition with which to translate it.

1. Intransitive, for 'cannot have a neutral complement'.
2. Non-transitive, for 'may have a neutral complement'
(Abbreviation for 'non-transitive' and 'non-intransitive').
3. Transitive, for 'must have a neutral complement'.
4. Complementary transitive, for 'must have two complements, one of which must be a neutral complement' (The second complement may be a neutral or a relational complement).
5. Complementary intransitive, for 'cannot have a neutral complement but must have a relational complement'.

By taking the predicatives found in the data, and by studying the contexts in which they occur, i.e. whether they occur with peripheral syntagms, and if so, whether these syntagms are bound to or expansions to the predicative, we may not only distinguish the types of predicative possible in San Martin Quechua, but also take the first steps to describing the underlying structures of sentence-bases by identifying the nuclei of those bases.

The decision as to whether syntagms peripheral to the predicative (the nucleus of the predicative-governed syntagm which in turn is the nucleus of the sentence-base) are bound or expansions is crucial. A bound syntagm is an indispensable part of the syntagm. A transitive predicative, for example, must have a neutral complement (ta syntagm) which actualizes the predicative. The complement is bound to the predicative in that without it the predicative does not have full information value. An expansion is all that is dispensable: its omission does not cause the rest of the syntagm to cease from being well-formed,

from having information value as a syntagma. In the example "ruNtuta raNtičiN Žaktapi"(he sells eggs in the town), "Žaktapi"(in the town) is an expansion, while "ruNtuta"(eggs) is bound to the predicative "raNtičiN"(he sells) since "ruNtuta raNtičiN" stands as a well-formed syntagma without "Žaktapi", but neither "raNtičiN" nor "raNtičiN-Žaktapi" can be regarded as being well-formed. In "ruNtuta raNtičiN Žaktapi", "ruNtuta" is an indispensable part of the syntagma, and "raNtiči"(sell) must be classified as a transitive predicative since it is actualized by a neutral complement.

While it is important to differentiate between bound syntagms and expansions, it is equally important, when identifying the types of predicative, to recognise ellipsis whenever it occurs, since failure to do so can equally result in wrong classification of predicative type and consequently a wrong analysis. The proper recognition is particularly pertinent to Quechua where a tendency to contract or abbreviate is very characteristic. For example, the following predicatives are generally classified as transitives, i.e. they must have a neutral complement:

ka'umarkaN omikuита	he saw a monkey
ruraN remedi'iota	he makes a cure
mikuNsapa uaNkanata	they eat hog
apamurkaN uNkuита	he brought illness

There are cases in the data, however, where predicatives such as these which are automatically assumed to be transitive, occur without a formally stated neutral complement:

*ka'uarkaN ¹	he saw(it)
*ruraN	he makes(it)
mikuNsapa	they eat
*apamurkaN	he brought(it)
*žukarkaN	he climbed(it/up)
*tarirkaNsapa	they found(it)
upiaNsapa	they drink

Contraction can be quite considerable; for example:

ka'uarkani suk omikuita	I saw a monkey
ka'uarkani sukta ²	I saw one
*ka'uarkani	I saw(one/it)
apamui čai iškai patita	bring those two gourds!
apamui čai iškaita	bring those two!
apamui čaita	bring those!
*apamui	bring(them)!
čaita čurarkani čaipi	I put that there
*čaita čurarkani	I put that(there)
*čurarkani čaipi	I put(that)there
*čurarkani	I put(that there)

Cases like these are so numerous in the data that we must consider the possibility that these predicatives are not, in fact, transitives, and in the case of "čura"(put) not a complementary transitive, as our intuitions and also our English

¹ I do not use the asterisk here in the conventional way to denote a hypothetical (philological use) or unacceptable form, but to indicate a contracted form - in terms of the theory, to indicate conflation.

² Contraction within the ta syntagma is not strictly relevant to the discussion but examples have been included for illustration.

translations would tell us, but non-transitives, i.e. they may or may not occur with a neutral complement. The neutral complement is optional.

To support a hypothesis that they are non-transitives, it must be shown that the addition of a neutral complement, a double complement(i.e. a neutral and a neutral or relational complement)for "čura"(put), would in some way affect the message, providing additional information over and above what is necessary to make it meaningful. In the case of a non-transitive, the predicative alone can constitute a well-formed, and therefore meaningful, syntagm. This is true of the examples "mikuNsapa"(they eat) and "upiNsapa"(they drink), given in the first set of examples above, which can stand on their own as being meaningful. In the example "mikuNsapa uaNkanata"(they eat hog), "uaNkanata"(hog) is an expansion and not a bound element. If it cannot be shown that the predicative can stand alone as a well-formed syntagm, i.e. that it is a free nucleus, then the hypothesis that the predicatives are non-transitives is refuted. In the data, even the most contracted utterance can be understood within the context of the utterances made previous to it. The three sets of examples given above illustrate how sentences can contract to the point where only the predicatives are stated. If these predicatives are isolated from their contexts and remain meaningful, then they can be considered well-formed on their own, and the type of predicative that each is can be ascertained on this evidence. If, however, the predicative cannot be regarded as constituting a well-formed syntagm, then the type(s) of syntagm(s) required

to make it so must be ascertained and the predicative type identified on the basis of the well-formed syntagm and not on the elliptical utterance to which the syntagm corresponds, since for a syntactic analysis, the constituents are always regarded as being present, even if on the level of realisation they may not always be so. Thus as far as the present syntactic analysis is concerned, the asterisked examples in the sets of examples given above can be ignored as they are examples of contraction or, more correctly, conflation.

The definitions given on p 97 state only the syntagm types which are necessary to actualize the predicative. These are bound syntagms; all other syntagms are regarded as expansions. The superordinate predicative together with the syntagms bound to it, if any, constitutes an instance of a minimum sentence-base. Since five types of predicative have been distinguished in San Martin Quechua (not counting copulative predicatives and certain other predicative forms which do not fall within the scope of the definitions as regards transitivity of predicatives, and which will be dealt with separately below), five types of predicative-governed syntagm can be established: intransitive, non-transitive, transitive, complementary transitive and complementary intransitive; and so five types of minimum sentence-base.

5. The Intransitive syntagm.

An intransitive type of minimum sentence-base has as its sole constituent a predicative syntagm. The predicative syntagm may, itself, be of one constituent, namely the predicative nucleus, or

of more than one, but this analysis into I.C.s is carried out on a lower level than the analysis of the sentence-base into its I.C.s, which is the concern here. Examples of minimum intransitive sentence-bases are:

rina'iani ¹	I want to go
uañurkaNsapa	they died
pakčanakuk ²	he lay face down
kuska'iarkaN	it straightened up
tamiaN	it rains
pakariN	it dawns(daylight comes)
ku'iurkaN	it moved
samarakanisapa	we rested
puñui	sleep!

The model set up to account for all possible instances of the intransitive syntagm has one position, the predicative nucleus, which is a free nucleus³.

6. The Non-transitive syntagm.

The definition for 'non-transitive' is that it may or may not

¹The moneme "...na'ia.." has the rough denotation of "volition".

²For the moneme "...k", see Chapter 11, p/60

³The 'subject' of a predicative is not a bound element in San Martin Quechua; it is an expansion as will be explained later on p/08. For this reason a position for 'subject' does not figure in the models set up for the minimum sentence-bases. It must also be noted that given that there is only one constituent in the intransitive type of minimum sentence-base, it is not strictly correct to talk of a syntagm, and so of a position since a syntagm implies positions.

have a neutral complement. It differs from 'transitive' in that a neutral complement is not obligatory, i.e. it is not a bound element but an expansion, and from 'intransitive' where the notions 'intransitive' and 'neutral complement' are, by definition, mutually exclusive. An intransitive sentence-base may never have, as one of its I.C.s, a neutral complement.¹ For example, "puñuN terradupi"(he sleeps in the attic) can occur, but never "puñuN terraduta". Similarly we have "uakakuipi" occurring with the intransitive "ri"(go) in "uakakuipi rirkaN" (she went crying), but "uakakuita" with the transitive "kažari" (begin to) in "uakakuita kažarirkaN"(she began crying). A non-transitive sentence-base may have as an I.C. a neutral complement which is an expansion to the predicative nucleus. Because of this possible occurrence, predicatives of this type cannot be classified as 'intransitive', while again, because of the possible non-occurrence of a neutral complement, they cannot be classified as 'transitive'. Examples of non-transitive sentence-bases in their minimum extent are:

mikuNsapa(uaNkanata)	they eat(hog)
upiaNsapami(iNkiri iakuta)	they drink(banana juice)
šamuN(uasita)	he comes(home)
sasikuN(uatata)	he diets(for a year)
kausaNsapa(sukamaN ažita)	they live(very well)

The model set up to account for the non-transitive syntagma has two positions: predicative(nuclear) and neutral complement positions.

¹This hypothesis should, perhaps, be emphasised as being provocative.

7. The Transitive syntagm.

A transitive predicative must have a neutral complement, and thus a sentence-base which has as its nucleus such a predicative must have a neutral complement as an I.C.¹. It is a bound element which actualizes the predicative. Examples of transitive syntagms are:

tiNkurkani suk užkuta	I met a man
raNtiNsapa porotota	they buy beans
munaNkiču gananakuita	do you want to make a challenge?
ka'uaškani uaNbrataka	I have seen the child
uaňučiškaN uažpakunata	it has killed the chickens
ui'uaškaNsapa kučikunata	they have reared pigs
apirkaN pumata	he seized the puma

A transitive sentence-base in its minimum extent is analysable into two I.C.s. The model for this type of syntagm has two positions: predicative(nuclear)position and neutral complement (bound peripheral)position.

8. The Complementary Transitive syntagm.

A complementary transitive predicative must have a neutral complement and a neutral or relational complement to actualize it. Generally, complementary transitive predicatives have a neutral and a relational complement. The provision of a second neutral complement as an alternative to a relational complement

¹That is to say, the predicative is classified as 'transitive' by virtue of the fact that a neutral complement always co-occurs.

has been made to account for those predicatives which require two neutral complements to actualize them, e.g. "uaNbrakunata kurkaN kužkita" (he gave the children money). It could be argued that a separate class should be set up for this type of predicative; however, as the class would have only a few members were it to be set up, I have opted to allow for its classification within the class of 'complementary transitive' by the definition of that predicative type. Examples of complementary transitive predicatives, and thus of complementary transitive syntagms are:

uarmiinita kačani Čaipi	I send my wife there
patipi Čurapai iakuta	put water in the gourd for me
paita kurkani tukui demandaNta	I gave him all he asked for

The model for the complementary transitive syntagm has three positions: predicative(nuclear)position and two complement (bound peripheral)positions, one of which is the neutral complement position.

9. The Complementary Intransitive syntagm.

Complementary intransitive predicatives must have a relational complement to actualize them, but cannot have a neutral complement. There are many intransitive predicatives in San Martin Quechua which do not occur frequently without a relational complement. This relational complement is, however, an expansion to the predicative, and is not essential to its status as a well-formed syntagm, this being shown by the

occurrence of the predicative in what can be described as a pure intransitive context, i.e. where the predicative stands alone as the sole constituent of a syntagma corresponding to a sentence, and is a well-formed (therefore, meaningful) utterance. The example of intransitive "urma" (fall) illustrates the problem facing the descriptivist when distinguishing between bound elements and expansions in the classification of predicatives. The predicative "urma" is found in the data together with a relational complement so frequently that there is the temptation to classify it as a complementary intransitive, for example:

uasikuna ŽiNpamaNta urmaNči	we fall from the roof tops
urmaNči kaspimaNta	we fall from trees
iakupi urmamurkaN	he fell into the water

However, an instance of "urma" found in the data as a well-formed utterance on its own, i.e. without the co-occurrence of a relational complement, e.g. "urmamurkaN" (he fell), refutes the hypothesis that "urma" is a complementary intransitive. It cannot be shown to be an elliptical realisation.

Examples of complementary intransitive syntagms are:

maN žukšiNču kai Pišua'ia žaktamaNta	it did not leave this town of Pishwaya
tataNpi ri'kurimurkaN	he appeared before his father
suk užku masi kiparirkaN žaktamaNta	the fellow stayed away from the town

The model for a complementary intransitive syntagma type has two positions: predicative (nuclear) position and relational

complement (bound peripheral) position.

10. Models of the predicative-governed syntagms (synopsis).

If the models of the different types of predicative-governed syntagms are brought together, their respective structures can be compared at a glance. The syntagma takes its name from the type of predicative which stands as its nucleus.

	<u>nuclear position</u>	<u>peripheral position(s)</u>
intransitive:	predicative	
non-transitive:	predicative	[neutral complement]
transitive:	predicative	neutral complement
complementary transitive:	predicative	neutral complement relational complement
complementary intransitive:	predicative	relational complement

Instances of these:

	<u>nuclear position</u>	<u>peripheral position(s)</u>	
intransitive:	puñurkaN		(1)
non-transitive:	uižarkaN	[uairata]	(2)
transitive:	uañučiškaN	uažpata	(3)
complementary transitive:	čurarkani	iakuta patipi	(4)
complementary intransitive:	žukširkaN	uasiNmaNta	(5)

[Translations: (1) he slept (2) he said [to the wind] (3) he killed a chicken (4) I put water in the gourd (5) he went from his house]

The neutral complement position of the non-transitive syntagma is bracketed to show that elements which occur in this position are not bound but expansions. Non-transitive is the only syntagma type in which a peripheral element which is not a bound element but an expansion can occur. Expansions can, and do, occur with all the syntagma types, but these are outside the syntagma which is under discussion here. Only bound elements (excepting the case of the non-transitive syntagma) are accounted for in the models given above.

11. 'Subject'.

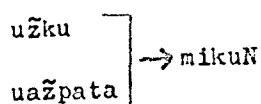
The 'subject' of the predicative in San Martín Quechua must be regarded as an expansion, and not, as in English for example, as a bound element. In San Martín Quechua, both number and person are expressed within the form of the predicative; no nominal or pronominal element is required to actualize the predicative, as will be seen from many of the examples given in this chapter. Thus in "ua'uaini puñuN"(my child is sleeping) or "pai ka'uAN pumata"(he sees a puma), for example, "ua'uaini" (my child) and "pai"(he) are expansions to the predicative, adding extra information value to "puñuN"(he is sleeping) and "ka'uAN pumata"(he sees a puma) respectively, which are well-formed utterances without the presence of a subject. The element which stands in 'subject' position is not a bound element, i.e. it does not actualize the predicative; for this reason 'subject position', as also other peripheral, not bound, positions, is not included in the models for the syntagms given above.

12. The relations between the elements and occurrence dependency in the syntagms.

With regard to realisations of the syntagm types, there is no formal ordering of the elements. Each peripheral syntagm is unambiguously marked with respect to its relation to the nuclear predicative: "...ta" shows the relation of a neutral complement, any of the relational elements marks the relational complement relation, and the subject relation is marked by the non-presence of "...ta" or a relational element.¹ For example, the elements "užku"(man), "mikuN"(eats) and "uažpata"(chicken, neutral complement), as I.C.s of a transitive syntagm, can be realised in any sequential order and be meaningful:

užku mikuN uažpata
užku uažpata mikuN
mikuN uažpata užku
mikuN užku uažpata
uažpata mikuN užku
uažpata užku mikuN

From this, we may say that determination is always parallel, i.e. the peripheral I.C.s are subordinated to the same predicative nucleus, but it cannot be ascertained that they do so in different ways(see Def. 14b). The relations between the elements can be given in a diagram as follows:



¹ There is no sign for "subject" in San Martín Quechua. The subject is denoted by the unmarked form; e.g. "uasi"(house) as opposed to "uasita"(neutral complement), "uasipi"(in the house) etc.

This is distinct from languages, English being an example, where the formal ordering of elements is also functional: the ordering of the elements standing in the subject and object positions in relation to the predicative is relevant as an indication of syntactic function. This is diverse determination. I shall put forward here as a hypothesis that there is no diverse determination in San Martin Quechua, only parallel determination.¹

The models for the predicative-governed syntagms show only the nuclear, predicative, position and the bound, peripheral, positions, if these are established. Where there are bound positions in the syntagms, we have, in terms of occurrence, examples of occurrence inter-dependency, i.e. the predicative may not occur without the bound element, and the bound element may not occur without the predicative (see Def. 12a). Transitive, complementary transitive and complementary intransitive syntagm types all give examples of occurrence inter-dependency. The non-transitive syntagm type is distinct since the peripheral element is not bound, but an expansion. A non-transitive predicative may occur on its own, without the peripheral element; the peripheral element, however, may not occur without the predicative. Non-transitive syntagm types are examples of unilateral occurrence dependency (see Def. 12b). There is only one element involved in the intransitive syntagm type, namely the predicative, so there is no case for occurrence dependency.

¹ It has been noted in a footnote (p 91) that this hypothesis could be refuted on the grounds of there being formal ordering between the two ta syntagms co-occurring where one ta syntagm stands as the direct object and the other as the indirect object of the predicative.

13. Instances of superordinate predicative-governed syntagms.

Where instances of superordinate predicative-governed syntagms occur in syntagms of greater extent than their own, they form the nuclei of the larger syntagms which correspond to sentences in the data. They cannot be subordinate to any other (higher level) syntagm type, i.e. they always constitute the governing syntagms. The syntagm types intransitive, non-transitive etc. occur in a relation of subordination only when the predicative nucleus of the syntagm in question shows the form of a subordinate predicative. The syntagm types, as discussed above as minimum sentence-bases, have as their nuclei superordinate predicatives.

On their own, superordinate predicative-governed syntagms can correspond to sentences, or they can occur in coordination with each other to form one sentence-base, e.g.

čaimanta/ kuadernuta apinsapa lapista apinsapa nota baxuta
surkuNsapa(then/ they take a note book, they take a pencil,
they get out a low price sheet)

kai brokana kuruna ča'iamuškaN kai kuruna ŠamuškaN(this thread
worm has now arrived, this worm has now come)

Contrastive para-syntactic features of clause intonation enable us to distinguish these as single sentences and not as two or more separate sentences.

The above are straightforward examples of superordinate predicative-governed syntagms standing in a relation of coordination with each other. Superordinate predicative-governed syntagms may be found realised in another way as illustrated

in the following examples:

maskamuNsapa apamuNsapa suk iškaita (they look for, they take one or two)

čairaku/ čai bruxuka čiknirkaN uarmiinita ūakarkaN iaka uaňučirkaN (because of that/ that witch hated my wife, he cursed(her), he almost killed(her))

In each of the above examples, the bound peripheral element, the neutral complement in each case, is subordinated to two or more nuclear predicatives. The problem for the description is to discern whether the neutral complement is subordinated to each predicative separately, in which case these are examples of conflation (see Def. 21), and thus syntactically speaking there are two or more predicative-governed syntagms standing in a relation of coordination with each other, or whether there is one predicative-governed syntagm where the neutral complement, as one I.C. of the syntagm, is subordinated to the predicatives standing together as another I.C. (the nuclear I.C.) of the syntagm.

To hypothesize conflation, the non-occurrence of the neutral complement "uarmiinita" (my wife) with "ūakarkaN" (he cursed) and "iaka uaňučirkaN" (he almost killed) would have to be shown to constitute a defective realisation of "čai bruxuka čiknirkaN ūakarkaN iaka uaňučirkaN"¹. That is to say, it would have to be shown that the only syntactically acceptable form

¹ For the purpose of this particular discussion, the analysis of the sentence-base as given above into two I.C.s "čairaku" (because of that) and "čai bruxuka čiknirkaN uarmiinita ūakarkaN iaka uaňučirkaN" (that witch hated my wife, he cursed(her), he almost killed(her)), is taken as performed.

of this utterance is:

čai bruxuka čiknirkaN uarmiinita ūakarkaN uarmiinita iaka
uañučirkaN uarmiinita (that witch hated my wife, he cursed my
wife, he almost killed my wife)

which would then be analysed as three coordinating predicate-governed syntagms:

(čai bruxuka čiknirkaN uarmiinita) ↔ (ūakarkaN uarmiinita) ↔
(iaka uañučirkaN uarmiinita)

The absence of the element "čai bruxuka" (that witch), which stands in the subject position of the syntagm "čai bruxuka čiknirkaN uarmiinita" from the other two syntagms cannot be said to constitute defective realisation in either one, since this element is an expansion and not a bound element. The neutral complement, on the other hand, is essential to actualize the predicatives, which are known, from elsewhere in the data, to be classifiable as transitives. Hence the hypothesis of conflation: that each predicative must have a neutral complement to actualize it.

To hypothesize that this is not an example of conflation is not to deny in any way the function of the neutral complement with respect to the predicatives "čiknirkaN" (he hated), "ūakarkaN" (he cursed) and "iaka uañučirkaN" (he almost killed). The action denoted in each of the predicatives is directed to the same person, namely "uarmiinita" (my wife), and to treat the syntagm "čai bruxuka čiknirkaN uarmiinita ūakarkaN iaka uañučirkaN" (that witch hated my wife, he cursed (her), he almost

killed(her)) as an example of one predicative-governed syntagm, and not as three coordinating syntagms, is to recognise the "togetherness" of the elements. On the first level of analysis there are three I.C.s:

0. čai bruxuka čiknirkaN uarmiinita ūakarkaN iaka uañučirkaN

1. čai bruxuka čiknirkaN ūakarkaN uarmiinita iaka uañučirkaN

On the second level of analysis, i.e. in analysing the second I.C. of the syntagma, the predicatives "čiknirkaN"(he hated), "ňakarkaN"(he cursed) and "iaka uaňučirkaN"(he almost killed) stand in a relation of coordination with one another; on the first level of analysis they constitute the nuclear I.C. of the syntagma. The neutral complement "uarmiinita"(my wife) stands in a relation of subordination to the nuclear I.C. as the bound peripheral element necessary to actualize the predicatives.

Such a hypothesis is adequate, consistent and simple in a way that a hypothesis of conflation is not. If the latter hypothesis were to be forwarded, then defective realisation of utterances of the type given above and of the type "tarpurkaNsapa rumuta porotota plaNtanuta"(they planted yuca, beans, bananas), neither of which are infrequent in the data, would have to be asserted on every occasion. That is to say, for a syntactic analysis the utterance "tarpurkaNsapa rumuta porotota plaNtanuta" is "tarpurkaNsapa rumuta tarpurkaNsapa porotota tarpurkaNsapa plaNtanuta". This is obviously cumbersome, and ultimately an inadequate description as it fails to recognise the possibility

of coordination between constituents of an I.C. of a syntagm, in this case a superordinate predicative-governed syntagm.

As has been seen in the examples given above, coordination between constituents of an I.C. of a predicative-governed syntagm can occur in the nuclear I.C. or in the peripheral I.C. In the latter case, the constituents stand in a relation of subordination to the predicative nucleus, and in a relation of coordination with one another. For example:

(rumuta \leftrightarrow porotota \leftrightarrow plaNtanuta) —————> tarpurkaNsapa

14. Transitive syntagm (cont.).

Where a transitive type of predicative, i.e. a transitive, non-transitive or complementary transitive, occurs with a personal pronoun as neutral complement, then that neutral complement may be expressed within the form of the predicative. For example, "he sees me" is not expressed in San Martín Quechua as "*ñukata ka'uaN" but as "ka'ua'uaN" where the underlined element ".ua.." denotes "first person" in the neutral complement position. Where this occurs, I call the transitive syntagm 'abbreviated'¹ and the neutral complement an 'abbreviatory element'². The following are examples of abbreviated transitive syntagms, i.e. where the personal pronoun

¹ It should be pointed out that the term 'abbreviated' reflects the formal aspect of the realised syntagm and has no bearing on the syntactic function of the transitive predicative or neutral complement.

² 'Abbreviatory' is merely a label comparable to, and in line with, the label 'abbreviated' above, and is not a syntactic notion.

in neutral complement position is incorporated in the form of the predicative; I have given the unacceptable non-abbreviated forms in brackets to assist comparison between the two:

tari'uarkaNsapa	they found me	(*tarirkaNsapa ñukata)
uañučišuNkisapa	they kill you	(*uañučiNsapa kaNta)
munašuNkiči	he likes you all	(*munaN kaNkunata)
ianapa'uaNki	you help me	(*ianapaNki ñukata)
maskaiki	I look for you	(*maskani kaNta)
uaktaku'uaNči	it throws us off	(*uaktakuN ñukaNčita)
iškai solesta kuiki	I give you two sols	(*iškai solesta kaNta kuni)

Not all of the possible relations between first, second and third persons, singular and plural, in subject and neutral complement positions can be realised in abbreviated form in San Martin Quechua.¹ The relations which are expressed in this manner are:

<u>subject person</u>	<u>neutral complement person</u>
first sing. and pl.	second sing. and pl.
second sing. and pl.	first sing. and pl.
third sing. and pl.	first sing. and pl.
third sing. and pl.	second sing. and pl.

¹ Strictly speaking, this is not correct as the person of the predicative is incorporated in the form of the predicative, so that there is no obligatory subject position (unlike English, but like Latin, Greek, Spanish etc). I use the term 'subject' loosely here to refer to the person endings of the predicative, i.e. "...ni", "...Nki", "...N" etc.

Not expressed in this way are:

<u>subject position</u>	<u>neutral complement position</u>
first sing. and pl.	third sing. and pl.
second sing. and pl.	third sing. and pl.

That is to say, there is no abbreviatory element for third person when it stands in the neutral complement position; it is always realised as "paita"(third person singular) or "paikunata"(third person plural), e.g.

munani paita	I want him
ka'uanki paikunata	you see them

Abbreviatory elements such as "...ua.." are generally regarded as monemes which, in Axiomatic Functionalist terms, means that they form part of the simultaneous bundle of monemes which is the predicative. Similarly classified as a moneme, and which, as far as this description is concerned, can be treated alongside the abbreviated personal pronoun elements, is the moneme "...naku.." expressing reciprocity. This moneme also occurs within the form of the predicative, and its occurrence in the predicative excludes the occurrence of a neutral complement in the neutral complement position. The following are some examples of predicatives with "...naku..":

makanakuNsapa	they fight one another/among themselves
uañučinakuNsapa	they kill one another
pagaračinakuNsapa	they make each other pay

Classified as monemes, these elements stand, syntactically speaking, as part of the predicative in the nuclear position of a predicative-governed syntagm.¹

Predicatives which can incorporate these monemes have been classified as transitive-predicative types, i.e. they must, or may, have a neutral complement. When they incorporate these monemes, however, the neutral complement is not realised; that is, the neutral complement position is always empty. For example:

predicative position	neutral complement position	
ka'uani	omikuita	(I see a monkey)
ka'uani	paita	(I see him)
ka'ua'uaN	X	(he sees me)
ka'uaiki	X	(I see you)
čikniNsapa	soldadukunata	(they hate the soldiers)
cikninakuNsapa	X	(they hate each other)

This can mean one of two things: either that the predicatives have been wrongly classified, or that the abbreviatory elements incorporated in the predicatives are not monemes, i.e. we are not dealing with simultaneous bundles of monemes but with syntagms.

Taking the first alternative first, we note that in all instances, except for the instances where the neutral complement is expressed in abbreviated form within the form of the predicative, the predicatives in question are transitive-type

¹Classification is not simply putting into categories; by classifying an entity in a certain way, a statement is made about the function of that entity.

predicatives, i.e. they must have a neutral complement. However, for the sake of consistency in the description, for those instances where the personal pronoun or ".naku.." is incorporated in the form of the predicative, the predicatives must be classified as non-transitive, i.e. may or may not have a neutral complement, since the neutral complement position always remains empty in these cases. This is obviously not a satisfactory solution, yet it is the only solution if the abbreviatory elements ".ua.." etc., and the element ".naku.." are classified as monemes.

To my knowledge, a challenge has not been made that these elements are not monemes, yet it is quite possible that they are not monemes but pleremes. Morphological analyses done on Quechua dialects to date have been performed on the basis that a word coincides with a phonological unit. Thus, "uasipi"(in the house), "ñukata"(me, neutral complement), "maskanakuNsapa"(they look for one another), "ka'ua'uaN"(he sees me) for example, are words analysable into monemes. Because the syntactic studies on Quechua have been so brief and superficial, syntax being regarded as secondary to morphology in the language, the implications of these morphological analyses for a syntactic analysis have not been questioned.¹

To classify these elements as monemes, and so to regard them as part of the predicative in which they occur, is a contradiction in terms when the rough denotation of ".ua..",

¹ Even recent studies which lay greater emphasis on syntax and semantics, including descriptions of the transformational type, do not reappraise but rather reiterate unquestioningly statements regarding the status of grammatical elements made in earlier linguistic descriptions of Quechua.

for example, is given as "first person object" (or in this work "first person, neutral complement"). The term 'neutral complement' immediately implies a syntactic relation which cannot be allowed if "...ua.." is a moneme. If, however, "...ua.." is regarded as a plereme, and assigned to the neutral complement position, this accounts syntactically for the semantic relation between doer and recipient of an action which cannot be accounted for if "ka'ua'uaN" (he sees me), for example, is regarded as a simultaneous bundle of monemes and therefore as one syntactic unit. The neutral complement is realised in every instance of an abbreviated transitive syntagm, although not by way of the recognised neutral complement marker "...ta". That these elements commute with other instances of the neutral complement in transitive syntagms also lends weight to the hypothesis that they are not monemes but pleremes: "ka'ua'uaN" for example commutes with "ka'uaN paita" (he/she sees him/her), "ka'uaN pumata" (he sees a puma), etc. For example:

predicative position	neutral complement position	
ka'ua...N	..ua..	(he sees me)
ka'uaN	pumata	(he sees a puma)
ka'uaNki	paita	(you see him)
ka'ua...N...	..su..ki ¹	(he sees you)
uañuči...Nsapa	..naku..	(they kill each other)
uañučiNsapa	uažpata	(they kill a chicken)

¹ I acknowledge here D. W. Howkins' study on these predicative forms in Quechua. This is the only existing analysis which has separated the subject forms from the neutral complement forms in all of the abbreviated transitive predicative forms.

The fact that, in realisation, these neutral complements occur within the form of the predicative to which they are bound does not affect the analysis, since, in terms of the theory, a plereme need not be a discrete linear unit coinciding with a discrete phonological unit or word. It is not established according to its correspondence to a phonological word though it may, in the majority of cases, coincide with a phonological word, but by its 'position' (function) and 'identity' in grammar, i.e. by purely grammatical criteria. The elements under discussion in this section can be shown to have syntactic function, and must therefore be given the status of pleremes. They are of lesser extent than one phonological word, being realised either in continuous or discontinuous form, within the form of the predicative which corresponds to one phonological word.¹ These are the only occurrences of neutral complements which are not marked by the neutral complement marker "...ta": first and second, neutral complement, personal pronouns, and "...naku..", expressing reciprocity.

15. The copulative predicative.²

The term 'copulative predicative' is that which I give to the element "ka..." the copula, together with its complement.

¹ For a plereme to be of less extent than one phonological word is not strange. In English, for example, one finds such cases as the genitive "'s" which is a plereme.

² The following three sections which deal with the copulative predicative, non-predicative predicates and the element "ti'ia" constitute an area in the description of syntactic relations in San Martin Quechua which would benefit from a more penetrating study than has been possible here. In the present description, I have limited myself to forwarding hypotheses which could(over)

The element "ka.." combines with monemes expressing person and time which are exclusive to predicative forms, e.g. "kani" (I am), "karkaN"(he was), "kaptiN(he was, in a subordinate relation). In this description I forward the hypothesis that "ka.." cannot itself be regarded as a predicative; rather it makes predicatives out of the elements with which it co-occurs. That is to say, the predicative function which can exist in a non-predicative element is usually transferred to the copula "ka..". The following give a representative selection of the copulative predicative:

čai kaspi karkaN bana sexu(that tree was a "bana sexu"/ it was a "bana sexu" tree)

manaN kai la'iaču karkaN ua'uainika(my child was not this kind)

sukamaN siNči runa karkaN(he was a very strong man)

maN uarmi'iukču karkaN čai uainaka(that young man was wifeless
lit. not with woman)

manaN ūakaduču kaNki(you are not bewitched)

parladumi kani/ suk ūipašuaN(I am engaged/ to a young woman)

kaNka kaNkimi sukamaN aragaN(you are very idle)

čaikuna karkaN ūuka'uaN(they were with me)

čaimaNta/ pička čuNka metrupina karkaN uasiNkunamaNta(then/
it was just fifty metres from their house)

manami mama kaNnaču ūužuka čaipi(mother, the little one is
not there now)

1(cont.) well require revision, should a more detailed study be made, and to giving examples of the occurrences of the elements under discussion.

The model set up to account for instances of the copulative predicative is as follows:

copula	complement to the copula
--------	--------------------------

The complement to the copula may be a nominal-governed syntagma, e.g. "sukamaN siNči runa karkaN" (he was a very strong man), or an adjectival syntagma, e.g. "parladumi kani" (I am engaged) or a relational complement, e.g. "čaikuna karkaN ūuka'uaN" (they were with me).

As with other predicative syntagms, there is no obligatory subject with the copulative predicative. The 'subject' of the predicative is expressed by a moneme denoting person which occurs within the form of the copula. Where a subject is stated explicitly, apart from person and number as expressed in the form of the copula, it is an expansion. As regards the realisation of the copulative predicative, either the copula or the non-predicative element can be realised before the other. Where a subject is stated explicitly, this may be realised before the copulative predicative or after it. In the first example below, the subject is realised first, and in the second example, it is realised after the copulative predicative:

kaNka kankimi sukamaN aragaN (you are very idle)
 manaN kai la'iaču karkaN ua'uaNika (my child was not this kind)

16. Non-predicative predicates.

Adjectives and nominals, in San Martín Quechua, may exhibit predicative function without that function being indicated by the presence of the copula "ka..". For example:

uakinka bruxu maN tukuiču (some (are) witches, not all)

mana uNtaika alabaduču (the current (was) not praised)

kai ixuini parladu (this my son (is) engaged)

manami siNka'iukču kai uainaka (not a possessor of a nose (is) this young man)

ua'uainika maNžaiba siNkasapami (my little one (has) a huge nose)

sukamaN iaku eskasomi (water (is) very scarce)

čai iškai užku uaNbrakuna sukamaN traNperu likidu (those two boys (are) trap-setting mad)

kai runaka sukamaN traga likidu (this man (is) a really big eater)

kamaNkunaka ia'uar likidu (their beds (are) all blood (covered in blood))

manaN kai uarmika mamainika (this woman (is) not my mother; lit. not this woman (is) my mother)

čaižaka mana uarmiini (that (person) (is) not my wife)

mana uarmiiniču kaika supaimi (not my wife, this (is) the devil; this (is) not my wife (but) the devil)

Because there is no copula in which the subject person can be expressed, the subject, and so the subject position, is obligatory. The model for non-predicative predicates is one of two positions: subject position and non-predicative predicate.

Non-predicative predicates tend not to occur as I.C.s of

larger syntagms. Rather, they constitute on their own syntagms which correspond to sentences. Copulative predicatives may occur as I.C.s of larger syntagms corresponding to sentences, and in these larger syntagms they may, according to the form of the copula stand as the nuclei of the syntagms or in a relation of subordination to a higher level predicative, not necessarily the nuclear predicative. That is to say, they function as predicative-governed syntagms.

17. The element "ti'ia..".

The element "ti'ia.." could be said to have a denotation roughly equivalent to that of "ka..", differing from "ka.." in that it does not relate a person or thing to something else, but "fixes" the subject with which it occurs in reality.¹ Its form is invariable; it occurs in the third person only, i.e. "ti'ia_N"² (the only modification being the presence, where appropriate, of monemes which are common to all predicatives in San Martín Quechua, such as those denoting time, e.g. "ti'iarka_N" (there was/there were), or which indicate that it

¹The element "ti'ia.." seems to be peculiar to the northern dialects of Quechua. From Ecuadorean Quechua, P. Camilo Mugica, in Aprenda el Quichua (pl5) gives the examples: "pischu yuraptian" (the bird is in the tree/there are birds in the tree), "Abelpa huasipi chuscu runa tian" (in Abel's house there are four men) in which, as in comparable examples from San Martín Quechua, the element 'tian' makes predicatives out of the nominal elements "pischu" (bird) and "chuscu runa" (four men) respectively. In the southern dialects no element "ti'ia" seems to occur; rather the copula "ka.." is used in contexts analogous to those in which "ti'ia.." occurs in the northern dialects; e.g. "fiestakunan kan" (there are festivals; Hoggarth, St. Andrews, 1970; Cuzco Quechua), "kanmi wasi" (there is a house; Parker, op. cit., p49; Ayacucho Quechua), "mexor (over, and also Footnote 2)

stands in a relation of subordination, e.g. "ti'iaptiN"(when there was/there were)), and it is bound to the subject element which it actualizes, I forward the hypothesis here that, like "ka..", "ti'ia.." cannot be regarded as a predicative; it is more like an actualizer to the subject to make this a predicative, and for the purposes of this description I label it an "actualizer", though it should be remembered that any bound peripheral element is an actualizer in the terms of the theory. The following are some examples of the occurrences of "ti'ia..":

ti'iaN suk sižužana balaini(there is just one of my bullets)
 Žamui kai kaipi/ ti'iaN kaškaN suk omikuika(come here/ there is a monkey again)

kunaNkamaN/ pesteka ti'iaN kai Žaktapi(up till the present/ there is disease in this town)

ti'iarkaN suk užku masi(there was this man companion)
 medikukunapiš ti'iaN(there are also shamans)

ti'iarkaN kiNsa užku ua'uaNkuna(there were three boys)
 manaN kai Žaktapika iaku ti'iaNču(there is not water in this town)

ti'iaNmi suk rarka anakpi iaku(there is, beyond the gorge, water)

ti'iarkaN suk iNčik sestu(there was a peanut basket)

1(cont.) kuka kan"(there is better coca; Escribens, op. cit., p21; Huaylas Quechua).

2 Examples of the exception to this are given below, p128.

ti'iarkaN Čai Žaktapi montoN soldadu (there were, in the town, many soldiers)

When a relational complement, which has as its nucleus the relational element "...pa", roughly denoting "possession", occurs with "ti'ia..", "ti'ia.." is said to denote "possession". For example:

tatainipa suk besti'ia ti'iaN (my father has a horse; lit. there is a horse belonging to my father)

ti'iarkaN paikunapa suk užku ua'ua (they had a baby boy; lit. there was belonging to them a baby boy)

ñukapami ti'iaN suk eskopetaini (I have my gun; lit. there is a gun belonging to me)

That "ti'ia.." translates into English as "to have" in these syntagms does not have any significance as far as its function is concerned, as the more literal translations show. "Ti'ia.." still functions as 'actualizer of the subject', the moneme "...pa" indicating the possessive relation between the possessor and the subject. This is also true for those examples where the moneme "...pa" or its variant form "/...pu/", as is more commonly realised in these instances than is "/...pa/" denoting possession, occurs within the form of the actualizer. It is interesting to note that the possessor of the subject actualized by "ti'ia.." is also realised within its form, though the implications of this may be of more significance for a morphological analysis than they are for a syntactic one. The function of "ti'ia.." does not change when it incorporates

"..pu.." expressing possession, or personal monemes such as ".Nsapa"(third person plural). For example:

ti'iapuNsapa tukui la'iaNkuna(they have all kinds(of things);
lit. there are to them all kinds(of things))
mana besti'ia ti'iapuNcu(he does not have a horse; lit. there
is not to him a horse)
suk uasi ti'iapuN(he has a house; lit. there is to him a house)

In the examples given above of "ti'ia..", the subject has always been a nominal element. It is possible, in San Martín Quechua, that a form of the predicative be assigned to this position and when this happens it can be translated as expressing obligation¹. For example:

rinaini ti'iaN(I must go)
pagarakunaNkuna ti'iaN(they must pay)
kutiçimu'uanaiki ti'iaN uaNbrainita(you must return to me my
child)

Translations are designed to give no more than rough equivalents of meaning in English. The meaning of "rinaini ti'iaN"(I must go), for example, could be given as "there is that I go" which would be a rendering more faithful to the

¹The use of "ti'ia.." in this context is not found in every dialect of Quechua. For Ecuadorean Quechua, Mugica, op. cit., p43, "huasima rina cani"(I must go home), which is comparable to southern dialects, e.g. "puñunaykim karqa"(you had to sleep; Parker, op. cit., p60; Ayacucho Quechua), "mikhunay kanqa"(I shall have to eat; Hoggarth, St. Andrews, 1970; Cuzco Quechua). In all of these the copula "ka.." is used. However, Lastra documents it for Cochabamba Quechua, op.cit., p65, "eskewela-mampis rinañan tiyan"(he has to go to school already).

Quechua, but which would not be regarded as acceptable English. Although it can be translated into English in different ways depending on the elements with which it co-occurs, in every instance of "ti'ia.." it can be regarded as an actualizer of the subject element. As an I.C. of a syntagma, "ti'ia.." together with the element it actualizes may occur as the nucleus of a sentence-base, or in a relation of subordination to a higher level predicative. In this, it can be classified together with the predicative-governed syntagms of San Martin Quechua.

CHAPTER 11

EXPANSIONS TO THE MINIMUM SENTENCE-BASE(1) -

SUBORDINATE PREDICATIVE-GOVERNED SYNTAGMS

1. Types of expansion to the sentence-base.

The superordinate predicative-governed syntagm, or the nucleus of the sentence-base, may be expanded in one, or more than one, of the different ways possible in San Martín Quechua. Disregarding for the present those elements such as "čairaku"(therefore) and "čaimanta"(then), which are peripheral to predicative based syntagms, I have distinguished three types of expansion possible:

nominal-governed syntagm

subordinate predicative-governed syntagm

complement syntagm

A nominal-governed syntagm, as an I.C. of a sentence-base, stands in the subject relation to the predicative nucleus.

'Complement syntagm' is a term embracing syntagms which are governed by the neutral complement marker "...ta" and syntagms governed by a relational complement marker, e.g. "...pi"(in, on, at), "uaN"(with). As expansions to the nucleus of the sentence-base, all three types of syntagm listed above may co-occur with one another as I.C.s of a sentence-base, though in San Martín Quechua there may be only one subject expansion to the nucleus.

The type of expansion to a minimum sentence-base may be

dictated by the type of predicative which stands as the nucleus of that sentence-base, just as the occurrence or not of bound, peripheral elements depends on the predicative nucleus. Thus, an expansion to an intransitive syntagm type, i.e. a syntagm which has an intransitive predicative nucleus, can never be a neutral complement, but may be a relational complement, while transitive and non-transitive syntagm types may be expanded to include neutral and/or relational complements. For example:

ñuka/ rirkani/ kai Sisa ŽaktamaNta(I/ went/ from this town of Sisa)

uirata mikuNsapa/ uatapi(they eat fat/ for a year)

tar'uarkaNsapa/ moNtoN iščimita sa'uainipi(they found me/ (with) lots of ants on top of me)

ñukami/ iaku ukupi/ kausani(I/ in the water/ live; I live in the water)

patipi čurapai iakuta/ upianainipa(put water in the gourd/ so that I may drink)

ŠamulNkimaN/ rumuinita surkuita(you may come/ to pull my yuca)

kapariipi/ rirkani(shouting/ I went)

čai biudaka/ žukširkaN ŽaktamaN/ maNčakui'uaN(that widower/ came out to the town/ frightened)

The slant lines indicate the analyses of the sentence-bases into I.C.s; these are the I.C.s of the sentence-base. The nuclei of the sentence-bases, i.e. the superordinate predicative-governed syntagms, are underlined. In each example there is a complement expansion, and in some of the examples, a subject

expansion. On the first level of analysis, no distinction can be made between nominal complements and predicative complements, i.e. between the types of syntagma which the neutral or relational complement marker governs.¹ This analysis is performed on a lower level than that of the first. On the first level of analysis, the type of syntagma which the neutral or relational complement marker governs is not relevant, since on this level it is the neutral or relational complement as a whole (be it analysable into nominal or predicative) which is an I.C. of the sentence-base and an expansion to the nucleus. Thus, while there are instances of subordinate predicative-governed syntagms in the above examples, they do not stand in a direct relation with the nucleus of the sentence-base; their relation with the nucleus, i.e. the superordinate predicative-governed syntagma, is an indirect one via the neutral or relational complement marker which governs that syntagma. The subordinate predicative-governed syntagms discussed in this chapter are those which stand in a direct syntactic relation with the nucleus of the sentence-base, namely one of subordination.

2. Subordinate predicative-governed syntagms as expansions to the nucleus of the sentence-base.

Where expansion to the sentence-base takes the form of a

¹The first four examples given have what would be analysed, on a lower level, as nominal neutral and/or relational complements; the second four examples show predicative complements. Both types of complement will be described in the following chapter.

subordinate predicative-governed syntagm, the predicative nucleus of this syntagm is readily distinguishable as being in a relation of subordination to the nucleus of the sentence-base as it never has the same form as the predicative nucleus of the sentence-base.¹ That is, the relation of subordination is indicated in the form of the subordinate predicative as opposed to the form of the superordinate predicative. In San Martín Quechua, I have distinguished two subordinate predicative forms on this, the first level of analysis, i.e. predicatives which stand in a relation of subordination to the predicative nucleus of the sentence-base. The different forms of the subordinate predicatives express different time relations between the subordinate predicative-governed syntagm and the superordinate predicative-governed syntagm. The two types of subordinate predicative-governed syntagm are those syntagms which have as their nuclei predicative forms which incorporate a "...spa..." or "...pti..." moneme², or those which have as their nuclei predicative forms with a "...k" moneme³. The difference between the two types of syntagm is not one of function or of internal structure, but is of a denotational nature.

3. The subordinate "...spa/pti..." predicative-governed syntagm.

The two forms of predicative incorporating a "...spa" or a

¹ See Chapter 1, p 83.

² The moneme "...pti" may be realised alternatively "...kti" in San Martín Quechua.

³ This moneme should not be confused with the superordinate predicative moneme "...k" which roughly denotes "narration". This will be discussed later on p 160.

"...pti" moneme are different realisations of the one type of subordinate predicative-governed syntagm. That is, both "...spa" subordinate predicatives and "...pti" subordinate predicatives express the same time relation to the nuclear predicative. As a general rule, the difference in form indicates either concord of person with that of the superordinate predicative, or a discord of person. Where there is concord, i.e. where the person of the action or state expressed by the subordinate predicative is the same as the person of the superordinate predicative, the moneme "...spa" is found in the form of the subordinate predicative, e.g.

