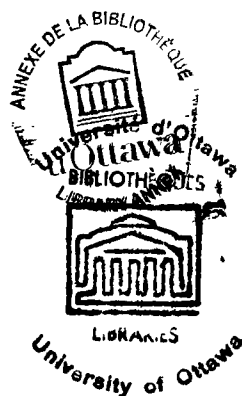


AN INQUIRY INTO THE PROCESS OF GRAMMAR CONCEPT ATTAINMENT
IN THE FRANCO-ONTARIAN JUNIOR SCHOOL CHILD

by Avrim Lazar

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CURRICULUM STUDIORUM

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INTRODUCTION

Formal grammar instruction has for many years been the subject of debate¹. Calls for its abandonment or reform abound. Some advocate an increase in the quantity and rigour of formal grammar instruction. Others suggest the elimination of formal grammar teaching and its replacement with language experience programs. In addition, there are those who claim that the grammar taught in the schools must be updated to correspond to one of the several modern approaches to linguistics, while still others warn that modern linguistics may be no more appropriate than quantum mechanics in the education of young children.

While most of the participants in the debate are not without their sources of support in the theories and research of allied fields relevant to the pedagogy of grammar, the resolution of the debate awaits the integration of the contributions of these fields in a theoretical analysis directed specifically at the process of learning grammar in the school. It is in the direction of that analysis that the present study aspires to make its contribution.

¹ Harold G. Shane, James Walden and Ronald Green, Interpreting Language Arts Research for the Teacher, Washington, Association for Supervision and Curriculum Development, NEA, 1971, p. 107-113.

The learning of grammar, like the learning of other disciplines, requires the attainment of a large number of classificatory concepts. In grammar, classificatory concepts are the syntactic categories into which the elements of language may be grouped. Examples of common classificatory concepts in grammar include: noun, verb, subject, clause and sentence. The various schools of linguistics disagree with each other on many issues but the importance of classificatory concepts is a point of general concordance. Grammar is recognized to be a system of regularities and the elements of language are thought of as belonging to groupings (classificatory concepts) to which these regularities apply. Traditional grammar emphasizes its parts of speech and categories of function words. Structuralist grammars place so much emphasis on categorizations that they are often referred to as taxonomic grammars. Transformational generative grammars require that a language's lexicon be grouped so that the rules of sentence generation may be applied to the appropriate content. It is, therefore, suggested that an important element in the analysis of the process of grammar learning in the school will be the study of the process of learning classificatory concepts in grammar.

The process of classificatory concept learning in general has enjoyed the attention of many investigators.

The results of their efforts are not, however, immediately applicable to the study of grammar concept learning. The process of learning concepts is sensitive to circumstance. It varies with the properties of the concept being learned, with the knowledge that the learner brings to the learning situation, and with the contingencies of the learning situation itself. The study of the process of grammar concept learning, therefore, must involve not only the findings of concept learning research but also the study of the particular circumstances involved in learning grammar.

The objective of the present study is to obtain information regarding the process of learning the classificatory concepts of grammar in the junior school classrooms of French Ontarian schools.

The term "junior school" is used in Ontario to refer to grades four, five, and six. The concept learning of interest in this study is that involved in the learning of the grammar of a mother tongue, namely French.

The study is pursued from the interactionist perspective of cognitive psychology. Accordingly, attention is paid to the characteristics of the learner, of the concepts, and of the learning situation. To do this, the study draws upon the perspectives of several disciplines, such as psychology, linguistics and pedagogy.

Although this study draws its information from a heterogeneous collection of sources, a single theoretical perspective is employed throughout. This perspective provides the framework within which the information from the various sources may be integrated. The framework chosen to perform this service is the Model of Concept Learning and Development (CLD), developed by Klausmeier and his associates at the Wisconsin Research and Development Center for Cognitive Learning². It should be noted, however, that Klausmeier's model is the instrument rather than the object of the current study. The objective is to use the CLD, not to test it. Nevertheless, in using Klausmeier's model, information regarding its veridicality and its heuristic power as an instrument for the analysis of pedagogical realities may be obtained as a secondary benefit.

The study is organized into three chapters. Chapter I has three objectives. The first objective is to present Klausmeier's model which will serve as a framework for the study.

The second objective is to conduct an exploratory theoretical analysis of the process of learning grammar concepts. This analysis includes the examination of

2 Herbert J. Klausmeier, Elizabeth Schwenn Ghatala and Dorothy A. Frayer, Conceptual Learning and Development, New York, Academic Press, 1974, vii-283 p.

several elements. One of these elements is the dichotomization of knowledge of grammar into theoretical and practical knowledge, a distinction which is essential in the systematic discussion of grammar learning. Other elements studied in the analysis are the properties of grammar concepts themselves, the knowledge of grammar the junior school child already has, and models of concept acquisition as they apply to grammar learning.

The third objective of Chapter I is the isolation of a problem for empirical research and the statement of a hypothesis relevant to that problem.

Chapter II presents the experimental design. The results of the empirical investigation are presented and discussed in Chapter III. The study closes with a summary and the presentation of conclusions.

CHAPTER I

REVIEW OF THE LITERATURE

This chapter has three objectives. The first is to present the model of concept learning and development which will serve as the framework for the remainder of the study. The second is to conduct an exploratory theoretical analysis of the process by which the junior school child learns grammar concepts. The third objective is to draw upon the results of the theoretical analysis so as to isolate a problem that may be subjected to empirical investigation and to derive a hypothesised solution to the problem isolated.

The chapter is divided into three sections corresponding to the three objectives.

1. Klausmeier's Model of Concept Learning and Development.

The central theoretical perspective that has been chosen for the pursuit of the current study is that of Klausmeier's Model of Concept Learning and Development (CLD)¹. It has been chosen because it offers a unique combination of heuristic advantages for the study of the current topic.

¹ Herbert J. Klausmeier, Elizabeth Schwenn Ghatala and Dorothy A. Frayer, Conceptual Learning and Development, New York, Academic Press, 1974, vii-283 p.

The first of these advantages is Klausmeier's cognitivist orientation. Cognitive psychology is more likely than other approaches to handle the study of grammar learning with elegance. This is because good grammar is infinite in its behavioural manifestations but finite in its underlying structure.

The second heuristic advantage offered by the CLD is that it admits to several possible processes of learning concepts. It thus does not restrict the current study to testing whether a particular concept learning process obtains in the case of grammar but rather expands the exploration by allowing the consideration of several alternative possibilities.

Third, the CLD treats both the learning that occurs as a result of schooling as well as untutored spontaneous learning. Clearly, both of these must be considered when grammar learning in the junior school child is at issue.

Fourth, and related to the previous advantage, the CLD incorporates more than one mode of knowing a concept. It allows one to differentiate between the knowledge of concepts that is incorporated in the unconscious ability to use grammar as an instrument of cognition and the knowledge of concepts incorporated in a theoretical awareness of grammar as an object of cognition.

The power of Klausmeier's model should become more apparent during its use in the course of the theoretical analysis of grammar concept learning. Before it can be used, however, its major parts must be presented and discussed. Accordingly, an examination of the CLD follows.

Klausmeier's theory concentrates on the acquisition of classificatory concepts. His definition of a concept follows that of Bourne who states that:

A concept exists whenever two or more distinguishable objects or events have been grouped or classified together and set apart from other objects on the basis of some common feature or property characteristic of each.²

Klausmeier expands on this definition of a concept saying

Objects or events may be put into the same category on the basis of their criterial attributes. The category is usually given a name. In turn, the word that represents the category may be defined in terms of the criterial attributes of the category . . . Concepts may be defined in terms of their intrinsic dimensions or attributes. The dimensions or attributes are abstracted as being alike or the same in otherwise dissimilar objects and thus define the concept from an objective point of view. For example the attributes which allow some objects to be classified as oranges and others as lemons are size, colour, shape and taste.³

2 L. E. Bourne, Human Conceptual Behavior, Boston, Allyn and Bacon, 1966, p. 1.

3 H. J. Klausmeier, B.E. Sterrett, D. A. Frayer, S. B. Lewis, V. W. Lee and J. L. Barry, Concept Learning: A Bibliography, 1950-1967, Wisconsin Research and Development Center for Cognitive Learning, Technical Report No. 82, 1969, p. 3.

Klausmeier goes on to say that a concept may be considered as either a private mental construct of an individual or as a "public entity" that comprises part of the substance of the various disciplines⁴. Concepts as mental constructs are the categories into which an individual organizes his universe. Concepts as public entities correspond to meanings of words such as one would find in a dictionary.

Klausmeier distinguishes between the relevant and irrelevant attributes of a concept. Those attributes which allow one to distinguish an example of a concept from a non-example are called the relevant attributes of that concept. Those attributes which belong to some exemplars of the concept but are not critical to deciding on membership in the group that forms the concept are called irrelevant attributes. For example, for the concept "noun", the property of being longer than four letters is an irrelevant attribute. The property of referring to a place is a relevant attribute.

As the name implies, the "Model of Concept Learning and Development" is addressed to two major phenomena, the learning of concepts and the development of knowledge of concepts. When focusing on concept learning, Klausmeier states that concepts are formed as a result of experience⁵.

⁴ Klausmeier, et al., 1974, Op. Cit., p. 4.

⁵ Ibid., p. 2.

This aspect of his approach is in the American tradition of concept learning theories. Within this American tradition Klausmeier's approach is closer to Bruner's hypothesis testing formulations⁶ and Hunt's information processing model⁷ than to the strictly behaviouristic and neobehaviouristic approaches. He describes the learning of concepts as involving the operations of attending, discriminating, remembering, and generalizing. In addition, he includes the operations of attribute discrimination, hypothesis formation and hypothesis evaluation when concepts are being learned at more developed levels of mastery.

Klausmeier's approach differs from that of traditional American learning theory in that he suggests a series of qualitatively distinguishable levels through which an individual's mastery of any one concept may develop⁸. This part of his theory resembles the approach to concept learning usually associated with Piagetian theory⁹. In addition, Klausmeier's theory resembles that of Piaget in its use of

6 Jerome R. Bruner, et al., Studies in Cognitive Growth, New York, Wiley, 1966, p. 1-343.

7 E. B. Hunt, Concept Learning: An Information Processing Problem, New York, McGraw-Hill, 1962, p. 1-278.

8 Klausmeier, et al., 1974, Op. Cit., p. 12.

9 Jean Piaget and Barbel Inhelder, The Psychology of the Child, New York, Basic Books, 1969, ix-173 p.

an organism-centred, interactionist orientation. However, Klausmeier deals only with the learning of classificatory concepts. He does not deal with growth and development of the intellect as a whole, or with the broad interplay of maturational and environmental factors, or with the logico-mathematical structures that underly thought. Unlike Piaget, Klausmeier deals in detail with only one developmental phenomenon, the development of the mastery of classificatory concepts.

Klausmeier's model includes four successively higher levels of concept attainment: the concrete, the identity, the classificatory, and the formal. Any one concept may be held at each of these levels. The relationship among the four levels is vertical with each level containing the elements of those below it in addition to characteristics of its own.

Concept attainment at the concrete level is inferred when an individual recognizes an object that he has previously encountered. It is the simplest level of concept attainment but is also the foundation for the more developed types of conceptual behaviour.

The identity level of concept attainment is inferred when an individual recognizes an object as the same one he has previously encountered despite a change in perspective or modality.

These two levels are of particular importance in studies of young children. They are not, however, of immediate interest to the current study. It is the classificatory and formal levels of concept mastery that are directly relevant to this study.

Attainment of a concept at the classificatory level implies that one can accurately differentiate among those things that are, and those things that are not, examples of the concept. At this level, a person may or may not know the name of the concept. If a person reacts to examples of the concept in a consistent fashion and fails to react similarly to non-examples of the concept, attainment at the classificatory level may be inferred.

Knowledge of a concept at the classificatory level is practical knowledge. Concepts known at this level are instruments rather than objects of cognition.

Support for the existence of such a level of concept mastery comes from Henley¹⁰ who reports that in concept attainment studies it is not unusual to find subjects who accurately differentiate examples from non-examples of a

¹⁰ Nancy Henley, The Study of Semantic Change Through Serial Reproduction of Concepts, cited in James Deese, "Meaning and Change of Meaning", in American Psychologist, Vol. 22, 1967, p. 646-651.

concept but who, when asked, offer entirely erroneous definitions for the concept. These subjects have attained the concept in question at the classificatory level.

Another example of concept attainment at the classificatory level is the widespread ability to use certain words appropriately without being able to explain exactly what the defining attributes of the words are. Examples of concepts frequently attained this way are intelligence, feeling, and intuition.

In grammar, the pre-school child's ability to differentiate between conjugable verbs and other words provides an example of concept learning at the classificatory level. Prior to ever learning the name "verb", the child treats all verbs in a manner distinct from the way he treats non-verbs, that is, he conjugates verbs and does not conjugate other words. He has attained the concept verb at the classificatory level.

The fourth level of concept mastery in Klausmeier's scheme is the formal level. A concept is attained at the formal level if the individual can

. . . give the name of the concept, can name its intrinsic or societally accepted defining attributes, can accurately designate instances as belonging or not belonging to the set, and can state the basis for their inclusion or exclusion in terms of the defining attributes.¹¹

¹¹ Klausmeier, et al., 1974, Op. Cit., p. 18.

In other words, an individual who has attained a concept at the formal level has a conscious understanding of the nature of the conceptual category. In grammar, for example, at the classificatory level an individual will know only which words are nouns and which words are not nouns, while at the formal level he will also be aware of why they are, or are not, nouns.

Concept attainment at the formal level is the attainment of theoretical knowledge about concepts. It requires an awareness of the criteria on which one is basing one's classifications. Concepts known at this level are objects as well as instruments of cognition.

These four levels are presented by Klausmeier as four modes of mastering a single concept. It should be noted, however, that the concept, that is, the precise grouping, does not remain invariant as the level of knowledge develops. The mastered concept is the same only in the sense that it is the knowledge of a particular concept at one level that develops into the knowledge of the same concept at a second level. Klausmeier cites the example of the concept plant. The mental construct a child has of plant is not congruent with that of a biologist. The latter mental construct, however, is a development of the former.

Klausmeier does not claim that all concepts are learned by passing through the sequence of the four levels.

He suggests that while most concepts will be learned by development through the four levels, some will be initially learned at the higher levels without having ever been first attained at the lower levels. Highly abstract concepts, for example, are likely to be learned for the first time at the formal level. While knowledge of a particular concept may originate at any level, development of that knowledge will, if it occurs, be by passing up the hierarchy to any levels that may be above it. That is, the direction of any development must be to higher levels.

Klausmeier's associates have attempted to assess the validity of his hierarchy by ascertaining whether or not the sequence of levels of mastery does obtain¹². In a cross-sectional study they tested levels of concept mastery of children at four grade levels; kindergarten, and grades three, six, and nine. The concepts tested were noun, cutting tool, and equilateral triangle. The results indicated that the students do tend to develop through Klausmeier's stages. However, the fact that Klausmeier's order in the hierarchy was confirmed was not surprising as it is necessitated by

12 Herbert J. Klausmeier, Thomas S. Sipple and Patricia S. Allen, First Cross-Sectional Study of Attainment of the Concepts Equilateral Triangle, Cutting Tool and Noun by Children Age 5 to 16 of City A, Wisconsin Research and Development Center for Cognitive Learning, Technical Report A No. 287, Madison, Wisconsin, 1974, p. 1-56.

definition. In Klausmeier's model, each level of concept mastery is said to include, in addition to the skills associated with it, the skills associated with the levels of mastery below it. Thus, logically higher levels cannot precede lower levels because they include the lower levels in them. The research, nevertheless, is of interest because it shows that the acquisition of concepts often passes through the lower levels of concept mastery and that the concepts in question are not usually first acquired at the formal level.

The next section of this chapter employs the "Model of Concept Learning and Development" as a unifying framework for the examination of elements of the process of grammar concept learning.

2. The Process of Grammar Concept Learning.

This section presents a theoretical analysis of the process whereby the Franco Ontarian junior school child learns grammar concepts. The analysis examines several elements. It looks first at the two kinds of knowledge that may result from grammar concept learning, theoretical and practical. It then examines the properties of grammar concepts themselves and in doing so makes reference to theories of linguistics. The analysis proceeds with a review of the literature regarding the degree to which the junior school

child has already mastered, and is ready to further master, grammar concepts. The study is then narrowed to focus on the type of grammar learning most likely to occur in the school. The final element of the analysis is an assessment of the likelihood of several alternative processes by which grammar concepts may be learned.

The section is divided into four parts entitled, "Theoretical and Practical Knowledge of Grammar", "Classificatory Concepts in Grammar", "The Junior School Child's Knowledge of Grammar Concepts", and "The Process of Grammar Concept Attainment at the Formal Level".

a) Theoretical and Practical Knowledge of Grammar — Among the more distinctive features of Klausmeier's theory is the differentiation between knowledge of a concept at the classificatory level and knowledge of a concept at the formal level. However, in keeping with his concentration on concept learning, Klausmeier does not present this differentiation as an example of a broader dichotomy between two ways of knowing in general.

It is suggested here that in grammar, the distinction between these two ways of knowing concepts is in fact an example of two ways of knowing grammar in general. One of these ways is having a practical knowledge of grammar, the other is having theoretical knowledge of grammar.

Practical knowledge of grammar includes as one of its elements knowledge of concepts at a classificatory level. It is manifested by appropriate usage. It most closely resembles what Noam Chomsky calls "grammatical competence"¹³.

Theoretical knowledge of grammar includes as one of its elements concept attainment at the formal level. It most closely resembles the result of what Ausubel refers to as "meaningful verbal learning"¹⁴. It is the knowledge that a linguist strives for, the conscious knowledge of the formal properties of a grammar system. It is the knowledge in which grammar is the object rather than the instrument of cognition.

It is further suggested here that this distinction between practical and theoretical knowledge is critical to the systematic study of grammar learning. The dichotomy between the two ways of knowing grammar is essential to the consistent interpretation of the language learning and grammar teaching literature. (It should be noted that the distinction is rarely made in the literature itself). The distinction is also critical to the accurate assessment of

¹³ Noam Chomsky, Aspects of the Study of Syntax, Cambridge, Massachusetts, M.I.T. Press, 1965, p. 3-9.

¹⁴ David Ausubel, Educational Psychology: A Cognitive View, New York, Holt Rinehart and Winston, 1968, p. 24-26.

the knowledge the child brings to the classroom and to the evaluation of the learning that occurs in the classroom. Furthermore, the understanding of the process by which grammar is learned in the school requires an understanding of the relationship between a practical and a theoretical knowledge of grammar.

In order to fully substantiate the validity of the dichotomy between a practical and a theoretical knowledge of grammar and in order to more fully appreciate the nature of the relationship that exists between these two ways of knowing grammar, several theoretical perspectives of this dichotomy will be examined and their lessons noted. Some of these perspectives focus on the supraordinate distinction between theoretical and practical knowledge in general, rather than knowledge of grammar in particular. Nevertheless, special attention will be paid to how the lessons of each perspective of this dichotomy may be applied to the learning of grammar.

A broadly conceived perspective on the distinction between practical and theoretical knowledge is offered by Ryle¹⁵. Although Ryle addresses himself to the supraordinate problem of the distinction between practical and

¹⁵ Gilbert Ryle, The Concept of Mind, London, Penguin, 1949, p. 28-32.

theoretical knowledge in general, his reflections are nonetheless of interest in considering the present problem. Ryle speaks of knowing how, that is, the ability to act, and knowing that, that is, the apprehension of truths. Ryle suggests that it is part of the western intellectualist tradition to associate intelligence with the apprehension of truths, that is, with knowing that. He further suggests that this tradition has led to a tendency to associate intelligent action or, knowing how, with prior possession of a theory of action or, knowing that.

Ryle admits that theories of action may lead to satisfactory practice but he goes on to suggest that the prevailing notion that theories of action are, in general, the basis for intelligent practice is in error. He suggests, rather, that intelligent practices are the basis for theories of action. In other words, he maintains that in general, theories of action are a distillate of practical experience.

Ryle illustrates his point with the compelling examples of wit and the apprehension of falsehood, both of which are intelligent practices and neither of which is, in general, the client of its theory. In addition, Ryle supports his point of view by arguing that the analysis of intelligent practice into the tandem processes of consideration and execution will lead to an infinite regress if carried to its logical conclusion. He argues that

consideration is itself an intelligent practice. It must also be analyzed into two processes, one of which is the intelligent practice of considering how to consider which must again be analyzed into two processes and so the regress proceeds.

The application of Ryle's dichotomy to the field of grammar offers interesting insights. Theoretical knowledge of grammar is an example of Ryle's knowing that or a theory of action. Practical knowledge of grammar is an example of knowing how or ability to act.

Ryle suggests that the traditional assumption of a dependence of intelligent action on theories of action is a part of our western intellectualist heritage. This assumption is perhaps reflected in traditional prescriptive grammars which consider rules of usage more authoritative than usage itself. The assumption is perhaps also reflected in approaches to pedagogy that assume that the route to improving usage is teaching "truths" about grammar.

Ryle further suggests that theories of action are in general based on the study of practice. This position is parallel to that adopted by modern theorists in linguistics. They consider the language related behaviour of native speakers of a language as the reference against which the theoretical or descriptive power of their formulations may be checked.

Structuralist grammars¹⁶, for instance, look to actual utterances of speakers of a language for data from which they may induce their grammatical descriptions and against which they may check the accuracy of their conclusions. Transformational generative grammars¹⁷, to take another example, refer to the language intuitions of the native speakers of a language to determine what is, and what is not, grammatical. In short, modern linguists look to the practical knowledge of native speakers of a language for the data on which to base their descriptions or theories.

It is of interest, when considering the process whereby grammar theory is learned, to note that, in accordance with the above, if a student of grammar theory has a practical knowledge of grammar, then the theory he is trying to learn is itself an attempt to formalize the practical knowledge he already has.

A second perspective on the distinction between practical and theoretical knowledge is that offered by the Russian cyberneticist Landa. Landa's translator uses the word mastery to refer to the practical ability to perform

¹⁶ George P. Faust, "Basic Tenets of Structural Linguistics", in Harold B. Allen, (ed.), Readings in Applied Linguistics, New York, Appleton-Century-Crofts, 1958, p. 63-67.

¹⁷ Noam Chomsky, Op. Cit., p. 27.

some operation. The word knowledge is adopted to refer to the theoretical understanding of a procedure¹⁸.

Landa, like Ryle, suggests that mastery does not depend upon knowledge. Mastery, in Landa's scheme, does not imply any understanding of the nature of the process being used, just the ability to use the process. One can master riding a bicycle without knowledge of physics, one can master an interviewing technique without knowledge of social psychology, and one can master a mother tongue without knowledge of linguistics.

Knowledge, on the other hand, is understanding. It is awareness of the formal nature of the process one is employing. It does not necessarily imply accompanying mastery. One may know the laws of balance and still fall off one's bicycle, one may know social psychology and still be awkward in social situations, and one may know the rules of grammar of a language and still not be capable of speaking it with grammatical fluency.