čaita rurašpa/ rirkani(having done that/ I went)

The "...spa" of "rurašpa" indicates that there is agreement of persons between the two predicatives; in both cases the first person singular expressed in the superordinate predicative "rirkani" is the subject. Where the person of the subordinate predicative differs from that of the superordinate predicative, "...pti" is found in the subordinate predicative form. Together with "...pti" occurs a person indicator marking the subject of the subordinate predicative, and so marking the difference in subject from subordinate to superordinate predicative¹, e.g.

čaita ruraptiN/ rirkani(his having done that / I went)
when he had done that

¹ While this is a general rule, there are instances in the data where, despite concord of persons in the two syntagms, the subordinate syntagm is governed by a "...pti" predicative. These instances, few in number, tend to occur in stories and should perhaps be regarded as constituting a marginal phenomenon. The form of the subordinate predicative, as "...spa" or "...pti"(over)

The time context is marked only in the superordinate predicative, i.e. the monemes for "past", "future" etc., occur only in the form of the superordinate predicative.

Traditional grammars classify "...spa/pti..." predicative forms as 'gerunds' or 'gerundives', while some modern linguistic descriptions regard them as 'nominalizations'¹ on the grounds, perhaps, that the person indicators of the "...pti" predicative forms are those which are found suffixed to nominals: e.g. "pagariptiNkuna"(their paying), "uasiNkuna"(his houses), as opposed to "pagariNsapa"(they pay). The monemes "kuna" and "sapa" roughly denote "plural"; the latter is found only in superordinate predicative forms. In this description, I choose to make a distinction not so much between predicative and nominal(though obviously this distinction is made between elements which occur in a truly predicative context and those which occur in a truly nominal context as defined by the description), as between superordinate and subordinate. The person monemes, e.g. "...ni"(first person), "...ni sapa"(first person plural exclusive), "...Nsapa"(third person plural), which are traditionally regarded as being verbal, occur only in predicatives which stand as the superordinate predicatives of sentence-bases. The monemes "...ini"(first person), "...Nkuna"(third person plural), for example, occur in elements which stand in a relation of subordination to the superordinate

¹(cont) does not alter the function of the syntagma in relation to the nuclear syntagma.

²For example, Snow: "Nominalizations in Ancash Quechua", Papers in Andean Linguistics, Vol. II, I. The examples given are, of course, from the San Martin dialect.

predicative of the sentence-base. These elements may have predicative function or nominal function.

The distinction between subordinate and superordinate I regard as a useful one. The superordinate predicative in San Martin Quechua has distinctive form not only in the person monemes, but also in the fact that the indicators of time (past, future etc.), and their expression in the presence or absence of monemes with the rough denotation of "past", "future" etc., occur only in the superordinate predicatives. The time of the action or state expressed by the subordinate predicative is expressed in relation to the time of the action or state expressed by the superordinate predicative, e.g. before it, after it, simultaneous with it. The superordinate predicative forms the most nuclear part of a sentence-base; it is the nucleus of the syntagma which governs, directly or indirectly, all other elements which may occur in a sentence-base. Making a distinction between superordinate and subordinate elements obviates the need to regard predicative forms such as "pagaripti¹kuña" (their paying) and "rinakuña" (that they go)¹ as 'verbalized nouns'² or 'nominalizations'³; the person monemes traditionally regarded as pertaining to nouns or nominals, are regarded, in this description, as monemes roughly denoting "person" suffixed to elements, nominal or

¹ See the following chapter, p/96 et seq, for a discussion of subordinate predicatives such as the example here, which are governed by neutral complement or relational markers.

² For example, Costa: "A Study of the SOA, NA, Y and Q Nominalizing Suffixes in Quechua", Papers in Andean Linguistics, Vol. 1, 1.

³ For example, Snow, op. cit.

predicative, which stand in a relation of subordination.

4. The time relation between subordinate and superordinate predicative-governed syntagms.

Subordinate "...špa/pti..." predicatives are often most easily translated as gerunds, and this perhaps is another reason why they are so classified in traditional grammars. The following piece of data shows how, especially in narrative, a sequence of events is expressed by a sequence of "...špa/pti..." predicative-governed syntagms and nuclear syntagms. Only the analysis between these two types of syntagm (single slant lines) and between the sentence-bases (double slant lines) is shown.

pušarkani uarmiinita kausak čikaN partipi// čaipi uatata
 kausaikašpa/ rirkani purikuk di'ia domiNku// di'ia domiNku
 purikuk rišpa/ tarirkani omikuita// omikuita tarišpa/
 bali'iarkani// bali'iaptiini/ čupa'uaN uarkunakumurkan//
 (I took my wife and lived in another area// when I had been
 living there for a year/ I went hunting one Sunday// going
 hunting one Sunday/ I found a monkey// having found a monkey/
 I shot// when I had shot/ it hung by its tail//)

Translation alone, however, is not a good guide to the function of, or even to the rough denotation of, a particular form, as will be seen from the examples given below where subordinate "...špa/pti..." predicative-governed syntagms can be translated into English in various ways. In some cases, the translation of the subordinate syntagm by a relation clause renders the most acceptable English. For these reasons also, the label

'gerund' becomes too narrow as an indicator of the function of a "...špa/pti..." predicative in relation to the nuclear predicative, and as an expression of the type of time relation between it and the superordinate predicative. The following is a representative selection of instances of "...špa/pti..." predicative-governed syntagm in the data; the "...špa" predicative-governed syntagms have been grouped together first, then examples of "...pti" predicative-governed syntagms are given. In the examples, the subordinate predicative-governed syntagm, as an I.C. of the sentence-base, is underlined.

kasarašpa/ tata'uaN mama'uaN/ kausarkaN(after they were married/ with his father with his mother/ they lived)

tarirkaN/ moNtoNta maskašpa(he found(him)/ after a lot of searching)

ča'iamušpa/ uižarkaN(on arrival/ he spoke)

čaita mikušpa/ užkuka/ uižarkaN(when he had eaten that/ the man/ spoke)

omikuita tarišpa/ bali'iarkani(when I had found a monkey/ I shot)

čaipi uatata kausaikašpa/ rirkani/ purikuk/ di'ia domiNku(when I had been living there for a year/ I went/ hunting/ one Sunday)

čaita čurašpa/.žukarkani/ eskopetainita ararišpa(putting that (there)/ I climbed/ carrying my gun)

čaimaNta// kamižata rurašpa/ puša'uarkaNsapa(then// after they had made a stretcher/ they took me off)

kusaikika/ uanuškaNnami/ omikuiraiku žukašpa(your husband/ has died just now/ because of a monkey he was climbing(after))

bakanaškaNsapa/ iacāšpaka pesteta(they have vaccinated(them)/)

knowing, now that they know about the disease)

padesišpa/ kausaikanī/ īai bruxuraiku(in suffering/ I live/ because of that witch)

paikuna/ kausaN/ tukui la'iapi/ trabaxašpa(they live/ in all kinds of ways/ working)

uakiNka/ urmamušpa kaspimaNta/ ki'uikuNči(some of us/ falling from trees/ hurt ourselves)

tataNpi rikurimurkaN kiNsa uatamaNta/ sukamaN siNči runa kašpa
(he appeared at his father's house after three years/ being a shaman lit. a very strong man)

čaipi sasikušpa/ ūablota kaapiNsapa(when they have dieted there/ they sieze the devil)

maN kužki'iukču kašpančimi/ maipitá tarinči(our being without money, as we are without money/ where are we to find(it)?)

pakčanokušpa/ parlak(lying face down/ he talked)

ňukami/ sukamaN muňani/ kasarašpa/ kausaita(I/ very much want to live/ being married)

animaNta apišpa/ paita/ gana'uai(by siezing his spirit/ him/ win for me)

čaita u'iarišpa/ īai užku masika/ kažparkaN(when he heard that/ that man companion/ ran)

tataini mana munaptiN/ rirkani(since my father did not like me/ I went(away))

kuska'iaptiN/ ka'uarkani/ ti'iakuptiN kaspi sa'uapi(when it straightened up/ I saw(it)/ sitting on top of the tree)

tiNkurkani suk užkuta/ riikaptiN purikuk paipis(I met a man/ who was also going hunting; more lit. he also was going hunting)

tari'uarkaNsapa moNtoN iſčimita sa'uainipi/ mikuikaptiN
siNkainita ſa'uiinita ſimiinipi(they found me (with) lots of
ants on top of me/ which were eating my nose, my eyes, in my
mouth)

čaipi/ urmamurkani/ mu'iu uaira'uaN čai bruxu apiči'uaktiN
(I fell/ there/ because that witch had reached me with a
whirlwind)

čaimaNtaka// aſuaN atuN žakta tukuptiN/ peste ča'iamurkaN
(then// as the town was becoming bigger/ disease arrived)
ruNtuta sukamaN maskaNsapa/ eskaso kaptiN uažna(they really
searched for eggs/ since chickens were scarce)
sukamaNm1 enbidi'iani/ medikukuna čupakuptiNkuna(I am really
jealous/ that the shamans suck out poison)

karupipiš kaptiN/ rik/ moNtoN xeNte(even when he was far away/
a lot of people/ went)

čaimaNta// laduNpi čurapuptiNkuna/ mana mikukču(then// when they
put(the food)by his side/ he did not eat)
mana iaku ti'iaptiN/ iakumaNta/ uañuNsapa/ kai žaktapi(because
there is no water/ from thirst/ they die/ in that town)

čai uasikunata rupačiptiNm1/ ſamurkaN guardi'iakuna/ pušak
paikunata(when they had set fire to these houses/ the police
came/ and took them)

mana remedibta ruraptiNkuna/ uañurkaN/ čai uarmika(because they
did not make a cure/ that woman/ died)

manami čažnaču/ ſuka/ ka'uani užkutaka/ mikuptiNka(not thus/
I/ see a man/ eating)

tarimurkaN čužikta/ tužpa sikipi ti'ikuptiN(she found the owl/
there at the foot of the stove)

puñurkaN/ kusaN isaNkuita maskaptiN(she slept/ while her
husband searched for "isangui"¹)

u'iarirkaN/ uarmika/ uaNbrataka/ kexaptiN(the woman/ heard
 the children/ moaning)

čaikuna/ faltakukkunata asutiksapa/ mana tenientemaN
rina'iaptiNkuna(they/ flogged the defaulters/ who had not
wanted to go to the lieutenant)

uasikuna karkaN čuNža/ xcNtekuna sukamaN kažaptiN(the houses
 were silent/ the people having really run(off))

kičuškaNsapaka/ maN utka pagariptiNkunana/ besti'iata kučita
 asta masiNkunata(if they did not pay quickly/ they would take
 horses, pigs, even their companions)

In none of these examples does the "...špa/ pti..." predicative-governed syntagm express a future action or state in relation to the superordinate predicative-governed syntagm. The action or state of the subordinate syntagm either precedes that of the nuclear syntagm in time, or is simultaneous with it.

5. Problems encountered in the analysis.

In all of the aforesaid, it has been implied that the "...špa/ pti..." predicative-governed syntagm is an expansion to the nuclear syntagm as a whole. The following inverted tree diagrams illustrate the analyses made of selected sentence-bases which have as an I.C. a subordinate "...špa/ pti..." predicative-governed syntagm. The subordinate syntagm has been underlined on the first level of analysis in each example.

¹"isangui" are a type of insect which bite.

0. *kuska'iaptin ka'uarkani*

1. *kuska'iaptin* *ka'uarkani*
(as it straightened up) I saw(it)

0. *tataini mana muna'uaptiN rirkani*

1. *tataini mana muna'uaptiN* *rirkani*
(since my father did not love me I went)

0. *kasarašpa tata'uaN mama'uaN kausarkaN*

1. *kasarašpa* *tata'uaN mama'uaN*
(married) with his father and
mother *kausarkaN*
he lived)

0. *mana remediota ruraptiNkuna uañurkaN īai uarmika*

1. *mana remediota ruraptiNkuna* *uañurkaN* *īai uarmika*
(because they did not make a cure she died that woman)
(because they did not make a cure, that woman died)

0. *animaNta apišpa paita gana'uai*

1. *animaNta apišpa* *paita gana'uai*
(by siezing his spirit) win him for me)

In the analysis of a syntagm, nothing outside the syntagm can be brought to bear in the analysis of that syntagm¹, and the above analyses of sentence-bases into constituent syntagms are consistent with this. There are times, however, when the subordinate "...pti" predicative-governed syntagm seems to relate specifically to one element, not the predicative nucleus,

¹ See Appendix A, Def. 9b, and p 35 of this work.

in the superordinate syntagma, i.e. it determines that element rather than the superordinate syntagma as a whole. These instances of "...pti" predicative-governed syntagms are the ones which are best rendered in English by a relational clause.

For example:

ka'uani užkuta mikuptiNka(I see the man who is eating)

ka'uani užkutaka mikuptiN aičata(I see the man who is eating meat)

tiNkurkani suk užkuta riikaptiN purikuk paipiš(I met a man who was also going hunting)

tari'uarkaNsapa moNtoN iščimita sa'uainipi mikuikaptiN siNkainita ūa'uiinita ūimiinipi(they found me(with)lots of ants on top of me which were eating my nose, my eyes, in my mouth)

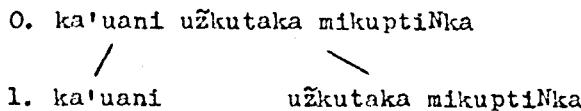
In the first three examples given, the subordinate "...pti" predicative has as its subject an I.C. of the nuclear syntagma, namely the neutral complement, which in the nuclear syntagma is a bound element to the transitive predicative. For example, "užkutaka" in " ka'uani užkutaka mikuptiNka"(I see the man eating), is bound to the transitive nuclear predicative "ka'uani"(I see), but at the same time, it could be said to be the subject of "mikuptiNka"(eating, who is eating); the third person moneme "...N" in "mikuptiNka" refers to "užkutaka". The last example given, "tari'uarkaNsapa moNtoN iščimita sa'uainipi mikuikaptiN siNkainita ūa'uiinita ūimiinipi"(they found me(with)lots of ants on top of me, which were eating my nose, my eyes, in my mouth), is an interesting one to note since where the subordinate predicative is found as a

constituent of the governing syntagma, it is generally the case that it is a neutral complement bound to the predicative nucleus of the governing syntagma, i.e. the predicative nucleus is classifiable as a transitive or complementary transitive predicative type where a neutral complement is obligatory. In this example, the neutral complement "moNtoN iſčimita" (lots of ants), as a peripheral I.C. of the governing syntagma, is an expansion to "tari'uarkaNsapa" (they found me) which is an abbreviated transitive predicative. It is also the subject of the subordinate predicative "mikuikaptiN" (eating). Given that "moNtoN iſčimita" is an expansion and not a bound element, there seems to be no reason why the following syntagma should not be acceptable "*tari'uarkaNsapa/ moNtoN iſčimi sa'uainipi mikuikaptiN siNkainita ſa'uiinita ſimiinipi" (*they found me/ (with) lots of ants on top of me eating my nose, my eyes, in my mouth), analogous with attested syntagms such as "puñurkaN/ kusaN isaNkuita maskaptiN" (she slept/ while her husband searched for isangui). The speaker, however, chose to relate "moNtoN iſčimi" (lots of ants) to the superordinate predicative "tari'uarkaNsapa" (they found me), by virtue of "...ta" the neutral complement marker. It stands, therefore, in a neutral complement position in the governing syntagma.

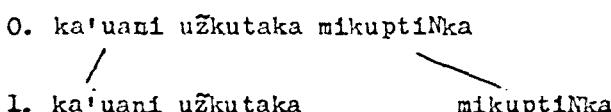
Two possibilities for the analysis of sentence-bases showing this phenomenon may be considered. Taking the example "ka'uani užkutaka mikuptiNka" (I see the man eating) as the test case, two hypotheses may be put forward for testing:

a) that "ka'uani užkutaka mikuptiNka" (I see the man eating) is an example of a transitive predicative-governed syntagma where

"užkutaka mikuptiNka"(the man eating) forms one I.C. of the syntagma, standing as the neutral complement bound to the transitive predicative nucleus "ka'uani"(I see). In inverted tree diagram form:



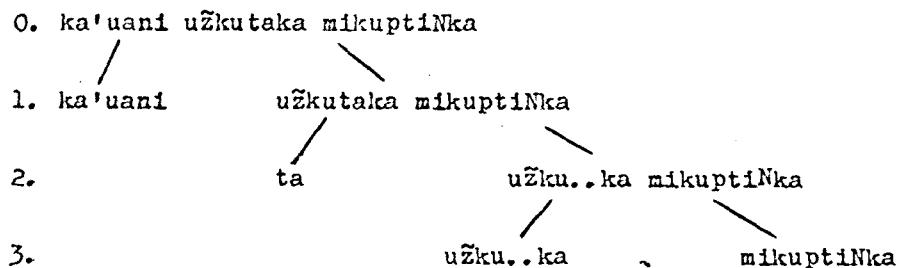
b) that the sentence-base, on the first level of analysis, has two I.C.s: a transitive predicative-governed syntagma, and a subordinate "...pti" predicative-governed syntagma of which only the nuclear position is realised. In inverted tree diagram form:



If we take the first hypothesis for testing, the relation of the I.C. "užkutaka mikuptiNka"(the man eating) to "ka'uani" (I see) is that of neutral complement. Thus on the next level of analysis, the I.C.s of the neutral complement syntagma would be: "užku..ka mikuptiNka" and "...ta", where "...ta" governs the rest of the syntagma.¹ On a still lower level, "mikuptiNka" would be seen to govern "užku..ka" which as the subject of the predicative, is an expansion. The analysis would be shown in inverted tree diagram form as in Fig. 1, on the following page.

There are certain objections to this analysis, the main one being that such an analysis destroys the function of function markers in San Martín Quechua. It destroys, for

¹This anticipates the analysis of neutral complement syntags given in the following chapter.

Fig. 1.

example, the functional difference between unmarked elements (which by virtue of being unmarked have subject function) and marked elements (which stand in complement positions, neutral or relational according to the marker). If the sentence-base is analysed such that "užkutaka mikuptiNka" (the man eating) forms one I.C., there is no way of showing, when analysing this syntagma on a lower level, that "užkutaka" is, in fact, the subject of "mikuptiNka" and not the neutral complement as the element "...ta" would suggest. If the syntagma is expanded to "užkutaka mikuptiN aičata" (the man eating meat), the problem is illustrated more clearly. There are now two elements marked by the neutral complement marker "...ta" in the syntagma, namely "užkutaka" (man) and "aičata" (meat). Unless we are to posit that the formal ordering of elements in Quechua is functional, there is no way of showing that it is the "...ta" of "užkutaka" which marks the neutral complement relation of "užkutaka mikuptiNka aičata" to "ka'uani" in "ka'uani užkutaka mikuptiNka aičata" (I see the man eating meat), and not the "...ta" of "aičata". If a hypothesis of formal ordering showing the functional ordering of elements were to be put forward, then there would be an immediate problem with "ka'uani aičata

"mikuptiN užkutaka" which is an acceptable utterance in San Martín Quechua. If formal ordering were functional, then "aičata"(meat) would have to be analysed as the subject of "mikuptiN"(eating) and "užkutaka" as the neutral complement in the syntagm "aičata mikuptiN užkutaka".

The neutral complement marker "...ta" governs those elements which with it constitute the neutral complement syntagm, and is suffixed to the nuclear element of the subordinate syntagm, not to any of the peripheral elements. Thus if "užkutaka mikuptiNka" were an instance of the neutral complement syntagm, the neutral complement marker "...ta" would be suffixed to the nuclear element of the syntagm it governs which, in this case, is "mikuptiN" and not "užku..ka". It is a feature of subordinate "...špa/pti..." predicatives that their function in relation to the superordinate predicative is marked by the presence of "...špa" or "...pti", and not by a neutral or relational complement marker. That is to say, the monemes "...špa" or "...pti" and the neutral or relational complement markers are mutually exclusive in a predicative form. Thus, if the speaker had intended a neutral complement to "ka'uani", he would have said "ka'uani užku mikunaNta" and not "ka'uani užkutaka mikuptiNka". That the English translation of the two different Quechua syntagms is "I see the man eating/ I see the man who is eating" is a problem in the translation. There is a difference between "ka'uani užku mikunaNta" and "ka'uani užkutaka mikuptiNka" which English does not perceive and which we can only vaguely guess at from the rough interpretations we give to "...ta" and "...pti".

Thus the analysis of "ka'uani užkutaka mikuptiNka" into two I.C.s: "ka'uani" and "užkutaka mikuptiNka" must be rejected as being inadequate and inconsistent with the rest of the description. The element "užkutaka" is bound to the superordinate predicative "ka'uani" which, as a transitive predicative, requires a neutral complement to actualize it. On the other hand, "mikuptiNka" does not require its subject to be expressed separately from the person moneme incorporated in its form, i.e. "...N" which denotes "third person". The analysis of the sentence-base into two I.C.s "ka'uani užkutaka" and "mikuptiNka" is both adequate and consistent. Both I.C.s as syntagms are autonomous, i.e. the analysis of each syntagma does not have to look outside the syntagma to describe the relations which hold between its constituent elements. The subordinate "...pti" predicative syntagma is well-formed, as is the superordinate predicative-governed syntagma.

6. Types of "...špa/ pti..." predicative-governed syntagma.

On its own level of analysis, a subordinate "...špa/pti..." predicative-governed syntagma shows identical structure to a superordinate predicative-governed syntagma. Thus, as regards transitivity, five different types of "...špa/pti..." predicative-governed syntagma can be distinguished: intransitive, non-transitive, transitive, complementary transitive and complementary intransitive, of which the transitive types, which include complementary transitive and non-transitive as well as transitive, may show the abbreviated transitive predicative forms. Copulative predicative syntagms and syntagms with the

actualizer "ti'ia.." may also occur as subordinate "...špa/pti..." predicative-governed syntagms. All of these types of syntagm are analysable, on a level lower than the first, in identical fashion to superordinate predicative-governed syntagms.

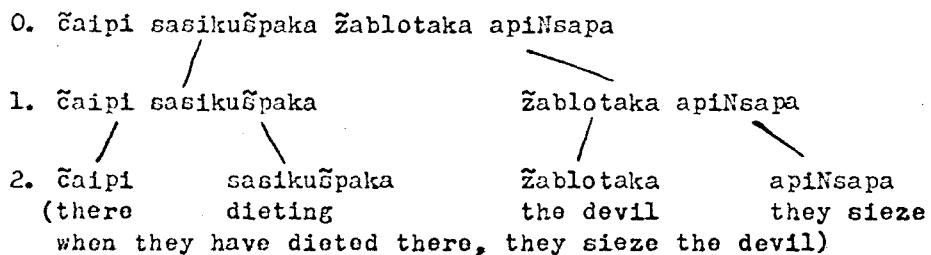
For example:

0. tataNpi rikurimurkaN kiNsa uatamaNta sukamaN siNči runa kašpa
 / \ \ \
 1. tataNpi rikurimurkaN kiNsa uatamaNta sukamaN siNči runa kašpa
 / \ \ \
 2. tataNpi rikurimurkaN sukamaN siNči runa kašpa
 (at his father's he appeared after three years a very strong man
 being
 after three years, he appeared at his father's a very strong
 man)

0. tiNkurkani suk užkuta riikaptiN purikuk paipiš
 / \ \ \
 1. tiNkurkani suk užkuta riikaptiN purikuk paipiš
 / \ \ \
 2. tiNkurkani suk užkuta riikaptiN purikuk paipiš
 (I met a man he going hunting he also
 I met a man who was also going hunting)

0. tarimurkaN čušikta tužpa sikipi ti'iauptiN
 / \ \ \
 1. tarimurkaN čušikta tužpa sikipi ti'iauptiN
 / \ \ \
 2. tarimurkaN čušikta tužpa sikipi at the foot of ti'iauptiN
 (she found the owl sikipi the stove there
 she found the owl at the foot of the stove)

0. ūuka ka'uani užkutaka mikuptiNka
 / \ \ \
 1. ūuka ka'uani užkutaka mikuptiNka
 / \ \ \
 2. ūuka ka'uani užkutaka he eating
 (I see the man he eating
 I see the man eating)



The type of predicative which stands as the nucleus of the syntagm determines which I.C.s of that syntagm are bound and which are expansions.

7. Occurrence dependency of subordinate "...špa/pti..." predicative-governed syntagms.

On the first level of analysis, a syntagm which has as its nucleus a "...špa/pti..." predicative form is always a subordinate syntagm, i.e. as an I.C. of a sentence-base it is a peripheral I.C. standing in a relation of subordination to the nucleus of the sentence-base. In its occurrence, it depends on the occurrence of a superordinate predicative-governed syntagm. No "...špa/pti..." predicative-governed syntagm can occur separately from a superordinate predicative-governed syntagm. This is an example of unilateral occurrence dependency, where one of two elements in a syntactic relation can occur whilst the other is "zero", but the other one cannot.¹ A "...špa/pti..." predicative-governed syntagm cannot occur without a superordinate predicative-governed syntagm; a super-

¹ See Appendix A, Def. 12b, and p55 of this work.

ordinate predicative-governed syntagm can occur without the occurrence of a "...spa/pti..." predicative-governed syntagm.

8. Instances of "...spa/pti..." predicative-governed syntagms.

As with superordinate predicative-governed syntagms, so with subordinate ones, with regard to realisation, there is no formal ordering of the elements within the syntagm, though in the case of the subordinate predicative-governed syntagm it is more usual to find the predicative nucleus realised last in the sequential order of the elements. This, however, is not obligatory, nor is the formal realisation of the subordinate predicative-governed syntagm as a whole in relation to the superordinate syntagm rigid. It may occur before or after the superordinate syntagm or, indeed, within that syntagm itself. The following example is an illustration of this last point: "kičuškaNsapa maN utka pagariptiNkuna besti'iata kučita asta masiNkunata"(they have taken horses, pigs, even their companions, if they have not paid quickly), where the two I.C.s of the sentence-base are "kičuškaNsapa besti'iata kučita asta masiNkunata" (they have taken horses, pigs, even their companions), which is the superordinate syntagm, and "maN utka pagariptiNkuna"(if they have not paid quickly), which is the subordinate syntagm and which, on the level of realisation, occurs within the superordinate syntagm.

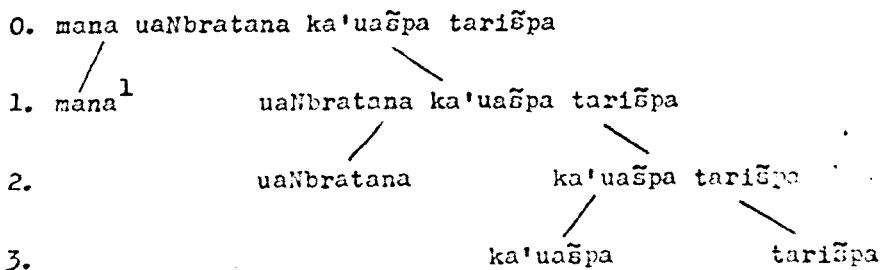
More than one subordinate "...spa/pti..." predicative-governed syntagm may occur in the same sentence-base. For example:

kaškaN armakuk riptiN/ tarirkaN/ moNtoNta maskašpa (when he went
 to bathe again/ he found(him)/ after a lot of searching)
 uarmi iaku mañaNpi Ša'iakušpa/ ka'uaN/ sumičiptiN (as the woman
 stood by the river side/ she saw(him)/ drowning)
 tukui tieNpo tamiaptiN/ puriksapa/ kargata aparišpa (with it
 raining all the time/ they walked/ carrying loads)
 tarirkaN uaNbrakuna/ čapak rišpaka/ Ša'iakuptiN suk iaku
 mañaNpi/ mačetiNuaN topata cučkuptiN (the children found(him)/
 having gone to spy/ standing by the river side/ cutting a balsa
 tree with his axe)
 čaita uižašpa/ kutirkaN sukamaN uakakuipi čai uarmika/mana
 uaNbratana ka'uašpa tarišpana (after she had said that/ that
 woman returned crying a lot/ not having seen, not having found
 the child)
 mana ku'iuktiini ainiptiini/ saki'uarkaN/ solameNte ŠuNkuini
 ku'iuktiN (when I did not move, when I did not answer/ he left
 me/ only my heart beating)

Both "...špa" and "...pti" predicative-governed syntagms can
 co-occur as I.C.s of the same sentence-base, and more than one
 of each, though the recursive nature of the structure, i.e.
 superordinate predicative-governed syntagm, "...špa/pti..."
 predicative-governed syntagm, "...špa/pti..." predicative-
 governed syntagm.....", must be limited for the obvious reason
 of diminishing intelligibility. Generally speaking, not more
 than three "...špa/pti..." predicative-governed syntagms occur
 in the same sentence-base. Each "...špa/pti..." predicative-
 governed syntagm stands in a relation of subordination to the

governing syntagm, and in a relation of co-ordination with each other on the first level of analysis of the sentence-base.

On the level of analysis of the subordinate syntagm, a bound peripheral element or syntagm may be subordinated to a nuclear syntagm which consists of two or more predicatives standing in a relation of co-ordination with each other. For example, in the sentence-base "čaita uižašpa/ kutirkaN/ sukamaN uakakuipi/ čai uarmi/ mana uaNbratana ka'uašpa tarišpa(when she had said that/ that woman/ returned/ crying a lot/ not having seen, not having found her child), the two "...špa" predicative-governed syntagms underlined are subordinate to the superordinate predicative "kutirkaN"(she returned) and stand in a relation of co-ordination with each other. When, on a lower level, we analyse the subordinate syntagm "mana uaNbratana ka'uašpa tarišpa"(not having seen, not having found her child), we find that "uaNbratana"(her child) is neutral complement to the predicatives "ka'uašpa(having seen) and "tarišpa"(having found), which together stand as the nuclear I.C. and on a lower level are analysed as two predicatives standing in a relation of co-ordination. That is:



¹This anticipates the analysis of the negative given in Chapter V.

As with a superordinate syntagma, so with a subordinate syntagma, conflation can occur to the extent that only the predicative nucleus is realised. For example: "ka'uašpa" for "ka'uašpa omikuita"(seeing the monkey), "čaita rurašpa" for "čaita kaspi sikiNpi čurašpa"(putting that at the foot of the tree", "sukamaN munaptiNkuna" for "sukamaN munaptiNkuna kasaraita"(they really were wanting to be married), "ruraptiNka" for "ruraptiNka čaita"(his having done that). Ellipsis in this form is particularly common, perhaps because of the nature of the "...špa/pti..." predicative-governed syntagma, where elements expressed in the superordinate syntagma may also relate to the subordinate syntagma, but for reasons of economy are not reiterated.

9. The subordinate "...k" predicative-governed syntagma.

A subordinate "...špa/pti..." predicative-governed syntagma, in expressing an action or state previous to or simultaneous with that of the nuclear predicative-governed syntagma, contrasts with a subordinate "...k" predicative-governed syntagma which expresses an action or state which follows that of the nuclear syntagma. For example:

rirkani/ kausak Kata'ua'iuk kebrada iaku mañaNpi(I went/ and lived beside the river at Katawayuk gorge)

pušarkani uarmiinita/ kausak čikan partipi(I took my wife/ to live in another area)

aku/ ka'uaak omikuita(come/ and see the monkey)

ramapi/ rirkani/ ti'iarik(on the branch/ it went/ and sat - it

went and sat on a branch)

maN atipaÑspaini/ uarmiinita kaÑani ñaipi/ u'iarik(not being able to myself/ I send my wife there/ to listen)

The subordinate predicatives discussed in this chapter are labelled according to the moneme which distinguishes them from other predicative forms. The "...k" of "ka'uak"(to see, and see), for example, is what distinguishes this predicative form from "ka'uasha"(seeing), "ka'uani"(I see), "ka'uaita"(that I see), "ka'uanaNpa"(so that he should see) etc., but just as with the moneme "...Ñpa" of "ka'uasha" or "...ni" of "ka'uani", the moneme "...k" does not have the status of 'plereme' in the description. The predicative form "ka'uak" is a simultaneous bundle of monemes and, therefore, one syntactic element. This syntactic element occurs in a predicative context and functions as a predicative.

10. The predicative "...k" moneme as opposed to the nominal "...k" moneme.

In traditional grammars, the "...k" predicative form has been classified as a present participle¹. In modern linguistic descriptions of Quechua dialects other than the present one², a form such as "ka'uak" is regarded as a 'derived nominal' by virtue of the moneme "...k" which is regarded as a 'nominalizer', and has the rough denotation "agent of action", i.e. someone

¹ For example, Mugica, Aprenda el Quichua; Perroud, Gramática Quechwa; Middendorf, Gramática Keshua.

² For example, Parker, Gramática del Quechua Ayacuchano; Lastra, Cochabamba Quechua Syntax; Escribens/Proulx, Gramática del Quechua de Huaylas.

who does something¹. By the addition of the moneme "...k", predicatives such as "su'ua"(steal), "ui'uaku"(rear, breed), "faltaku"(default), "makanaku"(fight), can function as nominals. For example:

iškai su'uak kažparkaN siNčita(two thieves ran hard)

kai ui'uakukkunata raNtikuNsapa uažpakuNata(the breeders sold chickens)

čaikuna faltakukkunata asutiksapa(they flogged the defaulters)
makanakukkunata maNčačiksapa(they frightened the fighters, the ones who were fighting)

Where "...k" forms are found in contexts other than true nominal contexts, such as the examples given on the previous page, they are still regarded as 'nominalizations' in the descriptions mentioned. This classification, I feel, is confusing and does not give an adequate syntactic description of the data. Syntactically speaking, since "...k" is not established as a plereme in its own right, its function separate from the element(s) with which it occurs simultaneously to form a plereme is not relevant to syntax. Thus, that the addition of the moneme "...k" to a lexical element which commonly conjoins with a predicative moneme to form a predicative, causes it to function as a nominal does not mean that every occurrence of a "...k" word is ipso facto a nominal. In "iškai su'uak kažparkaN siNčita"(two thieves ran hard), "su'uak" is found in a nominal context functioning as a nominal, while in "rirkaN su'uak"(he went and stole),

¹ Parker, op.cit., from whom many other American Quechua scholars take their lead.

"su'uak" functions as a predicative, albeit a subordinate predicative. As far as syntax is concerned, the two instances of "su'uak" in the syntagms given above are two distinct syntactic elements, separately analysable, with distinct functions. It is one of the problems of morphology to ascertain whether the "...k" of "su'uak" in "rirkani su'uak" and the "...k" of "su'uak" in "iškai su'uak" are one and the same sign, or whether they are two separate signs, i.e. homonyms. For syntax, however, this is not a relevant issue.

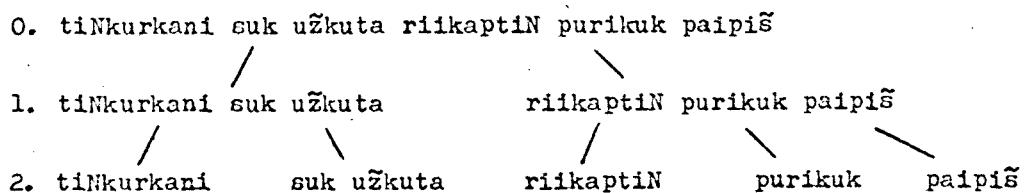
11. The occurrence of subordinate "...k" predicative-governed syntagms.

A syntagm which has as its nucleus a "...k" predicative form stands in a relation of subordination to the governing syntagma. In San Martín Quechua, it is not found as the governed element of a neutral complement marker "...ta", as seems to be possible in some of the other dialects of Quechua¹, but stands in a direct relation with the governing predicative. In this it is classifiable on the same level as a "...špa/pti..." predicative-governed syntagm which likewise can be governed only by another

¹ In Ancash Quechua, for example, the following have been recorded: "runa-ta wamra-n-ta maga-yka-q-ta rika-rqa-"(I saw the man hitting his child), "wayi-man ya-ykU-mu-q-ta wiya-šqa-yki-na-ku"(have you heard him come in the house yet?)(Snow, op. cit.) Cuzco Quechua shows the same phenomenon: "maskhawaqinvta rikunkichu"(did you see the one who is looking for me?), "kachasqa llank'aq characta"(he sent him to look at the work)(Hoggarth, St. Andrews). Puno Quechua: "runata rikurqani sapatun(ta) čurašacta"(I saw the man putting his shoes on), "nuqa yačani kunan pay hamučacta"(I know that he's on the way now)(Costa, op. cit.) All of the underlined would be rendered in San Martín Quechua by a "...špa/pti..." predicative-governed syntagm or by a predicative neutral complement.

predicative-governed syntagm.

A "... ſpa/pti..." predicative-governed syntagm can be governed only by the nuclear syntagm of the sentence-base, i.e. a superordinate predicative-governed syntagm; a "...k" predicative-governed syntagm can be subordinate to the nuclear syntagm of a sentence-base, or to a "... ſpa/pti..." predicative-governed syntagm on a lower level of the analysis. For example, "tiNkurkani suk užkuta/ riikaptiN purikuk paipiš" (I met a man/ who was going hunting, to hunt also), where "purikuk" is subordinate to "riikaptiN" (his going) which is subordinate to the nuclear predicative of the sentence-base "tiNkurkani" (I met). The element "purikuk" stands in an indirect relation with "tiNkurkani" via "riikaptiN" with which it stands in a direct relation. It is not analysable as an I.C. of the sentence-base on the first level of analysis as the following inverted tree diagram shows:



That is, "purikuk" is analysable as an I.C. of the syntagm "riikaptiN purikuk paipiš", and as such is a peripheral element which is an expansion to the nucleus "riikaptiN". The following are further examples of subordinate "...k" predicative-governed syntagms which stand in a relation of subordination to a "... ſpa/pti..." predicative-governed syntagm:

čaita ruračiškaN/ medikukunapi balekuk rišpa (they have had this done/ by going and complaining, to complain to the shamans) tarirkaN uaNbrakuna/ čapak rišpa (the children found(him)/ when they went and spied)

armakuk riptiN/ pačiamuk iaku runa čaupi positumaNta (when he went to bathe, and bathed/ the river man burst forth from the middle of the well)

A subordinate "...k" predicative-governed syntagma can also occur in a relation of subordination to a predicative-governed syntagma which is itself governed by a relational marker, and is not, therefore, in a direct relation with the governing syntagma of the sentence-base. The following example, which is analysed on p/71, illustrates this point:

"pa1/ uakakuipi/ rirkaN/ koNpadriNkunata iškaita ruegak/ rinaNkunapa puša'uak uasiinimaN" (he/ crying/ went/ and asked his colleagues, two of them/ that they go and take me to my house).

The syntagma is analysed on a lower level such that "rinaNkuna puša'uak uasiinimaN" (they go and take me to my house) is subordinate to the relational complement marker "...pa"¹, and still further, "puša'uak uasiinimaN" (and take me to my house) stands in a relation of subordination to "rinaNkuna" (they go).

More than one "...k" predicative-governed syntagma can occur in a relation of subordination to the governing syntagma, and in a relation of co-ordination with each other subordinate "...k" predicative-governed syntagma. For example:

¹ This analysis is described fully in the following chapter, p/96 et seq.

"rinimi/ ūukapiš/ kai kebrada anakpi/ čakrakuk kausak ui'uakuk"
 (I go/ I also/ beyond the gorge/ and farm, and live, and rear
 (animals)). The predicatives "čakrakuk"(farm), "kausak"(live)
 and "ui'uakuk"(rear animals) are in a relation of subordination
 to the superordinate predicative "rinimi"(I go), and each in a
 relation of co-ordination with the other. That is:

[čakrakuk $\leftarrow\rightleftharpoons$ kausak $\leftarrow\rightleftharpoons$ ui'uakuk] \longrightarrow rinimi

12. Subordinate "...k" predicative as opposed to narrative "...k"
predicative form.

The subordinate "...k" predicative form is distinguished from the narrative "...k" predicative form by virtue of the different positions of each. The narrative "...k" predicative form is always the nucleus of the governing syntagn of a sentence-base, being a narrative substitute for the usual superordinate predicative form. For example, "rik LamasmaNta" is synonymous with "rirkāN LamasmaNta"(he went from Lamas), and is the form favoured in narrative speech. A narrative "...k" predicative form, functioning as any superordinate predicative form does, can be found in such a relation of superordination to a subordinate "...k" predicative form. The two forms are distinguishable by the different positions in which they stand in a sentence-base. For example:

rik/ ti'iarik(he went/ to sit down, and sat down)
 uarmiNka čurakuk iakutami/ kada mikunaN oras/ patipi/ uniak
 čaipi(his wife put the water/ every mealtime/ in the gourd/
to drink there)

suedrōNuaN kausaikašpa uarmiNuaN/ rik/ armakuk(while he was living with his in-laws, with his wife/ he went/ and bathed, to bathe)

The subordinate "...k" predicative form has been underlined in these examples. The two forms can be further distinguished in that the narrative "...k" predicative form always indicates third person singular, or plural if it carries the moneme for plural "sapa": "riksapa"(they went) as opposed to "rik" (he went). The subordinate "...k" predicative form is invariable; there is no person or number indicator within the form of the predicative. These are indicated in the form of the governing predicative: e.g. "rirkani kausak"(I went to live, and lived) - the subject of "kausak" is the same as the subject of "rirkani", namely first person. Thus the subordinate "...k" predicative can be said to be in concord with the governing predicative. The time relation between the superordinate and subordinate predicatives is indicated by the moneme "...k". As has been said above, a subordinate "...k" predicative form expresses an action or state which is subsequent to that expressed by the superordinate predicative.

13. The time relation between subordinate "...k" and superordinate predicative-governed syntagms.

It has been suggested that a subordinate "...k" predicative form expresses "purpose of action", e.g. "rirkani ka'uak paita" (I go to see him, in order to see him)¹. Certainly if we

¹ Parker, for example, has suggested this approach to this type of predicative, op. cit.

translate a subordinate "...k" predicative form by an English infinitive, as in the example above, to construe "to see him" as "in order to see him" would seem a reasonable step to take. There is, however, a way of expressing "purpose of action" in Quechua, namely with a subordinate predicative form which incorporates the moneme ".na" and the relational marker ".pa" which has the rough denotation "purpose, benefactive"¹, e.g. "rirkani ka'uanainipa paita" (I went in order to see him). Snow, in his article "Nominalisations in Ancash Quechua"², launches the hypothesis that subordinate -q predicative forms ("...k" in San Martín Quechua) and subordinate -na predicative forms with the relational marker are:

"...variants of one complement type in which the presence of either of these nominalisers is determined by the class-membership of the matrix verb."

He states that:

"...purpose clauses with agentive -q, like purpose clauses with the infinitive nominaliser -na, indicate a potential process which is subsequent to the time period indicated for the next higher clause. In view of their semantic similarity in this regard and the fact that they occur with disjunctive sets of verbs, it is reasonable to conclude that purpose clauses with the infinitive nominaliser and those with the agentive suffix are actually conditioned variants."

Where the "matrix verb" is one which expresses movement, the

¹ See the following chapter, p 187.

² Papers in Andean Linguistics, Vol. 11, L. Costa, op. cit., makes the same hypothesis, though much more tentatively.

purpose clause with agentive *-q* is found; otherwise the purpose clause with the indefinite nominaliser *-na* occurs. This hypothesis seems to fit nicely as an answer to the question of why subordinate "...k" predicative forms occur almost exclusively with predicatives such as "ri"(go), "šamu"(come), which express movement. However, as a hypothesis that the form of the subordinate predicative is determined by the type of predicative which stands as the nucleus of the sentence-base, and that the two forms of subordinate predicative, "...k" and "...na..pa" are mutually exclusive, it must be refuted. The following two examples from San Martín Quechua show why the hypothesis must be refuted:

rirkani/ ama mala bidata kausanainipa(I went/ so that I would live, in order to live not a bad life)

rirkani/ kausak čikaN partipi(I went/ to live, and lived in another area)

Each sentence conveys information which is different from the other, and the difference in information value, as far as the different time relations are concerned, is to be found in the subordinate predicative. In the first example, "rirkani ama mala bidata kausanainipa"(I went so that I would not lead a bad life), the subordinate predicative "kausanainipa"(so as to live/ in order to live)¹ expresses the purpose of "rirkani" (I went); that is "I went" in the hope that I would find a

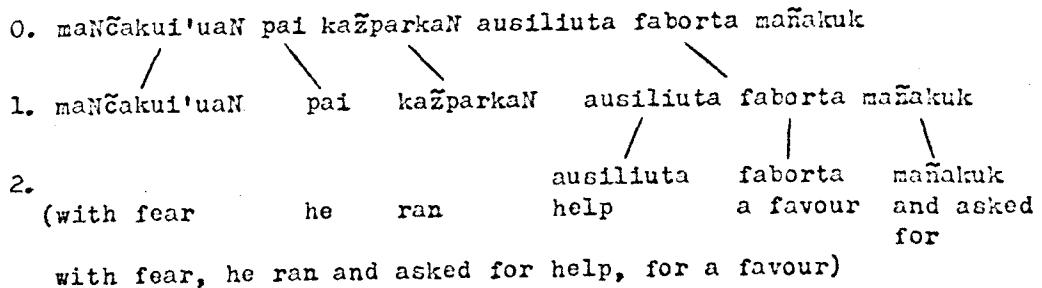
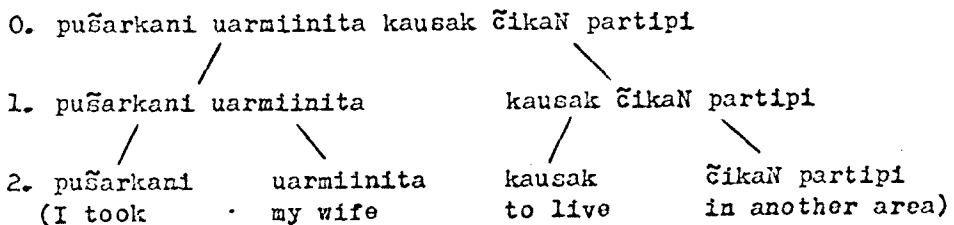
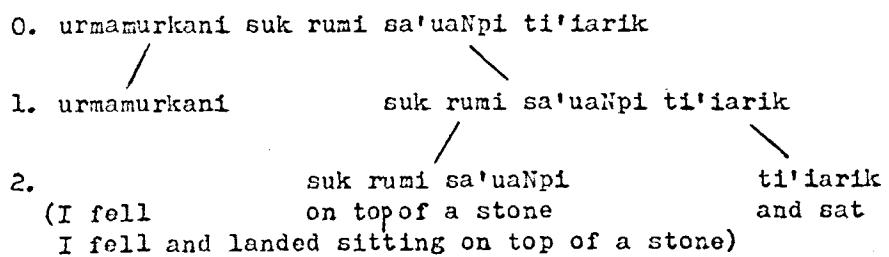
¹It will be shown in the following chapter that "kausanainipa" is in fact a syntagma in which the subordinate predicative "kausanaini" is governed by the relational marker "...pa" via which it contracts its relation to the superordinate predicative syntagma. This fact is overlooked here so as not to confuse the issue at hand.