In addition to dichotomizing ability into knowledge and mastery, Landa studies the factors that influence the practical application of theoretical knowledge. He examines what occurs when one attempts the practical application of a rule of which one has knowledge. He analyzes the application

¹⁸ L. N. Landa, Algorithmization in Learning and Instruction, Englewood Cliffs, Educational Technology Publications, 1974, p. 9.

of grammatical rule into two sets of operations¹⁹. The first set is one of identifying those situations to which the rule applies. In western terminology, this would be referred to as the identification of examples of a classificatory concept. The second set of operations is that of actually performing the actions specified by the rule. For example, the application of the rule that specifies that an adjective must reflect the gender of the noun it modifies, requires two sets of operations. The first set will determine if the word in question is indeed an adjective. The second set of operations will be that of actually executing the rule. This first part of Landa's study relies entirely on logic.

The second part of Landa's study is empirical²⁰. It reveals that the failure of Russian grammar students to apply rules they were taught was primarily due to their inability to identify examples of classificatory concepts in grammar. Students were being given theoretical information about the concepts and appeared to have learned that information. They could not, however, apply it in the practical identification of examples of the concepts. Turning to the methods of cybernetics, Landa demonstrates that the theoretical

19 Ibid., p. 110.

20 Ibid., p. 341-598.

definitions given to the students were not univocally interpretable in practical situations. He concludes that the application of grammar theory in grammar practice requires the prior algorithmization of grammar theory.

The ambiguity of Russian pedagogical grammars raises questions about the grammar taught to Franco-Ontarian students. Desjarlais and Lazar have surveyed the nine most popular texts currently employed in French Ontarian junior schools²¹. All these texts employ traditional pedagogical grammar. An example will illustrate the relevance of Landa's findings to French traditional pedagogical grammar.

Consider (1)

(1) La dance était joyeuse.

The student armed with the traditional grammar definition of a verb as a word that "expresses an action or a state", would be quite correct in calling the word dance a verb. If, however, the student decided to apply the definitions with more subtlety he might notice that the verb dance takes the place of a noun in this sentence and thus must be a pronoun. The student's conclusions would seem to be absurd. However, within a closed logical system of using

21 Lionel Desjarlais and Avrim Lazar, An Inquiry into the Psychopedagogy of Language Acquisition in the School Age Child (A Study of Readiness), Ottawa, Faculty of Education, University of Ottawa, 1976, p. 252.

defining attributes to identify examples of a concept, the conclusions would be quite correct. Certainly, they would be no more in error than, within the context of Euclidean geometry, identifying plane closed figures with three straight sides as triangles.

The definitions for concepts such as sentence, clause, adjective, and adverb can also be confusing. The theoretical information about the classificatory concepts in French traditional grammar does not allow univocal interpretation. Accordingly, Landa's conclusion that the application of grammar theory in grammar practice is inhibited by the inapplicable nature of theoretical definitions may apply to French as well as to Russian traditional grammar.

To summarize, Landa differentiates between mastery and knowledge. He has shown that concept identification is a logical prerequisite to rule application. Landa's empirical work reveals that in grammar rule application it is the failure to identify examples of concepts that blocks success. Finally, he demonstrates that theoretical knowledge of Russian traditional grammar concepts is inapplicable because the definitions are not univocally interpretable. The suggestion was made that Landa's conclusions about Russian grammar may also apply to French traditional grammar.

Before examining a third perspective on practical and theoretical knowledge, it may be noted in passing that the first part of Landa's analysis is similar to that presented by Gagné²². The latter theorist claims that in a hierarchy of learning tasks, concepts must be mastered prior to the rules which apply to examples of the concepts. Gagné's analysis differs significantly from Landa's in that Gagné deals only with practical knowledge. Gagné specifically excludes "verbal" (theoretical) knowledge from his hierarchies²³ whereas Landa says that ability to identify examples of a concept is prerequisite to the practical application of theoretical knowledge of rules.

It may be further noted, in passing, that this part of Landa's analysis lends weight to the importance of the current study in that it draws attention to the importance of teaching grammar concepts if one wishes to effectively teach grammar rules.

A third perspective on the distinction between theoretical and practical knowledge is provided by the fields of linguistics and psycholinguistics. The literature

22 R. M. Gagné, "The Learning of Principle", in H. J. Klausmeier and C.W. Harris, (eds.), Analyses of Concept Learning, New York, Academic Press, 1966, p. 81-95.

23 R. M. Gagné, "Learning Hierarchies", in Educational Psychologist, Vol. 6, No. 1, 1968, p. 5.

of linguistics contains reference to the distinction between knowledge of a language and knowledge of metalanguage^{24,25}. The term metalanguage was originally used to refer to language about language. It has its roots in philosophical studies of language where it was introduced as an application of Bertrand Russell's "theory of types". The introduction of the concept of metalanguage was supposed to allow statements to be made about language that were expressed not in the language itself but in a higher order "metalanguage"²⁶. Metalanguage is statements about language and knowledge of it may be regarded as knowledge of descriptions or theories of language rather than knowledge of language itself.

The distinction closely parallels that between practical and theoretical knowledge of grammar. Practical knowledge of grammar may be considered an element of knowledge of language and theoretical knowledge of grammar an element of knowledge of metalanguage.

²⁴ Louis Hjelmsler, Prolégomènes à une Théorie du Langage, Paris, Minuit, 1968, p. 156-171.

²⁵ Roman Jakobson, "Concluding Statement: Linguistics and Poetics", in T. A. Sebeok, (ed.), Style in Language, Cambridge, Massachusetts, M.I.T. Press, 1960, p. 356.

²⁶ Hans Hormann, Psycholinguistics: An Introduction to Research and Theory, Berlin, Springer Verlag, 1971, p. 152.

The use of the expression metalinguistic knowledge in more recent literature has been broader than its origins in logic would have allowed. It may now refer to any reflection on, or awareness of, language or communication. It includes judgments of grammaticality, checks on the effectiveness of efforts to communicate, and reflections on the nature of language. Metalinguistic knowledge, nevertheless, is still used in a manner that distinguishes it from practical, intuitive, knowledge of language and it thus still closely parallels the idea of theoretical knowledge of grammar.

Empirical studies by Holden²⁷ and an independent series of studies by Sinclair and Papandropoulou²⁸, have approached the learning of language from the perspective of the language-metalanguage distinction. Their results consistently indicate that metalinguistic awareness lags far behind the acquisition of practical mastery of grammar structures. These studies will be examined in more detail later in this chapter.

The discipline which is most directly concerned with knowledge of language is psycholinguistics. The

27 Marjorie H. Holden, Metalinguistic Ability and Cognitive Performance in Children from Five to Seven, ERIC Reports No. ED0078436, 1973, p. 1-7.

28 Hermine Sinclair and Joanna Papandropoulou, "What is a Word", in Human Development, Vol. 17, 1974, p. 241-258.

psycholinguists associated with transformational generative theories of grammar have also distinguished between practical and theoretical knowledge of grammar. Slobin²⁹, for example, states that knowledge of grammar rules may be evaluated by reference to a person's ability to meet a set of increasingly stringent criteria. However, all of these criteria require that the person act as if he knows the rules of grammar rather than require that he be able to state the rules. In other words, all of Slobin's criteria are designed to assess practical mastery. Slobin refers to the ability to state the rules as "an entirely different sort of ability"³⁰.

It may be noted, in passing, that this "different sort of ability", that is, theoretical knowledge of grammar, is recognized by Slobin and his fellow modern linguists and psycholinguists only so that they may be explicit in removing it from their domain of study. Accordingly, the results of linguistic studies of children should all be interpreted as referring to the development of practical knowledge of grammar, unless the author explicitly says otherwise.

The discussion of practical and theoretical knowledge has to this point not concentrated on the learning of

29 Dan I. Slobin, Psycholinguistics, Glenview, Illinois, Scott Foresman and Company, 1971, p. 53-55.

30 Ibid., p. 55.

concepts. Such a distinction in concept learning was made by Vygotsky more than forty years ago³¹. Vygotsky distinguishes between spontaneous and scientific concepts. The former are among those formed during the course of normal development without the assistance of direct tutorship. They are not consciously held by the children. Spontaneous concepts are the instruments rather than the objects of cognition.

Scientific, or non-spontaneous concepts are normally the result of instruction. Having scientific concepts involves a formal awareness of them. Scientific concepts are the objects, not just the instruments, of cognition. They are concepts of which one has theoretical knowledge. Vygotsky uses this distinction to make observations about the pedagogy of grammar. He states:

31 Lev Vygotsky, Thought and Language, Cambridge, Massachusetts, M.I.T. Press, 1962, p. 82-118.

Grammar is a subject which seems to be of little practical use. Unlike other school subjects it does not give the child new skills. He conjugates and declines before he enters school. The opinion has even been voiced that instruction in grammar could be dispensed with. We can only reply that our analysis clearly shows the study of grammar to be of paramount importance for the mental development of the child.

The child does have a command of the grammar of his native tongue long before he enters school but it is unconscious, acquired in a purely structural way. . . . The child will use the correct case or tense within a sentence but cannot decline or conjugate a word on request. He may not acquire new grammatical or syntactic forms in school but thanks to instruction in grammar and writing he does become aware of what he is doing and learns to use his skills consciously. Grammar or writing helps the child to rise to a higher level of speech development.

Thus our investigation shows that the development of the psychological foundations for instruction in basic subjects does not precede instruction but unfolds in a continuous interaction with the contributions of instruction.³²

Vygotsky's claim that a child acquires a command of his native tongue prior to entering school is consistent with the latest findings in developmental psycholinguistics. His characterization of spontaneously (untutored) acquired mastery of grammar as unconscious is also congruent with the results of current studies. Finally, Vygotsky's suggestion that the major role left for instruction is the

³² Ibid., p. 101.

creation of awareness of grammar has been supported by current analyses of the pedagogy of grammar.

Vygotsky's "modern" insight was made possible by analyzing knowledge of grammar into practical knowledge and theoretical knowledge. Vygotsky's main thesis with respect to the learning of grammar concepts is, however, one of synthesis rather than analysis. He states

. . . that the two processes -- the development of spontaneous and of non-spontaneous concepts -- are related and constantly influence each other. They are parts of a single process: the development of concept formation which is affected by varying external and internal conditions but is essentially a unitary process, not a conflict of antagonistic mutually exclusive forms of mentation.³³

Vygotsky goes on to suggest that instruction that seeks to instill scientific concepts should draw upon the child's spontaneously acquired mastery of concepts. This suggestion is based on two claims. The first is that instruction should begin with what the child knows. The second is that spontaneous or practical concepts are the relevant previous learning to which the teaching of scientific concepts should be addressed. Translating this into Klausmeier's terms, Vygotsky is suggesting first that the child brings knowledge of concepts at the classificatory level to the classroom and second that this knowledge may

33 Ibid., p. 85.

act as the previous learning on which the mastery of concepts at the formal level may be based. The suggestion is consistent with the development process postulated by Klausmeier.

Another major theorist in the realm of concept learning is Ausubel³⁴. He makes reference to Vygotsky's position but differs in his emphasis. Ausubel does recognize that the assimilation of scientific concepts can be assisted by reference to analogous spontaneously acquired precursors. These precursors are thought by Ausubel to have been acquired in a non-verbal manner (grammar concepts can be acquired non-verbally in the sense that they are not talked about), and to have been integrated into intellectual structure at a pre-operational level. Ausubel warns that these precursors are less precise and less categorical than the scientific concepts of formal disciplines. He thus suggests that care be taken to be certain that the students abandon the original spontaneous concepts in favour of the newly acquired scientific concepts³⁵.

Ausubel's advice may well be correct when applied to fields other than grammar. In grammar, however, the spontaneously attained concepts of syntax are considered the

³⁴ Ausubel, Op. Cit., p. 529-530.

³⁵ Ibid., p. 530.

standard against which the adequacy of scientific concepts may be measured. Ausubel's position is here analogous to that of the traditional prescriptive approach to grammar that regards formal grammar rules as the criterion against which grammar usage should be judged. Ausubel's advice, if literally and uncritically applied to language, could result in fluent speech emanating from the uneducated and halting fluency coming from those who were unlucky enough to have been taught the linguists' latest approximation to their native language. It is suggested that Ausubel's assumption that the precision of a concept is related to whether it is spontaneously or scientifically acquired does not seem valid in all cases.

The preceding review of the theoretical literature lends considerable weight to the notion of there being two ways of knowing grammar. It also increases the confidence one can place in the applicability of Klausmeier's dichotomy between concept mastery at the classificatory level and concept mastery at the formal level to the case of grammar.

In addition, the study of this dichotomy has provided a perspective from which the language development literature and metalinguistic development literature may be interpreted.

Furthermore, the relationship between these two types of knowledge has begun to emerge. The dependence of

grammar theorists on the study of grammar has been noted. The difficulty of applying grammar theory in practice was remarked upon. Most importantly, the suggestion that practical knowledge of grammar may be the "previous learning" on which the learning of grammar practice is based has been taken into consideration.

The discussion that follows is addressed to the question of what it is one knows when one knows a grammar concept, in both or either of these two ways.

b) Classificatory Concepts in Grammar — The preceding discussion describes two ways in which grammar may be known. The present discussion is primarily an examination of grammar itself.

It will be recalled that the "Model of Concept Learning and Development" is based on an interactionist orientation to learning. The variables that it considers important in the concept learning process include those associated with the properties of the concepts to be learned, those associated with the manner in which the learner encounters the concept, and those associated with the learner himself. The present study is addressed to the learning of grammar concepts in particular rather than to concept learning in general. Accordingly, the properties of grammar concepts should be examined.

In laboratory studies of concept learning the experimenter often defines the concept to be learned and either holds it constant while he varies other factors or systematically changes the characteristics of the concept to be learned and observes its effects on other factors. In either case, the characteristics of the concept are apparent to the experimenter³⁶.

In studies of concept learning that do not enjoy the controlled conditions of a laboratory, the naturally occurring concepts being learned must be analyzed either by the experimenter or the appropriate subject matter specialists. The analysis may result in a list of relevant and irrelevant attributes, a definition, examples, supra-ordinate and subordinate concepts and principles in which the concept is included.

The grammar concepts that the junior school child must master are, of course, naturally occurring. Accordingly, it is necessary to turn to subject matter specialists to analyze them. Unfortunately, the various schools of linguistics do not appear to agree on the properties of grammar systems. Rather than choose among the theories of linguistics, three approaches to grammar will be examined.

³⁶ Bourne, Op. Cit., p. 5-9.

The first approach which will be noted is traditional grammar. It is important because it is the system taught in the schools. The junior school child acquires grammar theory in the classroom. Concept attainment at the formal level occurs as an element of grammar theory learning. Thus one must look to the concepts of traditional grammar taught in the classroom for the properties of the concepts learned at the formal level.

The other two approaches to language that will be considered are structuralist and transformational generative grammars. It is necessary to look to them for an indication of the properties of grammar concepts learned at the classificatory level. These modern theories of language have developed, in part, as a reaction to the inadequacy of traditional grammar as a description of practical mastery. The bulk of the research on the development of practical mastery of grammar has been pursued from the perspectives of these theories. Grammar concept attainment at the classificatory level is a part of that practical mastery. Accordingly, if one wishes to know the properties of grammar concepts attained at the classificatory level, it is to these two theories that one must turn.

This division of grammar concepts into those learned at the classificatory level and those learned at the formal level suggests a question of central importance for the

current study. It has been established that grammar concepts may be known at two levels. It has not, however, been established that the set of grammar concepts that the child learns at each of these levels is the same. There may be two sets of concepts as well as two ways of knowing the concepts. The concepts learned at the formal level are those of traditional grammar and one must ask if those concepts are incorporated in the systems of the modern grammar theories that describe practical grammar mastery.

One of the reasons that this question is of special interest to the present study is that knowledge of grammar concepts at the classificatory level may well prove to be the previous learning on which the learning of grammar concepts at the formal level is based.

While a proper review of the three theories of grammar is beyond the scope of this study, an illustrative overview of them should serve the present purposes. Traditional grammar will be considered first, then structuralist grammar, and finally transformational generative grammar. It should be noted before commencing that the various schools of grammar differ one from the other mostly in the approach they adopt. The fundamental differences between them are the result of differences in their epistemological paradigms.

Traditional grammar's approach is prescriptive. It is familiar to most of those who have enjoyed a formal education. It has little support among present-day linguists but still enjoys wide popularity among pedagogues. It was developed by eighteenth century scholars who sought to apply to modern language the systems of grammar already used to describe classical languages. Modern French differs substantially from classical languages in the relative importance placed on word order rather than word inflection. Attempts to adapt to this difference were not equal to the task and as a result traditional French grammar is encumbered by a profusion of exceptions.

The classificatory concepts of traditional grammar are, in general, defined either according to semantic referents or according to function. The definitions of a noun, for example, as referring to a person, place, or thing, or of a sentence, to take another example, as expressing a complete thought, are based on semantic referent. The definition of a pronoun as taking the place of a noun is, on the other hand, based on syntactic function.

A frequently cited weakness of traditional grammar is the incompleteness, ambiguity, or inaccuracy of the definitions it offers for its classificatory concepts. This weakness was discussed earlier in this study when the applicability of Landa's research in Russian grammar to

French grammar was being assessed. It was remarked then that Landa's finding that Russian traditional grammar definitions are not univocally interpretable in grammar practice seems to apply to French traditional grammar as well.

The definitions found in traditional grammar, however, are not entirely without psychological foundation. Brown³⁷ has analyzed child language in a manner that suggests that for young children the semantic referents of words may be more important in determining class membership than is the case for adults. Further research by Brown indicates that for adults the syntactic status of a word in a sentence is used as a cue to its semantic referent³⁸. Both these findings are consistent with giving the definitions of traditional grammar the status of psychological half-truths. These half-truths could not, however, serve as reliable guides to the identification of examples of grammar concepts.

In summary, traditional grammar is a relatively unsophisticated, early approach to formalizing grammar. Somewhat like Newtonian physics, it is far from false but also far from adequate.

³⁷ R. W. Brown, "Linguistic Determinism and the Part of Speech", in Journal of Abnormal and Social Psychology, Vol. 55, No. 1, 1957, p. 1-5.

³⁸ R. W. Brown, Words and Things, Glencoe, Illinois, Free Press, 1958, p. 247.

An approach to language that has enjoyed widespread respect among linguists is structuralism³⁹. It seeks to avoid the artificiality of traditional grammar by adopting a strictly descriptive approach. It is a close relative of the radical empiricism of some American psychology. The focus in structuralism is entirely on observable language behaviour. Language is viewed as a series of emitted elements, the interrelationships of which are analyzed with little reference to their meanings. Because the structuralists inductively derive the rules of the grammar from the language output of the speaker of that language, they avoid the artificiality of some traditional grammar rules.

This school's method of classifying words is typical of its strictly empirical approach. The structuralists group words by their "privileges of occurrence". For example, those words which can fill the slot in sentence (3) have similar privileges of occurrence:

(3) It was a --- day.

In addition to privileges of occurrence, similarity in inflection and association with particular function words are used in building a hierarchy of categories into which the words may be grouped. The resultant system is impressive in its complexity and discrimination.

39 Faust, Op. Cit., p. 63-67.

When evaluated as an approach to describing language, structuralism has earned praise for its accuracy. It has also been criticized. Critics have noted its failure to differentiate between grammatical and agrammatical language data. They have also objected to its lack of parsimony.

Structuralism does not do away with the classificatory concepts of traditional grammar. These concepts are included in the taxonomies of structuralist grammars. However, traditional grammar's system of classificatory concepts does appear highly undifferentiated when compared to that of structuralist grammar. It is interesting to note here Hunt's widely accepted assertion that concepts are arranged as mental constructs in hierarchical systems. Using this assertion, one could conclude from a study of structuralism that in practical mastery of grammar, the classificatory concepts of traditional grammar hold mostly supraordinate positions in the grammar concept systems of a person with practical knowledge of a language.

While structuralist grammars do not deny the validity of groupings of words such as nouns, verbs, and the like, they do reject the definitions of traditional grammar. True to their strictly descriptive approach, they do not offer alternative explanations for the formation of these groupings. Psycholinguists have, however, attempted to do so.

The psychology associated with structuralism includes both strict stimulus-response behaviourism⁴⁰ and neo-behaviourism⁴¹. Accordingly, the classificatory concepts are thought of as being founded on the process of stimulus generalization which is explained by stimulus similarity or the evocation of identical mediating responses. The variety of stimulus configurations in which a single grammar concept may be manifested and the diversity of linguistic contexts in which these examples may appear, makes the use of these explanations somewhat burdensome. Accordingly, they have been criticized for being lacking in parsimony to an unacceptable degree⁴².

In conclusion, it may be said that structuralism leads to accurate language descriptions. It also leads to descriptions that are lacking in economy. Because grammatical language is infinite in its manifestations, this lack of parsimony may be considered a serious flaw in an approach to describing language.

⁴⁰ B. F. Skinner, Verbal Behavior, New York, Appleton-Century-Crofts, 1957, p. 1-148.

⁴¹ C. E. Osgood, "On Understanding and Creating Sentences", in American Psychologist, Vol. 18, 1963, p. 735-751.

⁴² J. A. Fodor, T. G. Bever and M. F. Garrett, The Psychology of Language, An Introduction to Psycholinguistics and Generative Grammar, New York, McGraw-Hill, 1974, p. 72-78.

Another system of grammar theory is transformational generative grammar. It provides a far more parsimonious account of language. It is usually associated with the insights of Noam Chomsky⁴³. His decidedly mentalist approach is a contrast to structuralism and will probably be classified by the historians of psychology as part of the intellectualist revolution against the extreme empiricism of behaviouristic approaches to human studies. The transformational approach is widely accepted among modern linguists.

The major postulate of the theory is that the speaker of a language has a finite set of rules, that is, an internal grammar with which he can translate an infinity of internal meanings into grammatically correct utterances. These rules are used to generate speech and writing; they pair meanings with the proper sounds or written representations.

There are two types of rules in this scheme. First, there are the "phrase structure rules". These use the lexicon of the language and grammatical markers to generate sentences containing the basic semantic relations to be expressed. The sentences they generate are called "deep structure" sentences and do not resemble those of ordinary

⁴³ Noam Chomsky, Op. Cit.

speech. Second, there are the "transformation rules". These transform the deep structure sentences into the surface structure sentences of normal grammatical language.

The most impressive aspect of transformational generative grammar is the economy with which it can describe the derivation of large collections of dissimilar sentences.

In the examples below, (5) to (10) illustrate some phrase structure rules. They generate sixty-four grammatical sentences and no ungrammatical sentences. Each rule in the sequence is an expansion of the elements in the rules above it. The last rules list "terminal elements", that is, the lexicon to which rules apply. They resemble the parts of speech of traditional grammar. Certain categories of non-terminal elements in phrase structure grammar also are recognizable as classificatory concepts from traditional grammar.