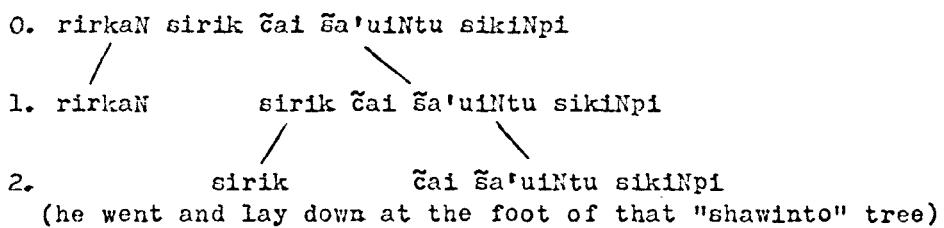
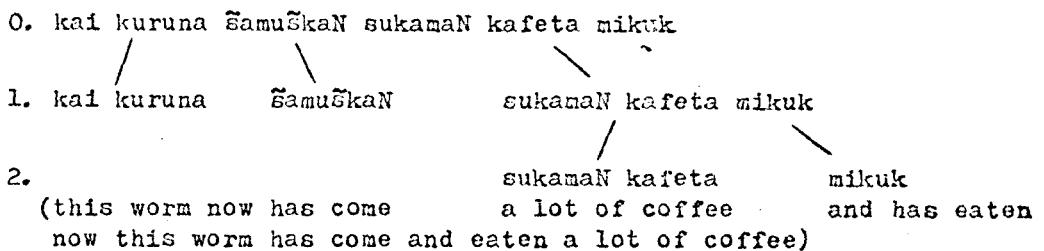
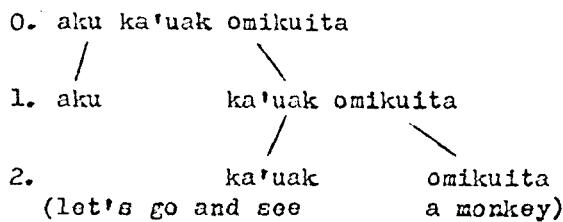
better life, but there was no certainty in the action of going at the time of its execution. In the second example, "rirkani kausak īikaN partipi"(I went to live in another area), the subordinate predicative "kausak" expresses the result of "rirkani"; that is, the living in another area is a certain, realised fact subsequent to the going. For this reason, two alternatives have been offered in the English translations of "...k" predicative-governed syntagms given, being two possible ways of expressing in English a time relation between two predicatives which can only be expressed in one way in San Martín Quechua. To a subordinate "...k" predicative form I give the rough denotation "subsequent action or state" rather than any of the other suggestions which have been made as to the possible denotation of this form, as this interpretation demonstrates clearly that there is a difference in function, and therefore in meaning, between this form and a predicative "...na..pa" form.

14. Types of "...k" predicative-governed syntagms.

The type of predicative which stands as the nucleus of a syntagm determines that syntagm type, i.e. it determines what must or may occur with it as I.C.s of the syntagm in which it is the nuclear element. This is no less true for syntagms which have as their nuclei subordinate "...k" predicative forms than for any other predicative syntagm type(or indeed for any nucleus in any syntagm). If, for example, the nucleus of a subordinate "...k" predicative syntagm happens to be "ka'uak"(to see), then one of the other I.C.s of that syntagm

must be a neutral complement, "ka'ua"(see) being classified as a transitive predicative; there may also be I.C.s which are expansions to the predicative. If the nucleus of the syntagma is an intransitive, this may be the sole constituent of the syntagma, or it may be expanded to include as an I.C. a relational complement. Five types of subordinate "...k" predicative syntagma are possible: intransitive, non-transitive, transitive, complementary transitive and complementary intransitive, and these syntagms are analysed in identical fashion to other predicative syntagms. The following inverted tree diagrams illustrate this:





15. Realisations of subordinate "...k" predicative-governed syntags.

With regard to formal realisation, there is no fixed formal ordering of constituents within the subordinate "...k" predicative-governed syntagm. That is, each element, or I.C., of the syntagm marks its relation to the nuclear predicative by a functional marker which is part of the form of that I.C. However, with regard to realisation in relation to the governing syntagm, a subordinate "...k" predicative-governed syntagm usually succeeds the governing syntagm. Where the "...k" predicative-governed syntagm stands in a direct relation of subordination to a superordinate syntagm of a sentence-base,

this applies, i.e. the sequential order of the sentence-base is for the governing(superordinate)syntagm of the sentence-base to be followed by the subordinate "...k" predicative-governed syntagm. This type of structure can be reiterated, e.g. "rina'iani sasikuk, rina'iani iačakuk"(I want to go and diet, I want to go and learn).

Where a "...k" predicative-governed syntagm is subordinate to a "...špa/pti..." predicative-governed syntagm, it can, and often does, precede the governing "...špa/pti..." predicative-governed syntagm; for example:

"armakuk riptiN"(when he went and bathed)

"čapak rišpa"(going and spying)

"paNpukuk rišpana čai uañuduta"(going and burying the dead)

This last example illustrates well the lack of formal ordering to show the functional ordering of elements. The two I.C.s of the syntagms are: "rišpana"(going now) and "paNpukuk čai uañuduta"(and burying the dead).

16. Occurrence dependency of the "...k" predicative-governed syntagms.

A subordinate "...k" predicative-governed syntagm can occur in a direct relation with the superordinate predicative-governed syntagm of the sentence-base or much lower down in the hierarchical ordering. In its occurrence it depends on the occurrence of another predicative syntagm(it is an example of unilateral occurrence dependency), but this syntagm may itself be a subordinate syntagm such that the relation between the

predicative-governed syntagm which is the nucleus of the sentence-base and the subordinate "...k" predicative-governed syntagm is an indirect one via a hierarchy of relations. The inverted tree diagrams on the following pages show the levels in the hierarchy at which "...k" predicative-governed syntagms can occur, and also show the point which has been reached in the description, though in the last inverted tree diagram given (p171), part of the syntactic analysis has been anticipated in order to show the level in the hierarchy at which a ...k... subordinate "...k" predicative-governed syntagm can occur.

O plantanata - rumutan pickupinla vickana čai užkuika čaipli kausik uantminuan

1 plantanuta rumuta pukupiñka mikania čai užukukai čaipi čai užukukai čaipi kausuk učur

2 plantarum

(bananas yucca when he had planted he went that man there and lived with his wife when he had planted bananas (and) yucca, that man went there and lived with his wife)

O manc mančakukšapču uarmikuna tutapi dicpi epak pžerankunapi rumita amentonašpu

/ | | | |

1 manc mančakukšapču uarmikuna tutapi dicpi epak pžerankunapi rumita amentonašpu

/ | | | |

2 epak pžerankunapi rumita amentonašpu

/ | | | |

3 epak pžerankunapi rumita amentonašpu

(they were not afraid the women by night buy heavy stones in their skirts stones loading the women were not afraid as they loaded stones night and day to carry in their skirts)

CHAPTER III

EXPANSIONS TO THE MINIMUM SENTENCE-BASE(2) -

NOMINAL-GOVERNED AND COMPLEMENT SYNTAGMS

1. Some general remarks.

In the preceding chapter, three types of expansions to the minimum sentence-base, the superordinate predicative-governed syntagm, were listed: namely, subordinate predicative-governed syntagm, nominal-governed syntagm and complement syntagm¹. Of these, the subordinate predicative-governed syntagm, as it has been discussed in the previous chapter, occurs only as an expansion. Nominal-governed and complement syntagms may occur as I.C.s bound to the predicative nucleus of the superordinate predicative-governed syntagm, i.e. as I.C.s of that syntagm, or as expansions to the superordinate predicative-governed syntagm, according to the type of predicative which stands as its nucleus². For example, if a relational complement syntagm occurs with an intransitive predicative, it is an expansion to the predicative, but if it occurs with a complementary intransitive predicative, then it is a bound element necessary to actualize the predicative and so forms part of the complementary intransitive syntagm. A transitive predicative must have a neutral complement, but there may also occur a further neutral complement which is an expansion and not bound to the predicative nucleus. A nominal-governed syntagm which stands in the subject

¹ See Chapter II, p/30.

² With the non-transitive type of predicative-governed syntagm the neutral complement is an expansion within the syntagm, and not an expansion to it.

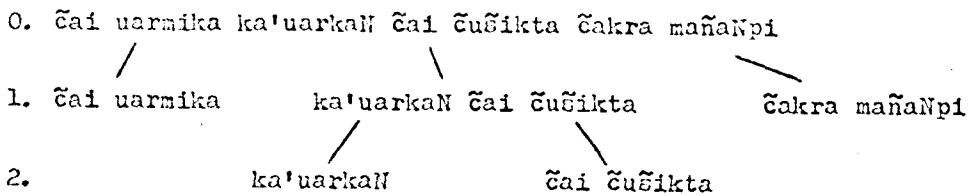
position is always an expansion except when it occurs with the element "ti'ia.." in which case its occurrence is obligatory.

The following sentence-base, analysed into its constituent syntags, gives examples of syntagm types to be analysed in this chapter:

čai uarmika ka'uarkaN čai čušikta čakra mañanpi(that woman saw that owl at the side of the field) - this is analysable into:

- a) čai uarmika(that woman) - peripheral I.C. which, being unmarked, stands in the subject position and is an expansion to the predicative nucleus;
- b) ka'uarkaN čai čušikta(she saw that owl) - superordinate predicative-governed syntagm, the minimum sentence-base, which consists of two I.C.s: "ka'uarkaN"(she saw) is the predicative nucleus of the minimum sentence-base and as a transitive predicative requires a neutral complement; "čai čušikta"(that owl) is a bound, peripheral I.C. in which the element "...ta" marks the function of the I.C. as neutral complement to the predicative nucleus;
- c) čakra mañanpi(at the side of the field) - peripheral I.C., marked as a relational by the element "...pi", which is an expansion to the nucleus of the sentence-base.

The analysis can be shown in inverted tree diagram form thus:



The element "čai uarmika" (that woman) is an example of a nominal-governed syntagma, and "čai čušikta" (that owl) and "čakra mañanpi" (at the side of the field) are examples of complement syntagms.

Syntagms such as these may occur as bound peripheral I.C.s to the governing element, on the first level of analysis to the superordinate predicative, or they may occur as expansions. Unlike the subordinate "... \tilde{e} pa/pti..." predicative-governed syntagms, the occurrence of nominal-governed and complement syntagms is not confined to the first level where they stand in a direct relation with the superordinate predicative; they may also occur on lower levels and not necessarily in a direct relation with the governing predicative, but indirectly via another syntactic element.

In this chapter I shall expound the hypothesis that the neutral and relational complement markers have the status of 'plereme' in the description. This represents a major divergence from Quechua scholarship as it stands, where the element "...ta" (neutral complement marker in the present work, otherwise designated as the 'object marker' or 'accusative case') and the elements "...pi", "...uaN", "...maN", "...maNta", "...raiku", "...pa", "...kamaN"¹ (which are variously termed

¹This form may also be realised /kama/.

'prepositions', 'postpositionals', 'relationalis' or 'case suffixes'), are regarded as having morphological status only.¹ First, however, the nominal-governed syntagma is analysed, as knowledge of this syntagma type, i.e. the field of relations which exists within it, has a direct bearing on the corroboration of the hypothesis relating to neutral and relational complement markers.

2. The nominal-governed syntagma.

The nominal-governed syntagma has as its nuclear element a nominal. In San Martín Quechua, it is possible that the nominal alone occurs as a realisation of this syntagma type. Thus all elements in the nominal-governed syntagma which do not stand in the nuclear position are expansions to the nucleus; there are no bound elements as one finds in English for example, where in most cases the nominal may not occur without an article or numerical element.

To account for the relations of these peripheral elements to the nucleus, the model we set up for the nominal-governed syntagma must allow for the maximum realisation of the positions of that syntagma. That is, the syntagma as a field of relations must be of sufficient extent to account for all the elements assigned to positions in the syntagma. By definition, the nuclear position is always filled; the nuclear element in San

¹This statement should be qualified: no work on Quechua of which I have knowledge, be it a traditional grammar or a modern linguistic description, treats these elements as syntactic rather than morphological entities.

Martín Quechua may stand on its own as one of the possible realisations of the nominal-governed syntagma (see the first example given below). The peripheral positions may or may not be filled in every instance of the nominal-governed syntagma, but there must always be sufficient positions in the model for all of these peripheral elements, even if there are 'zero' realisations of some of the positions in any one instance.

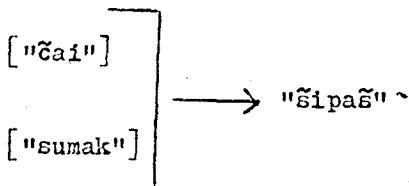
The instances of the nominal-governed syntagma given below act as examples for setting up and testing for its adequacy a nominal-governed syntagma model which will account for the whole field of relations which exists within it. We are, for the moment, dealing with the first level in the hierarchical order possible within the nominal-governed syntagma. On this level we may assign to one position a syntagma which is analysable on a lower level, but whose constituents do not, on the first level of analysis, separately hold direct relations with the nucleus of the nominal-governed syntagma. That is to say, at this point we are establishing the I.C.s of the nominal-governed syntagma; some of these I.C.s, including the nuclear I.C., may themselves be syntagmas which are analysable into I.C.s, but these are I.C.s of a syntagma which, as a whole, is an I.C. of the nominal-governed syntagma.

1. ſipaſ : maiden
2. suk uatu : a baby
3. īai ſumak ſipaſ : that beautiful maiden
4. iškai ūzū uaNbrakuna : two young children
5. sukamaN ſipaſkuna : many maidens

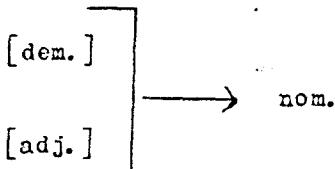
6. ēai traNperu likidu uaNbrakuna : those trap-setting mad children
7. ēai atuN iNčik sestu : that big peanut basket
8. suk rumu ēakra : a yuca field
9. ēai iškai maNžaibasapa ukuča : those two enormous mice
10. suk užku masi : a man companion
11. iškai čuNka kiNsa uata : twenty three years
12. ēai suknin užku uaNbra : that other boy, lit. male child

Example 1 is an instance of a nominal-governed syntagma with only the nuclear element realised and as such unhelpful in the process of establishing a model which will account for the whole field of relations within the nominal-governed syntagma. Example 2, "suk ua'ua"(a baby), and other examples given above which have only two constituents, must also be discarded, as it is obvious from the remaining examples that these do not represent a possible realisation of the nominal-governed syntagma in its maximum extent. If we take example 3, "ēai sumak Šipaš"(that beautiful maiden) as an instance of the nominal-governed syntagma realised to its maximum extent, we would set up a three position model, and label the positions 'demonstrative'(dem.), 'adjectival'(adj.) and 'nominal'(nom.). To these positions the I.C.s of the syntagma are assigned: (dem. "ēai", adj. "sumak", nom. "Šipaš"). The nominal element "Šipaš"(maiden) is the nucleus of the syntagma and is determined by the peripheral elements "ēai"(that) in the demonstrative position and "sumak"(beautiful) in the adjectival position. These each stand in a relation of subordination to the nucleus

of the syntagma and each is an expansion to that nucleus. Since we cannot determine that one of the peripheral I.C.s is subordinated to the nucleus in a different way from the other, we have parallel determination¹. That is:



or in terms of positions:



This three position model must be tested for its adequacy by applying it to the other examples given to see if it will account adequately for all the relations which exist between the elements. If it does, then it is adequate as a descriptive model; if it does not, then it must be discarded and a new model must be set up and tested. The table below(p/79) shows how the elements of the examples given above(p/76-7) would be assigned to the three positions of the model.

One of the consequences of the three position model is that the elements occurring in the demonstrative position in examples 9 and 12 form a single I.C. of the nominal-governed syntagma. That is, on the first level of analysis of the

¹ See Appendix A, Def. 14b, or p51 of this work.

	dem. position	adj. position	nom. position	
1.	0	0	šipaš	maiden
2.	suk	0	ua'ua	a baby
3.	čai	sumak	šipaš	that beauti- ful maiden
4.	iškai	žužu	uaNbrakuna	two young children
5.	0	sukamaN	šipaškuna	many maidens
6.	čai	traNperu likidu	uaNbrakuna	those trap- setting mad children
7.	čai	atuN	iNčik sestu	that big pea- nut basket
8.	suk	0	rumu čakra	a yuca field
9.	čai iškai	maNžaibasapa	ukuča	those two enormous mice
10.	suk	0	užku masi	a man companion
11.	iškai žuNka kiNsa	0	uata	twenty-three years
12.	čai suknin	0	užku uaNbra	that other boy

The Examples Assigned to a Three Position Model

syntagm type, "čai"(that, those) and "iškai"(two) for example, together, and not separately, hold a direct relation with the nucleus. On a lower level of analysis it must be shown whether they stand in a relation of co-ordination with each other, or whether they stand in a relation of subordination one to the other. As neither relation can be demonstrated, the proposition

that both elements are members of the same position class, and as such form one constituent on the first level of analysis, must be discarded. Similarly, if we assign the elements denoting number to the adjectival position, we find that here too, we cannot show a direct relation between the numeral element and the adjectival element. The only relation which holds between "iškai"(two) and "maNžaibasapa"(enormous) in example 9, is an indirect one via the nuclear element "ukuča"(mice)¹, just as the only relation which holds between "iškai" and "čai"(those) is an indirect one via "ukuča".

The three position model must be revised as it has not proved adequate in the description of the nominal-governed syntagma, i.e. it has not accounted for the elements which occur as instances of the nominal-governed syntagma and the relations which hold between them in an adequate way. A further position is required to account for the occurrence of elements denoting "number", i.e. "suk"(one), "iškai"(two) etc. To this position we may give the label 'numeral'(num.).

Having rejected the three position model, a four position model is found, on testing, to be adequate as a descriptive model for all instances of the nominal-governed syntagma, i.e. all the possible realisations of the syntagma. The table given below(p/61) shows how the elements, or I.C.s of the instances of the nominal-governed syntagma being used here as examples,

¹ Strictly speaking, "ukuča" translates as "mouse", "ukučakuna" being the plural form "mice". However, where the plurality of the nominal element is expressed elsewhere, via the numeral element for example, the plural moneme "...kuna" is not obligatory.

are assigned to the positions of the model. While 'position' is not a notion equivalent to 'sequential order'¹, the ordering of the positions in the table reflects the formal ordering in the nominal-governed syntagma. That is: (dem., num., adj., nom.)²

The Examples Assigned to a Four Position Model

	dem. position	num. position	adj. position	nom. position
1.	0	0	0	šipaš
2.	0	suk	0	ua'ua
3.	čai	0	sumak	šipaš
4.	0	iškai	žužu	uaNbrakuna
5.	0	0	sukamaN	šipaškuna
6.	čai	0	traNperu likidu	uaNbrakuna
7.	čai	0	atuN	iNčik sestu
8.	0	suk	0	rumu čakra
9.	čai	iškai	maNžaibasapa	ukuča
10.	0	suk	0	užku masi
11.	0	iškai čuNka kiNsa	0	uata
12.	čai	sukniN	0	užku uaNbra

Translations for these are, in order:

1. maiden

2. a baby

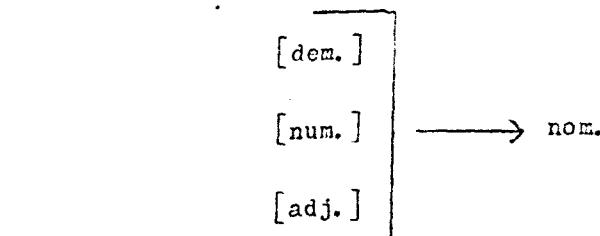
¹ See Appendix A, Def. 7g, or p 31 of this work.

² Some Quechua scholars, for example Parker, op. cit., p101, include in their scheme for noun phrases the possible occurrence of the negative element. In the present description, the negative(over)

3. that beautiful maiden
4. two young children
5. many maidens
6. those trap-setting mad children
7. that big peanut basket
8. a yuca field
9. those two enormous mice
10. a man companion
11. twenty-three years
12. that other boy

The syntactic complexes which occur in the numeral, adjectival and nominal positions of the nominal-governed syntagma are analysable as syntagms in their own right on a lower level. The analyses of these complexes which constitute syntagms is given in the following chapter of this description.

In the nominal-governed syntagma, each peripheral element stands in a relation of subordination to the nucleus of the syntagma, but it cannot be ascertained that they do so in different ways. Thus there is parallel determination, which can be symbolised:



2(cont)element is not analysed as an I.C. of the nominal-governed syntagma. See Chapter V, Section 1, p17/et seq for an analysis of this element.

-governed,

3. Occurrence and occurrence dependency of the nominal syntagm.

A nominal-governed syntagm when it is unmarked occurs in a subject relation to the governing predicative. This predicative may be a superordinate predicative, i.e. the nucleus of a sentence-base, or it may be a subordinate predicative. As the subject of a predicative, the nominal-governed syntagm is an expansion to it. The predicative has within its form a moneme which indicates person, and so does not require an obligatory subject to actualize it. In terms of occurrence, this is an example of unilateral occurrence dependency, i.e. a predicative may occur without a nominal-governed syntagm as subject, but a nominal-governed syntagm may not occur without a predicative.

The exceptions to this general statement are where the unmarked nominal-governed syntagm occurs in copulative or 'actualizing' expressions. For example, in "sukamaN siNči runa karkaN" (he was a very strong man), the nominal-governed syntagm forms part of the copulative predicative, i.e. the copula "ka..." makes a predicative out of a nominal-governed syntagm, in this case "sukamaN siNči runa" (a very strong man). This instance of the nominal-governed syntagm should not be confused with instances of the nominal-governed syntagm which stand in the subject relation to the copulative predicative, and are therefore expansions. The above example can be expanded to: "čai uainaka karkaN sukamaN siNči runa" (that young man was a very strong man), where the nominal-governed syntagm "čai uainaka" (that young man) stands in the subject position and is an expansion to the copulative predicative "karkaN sukamaN siNči runa" (he was a very strong man). The occurrence of "čai uainaka" (that young

man) is an example of unilateral occurrence dependency, "čai uainaka" depending upon the occurrence of the copulative predicative but not vice versa, while there is occurrence interdependency between "karkaN" and "sukamaN siNči runa". Similarly, where a nominal-governed syntagm occurs in a copulative expression without "ka...", i.e. in a non-predicative predicate construction, its occurrence is obligatory. As the subject of the non-predicative predicate, it is bound to it. Where a nominal-governed syntagm co-occurs with the element "ti'ia...", there is occurrence interdependency between the two elements.¹

A nominal-governed syntagm may occur as the bound peripheral I.C. of a neutral or relational complement syntagm. The neutral or relational complement marker is the nucleus of the complement syntagm and is the element which relates the nominal-governed syntagm to the governing predicative (see the following sections of this chapter). In terms of occurrence, there is occurrence interdependency between complement marker and the nominal-governed syntagm which it governs.

4. Syntactic relations between instances of the nominal-governed syntagm in subject position.

More than one nominal-governed syntagm may occur in the subject position of a predicative-governed syntagm and, while in most cases they stand in a relation of co-ordination with

¹ For copulative predicative, non-predicative predicate and the element "ti'ia...", see pp/21-29.

each other, it is possible to find examples of apposition, i.e. two or more nominal-governed syntagms, or a nominal-governed syntagm and a pronominal element, stand in the quasi-syntactic relation of apposition the one to the other.¹ The following example shows apposition of a nominal-governed syntagm, in which only the nuclear element is realised, to a pronominal element: "paikuna uaNbrakuna kiparirkaN"(they, the children, stayed behind". The pronominal element "paikuna"(they) and the nominal "uaNbrakuna"(the children) refer to the same set of people - "uaNbrakuna" qualifies "paikuna" - and are juxtaposed to, rather than co-ordinate with, each other.

The following examples of nominal-governed syntagms which jointly form the subject of the predicative and are in co-ordination with each other should be noted. Generally, where there are instances of the nominal-governed syntagm in co-ordination, only the nuclear element is realised.

iSkai kiNsa Čakrata tarpuksapa uarmikuna uaNbrakuna(the women, the children cultivated two, three fields)

uarmiinita mana munarkaNču tataini mamaini(my father, my mother did not like my wife)

ti'iarkaN gobernadorkuna tenieNte kapitaNkuna(there were governors, a lieutenant, captains)

sukamanN mančakurkaN kai xeNtekunaka uarmiNtiN užkuNtiN mosokuna (these people, the merchants both women and men together² were

¹ See Appendix A, Def. 11d, or p 46 of this work.

² The element "...NtiN" of "uarmiNtiN" and "užkuNtiN" is difficult to translate into English. The above rendering does no more than give a rough paraphrase. The occurrence of "...NtiN" is rare in the data, and it is, therefore, well nigh impossible to(over)

very afraid)

5. The relational complement syntagma.

The relational elements of San Martín Quechua, i.e. those elements which mark the function of the relational elements, and which have hitherto been referred to as relational complement markers in this description, are as follows:

"...pi"	in, on, at
"...uaN"	with, and
"...maN"	to towards
"...maNta"	from, after
"...kamaN"	up to, as far as, even

2(cont) determine whether it is a relational element comparable with those to be discussed in section 5 of this chapter, or whether complexes such as "uarmiNTiN" and "užkuNTiN" are pleremes, to be treated as morphological complexes rather than syntactic complexes.

Another element in San Martín Quechua which has a similar meaning of "being together, amongst themselves" is "...pura", alternatively realised "...purak". The element "...pura" is also of limited occurrence in the data. Like "...NTiN", it occurs with a nominal element, and generally more than one nominal element plus "...pura" occur in the same sentence-base. In addition, the nucleus of the sentence-base is a predicative form which incorporates the moneme "...naku..." (see Chapter 1, p 117). For example: "makanakuNsapa familia pura uauki pura"(they fight one another, in families, among brothers); "uauki purak ti'iu purak tata purak mamaNkuna'uaN kaparičinakuNsapa kučiraiku"(among brothers, among friends, among fathers, with their mothers, they have violent arguments (lit. make each other cry out)because of the pigs). While it is possible that "...pura" determines "uauki" in "uauki pura"(among brothers) for example, I do not include this element in the list of relational complement markers because of its limited occurrence in the data, and also because, unlike other relational complement markers, it seems to occur only with a nominal element. I have no examples of its occurrence with a predicative form.

"...raiku" because of

"...pa" belonging to, for(benefactive)
in order to¹(1)

In formal realisation, these elements occur after the nominal or predicative element, and not before. In many ways they are analogous to the prepositions of other, for example European, languages, differing not so much in function as in sequential order. They have been variously labelled in traditional grammars and modern linguistic descriptions. Where they have not been regarded as forming the case endings of the noun declension in Quechua(along with the unmarked nominative case, and accusative with "...ta"), the labels 'postpositional' and 'relational' have been favoured. In the present description, the term 'relational' is favoured. The English translations of the relational elements given above are intended only as rough indications of the denotation of these elements. The following are some examples of their occurrence in the data; the first set are examples of relational complement markers occurring with nominal-governed syntagms, the second set show relational complement markers with predicative-governed syntagms. The relational complement marker is underlined in each example.

kai Sisa Zaktamanta(from this town of Sisa)

¹When "...pa" occurs with a nominal element, it has the rough denotation "possession" or "benefactive"; when found to co-occur with a predicative element, it roughly denotes "purpose". As has been noted above(footnote, p 95), while the two rough denotations suggest that we are dealing with homonyms, i. e. two or more separate signs, it may well be that the rough denotations that we have given for "...pa" are not clear indices of its significance, and that the "...pa" which occurs with a nominal and that which occurs with a predicative are realisations of the same sign.

suk kaspi renako ramaNpi(on the branch of a "renako" tree)
 īkaN partipi(in another area)
 mana montoN tiru'uaN(with not many shots)
 uasiNmaN(to his house)
 īai bruxuraiku(because of that witch)
 uažpa'uaN(with chickens)
 sukamaN tukuipi(really everywhere, lit. in all(places))
 atuN rarkapi(in a big gorge)
 tukui īaktapi(in all the town)
 īai īaupi sačapi(in the middle of the wood)
 īai iškai sumak īipašraiku(because of those two beautiful maidens)
 maN īankamaNtaču(not from laziness)
 uasiNkamaN(as far as his house)

uakakuipi(in tears, crying)
 iškai uatata kasaražkainipi(in my having been married two years)
 maNčakui'uaN(with fear)
 uarmiinita ūakaškaNraiku(because he has cursed my wife)
 iakuta tariškaNkunaraiku(because they have found water)
 sasikuimaNta(from dieting, after dieting)
 īapaimaNta(from spying)
 ūaikui'uaN(with fatigue)
 kargakunainikama eskopetainita(until I loaded my gun)
 ūimipi urmanaNkamaN(until they fell in(his)mouth)
 sokta semana so sediškainipina(in my having suffered six weeks now)
 pagārakuškaNkunamaNta(from(as a result of)their having paid)
 uaňučinaNčipa omikuita(so that we may kill the monkey)
 ama mala bidata kausanainipa(so that I would not live a bad life)

upianainipa(in order that I may drink)

In no description of a Quechua dialect do I find the hypothesis that the elements underlined in the examples given above are anything but morphological items which together with the nominal lexemes with which they occur constitute words (pleremes, in this description). For example, nominal "uasi" (house) and relational "...pi" (in, at, on) form one word "uasipi" (in, at the house). Cordero, in the foreword to his Quechua dictionary, says of the relational element, which he labels "preposicional" (prepositional):

".... las partes de la oración que determinan a otras, o las rigen, como dicen los gramáticos, forman, en quichua, una sola palabra con el sustantivo o con el que verbo desempeña funciones de nombre.... las palabras quichuas equivalentes a las preposiciones de otras lenguas pueden ponerse en algunos casos, no solamente a nombres, sino también a adjetivos, a verbos en gerundio y aún a ciertos adverbios, ej. carumanta(de lejos), cuchallapi(muy cerca), unaman(hacia abajo), ashunhuan(con más) etc."¹

(....the parts of the sentence which determine others, or which govern them, as grammarians would say, constitute in Quechua a single word with the noun or with the verb which fulfils the functions of the noun(my underlining)the Quechua words which correspond to the prepositions of other languages may, in some cases, be suffixed not only to nouns but also to adjectives, to gerundives, and even to certain adverbs, e.g. (over)

¹ Cordero, Diccionario Quichua, pXXVI-XXVII.

carumanta(from afar), cuchallapi(very near), unaman
(downwards), ashuan(with more) etc.)

This thesis, that relational elements and the lexemes to which they are affixed constitute single words, is one to which both traditional grammarians and modern linguists of Quechua, such as Parker, Lastra and Eribens, have adhered, grouping together all the elements which occur after nominals in this way for description under the traditional classification of case: "...maN" signifies dative case, "...pi" locative, "...maNta" ablative, and so on. They are regarded as morphological items par excellence forming, together with Ø and "...ta", the noun declension. Their description, that they form the case endings of the noun declension, requires that they occur only with nouns, and thus, all of those elements which occur with relationals, such as are given in the second set of examples listed on p/88 of this work, and which I regard as predicative forms, are classified as verbal nouns or nominalizations, i.e. as verbs which function as nouns.¹ I shall give the rationale for not doing this, i.e. for not regarding them as nominalizations but as predicatives, at a later stage in this chapter. For the moment, I shall concentrate on the refutation of the thesis that these elements are morphological items in the terms of

¹ Although the theoretical approach is quite distinct from the neo-Bloomfieldian one, Bills, in his article "On case in Quechua", Papers in Andean Linguistics, Vol. 11, No. 11, affirms that "the case-markers of Quechua are noun phrase(NP)suffixes", and that "...case is inherently associated with an NP constituent". It is interesting to note that in his affirmation Bills only gives examples of nouns with these elements. He has no examples of "verbal nouns" with "case-markers".

the theory used for this description.

If we take as a hypothesis that these elements, together with the nominal lexeme to which they are bound, are pleremes, and we leave to one side for the moment the implications of this hypothesis as far as "uakakuipi"(in tears), "uarmiinita ūkaškaNraiku"(because he has cursed my wife), "upianainipa" (so that I may drink) etc., are concerned¹, we find that the model which we set up to account for instances of the relational complement syntagm is no different from that model which we have already set up to account for instances of the nominal-governed syntagm. This is the case since by regarding "uasipi" (in, at the house) as one plereme, we may commute it with "uasi"(house) - they occur in equivalent contexts, for example "čai uasi"(that house) and "čai uasipi"(in, at that house). To take another example for the purpose of assigning elements to positions and so giving them function, we may commute "čai sumak ūipaš"(that beautiful maiden) with "čai sumak ūipašraiku" (because of that beautiful maiden), since by regarding "ūipaš" (maiden) as a plereme and "ūipašraiku"(because of the maiden) as a plereme, we have no criterion for distinguishing between them syntactically. They are both simultaneous bundles of monemes which function syntactically in the nominal position. The table below(p/92) gives illustrations to this. I use the four position model which has been set up as adequate for the

¹ Obviously the implications apply equally to predicative complements marked by a relational element as to nominal complements, but for the sake of simplicity in the presentation I deal with the two types of complement separately.

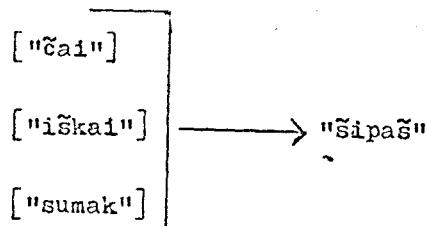
description of all possible instances of the nominal-governed syntagm, and give both nominal-governed syntagms and nominal-governed syntagms suffixed with a relational element as examples.

dem. position	num. position	adj. position	nom. position
1. 0	moNtoN	0	tiru'uaN
2. 0	suk	žužu	uaNbRa
3. čai	0	čaupi	sačapi
4. čai	iškai	traNperu likidu	uaNbRakuna
5. 0	0	0	uasiinimaN
6. 0	0	0	uasiini
7. čai	iškai	sumak	žipaš
8. čai	iškai	sumak	žipašraiku

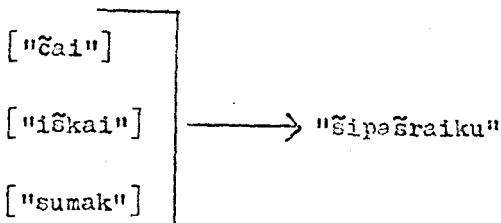
1. moNtoN tiru'uaN with many shots
2. suk' žužu uaNbRa a young child
3. čai čaupi sačapi in the middle of that wood
4. čai iškai traNperu likidu uaNbRakuna those two trap-setting mad children
5. uasiinimaN to my house
6. uasiini my house
7. čai iškai sumak žipaš those two beautiful maidens
8. čai iškai sumak žipašraiku because of those two beautiful maidens

Clearly it is very unsatisfactory to show "žipašraiku"

(because of the maiden) as having the same function as "šipas" (maiden), i.e. nominal nucleus of the nominal-governed syntagma which governs the rest of the syntagma; that is to say that



is equivalent to



and that in the syntagma's relation to other syntactic entities, for example to the superordinate predicative,

([čai sumak šipas]) → rirkani

and

([čai sumak šipasraiku]) → rirkani

are equivalent.

Taking the internal relations of the nominal-governed syntagma first, "šipas" (maiden) as the nominal nucleus governs "čai" (that) and "sumak" (beautiful). Similarly, if "raiku" does not have status syntactically, "šipasraiku" (because of the maiden) governs the peripheral elements, or stated conversely, "čai" and "sumak" determine "šipasraiku" and not

just "Šipaš". It is obviously not the case that "čai" determines "Šipašraiku" giving "čai Šipašraiku"(that because of the maiden), but that "čai" determines "šipaš" giving "čai Šipaš"(that maiden), and "čai Šipaš" as an instance of the nominal-governed syntagm determines "raiku". That is:

$$([\text{čai}] \longrightarrow \text{Šipaš}) \longrightarrow \text{raiku}$$

The whole nominal-governed syntagm is governed by "raiku".

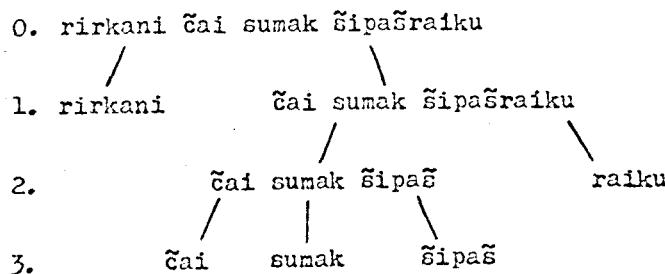
By demonstrating that ordering relations exist between the nominal-governed syntagm and a relational complement marker, the hypothesis that complexes such as "Šipašraiku"(because of the maiden), "uasiinimaN"(to my house), "žaktapi"(in the town) are single pleremes is refuted. The nominal-governed syntagm stands in a relation of subordination to the relational complement marker. In its relations with other syntactic entities, the nominal-governed syntagm, when it is unmarked, as in the example "čai sumak Šipaš", stands in the subject relation to the governing predicative of the larger syntagm of which it is an I.C. When governed by a relational complement marker, it stands in an indirect relation with the governing predicative via the relational complement marker. In the sentence-base "čai sumak Šipašraiku rirkani"(because of that beautiful maiden I went), for example, "čai sumak Šipaš" is related to the predicative nucleus of the sentence-base via the relational element "raiku". That is, on the first level of analysis, there are two I.C.s: "rirkani"(I went) and "čai sumak Šipašraiku"(because of that beautiful maiden). The element "...raiku" is analysable, on the next level, as the nucleus of the syntagm "čai sumak Šipašraiku", and is the element which

marks the function of the nominal-governed syntagma "čai sumak Šipaš" in relation to the superordinate predicative "rirkani". The nominal-governed syntagma is bound to the relational element, i.e. a relational complement marker requires the presence of another syntagma to actualize it, in this case a nominal-governed syntagma.

The relations between the elements of the sentence-base "čai sumak Šipašraiku rirkani" (I went because of that beautiful maiden) may be shown in the following way:

((["čai"], ["sumak"] → Šipaš) → raiku) → rirkani

In inverted tree diagram form, the analysis of the sentence-base is as follows:



A two position model is set up to account for all instances of the relational complement syntagma, where the related complement is a nominal-governed syntagma, i.e.

nominal-governed syntagma	relational element
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So far, we have dealt with relational elements in so far as they govern nominal-governed syntagms, that is the complement syntagma has been an instance of the nominal-governed syntagma. Two other types of syntagma, namely the predicative-governed

and the adjectival syntagm¹ can also be governed by a relational element, and where this is so the two position model as it has been given above remains adequate. To allow for the occurrence of a nominal-governed syntagm, a predicative-governed or an adjectival syntagm in the peripheral position, I shall modify the labels given to the positions of the model:

complement syntagm	relational element
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The label 'complement syntagm' is a cover term for the syntagm type which may occur in this position. Where I wish to make a distinction between the types, I shall call the relational complement syntagm which has as its bound peripheral I.C. an instance of the nominal-governed syntagm, the nominal-governed relational complement syntagm, or more briefly, the nominal-governed relational syntagm, the relational complement syntagm which has as its bound peripheral I.C. an instance of the predicative-governed syntagm, I shall call the predicative-governed relational complement syntagm, or more briefly, the predicative-governed relational syntagm, and the relational complement syntagm which has as its bound peripheral I.C. an instance of the adjectival syntagm, I shall call the adjectival relational(complement)syntagm.

Examples of the predicative-governed relational syntagm have been given above on p/88; a few are reiterated here with the addition of the governing syntagm, in all cases the super-ordinate predicative-governed syntagm. An example of the

¹For adjectival syntagm, see the following chapter, pp 251-6

adjectival relational syntagm is given finally.

ama mala bidata kausanainipa/ rirkani(so as not to lead a bad life/ I went)

sukamaN kaparičik kani/ uarmiinita ūakaškaNraiku(I used to cry out a lot/ because he had cursed my wife)

pai/ ualtakuipi/ rirkaN(she/ crying, in tears/ went)

kižu likidu ūukšiNsapa/ sasikuimanTa(they come out all yellow/ from dieting)

mana ūimipi urmanaNkamaN/ mana mikukču(unless they fell in his mouth, lit. up to their not falling in his mouth/ he did not eat)

ama/ sukamaN altupi kaptiNka/ baliaNkiču(don't shoot/ while it is very high)

Just as for the nominal-governed syntagm it was shown that the relational element governs the whole of the syntagm, so too with the occurrences of a predicative-governed syntagm or an adjectival syntagm with a relational element, the relational element governs the predicative-governed syntagm or adjectival syntagm as a whole. It is the nucleus of the syntagm in which it occurs as an I.C., and the peripheral I.C. is bound to it.

Taking the example "sukamaN kaparičik kani uarmiinita ūakaškaNraiku"(I used to cry a lot because he had cursed my wife) for analysis, we have on the first level, two I.C.s:
 a) "sukamaN kaparičik kani"(I used to cry a lot) which, as an instance of a superordinate predicative-governed syntagm, is the nucleus of the sentence-base; and

b) "uarmiinita ūakaškaNraiku" (because he had cursed my wife), which, as the peripheral I.C. of the sentence-base, is an expansion to the nucleus, standing in a relation of subordination to it. On the next level, the subordinate syntagm is analysed showing two I.C.s:

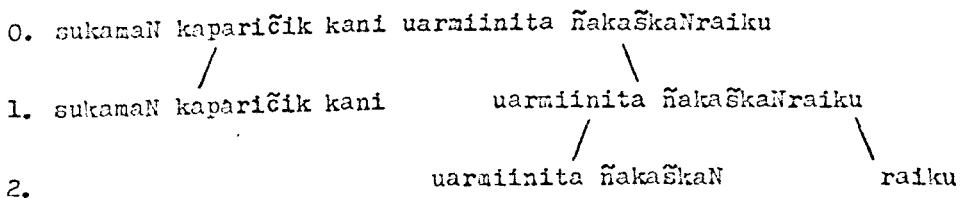
a) "...raiku" (because) which is the nucleus of the predicative-governed relational complement syntagm, and is the relational element which relates the subordinate predicative-governed syntagm to the nucleus of the sentence-base. It is not a free nucleus, requiring actualization, in this case by a predicative-governed syntagm; and

b) "uarmiinita ūakaškaN" (he cursed my wife) a subordinate predicative-governed syntagm which is the bound peripheral I.C. of the relational complement syntagm.

We may show the analysis of the sentence-base in the following way:

((uarmiinita ūakaškaN) → raiku) → sukaman kaparičik kani

and in inverted tree diagram form:



The analysis only goes as far as concerns us in this chapter. The subordinate predicative-governed syntagm is analysable further as an instance of a transitive syntagm, while the superordinate syntagm is also analysable as an instance of the

predicative syntagm.¹ I shall study the relation of the subordinate predicative-governed syntagm, as an I.C. of the relational complement syntagm, to the superordinate syntagm, and more particularly to the superordinate predicative in a later section of this chapter.

In two of the examples given above(p/47), the negative element occurs. In these and other examples of relational complement syntagms where the negative element occurs, care must be taken in distinguishing whether the negative element determines the whole of the relational complement syntagm, or whether it determines one of the constituents. As a working hypothesis, I shall forward the hypothesis that in the examples given above in which the negative element occurs, the latter is the case, i.e. the negative element determines one of the constituents of the syntagm rather than the whole relational syntagm. For example, in "ama mala bidata kausainsinipa"(so as not to lead a bad life), the negative element "ama" does not determine the whole syntagm but only the peripheral I.C. of that syntagm:

(ama → (mala bidata kausaini)) → pa²

Thus the negative element is a constituent of the complement

¹ For predicative syntagm, see the following chapter, p235-242.

² This example is an interesting one to note as it shows the occurrence of "ama"(not) in a non-imperative context. Generally, "ama" occurs when the imperative form of the predicative is negated, and in most descriptions of Quechua its occurrence beyond this context is not documented. In San Martín Quechua, it occurs as the negating element of a predicative-governed relational syntagm governed by "...pa". The negative element "mama" does not occur in this context. This is, however, a question of free and/or combinatory variance which lies outside the scope of a syntactic description.

syntagm. This anticipates the description of the negative element to be given in a subsequent chapter.¹

On the first level of analysis of relational complement syntagms, no distinction can be made between nominal-governed, predicative-governed and adjectival syntagms, as has already been stated. Each syntagm type is subordinate to the relational element, and each type of subordinate syntagm is assigned to the same position in the relational complement syntagm model, i.e. to the peripheral position. The following table gives illustration of this:

	complement syntagm	relational element
1.	kai Sisa Žakta	maNta
2.	čikan partí	pi
3.	mana moNtoN tiru	uaN
4.	uasiini	maN
5.	čai iškai Šipaš	raiku
6.	uasiN	kamaN
7.	uakakui	pi
8.	uarmiinita ūakaškaN	raiku
9.	ama mala bidata kususanaini	pa
10.	pagarakuškaNkuna	maNta
11.	eskopetainita kargakunaini	kama
12.	Žaikui	uaN
13.	mana Šimipi urmanaN	kamaN
14.	sukamaN altu	pi

¹ See Chapter V, p 171 et seq.

1. kai Sisa ŽaktamaNta	from this town of Sisa
2. ŽikaN partipi	in another area
3. mana moNtoN tiru'uaN	with not many shots
4. uasiinimaN	to my house
5. Žai iškai Šipašraiku	because of those two maidens
6. uasiNkamaN	as far as his house
7. uakakuipi	crying, in tears
8. uarmiinita ŽakaškaNraiku	because he had cursed my wife
9. ama mala bidata kausanainipa	so as not to live a bad life
10. pagarakuškaNkunamaNta	from their having paid
11. eskopetainita kargakunainikama	until I loaded my gun
12. Žaikui'uaN	with fatigue
13. mana Žimipi urmanaNkamaN	as far as their ^{not} falling in his mouth
14. sukamaN altupi	very high

6. Occurrence and occurrence dependency of the relational syntagm.

The relational syntagm occurs always in a relation of subordination to a predicative-governed syntagm. That is, it requires the presence of a governing predicative to which it may relate, but the converse is not always true; in most cases it is an example of unilateral occurrence dependency. The exceptions to this are the occurrence of a relational syntagm with a complementary intransitive predicative where as a bound element, together with the predicative, it forms the complementary intransitive syntagm, and the occurrence of a relational syntagm with a complementary transitive predicative where it occurs as one of the two bound complement syntagms necessary

to actualize the predicative.¹

The predicative which governs a relational syntagm is not necessarily the superordinate predicative, i.e. the nuclear predicative of the sentence-base, but may be a subordinate predicative. That is, a relational syntagm may be analysed as an I.C. of a sentence-base, either as a bound element to the superordinate predicative or as an expansion to it, or it may be an I.C. of a subordinate predicative-governed syntagm, namely a "...spa/pti..." predicative-governed syntagm or a "...k" predicative-governed syntagm, in which case it is analysed on a lower level. As with a superordinate predicative, so with a subordinate predicative, the relational syntagm may be a bound element or an expansion, depending on the type of governing predicative.

The following sentence-bases furnish us with examples of relational syntagms occurring on different levels of the syntactic hierarchy. The first three sentence-bases given show the relational syntagm as an I.C. on the first level of analysis; the remaining examples show the relational syntagm as an I.C. of a subordinate predicative-governed syntagm.

ñuka/ kai Sisa ŸaktamaNta/ rirkani(I/ from this town of Sisa/
went)

tarirkani omikuita/ suk kaspi renako ramaNpi(I found a monkey/
on the branch of a "renako" tree)

¹ For the complementary intransitive and complementary transitive syntagm models, see p/07

urmamurkani/ kaparikuipi(I fell down/ shouting out)

ka'uarkani/ ti'iakuptiN kaspi sa'uapi(I saw(it)/ there at the top of the tree)

pai/ uakakuipi/ rirkaN/ koNpadriNkunata iškaita ruegak rinaNkunapa puša'uak uaciinimaN(he/ crying/ went/ and asked his colleagues, two(of them), that they go and take me to my house)¹

omikuiraiku ūukaikašpa/ urmamurkani/ mu'iu uaira'uaN čai bruxu apiči'uaktiN(as I was climbing because of(after)the monkey/ I fell/ that witch having roached me with a whirlwind)

These last two examples are analysed fully in inverted tree diagram form at the end of this chapter, p 231 and 228.

7. Instances of the relational syntagm.

It is not unusual to find several instances of this syntagm type occurring as I.C.s of the same higher level syntagm. For example:

mikuikaptiN siNkainita na'uiinita ūimihiipi riNriinipi(they were eating my nose, my eyes, in my mouth, in my ears)

proibaNsapa birotiNkunata bakapi bestiani ažkuni uaNbrakunapi (they test their darts on cows, on horses, on dogs, on children)

tataNbi rikurimurkaN kiNsA uatamaNta(at his father's he appeared after three years)

¹The analysis of this sentence-base as given in the previous chapter on p 174 can now be furthered to include the analysis of the relational syntagms.

uarmi uaNbra puñuk tata'uaN ažpapi(the girl slept with her father on the ground)

ti'iaNši kai rarka anakpi suk rumi sikiNpi iaku(they say there is beyond the gorge underneath a stone water - they say there is water beyond the gorge underneath a stone)

paNparkaNsapa saca ukupi maNčakui'uaN(they buried(them)in the woods(lit. in the inside of the woods) with fear)

There is no formal ordering between the relational syntagm and the governing syntagm; it may precede the predicative-governed syntagm which it determines, or it may be realised after it. The relation between the two syntagms is marked by the nucleus of the relational syntagm, i.e. the relational element. There are no examples in the data of the relational syntagm being realised in discontinuous form; the complement syntagm, be it nominal-governed, predicative-governed or adjectival, always precedes the relational element, and is itself not realised in discontinuous form. In the examples above, each relational syntagm stands in a relation of subordination to the predicative nucleus, and in most cases, the recursive structure possible with the relational syntagm is illustrated. Exceptions are syntagms of the type: "tataNpi rikurimurkaN kiNsa uatamaNta"(at his father's house he appeared after three years), which does not illustrate recursiveness since the predicative "rikurimurkaN"(he appeared) is an example of a complementary intransitive, i.e. it requires a relational syntagm to actualize it. Thus in this example one relational syntagm stands as a bound element to the predicative nucleus

while the other is an expansion. It is reasonable to suppose, given the nature of time expressions, that "kiNsa uatamaNta" (after three years) is an expansion, and that "tataNpi"(at his father's) is bound to "rikurimurkaN". Thus, while it is generally the case that where more than one relational syntagm occurs in a syntagm, they stand in co-ordination with each other, it is not always so as the above example has shown.

8. Internal relations between the I.C.s of the relational syntagm.

The syntagms which occur in the complement position of the relational syntagm are analysable, as syntagms in their own right, on a lower level. The model for the analysis of the nominal-governed syntagm has already been dealt with earlier in this chapter(p/81), and the types of predicative-governed syntagm possible in San Martin Quechua have been given in Chapter 1 of the description(p/01 et seq), and the model for the analysis of the adjectival syntagm is given below in Chapter IV (p254). The complement syntagm is bound to the relational complement marker.

It may happen that two nominal-governed syntagms occur subordinate to the same relational element, as in the example "kiNsa kiža čusku kižapi"(in three, four months), where the nominal-governed syntagms "kiNsa kiža"(three months) and "čusku kiža"(four months) are co-ordinate with each other, and together are subordinate to the relational element "...pi". That is to say, they form one I.C. of the relational syntagm. The analysis can be shown thus:

(kiNsa kiža $\leftarrow\rightarrow$ čusku kiža) \longrightarrow pi

This type of structure has not been attested for predicative-governed complement syntagms, or for adjectival complement syntagms. Also not attested in the data is the occurrence of more than one relational element governing the same complement syntagm, as has been asserted for the dialects of Ayacucho¹ and Bolivia².

9. The neutral complement syntagm.

The following is a selection of sentence-bases in which there occur instances of the neutral complement, which has been underlined in each instance.

uarmiinita kačani čaipi(I send my wife there)

tari'uarkaNsapa³ moNtoN iščimita sa'uainipi(they found me(with) lots of ants on top of me)

koNpañerainita mana munarkaNču(he did not like my companion)
mana mikuNsapaču uaNkanata žuičuta itukšita(they do not eat hog, venison, fish)

mamaNkunata tataNkunata makaNsapa(they fight their mothers, their fathers)

sasikurkaN iškai uatata(he dieted(for)two years)

¹Parker, op. cit.

²Dills, op. cit.

³The pronominal type of neutral complement as exemplified in "tari'uarkaNsapa" is not under discussion here. Discussed in this section are those instances of the neutral complement syntagm which are marked by the neutral complement marker.

ui'uaškaNsapa moNtoN uažpata (they have reared lots of chickens)
 ka'uarkaN čai užku masika uarmitaka mižua puru lomo'iukta (that
 fellow man saw the woman (who had) her back all feathers, with a
 feathered back)

ganaipači žuičuta kažpaita (let's challenge the deer at running)
 manaN iu'ianiču kačarimuškainita ramumaNta (I do not know
 how I let go of the branch)

uarmiinika sukamaN uakakuita kažarirkaN (my wife began to really
 cry)

mana atipaniču ruraita čaita (I am not able to do that)

manami munaniču čai la'ia'uaN kasaranaNtaka (I do not want that
 she marry with that kind, I do not want her to marry that kind
 (of person))

sasikuNsapa tolda ukupi ažita (they diet under a mosquito net
 well, hard)

moNtoN iaku kažpamurkaN silčita (lots of water ran out strongly)

It can be said that a neutral complement syntagma parallels a relational complement syntagma: it is the complement marker "...ta" in the case of the neutral complement, one of the relational elements in the case of the relational complement, which marks the function of the complement syntagma. Thus it would not be amiss to consider "...ta" as being of plereme status in the description. The element "...ta" fulfills quite adequately all the requirements needed of a nucleus. It determines more than any other of the I.C.s of the syntagma the distribution of the syntagma; it is the I.C. via which relations between higher level I.C.s are contracted; it is

the identity element for the syntactic functions of the other I.C.s of the syntagma. The same cannot be held if "...ta" is to be regarded as part of a morphological complex and not as a separate syntactic entity. If, for example, "...ta" is not given plereme status in "ui'uaškaNsapa moNtoN uažpata (they have reared lots of chickens), the complex "uažpata" would be regarded as the nucleus of the syntagma "moNtoN uažpata" (lots of chickens), governing the element "moNtoN" and relating it to the higher level I.C., and nucleus of the sentence-base "ui'uaškaNsapa" (they have reared). A statement to this effect cannot be made: "moNtoN" does not determine "uažpata", but simply "uažpa", or to give the converse "uažpata" does not govern "moNtoN", but "uažpa" does. The element "...ta" relates the complex "moNtoN uažpa" to the predicative nucleus of the sentence-base "ui'uaškaNsapa". The analysis of "moNtoN uažpata" (lots of chickens) must be as follows:

- a) "...ta": nucleus of the syntagma, indicating its function, that of neutral complement, in relation to the higher level nucleus "ui'uaškaNsapa"
- b) "moNtoN uažpa": bound peripheral element, which is analysable as an instance of the nominal-governed syntagma

The full analysis of "ui'uaškaNsapa moNtoN uažpata" (they have reared lots of chickens) may be shown in the following way:

$(([\text{moNtoN}] \rightarrow \text{uažpa}) \rightarrow \text{ta}) \rightarrow \text{ui'uaškaNsapa}$

Thus, as with the relational complement syntagma, a two position model can be set up to account for all instances of the neutral

complement syntagm, i.e.:

complement syntagm	neutral complement marker
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The complement syntagm may be an instance of the nominal-governed syntagm as in the example just given above, or it may be an instance of a predicative-governed syntagm, as in the example "mana atipaniču ruraita čaita" (I am not able to do that), where the predicative-governed syntagm "rurai čaita" (to do that) stands in an indirect subordinate relation to the superordinate predicative-governed syntagm "mana atipaniču" (I am not able), the relation being that of neutral complement as marked by the element "...ta" of "ruraita", i.e.:

((čaita rurai) → ta) → mana atipaniču

The complement syntagm may also be an instance of the adjectival syntagm, as the following examples show:

kažparkaN siNčita(he ran strongly)

sukamaN ažita kausaNsapa tukui bariuna(the whole district
lives very well)

ažuaNta makanakuNsapa(they fight one another more)

The governed elements of the neutral complement syntagms, i.e. "siNči" (strong), "sukamaN aži" (very good) etc., occur most commonly in the adjectival position of the nominal-governed syntagm, so it is possible that we are here dealing with cases of ellipsis - that these are elliptical realisations

of the nominal-governed syntagma.¹ If the missing element can be supplied, then ellipsis can be demonstrated; if no element can be shown to be missing, then the utterance must be regarded as being well-formed in their present realisations. In the examples above, if ellipsis is to be demonstrated, a nominal element is required to make a meaningful utterance. If the addition of the nominal element alters the information value of the utterance, or if, indeed, no nominal element can be found to fit in that particular context to give a meaningful utterance, then ellipsis cannot be demonstrated, and the occurrence of elements such as "ašuaN"(more), "aži"(good) in "ašuaNta" and "ažita" must be treated separately from their possible occurrence in the adjectival position of the nominal-governed syntagma.

In these examples, we are dealing with instances of a different syntagma type from the nominal-governed syntagma, since we cannot demonstrate that they are elliptical realisations of the nominal-governed syntagma. It has been stated by other Quechua descriptivists that "...ta" gives adverbial quality to adjectives², and certainly as far as the translation of those elements is concerned, their English translations are best categorised as adverbs. However, those elements which may truly be classified as adverbs in San Martín Quechua, which determine the predicative, always occur in unmarked form before the predicative. That is, the relation of the adverbial

¹ Bills, op. cit., states that examples such as these are surface structures of the deep structure(NP) - in our terms they are elliptical.

² For example, Parker, op. cit.

— by virtue of the element "...ta", must be regarded as instances of the neutral complement syntagm themselves. I shall call this syntagm type the *adjectival neutral complement syntagm*, since as far as the field of relations of the adjectival complement syntagm is concerned, it is identical to the field of relations which exists for those syntagms which occur in the adjectival position of the nominal-governed syntagm.

The table below (p212) shows how the elements of instances of the neutral complement syntagma are assigned to the positions of the model set up to account for all such instances.

If this table is compared with that given for the relational complement syntagm on p100, it will be seen that the two position model accounts adequately for all instances of complement, be they relational or neutral. If we wish to take both types of complement together for description, we may use the following model:

complement syntagma complement marker

¹ For example, "sukaman" in "sukaman kažparkaň"(he ran a lot). A full treatment of such elements will be given in Chapter IV, p 242-4.

complement syntagma	neutral complement marker
1. uarmiini	ta
2. moNtoN iščimi	ta
3. koNpañeraini	ta
4. iškai uata	ta
5. moNtoN uažpa	ta
6. mižua puru lomo'iukta uarmi	ta
7. žuiču	ta
8. kažpai	ta
9. ramumaNta kačarimuškaini	ta
10. sukamaN uakakui	ta
11. kaita rurai	ta
12. čai la'ia'uaN kasaranaN	ta
13. aži	ta
14. siNči	ta
1. uarmiinita - my wife	
2. moNtoN iščimita - lots of ants	
3. koNpañerainita - my companion	
4. iškai uatata - two years	
5. moNtoN uažpata - lots of chickens	
6. uarmitaka mižua puru lomo'iukta - the woman(with) a feathered back	
7. žuičuta - deer	
8. kažpaita - to run, at running	
9. ramumaNta kačarimuškainita - how I let go of the branch	
10. sukamaN uakakuita - really crying	
11. ruraita kaita - to do this	

12. *čai la'ia'uaN kasarananta* - that she marry with that kind
 13. *ažita* - well
 14. *siNčita* - strongly

10. Occurrence and occurrence dependency of the neutral complement syntagm.

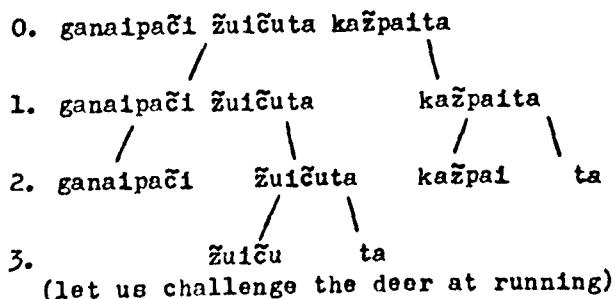
The neutral complement syntagm may occur as a bound peripheral element, or as an expansion to a higher level nucleus. It occurs as a bound peripheral element when it is an I.C. of a transitive or complementary transitive syntagm, giving examples of occurrence interdependency between the predicative nucleus, superordinate or subordinate, and the neutral complement syntagm, and it is an expansion when it occurs as a peripheral element of a non-transitive type of predicative-governed syntagm, superordinate or subordinate. In this latter case, we have an example of unilateral occurrence dependency, i.e. the neutral complement syntagm depends on the occurrence of a non-transitive predicative, but not vice versa. Examples of neutral complement syntagms occurring as I.C.s of superordinate predicative-governed syntagms, or as I.C.s of subordinate predicative syntagms, including predicative-governed complement syntagms, have been given in the foregoing and need not be reiterated here. For illustrations of the possible occurrences of neutral complement syntagms in the hierarchical order, the reader is referred to the set of inverted tree diagrams at the end of this chapter, p228-232.

Apart from its occurrence as an expansion to a non-transitive predicative, in which case it is an I.C. of the non-transitive syntagm, a neutral complement syntagm may occur as an expansion

to a transitive syntagma. That is, the relation of the subordinate syntagma to its nucleus, the superordinate transitive syntagma, cannot be expressed except via a neutral complement - its information value can only be expressed in terms of the neutral complement. Two examples of this type are:

tatainita abisačimurkaN desgrasia sosediškainita(they informed my father(of)the misfortune which had befallen me)
ganaipači žuičuta kažpaita(let us challenge the deer at running)

In the first example the neutral complement syntagma "desgrasia sosediškainita"(the misfortune which had befallen me) complements the superordinate transitive syntagma "tatainita abisačimurkaN"(they told my father). In the second example, "kažpaita"(at running) complements the superordinate transitive syntagma "ganaipači žuičuta"(let us challenge the deer). The analysis of this example may be shown in inverted tree diagram form thus:



Where, as in these examples given directly above, the complement syntagma of the neutral complement syntagma is an example of a predicative-governed syntagma, then the neutral complement syntagma is an expansion to the superordinate syntagma as a whole. Where the complement syntagma is an instance of the nominal-governed syntagma, then the neutral complement syntagma is an expansion to

the neutral complement of the transitive syntagm rather than to the transitive syntagm as a whole. That is, a nominal-governed neutral complement syntagm may occur as an expansion to another nominal-governed neutral complement syntagm. For example, in the sentence-base "ka'uarkaN īai užku masi uarmitaka mižua puru lomo'iukta"(that fellow man saw the woman, her back all feathered), the neutral complement syntagm "mižua puru lomo'iukta"((her)back all feathered) is related to the superordinate predicative "ka'uarkaN" only via the neutral complement "uarmitaka"(woman), which is a bound peripheral element of the transitive syntagm. That is, "mižua puru lomo'iukta" is an expansion to "uarmi" which is related to the predicative nucleus of the sentence-base via "...ta". The analysis of the sentence-base with the subject element "īai užku masi"(that fellow man) omitted may be shown in the following way:

(([mižua puru lomo'iuk → ta] → uarmi) → ta) → ka'uarkaN

While the neutral complement syntagm "uarmitaka" is an example of occurrence interdependency, with "ka'uarkaN", "mižua puru lomo'iukta" is an example of unilateral occurrence dependency, depending on "uarmitaka" for its occurrence. This type of example should not be confused with syntagms of the type "aragaNtaka kurkaNsapa kužkita"(they gave the idler money), where the two neutral complement syntagms are bound to the governing predicative "kurkaNsapa" which is an example of a complementary transitive predicative.¹ In the example given above, the sentence-base does

¹ See Chapter 1 of the description and p/04 for complementary transitive predicative.

not cease to be well-formed if the neutral complement syntagm "mižua puru lomo'iukta" were omitted.

Apart from the possible occurrences just covered, where two or more neutral complement syntagms of the same type occur, i.e. where two or more nominal-governed neutral complement syntagms occur or where two or more predicative-governed neutral complement syntagms occur¹, they stand in a relation of subordination to the nucleus of the higher level syntagm, and in a relation of co-ordination with each other. For example:

čušpainita mačitiinita pikšainita čurarkani kaspi sikiNpi/
žukanainipa(I put my pouch, my axe, my saddle bag at the foot
of the tree/ so that I could climb)

paikunaka upiansapami bušikžata iaku sisata čuču'uašata(they
drink bushik, yaku sisa, chuchuwasha²)

mana mikuNsapaču uaNkanata žučuta itukšita(they do not eat hog,
venison, fish)

mana iačašpa leita eskribiita(not knowing how to read, how to
write)

Apposition of one neutral complement syntagm to another has been attested in the data, the following being an example:

manami čašnaču ūuka ka'uani xeNtetaka užkutaka mikuptiNka(not
in this way do I see(have I seen)a person, a man eating)

¹No instances of two or more adjectival neutral complement syntagms are attested in the data, but this is not to say that such an occurrence would not be possible or probable.

²These are all herbal drinks.

11. Anticipation of an attempted refutation.

An attempted refutation of the analysis of relational and neutral complement markers as pleremes, and thus the complexes in which they occur as syntagms, must be anticipated. The analysis which establishes the relational elements and neutral complement marker "...ta" as pleremes, forms, as far as I know, a unique hypothesis in descriptions of Quechua dialects and therefore, considerable disturbance of the accepted "facts" of the language, it being the first axiomatic functionalist description of Quechua syntax to be performed. On grounds of prosody, an attempted refutation of the hypothesis may be made.

Intonation, stress etc., generally considered as useful pointers to word or sentence boundaries, suggest that the realisation of the elements "...pi", "...uaN", "...ta" etc., coincides with the accent pattern of the San Martín dialect of Quechua only if they are treated as monemes and not as monomemonic words, i.e. pleremes. In San Martín Quechua, it is usual for stress to be placed on the penultimate syllable of the phonological unit or word¹, e.g. uási(house), uárm̩i (woman), mamaNkúna(their mothers). This accent pattern is carried through to complex items where one of the constituents is "...pi", "...uaN", "...ta" etc; thus we have: uasípi(in the house), uarm̩ita(woman, neutral complement), mamaNkuna'uaN(with their mothers). If the underlined elements were words, it may be argued that prosody should give: uárm̩i tá, uási pi, mamaNkúna uáN, with a slight pause between the constituents

¹ See Mulder, Sets and Relations, p55.

of the complexes, pause being a good indication of word boundaries. Since this is not the realisation of these complexes, but rather the elements "...pi", "...uaN", "...ta" etc. together with the lexeme, nominal or predicative etc., with which they occur, form a complete phonological word, then it may be argued that they should be regarded as morphological items and not as pleremes.

In the terms of the theory, however, first and second articulations are separate and autonomous¹. Usually the phonological word does coincide with the grammatical word, but a word, or plereme, in grammar is not established solely by its correspondence to a discrete phonological entity, but by its 'position' (function) and 'identity' in grammar, i.e. by purely grammatical criteria. The elements under discussion here have been shown to have grammatical function and must, therefore, be given the status of pleremes. They are of lesser extent than one phonological word.

12. The time relation between predicative complement and governing predicative.

Before exploring the time relations between subordinate predicative complement and governing predicative, I shall state my reasons for regarding these elements as predicatives and not as nominalisations, as other Quechua scholars have done.

The following are instances of the predicative-governed

¹ See Mulder and Hervey, Theory of the Linguistic Sign, and also Hervey, "Mulder's Axiomatic Linguistics", Lingua, 28, No. 4, (1972).

syntagm occurring in the complement position of the neutral or relational complement syntagm. The complement marker is included, the slant line indicating that the analysis (complement syntagm → complement marker) has already been performed on the higher level. The reason for the underlining is to be explained below.

uarmiinita ñakaškaN/ raiku(because/ he had cursed my wife)

sukamaN kaparikui/ pi(in/ my really crying out)

iakuta tariškaN/ raiku(because/ he had found water)

mana ūsimipi urmanaN/ kamaN(as far as/ their not falling into his mouth)

iškai uatata kasaraškaini/ pi(in/ my having been married two years)

rinaNkuna/ pa/ puša'uak uasiinimaN(so that/ they go and take me to my house)

ama mala bidata kausənaini/ pa(so as/ not to lead a bad life)

uasiinipi ēa'iači'uškaNkuna/ ta(how/ they brought me to my house, lit. made me arrive at my house)

tukui iačaškaN/ ta(all he knew)

gananakui/ ta/ ñuka'uaN(to/ have a bet with me)

rumuinita surkui/ ta(to/ take out my yuca)

kičui/ ta/ kusaNta(to/ take away her husband)

sukamaN piNkakui/ pi(in/ great shame)

ama ūamunaNkuna/ pa(so as/ not to come)

In the above examples, a morphological element in each of the predicative forms has been underlined, i.e. "...na..", "...ška.." and "...i..". In order to see one of the differences

in analysis between the present description of a Quechua dialect and other descriptions of Quechua, some words need to be written concerning these elements.

In other descriptions of Quechua which have been produced according to modern linguistic theories, the elements "...na..", "...ška.." and "...i..", along with the element "...k", previously discussed in this work¹, are regarded as 'nominalisers'.² That is, when they occur in conjunction with a predicative (verbal, if we are to retain the terminology of these works) lexeme, they are said to endow that verb with noun qualities; it becomes a verbal noun, or a 'derived noun'. For example, the element "...na.." when affixed to certain verb roots causes that verb to function as a noun: "pukuna"(blow pipe) from "puku"(blow), "pičana"(brush) from "piča"(brush, clean), "puñuna"(bed) from "puñu"(sleep), "mikuna"(food) from "miku"(eat) etc. Similarly, a noun is derived from a verb root which is suffixed with the element "...i..": "rupai"(heat) from "rupa"(burn), "kausai"(life) from "kausa"(live), "uNkui"(illness) from "uNku"(fall ill).³

Whenever these elements are found to occur in a word, that word is classified as a 'nominalisation'. As Lastra states:

¹ See p 154 et seq.

² All of the descriptions produced by American scholars of which I have knowledge classify these elements in this way, regardless of whether the theoretical base for their works lies in Bloomfieldian linguistics or transformational grammar.

³ These examples have been taken from San Martín Quechua. No example of nominalisations with "...ška.." are found in this dialect - "...ška.." does not occur in nominal complexes, i.e. in elements which occur in a nominal context. Examples of nominalisations from other dialects are "wañusqa"(a dead person; Escribens, op.cit.; Huaylas Quechua), "uywa-sqa"(person who has been brought up; Lastra, op.cit.; Cochabamba Quechua), "unqusqa"(person who is ill; Parker, op.cit.; Ayacucho Quechua). In equivalent contexts in San Martín Quechua, the forms (over)

"These suffixes are substantive deriving suffixes.... The inflectional suffixes that follow are typically substantival and the form is thus morphologically substantive"¹. The inflectional suffixes referred to are those denoting person and number. These differ from those elements denoting person and number which occur with a predicative. For example, the moneme "...kuna" roughly denoting "plural" is found as opposed to "...sapa" which also denotes "plural" but which is a verbal suffix². Moreover, the case endings of Quechua, i.e. the relational elements and "...ta", form the noun declension, together with *q*, and thus it is to be presumed that their occurrences signal nominal or nominalised elements. Given all of this, we can do no other than regard forms such as "SamunaNkunapa"(so that they come), "kičuita"(that(I)take away, to take away) as nominal forms, although they patently have predicative function.

3(cont) "uañudu"(dead), "uNkudu"(ill), which may be regarded as showing Spanish influence, are found.

¹ Lastra, op.cit.

² The moneme "...sapa" is, in fact, used exclusively in the superordinate predicative. Predicatives which stand subordinate to the nucleus of the sentence-base do not display the moneme "...sapa" to denote plurality but "...kuna". This refutes Lastra's claim, and those made by others, that there are "inflectional suffixes" which are typically "substantive" and inflectional suffixes which are typically predicative, for example "...kuna" and "...sapa", unless only one type of occurrence of the predicative, namely as the nucleus of the sentence-base, is to be allowed. From my own studies, it appears that there is one set of person and number monemes used in conjunction with superordinate predicative, and another set which are used in conjunction with elements which are subordinate to the superordinate predicative, be they nominal elements or predicative. Thus I make a division between superordinate and subordinate, rather than between nominal and predicative(substantive and verbal) in these cases. See Chapter 11 of the description for a previous discussion on this topic.

This indeed cannot be ignored and statements must be made to the effect that when this set of suffixes occurs in subordinate clauses they form a nominalised verb to which are usually attached possessive endings if the suffix in question is sqa or na, and which carries the accusative suffix if the subordinate clause functions as object of the main verb or some other relational suffix marking adverbial function if the subordinate clause is adverbial. The subordinate clauses can thus be viewed as nominalised sentences.¹ Snow, in his article "Nominalizations in Ancash Quechua", states simply that "these nominalizers constitute a unique set of suffixes whose occurrence in subordinate predicatives is obligatory. That is, one of the nominalizers occurs in the predicate of every complement sentence." Lastra best explains the paradox by stating that "syntactically....the forms containing the derivative suffixes behave as verbs in that they take direct objects and will be called verbals when they occur as centers of secondary clauses".²

In the present work no paradox arises since those elements which occur in predicative contexts are classified as predicatives and those elements which occur in nominal contexts as nominals. Nominal context is defined according to the nominal-governed syntagm; that is, the elements of the syntagm, the nucleus of which has been classified as a nominal, can be assigned to the positions of the nominal-governed syntagm model, and this way the function of the elements can be described

¹ Costa, op. cit.

² Lastra, op. cit.

adequately, consistently and simply. By predicative context is meant that according to the predicative type, a field of relations is determined of the type: (transitive predicative, neutral complement); (complementary intransitive predicative, relational complement) etc. Clearly, complexes such as "uarmiinita ūakaškaNraiku" (because he had cursed my wife), "upianainipa iakuta" (so that I may drink water), must be classed as occurring in predicative contexts, and can in no way be regarded as nominals.

Only those elements which have plereme status are relevant to a syntactic analysis; thus, unless it can be demonstrated that the elements ". ūka..", ". na.." and ". i.." are not monemes occurring in morphological complexes, but are monomeric words, they cannot be shown to have any direct bearing on the syntactic analysis. They are not syntactic entities, i.e. they do not have function on the syntactic level; it cannot be demonstrated that they enter into any syntactic relation. The whole of the complex is taken for analysis and the description made of its function relates to it wholly and not to just a part of it. A complex such as "upianaN" (he drinks) is, therefore, regarded as a predicative since it functions as a predicative, i.e. it is an example of a non-transitive. The fact that ". na.." is also found in morphological complexes which function as nominals does not affect the analysis of "upianaN" as a predicative. Forms which show the elements ". ūka..", ". na.." and ". i..", and which are found to function as predicatives, i.e. they occur in the predicative context, are classified as predicatives. The fact that these elements

may also be found in nominal forms, i.e. in forms which occur in the nominal context, does not affect the classification of the predicative forms as predicatives.

Although it does not affect the syntactic description directly, it is interesting and advantageous to note the function of the elements "...ška..", "...na.." and "...i.." in the subordinate predicatives. It has already been noted in the description of subordinate "...špa/pti..." predicatives, and subordinate "...k" predicatives, that the monemes "...špa/pti..." and "...k" mark a time relation between the subordinate predicative and the governing predicative, and also a subject concordance or discordance.¹ The same is true for the elements under discussion here. Time in the sense of "past", "future", "general" etc., is expressed only in the superordinate predicative. The monemes denoting these features of time occur exclusively in these predicative forms.² Time in subordinate predicatives is expressed in its relation to the time elements of the superordinate predicatives, there being certain monemes in the subordinate predicatives to indicate that relation. Where the predicative is subordinate to a complement marker, and therefore in an indirect relation with the governing predicative, i.e. it is a complement predicative, the monemes "...ška..", "...na.." and "...i.." indicate the time relation between complement syntagm and superordinate predicative in conjunction with the complement marker, and in the case of "...na.." discord of

¹ See Chapter 11 of the description.

² The exceptions to this are "...ška.." which roughly denotes "past, recent", e.g. apamuškani(I have brought) and "...ika.." which roughly denotes "action at a given time", e.g. ruraikani(I am doing). These are found in the forms of subordinate predicatives as well as in the forms of superordinate predicatives.

subject between subordinate and superordinate predicatives may be expressed, while in the case of "...i.." concord of subject is definitely expressed. The following is a small selection of the instances of subordinate predicatives occurring in complement syntagms. The analysis into governing and governed is shown by the slant line.

ka'uaN/ apamuškaikita (he sees/ what you have brought)
 manaN iu'ianiču/ kačarimuškainit a ramumaNta (I do not know/ how I let go of the branch)
 rurapaNki/ čai ruegaškainita (you do/ that which I have asked)
 bersukurkaN/ tukui iačaškaNta (he chanted/ all that he knew)
 sukamaN agra desirkaNsapa/ iakuta tariškaNkunaraiku (they were very grateful/ because they had found water)
 ŠamuškaN/ upianaNpa iakuta (he has come/ so that he may drink water)
 pikšainita čurarkani kaspi sikiNpi/ ūkanaainipa (I put my saddle bag at the foot of the tree/ so that I could climb)
 iakuta apamui kai uasiNčimaN/ armakunainipa (bring water to our house/ so that I can bathe)
 munaN/ rinainita pai'uaN (he wants/ that I go, me to go, with him)
 munani/ ku'iači'uanaNčita (I want/ that he loves us, him to love us)
 uiža'uai/ ruranaikita (tell me/ what you do)
 uakakuita/ kažarirkaN (crying/ she began; she began to cry, crying)
 ūkapiš munani/ mediku'iaita (I too wish/ to become a shaman)
 ianaparkaNsapa/ uasikuita (they helped/ to build the house)
 rirkani/ ka'iaipi (I went/ calling)

urmamurkani/ sukamaN kaparikuipi(I fell/ shouting out a lot)

žukšiNsapa/ sasikuimaNta/ ideN sukamaN uNkudu Šina(they come out/ from dieting/ just like extremely sick people)

The element "...ška.." which occurs in the subordinate predicative forms of the first examples given, expresses a realised state or action in relation to that of the superordinate predicative. The action or state as expressed by the subordinate complement syntagm has been realised before that of the governing syntagm; the element "...ška.." marks the time relation of "past". The subject of a subordinate complement predicative with "...ška.." is always expressed in the form of the predicative, regardless of whether or not it may be identical to that of the superordinate predicative.

The element "...na.." indicates an unrealised action or state in relation to the action or state expressed in the superordinate predicative. Where the subordinate predicative with "...na.." is governed by the relational element "...pa", the subject of the predicative is expressed in the form of a person moneme, even if the subjects of the predicative complement and the superordinate predicative are identical. Where a subordinate complement predicative with "...na.." is governed by the neutral complement marker "...ta", the element "...na.." further indicates that the subject of the complement predicative is not identical with that of the superordinate predicative, the subject of the subordinate predicative being expressed by a person moneme in the form of the predicative. Where a subordinate complement syntagm governed by "...ta" has identical subject with the

superordinate predicative, then the moneme "...i.." is found in the form of the complement predicative. For example: "munani rinaNta"(I want that he go, him to go) but "munani riita"(I want that I go, to go)

Subject concord is to be expected between superordinate predicative and subordinate complement predicative where the latter shows the element "...i.." in its form. This appears to be the chief function of this element, the time relation between subordinate and superordinate predicatives being indicated by the relational marker. Thus in "rirkani ka'iaipi" (I went calling), for example, the relational marker "...pi" indicates that the calling "ka'ia" was concurrent with the going "rirkani", while the moneme "...i.." in "ka'iaipi" marks concord of subject.

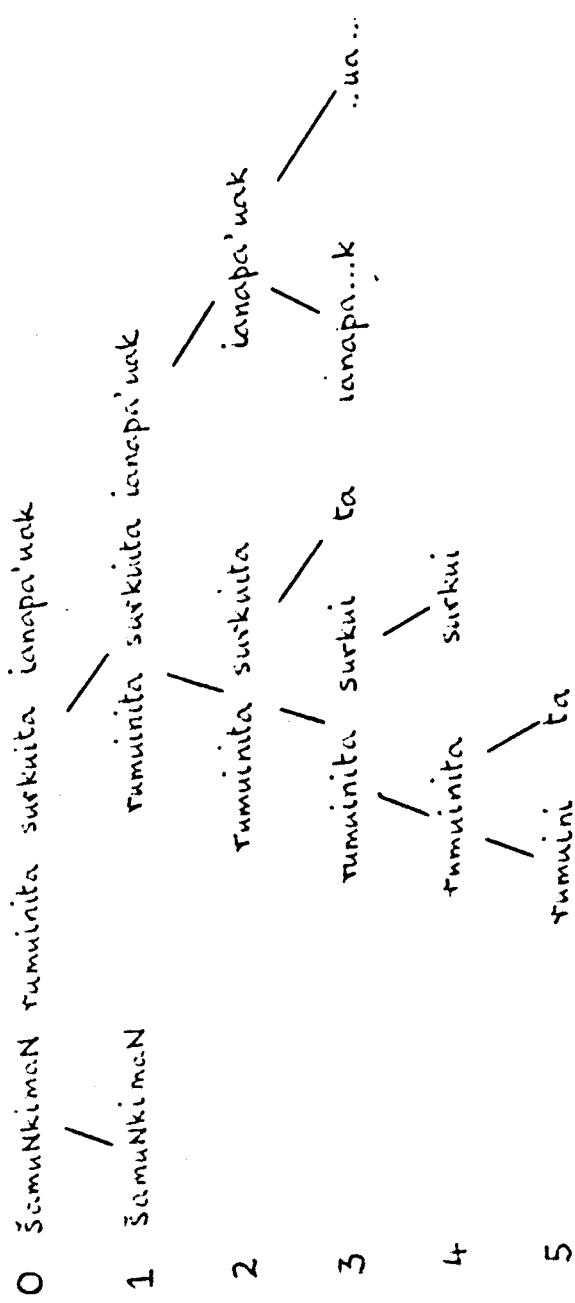
The above is meant only as a rough guide to time relations, and not as any definitive statement of morphology. In all of the examples given, the predicative-governed complement syntagm has been in a relation of subordination, via the complement marker, to a superordinate predicative-governed syntagm, i.e. to the nucleus of a sentence-base. Predicative-governed complement syntagms may occur on levels of the hierarchy other than the first, i.e. they are not I.C.s on the first level of analysis, in which cases the governing syntagms are themselves subordinate to other higher level predicatives.

The following inverted tree diagrams show the levels in the hierarchy at which complement syntagms can occur, and except for two examples on p228 and 230, where nominal complexes remain to be analysed, the sentence-bases have been analysed to their U.Cs.

0. emikuiriačku ūnkaikašpa urmamurkani mu'iu uair'aun ēai bnxu apič'waktin
- 1 emikuiriačku ūnkaikašpa urmamurkani mu'iu uair'aun ēai bnxu apič'waktin
- 2 emikuiriačku ūnkaikašpa mu'iu uair'aun ēai bnxu apič'waktin
- 3 emikuiriačku ūnkaikašpa mu'iu uair'aun apič'waktin
- (the monkey because of my climbing I fell a whistwind with that witch having reached me as I was climbing after the monkey, I fell, that witch having reached me with a whistwind)

* The nominal complex "mu'iu uair'a" remains to be analysed.

* The analysis of the element "pis" is here tentative. See Chapter V, p 238-291.



(you may come my jirca to pull
 and help me
 you may come and help me to pull my jirca)

0 piu uakakuipi tikeN konpadiNkunata iškaita megak rinankunapa pušinak usiuimanaN
 1 piu uakakuipi tikeN konpadiNkunata iškaita megak rinankunapa pušinak usiuimanaN
 2 uakakupiu tikeN konpadiNkunata iškaita megak rinankunapa puši'wak usiuimanaN
 3 konpadiNkunata iškaita megak pa rinankunapa puši'wak usiuimanaN
 4 konpadiNkunata [iškaita]
 5 puši'wak usiuimanaN
 6 puši'wak uuu.. usiuimanaN

(he crying went his colleagues two and asked in order that they go and to my house
 he want crying and asked his colleagues , two of them , to go and take me to my house)
 The square bracket enclosing [iškaita] indicates that this element stands in a relation of opposition to
 "konpadiNkunata"

CHAPTER IV

SYNTAGMS ANALYSED TO THEIR ULTIMATE CONSTITUENTS

1. Syntagm types requiring further analysis.

The analysis of sentence-bases in San Martín Quechua shows that three basic syntagma types can be established: predicative-governed syntagma, nominal-governed syntagma and complement syntagma. These syntagma types may occur as I.C.s of sentence-bases, or as I.C.s of lower level syntagms. This has been illustrated in the foregoing chapters of the description, as have been discussed the syntactic relations which hold between them as I.C.s of larger syntagms.

As syntagms further analysable in the hierarchical order, they may have I.C.s which are themselves syntagms. From the model set up for the complement syntagma, we see that to the peripheral position of the syntagma is assigned a predicative-governed syntagma, a nominal-governed syntagma or an adjectival syntagma, all of which are analysable as syntagms in their own right on a level of analysis lower than that of the complement syntagma. Where the predicative nucleus of a predicative-governed syntagma is of the type requiring actualization, i.e. a transitive requiring a neutral complement, a complementary intransitive requiring a relational complement or a complementary transitive requiring a neutral and a neutral or relational complement, then the peripheral I.C. of the predicative-governed syntagma is further analysable as a complement syntagma. Further analysis of the predicative-governed syntagma is also necessary

where the predicative nucleus is itself a syntagm. Syntagms which stand in the predicative position of the predicative-governed syntagm are instances of the predicative syntagm.

The nominal-governed syntagm, which always has the potentiality of being a lower level syntagm than the predicative-governed and complement syntagms in that it may occur as an I.C. of these syntagm types, may also have I.C.s which are themselves syntagms analysable on a yet lower level. In every case, the syntagm analysable on the lower level is labelled according to the position to which it is assigned as an I.C. of the nominal-governed syntagm.

Except in the cases of syntagms of two positions where the I.C. assigned to the peripheral position is bound, not every I.C. of a syntagm is realised in every instance of that syntagm type; that is, not every position of the model set up to account for all instances of that particular syntagm type is filled in every instance. Nevertheless, syntagms must be analysed according to their maximum possible extent, not only to account for the field of relations within the syntagm adequately, but also because this is the only way that the ultimate constituents (U.C.s) of the analysis are reached.¹ Thus, in this chapter, not only the predicative syntagm is analysed, but any syntagm which may occur within the hierarchy of that syntagm type. Similarly, the syntagms within the syntagms which are I.C.s

¹ For the definition of 'ultimate constituent' see Appendix A, Def. 7f(1b). Much of the aforesaid is, of course, general to any syntactic and not just applicable to San Martín Quechua.

of the nominal-governed syntagm are analysed until only ultimate constituents remain. The U.C.s of a syntactic analysis are pleremes.

2. The predicative syntagm.

A predicative form stands in the nuclear position of a predicative-governed syntagm. If the predicative is an intransitive or a non-transitive (i.e. it requires no actualization), then it may stand alone as an instance of a predicative-governed syntagm, and if, furthermore, it is a superordinate predicative, then it may stand alone as ^a~~A~~ sentence-base, as the first three predicative forms given in the examples below illustrate. The following examples show instances of predicative forms (superordinate and subordinate) standing as the nuclei of predicative-governed syntagms. The first four examples show instances of superordinate predicative forms, the remaining examples show instances of subordinate predicatives.

uañuni	I die
mikuN	he eats
šamuNkimaN	you may come
tarirkani/ omikuita	I found/ a monkey
riikaptiN	he was going
čaita/ katišpa	that/ (I) was following; I was following that
ianapa'uak (analysed: ianapa..k/ ..ua..)	(and) help/ me
rumuta/ surkui	yuca/ to pull out
uažpata/ raNtičinaN	chickens/ he sells

On the evidence of these and like examples, it could be hypothesized that there is no predicative syntagma in San Martín Quechua, but that the element which stands as the nucleus of a predicative-governed syntagma is a form of the predicative, i.e. one plereme. The following examples, however, quickly refute such a hypothesis:

sukamaN baliarkaN (he shot a lot / he shot hard¹)
sukamaN gastači'uaNči (they make us really spend)
iakami uaňuškani iarkaimaNta (I almost died from thirst)
tabakutami sukamaN upiaškani (I have really drunk (smoked) tobacco)
aipa sukamaN maskaksapa (they searched really a lot)
uarmiNka sukamaN maNčakurkaN (his wife was really afraid)
sukamaNna uarmiNka uakakurkaN maNčakui'uaN (his wife cried a lot with fear)
maN utka medikuta maskašpa (they search not quickly for the shaman; they do not search quickly for the shaman)
kai uainatami sukamaN munaškani (I have really desired this young man)

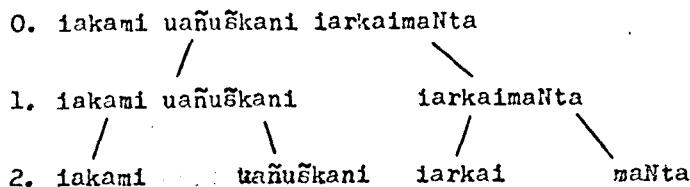
In these examples, the elements which can be said to determine the predicative forms are underlined. If we take the example "iakami uaňuškani iarkaimaNta" (I almost died from thirst), we see that both "iakami" (almost) and "iarkaimaNta" (from thirst) are peripheral to the predicative nucleus "uaňuškani" (I died), and since "uaňuškani" is an intransitive predicative, they are

¹ The element "sukamaN" does not translate easily into English. It has the rough denotation of "intensity" and gives emphasis to the element which it determines, in the case of its occurrence as an I.C. of the predicative syntagma to the predicative.

both expansions to it. The two expansions do not, however, determine the predicative nucleus in the same way: "iarkaimaNta" is more peripheral than "iakami", or put conversely "iakami" is more nuclear than "iarkaimaNta". That is, "iakami" determines the predicative "uañuskani", which together with "iakami" governs "iarkaimaNta". The relations between the elements may be shown in the following way:

[iarkai → maNta] → (iakami → uañuskani)

or in inverted tree diagram form:



A predicative syntagm model of two positions is found to account adequately for all instances the ~~the~~ predicative syntagm. I label the peripheral position 'adverbial':

adverbial	predicative
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The predicative stands as the free nucleus of the syntagm, i.e. the adverbial element is an expansion to the predicative which it determines, and not a bound element. Both predicative and adverbial elements, as I.C.s of the predicative syntagm, may be analysable on a lower level.