- (5) Sentence $\rightarrow$ Noun phrase and verb phrase.
- (6) Noun phrase $\rightarrow$ Determiner and noun.
- (7) Verb phrase $\rightarrow$ Verb and noun phrase.
- (8) Determiners $\rightarrow$ The, a.
- (9) Noun $\rightarrow$ Boy, girl, bull, bat.
- (10) Verb $\rightarrow$ Hit.

This example of a set of grammar rules illustrates the dependence of transformational generative grammar on the existence of classificatory grammar concepts.

Johnson⁴⁴ has demonstrated that if transformational grammar is a description of the psychological processes involved in sentence generation then a highly categorized lexicon is a logical necessity. In other words, he maintains that classificatory concepts are a logical prerequisite to the use of sentence generating rules.

Transformational generative grammar does not specify definitions for classificatory concepts in the manner that traditional grammar does. The rewriting rules are the form of definition used. In the case of terminal elements, these rules merely list a lexicon.

The preceding review of traditional, structuralist, and transformational generative grammars indicates that the various conceptions of grammar do indeed differ. It also indicates that they contain similar elements (not a surprising finding given that they treat the same phenomena). Among the elements common to all three approaches are classificatory concepts such as those included in traditional grammar. Modern theories of language do, however, include many more classificatory concepts than those normally associated with traditional pedagogical grammar.

⁴⁴ N. F. Johnson, "Linguistic Models and Functional Units of Language Behavior", in S. Rosenberg, (ed.), Directions in Psycholinguistics, New York, Macmillan, 1965, p. 29-65.

It was asked at the beginning of this chapter whether the concepts of traditional grammar are the same as those incorporated in practical mastery. It seems reasonable now to reply in the affirmative. The concepts of traditional grammar are a subset of the set of concepts acquired at the classificatory level. One can thus conclude that the classificatory and formal levels of mastery are two ways of knowing the same grammar concepts.

c) The Junior School Child's Knowledge of Grammar Concepts — The relationship between practical and theoretical knowledge of grammar has been examined. It has been suggested that grammar concept learning may occur at either the classificatory or the formal level of mastery. The properties and roles of concepts in grammar have also been examined. It has been suggested that the properties of grammar concepts likely to be learned at the classificatory and formal levels of mastery are sufficiently congruent for the two levels of concept mastery to be considered two modes of knowing the same grammar concepts.

In the discussion that follows, the junior school child's mastery of grammar concepts at both the classificatory and formal levels shall be examined.

The first subject to be treated is the junior school child's knowledge of grammar concepts at the classificatory level. Klausmeier defines concept mastery at that level as

the ability to distinguish between exemplars and non-exemplars of a concept. Concept mastery at the classificatory level does not require knowledge of the name of the concept. In order to determine if a person has acquired a concept at this level, one must observe whether the person reacts to examples of the concept in some consistent manner and fails to react in the same manner to non-examples of that concept. This may be done in grammar by observing the degree of practical mastery of language.

Transformational generative grammars reveal that practical grammar mastery incorporates rule usage. The analyses of both Landa and Gagné reveal that rule usage incorporates concept identification. Therefore, one can look to the degree of practical mastery of grammar for an assessment of the degree of grammar concept attainment at the classificatory level.

A review of research on the acquisition of practical mastery of grammar in the school child follows. It is hoped that two types of information will result from it: information about the degree of grammar concept knowledge at the classificatory level acquired by the child before entering school; and information about the concepts he is attaining during junior school.

Although studies of syntactic development in the young child have, to a certain extent, eclipsed those dealing

with the school age child, the latter have not been entirely ignored. Early studies of language development in the school-age child deal mostly with the gross aspects of linguistic behaviour⁴⁵. The variables assessed are amount of speech, mean sentence length and relative frequency of simple, complex and compound sentences. Sentence length emerges as the best index of linguistic maturation. There is, of course, a parallel increase in complexity of construction.

The more recent studies fall into two major categories. The first group describes changes in the profile of structures used by the children. They offer data on the relative frequency of each grammatical pattern used in the speech and writing of students at different grade levels. The second group of studies is more limited in scope but reports on new acquisitions rather than changes in the frequency of usage of previously acquired structures.

The works of the former group shall be reviewed first. They share a methodology that consists of collecting samples of spontaneous or elicited child speech and analyzing it into its constituent patterns.

⁴⁵ Dorothy A. McCarthy, "Language Development in Children", in Manual of Child Psychology, edited by Leonard Carmichael, New York, Wiley, 1954, p. 492-630.

An ambitious piece of research carried out by Strickland⁴⁶ uses the structuralist framework to analyze language collected from 575 students in grades one through six. She uses phonological rather than semantic indicators to distinguish the units which for her study are regarded as sentences. A highly complex system of "movables", "fixed slots", "connectors" and the classes of words and phrases that could fill those places allow her to identify a progression from 658 structural patterns employed in grade one, to 1,041 current in grade six. The developmental trends discovered by the high analytical resolution of structural dissection are comprised of new permutations and combinations of structures already acquired rather than the acquisition of new structures.

Strickland concludes that, "With a few exceptions, children master the sound system of their language and also its basic grammar before they enter school at age five or six"⁴⁷.

46 Ruth G. Strickland, "The Contribution of Linguistics to the Teaching of Reading, Writing and Grammar in the Elementary School", in Bulletin of the School of Education, Indiana University, Vol. 40, No. 1, 1964, p. 1-41.

47 Strickland, Op. Cit., p. 17.

Loban⁴⁸ also employs the structuralist framework but his method differs from that of the above studies in that he segments his samples into "communication units", rather than into sentences. The communication unit is a grammatically independent predicate or an answer to a question that requires only the repetition of the question to satisfy the criterion of independence. The study focuses on ability rather than grade grouping. Nevertheless, it does reveal a progression from kindergarten to grade nine that can be characterized by a decrease in incomplete structures, greater variation of structural patterns, and greater variation of structures employed within individual sentences.

Another structuralist study conducted in the French schools of Ontario⁴⁹ reports findings compatible with those above.

The studies reviewed thus far indicate that the junior school child does progress in his practical mastery of grammar. They also reveal, however, that this progress does not involve the acquisition of many new grammar forms

⁴⁸ W. D. Loban, The Language of Elementary School Children, NCTE Report No. 1, Champaign, Illinois, NCTE, 1963, xvi-92 p.

⁴⁹ Jacques Vachon, A Proposal for a Structural Analysis of the Language Development of the Child as a Base for Learning a Mother Tongue, unpublished report presented to the Minister of Education in Ontario, 1973, p. 246-670.

but rather that it is a consolidation of control over his use of previously acquired structures. They further reveal that basic grammar usage is developed prior to school entrance and accordingly that the concepts of all but the most sophisticated grammar theories are also acquired at the classificatory level prior to school entrance.

We turn now to studies based on the transformational grammar paradigm. The results are for the most part in agreement with those stated previously.

Menyuk^{50,51} concludes from a series of studies that nearly all the transformations of adult language are present in nursery school children. She does, however, inform us that children in grade one still have not acquired the full complement of transformational rules for use of the auxiliary have, the participle complement, iteration, nominalization and pronominalization of the conjunctions if and so.

A study by Hunt⁵², in the tradition of the search for indices of syntactic maturity, explores the development of

50 Paula Menyuk, "Syntactic Structures, the Language of Children", in Child Development, Vol. 34, 1963, p. 407-422.

51 Paula Menyuk, Sentences Children Use, Cambridge, Massachusetts, M.I.T. Press, 1969, xii-165 p.

52 Kellogg W. Hunt, Grammatical Structures Written at Three Grade Levels, NCTE Report No. 3, Champaign, Illinois, NCTE, 1965, xix-159 p.

sentence-combining transformations. The transformations can account for much of the elegance, succinctness and economy of mature speech. Within the transformational generative paradigm, they are believed to occur as potentially independent kernel sentences that are joined through the use of sentence-combining transformation rules. For example, the kernel sentences:

(13) It was yesterday.

(14) I was in the park.

(15) I saw a man.

(16) He rode a bike.

(17) The bike was red.

can be combined to form the surface structures sentence:

(18) Yesterday, while in the park, I saw a man
riding a red bike.

Much of the apparent difference in style between adult and children's speech is due to the latter's failure to use these transformations.

Hunt uses the length of T-Unit, a structure equivalent to a main clause together with any subordinate clauses that may be grammatically related to it, as a measure of use of sentence-combining transformations. He reports a steady increase in T-Unit length through the school years.

Hunt also notes that while the structures he investigated change in frequency of usage, they are all present in the language of grade four children. Similar results are reported by O'Donnell⁵³ in a separate study using the same methodology.

Studies that seek specifically to learn exactly what new syntactic structures are acquired by the junior school child have also been performed. These are tightly controlled experiments drawing on small samples and focusing on one or two structures at a time. They all relate to the pairing of surface and deep structure, that is, the child's comprehension of specific grammatical forms.

Exemplary in this group is the research of Carol Chomsky^{54,55}. Her work employs Piaget-style interview techniques. She starts with the knowledge that six-year-old children have acquired nearly all the obvious linguistic structures. She draws on the insight of transformational generative grammar to predict four sources of syntactic

53 Roy C. O'Donnell, William J. Griffin and Raymond C. Norris, Syntax of Kindergarten and Elementary School Children: A Transformational Analysis, NCTE Report No. 8, Champaign, Illinois, NCTE, 1967, xv-115 p.

54 Carol Chomsky, The Acquisition of Syntax of Children from 5 to 10, Cambridge, Massachusetts, M.I.T. Press, 1969, 126 p.

55 Carol Chomsky, "Stages in Language Development and Reading Exposure", in Harvard Educational Review, Vol. 42, No. 1, 1972, p. 1-33.

complexity likely to require late acquisition, and studies only these four structures.

The first three of these structures are related to violations of the Minimal Distance Principle (MDP). This rule states that "the implicit subject of the complement verb is the noun phrase most closely preceding it". In addition to the three exceptions to MDP, Carol Chomsky studies the learning of the interpretation of pronouns which do not refer to noun phrases in the sentence in which they appear. The four structures studied by Carol Chomsky are summarized on Table I.

Carol Chomsky concludes from her study that: structures A, B, and C are strongly subject to individual rates of development, that A and B are acquired between ages five to six and nine, that structure C is still imperfectly acquired by some children at age ten, and structure D is acquired fairly uniformly at about age five to six. In addition, she notes that the order in which these acquisitions are made appears to be invariant. This order includes the establishment of the rule, the appearance of the exception, the overgeneralization of the exception to cases where the rule should apply and the disappearance of overgeneralization with appropriate use of the rule and the exceptions. Finally, she concludes that the age at which an individual child will pass through these various stages cannot be predicted on the basis of our present understanding.

Table I.-
Summary of Carol Chomsky's Research.

Type of Syntactic Complexity	Specific Structures Used for Study	Source of Difficulty
A. The true grammatical relations which hold among the words in a sentence are not expressed directly in its surface structure.	John is easy to see	Subject of sentence is the object rather than the subject of <u>see</u> , a violation of MDP.
B. The syntactic structure is at variance with the general pattern in the language.	John promised Bill to go	Subject of <u>go</u> is John rather than <u>Bill</u> , a violation of MDP.
C. A conflict exists between two potential syntactic structures associated with a particular verb.	John asked Bill what to do	Subject of <u>do</u> is John rather than <u>Bill</u> , a violation of MDP.
D. Restrictions on a grammatical operation apply under certain limited conditions only.	He knew that John was going	Reference of <u>he</u> is not to John although John is the only noun phrase in the sentence.