The adverbial element is always realised before the predicative. In sequential order, an element standing in the subject relation to the predicative nucleus may be interposed between the adverbial element and the predicative, as the following examples illustrate:

sukamaN uaira suenamurkaN (the wind really blew, made a noise)
 sukamaN iaku runaka puša'uana'iaN (the river man really wants
 to take me)

sukamaN xeNtekuna maNčarkaN soldadukunata (the people really
 feared the soldiers)

sukamaNna uarmiNka uakakurkaN maNčakui'uaN (his wife really
 cried from fear)

The term 'adverbial' I use in a very limited sense and apply only to that set of elements which may be assigned to the adverbial position of the predicative syntagm. Adverbial elements are unmarked in their function as determinants of the predicative. In this they stand in contrast to those elements marked by "...ta" which, when translated into English, appear to have adverbial qualities; for example, "siNčita" in "kažparkaN siNčita" (he ran strongly), and "ažita" in "ažita kausaNsapa" (they live well). These elements cannot be shown to have identical function to elements such as "sukamaN" which occur in the adverbial position of the predicative syntagm. This is evidenced by the fact that they do not belong to the same position class; "siNčita" (strongly), "ažita" (well) etc., are members of the neutral complement position class, their relation to the predicative being marked by the neutral complement marker "...ta", and thus their function. Those elements which truly determine the predicative and which together with the predicative constitute the predicative syntagm, precede it in formal ordering and are unmarked.¹

¹The only reference I have found in descriptions of Quechua dialects to elements such as "sukamaN" which occur before the predicative and determine it is in Taylor, "Le Parler Quechua d'Olto, Amazonas (Pérou)", SELAF, 1975, in which he states (over)

The possibility of further analysis of both positions of the predicative syntagma must be explored; that is, elements assigned to the adverbial and predicative positions may be syntactic complexes which must then be analysed on a lower level.

As far as the nuclear position is concerned, i.e. the predicative position, the auxiliary is not a characteristic of Quechua. Predicatives form simultaneous bundles of monemes which, by definition, are not analysable on the syntactic plane. There is one type of complex, however, which does present itself for analysis and which involves the use of the copula "ka...".

The following are examples of its occurrence:

ñuka/ kaparičik kani I/ used to cry out, lit. be made to cry out

sakmak kani I used to hit out

ñuka/ makana'iak kani I/ used to want to fight

In the description, a moneme "...k" has been shown to mark a time relation between a subordinate and superordinate predicative, e.g. "rirkani kausak"(I went and lived), and a moneme "...k" has been shown to mark a nominal as in "su'uak" (thief), "ui'uakuk"(breeder) etc. It is possible that it is this latter moneme which occurs here, giving nominal function to the element(predicative lexeme) to which it is suffixed.

l(cont) "Il est conçu parfois.....par sa position immédiatement devant le verbe, au syntagme verbal". Otherwise, the term 'adverb' is applied loosely to refer to any element which may, on translation and in traditional grammatical terms, be classified as an adverb.

Thus the complexes given above could be alternatively translated:

ñuka/ kaparičik kani	I/ am a shouter
sakmak kani	I am a hitter
ñuka/ makana'iak kani	I/ am a fighter

and be examples of the copulative predicative.

As has been said before, translation is not a good guide to function, and indeed, can obscure the function of elements.

Given that the moneme "...k" has already been shown to present difficulties in the description¹, the following analysis made of these complexes should be regarded as being tentative only.

While there is no positive evidence to decide whether the different occurrences of the moneme "...k" are instances of one and the same moneme, and therefore sign, or whether we are dealing with homonyms, a few points can be made regarding its occurrence, and function, in the complexes cited above. Taking the example "makana'iak kani"(I used to want to fight), there is in the element "makana'iak" the moneme "...na'ia..", which has the rough denotation "volition" and which may be regarded as a moneme whose occurrence is limited to predicative forms. Similarly, the occurrence of the moneme "...či.." (which has the rough denotation of "make to" - commonly referred to as a 'causative') in "kaparičik kani"(I used to cry out) is limited to predicative forms. Moreover, attested in the data is the occurrence of the adverbial element "sukamaN"(really, a lot) with these forms; for example:

sukamaN ñuka kaparičik kani I really used to cry out

¹ See Chapter 11, p 155 et seq.

sukamaN ñuka makana'iak kani

I really used to want
to fight

The element "sukamaN" is not limited in its occurrence to the adverbial position of the predicative syntagm; it may also occur in the adjectival position as a determinant of the adjective (i.e. as an I.C. of an adjectival syntagm; see below, p253), but it may not, as a constituent of a nominal-governed syntagm, be an I.C. of that syntagm, i.e. stand in a direct syntactic relation with the nominal nucleus of the syntagm.

With these points in mind, it seems that a hypothesis that "kaparičik", "sakmak" etc., are nominals may be refuted, and that we are not dealing here with examples of the copulative predicative. It is far more likely that we are dealing with a form of the predicative. Whether these forms have anything in common with subordinate "...k" predicatives or not, is not clear from the evidence to hand. Certainly in context, these complexes denote a past action, but unlike subordinate "...k" predicatives they do not relate to superordinate predicatives, being acceptable sentence-bases as they stand; that is, they are well-formed utterances. I shall forward the hypothesis that these complexes are instances of a compound tense which is best translated into English as "used to", and which may be labelled "iterative past".¹

3. The adverbial syntagm.

The analysis of the predicative syntagm "aipa sukamaN

¹ Not attested for the San Martin dialect are compound tenses involving the conditional form of the predicative and the copulative "karkaN"; for example, "ruwanman karqa" (he would have made; Parker, op.cit., Ayacucho Quechua).

"maskaksapa" (they really searched a lot¹) demonstrates the existence of a field of relations within the adverbial position, i.e. a syntagm may be assigned to the adverbial position of a predicative syntagm on the first level of analysis. The I.C.s of the above syntagm, on the first level of analysis, are:

(adv. pos. "aipa sukamaN"; pred. pos. "maskaksapa")

In the syntagm "aipa sukamaN", "sukamaN" stands in the nuclear position and is determined by "aipa". The element "aipa", as a peripheral element, is an expansion, standing in an indirect relation with "maskaksapa" (they searched) via "sukamaN" (really). The relations may be shown thus:

[[aipa] → sukamaN] → maskaksapa

The element "aipa" is an expansion to "sukamaN" and the syntagm "aipa sukamaN" is an expansion to "maskaksapa".

The model which will account for all instances of the adverbial syntagm has two positions:

determinant	adverbial
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The occurrence of the negative element in conjunction with the predicative syntagm, e.g. "maN utka medikuta maskašpa" (their not searching quickly for the shaman), "maN utka pagariptiNkuna" (their not paying quickly), is external to the predicative syntagm, i.e. the negative element is not an I.C. of the

¹The element "aipa" cannot be easily translated into English; it is an emphatic, giving emphasis to "sukamaN".

predicative syntagm, but rather stands in a direct syntactic relation with the predicative syntagm. The negative element determines the predicative syntagm, i.e. "maN → utka pagariptiNkuna". This, however, anticipates the description of the negative element given below in Chapter V.

4. The nominal-governed syntagm.

A model of four positions has been set up as adequate for the description of the nominal-governed syntagm, namely:

demonstrative position	numeral position	adjectival position	nominal position	¹
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To these positions complex items may be assigned as the following few examples show:

	demonstrative position	numeral position	adjectival position	nominal position
1.	čai	0	traNperu likidu	uaNbrakuna
2.	čai	0	atuN	iNčik sestu
3.	0	iškai čuNka kiNsa	0	uata
4.	0	suk	0	užku masi
5.	0	0	maNžaibasapa raku	kapuNkuna
6.	čai	iškai	0	uarmi uaNbra
7.	0	sokta čuNka	0	kučikuna
8.	0	0	ašuan atuN	žakta

¹ For nominal-governed syntagm, see Chapter III, p/81.

1. Čai traNperu likidu uaNbrakuna	those trap-setting mad children
2. Čai atuN iNčik sestu	that big peanut basket
3. iškai čuNka kiNsa uata	twenty-three years
4. suš užku masi	a fellow man
5. maNžaibasapa raku kapuNkuna	their enormous, fat castrated pigs
6. Čai iškai uarmi uaNbra	those two girls; lit. female children
7. sokta čuNka kučikuna	sixty pigs
8. ašuaN atuN žakta	bigger town; lit. more big town

No complex items have been attested in the data on San Martín Quechua for the demonstrative position; complex items have, however, been attested for the other three positions of the nominal-governed syntagm. Often, the complexes are very obviously syntactic complexes, and the relation(s) between the elements is/are evident. Where this is not the case and it proves difficult to discern ordering relations between the elements of a complex, as it may do for complexes occurring in the nominal position, those criteria laid down by Hervey and Mulder for distinguishing between morphological and syntactic complexes will be followed.¹

5. The numeral syntagm.

In San Martín Quechua, as in all dialects of Quechua, only

¹ Hervey and Mulder, "Pseudo-composites and Pseudo-words: sufficient and necessary criteria for morphological analysis", La Linguistique, 1, Vol. 9, 1973, in which a rigorous set of criteria are given for distinguishing between "simple signs", "complex signs" (analysable into at least two smaller constituent signs), (over)

the number elements one to ten are simple signs; all members of the class above the number ten are complex items made up from combinations of single numeral elements, except for "pačak"(hundred) and "uaraNka"(thousand).¹

The repetition of the element "iškai" has been deliberate to highlight the construction of the numeral complexes given below, replacing the relevant numeral of some attested examples in the data.

čuNka iškai	twelve
iškai čuNka	twenty
iškai čuNka iškai	twenty-two
iškai pačak	two hundred
iškai uaraNka	two thousand

The first two examples alone appear to give sufficient evidence that these complexes are syntactic and not morphological. We can demonstrate that, by the reversibility of the elements "čuNka"(ten) and "iškai"(two) to give two distinct complex signs "čuNka iškai"(twelve) and "iškai čuNka"(twenty), the relation between the two elements is not one of simultaneity. That is, we can show that there is an asymmetrical relation between "iškai" and "čuNka", and an asymmetrical relation implies ordering relations.²

¹(cont) morphological complexes" and "syntactic complexes". See also Part 1, Chapter 11, p.24 of the present work.

¹The San Martín Quechua equivalents for one to ten are: suk, iškai, kiNsa, čusku, pička, sokta, kaNčis, pusak, iškuN, čuNka respectively.

²See Appendix A, Def. 6a. or p.22 of this work.

It has been suggested by other Quechua scholars that in "iškai čuNka", for example, the relation between the elements is one of subordination of "iškai" to "čuNka", i.e. "iškai" determines "čuNka", while in "čuNka iškai" the two elements stand in co-ordination.¹ While the first analysis is adequate, i.e. (iškai → čuNka)(see below), the analysis of "čuNka iškai" (twelve) as (čuNka ↔ iškai) cannot be upheld in terms of the theory applied in this description. Co-ordination is defined as 'direct tactic(by implication symmetrical)relation of mutual functional independency'.² Thus the implication of an analysis (čuNka ↔ iškai) would be that "čuNka"(ten) and "iškai"(two) are independent of each other for their functions.

Co-ordination between numeral elements can, and does occur, as in the following examples:

suk iškai sol(one, two sols)

sokta čuNka kaNčis čuNka pačak kučikuna(sixty, seventy, a hundred pigs)

suk uaraNka iškai uaraNka sol(one thousand, two thousand sols)

Para-syntactic features enable us to determine that, in the last two examples, we are dealing with complex items and not with simple signs in co-ordination; that "sokta čuNka", "kaNčis čuNka" for example, are complex items(sixty and seventy respectively) and not simple signs in co-ordination thus:

¹ See for example, Parker, op.cit. or Escribens, op.cit. In the above, I have applied their analysis to San Martin Quechua.

² See Appendix A, Def. 11b. or p 46 of this work.

(sokta ↔ āuNka ↔ kaNčis ↔ āuNka) (six, ten, seven, ten)

The example "sokta āuNka kaNčis āuNka pačak kučikuna"(sixty, seventy, a hundred pigs) is analysed in the following way:

[sokta āuNka ↔ kaNčis āuNka ↔ pačak] → kučikuna

This type of structure is distinct from that of "āuNka iškai" (twelve) which cannot be regarded as an example of co-ordination. The elements "āuNka" and "iškai" are not functionally independent but are functionally dependent in some way. A relation of inter-ordination cannot be demonstrated between the elements since we cannot show that "āuNka" and "iškai" mutually imply each other, i.e. if "āuNka" then "iškai", which is clearly not the case; "āuNka"(ten) does not imply "iškai"(two) or vice versa.

Returning for the moment to the complex "iškai āuNka"(twenty), we can show that there is a relation of subordination between the elements where "iškai"(two) determines "āuNka"(ten)(a literal translation of "iškai āuNka" would be "two tens"). That is, "āuNka" is the nucleus of the syntagma "iškai āuNka" and "iškai" as the peripheral element determines it. The relation may be presented thus:

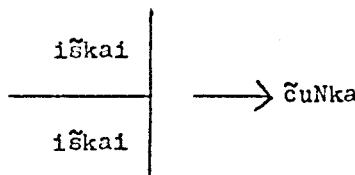
iškai → āuNka

As a peripheral element dependent on "āuNka" for its function, "iškai" is an expansion. Similarly, in "iškai pačak"(two hundred) and "iškai uaraNka"(two thousand), "pačak"(hundred) and "uaraNka" (thousand) are, in their respective syntagms, determined by "iškai".

Since we cannot demonstrate a relation of co-ordination or

a relation of interordination between "čuNka" and "iškai" in "čuNka iškai"(twelve), we are left with two alternatives: either that one element stands in a relation of subordination to the other, or that "čuNka iškai" is not a syntactic complex after all. If we were to regard it as a morphological, and not a syntactic complex, the analysis of the complex "iškai čuNka iškai"(twenty-two), for example, where we have established "iškai" as a determinant of "čuNka" in "iškai čuNka", would be (iškai → čuNka iškai) which cannot be maintained. The element "iškai" determines only "čuNka"; it only stands in a direct relation with "čuNka". The relation between the two "iškai"s of "iškai čuNka iškai" is an indirect one via "čuNka".

Thus "čuNka" appears to be the nucleus of the syntagm, with each peripheral element standing in a relation of subordination to it, but not in the same way, i.e. it is an example of diverse determination:



The syntagm "iškai čuNka iškai"(twenty two) is analysed into three I.C.s: "čuNka" which is the nucleus of the syntagm, and the two "iškai"s which are each peripheral to the nucleus.

An alternative hypothesis, which is more intuitively satisfying, is that on the first level of analysis there are two I.C.s: "iškai čuNka"(twenty) and "iškai"(two). In the complex "iškai čuNka iškai", "iškai čuNka" seem to "go more together" as one I.C. with "iškai"(two) forming another I.C.

with which it contracts a tactic relation. The relation cannot be one of co-ordination or of interordination for the same reasons as given for determining the type of tactic relation between "čuNka" and "iškai" in "čuNka iškai"(twelve). The relation must then be one of subordination. It is more intuitively satisfying to give the relation of subordination between the elements as (iškai čuNka → iškai). That is, "iškai"(two) as the nucleus of the syntagma governs "iškai čuNka"(twenty) which is analysable on a lower level as (iškai → čuNka). This is consistent with other analyses made of complex items occurring in one position in San Martín Quechua: that the final element of the complex(in formal ordering the right hand element) is determined by those elements which precede it in formal realisation, or conversely, it governs those elements which precede it in the complex. This analysis of numeral complexes is the one which I forward in this description.

A numeral element may be determined by an element which is not itself a numeral, e.g. "iaka sokta"(almost six) where "iaka" (almost) determines "sokta"(six). Thus the model set up to account for all instances of the numeral syntagma is one of two positions:

determinant	numeral
-------------	---------

The numeral complexes assigned to the numeral position are analysable as syntagms in their own right on a lower level. Members of the numeral position class are not only those elements and complexes which denote specific number, e.g. "suk" (one), "čusku pačak"(four hundred), but also those elements, commonly classed in traditional grammars as adjectives, which

more generally denote number, for example "moNtoN"(many), "tukui"(all), "uakin"(some). A criterion used in the establishment of positions, and also in the membership of that position class, is that of commutability of elements. If two elements are mutually substitutable in equivalent contexts, i.e. if they commute with each other, they belong to the same 'position class'. Elements such as "suk", "čusku pačak", "moNtoN", "tukui" are mutually exclusive in equivalent contexts.

6. The adjectival syntagma.

The following complexes form a representative sample of the type of complex which may occur in the adjectival position. The whole syntagma of which the adjectival syntagma is an I.C. is given for the sake of clarity when giving the English translations of the complexes.

maNžaibasapa raku/ kapunkuna	enormous fat/ their castrated pigs
ažuaN atuN/ žakta	bigger(lit. more big)/ town
ažuaN siNči/ runa	stronger(lit. more strong)/ man
sukamaN siNči/ medikukuna	very strong/ shamans
maN atuN/ rarka	not big/ gorge
sukamaN aži/ kusaini	very good/ my husband
sukamaN siNči/ ta	very strong/ neutral complement marker
sukamaN aži/ ta	very well/ neutral complement marker
traNperu likidu/ uaNbrakuna	trap-setting mad/ children
ia'uar likidu/ kamaNkuna	really bloody/ their beds

Adjectival elements, when occurring as I.C.s of a nominal-

governed syntagm, determine the nominal nucleus of that syntagm, i.e. adjectival → nominal.¹ Thus, in the examples above which are instances of the nominal-governed syntagm, the adjectival complexes determine the nominal nucleus. That is, on the first level of analysis of the nominal-governed syntagm, the adjectival elements together, and not separately, stand in a direct relation, one of subordination, to the nominal nucleus. On a lower level of analysis, i.e. on the level of analysis of the adjectival complex as a syntagm in its own right, it must be shown whether the elements of the complex stand in a relation of co-ordination with each other, or whether they stand in a relation of subordination the one to the other.

Taking the first example from above "maN̄aibasapa raku kapuNkuna" (their enormous fat castrated pigs), we may demonstrate co-ordination between "maN̄aibasapa" (enormous) and "raku" (fat); they are independent of one another for their function, each standing separately in a relation of subordination with "kapuNkuna" (their castrated pigs). The element "maN̄aibasapa" is not dependent on "raku" for its function or vice versa; the syntagm "maN̄aibasapa kapuNkuna" (their enormous castrated pigs) is well-formed without "raku", as is "raku kapuNkuna" (their fat castrated pigs) without "maN̄aibasapa". Thus, we may say that as I.C.s of the adjectival syntagm, "maN̄aibasapa" and "raku" stand in a relation of co-ordination with each other, i.e. (maN̄aibasapa ↔ raku).

Not all I.C.s of an adjectival syntagm stand in a relation of co-ordination with each other, i.e. we may not assert

¹ For nominal-governed syntagm, see Chapter III, p/82.

co-ordination between the I.C.s for every instance of the adjectival syntagma. If "sukamaN siNči" in "sukamaN siNči medikukuna", for example, were two elements in co-ordination, then one or other of the elements could be omitted and a meaningful utterance maintained. If we omit "sukamaN"(very), "siNči medikukuna"(strong shamans) remains meaningful; if we omit "siNči"(strong), however, "sukamaN medikukuna"(very shamans) ceases to be meaningful. The relation between the elements cannot be shown:

[sukamaN $\not\leftrightarrow$ siNči] \longrightarrow medikukuna

with "sukamaN" and "siNči" each subordinate to "medikukuna", and co-ordinate with each other. The element: "siNči" stands in a direct relation with "medikukuna", but the element "sukamaN" does not. Thus there is not co-ordination between the elements. The complex "sukamaN siNči" as a whole, stands in a direct relation of subordination to "medikukuna", i.e. sukamaN siNči \longrightarrow medikukuna. That "siNči medikukuna"(strong shamans) is meaningful on its own implies that "sukamaN" is an expansion to "siNči". That is, the analysis of the syntagma "sukamaN siNči" (very strong) is as follows:

- a) "siNči"(strong): free nucleus of the syntagma
- b) "sukamaN"(very): peripheral element which determines "siNči" and is an expansion to it.

That is:

sukamaN \longrightarrow siNči

From this we may set up a two position model to account for

all instances of the adjectival syntagm where there is a relation of subordination between the I.C.s:

determinant	adjectival
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This model accounts adequately for the examples given above(p251):

	determinant position	adjectival position
1.	ašuaN	atuN
2.	sukamaN	aži
3.	ašuaN	siNči
4.	sukamaN	siNči
5.	maN	atuN
6.	sukamaN	traNperu likidu

1. more big
2. very good
3. more strong
4. very strong
5. not big
6. really trap-setting mad

A syntagm may occur in the determinant position for, as with its occurrence as determinant of an adverbial element, so with its function of determinant of an adjectival element, the element "sukamaN"(very) may itself be an I.C. of a lower level syntagm. The element "sukamaN" is the only attested determinant which may itself be determined. In the adverbial context it can be determined by "aipa"¹, and in the adjectival context, it can be determined by "ašuaN"; for example, "ašuaN sukamaN siNči" (more very strong, i.e. even more strong) which may be analysed

[ašuaN → sukamaN] → siNči

The possible analysis of "maN"(not) as determinant of the

¹For adverbial syntagm, see p141-244.

adjectival element "atuN"(big) in "maN atuN rarka"(not a big gorge), and not as a determinant of the nominal-governed syntagm "atuN rarka" will be discussed in the section on the negative element in the following chapter, p277-8.

The last example assigned to the table above shows a complex item occurring in the adjectival position, i.e. the nuclear position of the adjectival syntagm, namely "traNperu likidu" (trap-setting mad). Other examples of this type attested in the data are: "baratu likidu"(really cheap), "su'ua likidu"(thorough thief), "daño likidu"(real damage), "ia'uar likidu"(completely bloody), "traga likidu"(thorough glutton). These complexes tend to occur as instances of the adjectival syntagm as complement to the copula in the copulative predicative or as non-predicate predicatives¹; for example:

čai uaNbrakuna karkaN traNperu likidu(those children were trap-setting mad)

kučikuna su'ua likidu(the pigs(are)thorough thieves)

kai runaka sukamaN traga likidu(this man(is)a thorough glutton)

They occur less frequently as an I.C. of a nominal-governed syntagm assignable to the adjectival position, e.g. "čai traNperu likidu uaNbrakuna"(those trap-setting mad children). The element "likidu" seems to convey a meaning of "complete" or "thorough". Its occurrence in the data and the problems it poses in the description have been discussed earlier in this work². As far as the present syntactic description is concerned, complexes of the type "traNperu likidu",

¹For copulative predicate and non-predicate predicate, see Chapter 1 of the description, p121-5.

²See Part 1, Chapter III, p 67 et seq.

"su'ua likidu" are not syntactic, i.e. they are not analysable on the syntactic plane.

The adjectival syntagm may occur as an I.C. of a nominal-governed syntagm, or it may occur as an I.C. of a complement syntagm, i.e. as the syntagm bound to the neutral or relational complement marker. In its occurrence as such, it cannot be regarded as an elliptical realisation of the nominal-governed syntagm in the way that "čaita"(that), "iškaita"(two) for example, can. In the latter case, the missing element can be supplied while in the case of the adjectival complement syntagm, context does not produce any such missing element. It must be regarded as constituting a well-formed syntagm on its own on that level of analysis.

7. The nominal syntagm.

The following are examples of the type of complex item which may occur in the nominal position of a nominal-governed syntagm:

inčik sestu	peanut basket
rumu sestu	yuca basket
rumu čakra	yuca field
poroto čakra	bean field
poroto karga	bean load
iaku pati	water gourd
inčiri iaku	banana water
užku masi	man fellow ¹

¹There is no direct correlation between "masi" and "fellow" as we understand it in English. The element "masi" seems to refer to a fellow member of a group. Where for example "užku masi" occurs in examples given in the description, I have given the rendering "fellow man" rather than "man fellow" as being more acceptable English.

uarmi masi	woman fellow
iNdio masi	Indian fellow
užku uaNbra	man child; boy
uarmi uaNbra	woman child; girl
užku ua'ua	man child
uarmi uaNbra	woman child ¹
kuči ua'ua	pig child; piglet
Sisa Žakta	Sisa town
Kata'ua'iuk kebrada	Katawayuk creek

The elements of each complex have been separately identified as signs, i.e. by finding valid commutations for each element we can demonstrate that we are not dealing with single but with complex signs which may be morphological or syntactic.

Taking the last two examples first, by reversing the elements to give two distinct complexes: "žakta Sisa"(the town(is)Sisa) and "kebrada Kata'ua'iuk"(the creek(is)Katawayuk) respectively, we may demonstrate an asymmetrical relation between the elements. The complexes "Sisa Žakta"(Sisa town) and "Kata'ua'iuk kebrada" (Katawayuk creek) are syntactic. Taking the remaining examples for testing, we do not have in the data instances of "sestu iNčik"(basket peanut), "čakra rumu"(field yuca), "uaNbra užku" (child man) etc., to demonstrate asymmetry between the elements of each complex, nor do we have valid commutations of one or other of the elements of each complex with a syntagm, e.g. "iNčik rumu

¹ In the complexes "užku uaNbra" and "uzku ua'ua" etc., a male speaker tends to use "uaNbra"(child), while a female speaker uses "ua'ua". Both "uaNbra" and "ua'ua" may be used to refer to a child or to a baby. There does not appear to be any discrimination of age to signal the usage of one in preference to the other.

čakra"(peanut and yuca field) which would enable us to demonstrate that these are syntactic complexes. Thus, strictly speaking, given that ordering relations cannot be demonstrated between the elements of the complexes, they should be treated as morphological and therefore not analysable on the syntactic plane.¹ However, by analogy with "Sisa žakta" and "Kata'ua'iuk kebrada", and on the assumption that these other complexes are of the same structural type, I shall forward the hypothesis, which must remain hyper-hypothetical since it cannot be tested adequately with the data to hand, that the complexes are syntactic, and therefore analysable on the syntactic plane.²

Taking the complex "iNčik sestu"(peanut basket) as our working example, the element "iNčik"(peanut) stands in a relation of subordination to "sestu"(basket), i.e. [iNčik] → sestu. Three alternatives present themselves for testing with regard to the analysis of "iNčik" which as a peripheral element is an expansion to the nominal nucleus:

- a) that "iNčik"(peanut) is assigned to the adjectival position of the nominal-governed syntagm, and is a member of that position class;
- b) that a separate position is set up to account for the function of elements such as "iNčik" in the nominal-governed syntagm;
- c) that together with "sestu"(basket), "iNčik sestu"(peanut

¹ See Hervey and Mulder, op.cit. or p22 of this work for the set of criteria used in the establishment of syntactic as opposed to morphological complexes.

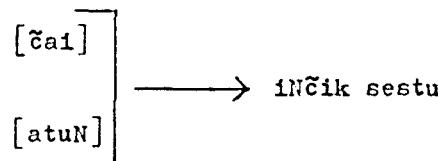
² Should additional field work show that complexes such as *"čakra rumu" or *"iNčik rumu čakra" are not meaningful utterances, then the hypothesis that "iNčik sestu"(peanut basket), "rumu čakra" (yuca field) etc., are syntactic is refuted.

basket) forms a complex item in the nominal position of the nominal-governed syntagma, which is analysable on a lower level as an instance of the nominal syntagma.

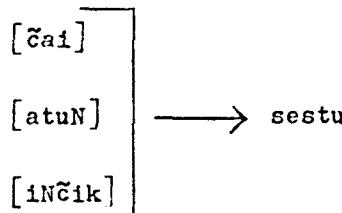
The nominal-governed syntagma "čai atuN iNčik sestu" (that big peanut basket) is an expansion of "iNčik sestu" (peanut basket) and has been attested in the data. In this syntagma, the element "atuN" (big) is assigned to the adjectival position, and if we take the first alternative for testing, then "iNčik" (peanut) would also be assigned to this position. The implication of a complex "atuN iNčik" (big peanut) in the adjectival position could be that this is an instance of the adjectival syntagma where "atuN" determines "iNčik", i.e. (atuN → iNčik), or that the two elements stand in a relation of co-ordination with each other and each in a relation of subordination to the nominal nucleus of the nominal-governed syntagma, i.e. [atuN ↔ iNčik] → sestu. To analyse the syntagma "atuN iNčik sestu" (big peanut basket) as [atuN → iNčik] → sestu means that "atuN" stands in an indirect relation with "sestu" via "iNčik" which does not seem to be the case. Rather "atuN" (big) determines "sestu" (basket). The element "iNčik" (peanut) also determines "sestu", so it could be held that the analysis of the syntagma should be: [atuN ↔ iNčik] → sestu. Such an analysis does not, however, fit the semantic facts. In the complex the element "iNčik" seems more nuclear than "atuN"; that is, "atuN" does not just determine "sestu" but "iNčik sestu"; i.e. atuN → iNčik sestu.

For the same reason, alternative (b) must be rejected. The element "iNčik" is not peripheral to "sestu" in the same way that the other peripheral I.C.s of the nominal-governed syntagma

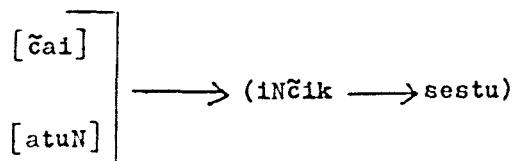
are, which is what would be implied if another peripheral position were set up to accomodate "iNčik". That is, in the syntagm "čai atuN iNčik sestu"(that big peanut basket), "čai"(that) and "atuN" (big) do not determine "sestu"(basket), but "iNčik sestu"(peanut basket). There is parallel determination between "čai" and "atuN", but there is not parallel determination between "čai" and "iNčik" or between "atuN" and "iNčik". The syntagm must be analysed:



where "iNčik sestu", as the nominal, nuclear, element, governs the rest of the syntagm, and cannot be analysed:



From this we may say that a nominal syntagm may occur in the nominal position of the nominal-governed syntagm(i.e. we accept the third alternative given above). This syntagm type may have two I.C.s: determinant and noun. The analysis of the syntagm "čai atuN iNčik sestu" may be shown in the following way:



Not listed in the set of examples given above(p256?) are items such as "čučik puru"(owl through and through), "ia'uar puru" (nothing but blood). The element "puru" seems to mean "totalness" or "completeness" of the element to which it is suffixed. Like

"likidu" which seems to be its adjectival counterpart¹, "puru" occurs only in combination with a nominal element to which it is suffixed and it is treated here as not being a syntactic element.

8. Further analysis of the nominal syntagm.

In the above, we have tentatively set up a two position model to account for all instances of the nominal syntagm:

determinant	noun
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and as far as the instances of the nominal syntagm given above are concerned, it gives adequate account of the relations between the I.C.s. The I.C.s assigned to these two positions are also U.C.s of the analysis.

In the data there may be, however, instances of the nominal syntagm which are not accounted for adequately by the two position model (that is, the relations between the I.C.s of the nominal syntagm are not accounted for adequately), or, if the model is found to be adequate, the I.C.s assigned to the positions may not be U.C.s; that is, they may be requiring further analysis before the U.C.s of the analysis are reached. I refer to complexes such as the following:

Kata'ua'iuk kebrada iaku mañaNpi (beside the Katawayuk creek river)
 kaspi sa'uaNpi (at the top of the tree)
 kaspi sikiNpi (at the foot of the tree)
 suk rumu sa'uaNpi (on top of a stone)
sa'uainipi (on top of me)

¹ See p 255.

kai kebrada anakpi(beyond, above this creek)
 rumi sikimanTa(from under the stone)
 sača ukupi(in the interior of the woods)
 ČakraN mañapi(at the side of his field)
uašapi(outside)
uašamaNta(from outside)
 iNčik sestu ukumaNta(from inside, out of the peanut basket)
 iNčik sestu ukupi(into the peanut basket)
 Čimi ukupi(into(his)mouth)

The analysis of the nominal-governed relational syntagm is that the relational marker governs the nominal-governed syntagm which is bound to it. For example, in "čai uasipi"(in that house) "čai uasi"(that house) as an instance of the nominal-governed syntagm is bound to the relational marker "...pi" which it actualizes:

$(čai\ uasi) \longrightarrow pi^1$

For determining the maximum field of relations possible within the nominal syntagm, it is necessary to determine whether the underlined elements in the above examples are further types of relational marker, and therefore assignable to the relational marker position of the relational complement syntagm, or whether they are analysable as instances of the nominal-governed relational syntagm. That is, there are two hypotheses to be tested:

a) that "iNčik sestu ukupi"(inside the peanut basket), for

¹For nominal-governed relational syntagm, see Chapter III of the description.

example, as an instance of the nominal-governed relational syntagm is analysed:

(iNčik sestu) → ukupi

where "iNčik sestu"(peanut basket) is an instance of the nominal-governed syntagm bound to the relational marker "ukupi"(inside). The peripheral element is analysable, on a lower level, as an instance of the nominal syntagm; the nuclear element "ukupi" may or may not be further analysable;

b) that the syntagm is likewise analysed into two I.C.s, but the I.C.s are: "iNčik sestu uku" and "...pi". That is, "iNčik sestu uku"(the peanut basket inside) is an instance of the nominal-governed syntagm which is governed by "...pi"(in):

(iNčik sestu uku) → pi

The complex "iNčik sestu uku" is analysable as an instance of the nominal syntagm on a lower level.

We may validate the first hypothesis by demonstrating that "ukupi", for example, is a simple sign. Attested in the data, however, are instances of "uku"(inside), "siki"(the foot of) etc., occurring on their own without a relational element, and in such occurrences their denotations are equivalent to when they occur in conjunction with a relational element. For example:

uaša ianaini	outside(is)black for me
uašamaNta	from outside
tužpa siki	the foot of the stove
tužpa sikimaNta	from the foot of the stove

Thus "uašamaNta", "sikimaNta" etc. cannot be regarded as simple

signs but as complex signs; that is, they are analysable into constituent signs.

Thus for the first hypothesis to be valid, we must show that "tužpa siki", for example, is an instance of a relational syntagm where "siki" as relational marker governs the function of "tužpa"(stove) by relating it to a higher level constituent. That is, that "tužpa siki"(the foot of the stove) and "tužpamaNta" (from the stove) are functionally equivalent. While it can be shown that "...maNta" relates "tužpa" to a higher level constituent, and "tužpamaNta" is an instance of the relational complement syntagm, the same cannot be maintained for "tužpa siki", i.e. it cannot be shown to have identical function. The element "tužpa siki" may stand in the subject relation to a predicative, but it may not stand in the relational complement relation.

We may not regard "siki" as being a member of the relational marker class, so we must analyse it as an instance of a nominal. Thus "tužpa sikipi"(at the foot of the stove) is an instance of the nominal-governed relational syntagm where "...pi" governs the nominal-governed syntagm "tužpa siki". That is:

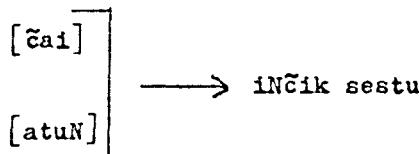
(tužpa siki) → pi

Such an analysis is equivalent to the analysis of complexes such as "uasipi"(in the house), "LamasmaN"(to Lamas), but it is not necessarily the case that the syntagm "ukupi"(in the inside) commutes with the syntagm "uasipi"(in the house) for example, since we may also have "uasi ukupi"(in the interior of the house), i.e. the distribution is not the same in each case:

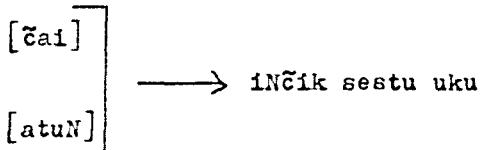
0	uku	pi
uasi	0	pi
uasi	uku	pi

If we take "uasi uku" as an instance of the nominal syntagm, we would analyse it in the following way: (uasi → uku), in the way that "iNčik sestu"(peanut basket), for example, is analysed (iNčik → sestu).

To say that each is an instance of the same syntagm type, we must be able to demonstrate that the relations which hold between the I.C.s of the syntagms are the same in each case. Otherwise, "uasi uku" is not an instance of the same nominal syntagm type as "iNčik sestu". If we take the examples "čai atuN iNčik sestu"(that big peanut basket) and "čai atuN iNčik sestu uku"(that big peanut basket inside), we may test to see if the relations of "čai"(that) and "atuN"(big) to "iNčik sestu" (peanut basket) in "čai atuN iNčik sestu" are the same as would hold between "čai", "atuN" and "iNčik sestu uku" in "čai iNčik sestu uku". That is:



and



As regards the nominal syntagm, there are ordering relations between "iNčik" and "sestu", "iNčik" determining "sestu"; (iNčik → sestu), and there are ordering relations between

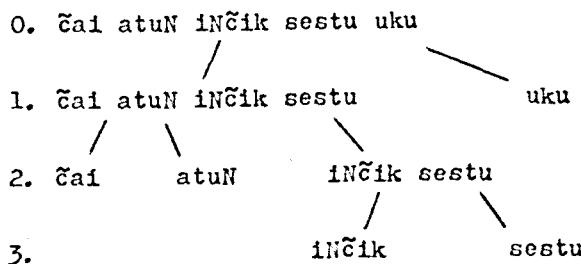
"sestu" and "uku", "sestu" determining "uku": (sestu → uku).

Thus we may give the relations between "iNčik", "sestu" and "uku" in "iNčik sestu uku" (peanut basket inside) as (iNčik → sestu) → uku.

In the analysis of "čai atuN iNčik sestu uku" (that big peanut basket inside), "čai" and "atuN" do not seem to determine "uku" as much as they determine "iNčik sestu", i.e. "čai", "atuN", "iNčik" and "sestu" seem to go together, and "čai atuN iNčik sestu" as a whole determines "uku". That is, an analysis of the syntagma into two I.C.s: "čai atuN iNčik sestu" and "uku" appears to account, in the most adequate way, for the relations, grammatically and semantically. The elements "čai" and "atuN" determine "iNčik sestu", and that syntagma as a whole, on a higher level, is governed by "uku". That is, "čai" and "atuN" contract an indirect tactic relation with "uku" via "iNčik sestu"; they do not stand in a direct relation with that element. The analysis may be shown thus:

$([\text{čai}], [\text{atuN}] \rightarrow (\text{iNčik} \rightarrow \text{sestu})) \rightarrow \text{uku}$

or in inverted tree diagram form:



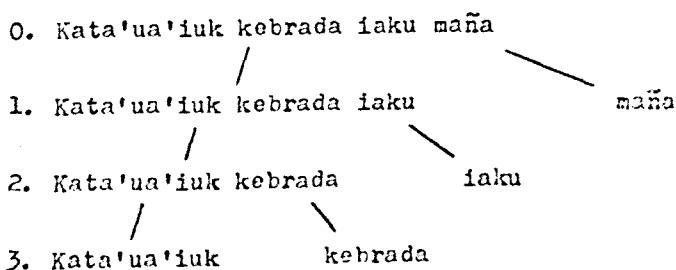
Thus we have the case where a noun "uku" governs a nominal-governed syntagma. This type of structure seems to be confined to instances such as the above, where a nominal-governed syntagma

is governed by an element, a noun, which may roughly be said to denote location, e.g. "uku"(inside), "siki"(the foot of).

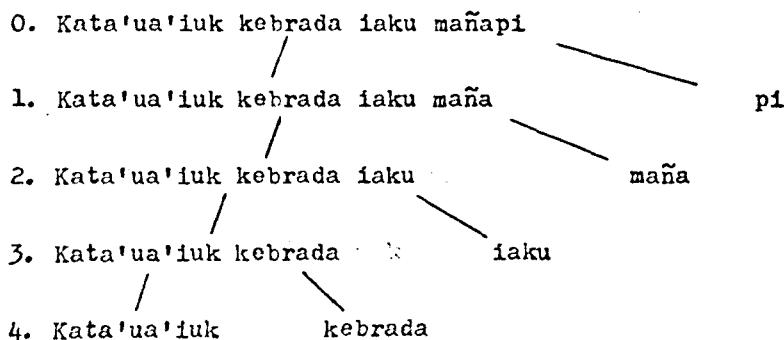
We may account for this type of structure with a two position model:

determinant	noun
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where the elements such as "uku" are assigned to the noun position, and nominal syntagms, or nominal-governed syntagms are assigned to the determinant position. Where a nominal syntagm is assigned to the determinant position, it may itself be analysed in terms of the model (determinant; noun). That is, there may be recursiveness of a structure type. The full possible extent of recursiveness may be exemplified by the instance of "Kata'ua'iuk kebrada iaku maña" (the Katawayuk creek water side). On the first level of analysis, this syntagm may be analysed into two I.C.s: "Kata'ua'iuk kebrada iaku" (Katawayuk creek water) and "maña" (side). The determinant of "maña" is further analysable into: "Kata'ua'iuk kebrada" (^{wa}Kata_{uk} cr^{ek}) and "iaku" (water). The complex "Kata'ua'iuk kebrada" as determinant of "iaku" is further analysable: "kata'ua'iuk" and "kebrada". Thus we have a structure (determinant; noun) where the 'determinant' is further analysable (determinant; noun). In inverted tree diagram form, the analysis may be shown thus:



This seems to be the limit of recursiveness in this position, for reasons of intelligibility. Reference back, however, can be increased by one stage if a syntagma such as "Kata'ua'iuk kebrada iaku maña" is governed by a relational element, as in "Kata'ua'iuk kebrada iaku mañapi" (by the Katawayuk creek water side) for example. The analysis of this syntagma to its U.C.s may be shown in inverted tree diagram form thus:



9. The relational element "...pa" in conjunction with a nominal.

The relational element "...pa" when found in co-occurrence with a nominal lexeme may be given the rough denotation of "possession"; in traditional grammar it would be said to correspond to the genitive case. The following are some of the examples found in the data of the occurrence of "...pa" together with a nominal lexeme.

paipa rimanaNta/ kreišpa(his words/ believing)

ča'iamurkaN/ peste kucipa(arrived/ the disease of the pigs)

doktorpa remediuNka(the doctor's remedy)

uarmipa mamaNka/ uižarkaN/ užkupa tataNtaka(the woman's mother/
spoke to/ the man's father)

ñukapaka ua'uainika/ siNkasapami(my child/ (has) a big nose)

mamaNka uarmipa/ ka'uarkaN(the mother of the woman/ looked)
 rupačirkaNsapa/ kai Pišuainikuna/ SisinuNkunapa uasiNkunata(they
 set fire to/ these Pishwayans/ the Sisinos' houses)
 Čai čušikka/ mudarkaN/ čai uarmipa mudanaNta(that owl/ changed
 into/ that woman's clothes)

In the underlined instances of the nominal-governed relational syntagm, the relational marker does not relate the nominal-governed syntagm which it governs to a higher level predicative nucleus, but to a higher level nominal. That is, "čai uarmipa mamaNka"(that woman's mother) is analysed:

[čai uarmi → pa] → mamaNka

The relational marker "...pa" is the only relational which appears to have this capacity, and in this capacity illustrates embedding. That is, a nominal-governed syntagm may be embedded in a higher level nominal. In the example "čai uarmipa mamaNka uižarkaN užkupa tataNtaka"(that woman's mother spoke to that man's father), "uarmipa"(woman's) is related to "uižarkaN"(spoke to) only via "mamaNka"(her mother). Similarly, the relation of "užkupa" to "uižarkaN" is an indirect one via "tataNtaka"(his father). In "užkupa tataNtaka"(the man's father) one complement syntagm is embedded within another, i.e.

([užku → pa] → tataN) → taka

In the nominal-governed relational syntagms "užkupa" and "čai uarmipa", the relational element "...pa" is not a free nucleus, i.e. it requires a nominal-governed syntagm to actualize it. As an I.C. of a higher level nominal-governed syntagm, it is an

expansion; for example, "užkupa"(the man's) in "užkupa tataN" (the man's father) is not a bound, peripheral element, but an expansion.

It seems from attested examples in the data that the nominal-governed relational "...pa" syntagm relates directly to a nominal; that is, it is governed by a nominal rather than by a nominal-governed syntagm. The occurrence of a nominal-governed relational syntagm governed by a nominal seems to exclude the occurrence of demonstrative, numeral or adjectival elements as determinants of the nominal nucleus. The governed syntagm of the relational complement may, however, be analysed as an instance of the nominal-governed syntagm. That is, on the first level, we have two I.C.s: nominal-governed relational syntagm marked by "...pa", and nominal nucleus.

10. The pronominal element.

The pronominal elements "ñuka"(I), "kaN"(you), "pai"(he, she, it) etc. function in the same way as nominal-governed syntagms, but they may not be regarded as being instances of this syntagm type. That is, they do not enter into any relations with elements which are assignable to the positions of the nominal-governed syntagm. Indeed, they do not enter into relations with any other elements such that a field of relations may be set up with the pronominal element standing as the nucleus, giving a pronominal syntagm.

CHAPTER V

FURTHER SYNTACTIC RELATIONS IN SAN MARTIN QUECHUA

1. The negative element.

The sign denoting "negation" in San Martín Quechua may be variously realised: "manaN...ču", "mana..ču", "maN..ču", "manaN", "mana", "maN", "ama...ču" and "ama". The element "...ču" may be suffixed to the negated element or syntagma, "mana(N)", "maN" or "ama" preceding it. The following examples illustrate the occurrence of the negative element which is underlined in each example:

mana apičirkaNču (he did not reach(it))

manaN ūukaka ūukaita animukuniču (I don't feel like climbing)

mana templomaN riniču/ maN atipašpaine (I do not go to church/ since I am not able)

maN uarmi'iukču karkaN čai uainaka (that young man was not a possessor of woman, i.e. he was without a wife)

manaN ūakaduču kaNki (you are not cursed)

mana uarmipa mamaN munarkaču (that woman's mother did not want (it))

mana muna'uaptiN tataini mamaini (my father, my mother not liking me)

imapatá mana retroikita apamuškaNki¹ (why have you not brought your rear loading gun?)

mana apamuškaniču/ mana bala ti'iaptiN (I have not brought(it)/

¹The "...tá" of "imapatá" (why?) should not be confused with the neutral complement marker "...ta"; "...tá" only occurs suffixed to interrogative elements and does not appear to have syntactic function.

there being no bullet)

maN apamuna'iarkaniču(I did not want to bring(it))

manaN kai Žaktapika iaku ti'ianču(there is not water in this town)

mana iaku ti'iaptiN(there not being water)

maN žankamaNtaču(not from laziness)

maN atuN rarkapiču(not in a big gorge)

maN aipataču(not a lot)

manaN kaN fuersasiuk ūuka Žina(you(are)not a possessor of strength like me)

ama ŽamunaNkunapa Žaktapi(so that they would not come into town)

maN utka medikuta maskašpa(not seeking the shaman quickly)

mana ūakadu kašpaka atipaNču(being cursed she could not(fish))

ama kišpiNkiču(you do not escape)

ama baliaNkiču(you do not shoot)

ama dexakuiču pušašunaNta(don't let him take you off)

Of the variant realisations of the sign for "negation" we may say that "manaN...ču" and "ama...ču" are allomorphs. The occurrence of "ama...ču" and "ama" is contextually determined, excluding the occurrence of "manaN...ču" and "manaN" respectively.

The negative element "ama...ču" occurs only with super-ordinate predicatives, and can be rendered in English as a prohibitive. The last three examples given above show the occurrence of "ama...ču". The element "ama" negates a predicative-governed complement syntagma which has as its nucleus the relational marker "...pa", and occurs only in this context; e.g.

"ama mala bidata kausanainipa" (so that I would not live a bad life), "ama ſamunaNkunapa ſaktapi" (so that they would not come into the town). In these contexts the element "mana" may not occur. In all other contexts, except that of a subordinate predicative-governed syntagm, "manaN...ču" or one of its variant realisations may occur. When a subordinate predicative-governed syntagm is negated, "manaN", "mana" or "maN" occurs. As a general rule, the element "...ču" is not suffixed to the negated subordinate syntagm. It is not possible to say, however, that "manaN" and "manaN...ču" are mutually exclusive, as the above example "mana iačaſpaču" (his not knowing) shows; the elements "manaN" and "manaN...ču" may occur in equivalent contexts. The occurrence of one realisation of the sign for "negation" as opposed to another does not appear to be contextually determined, except in the case of a subordinate predicative-governed syntagm mentioned above, where the element "...ču" tends to be excluded. In this description, I shall regard "manaN...ču", "mana...ču", "maN...ču", "manaN", "mana" and "maN" as being variant realisations of the sign denoting "negation" in San Martin Quechua.

None of the models for the basic syntagm types given in the preceding description includes a position to which may be assigned the negative element. That is, the negative is not regarded as forming part of the field of relations which may be the predicative-governed syntagm, nominal-governed syntagm or complement syntagm, but as being outside the syntagm. The hypothesis forwarded is that the negative element is an I.C., not of the syntagm it negates, but of a larger syntagm which has as its other I.C. the negated syntagm. That is, negated element —→

syntagm. This hypothesis can be tested with the following example: "manaN kai la'iaču"(not this kind), a negated nominal-governed syntagma.

When setting up the model which will account for all instances of the nominal-governed syntagma, the occurrence of the negative and its function in relation to the other elements of the syntagma must be considered; that is, whether it determines only the nominal nucleus of the syntagma, or whether, along with the elements assigned to the demonstrative, numeral and adjectival positions, it determines the nominal nucleus, or whether it determines the nominal-governed syntagma as a whole. Taking the first alternative first, i.e. that the nominal element determines the nominal nucleus only, the relations between the I.C.s of the syntagma "manaN kai la'iaču"(not this kind) may be shown as follows:

kai → manaN la'iaču

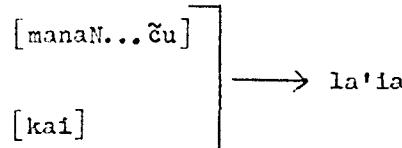
The element "kai"(this), assigned to the demonstrative position, determines the nominal nucleus "manaN la'iaču", which as a syntagma is analysable on a lower level:

manaN...ču → la'ia

On the first level of analysis, there are two I.C.s, "kai" (peripheral) and "manaN...ču la'ia"(free nucleus).

To validate this hypothesis, we must be able to demonstrate that the relation of "manaN...ču" to "la'ia"(kind) is more nuclear than the relation of "kai"(this) to "la'ia". If we cannot do this, we may consider an alternative hypothesis that "manaN...ču" and "kai" are subordinate to "la'ia", but it cannot

be demonstrated that they do so in different ways. That is, we have an example of parallel determination:



A further position would have to be set up in the nominal-governed syntagm model to account for the possible occurrence of the negative element. This would give a five position model, which would be realised in the instance of "manaN kai la'iaču"(not this kind) thus:

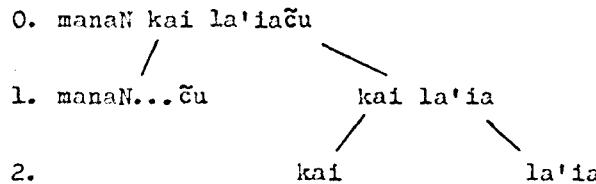
negative position	demonstrative position	numeral position	adjectival position	nominal position
manaN..ču	kai	0	0	la'ia

Such a model still does not describe adequately the relations which hold between the elements of the syntagm, however, for while it is clear that "kai" determines "la'ia": [kai] → la'ia, the element "manaN...ču" does not determine "la'ia" alone in the syntagm as analysed above, but determines the whole syntagm "kai la'ia". That is:

$$\text{manaN...ču} \longrightarrow \text{kai la'ia}$$

The negative element determines the nominal-governed syntagm as a whole, which on a lower level is analysable in terms of that syntagm type. Thus on the first level of analysis, we have a syntagm in which two I.C.s can be distinguished: the negative element "manaN...ču" and "kai la'ia"(this kind) which is an instance of the nominal-governed syntagm. The nominal-governed syntagm is analysed on the lower level. The following inverted

tree diagram illustrates the steps taken in the analysis of "manaN kai la'iaču":



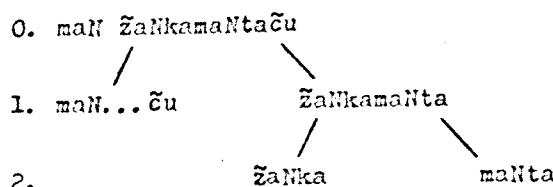
A two position model may be set up to account for all instances of the negated nominal-governed syntagm:

negative element	nominal-governed syntagm
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The negative element determines the nominal-governed syntagm, and as a peripheral element is an expansion.

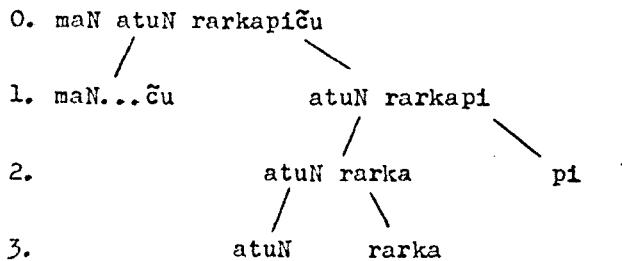
The same type of syntactic relation may be seen to hold between the negative element and complement syntagm, i.e. the negative element determines a syntagm which, on a lower level, is analysable as an instance of the neutral or relational complement syntagm. For example: "maN ŽaNkamaNtaču" (not from laziness), where "maN..." determines "ŽaNkamaNtaču" (from laziness) which is an instance of the relational complement syntagm, further analysable: ŽaNka → maNta.

That is, in inverted tree diagram form the analysis of the negated relational complement syntagm is shown:



Another example of the negated relational complement syntagm is

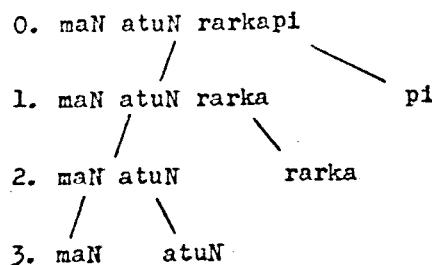
"maN atuN rarkapiču" (not in the big gorge), where "maN...ču" determines "atuN rarkapi" (in the big gorge). The full analysis of this syntagma shown in inverted tree diagram form is as follows:



In this instance, the element "...ču" of "maN...ču" helps in determining that "atuN rarkapi" is the negated syntagma, i.e. that "maN...ču" determines the relational complement syntagma. Were the element "...ču" to be omitted, giving "maN atuN rarkapi", the function of "maN" as determinant of the relational complement syntagma would not be so unambiguous, but could be analysed in two other ways. It could be analysed as determining the adjectival element "atuN" (big), i.e. as being an I.C. of the adjectival syntagma which is an I.C. of the nominal-governed syntagma, which is the bound peripheral I.C. of the relational complement syntagma. This analysis may be shown thus:

$$([maN \rightarrow atuN] \rightarrow rarka) \rightarrow pi$$

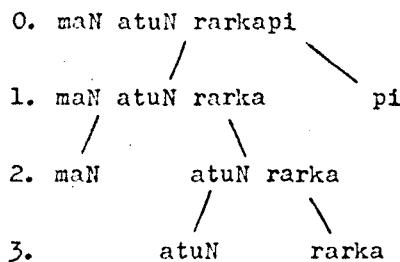
or in inverted tree diagram form:



Alternatively, it could be analysed as determinant of the nominal-governed syntagma, i.e. $\text{maN} \rightarrow \text{atuN rarka}$, which as an instance of the negated nominal-governed syntagma is bound to the relational complement marker "...pi". That is:

$(\text{maN} \rightarrow \text{atuN rarka}) \rightarrow \text{pi}$

or in inverted tree diagram form:



The type of analysis made in one particular instance as opposed to another can vary according to which accounts best for the semantic facts of that particular syntagma. When the element "...ču" occurs as part of the form of the negative, it is not difficult to discern the function of the negative, i.e. which element or elements it determines, as "...ču" is suffixed to the element it negates, to the nuclear element in the case of the negated syntagma.

Where the negative element co-occurs with a predicative-governed syntagma, there are two possible analyses to be considered:

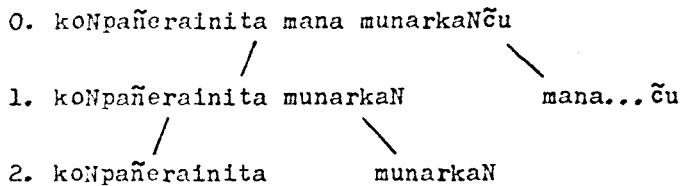
a) that the negative element determines the predicative syntagma. In "koNpañerainita mana munarkaNču" (he did not like my companion), for example, the analysis would be:

$\text{koNpañerainita} \rightarrow (\text{mana...ču} \rightarrow \text{munarkaN})$

On the first level of analysis, there are two I.C.s: "mana munarkaNču"(he did not like) which as the transitive predicative nucleus of the predicative-governed syntagm requires a bound peripheral I.C. "koNpañerainita"(my companion) which is the neutral complement. The predicative nucleus is analysable on a lower level, where "mana...ču" determines "munarkaN"(he liked); b) that the negative element determines the predicative-governed syntagm as a whole. That is, "koNpañerainita mana munarkaNču" is an instance of the negated predicative-governed syntagm, which has two I.C.s on the first level of analysis: "mana...ču" determines "koNpañerainita munarkaN" which is analysable on a lower level as a transitive syntagm. That is:

[mana...ču] → koNpañerainita munarkaN

or in inverted tree diagram form:



This analysis accounts better for the relations which hold between the elements, and in this description I favour the analysis:

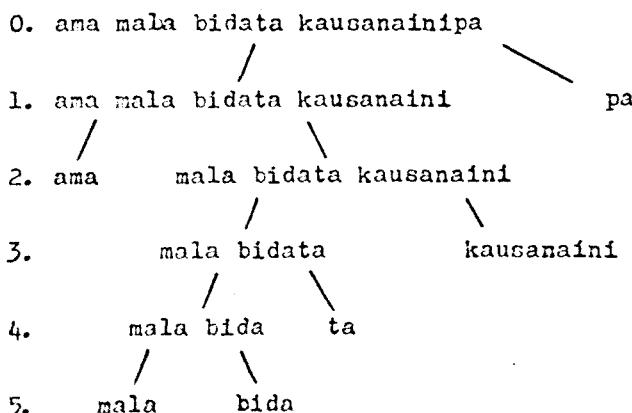
negative element → predicative-governed syntagm

The predicative-governed syntagm may be the nucleus of a sentence-base or be a subordinate syntagm, as in "ama mala bidata kausanainipa"(so that I would not lead a bad life), for example. This example provides good illustration of the procedure

involved in the testing for the function of the negative, i.e. for ascertaining which element or elements it determines. The alternative analyses forwarded for testing the relational complement syntagm "ama mala bidata kausanainipa" which is an expansion to "rirkani" (I went) in the sentence-base "ama mala bidata kausanainipa rirkani" (I went so as not to live a bad life), are as follows:

- a) ([- ([ama → mala] → bida) → ta] → kausanaini) → pa
- b) ([(ama → mala bida) → ta] → kausanaini) → pa
- c) ([ama → mala bidata] → kausanaini) → pa
- d) (ama → mala bidata kausanaini) → pa
- e) ama → mala bidata kausanainipa

Of these, analysis (d) is the one which adequately accounts for the function of the negative in the syntagm, and which fits the semantic facts. The negative element "ama" determines the subordinate predicative-governed syntagm "mala bidata kausanaini" (I may live a bad life) which is bound to the relational complement marker "...pa". The analysis of the syntagm may be shown in inverted tree diagram form thus:



The model set up to account for all instances of the negative element is one of two positions:

negative element	syntagm
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The syntagm assigned to the syntagm position may be an instance of the predicative-governed syntagm, nominal-governed syntagm, complement syntagm or adjectival syntagm, which is analysable on a lower level in the hierarchy.

2. The complex "mana....ni".

The complex "mana....ni" may be translated into English as "not....nor", but we may not posit a relation of interordination between "mana..." and "ni...". That is, the relation between the negative syntagm "mana..." and the negative "ni..." is not "mana... ↔ ni...". The element "mana..." may occur without "ni...", but "ni..." does not occur without a preceding "mana..."¹. In terms of occurrence dependency, "ni..." depends on the occurrence of "mana..." previous to it, but not vice versa; it is an example of unilateral occurrence dependency. For example:

manaN ka'uashkaniču maipita ēuraškan^{Ki} ni sipičiškaniču(I have not seen where you have put(her) nor have I drowned(her))
maN atuN rarkapiču ni atuN iakupiču kausarkaN(he lived not in

¹On the occasion that "ni...ni..." occurs in the data, in "tukui ēaikunata sasikuNsapa/ ni mikuNsapaču porotota ni arosta" (they diet all these/ neither do they eat beans, nor rice), it could be asserted that there is some interference from Spanish, where "ni...ni..." conveys the information "neither...nor...". On every other occurrence of "ni..." in the data, this element is preceded by "mana...", and although its occurrence may be due to interference from Spanish, it cannot be stated categorically that it is an extraneous, Spanish-derived, element. See Part 1, Chapter III, for a discussion of extraneous elements.

a big gorge, nor by a big river)

maN karana'iaknaču ni mama ni tata ni uaukikuna (they did not want to feed(him)now, not his mother, not his father, not his brothers)

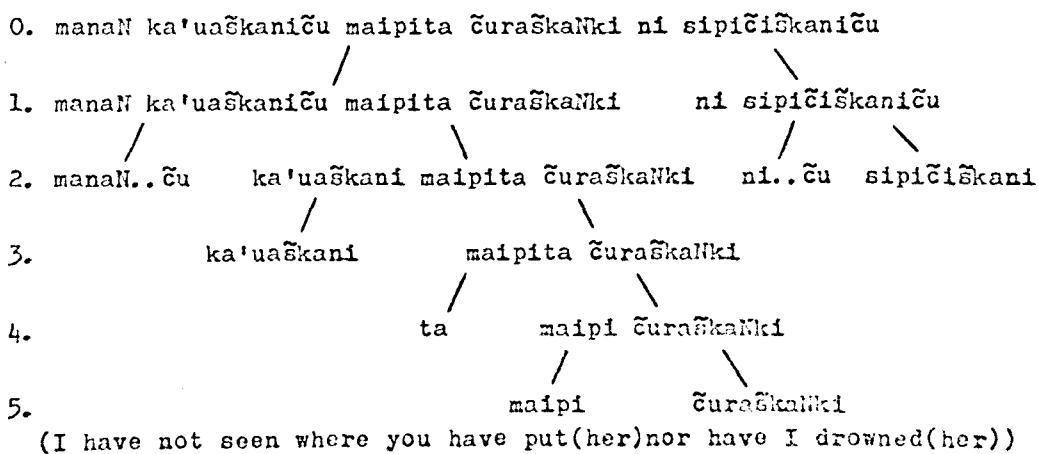
mana ni maimaN rišpa atipaniču trabaxaita (going nowhere, I cannot work)

mana ūukataka ni pika ka'ua'uaNču (no-one sees me)

mana ni pi kre'iirkaNču (no-one believed)

Following the analysis made of "manaN...ču" in the previous section, the negative element determines the syntagm with which it occurs, and the negated syntagm with "ni..." may be said to be subordinate to the negated syntagm with "mana...". Taking the first example given above, the relations between the two negated syntagms may be shown as follows:

ni sipičiškaniču → manaN ka'uaškaniču maipita čuraškaNki
and the full analysis of the sentence-base may be given in inverted tree diagram form thus:

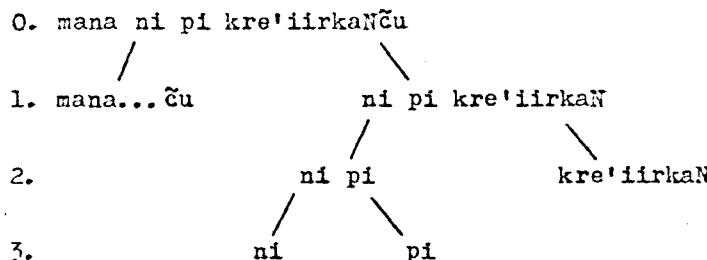


The analysis of this syntagm may differ from the analysis made

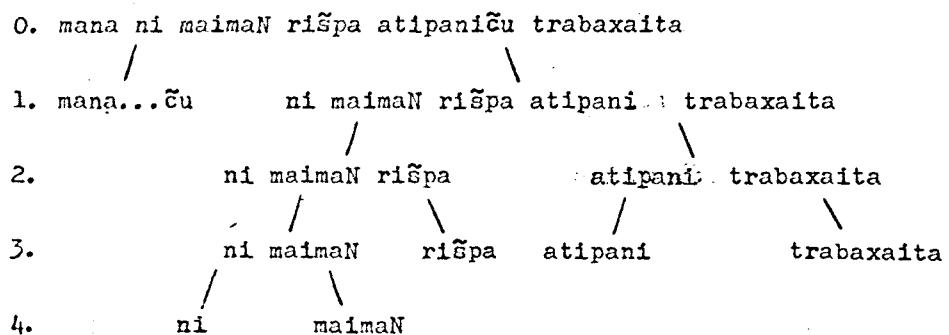
of a syntagm of the type of the last three examples given on the previous page where the element "ni" appears to determine a single element rather than a whole syntagm, and as the determinant of a single element it forms a syntagm with it which is an I.C. of the larger syntagm negated by "mana"; for example, "ni pi" (not someone, i.e. no-one), "ni maimaN" (not anywhere, i.e. nowhere), and, not given in one of the above examples but attested in the data, "ni maikaN" (not anything, i.e. nothing). The analysis of the example "mana ni pi kre'iirkaNču" (no one believed) illustrates this:

mana...ču → ni pi kre'iirkaN

where "ni pi" stands in the subject relation to "kre'iirkaN" and is analysable on a lower level: ni → pi. In inverted tree diagram form, the analysis of "mana ni pi kre'iirkaNču" (no-one believed) is as follows:



And to take another example "mana ni maimaN rišpa atipaniču trabaxaita" (going nowhere, I cannot work), the function of "ni" as negator of a single element may be seen in the full analysis of the sentence-base given in inverted tree diagram form:



The syntagma "ni maimaN rišpa atipani trabaxaita" is determined by the negative element "mana...ču". As a syntagma analysable in its own right, it is an instance of a transitive syntagma in which "atipani"(I can) is the superordinate(nuclear)predicative and "trabaxaita"(work) the neutral complement bound to the predicative nucleus. The subordinate predicative-governed syntagma "ni maimaN rišpa"(nowhere going) as a peripheral I.C. is an expansion. Analysable on the lower level, "ni maimaN"(nowhere) is an expansion of the intransitive subordinate predicative "rišpa"(going), and can be further analysed: ni → maimaN. The element "ni" occurs in this context only when "mana" determines the syntagma of which "ni" is a constituent. Otherwise "mana" occurs in this context, e.g. mana pi(no-one), and is analysable in the same way that "ni pi" has been analysed above, on the relevant level in the analysis.

The element "nima" is also found to occur in conjunction with the negative element "mana", and seems to be more emphatic than "ni". For example:

mana čai uaira kaspikunata uraičiita atiparkaNču nima čai
rumikunata siNkučiita atiparkaNču (that wind could not take down
the trees nor could it make the stones roll)

mana ti'iarkaNču nima guardiakuna kai Žaktapi(there were not even guards in this town)

manami nima la'iapi puša'uaNkiču(you will not take me in any way)

mana nima autoridadta kre'iiNsapaču nima mamaNkunata kre'iiNsapaču ua'uaNkuna(their children do not believe the authorities nor do they believe their mothers)

3. The comparative "ideN... Žina".

The element "ideN... Žina", which may alternatively be realised "ideN" which occurs before the element compared¹, or "Žina" which occurs after, may be translated roughly into English as "like, just like". It is used as a comparative; for example:

maN fuersasiuk ſuka Žinaču kaNka(you(are)not a possessor of strength like me)

maN ſuka Žinaču kažpaNki(not like me you run; you do not run like me)

uaňučinakurkaNsapa ideN suk uaňkana ideN suk animal(they killed one another like the hogs(lit. a hog)like animals(lit. an animal))

sasikui ſuka Žina gananaikipa(diet, so that you earn(money)like me)

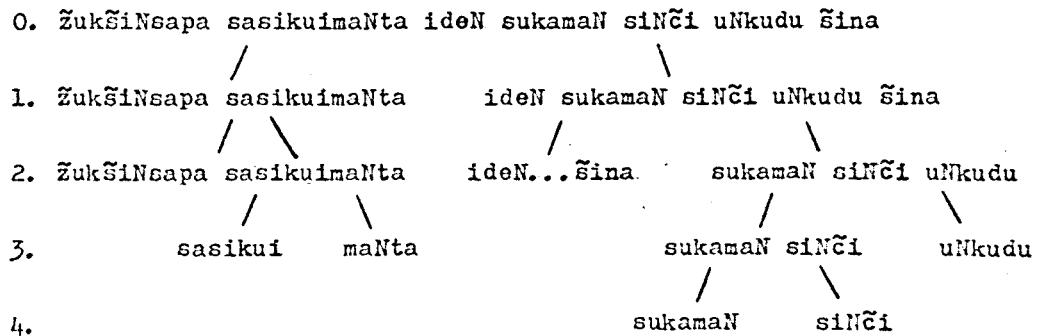
žukŠiNsapa sasikuimanta ideN sukamaN siNči uNkudu Žina(they come out from ^{the} eating like an extremely sick(person))

¹ See Part 1, Chapter III, p 71 , for a discussion on "ideN" as a possible extraneous element.

In analysis, "ideN... ūsina" is the element which relates the subordinate syntagma of which it is the nucleus to the governing syntagma. Taking the last example above: "žukšiNsapa sasikuimanTa ideN sukamaN siNči uNkudu ūsina"(they come out from dieting like an extremely sick(person)), we may show the analysis of the syntagma "ideN sukamaN siNči uNkudu ūsina"(like an extremely sick(person)) as:

sukamaN siNči uNkudu → ideN...šina

where the nominal-governed syntagma "sukamaN siNči uNkudu"
(extremely sick person) as the peripheral I.C. is bound to
"ideN... Šina". On the higher level, the syntagma "ideN sukamaN
siNči uNkudu Šina" is subordinate to the superordinate predicative
"žukšiNsapa"(they come out) and is an expansion to it. The super-
ordinate predicative, as an example of a complementary intransitive,
must have a relational complement syntagma to actualize it, in
this case " sasikuimaNta"(from dieting). The analysis of the
sentence-base may be shown in inverted tree diagram form as
follows:



A two-position model may be set up to account for all instances of the syntagma type which has as its nucleus the element

"ideN... Šina". The element or syntagma subordinate to "ideN... Šina" is bound to it; that is, "ideN... Šina" is not a free nucleus. In this, an "ideN... Šina" syntagma parallels a complement syntagma, i.e. the two position model set up to account for all instances of the complement syntagma accounts adequately for all instances of syntagms governed by the element "ideN... Šina"¹. Given this, it would not be amiss to regard "ideN... Šina" as a relational element, and a member of the same position class as the other complement markers, e.g. "...ta"(neutral complement marker), "...pi"(in, on, at), "uaN"(with) etc.

4. The element "piš".

The element "piš" may be given the rough denotation "as well, also". Its occurrence is illustrated in the following examples:

tiNkurkani suk užkuta riikaptiN purikuk paipis(I met a man who was going hunting(he)also)

pušarkaNsapa uarmiinitapiš(they took my wife also)

čairaiumi ūukapiš rina'iani sasikuk(therefore I also want to go and diet)

medikukunapiš ti'iaN(there are also shamans)

paikunapiš čašna sasikušpa mediku'iaN(they also, dieting thus, become shamans)

munani paitapiš fregaita(I want to "do" him as well)

manaN uaira ūukapiš kre'iikiču(wind, I also do not believe you)

¹ For complement syntagma, see Chapter III of the description, p 111.

čikniNsapa kai medikukunatapiš bruxukunaka (the witches hate the shamans as well)

čai čaupikunapiš čamurkaNsapa uañuk (those middle ones (the ones who live within the jungle) also came and died)

In all the descriptions of Quechua of which I have knowledge, the element "...piš" is analysed as a morphological item. It is a final suffix of a noun lexeme, i.e. no suffix may occur after it, though other noun suffixes may precede it, for example "...ta" in "paitapiš" (he also). In this description of San Martín Quechua, I forward the hypothesis that "...piš" is given the status of 'plereme', i.e. that there are ordering relations between "...piš" and the other elements in the syntagma.

We may demonstrate that "...piš" is not a morphological item but a syntactic one, in terms of the theory used in this description, with the analysis of the example "čikniNsapa kai medikukunatapiš bruxukunaka" (the witches hate these shamans also). Already in the description, we have given the neutral complement marker "...ta" plereme status¹; thus if we are to regard "kai medikukunatapiš" as forming one I.C. of the sentence-base (which is one hypothesis which must be forwarded for testing) and we give moneme status only to "...piš", we may analyse "kai medikukunatapiš" as:

kai medikukuna → tapiš

or as:

kai medikukuna...piš → ta

¹ See Chapter III of the description, p207.

In the first analysis "...piš" is regarded as forming a morphological complex with "...ta" which cannot be accepted as giving an adequate description of the function of "...piš" or as fitting the semantic facts. In the second analysis "...piš" is regarded as a grammeme¹, i.e. it is part of the sign "medikukunapiš" which is realised discontinuously "medikukuna...piš". Thus the neutral complement marker "...ta" governs the nominal-governed syntagma "kai medikukuna...piš" in which "kai"(these) determines "medikukuna...piš"(also shamans). That is:

([kai] → medikukuna...piš) → ta

Thus according to this analysis, "kai" is governed by "medikukuna...piš" in the same way that it is governed by "medikukuna" in "kai medikukuna"(these shamans) for example, i.e. [kai] → medikukuna.

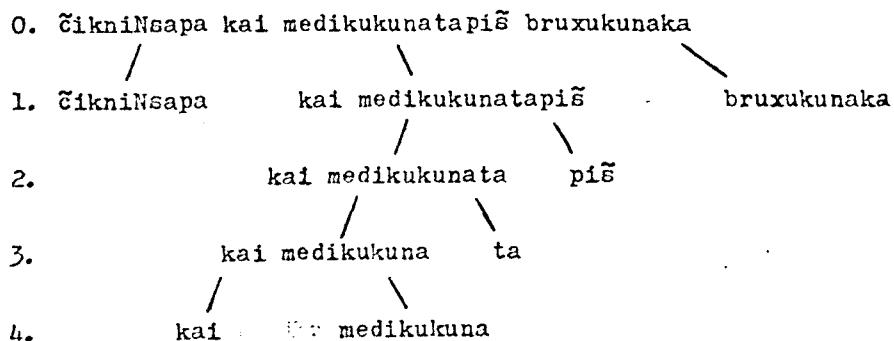
While it is clear that "kai" and "medikukuna" contract relations with one another within the same field of relations, the function of "...piš" would not be described adequately if it were to be given moneme status only, forming a morphological complex with "medikukuna". To describe its function adequately, "...piš" must be given plereme status, and thence its relation with the other elements of the syntagma must be ascertained. In previous testing "...piš" has appeared to lie outside the field of relations which is the nominal-governed syntagma, i.e. it is not an I.C. of this syntagma type. In the case of "kai medikukunapiš"(these shamans also), the element "...piš" may not be analysed as an I.C. of the nominal-governed syntagma "kai

¹ For 'grammateme', see Appendix A, Def. 29b or p/9 of this work.

medikukuna", nor may it be analysed as an I.C. of the neutral complement syntagm "kai medikukunata". Rather, it contracts a syntactic relation with the neutral complement syntagm on a higher level where this syntactic relation is one of subordination. That is, "...piš" determines the neutral complement syntagm "kai medikukunata":

piš → kai medikukunata

The analysis of the sentence-base of which "kai medikukunatapiš" is an I.C., "čikniNsapa kai medikukunatapiš bruxukunaka" (the witches hate these shamans as well) may be shown in inverted tree diagram form thus:



In terms of occurrence dependency, the occurrence of the element "...piš" is an example of unilateral occurrence dependency, i.e. it depends upon the occurrence of a nominal-governed or complement syntagm, but the converse does not apply.

5. The element "...ši".

The element "...ši" can be rendered in English as "they say; it is said that"; in traditional terms, it indicates reported speech. For example:

kai kaipi~~Si~~ ~~čai~~ iaku ti'iaN (there is water here they say)

suk tieNpo~~Si~~ ti'iarkaN suk uaina (once, it is said, there was a young man)

urmamurkani sukamaN kaparikuipi~~Si~~ (I fell crying out a lot they say)

suk pača~~Si~~ suk uainaka ča'iak uasipi (once upon a time, it is said, a young man arrived at the house)

iaku eskasona~~Si~~ (water (is) scarce they say)

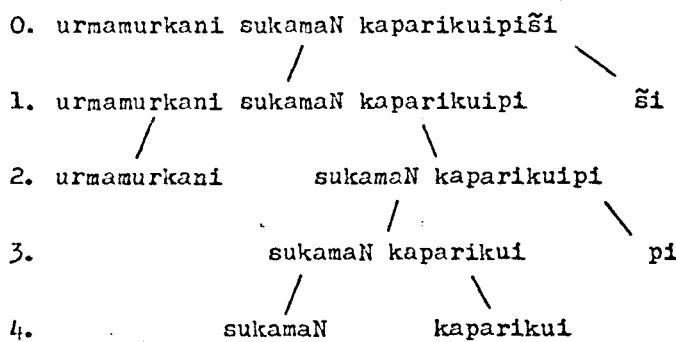
ti'iaN~~Si~~ kai rarka anakpi suk rum~~i~~ sikiNpi iaku (they say (that) beyond the gorge under a stone there is water)

A hypothesis forwarded regarding the analysis of "...~~Si~~" is that it has plereme status. As a plereme it stands external to the syntactic relations which hold between the other constituents of the syntagma in which it occurs. That is, it is not an I.C. of that syntagma but it is an I.C. of a higher level syntagma in which it is the peripheral I.C. standing subordinate to the syntagma which constitutes the other I.C. on the higher level. The element "...~~Si~~" determines the syntagma with which it occurs. The description of the syntactic relation which holds between the element "...~~Si~~" and the syntagma with which it occurs may be illustrated by the analysis of the sentence-base "urmamurkani sukamaN kaparikuipi~~Si~~" (I fell crying out a lot they say):

~~Si~~ → urmamurkani sukamaN kaparikuipi

The syntagma "urmamurkani sukamaN kaparikuipi" (I fell crying out a lot) may be regarded as forming a well-formed sentence-base and is analysable as such into two I.C.s: "urmamurkani" (I fell),

superordinate predicative and nucleus of the sentence-base, and "sukamaN kaparikuipi" (crying out a lot) which is an instance of the predicative-governed relational complement syntagm standing peripheral to the nucleus of the sentence-base and which is an expansion to it. The full analysis of the sentence-base may be shown in inverted tree diagram form as follows:



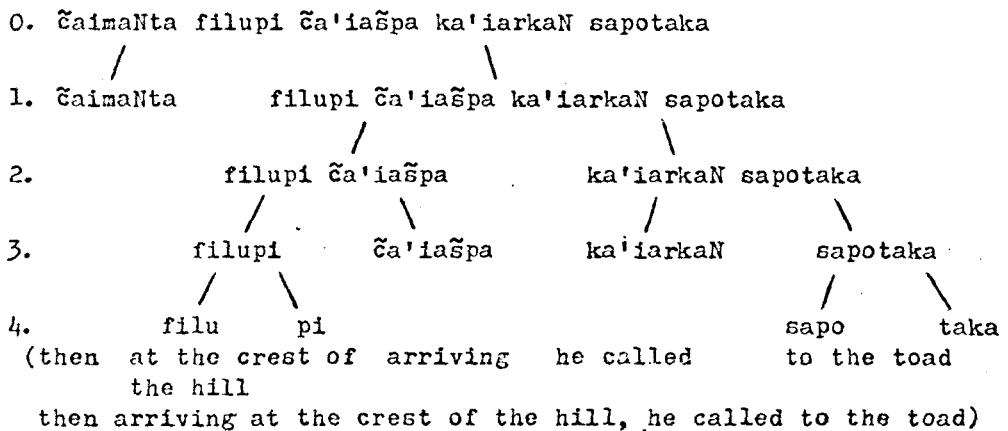
6. Adjuncts.

There are further elements in San Martín Quechua which are analysed on the first level of analysis as determining the rest of the sentence-base. That is, where one of these elements, to which I give the label 'adjunct' and which usually, but not always, expresses a time relation, occurs in a sentence-base, the sentence-base is analysed into two I.C.s on the first level: adjunct and sentence-base, where the adjunct determines the sentence-base. That is:

adjunct → sentence-base

The adjunct is subordinate to the sentence-base and is an expansion to it; the sentence-base remains well-formed as a sentence-base, i.e. as a syntagm which corresponds to a sentence, without the adjunct. For this reason I retain the term 'sentence-

base' when referring to the syntagma determined by the adjunct, though strictly speaking the sentence-base proper includes the adjunct, and on this level of analysis the governing syntagma is an I.C. of the sentence-base. The following example illustrates the analysis of a sentence-base which has as an I.C. an adjunct:



On the first level, the sentence-base "čaimanta filupi ča'iašpa ka'iarkaN sapotaka" is analysed into two I.C.s:

čaimanta → filupi ča'iašpa ka'iarkaN sapotaka

The syntagma "filupi ča'iašpa ka'iarkaN sapotaka", which may also correspond to a sentence and so be regarded as a sentence-base, is then analysed into its I.C.s on the lower level and these I.C.s analysed on successively lower levels until the U.C.s are reached.

The following is a selection of sentence-bases which are determined by adjuncts. The adjuncts are underlined in each example.

čaimanta kutiikašpa tinkurkani suk užkuta riikaptiN purikuk

paipiñ (then as I was returning I met a man who was also going hunting)

čašnamanta omikuika samarkaN (thus the monkey rested)

čaimanta pukučinsapa sarata rumuta (then they cultivate maize, yuca)

čaimanta sukamaN čai uainata maskačiksapa tukui maita kai mu'iu uaira'uaN altuta ažpata (then, they searched hard for that young man everywhere with this whirlwind high and low (lit. on the ground))

kunaN uañuči'uañčisapa (now, they are killing us)

ñami sasikuškanimi (now I have dieted)¹

ña uañurkaNsapana uaira robačiptiN uasiNkunata (now they are dead the wind having torn down their houses)

čairaiku uakinka medikukunapi taNti'iačikuk uNkučikušpaka (therefore some, who have made themselves ill, gather at the shamans')

kunaN proibašuN fuersaNčita (today let us test our strength)

ka'iaN ka'uanakušuN maikaNmi gananakušuN (tomorrow let us see who will win)

čairaiku sukamaN piNkakuipi kutirkansapa paikunaka (because of that, they returned very ashamed)

¹ Although "kunaN" and "ña...na" can both be translated into English as "now", they are distinct signs in San Martín Quechua. "kunaN" expresses "now" in a more immediate sense than "ña...na", and in some contexts can be rendered in English as "today". Perhaps the hackneyed "at the present moment in time" best conveys the rough denotation of "kunaN". The element "ña...na" is used to give a more general sense of "now". "ña" may occur on its own as in this example, or with "...na" which is suffixed to a plereme which is realised subsequent to "ña" (see the following example), or "...na" may occur on its own or more than once in the same syntagma (see later examples). Its multiple realisation does not seem to have function apart from possible emphasis.

čašnomaNta čai aragaNtaka kre'iirkansapa(then they believed the idler)

ñami sukaman ažitana kausansapa tukui bariuna(now the whole district lives very well)

čašna kausarkaN paimi(thus he lived)

čaipi čai Šipaška rabiašpa uižarkaN tataNta mana pai'uaN kasaraptiN(then that maiden being angry talked to her father when he did not marry her)

suk tieNpoka suk užku masika kiparirkaN karupi ŽaktamaNta suk iaku anakpi(once upon a time a fellow man stayed a long way from the town beyond the river)

suk pačaši suk uainaka ča'jak uasipi(they say that once a young man arrived at the house)

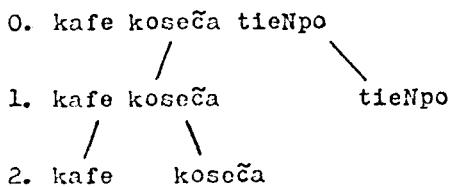
kai Žaktapi ñauPamaNta pača ŠamurkaNsapa iaikuk xeNtekuna(in the old days(lit. from before time) people came and entered this town)

takša kaškainikuna tieNpo kai Žaktapi ti'iarkaN gobernadorkuna teniente kapitaNkuna(when we were children(lit. our being children time) there were governors, lieutenants, captains in this town)

komersiaNtikuna kafe koseča tieNpo ka'iaškaNsapa rimak kafe'iukkunata(the merchants at coffee harvest time called and spoke with the coffee farmers(lit. possessors of coffee))

From the last few examples given, it will be noted that a syntagma may occur in the adjunct position. This is analysable usually as an instance of the nominal or nominal-governed syntagma; for example "suk tieNpoka" may be analysed as an

instance of the nominal-governed syntagma, $\text{suk} \rightarrow \text{tieNpoka}$, " $\text{kafe koseča tieNpo}$ " may be analysed as an instance of the nominal syntagma, $[\text{kafe} \rightarrow \text{koseča}] \rightarrow \text{tieNpo}$. This analysis may be shown in inverted tree diagram form:



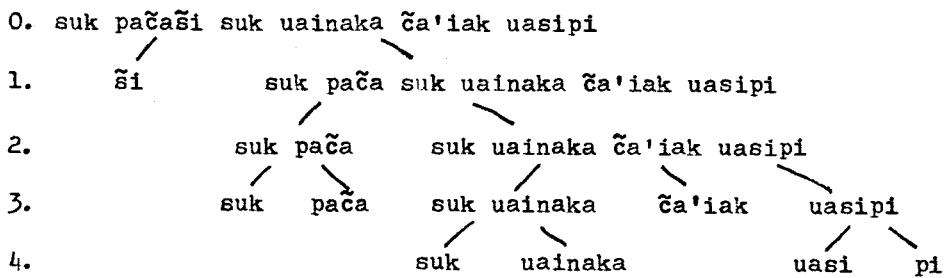
and takes place on a lower level than the analysis of the sentence-base " $\text{komersiaNtikuna kafe koseča tieNpo ka'iaškaNsapa rimak kafe'iukkunata}$ "(the merchants at coffee harvest time called and spoke with the coffee farmers) into its I.C.s:

$[\text{kafe koseča tieNpo}] \rightarrow \text{komersiaNtikuna ka'iaškaNsapa rimak kafe'iukkunata}$

The element "...ši"(they say) may occur with elements in the adjunct position, e.g. " suk tieNpoši ", " suk pačaši "(both of which may be translated as "once, they say")in which case the element "...ši" as one I.C. determines the other elements which together form the nuclear I.C. of the syntagma. For example, in " $\text{suk pačaši suk uainaka ča'iak uasipi}$ "(once, they say, a young man arrived at the house), the element "...ši"(they say) is subordinate to " $\text{suk pača suk uainaka ča'iak uasipi}$ "(once a young man arrived at the house), and is an expansion to it. That is, the syntagma is analysed into two I.C.s on the first level: "...ši" and " $\text{suk pača suk uainaka ča'iak uasipi}$ ":

$[\dotsši] \rightarrow \text{suk pača suk uainaka ča'iak uasipi}$

The syntagm "suk pača suk uainaka ča'iak uasipi" is analysable, on the lower level, into two I.C.s: "suk pača" (once), and "suk uainaka ča'iak uasipi" (a young man arrived at the house), where "suk pača" determines "suk uainaka ča'iak uasipi" and stands in the adjunct position. The full analysis of the sentence-base "suk pačaši suk uainaka ča'iak uasipi" may be shown in inverted tree diagram form as follows:



7. Interrogatives.

"Question" may be indicated in San Martin Quechua by the element "...ču" or by a pronominal element such as "pi"(who), "maipi"(where) etc. To elements such as these pronominals may be added the element "...tá"(alternatively realised "...tí") which indicates their function as interrogatives in the utterance; for example "pitá"(who?), "maipitá"(where?). Given our present state of knowledge regarding Quachua monemes and their denotations, it would be hazardous to forward a hypothesis that the elements "...ču" and "...tá" have syntactic function, i.e. in "pitá"(who?), for example, there is a syntactic relation between "...tá" and "...pi", or between "...tá" and the rest of the syntagm of which "pi" is an I.C., especially since the occurrence of "...tá" to indicate a question, although frequent, does not appear to be obligatory. Similarly, for "...ču" to have plereme status, we would need to show that this element has

function syntactically. That is, in the syntagm "munaNkiču gananakuita ūuka'uaN"(do you want to have a bet with me?) for example, we must show that the element "...ču" stands outside the field of relations which is the transitive syntagm, i.e. that

ūuka'uaN gananakuita → munaNkiču

and

ūuka'uaN gananakuita → munaNki

are not equivalent, but rather that on the first level the sentence-base is analysed into two I.C.s "munaNki gananakuita ūuka'uaN" which is an instance of the transitive syntagm, and the interrogative element "...ču". Unless a syntactic relation can be demonstrated between the transitive syntagm and the interrogative element "...ču", i.e. that the sentence-base can be analysed into two I.C.s, we may not posit that "...ču" has syntactic function. In the present description "pitá" etc. and elements which occur with "...ču" giving them interrogative value, e.g. "ažiču"(is it good?), "munaNkiču"(do you want?) are regarded as constituting single pleremes. The following are examples of the occurrence of elements having interrogative information value.

kaNču kaNki kai uaina GabiláN(are you this young man(called) Gabilan?)

munaNkiču gananakuita ūuka'uaN(do you want to have a challenge, a bet with me?)

ima'uaNrami uaňučiimáN(with what may I kill(it)?)

pitá apamuNmaN retrokargata uaňučinainipa(who might bring a rear

loader so that I can kill(it)?)

imačami anakiamurkaN kai rarkata(what is coming up the gorge?)

maN kužki'iuk kašpaNčimi maipitá tariNči(as we are without

money(lit. not possessors of money)where do we find(it)?)

imapatí kasaranka kai mana siNka'iukuanka(why will she marry with this one without a nose(lit. this not possessor of a nose)?)

imapatá saki'uaNki GabilanSitu(why are you leaving me, my little Gabilan?)

maimantatá rikurimuNki(from where do you appear?)

imatata ruraškaNki čai uaNbrainitaka(what have you done to my child?)

maipitá puñuna'iaNki(where do you want to sleep?)

pi'uaNnatá kausaša kai čakrapika(with whom shall I live on this farm?)

Given that plereme status has not been given to the elements "...ču" and "...tá", the analysis of sentence-bases in which they occur does not differ from the analysis of sentence-bases in which they do not occur. The implications of this, as far as the pronominal elements are concerned, is that they are analysed according to their functions in relation to the predicative nucleus. Thus in "pitá apamuNmaN retrokargata uaňučinainipa"(who may bring a rear loader so that I may kill(it)?), for example, "pitá"(who?) stands in the subject relation to the superordinate predicative "apamuNmaN"(he may bring); in "imatata ruraškaNki čai uaNbrainitaka"(what have you done to my child?), "imatata"(what?) is a neutral complement bound to the transitive

predicative "ruraškaNki" (you have done) which stands as the nucleus of the sentence-base. In "pi'uaNnatá kausaša kai čakrapika" (with whom shall I live on this farm?), "kausaša" (I shall live) is an example of a non-transitive predicative, and thus both "pi'uaNnatá" (with whom?) and "kai čakrapika" (on this farm) as peripheral I.C.s are expansions.

It will be seen from these examples that the pronominal elements "pi" (who), "ima" (what) etc. function in equivalent contexts to the nominal-governed syntagma, i.e. they may occur in subject position or in the complement position of the neutral or relational complement syntagma.¹

There is a further type of occurrence of these pronominal elements which, in traditional terms, would be classified as 'indirect question' or 'relational clause' and which has been discussed previously in this work as falling outside the Quechua system.²

Complexes such as "pi uarmi" (which woman?), "ima čakra" (which field?), which are found to occur in other, notably southern, dialects, are not attested in the data for San Martín Quechua.

¹ See Chapter IV, p 270 for pronominal element.

² The reader is referred back to Part I, Chapter III, p 73 et seq.

CHAPTER VI

AN INVENTORY OF THE SYNTAGM TYPES
ANALYSED IN THE DESCRIPTION1. Analysis of the sentence-base.

Taken for analysis are those sentence-bases the corresponding syntagms of which have as their nuclei superordinate predicative-governed syntagms; that is, the predicative nucleus of a predicative-governed syntagm shows superordinate form. A superordinate predicative-governed syntagm may stand on its own as corresponding to a sentence, in which case it is termed a minimum sentence-base, it may constitute the nucleus of a larger syntagm corresponding to a sentence, or two or more superordinate predicative-governed syntagms may stand in a relation of co-ordination with each other to constitute a syntagm which corresponds to a sentence.