Similar studies have been performed by Kessel⁵⁶ and Cromer⁵⁷. They employed methodological refinements of Carol Chomsky's testing procedure. In addition, Cromer used mental age rather than chronological age as an independent variable. Although their results are similar to those obtained by Carol Chomsky, Kessel found younger ages of acquisition and Cromer's use of mental age led to the detection of more distinct developmental trends.

Similar studies of syntactic development in school age children have been reviewed by Palermo and Molfesse⁵⁸.

In conclusion, one can infer from the studies of practical mastery that the concepts of most school grammars are mastered at the classificatory level prior to school entrance. One can further conclude that the concepts attained at the classificatory level during and after junior school are those normally associated with highly sophisticated linguistic descriptions.

⁵⁶ F. S. Kessel, "The Role of Syntax in Children's Comprehension from Ages Six to Twelve", in Monographs of the Society for Research in Child Development, Vol. 35, 1972, p. 66-74.

⁵⁷ Richard F. Cromer, "The Learning of Surface Structure Clues to Deep Structure by a Puppet Show Technique", in Quarterly Journal of Experimental Psychology, Vol. 24, No. 1, 1972, p. 66-74.

⁵⁸ David S. Palermo and Dennis L. Molfesse, "Language Acquisition from Age Five On", in Psychological Bulletin, Vol. 78, No. 6, 1972, p. 409-428.

The preceding review of the literature focused on the classificatory level of concept mastery. The discussion which follows deals with concept mastery at the formal level. Klausmeier defines the formal level of mastery as the level at which the student is aware of the relevant or defining attributes of a concept. At this level, he must be capable of discriminating and naming these attributes. In addition, he must know the role they play in defining the composition of the conceptual category⁵⁹. The development of grammar concept knowledge at the formal level is a part of the general development of theoretical knowledge of grammar, that is, of general metalinguistic development.

Although the topic has not been a popular one for research, there have been some investigations in this area from which one can draw tentative conclusions. These investigations share a view of metalinguistic development as being a function of the child's emerging capacity to reflect on, and be aware of, the language he has been employing. This capacity requires that the child abstract the nature of words as a group of symbols as such from their roles as representatives of reality. For example, the child must see that the word dog belongs to the group of phenomena known as words, as well as the category of phenomena known as animals.

59 Klausmeier, et al., 1974, Op. Cit., p. 19.

Once the child begins to achieve this awareness of words as entities in themselves, he can begin to develop his knowledge and understanding of the formal nature of the system of language of which those words are a part.

The majority of preschool-age children have not developed this awareness of words as separate symbolic entities. They view individual words as being inseparable from the realities which they represent. They also view words in sentences as being fused together as inseparable parts of sentence meaning. These phenomena have been remarked upon by several investigators. Vygotsky, for instance, states that "semantically the child starts from the whole, from a meaningful complex and only later begins to master the separate semantic units, the meaning of words, and to divide his formerly undifferentiated thought into units"⁶⁰.

More evidence of the fusion of words in sentences comes from recent experiments by Sinclair and Papandropoulou⁶¹. They reveal that when asked for a long word, a child of almost seven years may give a sentence such as I go home and I take my shoes off. Sinclair further notes that children, when asked for a long word, often named

60 Vygotsky, Op. Cit., p. 126.

61 Sinclair and Papandropoulou, Op. Cit.

a long object or a lengthy journey. This latter finding illustrates young children's confusion of words with the objects they represent. The confusion of words with what they represent is further illustrated by Sinclair when she reports that function words, such as the or an, are considered by young children not to be whole words at all because they do not refer to anything.

The fusion of word and referent is also revealed in a Roumanian experiment. Children were asked to count the nouns in (19):

(19) The snow fell in the villages.

From the results, Tucicov-Bogdan⁶² demonstrates that young school-age children believe that the word villages contains several nouns. This is consistent with a noun being a person, a place, or a thing. It is only the older child that can conceptualize villages as one noun referring to several concrete entities.

This study and similar studies performed in the United States by Holden⁶³ indicate the age of emergence of word awareness is between five and seven years.

62 Ana Tucicov-Bogdan, "Abstraire et concrétiser dans l'apprentissage de la grammaire", in Revue Roumanienne de Sc. Soc. Psy., Vol. 9, No. 2, 1965, p. 211-222.

63 Holden, Op. Cit.

Sinclair⁶⁴ differentiates this development of word awareness into a sequence of steps that trace the evolution of metalinguistic knowledge both before and after the emergence of word awareness. The first steps are characterized by the failure to separate a word from its meaning. They extend until age six or seven.

By age seven to eight, however, the child can fully separate a word from its referent but still does not view the word as a linguistic element. Words are considered as representatives of a system of things to which they refer. The child's conception of the relationship of words to each other is based on the relationship between the things the words refer to and not on the places the words hold in the system of words called language. In other words, in the mind of the child at this stage, words are viewed as entities in themselves but these entities are linked through their meanings to the world they represent and not through their function to the world of linguistics.

Children of eleven years and older may have developed to a later stage. They may perceive words as being parts of a linguistic entity. They would thus define them in terms of their functional interrelationships. They are ready to conceptualize a word as being a member of two universes, the

⁶⁴ Sinclair and Papandropoulou, Op. Cit.

universe of symbols of things and the universe of types of symbols.

Klausmeier states that at the formal level of concept attainment discrimination of relevant attributes is essential⁶⁵. In the earlier discussion of traditional grammar, it was noted that some traditional grammar concepts are defined in terms of semantic referents. Noun, for example, is defined as a word referring to a person, place, or thing. These attributes are comprehensible to the child who has developed word awareness. The child of Sinclair's third stage should be ready to learn these concepts. This is likely to include the majority of junior school students.

Nevertheless, many grammar concepts are not defined in terms of semantic referent and, thus, require metalinguistic capacity associated with Sinclair's fourth stage. Definitions expressed in terms of syntactic function, for example, require that the child perceive syntax as being independent of referent. This capacity is in line with Sinclair's most developed stage. Most junior school students will just be developing this level of metalinguistic awareness. As such, this fourth stage is more likely to characterize the older intermediate school students.

65 Klausmeier, et al., 1974, Op. Cit., p. 19.

Sinclair uses 102 Swiss children in her study. Caution must be exercised in transferring Sinclair's results to Franco-Ontarian students. There is nonetheless no particular reason to expect that the average Franco-Ontarian student would be significantly more advanced in meta-linguistic awareness than the French-speaking Swiss children used by Sinclair in her study.

In review, the junior school child has, at the practical level, mastered all the basics of grammar. He has thus attained, at the classificatory level of mastery, all the grammar concepts usually found in the school curriculum. The new grammar structures that the student may acquire at the classificatory level are likely to be those described only in highly sophisticated linguistic theories. These structures are not included in the junior school course of studies.

The junior school child is just developing readiness to attain many grammar concepts at the formal level. In response to schooling, he may begin to attain the fundamental concepts of grammar at the formal level. He is unlikely to complete this concept learning until all the fundamental concepts have been introduced in school and until he has fully developed his ability to separate a word from its referent.

The concepts of grammar that are mastered at the classificatory level are likely to be congruent with those that might be acquired at the formal level. However, the acquisition of a particular concept at the classificatory level is likely to occur at a far younger age than the attainment of the same concept at the formal level. The junior school child is attaining concepts at the formal level that he long ago attained at the classificatory level. He is also attaining concepts at the classificatory level that he may never attain at the formal level. Accordingly, the processes of concept attainment of grammar concepts at the two levels in the junior school child cannot be profitably studied as a single phenomenon. A choice of focus must be made.

The choice made here is to study the attainment of grammar concepts at the formal level. The choice is made for two reasons. First, the formal level is of more immediate relevance to grammar instruction. Second, the process of attaining theoretical knowledge of grammar has received far less attention in the past than the process of developing practical mastery of grammar.

d) The Process of Concept Attainment at the Formal Level — Klausmeier's "Model of Concept Learning and Development" accommodates the possibility of various processes of concept attainment at the formal level. In the discussion

that follows, several alternative processes shall be noted and the relevance of each to grammar concept learning at the formal level for junior school students will be evaluated.

Ausubel has suggested that learning processes may be dichotomized into two categories, discovery learning and reception learning. In reception learning, on the one hand,

. . . the principal content of what is to be learned is presented to the learner in more or less final form. . . . The essential feature of discovery learning, on the other hand, is that the principal control of what is to be learned is not given but must be discovered by the learner before he can internalize it.⁶⁶

In discovery learning of concepts, the learner has two tasks to perform. He must first discover the concept and he must then learn it. In reception learning, he has only one responsibility. He must learn the concept presented to him.

The discovery paradigm has been the subject of many research studies in the field of concept learning. These studies employ a variety of controlled guessing games in which the subject attempts to discover a simple concept that has been set by the experimenter. The processes of concept discovery used by the subjects in the experiments are observed under varying conditions. The researchers

⁶⁶ David Ausubel, "In Defence of Verbal Learning", in Richard Anderson and David Ausubel, (eds.), Readings in the Psychology of Cognition, New York, Holt Rinehart and Winston, 1965, p. 87-102.

associated with this type of study have been criticized for the irrelevance of their studies to the world of instruction⁶⁷. This is perhaps because the world of the classroom is one where purposive concept learning is often occurring. The activities described in the discovery paradigm may indeed be those of the unreflective processes of concept attainment at the classificatory level during the normal course of development. They are, however, unlikely to be common in classrooms except where some "discovery" procedure is being employed.

The junior school child could employ the discovery process to attain grammar concepts at the formal level if either of two conditions existed. The first condition would be his setting out on his own as a linguist to discover the structure of his language. This is unlikely to be a widespread phenomenon. The second possibility is that a discovery-oriented course of study is followed in school. It is possible that teachers teach grammar concepts by playing concept discovery guessing games with their students, but there is no reason to believe that they generally do so. Discovery-centred curricula such as those made popular in science are not popular in grammar.

⁶⁷ Susan Markle, "They Teach Concepts Don't They", in Educational Researcher, Vol. 4, 1973, p. 3-9.

The more general process is likely to involve some form of reception learning. Two reception processes of concept attainment at the formal level are consistent with the framework of the CLD. The first is concept assimilation. The second is concept development.

In concept assimilation, one encounters a concept for the first time in nearly complete form. The relevant attributes of the concept are presented as a matter of definition. One is expected to assimilate the defining attributes and use them as a guide for identifying examples of the concept. If, for example, one assimilates the concept triangle, one would use the defining attributes to classify objects as triangles or non-triangles. Objects conforming to the description, "plane, closed three-sided figure with straight lines" would be classified as triangles. Those not demonstrating these attributes would be classified as non-triangles. In concept assimilation, one learns a new classification of phenomena. Objects may now be classified as examples or non-examples of the newly learned concept and the classifying is performed on the basis of the presence or absence of the defining attributes.

Anderson and Kulhavy⁶⁸ have empirically demonstrated the efficacy of concept learning from definitions alone. They provided college students with one sentence definitions of unfamiliar concepts and instructed subjects to use the definitions to correctly identify examples of the concepts on a multiple choice test. The error rate on the test was seven per cent for the experimental group. A control group, which did not have the definitions, had an error rate of seventy-three per cent.

Several studies have shown that providing a concept definition removes the facilitative effect of increasing the number of examples in concept instruction. Frayer⁶⁹ has demonstrated this with fourth and sixth grade students. Feldman⁷⁰ in a parallel study using only sixth grade students obtains similar results.

68 R. C. Anderson and R. W. Kulhavy, "Learning Concepts from Definitions", in American Educational Research Journal, Vol. 9, 1972, p. 385-390.

69 D. A. Frayer, Effects of Number of Instances and Emphasis of Relevant Attribute Values on Mastery of Geometric Concepts by Fourth- and Sixth- Grade Children, Wisconsin Research and Development Center for Cognitive Learning, Technical Report No. 116, 1970.