Seven types of superordinate predicative-governed syntagm have been distinguished in the description:

1. intransitive syntagm comprising an intransitive predicative, e.g. "rirkaN"(he went)¹;
2. non-transitive syntagm which has the nuclear position to which the predicative is assigned, and one peripheral position to which is assigned a neutral complement syntagm which is an expansion to the nucleus, e.g. "mikurkaN[uaNkanata](he ate hog);
3. transitive syntagm comprising the nuclear, predicative position

¹ Strictly speaking, this is not a syntagm type as there is only one I.C., namely the intransitive predicative which may be analysable as an instance of the predicative syntagm on a lower level.

and one peripheral position to which is assigned a neutral complement syntagm. The neutral complement syntagm is bound to the nucleus, e.g. "ka'uani omikuita"(I see a monkey);

4. complimentary transitive syntagm which has three positions: nuclear predicative position and two bound peripheral positions. A neutral complement is assigned to one of the peripheral positions and a neutral or relational complement syntagm to the other, e.g. "iakuta ēurarkaN patipi"(she put water in the gourd);

5. complementary intransitive syntagm which has two positions: nuclear predicative position and a bound peripheral position to which is assigned a relational complement syntagm, e.g. "čakraN mañapi rikurimurkaN"(it appeared at the edge of her field);

6. copulative predicative which comprises the copula "ka..." and a complement to the copula which may be a nominal, e.g. "supai karkaN"(it was the devil), a nominal-governed syntagm, e.g. "sukamaN siNči runa karkaN"(he was a very strong man), an adjectival syntagm, e.g. "karkaN sukamaN traNperu likidu" (they were really trap-setting mad), or a relational complement syntagm, e.g. "karkaN iaku mañaNpi"(it was at the water's edge);

7. the element "ti'ia..." which is not, strictly speaking, a predicative but which gives predicative function to the nominal or nominal-governed syntagm with which it co-occurs. It is labelled 'actualizer' in the description. Examples: "iakuka ti'iaN"(there is water), "ti'iarkaN kiNsa užku ua'uaNkuna" (there were her three boys).

As has been stated above, these syntagm types may occur on

their own as minimum sentence-bases or they may be the nuclei of larger syntagms. Where a superordinate predicative-governed syntagma stands as the nucleus of a syntagma, the peripheral I.C. (s) of that syntagma may be one or more than one of the following syntagma types. These are expansions to the superordinate predicative-governed syntagma:

1. a nominal, nominal-governed syntagma or pronominal element which stands in the subject relation to the superordinate predicative, e.g. "omikuika samarkaN"(the monkey rested), "čai bruxuka čiknirkaN uarmiinita"(that witch hated my wife), "kaNka kaNkimi sukamaN aragaN"(you are very idle). Subject elements, i.e. elements which stand in the subject relation to the superordinate predicative, are expansions, except in the case of the actualizer "ti'ia..." where the occurrence of a subject element is obligatory, e.g. "ti'iaN bruxukuna"(there are witches);

2. a complement syntagma which may be a neutral complement syntagma, i.e. the nuclear position is filled by "...ta", e.g. "ganaipači žuičuta kažpaita"(let's challenge the deer at running)¹, or a relational complement syntagma, i.e. the nuclear position is filled by a relational complement marker, e.g. "kai Sisa žuktamaNta rirkani"(I went from this town of Sisa). A neutral complement syntagma may occur as an expansion to a transitive syntagma type, but it does not occur as an expansion

¹ In this example, "žuičuta"(deer) is an I.C. of the transitive syntagma "ganaipači žuičuta"(let us challenge the deer), and "kažpaita"(at running) is an expansion to this syntagma.

to an intransitive syntagma type, to a copulative predicative or to the actualizer "ti'ia...". A relational complement syntagma may occur as an expansion to any of the predicative syntagma types listed above. There may be more than one complement syntagma which is an expansion to the nucleus of a sentence-base, e.g. "iškai kižata sasikuNsapa tolda ukupi ažita"(for two months they diet under a mosquito net well/hard);

3. a subordinate predicative-governed syntagma, i.e. a predicative-governed syntagma in which the predicative nucleus shows subordinate form. Subordinate predicative-governed syntagms which are expansions to the predicative nuclei of sentence-bases, i.e. they are I.C.s of syntagms on the first level of analysis, have predicative nuclei which incorporate the moneme "...špa" or "...pti" or "...k", e.g. "tataini mana muna'uptiN rirkani"(my father not liking me I went), "kasarašpa tataNuN mamaNuN kausarkaN"(married, he lived with his father, with his mother), "rina'iani sasikuk"(I want to go and diet). More than one "...špa/pti..." or "...k" predicative-governed syntagma may occur as I.C.s of the same sentence-base, e.g. "uarmi iaku mañaNpi Ša'iakušpa ka'uaN sumičiptiN(as the woman stood by the river side she saw(him)drowning), "čaita čurašpa ūkarkani eskopetainita aparišpa"(putting that(there) I climbed carrying my gun), "luska'iaptiN ka'uarkani ti'iakuptiN kaspi sa'uapi"(when it straightened up I saw(it) there at the top of the tree), "maN atipašpaine uarmiinita kačani čaipi u'iarik"(not being able to myself I send my wife there to listen), "rinimi ūukapis kai kebrada anakpi čakrakuk kausak ui'uakuk"(I too go beyond the gorge and farm and live and rear(animals)). Except in the

last example, the subordinate predicative-governed syntags (underlined) stand in a direct relation with the superordinate syntagm and in an indirect relation with each other via that syntagm, i.e. they constitute separate I.C.s of the sentence-base. In the last example the "...k" predicatives together form one I.C. of the sentence-base which is an expansion to the superordinate predicative "rinimi"(I go). On a lower level, they are analysed as three "...k" predicatives each standing in a relation of co-ordination with the other. The analysis of this syntagm into I.C.s on the first level is as follows:

0. rinimi ūukapiš kai kebrada anakpi ūakrakuk kausak ui'uakuk
1. rinimi ūukapiš kai kebrada anakpi ūakrakuk kausak ui'uakuk
(I go I also beyond the gorge and farm and live and
rear(animals))

The predicative "rinimi" (I go) as a superordinate intransitive predicative stands as the nucleus of the syntagma; the remaining I.C.s of the syntagma, as peripheral I.C.s, are expansions.

Not classified in the above and which may stand on their own as sentence-bases are non-predicate predicative syntagms. A syntagm of this type comprises a nominal, nominal-governed syntagm or pronominal element, which stands as the subject element, and an adjectival syntagm, nominal or nominal-governed syntagm which stands as the complement, e.g.

kamaNkunaka ia'uar likidu(their beds(were)really bloody(soaked in blood))

kai runaka sukaMAN traga likidu(this man(is)really gluttonous)
pai bruxuka(he(is)a witch)

ua'ua inika maN̄zaiba siNkaspami (my baby (has) a huge nose)

Syntagms of this type generally occur on their own as sentence-bases; the only type of expansion permitted to this syntagm type is a relational complement syntagm, e.g. "kai ixuini parladu kai ixaiki'uaN"(my son(is)engaged to your daughter).

2. Analysis of the I.C.s of a sentence-base.

In the preceding section, the possible I.C.s of a sentence-base have been listed. Where these I.C.s are syntagms, they are themselves analysable into I.C.s. The analysis into I.C.s of the superordinate predicative-governed syntagm types has been given. The types of subordinate "...špa/pti..." and "...k" predicative-governed syntagm are identical to the types of superordinate predicative-governed syntagm, i.e. intransitive, non-transitive etc., the difference lying in the form of the predicative nucleus and not in the structure of the syntagm. As with a superordinate predicative-governed syntagm, a "...špa/pti..." or "...k" predicative-governed syntagm may have as expansions a nominal, nominal-governed syntagm or pronominal element, one or more complement syntagms, and in the case of a "...špa/pti..." predicative-governed syntagm, a subordinate "...k" predicative-governed syntagm may occur as a peripheral I.C. which is an expansion to the nuclear "...špa/pti..." predicative-governed syntagm, e.g. "čapak rišpa"(going and spying). A "...špa/pti..." predicative-governed syntagm may not occur on a lower level in the hierarchy.

A nominal-governed syntagm comprises demonstrative position, numeral position, adjectival position and nominal position. The element assigned to the nominal position is the nucleus of the

syntagm; the elements assigned to the other positions of the syntagm are, as peripheral I.C.s, expansions to the nominal nucleus.

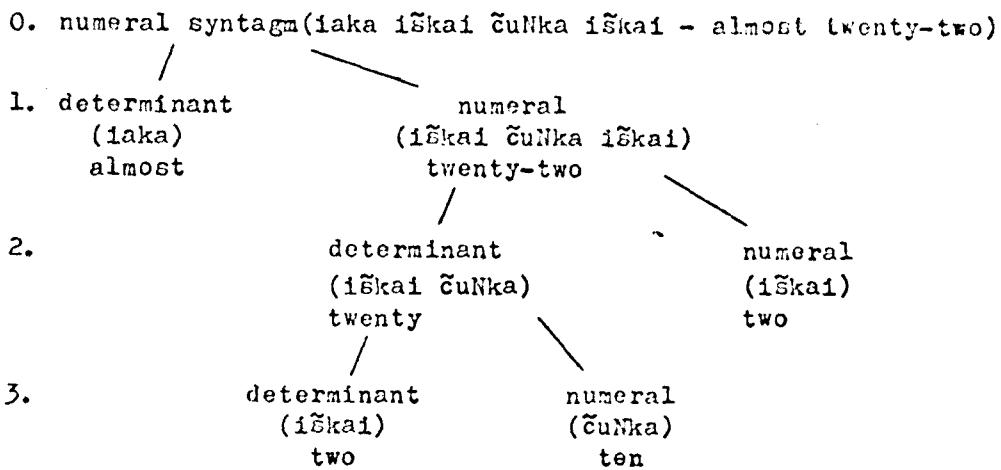
A complement syntagm comprises two positions: the nuclear position to which is assigned the neutral complement marker "...ta" or one of the relational complement markers such as "...pi"(in, on, at), "uaN"(with), and the bound peripheral position to which may be assigned a nominal, nominal-governed syntagm or pronominal element, e.g. "uasipi"(in the house), "kai Sisa ŽaktamaNta"(from this town of Sisa), "paita"(him), an adjectival syntagm, e.g. "altupi"(high) or a (subordinate) predicative-governed syntagm, e.g. "rumuinita surkuita"(to pull out my yuca).

3. Analysis of the I.C.s of the nominal-governed syntagm.

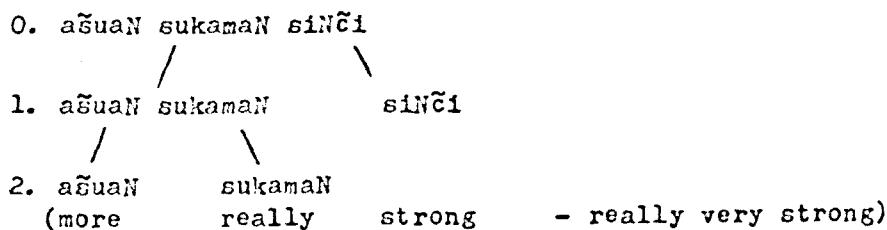
Immediate constituents of the nominal-governed syntagm which may be syntagms themselves analysable on a lower level are numeral syntagms, adjectival syntagms and nominal syntagms.

A syntagm assigned to the numeral position has two positions: the nuclear position to which is assigned an element denoting "number" and one peripheral position labelled 'determinant'. An element assigned to the determinant position is an expansion to the numeral nucleus. The numeral nucleus may itself be a syntagm, i.e. where the number element is a complex item such as "iškai ŽuNka iškai"(twenty-two). The nuclear syntagm has two positions: determinant and numeral, where the element assigned to the determinant position may be further analysable into two I.C.s: determinant and numeral. On each level, the element assigned to the determinant position is an expansion to

the numeral nucleus of the syntagma on that level. The hierarchy in the numeral syntagma may be shown as follows:

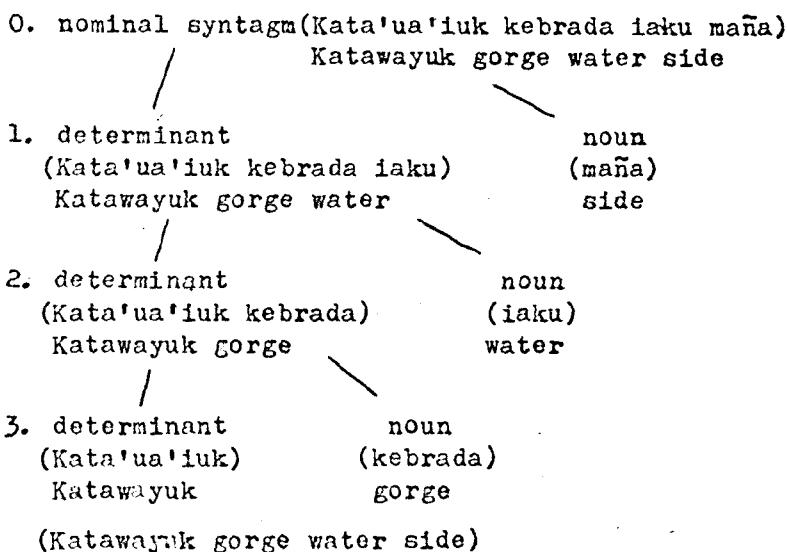


A syntagma assignable to the adjectival position, where there is a relation of subordination between the I.C.s, has two positions: determinant and adjectival. An element assigned to the determinant position is an expansion to the adjectival nucleus of the syntagma, and may itself be a syntagma, i.e. a determinant may itself be determined; for example, in "ašuaN sukamaN siNči" (really very strong), "ašuaN sukamaN" (really very) determines "siNči" (strong), and on a lower level "ašuaN" determines "sukamaN", i.e. on each level the determinant is an expansion:



A syntagma assigned to the nominal position has two positions: determinant and nominal nucleus (labelled 'noun') which is a free nucleus, i.e. the determinant is an expansion. To the

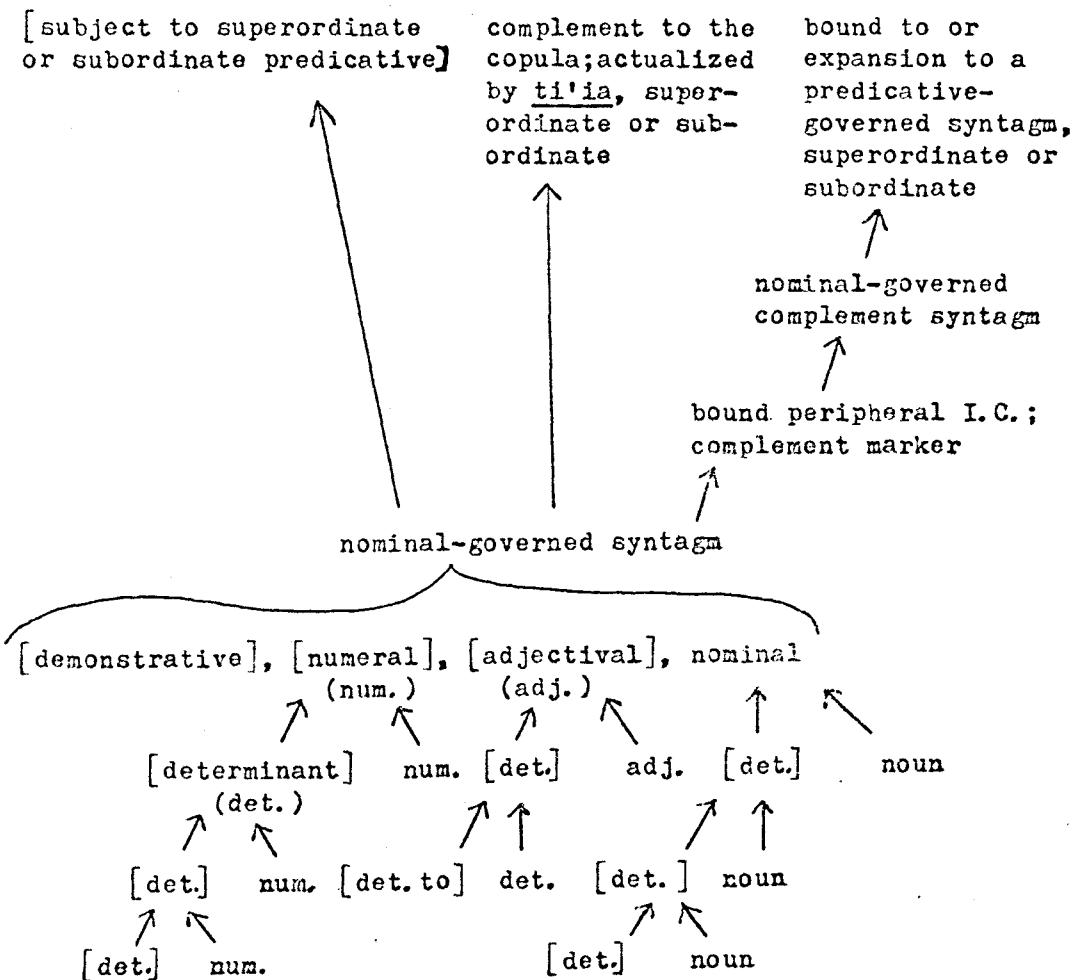
determinant position may be assigned a syntagm which is itself analysable into determinant and noun. That is, we may have a hierarchy in the nominal syntagm as follows, where on each level the element assigned to the determinant position is an expansion to the noun nucleus:



A relational complement syntagm, where the relational complement marker is "...pa"(possession) and the bound peripheral syntagm is a nominal-governed syntagm or a pronominal element, e.g. "čai uarmipa"(that woman's) may also occur as an expansion to a nominal element, e.g. "čai uarmipa mudanaN"(that woman's clothes). A nominal-governed syntagm of this type, i.e. a syntagm in which the peripheral I.C. is an instance of a nominal-governed relational complement syntagm may occur in the subject position, i.e. in the relation of subject to the predicative, e.g. "ča'iamurkaN peste kučipa"(the pig's disease arrived), or in the bound peripheral position of a complement syntagm, e.g. "SisinuNkunapa wasiNkunata"(the Sisinos' houses, neutral complement).

4. Hierarchical levels on which the nominal-governed syntagm and its constituents can occur.

In the scheme given below, the arrows point from lower level syntagms to higher level syntagms.



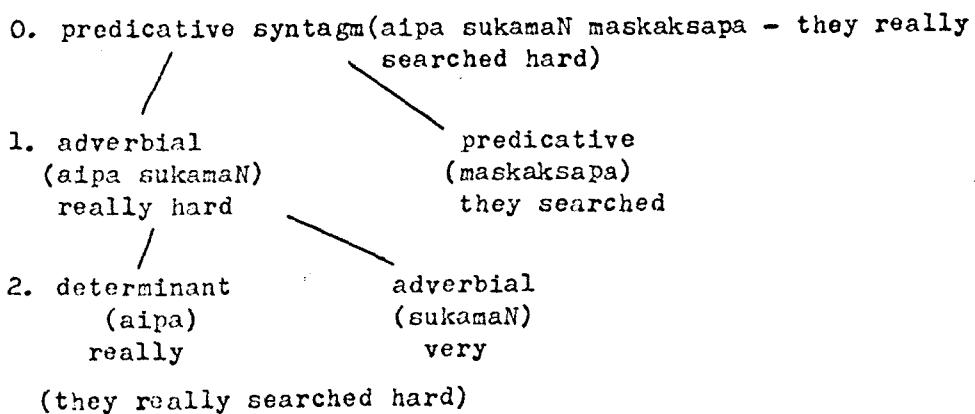
A pronominal element may occur in equivalent context to a nominal-governed syntagm. The above scheme does not show the possible occurrence of a nominal-governed relational complement syntagm, where the relational marker is "... pa", as an expansion to a nominal element. On a higher level this syntagm type, which has two I.C.s: nominal-governed syntagm governed by "pa" and nominal nucleus, may occur in equivalent context to a nominal-governed

syntagm.

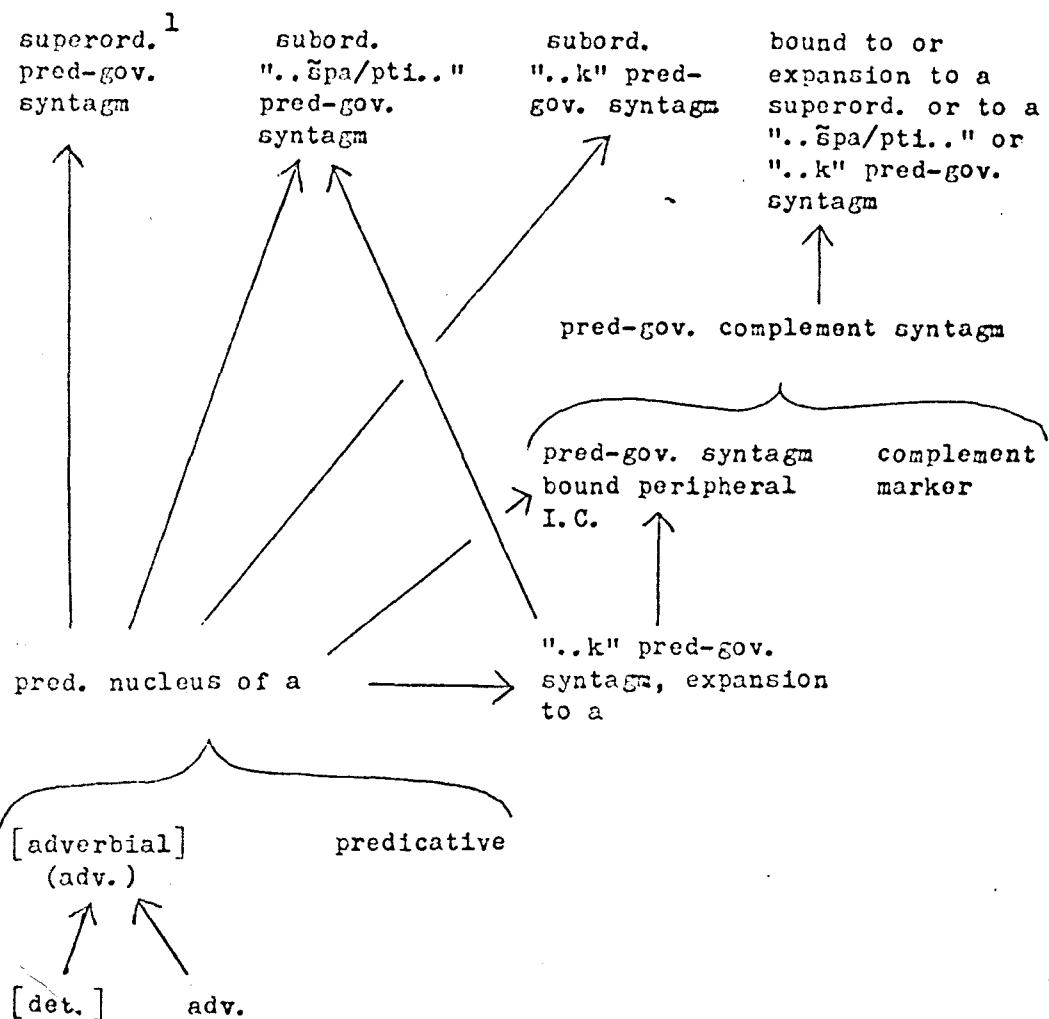
The occurrence of an adjectival syntagm is not restricted to its being an I.C. of a nominal-governed syntagm. It may be the bound peripheral I.C. of a complement syntagm which on a higher level is bound to or an expansion to a superordinate or subordinate predicative-governed syntagm, or it may be the complement to the copula in a superordinate or subordinate copulative predicative.

5. Analysis of the I.C.s of the predicative syntagm.

The predicative nucleus of a predicative-governed syntagm may itself be a syntagm analysable on a lower level. A predicative syntagm has two positions: adverbial and predicative. The I.C. assigned to the adverbial position is an expansion to the predicative nucleus, and may itself be a syntagm analysable: determinant and adverbial, where the determinant is an expansion to the adverbial nucleus. The analysis of the predicative syntagm may be shown as follows:



6. Hierarchical levels on which a predicative syntagma can occur as an I.C.



Those elements which determine syntagms as a whole before they are analysed into their I.C.s, i.e. the negative element, the elements "...piš"(also) and "...si"(they say) and adjuncts have not been included in this discussion. Co-ordination between I.C.s of syntagms has also been overlooked, since to go into all the possible instances of co-ordination between syntagms would not contribute significantly to statements made concerning

¹"Superord" is an abbreviation for "superordinate", "subord." for "subordinate", "pred-gov" for "predicative-governed" and "pred" for "predicative".

the syntagm types analysed in the description, given the nature of the relation of co-ordination.

The elements "...ka"(as in "šipaška"(maiden), for example), and "...mi"(as in "paimi"(he), "munanimi"(I want), for example), which are generally regarded as emphatics, are not included in this description, for while we are able to identify a form "...ka" ("šipaška" as opposed to "šipašta", "šipašuaN", "šipašpa", for example) and a form "...mi"("paimi" as opposed to "paita", "paika", "paipa", for example), we are not able to identify a sign "...ka" or a sign "...mi", since nowhere in the data is there evidence to suppose that "...ka" or "...mi" is functional. Their presence or absence as suffixes does not alter the significance of the messages being conveyed - a necessary requirement if they are to be set up as signs, i.e. as elements with form and information-value(see Def. 2a).

For example:

ti'iarkaN suk <u>šipaš</u>	there was a maiden
ti'iarkaN suk <u>šipaška</u>	there was a maiden
munani mediku'aita	I want to become a shaman
munanimi mediku'aita	I want to become a shaman

The element "...ka" does not affect the function of "šipaš" in relation to the predicative nucleus "ti'iarkaN"(there was) in any way, nor does it affect the function of "šipaš" as nucleus of the nominal-governed syntagm: "suk šipaš"(a maiden). Similarly the element "...mi" cannot be shown to alter the information-value of "munani mediku'aita". The presence, or absence, of "...ka" or "...mi" is non-functional, and has no bearing on a syntactic analysis. On the para-syntactic level they may be regarded as emphatics.¹

¹ Mention may also be made here of the almost total absence in the data of elements such as "...ra"(yet), "...taq"(emphatic) which are found in other Quechua dialects. Taylor(op.cit) notes the same for Olto.

APPENDICES

A. Postulates for Axiomatic Functionalism.

Axiom A. All features in semiotic sets are functional.

Def. 1a. "Functional" for "separately relevant to the purport of the whole of which it is a part".

Def. 1b. "System" for "self-contained set of features with a common purport".

1b¹. "Self-contained" for "representing all relative dependences of its members, as members of the set in question". In order to avoid a common confusion, it should be noted that a set is not a member, though it is a sub-set, of itself, and nor is any other of its sub-sets(i.e. members of the power-set of that set)a member of the set as such. Of course, some sub-sets may be self-contained themselves. The notions "functional"(Def. 1a.) and "self-contained" can be applied to "combinations(of items)" as well as to "sets". In the case of "self-contained" applied to "combinations", the term "members" has to be replaced by "constituents", and the term "set" by "combination".

Def. 1c. "Semiotic system" for "system of conventions for communication". That is to say all features of such a system are conventional and their common purport is "communication".

1c¹. "Features" for "elements, analytical properties of elements, or¹ relations between elements or properties of elements".

1c². "Entity" for "element or discrete disjunct analytical

¹"or" in formal postulates has to be understood as "and/or".

property of element".

1c³. "Semiotic entity" for "entity in semiotic system".

Axiom B Semiotic systems contain simple, or complex unordered,
or complex ordered signa or figurae.

Def. 2 "Information-value" for "specific set of potential interpretations".

2a. "Sign or symbol" for semiotic entity with both form and information-value", simply called "signum" or "plerematic entity".

2a¹. "Sign" for "signum with wholly fixed conventional information-value".

2a². "Symbol" for "signum with not wholly fixed conventional information-value, i.e. to which a temporary item of information-value can be attached by a definition".

2a^{2a}. "Proper symbol" for "symbol with partially fixed conventional information-value"(the latter being partially dependent on occasional definitions of an explicit or tacit nature). Examples to be found in algebra, symbolic logic, etc. Also "proper names" are proper symbols.

2a^{2b}. "Nonce symbol" for "symbol with no fixed conventional information-value"(the latter being wholly dependent on occasional definitions of an explicit or tacit nature).

2a³. "Grammatical entity" for "signum in a semiotic system that has a grammar".

2a^{3a}. "Grammar" for "morphology or syntax". Alternative definition: "complex plerematic system"(see complex

- system and plerematic system below).
- Def. 2a^{3b}. "Morphology" for "complex unordered plerematic system"(see unordered system below).
- 2a^{3c}. "Syntax" for "complex ordered plerematic system" (see ordered system below).
- 2a^{3d}. "Plerematic system" for "system of signa". This may be a simple or complex system(see simple system and complex system below).
- 2a^{3e}. "Grammar" for "complex system of signa"(alternative definition to Def. 2a^{3a}).
- Def. 2b. "Figura" for "semiotic entity which has only form".
- 2b¹. "Cenological entity" for "figura in a semiotic system that has a cenology".
- 2b^{1a}. "Cenology" for "cenematics or cenotactics". Alternative definition: "complex cenological system"(see complex system and cenological system below).
- 2b^{1b}. "Cenematics" for "complex unordered cenological system"(see unordered system below).
- 2b^{1c}. "Cenotactics" for "complex ordered cenological system"(see ordered system below).
- 2b^{1d}. "Cenological system" for "system of figurae". This is not necessarily a cenology, i.e. it may be a simple system(see below and compare with Def. 2a^{3d}).
- 2b^{1e}. "Cenology" for "complex system of figurae" (alternative definition to Def. 2b^{1a}).
- Def. 3a. "Phonology" for "Cenology in natural language".
- 3a¹. "Phonematics" for "cenematics in ~~a~~ natural language".

- Def. 3a². "Phonotactics" for "cenotactics in natural language".
- Def. 3a³. "Phonological system" for "cenological system in natural language".
- Def. 3a⁴. "Phonological form" for "feature belonging to phonological system".
- Def. 3b. "Articulation" for "cenotactics or syntax".
- Def. 3c. "Double articulation" for "both cenotactics and syntax".
- 3c¹. "Proper language" for "semiotic system with a cenology containing both a cenematics and a cenotactics, and a grammar containing both a morphology and a syntax".
- All natural languages, known to date, are proper languages, but not necessarily vice versa. Natural languages, in addition, incorporate a para-phonotactic and a para-syntactic system (see below), but also other other semiotic systems may incorporate para-tactic systems (see below).
- 3c^{2a}. "Proper cenology (or proper phonology, in the case of natural language)" for "system constituted by the interlocking of one cenematics (or phonematics) and one cenotactics (or phonotactics)".
- 3c^{2b}. "Proper grammar" for "system constituted by the interlocking of one morphology and one syntax". Note that a proper language is constituted by a proper cenology and a proper grammar.
- 3c^{2c}. "Interlocking" for "the one system providing the forms of the entities of the other system" (a cenology and a grammar interlock in this way), or "the one system providing the basic elements of the other

system"(a cenematics and a cenotactics, as well as a morphology and a syntax interlock in this way).

- Def. 4a. "Simple system" for "system without combinations of elements".
- Def. 4b. "Complex system" for "system with combinations of elements".
- 4b¹. "Unordered system" for "complex system without ordering relations between elements"(see ordering relations below).
- 4b². "Ordered system" for "complex system with ordering relations between elements"(see ordering relations below).
- Def. 5. "Semiotic system" for "system constituted by the interlocking of one pleromatic system and one cenological system"(alternative definition to Def. 1c). We can, therefore, have semiotic systems, where either the pleromatic system, or the cenological system, or both are simple, unordered or ordered. This, in its turn, leads to various types of simple, unordered, or ordered semiotic systems: e.g. ordered systems that are cenologically simple but plerematically ordered, e.g. algebra or the reverse of this, e.g. the Morse-code etc.
- Def. 6a. "Ordering relations" for "asymmetrical relations between entities in combinations". This does not necessarily refer to linear, or other spatial, ordering, as this is a matter of realisation".
- Def. 6b. "Relations of simultaneity" for "symmetrical relations between entities in combinations". By Axiom A, only functional criteria can be brought to bear in deciding whether a relation is symmetrical or asymmetrical.
- Def. 7a. "Paradigmatic" for "the oppositional or distinctive

aspect of semiotic entities".

- Def. 7a¹. "Paradigmatic relations" for "relations of opposition between members of sets".
- 7a². "Commutation" for "alternation between semiotic entities (or "zero" and semiotic entities) in functional opposition as immediate constituents, in a given context".
- 7a³. "Distinctive function" for "the set of commutations in which a semiotic entity may partake". Alternative definition: "the set of oppositions into which a particular semiotic entity enters". In symbols: $\underline{a} \sim (\underline{b} \underline{U} \underline{c} \underline{U} \underline{d})$, which states the distinctive function of \underline{a} , in case the set of oppositions \underline{a} enters in is: $(\underline{a} \sim \underline{b}, \underline{a} \sim \underline{c}, \underline{a} \sim \underline{d})$, and no others. In fact, $\underline{a} \sim (\underline{b} \underline{U} \underline{c} \underline{U} \underline{d}) = \underline{a} \sim \underline{b} \underline{U} \underline{a} \sim \underline{c} \underline{U} \underline{a} \sim \underline{d}$. Suspension of opposition in given contexts, and governed by those contexts, is called neutralization. A phoneme (as a simultaneous bundle of distinctive features) exhibiting a suspension of opposition between distinctive features - in which case it simply does not possess those features - is called an archiphoneme. An archiphoneme is a self-contained bundle of distinctive features common to one or more phonemes. An example is the last phoneme of German "Hand", phonemically / anD/ (or /hanT/), in which there is suspension of opposition between the distinctive features "voiced" and "unvoiced". The archiphoneme /D/ (or /T/) is a self-contained bundle of distinctive features "apical" and "occlusive", and it has those two features (taken together) in common with German /d/ and /t/, but with no other phonemes of German.
- Def. 7b. "Syntagmatic" for "The ordering aspect of semiotic entities".

- Def. 7b¹. "Syntagmatic relations" for "ordering relations between semiotic entities in combinations".
- 7b². "Syntagmatic entity" for "entity capable of standing in ordering relations with other entities or having an internal structure such that it is capable of containing - as constituents - entities capable of standing in ordering relations with other entities". In other words, to be a syntagmatic entity, an entity should itself be orderable, or have something in its structure that allows it to have orderable constituents. The implication for language is that distinctive features(narrow sense) and monemes are not syntagmatic entities, whereas phonemes, words or grammatemes(pleremes), and phrases are. (cf. Def. 7b) For "phonemes", "words", etc. see Defs. below).
- Def. 7c. "Tactic" for "Cenotactic" or "Syntactic".
- 7c¹. "Cenotactic entity" for "syntagmatic entity in cenology".
- 7c². "Phonotactic entity" for "cenotactic entity in natural language".
- 7c³. "Tactic relations" for "constructional relations(whether ordering or not)between syntagmatic entities, as immediate constituents(see below), in combinations". Note that tactic relations are not necessarily syntagmatic(i.e. ordering)relations, but they are between syntagmatic entities.
- 7d. "Syntactic entity" for "syntagmatic entity in grammar".
- Def. 7d¹. "Syntactic relations" for "tactic relations in grammar".
- Def. 7e. "Cenotactic/phonotactic relations" for "tactic relations in cenology/phonology".

- Def. 7f. "Constructional relations" for "relations between immediate constituents".
- 7f¹. "Constituents" for "entities(of the same kind, i.e. of the same level of abstraction) in self-contained combinations".
- 7f^{1a}. "Immediate constituents" for "constituents that are not constituents of constituents within the combination in question".
- 7f^{1b}. "Ultimate constituents" for "the last analytical entities of a self-contained combination of entities".
- It is theorematic that in cenematics and morphology, in contra-distinction with cenotactics and syntax, immediate constituents are always at the same time ultimate constituents.
- Def. 7g. "Positions" for "divisions within a chain(see below), 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, or with "zero". Alternative definitions: "points on a chain (see below)corresponding to relata of direct tactic relations" and "points of intersection between paradigms(visualized as a vertical straight line, called paradigmatic axis)and a chain(visualized as a horizontal straight line, called syntagmatic axis)".
- Def. 7g¹. "Paradigm" for "set of entities in functional opposition in a given context, within a chain(see below)".
- Def. 8a. "Ceneme" for "self-contained bundle of one or more distinctive features as its immediate(and at the same

time: ultimate) constituents". Alternative definitions: "self-contained bundle of one or more distinctive features" (cf. Martinet), "minimum syntagmatic element in cenology", "minimum cenotactic element".

- 8a¹. "Cenematic complex" for "complex ceneme". A complex ceneme is a cenematic complex, as opposed to a cenotactic complex. A complex cenological entity is either cenematically or cenotactically complex.
- 8a². "Phoneme" for "ceneme in natural language". Hence, of course, "phonematic complex" for "complex phoneme". Resulting further definitions for "phoneme" are those Def. 8, with "cene-" and "ceno-" changed into "phone-" and "phono-", respectively.
- 8a³. "Distinctive feature" for "minimum cenematic entity". In natural language, therefore, "minimum phonematic entity". This implies "minimum cenological/phonological entity". The term "distinctive feature" is also used, in a wider sense, for any functional feature, i.e. for "feature or complex of features that is separately relevant to the purport of the whole of which it is a part" (cf. Def. 1a). Note, however, that "the whole" should here be taken to mean "a complex semiotic entity", rather than "the semiotic system". This implies, in fact, that any semiotic feature can at one time or other be regarded as a distinctive feature, i.e. when it is regarded as a feature of a semiotic entity. In a theoretically trivial, but operationally not always trivial, sense, any feature is in the first place a feature of itself, i.e. we may recognise bundles of one

feature only. If one wants to distinguish between the only feature of an object and the object itself, as separate entities, one may call the former x-"ness", e.g. the only distinctive feature of the phoneme /l/ in English can be called "/l/-ness". At any rate, it may be necessary to distinguish in a consistent description between, say, the phoneme /l/ and its only distinctive feature, or between the word(see below)"cat", and its only moneme (see below). Whenever the term "distinctive feature" is used in a wider sense, i.e. for "any feature that is distinctive(i.e. functional)", rather than for "minimum cenematic entity", this should be entirely clear from the context, or it should be separately indicated.

Def. 8b. "Plereme" for "word or grammeme".

8b¹. "Word or grammeme" for "self-contained(by definition: simultaneous)bundle of one or more monemes as its immediate(and at the same time: ultimate)constituents". Alternative definitions, "minimum syntagmatic entity in grammar", "minimum syntactic entity". It goes without saying that it is irrelevant for syntax whether the form of a word or grammeme is confined to a particular uninterrupted "space" within realizations of a chain, or whether it is even "all over the place", as it may be in systems that exhibit a great degree of "concord". This is a matter of allomorphy(see below), not of this, more abstract, syntactic level. The distinction between "word" and "grammateme", which is intensional, not extensional, will be dealt with in definitions below.

8b². "Morphological complex" for "complex plereme". A complex plereme(i.e. a complex word or a complex grammeme) is a morphological complex as opposed to a syntactic complex. A complex plerematic entity(i.e. signum) is either morphologically or syntactically complex.

8b³. "Moneme" for "minimum morphological entity". This implies "minimum grammatical entity". Monemes are the grammatical analogues of "distinctive features"(cf. Def. 8a³).

Def. 9. "Distributional unit(wider sense)" or "field of relations" or "chain" for "self-contained bundle of positions". The term "chain" is also used in a less abstract sense for "instance of a self-contained bundle of positions", etc., i.e. for "a self-contained combination of one or more syntagmatic entities". The syntagmatic entities stand, in that case, in positions of the conceived underlying structure, i.e. the self-contained bundle of positions.

Def. 9a. "Distributional unit(narrow sense)" or "cenotagm(in natural language: "phonotagm")" for "self-contained bundle of positions in cenology(or: phonology)", or for "instance of a self-contained bundle of positions in cenology(phonology)". Alternative definition: "minimum type of structure within which the distribution of cenotactic(phontactic)entities can be described completely and exhaustively." This is to say that nothing outside such a structure can determine the distribution of immediate constituent entities within the structure. But see Def. 9b for possible further distribution of phonotags themselves.

9a¹. "Distribution" for "the set of occurrences of an entity in constructional relations with other entities".

Def. 9b. "Phrase" or "syntagm" for "self-contained bundle of positions in grammar", or for "instance of a self-contained bundle of positions in grammar". In practice, in natural languages, the parallelism with "distributional unit(narrow sense)" or "phonotagm" is not complete, as, in grammar, one can have phrases within phrases, those again within phrases, etc. For an exhaustive description of the distribution of a syntactic entity one has to consider all structures(syntagms) in which that element can occur, and then one has to describe the distribution of these structures themselves in a similar way, and so on. In practice, in phonology such complications are few, and generally of a different, i.e. not hierarchical, nature. In phonology one may have to describe the distribution of types of distributional unit, with respect to one another, in order to supplement the description referred to under 9a.

Def. 10. "Syntagmeme" for "ordered pair consisting of a paradigmeme and the position in which it stands", i.e. "member of a chain(cenotagm or syntagm). (Cf. Def. 9a, 9b and 10b).

Def. 10a. "Paradigmeme" for "member of a set of entities in functional opposition in a given context, within a chain", i.e. "member of a paradigm"(Cf. Def. 7_E¹).

Def. 10b. "Instance of a chain(also simply called: chain; cf. Def. 9)" for "self-contained simultaneous bundle of syntagmeme". Ordering relations may be between paradigmemes, but not

between syntagmemes, as the latter already include the ordering relations.

Def. 11a. "Relation of sub-ordination" or "determination" for "direct tactic asymmetrical relation of functional dependency(see direct relation below). Its converse is super-ordination or "government". This is, perhaps, the only type of tactic relation there is in phonology. If a and b are in a direct tactic relation, and a is for its tactic function(i.e. "position")dependent on b, but not vice versa(in symbols: $a \rightarrow b$), a is said to be standing in peripheral, and b in nuclear position in the chain(i.e. the self-contained bundle of positions).

Def. 11b. "Relation of coordination" for "direct tactic(by implication: symmetrical)relation of mutual functional independency". If a and b are in a direct tactic relation, and a is for its tactic function(i.e. "position") independent of b, and vice versa, a and b are said to be coordinated(in symbols: $a \not\rightarrow b$). This definition implies that, for instance, in the phrase "John and Paul" there is no relation of coordination between "John" and "and Paul"(there is no mutual functional independency here), nor between "John" and "Paul"(there is no direct tactic relation between these elements here), but there is, for instance, coordination between "big" and "black" in "a big black box".

Def. 11c. "Relation of inter-ordination" for "direct tactic(by implication: symmetrical)relation of mutual functional dependency"(i.e. functional interdependency). If a and b

are in a direct tactic relation, and a is for its tactic function(i.e. "position")dependent on b as well as vice versa, a and b are said to be inter-ordinated(in symbols: a ↔ b). It means, in fact, that the relation between a and b is both one of sub-ordination and super-ordination, and the same goes for the converse of the relation.

Compared with coordination we may say that in inter-ordination a and b are both nuclear and peripheral, whereas in coordination they are neither nuclear, nor peripheral.

Def. 11d. "Relation of apposition" or "quasi-syntactic relation" for "direct non-constuctional - and, therefore, non-grammatical - relation between, qua tactic function, equivalent immediate constituents of a chain or of a sentential entity(see below)". If a and b are in a direct non-constuctional relation, but each of them separately is, or corresponds to, an immediate constituent of a more complex entity, a and b are said to be in a relation of apposition(in symbols: a — b). This implies, of course, that such entities, though in a direct relation, cannot together constitute a sub-chain of a chain, though each of them, independently can. There are here two possibilities to be considered, i.e. that each of the elements in apposition is a separate, qua tactic function equivalent, immediate constituent in relation to other immediate constituents(e.g. "John, the fool, stayed behind"), or that two grammatical entities are in a direct non-constuctional relation and exhaust the chain(which makes the relation uninteresting on that level, as it is merely

juxtaposition), but correspond, on the sentential level to clauses (see below). In the latter case we have a non-construction on the grammatical level, which corresponds to a construction on the sentential level, and this makes the non-construction, of course, indirectly of interest to the analyst. The latter can be called "sentential apposition". Examples of sentential apposition are: "Yes, he did it.", "He is a fool, isn't he.", "Voici, un livre!". The difference between apposition and coordination is that the relation in the former is constructional (i.e. it is not merely "juxtaposition", and has, therefore, semantic import as such) and results, therefore, in a construction (i.e. chain), whereas apposition is non-constructional. The term "quasi-syntactic" is appropriate, as, especially in proper languages, the entities involved may exhibit the phenomenon of "contextual" or "partly contextual" variance, and bear, therefore, some superficial similarity with entities in constructions.¹

Def. 12a. "Occurrence interdependency" or "bilateral (or mutual) occurrence dependency" for "relation such that neither of two entities in direct relation (see below Def. 15) which are immediate constituents of a chain can occur in the chain in question whilst the other is zero". In symbols: a b. This may be either a case of sub-ordination, or of inter-ordination, but not of coordination.

¹ For much of the syntactic part of the theory I owe gratitude to A. H. C. Ward, in Toronto, with whom I had extensive correspondence and many discussions about this topic. Professor Ward was working on a syntax for Ancient Chinese along axiomatic functionalist lines.

Def. 12b. "Unilateral occurrence independency" or "unilateral occurrence dependency" for "relation such that one of two entities in direct relation(see below)which are immediate constituents of a chain can occur in the chain in question whilst the other is zero, but the other one cannot". In symbols $\underline{a}b$ or $a\underline{b}$, the square brackets indicating the occurrence dependent entity: i.e. it requires the other entity for its occurrence, but not vice versa. Such an entity between square brackets is called an "expansion"(see below). This is always a case of sub-ordination.