70 K. J. Feldman, The Effects of Number of Positive and Negative Instances, Concept Definition, and Emphasis of Relevant Attributes on the Attainment of Mathematical Concepts, Wisconsin Research and Development Center for Cognitive Learning, Technical Report No 243, 1972.

Klausmeier⁷¹, Ausubel⁷², and Bruner⁷³ have all suggested that much of the learning of older children, especially in school, involves concept assimilation rather than learning from examples.

The assimilation process is thus an efficacious method of attaining a concept. It is the method usually associated with school learning. It is consistent with the way concepts are presented in textbooks. The assimilation process may well be the way the junior school child attains grammar concepts at the formal level of mastery.

A second process whereby a concept may be attained at the formal level of mastery is concept development. In this process, knowledge of a concept that is already mastered at the classificatory level is developed to the formal level. The concept's name and its defining attributes are associated with the existing mental structure of a conceptual category already formed at the classificatory level.

There is reason to believe that the developmental process may obtain in the case of the Franco-Ontarian junior school child's learning of grammar concepts. The child has already attained these concepts at the classificatory level

71 Klausmeier, Op. Cit., p. 145.

72 Ausubel, Op. Cit., p. 87-102.

73 J. S. Bruner, et al., Studies in Cognitive Growth, New York, Wiley, 1966.

of mastery. It is thus possible for him to employ the developmental process to increase his mastery of grammar concepts from the classificatory level to the formal level.

The process of attaining grammar concepts at the formal level of mastery has been shown to be likely a function of reception learning. Two reception learning processes, concept assimilation and concept development, have been discussed as reasonable descriptions of the process that occurs. The question of which of these two processes is a better description of what actually occurs in the junior school grammar lesson is one that requires reference to empirical means for its resolution. The section which follows presents this problem in a form suitable for empirical investigation.

3. Recapitulation and Statement of the Problem and Hypothesis.

a) Recapitulation — The analysis of the process of grammar concept learning began with an examination of the types of knowledge that can result from grammar learning, namely practical knowledge and theoretical knowledge. It was noted that Klausmeier's distinction between concept mastery at the classificatory level (which is an element of practical knowledge) and concept mastery at the formal level (which is an element of theoretical knowledge) is critical in the systematic study of grammar concept learning. It was further

noted that practical grammar knowledge may be the foundation for subsequent learning of grammar theory.

The analysis continued with an examination of grammar concepts themselves. The properties of the traditional grammar classificatory concepts that the school child must learn at the formal level of mastery were studied. Because traditional grammar as such is not an accepted description of what practical grammar mastery entails, structuralist and transformational generative grammars were also examined so as to gain some insight into the concepts that the child attains at the classificatory level of mastery. It was concluded that mastery of the concepts of traditional grammar is incorporated in practical grammar mastery as well as theoretical grammar learning and that the concepts that the child must master at the formal level are a subset of those he masters at the classificatory level. The analysis then proceeded to a review of the empirical literature regarding the junior school child's knowledge of grammar. This led to the conclusions that the concepts normally included in the grammar course of studies were mastered at the classificatory level prior to school entrance and that the junior school child is just developing readiness to master those same concepts at the formal level. It was decided to focus the study on learning grammar concepts at the formal level.

The possible processes of grammar concept learning were then studied. They were dichotomized into those within the discovery learning paradigm and those within the reception learning paradigm. It was decided that grammar concept learning is more likely to be a function of reception learning. Concept attainment at the formal level of mastery, within the reception learning paradigm, was dichotomized into the assimilation process and developmental process. It was noted that there was reason to place confidence in either of these processes as a description of grammar concept attainment at the formal level of mastery in the Franco-Ontarian junior school child. It was further noted that there was also uncertainty as to which was the more accurate description. The possibility of resolving the uncertainty by conducting an empirical investigation was suggested.

b) The Problem and the Hypothesis — The theoretical exploration has arrived at the point where the uncertainty is best resolved by reference to empirical investigation. The problem to be solved is whether the grammar concept learning at the formal level of mastery in the Franco-Ontarian junior school child is better described as a function of concept assimilation or as a function of concept development.

The problem is one which the current theoretical and empirical literature does not solve with any degree of certainty. The solution to the problem is, however, suggested by the results of the preceding theoretical analysis. Three observations resulting from that analysis lead one to hypothesize that the developmental process dominates.

The first observation supporting the likelihood of the developmental process occurring is that the concepts on the school grammar courses of study have already been mastered at the classificatory level by junior school students. The students already have mental constructs corresponding to the concepts they must learn. The theoretical information about the concepts could thus be associated with these constructs rather than be used as a basis of a new classificatory concept. In other words, there are concepts already attained at the classificatory level waiting to be developed to the formal level.

The second observation which suggests that the developmental process will predominate is related to the fact that students of traditional grammar do learn to identify examples of the classificatory concepts. In the assimilation process, the defining attributes are the instruments with which one identifies examples of the concept. The defining attributes of traditional grammar are unreliable guides. Attributes such as "expresses a complete thought",

"modifies a verb", or "expresses an action" are not univocally interpretable. The students of traditional grammar do, however, generally learn to identify examples of grammar concepts with considerable accuracy. It seems more likely that they do so by associating the appropriate label with a concept already attained at the classificatory level than by using the defining attributes offered in the definitions.

It may be noted in passing that it has been the experience of the writer that persons shown sentences such as (20):

(20) The run was exciting.

immediately recognize the absurdity of calling run a verb, despite their having no linguistic training other than traditional grammar. This would seem to argue in favour of their having associated the label "verb" with the concept of verb that they had previously intuitively acquired at the classificatory level. In other words, it suggested that they learned verb by a developmental process.

The third argument for favouring the developmental process is again related to the junior school child's ability to identify examples of concepts. Many of these concepts have defining attributes that cannot be perceived without a meta-linguistic understanding more developed than that of a

junior school child. The child is thus unlikely to be performing the identification of examples of these concepts using those defining attributes.

It is therefore hypothesized that:

The Franco-Ontarian junior school child's learning of grammar concepts is better described as a function of concept development than as a function of concept assimilation.

The empirical investigation that was conducted in order to test this hypothesis is described in the next chapter.

CHAPTER II

EXPERIMENTAL DESIGN

The preceding chapter concludes with the hypothesis that the Franco-Ontarian junior school child's learning of grammar concepts at the formal level of mastery is better described as a function of concept development than as a function of concept assimilation.

This chapter presents the design of the empirical investigation that was conducted in order to test that hypothesis. The experimental design will be discussed under the following five subheadings: "Operationalization of the Hypothesis", "The Instrument", "The Sample", "Collection of the Data", and "Statistical Procedures".

1. Operationalization of the Problem.

The definitions of concept assimilation and of concept development that are found in the theory are not stated in terms that allow the direct observation of these two processes. The pursuit of the empirical study of these processes thus requires that they be redefined in terms of some observable behaviour patterns from which they may be inferred, that is, they must be operationally defined.

Knowledge of defining attributes is the means of identifying examples when one learns through the concept

assimilation process. Accordingly, the assimilation process is operationally defined as one in which ability to specify defining attributes of a concept is at least as advanced as ability to identify examples of a concept.

In the developmental model, ability to identify examples of a concept represents a lower level of mastery than ability to specify defining attributes. Accordingly, the developmental process is operationally defined as that in which ability to identify examples of a concept is greater than ability to specify the defining attributes of that concept.

Using these definitions, the hypothesis may now be restated in terms which make it more accessible to empirical testing. It is hypothesized that for Franco-Ontarian junior school students scores on a test of ability to identify examples of grammar concepts will be significantly higher than scores on a test of ability to specify the defining attributes of the same grammar concepts.

In order to complete the operationalization of the hypotheses, it is necessary to operationally define ability to identify examples of grammar concepts and ability to specify defining attributes of grammar concepts. Both these abilities are operationally defined here as performance on

the appropriate subscales of the Test de Compréhension de Structures Linguistiques¹. That instrument is described under the next subheading.

2. The Instrument.

The instrument that was employed in the empirical investigation is the Test de Compréhension de Structures Linguistiques (TCSL)². It assesses various aspects of mastery of grammar concepts.

TCSL was developed by Desjarlais and Lazar in accordance with the Frayer-Klausmeier schema for testing aspects of concept mastery³. The Frayer-Klausmeier schema is based upon Klausmeier's Model of Concept Learning and Development. The schema includes twelve multiple choice item forms which may be used to construct questions for testing knowledge of any particular concept.

1 Lionel Desjarlais and Avrim Lazar, An Inquiry into the Psychopedagogy of Language Acquisition in the School Age Child (A Study of Readiness), Ottawa, Faculty of Education, University of Ottawa, 1976, p. 66-86.

2 Ibid.

3 Dorothy Frayer, Wayne C. Fredrick and Herbert J. Klausmeier, A Schema for Testing the Level of Concept Mastery, Working paper No. 16, Wisconsin Research and Development Center for Cognitive Learning, University of Wisconsin, Madison, Wisconsin, 1969, p. 1-32.

TCSL itself includes questions built in accordance with eleven of the Frayer-Klausmeier item forms. It is a domain-referenced instrument which measures ability in a completely crossed two-dimensional domain. The first dimension of the domain that it tests is the classificatory concepts of traditional grammar. TCSL includes questions directed at knowledge of twenty-seven of these concepts. They are listed in Table II.

The second dimension of the domain tested is the tasks which students may be asked to perform so as to demonstrate their level of mastery of the concepts. These tasks correspond to the eleven types of item forms adopted from the Frayer-Klausmeier schema. Item forms for seven of these tasks are presented in Table III. (The four tasks not presented measure abilities not relevant to the current investigation).

There are eleven questions, one using each task, for each of the twenty-seven concepts in TCSL. Figure 1 illustrates the item matrix into which the questions of TCSL may be organized. Each cell is at intersection of a particular task and a particular concept and there is a question for each cell which asks the student to perform the task with the concept. The column means are called task subscale scores and may be used to assess ability to perform a particular task with grammar concepts. Similarly, the row

Table II.-

The Concepts Included in the Test de Compréhension de Structures Linguistiques.

1. Adverbe	10. Pronom relatif	19. Proposition
2. Adjectif possessif	11. Verbe	20. Proposition indépendante
3. Adjectif qualificatif	12. Verbe d'état	21. Proposition principale
4. Adjectif démonstratif	13. Verbe d'action	22. Proposition subordonnée
5. Adjectif numéral	14. Temps composé	23. Sujet
6. Nom	15. Conjonction	24. Complément direct du verbe
7. Pronom personnel	16. Temps présent	25. Attribut
8. Pronom possessif	17. Temps passé	26. Complément indirect du verbe
9. Pronom démonstratif	18. Temps futur	27. Complément circonstanciel du verbe.

Table III.-
Item Form for Testing Aspects of Concept Mastery.

Task Number	Given the	the student can select the	Prototype of Item Stem
3	name of a concept	example of the concept.	<u>Which of these is name of concept?</u>
4	name of a concept	non-example of concept.	<u>Which of these is NOT name of concept?</u>
5	example of a concept	name of the concept.	<u>Example of concept is an example of:</u>
6	name of a concept	name of the relevant attribute of the concept.	<u>What is always true about name of concept?</u>
7	name of a concept	name of the irrelevant attribute of the concept.	<u>What is NOT always true about name of concept?</u>
8	definition of a concept	name of the concept.	<u>Definition is called:</u>
9	name of a concept	definition of the concept.	<u>What is the meaning of name of concept?</u>

	TASKS											CONCEPT SUBSCALE SCORES
	1	2	3	4	5	6	7	8	9	10	11	
1												
2												
3												
4												
5												
6												
7												
8												
9												
C	10											
O	11											
N	12											
C	13											
E	14											
P	15											
T	16											
S	17											
	18											
	19											
	20											
	21											
	22											
	23											
	24											
	25											
	26											
	27											
Task Sub- scale Scores												

Figure 1. Item Matrix of the Test de Compréhension de Structures Linguistiques.

means are concept subscale scores used to assess knowledge of a particular concept.