Def. 12c. "Bilateral(or mutual)occurrence independency" for "relation such that each of two entities in direct relation(see below)which are immediate constituents of a chain can occur in the chain in question whilst the other is zero". In symbols $\underline{a}[\underline{b}]$. Occurrence dependency, etc., has to be carefully distinguished from functional dependency, etc. Bilateral occurrence independency is always a case of coordination.

Def. 13a. "Nucleus" or "governing entity" for "entity in nuclear position(see Def. 11a)". In symbols $\underline{b} \rightarrow \underline{a}$, $[\underline{b}] \rightarrow \underline{a}$, $\underline{a} \leftarrow \underline{b}$, or $\underline{a} \leftarrow [\underline{b}]$, in which \underline{a} is the nucleus. The nucleus is the "identity-element" in the chain in question, i.e. the tactic functions of all other elements depend on their relation towards the nucleus.

Def. 13b. "Peripheral entity" or "governed entity" or "determinant entity" for "entity in peripheral position(see Def. 11a)". In symbols $\underline{b} \leftarrow \underline{a}$, $\underline{b} \leftarrow [\underline{a}]$, $\underline{a} \rightarrow \underline{b}$, or $[\underline{a}] \rightarrow \underline{b}$, in which

a or [a], is peripheral.

Def. 13c. "Expansion" for "immediate constituent that commutes with zero". In symbols [a] → b, in which [a] is an expansion; also [a] ↔ [b], in which both [a] and [b] are expansions. Complex expansions may contain entities that are themselves not expansions, e.g. [[a] → b] → c, or even [a → b] → c.

Def. 13d. "Bound entity" or "actualizer" (cf. Martinet's concept of "actualization"; see below) for "peripheral immediate constituent that does not commute with zero". In symbols: a → b, in which a is a bound entity.

Def. 13e. "Free nucleus" for "nuclear immediate constituent that does not require the presence of a non-zero peripheral constituent. In symbols a ← [b], in which a is a free nucleus.

Def. 13f. "Actualization" for "situation in which a nuclear immediate constituent requires the presence of a non-zero peripheral constituent". In symbols a ← b, where a is said to be actualized, and b is said to be a bound entity (Def. 13d) or actualizer. There is a resemblance here with Martinet's concept of "actualization", but my use of this term is not confined to the actualization of predicates.

Def. 14a. "Disjunctive or diverse determination" for "complex tactic relation such that two or more peripheral immediate constituents are subordinated to the same nucleus, but in different ways". I.e. a R_x c and b R_y c, where a and b are peripheral, c is nuclear,

and \underline{R}_x and \underline{R}_y are different tactic relations (relators).

In symbols:

$$\frac{\underline{a}}{\underline{b}} \rightarrow \underline{c}$$

Example:

$$\frac{\text{he}}{\text{him}} \rightarrow \text{hit} \quad \text{"he hit him"}$$

Def. 14b. "Conjunctive or parallel determination" for "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". I.e. $\underline{a} \underline{R}_x \underline{c}$ and $\underline{b} \underline{R}_y \underline{c}$, where, as far as we know, $(x \neq y)$, i.e. $x = y$. In symbols

$$\frac{\underline{a}}{\underline{b}} \rightarrow \underline{c} \quad \text{Example} \quad \frac{\text{the old}}{\underline{\text{old}}} \rightarrow \text{man} \quad \text{"the old man"}$$

This situation differs from certain cases of coordination, i.e. $(\underline{a} \leftrightarrow \underline{b}) \rightarrow \underline{c}$, which, indeed, implies $\underline{a} \underline{R}_x \underline{c}$ and $\underline{b} \underline{R}_y \underline{c}$, where $x = y$, but where \underline{a} and \underline{b} stand in a direct tactic relation, and hence are together one immediate constituent (rather than two separate ones) in respect to \underline{c} . Because in cenotactics (phonotactics) all relations must involve time or space in a functional capacity, parallel determination cannot obtain in cenotactics (phonotactics), only in syntax. E.g.

$$/pit/ = \underline{p} \rightarrow \underline{i} \leftarrow \underline{t} = \frac{\underline{p}}{\underline{t}} \rightarrow \underline{i}, \text{ rather than } \frac{\underline{xp}}{\underline{t}} \rightarrow \underline{i}.$$

Various adaptations and combinations within this type of presentation are feasible, especially in syntax. For instance, one can use this type of notation for the abstract presentation of a chain in terms of positions only, or combine this with a presentation of an instance of such a chain, and further combine this with an

indication of occurrence dependency, e.g.

$$\frac{a, x}{b, y} \rightarrow c, z, \frac{a, x}{b, y} \rightarrow c, z, \frac{[a], x}{b, y} \rightarrow c, z, \text{ or } \frac{[a], x}{b, y} \rightarrow c, z$$

as the case may be, where x, y , and z are positions and a, b and c are entities (or 'zero') in those positions.

Furthermore, terms, e.g. a, b, c , if syntactically complex, may be represented themselves in this way whenever feasible, and so on, just as, say, in ordinary algebra. Round brackets or other devices may have to be used in such cases in order to show the immediate constituent structure, just as, say, in ordinary algebra. A useful further convention with respect to occurrence dependency could be: one pair of brackets enclosing more than one item (in separate positions), in those cases where either one, but not, say, both, in the case of two items, as an expansion. E.g.

$$\begin{bmatrix} \text{the} \\ \text{one} \\ \text{old} \end{bmatrix} \rightarrow \text{man}$$

This formula accounts for "the man", "the old man", "one man", "one old man", "the one man", "the one old man", but it excludes "old man".

Def. 14c. "Underlying structure" for "abstract representation of a chain in terms of positions with or without indication of functional dependencies, or occurrence dependencies". E.g.

$$\frac{x}{y} \rightarrow z, \frac{x}{y} \rightarrow z, \frac{[x]}{y} \rightarrow z, \frac{[x]}{y} \rightarrow z, x y z, [x] y z,$$

where x, y and z indicate positions, and are in the presentation of the underlying structure usually

replaced by convenient labels indicating the positions,
e.g.

$$\frac{\text{subject}}{\text{object}} \rightarrow \text{predicative}, \frac{\text{subject}}{\text{object}} \rightarrow \text{predicative}$$

Def. 15. "Direct relation" for "relation between constituents (not necessarily immediate constituents) that is not a relation via other constituents". The relation of "being in a relation with", if not further qualified, is transitive. I.e. a R b and b R c implies a R c. When also the converse is true, i.e. a R c implies a R b and b R c, the relation a R c is by virtue of a R b and b R c - in fact a R b and b R c, on the one hand, and a R c on the other, are in that case equivalent. We may, then, say that the relation a R c is via b, and a R c is, consequently, not a direct relation. In semiotic systems there are direct relations between peripheral immediate constituents and the nucleus, and between the immediate constituents in coordinative and interordinative constructions. As these are relations between immediate constituents, they are at the same time tactic relations, and, consequently, they are direct tactic relations. There are also direct relations between the nuclei of peripheral constituents and the nucleus of the corresponding nuclear constituent - the nuclei constitute, as it were, the joints in multiply complex constructions - but as the nuclei in that case are mere constituents, not immediate constituents, such relations are direct, but not tactic, relations, i.e. direct non-tactic relations.

Relations between peripheral immediate constituents in a subordinative construction are tactic, but not direct, i.e. they are indirect tactic relations. All other relations between constituents are indirect non-tactic relations, and as such uninteresting. Also in the case of quasi-tactic relations (apposition) which are, of course, non-tactic, we may, in the case of appositional complexes, distinguish between direct and indirect relations, i.e. in "John, a carpenter in Crail, a little town in Fife, Scotland" there is a direct quasi-tactic relation between the first and the second, between "Crail" and the third, and between "Fife" and the fourth part. The relation between "John" and "carpenter", that between "Crail" and "town", and that between "Fife" and "Scotland" is direct but not even quasi-tactic, and therefore of little interest, and all the other relations are even less interesting, as they are not direct nor even quasi-constructional.

Axiom C. Figureae may have para-cenotactic features and signa may have para-syntactic features.

Def. 16. "Para-tactic features" for "para-cenotactic or para-syntactic features". In natural language these are usually, but (from a functional point of view) inappropriately, lumped together under the term "prosody". This is because their phonetic substance is usually simple "pitch" or "amplitude", or a mixture of the two. The lack of variation in substance leads to a great deal of amalgamation (physical simultaneity) and layering at the phonetic level,

and disentanglement at this level is usually impossible.

The following definitions make disentanglement possible at both the cenological and the grammatical, and within these at the contrastive, as well as distinctive, levels.

Another type of para-tactic feature, frequently encountered in natural language, is differences in sequential order(i.e. permutation)of the tactic entities involved. E.g. "Can he do it" versus "he can do it". This should not be confused with permutation as a means of expressing syntactic relations, e.g. "he hit me" versus "I hit him". The latter are inherent in the tactic construction and, therefore, not para-tactic.

Def. 17. "Para-cenotactic features" for "cenological(phonological) features accompanying, but not determining the identity of, cenotactic(phonotactic)entities". Of course, a cenotactic entity in combination with such features assumes an identity of its own on another level of analysis.

Def. 17a. "Contrastive para-cenotactic features" for "features with the sole function of groupment over and above cenotactic groupment". I.e. para-cenotactic(para-phonotactic)features that give form and unity to cenotactic(phonotactic) complexes as such(i.e. form over and above the inherent form of the cenotactic entities themselves). Typical examples are "juncture", and normal unit-accent, e.g. so-called "word accent", "word-group or phrase accent", etc. Juncture, especially when not always realized by "pause", is frequently a function of accent. To be distinguished from unit-accent, which - after Martinet - I prefer to

call "contrastive accent", is "connotative stress" and other features fulfilling the same function, which may be considered as (usually non-discrete) features of an auxiliary semiotic system used to draw attention to specific parts of an utterance, at the cost of others, and so adds connotation to the denotation, which remains constant.

Examples of connotative stress are seen, for example in the difference between "he hit him", "he hit him" and "he hit him" (the stressed parts are underlined), which have the same denotation, but which are different as to connotation. Of a similar nature, and often occurring in conjunction with the former, is what one might call "connotative modulation", which usually takes the form of pitch-modulation, similar in appearance to, but to be distinguished from, the phonetic forms corresponding to intonation (see below).

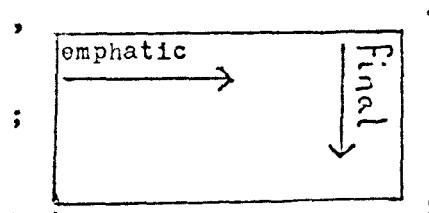
Def. 17b. "Distinctive para-cenotactic features" for "para-cenotactic features that are in a relation of commutation (see Def. 7a²) with one or more other para-cenotactic features, or with 'zero'". A typical example in natural language is "tone", as, for instance in Chinese. Also the phonological forms (see below) of distinctive intonations (see below) are distinctive para-phonotactic features, whilst the intonations themselves are distinctive para-syntactic features (see below).

Def. 18. "Para-syntactic features" for "features accompanying, but not determining the identity of, syntactic entities". Of course, a syntactic entity in combination with such features assumes an identity of its own on another level of analysis.

Def. 18a. "Contrastive para-syntactic features" for "features with the sole function of groupment over and above syntactic groupment". I. e. para-syntactic features that add further organisation to syntactic complexes as such. Typical examples in natural language are cases of "suspensive" clause intonation, usually, in writing, symbolized by a comma, which may help to distinguish between say, "John bought a horse, Peter sold it again."(one sentence), and "John bought a horse. Peter sold it again."(two sentences), and cases of so-called "thème and propos"(or "topic and comment")arrangement, e. g. "John, is not a bad guy", as opposed to "John is not a bad guy". Such features may also affect variance at the syntactic level, e.g. "John, he is not a bad guy", but not "John he is not a bad guy.", or "It was Napoleon, who lost at Waterloo." as opposed to "Napoleon lost at Waterloo.". Also cases of "apposition"(see Def. 11d)are usually formally marked by such features.

Def. 18b. "Distinctive para-syntactic features" for "para-syntactic features(of a plerematic nature, i. e. involving both form and information-value)that are in a relation of commutation(see Def. 7a²)with one or more other para-syntactic features". A typical example in natural language is "sentence-intonation". Note, for instance, the difference between "John goes home.", "John goes home?" and "John goes home!". It has to be distinguished from the clause-intonation

in "John goes home,....", which is contrastive, rather than distinctive. Nevertheless, sentence-intonation is at the same time clause-intonation, and therefore contrastive, as it is a para-syntactic feature of the last, or the only, clause in the sentence (for "clause" and "sentence", see below). However, this is not the sole function of sentence-intonation, and the latter is, therefore, a distinctive, rather than a contrastive, para-syntactic feature. There are several complications with respect to "intonation", owing to the fact that the systems involved are infinite, i.e. there is no discrete set of members. This is not the place to go into all of them. Suffice it to say that, as far as I know, all systems exhibit a cline from suspensive [,], to final [.], and, within this, from non-emphatic [,] or [.], to emphatic [?] or [!] respectively. We can represent this by the following square:



The most common situation seems to be that "suspensive" is phonetically mainly characterized by the steepness of the rise or fall in pitch, often accompanied by an increase of amplitude. The "form" of an intonation may correspond to any point on this square, and the information-value of the intonation stands in a direct relation to

its relative form(i.e. "relative" within its potential range of variation within the above square).

Def. 19. "Para-tactic(i.e. para-cenotactic or para-syntactic)unit" for "self-contained entity constituted by tactic(i.e. cenotactic or syntactic)entities, together with accompanying para-tactic features". The tactic entities involved are called the "base" of the unit. For instance, in natural language, a sentence is constituted by its base(one or more syntactic entities)and a sentence-intonation(a distinctive para-syntactic feature). Similarly a clause is constituted by its base(one or more syntactic entities)and a clause-intonation(a contrastive para-syntactic feature). In phonology, a word-accent-group consists of a base(the complex of one or more phonotactic entities, usually roughly corresponding with the phonological form of a word in terms of phonemes)and a so-called word-accent. A phrase-accent-group is a complex of the latter, together with a superimposed so-called phrase-accent, or a combination of phrase-accent-groups together with a further phrase-accent, and so on. A tone-unit e.g. tone-syllables in Chinese, is a phonotagm, together with its tone. E.g. in Pekingese, where there is distinctive opposition between four tones and "zero", "ma¹", "ma²", "ma³", "ma⁴", and "ma" correspond to one and the same phonotagm, but are different para-phonotactic units.

Def.19a. "Complex para-tactic unit" for "self-contained entity constituted by two or more para-tactic units, together

with further accompanying para-tactic features". Because of amalgamation these "further" features may be superimposed on para-tactic features of one or more of the constituents themselves. An example in phonology has already been mentioned under Def. 19, i.e. a phrase-accent-group.

Axiom D. All semiotic systems contain sentences.

Def. 20. "Sentence" for "signum with such features that it cannot be a feature(constituent, or other feature) of another signum". Alternative definition: "signum such that it is a self-contained vehicle for conveying messages". It should be noted that other signa, even though they have information-value, can only convey messages if and when belonging to, or constituting the base of, a sentence. That is, the notions "information-value" and "message" have to be distinguished.

Def. 20a. "Clause" for "potential constituent (perhaps the only one) of a sentence". "Constituent" should, of course, not be confused with "feature". Sentence-base (see below), and intonation, for instance, may both be "features" of a sentence, but not "constituents". Constituents (Def. 7f¹) are entities of equivalent status within a self-contained combination of such entities. In semiotic systems where sentences are para-syntactic units (as in natural language), clauses must, therefore, be para-syntactic units as well.

Def. 20b. "Base" for "in a para-tactic unit, the total complex of those features that correspond (on another level) to tactic entities". E.g. in Pekingese /ma/² (i.e. the syllable /ma/

under the rising tone), the base is the phoneme-complex (phonotagm) /ma/. Example from syntax: the sentence-base of "I believe he is a good chap." is the corresponding syntagm (i.e. without the intonation). Of course, in semiotic systems with no para-syntactic features, i.e. where the sentential level is part (the highest) of the hierarchy of the syntactic level (this would imply that there is no extensional difference between sentence, base, and syntagm) these distinctions can be ignored. Sentences in such a system are just certain types of syntagm. Similar considerations hold for systems with no syntax, let alone for systems with no grammar.

Def. 20c. "Sentential features" for "such features - belonging to the base, or additional to the base (in the latter case they are by definition para-syntactic) - as determine particular signa to be sentences, or constituents of sentences."

Def. 20c¹. "Sentential markers (sentence-markers or clause-markers)" for "sentential features belonging to the base of sentential entities (i.e. sentences or clauses)". Alternative definition: "sentential features that are not para-syntactic features". Examples in English are such syntagms as "isn't he", etc., at the end of a sentence-base, or clause-base.

Def. 21. "Ellipsis" for "defective realization of a syntagm, such that one or more of its constituents are not realized at the utterance level". This implies that ellipsis belongs to realization, rather than to the form of a

signum. It does not have to be accounted for, except at the utterance-level, and the phenomenon can therefore be ignored in syntax, i.e. in syntax one regards the constituents as being present. Still it is sometimes difficult to recognize ellipsis in syntax for what it is. The following are mere rules-of-thumb for solving the problem. In the first place, it is typical(though not necessary)for contextual(see below)ellipsis that it is the nuclear element of a syntagm that is left out in realization. Unless one can analyze a syntagm with suspected elliptical realization in such a way that this is shown not to be the case, one must conclude that it is, indeed, a case of elliptical realization. In case it is a peripheral element that is left out, one has to test whether the message would have been affected by its inclusion. If so, it is not ellipsis. E.g. "John eats", and "John eats soup" have different denotations, and the former is, therefore, not elliptical, but "John hit, and Peter pushed him" is elliptical. Within "ellipsis" one might wish to distinguish between the already mentioned "contextual" or "proper" ellipsis, e.g. "No, not a cow, a horse." as an answer to, say "Did he buy a cow?", and "conflation", e.g. "John hit, and Peter pushed him". The difference between the two types is that, whereas in the former it is impossible to establish precisely which is the syntactic sign that has to be regarded as corresponding to the utterance in question - even if one knows the context -, in the second one can say exactly

what and where the ellipsis is, and the corresponding syntagm can be established, without any reference even to the context in which the sentence is used. For that reason one might wish to have a formal notation for such a "construction". Such a notation could be:

$$\left(\begin{array}{|c|} \hline \text{John} \\ \hline \boxed{\text{him}} \\ \hline \end{array} \rightarrow \text{hit} \right) \leftarrow \left(\text{and} \leftarrow \left(\begin{array}{|c|} \hline \text{Peter} \\ \hline \boxed{\text{him}} \\ \hline \end{array} \rightarrow \text{pushed} \right) \right)$$

the box indicating the suppressed part of the realization.

It should be noted that in both cases we may recognize the realization of the sentences, qua sentences, to be well-formed, i.e. one might be tempted to regard "ellipsis" as referring to a discrepancy between syntactic and sentential well-formedness. Though such a view is not factually incorrect, one is likely to encounter difficulties in establishing the precise extent of the discrepancy. Only in the case of "conflation" are we able to establish the syntactic structure of the sentence-base, as, in the case of "contextual ellipsis", the utterance could correspond to any one of a number of structurally different syntactic entities, e.g. "No, he did not buy a cow, but he bought a horse", or "No, what he bought was not a cow, but a horse", etc. At the sentential level we must, therefore, consider ellipsis to play no role at all, and the only analyses possible at that level are one into constituents, the clauses, and one into base and para-syntactic features. It is irrelevant at the sentence level whether the base corresponds to a well-formed realization of a syntactic

structure. It is only at a different level, i.e. the syntactic one, that ellipsis becomes an issue, and from the point of view of that level we may say that it is merely a matter of defective realization of a syntactic entity as an utterance. The fact that, in normal communication, all realization presupposes utterances of sentences, is, analytically speaking, irrelevant. There is no reason why one could not recognize the realization of something to be not well-formed at one level, but perfectly well-formed at another. After all, a similar discrepancy may occur between phonological and grammatical well-formedness, morphological and syntactic well-formedness, syntactic and semantic well-formedness, etc. In this theory - I should like to stress this - the syntactic and sentential levels are regarded as entirely different levels. The latter occupies an important position in the whole of linguistic analysis, because all realization, as I said already, presupposes sentences, and actual sentences (but not necessarily the abstract sentential level) have, therefore, constantly to be referred to, especially when decisions as to matters of identity (on all other levels) are concerned. It is, indeed, via sentences that the ultimate identity of any semiotic feature is to be established, but once established such a feature has become a member of its proper inventory of features, and is, from that moment onwards, independent of the sentence-utterances it may be instanced in. In order to avoid a common confusion, it should be noted

distinctive function of a particular signum". This is in agreement with Hervey's definition of "utterance" as "a model for a single realization of a signum", and with his tenet that a signum is a class of utterances. The same considerations of "equivalence", mentioned below with regard to "signum", "expression", and "content", apply here too.

- Def. 22a. "Phonetic form" for "realization form in natural language". A phonetic form is, for instance, the phonetic feature "labiodental", or the class of denotata corresponding to a "letter" in the International Phonetic Alphabet, duly defined within Phonetics. In general, all phonetic features that may be the realizations of figurae are phonetic forms. As far as linguistics(phonology) is concerned, phonetic forms(as all realization forms) have the status of mere generalized "protocols", i.e. statements of fact, notwithstanding that there exists a highly developed science(phnetics)that provides us with those "protocols".
- Def. 23. "Phonological form(symbolization: p; formally defined as $\{f\}^x \underline{Rd}^x$, see below)" for "a particular maximum class of one or more phonetic forms $\{f\}$, each member f in its capacity of standing in a relation with a particular distinctive function d". Alternative definitions: "A class of all and only the phonetic forms able to be, and in their capacity of being, distinctive, in a particular way, with respect to a message, in the language in question", "self-contained class of allophones".

that there are no ill-formed entities in language, i.e. "well-formedness" or "not well-formedness", is always a matter of realization with respect to a particular level of analysis, not of entities at the level in question. The two examples just mentioned are both well-formed from the point of view of the sentential level, and both not well-formed from the syntactic point of view. The difference between the two is merely in the fact that in the case of "contextual ellipsis" the base defies syntactic analysis, whereas in the case of "conflation" the actual syntagm corresponding to the base can be reconstructed, and consequently analyzed.

Axiom E. "There may be a many-to-one relation between realization form and figura(allophony), and between cenological form and signum(allomorphy), and vice versa(homophony and homomorphy respectively)".

Def. 22. "Realization form(symbolization: f)" or "substance form" for "generalized model for a class of impressionistically similar phenomena that may correspond to one or more figurae". Because of the generalization involved, a realization-form is already a class of what one could call "images", these being "models" of the unique form of a single realization. If we symbolize images as i, i.e. f = {i}, we may, in anticipation of what follows, define "utterance" as "iRs", (where "s" stands for the distinctive function of a particular signum), i.e. as "a model(image) for the specific form of a single realization in its capacity of standing in a relation with ^{the} particular

Mutatis mutandis, with a change of terminology, these definitions can be applied to other Semiotic Systems as well. The same holds for the remainder of the definitions.

Def. 23a. "Allophone" or "phone"(formally defined as $f^x R_d^x$, where $f^x \in \{f\}^x$, and it is the case that $\{f\}^x R_d^x$ for "a particular phonetic form f, member of a particular class of phonetic forms {f}, in its capacity of standing in a relation with a particular distinctive function d".

Alternative definitions: "A particular phonetic form f in its capacity of having a particular distinctive function d", "member of a phonological form(as a class)". Though "allophone" is partly derived from Greek "allos" (different)and, strictly speaking, the term, therefore, is only appropriate in the case of a class having more than one member, by convention the term "allophone" is used also in those cases where the term "phone" would seem to be more appropriate. The same goes for "allomorph" and "morph".

Def. 24. "Signum"(formally defined as $E \& C$, or as $\{p\}^x R_s^x \& s^x R \{p\}^x$)" for "the conjunction of a particular expression and a particular content, which mutually imply one another"(alternative definition to Def. 2a). As also a particular signum and a particular expression, and, therefore, a particular signum and a particular content mutually imply one another, we can represent this as follows:



As this implies equivalence between signum(S), expression(E) and content(C) in any statement using any of these terms, we can, in practice, ignore the difference between S, E and C. Though, if we define (see below) E as $\{p\}^X R_s^X$, C as $s^X R \{p\}^X$, we have to define S as $\{p\}^X R_s^X \ s^X R \{p\}^X$, we are allowed, for reasons of simplicity, to act as if S were simply $\{p\}^X R_s^X$.

Def. 24a. "Expression(symbolized E, formally defined as $\{p\}^X R_s^X$)" for "a particular maximum class of one or more phonological forms {p}, each member p in its capacity of standing in a relation with a particular distinctive function s". Alternative definitions: "A class of all and only the phonological forms able to be, and in their capacity of being, a phonological form of an instance of a particular signum", "self-contained class of allomorphs". The latter definition, by equivalence (see above), is also appropriate for defining content, and signum. The symbol s, standing for the distinctive function of a signum, is chosen in order to distinguish it from d, which stands for the distinctive function of a figura. Distinctive function s(in the case of "signs") is properly included in "semantic function", from which it has to be distinguished. The difference is, however, only important in the case of "synonyms", which have the same semantic function, but - as they are different signs - different distinctive functions.

- Def. 24a¹. "Allomorph" or "morph" (formally defined as $\underline{p}^x R_s^x$, where $\underline{p}^x \in \{\underline{p}\}^x$, and it is the case that $\{\underline{p}\}^x R_s^x$) for "a particular phonological form \underline{p} , member of a particular class of phonological forms $\{\underline{p}\}$, in its capacity of standing in a relation with a particular distinctive function \underline{s} ". Alternative definitions: "A particular phonological form \underline{p} , in its capacity of having a particular distinctive function \underline{d} ", "member of an expression (or, by equivalence, of a content or a signum) (as a class)".
- Def. 24b. "Content (symbolized C , formally defined as $\underline{s}^x R \{\underline{p}\}^x$)" for "a particular distinctive function \underline{s} , in its capacity of being the particular distinctive function \underline{s} of each member of a particular class of phonological forms $\{\underline{p}\}$. Alternative definition: "the converse of expression".
- Def. 25. "Homophone" for "allophone of one figura having the same phonetic form as an allophone of another figura". Formalized definition: $\underline{f}^x R_d^x \sim \underline{f}^y R_d^y$, where $x \neq y$.
- Def. 26. "Homomorph" for "allomorph of one signum and having the same phonological form as an allomorph of another signum". Formalized definition: $\underline{p}^x R_s^x \sim \underline{p}^y R_s^y$, where $x \neq y$.
- Def. 27. "Homonym" for "total class of allomorphs of one signum, in comparison with and its members having the same phonological forms as those of the total class of allomorphs of another signum". Formalized definition: $\{\underline{p}\}^x R_s^x \sim \{\underline{p}\}^y R_s^y$, where $x \neq y$. One could

define "homonymy", informally, as "total homomorphy between signa".

Def. 28. "Synonym" for "signum", in comparison with and having the same intrinsic information value(denotation)as another signum". By implication these signa differ from one another in the class of phonological forms of their allomorphs. Formalized definition: $(\{p\}^x R_s^x RD^x \sim \{p^y R_s^y\} RD^x)$, where $x \neq y$, D = "denotation". It goes without saying that, if we speak about "different signa", we mean "different signa belonging to the same Semiotic System", as comparison of signa from different systems with respect to their distinctive functions(i.e. S^x \sim S^y ), and, consequentially, their identities, is meaningless, even though signa of different systems may conceivably have the same denotation(i.e. referential correspondence with the same class of denotables).

Def. 29a. "Word" for "plereme, as a class of allomorphs, established in such a fashion that all its members have a continuous (i.e. uninterrupted)phonological form".

Def. 29b. "Grammateme" for "plereme, as a class of allomorphs, established in such a fashion that some of its members have a noncontinuous(i.e. interrupted)phonological form". The problem of having to distinguish between "word" and "grammateme" arises especially in languages that exhibit the feature of so-called "concord", i.e. contextual variance with regard to allomorphs of words, which variance is governed by the use of another constituent in the

construction. A classical example of this is so-called "gender", as, for instance, in French or German. In French, for instance, we may say that "la grande montagne blanche", /la grād mōtañ blāš/, contains, as constituents, four pleremes. Now, it is equally correct to say that the phonological form of these pleremes, in this particular instance, is /la/, /grād/, /mōtañ/, and /blāš/ respectively, as it is to say that their phonological form is /l/, /grā/, /a...d mōtañ...š/, and /blā/ respectively. In the first case we have to add that /la/, /grād/ and /blāš/, are affected by "concord", i.e. that their variance is governed by the fact that they are in construction with a so-called feminine "noun", as this is not immediately clear from the presentation. In the second case it is immediately clear that "mōtañ" governs the variance, but we have separately to account for the fact that the particular phonological form the other entities assume is governed rather by the identity of the pleremes "la", "grand" and "blanc", and only the fact that they assume that form is governed by their being in construction with the plereme "montagne". The two ways of presentation are, therefore, complementary, rather than being in competition. As the difference between the two modes is intensional, rather than extensional, i.e. it does not affect the identity of the pleremes in question, one can use either, or both, according to the convenience, or according to the emphasis on the one, or the other, aspect of the case. The term "grammateme" can also be used, irrespective of whether

there is "concord" involved, in other cases where the phonological form of a plereme is discontinuous, or crosses boundaries of what is normally the phonological form of a word. E.g., in English, the plereme "can afford to" can be called a grammeme, rather than a word, and so can, say, the plereme "umbringen" in German, in view of allomorphs having such phonological forms as /bri ... um/, etc. In the last two examples, the pleremes in question can only be set up as "grammatemes", not as "words". In the earlier examples, they can be set up in both ways. Some pleremes can only be "words", as they cannot be set up in such a way that some of their allomorphs have discontinuous phonological forms. Some languages may have only one type of plereme, others may have only two of the three(i.e. only establishable as words, only as grammemes, and both as words and as grammemes)possible types of pleremes one may find in a language. Of course, by definition every language has pleremes. Any semiotic system that has a syntax must have minimum syntactic entities, i.e. pleremes. Cf. Def. 8b¹. Pleremes are the grammatical analogues of cenemes(phonemes), just as monemes are the grammatical analogues of distinctive features(cf Def. 8b³).

B. Phonemes of San Martín Quechua and their realisations.

The list of phonemes and their realisations given below is that which pertains to System A in the axiomatic functionalist description of San Martín Quechua phonology, i.e. the bona fide 'Quechua' system as opposed to System B which includes in its classification extraneous elements which are intuitively Spanish forms.¹

In San Martín Quechua phonology described according to System A, i.e. omitting 'Spanish' forms, the distributional unit/syllable is of three positions: (explosive, nuclear, implosive), abbreviated to: (e, n, i)². Reference is made to these positions, especially when it is found that a phoneme is realised differently according to the position in which it stands in the distributional unit/syllable.

Phoneme /a/: this is the only 'vowel' phoneme in the system, occurring in 'n' only. The realisation of /a/ depends on its phonetic context. For the purposes of the present work, I shall give it as - 'back, open, rounded, lax'.

Phoneme /i/: this operates in all three positions 'e', 'n' and 'i'. The phoneme /i/, as is /u/, is a 'consonantal-vocalic' phoneme. The realisation of /i/ depends on its context in (e, n, i). Generally speaking, in 'e' it is realised [j], in 'n' [i] and in 'i' [i].

¹ D. W. Howkins, Phonology of San Martín Quechua, St. Andrews Ph. D. thesis (1972).

² As there are no subsets of the distributional unit in this system, the distributional unit and the syllable are (e, n, i). Hence reference is made to the distributional unit/syllable (e, n, i).

Phoneme /u/: this operates in all three positions 'e', 'n' and 'i'. Like /i/ it is a 'consonantal-vocalic' phoneme. In 'n' it is realised - 'back, close, rounded, lax'. In the peripheral positions ('e' and 'i') its realisation depends upon the nucleus of the particular phonetic syllable. The possible combinations are:

explosive [wá]
 ζ

[wi]

implosive [áu]
 \wedge

The explosive realisation is a glide which may be characterised as a movement from 'back, close, rounded, tense, labial' to a more 'open' and 'lax, rounded' position, where the nucleus is [a], and towards 'front, close, spread' where the nucleus is [i]. The implosive realisation situation may be given as the reverse of that given for [wá] - it is a movement from 'open' position of the nucleus back towards 'back, close, rounded, tense, labial'.

Phoneme /p/: this operates in 'e' and 'i'. After a nasal in the same accent group, /p/ has a free variant realisation [b] - voiced, bilabial, occlusive. The realisation [b] is in free variance with [p] - unvoiced, bilabial, occlusive. The latter realisation occurs in all contexts except after nasal.

Phoneme /t/: this operates in 'e' and 'i', and has a free variant realisation [d] after a nasal in the same accent group - voiced apico-dental, occlusive. The realisation [d] varies freely with [t] - unvoiced, apico-dental, occlusive - after nasal, and the latter realisation occurs in all other contexts.

Phoneme /k/: this operates in 'e' and 'i'. After a nasal in the

the same accent group, /k/ has a combinatory variant realisation [g] - voiced, velar, occlusive. Otherwise, /k/ is realised unvoiced, velar, occlusive [k].

Phoneme /m/: this operates in 'e' only and is realised bilabial nasal [m].

Phoneme /n/: this operates in 'e' only and is realised apico-alveolar nasal [n].

Phoneme /ñ/: this operates in 'e' only and its realisation can be described as palatal nasal plus semi-vowel [j].

Phoneme /l/: this operates in 'e' only and occurs in very few forms in the language. It is realised apico-alveolar lateral [l].

Phoneme /ʒ/: this operates in 'e' and 'i', and the most common realisation of this phoneme is palatal voiced 'hush' [ʒ], similar to the initial sound of French jour.

Phoneme /tʃ/: this operates in 'e' and 'i' and is realised unvoiced palatal affricate.

Phoneme /r/: this operates in 'e' and 'i' and is realised apico-alveolar trill.

Phoneme /s/: this operates in 'e' and 'i' and is realised unvoiced apico-alveolar sibilant [s].

Phoneme /ʃ/: this operates in 'e' and 'i' and is realised unvoiced palatal 'hush', similar to the initial sound of English ship.

Archiphoneme /N/: this occurs in the implosive position where the phonemes /m/, /n/ and /ñ/ cannot be established because of

neutralisation between nasals. It is realised in various ways depending on its context (usually it assimilates to a succeeding phoneme in the same accent group):

before /p/, /N/ is realised bilabial nasal [m]

before /t/, /N/ is realised apico-dental nasal [n]

before /z̄ ̄s̄ ̄s̄/, /N/ is realised palatal nasal [n̄]

before /k/, /N/ is realised velar nasal [ŋ̄]

In absolute final position, /N/ is realised [n̄] or [ŋ̄].

The above analysis is based on the omission from consideration of forms which have historically Spanish elements in them. I refer to the elements [b, d, g, f, x] of the consonants, and [e, o] of the vowels. In this description, these are treated in an ad hoc way as phonemes /b/, /d/, /g/¹, /f/, /x/, /e/ and /o/. With the exception of /b/ and /o/, these forms occur exclusively in Spanish forms, but the occurrence of /b/ and /o/ in forms of certain Quechua origin is very limited: /b/ occurs in only six words and /o/ in only two.

The notation ' is used for orthographical convenience throughout the presentation of phonological forms to mark a syllabic boundary in those cases where implosive position filled by Ø is followed by a syllable beginning with a vowel. For example, /kaO-uaO-uaN/ is not given as /kauauaN/ which may cause the reader slight difficulties of interpretation, but as /ka'ua'uaN/ - thus the form of the word, stress pattern etc., can be more quickly assimilated.

¹ I refer to 'Spanish' forms such as 'bala' (bullet), 'daño' (harm), 'gana' (win). This should not be confused with the variant realisations [b d g] after nasal, which is a purely Quechua phenomenon.

C. 1. Superordinate predicative suffixes for person and number.¹

miku- <u>ni</u>	I eat
miku- <u>Nki</u>	you eat
miku- <u>N</u>	he/she/it eats
miku- <u>N</u> - <u>CI</u>	we eat - inclusive
miku- <u>ni</u> -SAPA	we eat - exclusive ²
miku- <u>Nki</u> - <u>CI</u>	you(plural)eat
miku- <u>N</u> -SAPA	they eat

2. Subordinate predicative suffixes for person and number.

ri-na- <u>ini</u> -pa	that I may go
ri-na- <u>iki</u> -pa	that you may go
ri-na- <u>N</u> -pa	that he may go
ri-na- <u>N</u> - <u>CI</u> -pa	that we may go - inclusive
ri-na- <u>ini</u> -KUNA-pa ³	that we may go - exclusive
ri-na- <u>iki</u> - <u>CI</u> -pa	that you(plural)may go
ri-na- <u>N</u> -KUNA-pa	that they may go

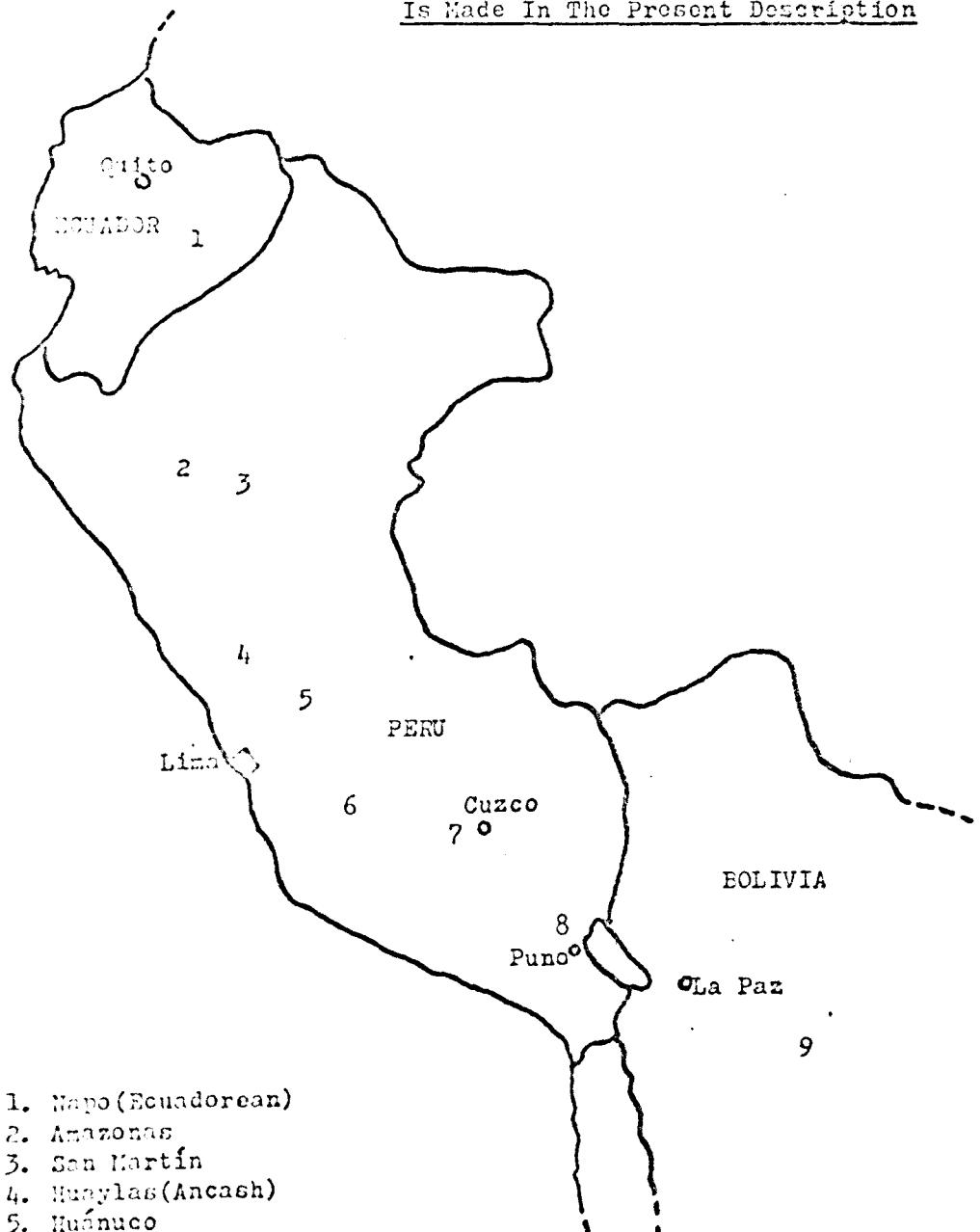
¹ Suffixes for person are underlined; those for number are given in capital letters. It should be noted that the two sets of forms given here are intended as illustrations of the most common formal differences between suffixes for person and number in superordinate and subordinate predicative elements and do not constitute a morphological analysis. To take one example, in a morphological analysis in terms of the theory, /ni/, /N/ and /ini/ are only three of the allomorphs of the sign for "first person". A complete statement of this sign would give the class of allomorphs {/ni/, /N/, /ini/, /i/, Ø}, but to include /i/(which occurs in forms like "miku-i-maN"(I may eat)) and 'Ø'(which occurs in forms like "miku-sa"(I will eat)) would mean giving a long list of paradigms which would not highlight the central point here which is that of the differences between superordinate and subordinate predicative forms as regards person and number.

² In San Martin Quechua, there is a distinction between 'inclusive' (includes the hearer) and 'exclusive'(excludes the hearer) in the first person plural. In this set of forms the signs for "plural inclusive" and "plural exclusive" are "ci" and "sapa" respectively. Note that second person plural includes hearer(hence "ci") and that third person plural excludes hearer(hence "sapa").

³ Contrast "kuna" for "plural exclusive" with "sapa" in the superordinate predicatives.

The monemes for person underlined in the forms of subordinate predicative given and the moneme "kuna" denoting "plural" are also found in nominal forms. It is this together with the fact that they combine with "...ta" and relational elements which has led other Quechua scholars to regard subordinate predicatives as 'nominalizations'. In the present description, these monemes are not regarded as being exclusive to nominal elements but as being exclusive to elements, nominal or predicative, which stand in a subordinate, as opposed to a superordinate, relation.

Dialect Zones To Which Reference
Is Made In The Present Description



1. Napo (Ecuadorian)
2. Amazonas
3. San Martín
4. Huaylas (Ancash)
5. Huánuco
6. Ayacucho
7. Cuzco
8. Puno
9. Cochabamba

REFERENCES

1. Linguistic Theory.

- DE SAUSSURE, F. : Course in General Linguistics, transl. Baskin, New York, 1959.
- HOCKETT, C. F. : A Course in Modern Linguistics, New York, 1959.
- HERVEY, S. G. J. : "Mulder's 'Axiomatic Linguistics'. A reply to C. Bailey's Review in Language Vol. 46, No. 3.", Lingua, 28(1972).
- HERVEY, S. G. J. / MULDER, J. W. F. : "Pseudo-composites and pseudo-words: sufficient and necessary criteria for morphological analysis.", La Linguistique, I(1973)
- MARTINET, A. : A Functional View of Language, Oxford: The Clarendon Press, 1962.
- " : Elements of General Linguistics, transl. Palmer, London, 1964.
- " : La Linguistique Synchronique, Presses Universitaires de France, Paris, 1968.
- MULDER, J. W. F. : "Descriptive Adequacy in Phonology and the Vowel Phonemes of the Scottish Dialects of Angus and Perthshire Compared with the Southern English System.", La Linguistique, I(1974).
- " : "From Sound to Denotation", Folia Linguistica: Acta Societatis Linguisticae Europaene, Tomus VI, 1/2(1973).

- MULDER, J. W. F. (cont) : "Linguistic Sign, Word and Grammateme.", La Linguistique, I(1971).
- " : "Linguistic Theory, Linguistic Descriptions and the Speech Phenomena.", La Linguistique, I(1975).
- " : "On the art of definition, the double articulation of language and some of the consequences.", Forum for Modern Language Studies, II(1969).
- " : Sets and Relations in Phonology: An Axiomatic Approach to the Description of Speech, Oxford: The Clarendon Press, 1968.
- MULDER, J. W. F./HERVEY, S. G. J. : "Index and Signum.", Semiotica, IV(1971).
- ": Theory of the Linguistic Sign, Mouton, The Hague, 1972.

B. Works on Dialects of Quechua.

- BILLS, G. D. : "On Case in Quechua.", Papers in Andean Linguistics(Wisconsin), Vol. 11, No. II (1975)
- CORDERO, L. : Diccionario Quichua-Español/Español-Quichua, Casa de la Cultura Ecuatoriana, Quito, 1955.

- COSTA, R. : "A Study of the SQA, NA, Y and Q Nominalizing Suffixes in Quechua.", Papers in Andean Linguistics(Wisconsin), Vol.1., No.1. (1972).
- HOWKINS, D.W. : Phonology of San Martín Quechua, St. Andrews Ph.D Thesis, 1972.
- LASTRA, Y. : Cochabamba Quechua Syntax, Mouton, The Hague, 1968.
- MIDDENDORF, E.W. : Gramática Keshua, transl. More, Lima, 1970. Original German text, 1892.
- MUGICA, P.C. : Aprenda el Quichua, Quito, 1967.
- PARKER, G.J. : Gramática del Quechua Ayacuchano, Lima, 1965.
- " : Sugerencias Para Un Alfabeto General Del Quechua, Universidad Nacional Mayor de San Marcos, Lima, 1972.
- PERROUD, C. : Gramática Quechwa: Dialecto de Ayacucho, 2nd. ed., Lima, 1961.
- PROULX, P./
ESCRIBENS, A. : Gramática del Quechua de Huaylas, Lima, 1971.
- SNOW, C.T. : "Nominalizations in Ancash Quechua: I", Papers in Andean Linguistics, Vol.11, No.1. (1973).
- TAYLOR, G. : "Le Parler Quechua d'Olto, Amazonas(Pérou): Phonologie, Esquisse Grammaticale, Textes.", Langues et Civilisations à Tradition Orale, II(1975). Société d'Etudes Linguistiques et Anthropologiques de France(SELAF), Paris.

ADDENDUM

MULDER, J. W. F. : "Postulates for Axiomatic Functionalism",
Actes du premier colloque de linguistique
fonctionnelle, Groningen(1974), forthcoming.