The validity of a domain-referenced test is a function of the extent to which it tests ability in, and only in, the domain to which it is directed. To verify that the questions did indeed ask the students to perform the appropriate task with the right concept, the test's developers had raters sort unidentified items by concept and by task. In addition, the developers performed a validation study with a sample of 500 Franco-Ontarian students in which the correlation of each item with the appropriate concept subscale score and task subscale score was assessed⁴. These results were interpreted as supporting the test's validity.

To guard against questions requiring knowledge outside the domain being tested, vocabulary for the questions in TCSL was taken from Franco-Ontarian Grade two readers. In addition, the suitability of questions was judged by a committee of junior school teachers and the subjects of the validation study were allowed to ask any questions regarding words or sentences they did not understand. Again, the results were supportive of the validity of the instrument. The test's developers report that when used with Franco-Ontarian students between grades four and eight, the test,

⁴ Desjarlais and Lazar, Op. Cit., p. 81-84.

as a whole, has a Kuder-Richardson formula reliability index of 0.98. Task-based subscale scores are reported to have KR₂₀ reliability ranging from .78 to .83.

The usefulness of TCSL for the current empirical investigation relates to both dimensions of the domain tested. The twenty-seven concepts are of interest because Desjarlais, et al. report that they are included in most of the grammar courses of study of Franco-Ontarian schools⁵. Seven of the eleven tasks are relevant to the current research. Tasks Nos. three, four, and five test the ability to identify examples of concepts and Tasks Nos. six, seven, eight, and nine test the ability to associate appropriate defining attributes with a concept. The item-forms for these seven tasks are presented in Table III.

The operational definitions of ability to identify examples of grammar concepts and of ability to specify defining attributes can now be made more specific by stating that the former ability is measured by TCSL Tasks three, four, and five and the latter ability is measured by TCSL Tasks six, seven, eight, and nine.

A copy of TCSL is included in Appendix 1.

5 Ibid., p. 101-102.

3. The Sample.

The population from which the sample was drawn was composed of the students of grades four, five, and six in the French schools of thirteen accessible school districts in Ontario. The thirteen districts include both urban and rural areas. They include all the regions with large Francophone populations in Ontario.

The unit sampled was the classroom. The sampling was done independently for each grade level. Simple random choice was used to choose fifty classes at a particular grade level from a frame listing all the French classes at that grade level in all thirteen districts. The procedure was repeated with the frames for each of the grade levels.

Attrition of classes at a rate of twelve per cent was caused by a variety of reasons, including non-grading, spring floods, and illness.

The final sample was composed of forty classes in grade four, forty-four classes in grade five, and forty-nine classes in grade six, a total sample of 133 classes.

4. Collection of the Data.

The length of the TCSL made the administration of the whole test to any one student difficult. In addition, the number of items which related to each of the twenty-seven concepts suggested that internal clues might destroy

the item independence if the test was administered in less than several sittings. Accordingly, it was decided that multiple matrix sampling procedures should be used. This involved the sampling of test items as well as subjects. The test items were sampled exhaustively with no replacement. Nine separate samples were drawn. The questions in each sample were placed in a separate test book. Thus each of the books contained a representative sample of TCSL questions, and the nine books together contained the whole test. The books were labelled T1 to T9. The students each wrote only one of the nine books. Within each class the test books were distributed in order, first T1, then T2, until T9 was reached, at which time distribution started again with T1. The subtests were assigned to the randomly ordered students until each student within a class had one test book. No student wrote more than one of the test books.

While this method did not allow estimation of individual performance on all the items of TCSL, it did allow assessment of class performance on the whole instrument. The class was the unit sampled and should be the experimental unit, thus class performance estimates answered the needs of the current study.

The testing was accomplished during the month of May 1975. All schools were tested within a three-week period. The testing was performed by a team which had been trained

together to follow a standardized procedure of test administration. All the members of the testing team had teaching experience.

Testing procedure allowed a forty-minute period. No time limit was announced but most students completed their tests in less than thirty minutes.

Wherever possible, both the class teacher and the test administrator remained in the classroom for the testing period. The test administrator endeavoured to create a work-oriented but relaxed atmosphere in the classes. Students were informed that they were not expected to know all the answers and were asked not to guess. Test administrators read the instructions on the front page of the test books and did the two examples included in the instructions on the blackboard. The data collection was accomplished without incident.

5. Statistical Design.

In accordance with the hypothesis, the independent variable is type of ability and the dependent variable is performance of the corresponding TCSL items.

Dependent variable scores were obtained by averaging each item by classroom.

A three-factor univariate analysis of variance ($p < .05$) of dependent variable scores⁶ was performed by means of the NYBMUL⁷ program. The design is illustrated in Figure 2. The first factor, (A), is type of ability. It includes two levels. The first level, (A_1), is ability to identify examples of grammar concepts and the second level, (A_2), is ability to specify defining attributes of the same concepts.

The second factor, (B), is type of task. It is nested in type of ability. There are several levels of type of task. The first three levels (B_1 , B_2 , and B_3) correspond to TCSL Tasks three, four, and five and are nested in A_1 . The subsequent four levels (B_4 , B_5 , B_6 , and B_7) correspond to TCSL Tasks six, seven, eight, and nine and are nested in A_2 .

The third factor, (C), is "grade". It is crossed with both the preceding factors. It has three levels, (C_1 , C_2 , and C_3), corresponding to grades four, five, and six.

6 Virginia Keith, Design and Analysis of Experimentation, Ottawa, University of Ottawa Press, 1972, p. 98-136.

7 J. D. Finn, "Multivariate - Univariate and Multivariate Analysis of Variance and Covariance: A Fortran Program (Version 4)", State University of New York at Buffalo, 1967.

	A_1			A_2			
	B_1	B_2	B_3	B_4	B_5	B_6	B_7
C_1	R=40	R=40	R=40	R=40	R=40	R=40	R=40
C_2	R=44	R=44	R=44	R=44	R=44	R=44	R=44
C_3	R=49	R=49	R=49	R=49	R=49	R=49	R=49

Figure II. Statistical Design.

Although grade is not an element in the hypothesis being tested, there was reason to suspect that it would account for a large amount of variance in the dependent variable scores. It was added as a factor so as to reduce error variance and increase the precision of the analysis. This procedure is suggested by Keith⁸.

The Scheffe test⁹ was used in post hoc procedures to test hypothesized differences in means between levels of B, (type of task) ($p < .05$).

The results of the investigation described here are presented in the next chapter.

8 Keith, Op. Cit., p. 160-162.

9 Ibid., p. 148-151.

CHAPTER III

PRESENTATION AND DISCUSSION OF RESULTS

This chapter presents and discusses the results of the empirical investigation that is described in the preceding chapter. The chapter is organized under the following four subheadings: "Descriptive Data", "Results of the Analysis of Variance", "Results of the Post Hoc Procedures", and "Discussion of the Results".

1. Descriptive Data.

It will be recalled that the independent variable is type of ability as measured by type of task. The two types of ability of interest are ability to identify examples of grammar concepts and ability to specify the defining attributes of the same concepts. The seven types of task of interest are TCSL Tasks three, four, and five which measure the former ability, and TCSL Tasks six, seven, eight, and nine which measure the latter ability. It will further be recalled that the dependent variable is performance on the appropriate questions in TCSL.

It was hypothesized that ability to identify examples of grammar concepts will be superior to ability to specify defining attributes of the same concepts. Table IV presents the means and standard deviations of the dependent

Table IV.-

Mean and Standard Deviations of Dependent Variable
Scores by Type of Ability (N = 133).

	M	SD
Ability to Identify Examples	.434	.132
Ability to Specify Defining Attributes	.339	.115

variable scores by type of ability. It may be noted that the direction of the results is that predicted by the hypothesis. Table V presents the means and standard deviations for the dependent variable scores by task. Again, it may be noted that the results are in the direction predicted by the hypothesis.

An analysis of variance was performed to ascertain whether these findings meet the criteria for statistical significance. The results of that analysis are presented next.

2. Results of the Analysis of Variance.

The analysis of dependent variable scores was conducted using a univariate three-factor analysis of variance ($p < .05$). The first factor is type of ability, the second factor (nested in the first) is type of task, and the third factor is grade level.

The results of the analysis of variance are presented in Table VI. Factor A, type of ability, is statistically significant. This indicates that the null hypothesis that there is no difference between scores on tasks which measure the first type of ability and scores on tasks which measure the second type of ability can be rejected.

Table V.-
Means and Standard Deviations of Dependent Variable
Scores by Task (N = 133).

	M	SD
Task 3	.440	.133
Task 4	.396	.117
Task 5	.468	.136
Task 6	.323	.118
Task 7	.308	.105
Task 8	.357	.121
Task 9	.368	.111

Table VI.-
Results of the Analysis of Variance

Source of Variance	ndf	MS	F	p
A (type of ability)	1	2.082	260.14*	.0001
B:A (type of task)	5	1.356	16.94*	.0001
C (grade)	2	2.974	371.66*	.0001
AC	2	.015	1.94	n.s.
CB:A	10	.004	0.51	n.s.
R:ABC	910	.008		

* $p < .05$

Factor B, type of task, is statistically significant but post hoc tests are required to locate which task scores are significantly higher than other task scores.

Factor C, grade, is also statistically significant which suggests that its addition to the statistical design did indeed contribute to the precision of the analysis by reducing error variance.

Interaction is not predicted by the theory and no statistically significant interaction was detected.

3. Results of the Post Hoc Procedures.

The hypothesis predicts that scores on the tasks which measure ability to identify examples of concepts should be higher than scores on tasks which measure ability to specify the defining attributes of the same concepts. The former ability is tested by Tasks three, four, and five. The latter ability is tested by Tasks six, seven, eight, and nine.

The hypothesis thus predicts that scores on each of Tasks three, four, and five will be higher than scores on any of the other four tasks. A total of twelve contrasts of means may thus be examined for significance with each contrast being a test of the hypothesis.

The Scheffe test was employed for these twelve post hoc tests of significance ($p < .05$). The error term used was that derived from the analysis of variance.

Table VII presents the results of the twelve contrasts. The null hypothesis of no difference between means was rejected in each case.

4. Discussion of Results.

The empirical investigation was conducted in order to test the hypothesis that for Franco-Ontarian junior school students, grammar concept learning at the formal level of mastery is better described as a function of concept development than as a function of concept assimilation.

The hypothesis was tested by comparing ability to identify examples of grammar concepts with ability to specify the defining attributes of the same concepts. The former ability was measured by performance on TCSL Tasks three, four, and five. The latter ability was measured by performance on TCSL Tasks six, seven, eight, and nine.

The results of the empirical investigation clearly support the hypothesis being tested. The predicted overall differences between performance on the tasks which measure ability to identify examples of grammar concepts and performance on the tasks which measure ability to specify defining attributes of the same concepts were found at levels

Table VII.-

Scheffe Simultaneous Confidence Intervals for Simple Contrasts of Means.

Contrast of Means	Scheffe Simultaneous Confidence Intervals
Task 3 - Task 6	.117 $\pm$.001 *
Task 3 - Task 7	.132 $\pm$.001 *
Task 3 - Task 8	.083 $\pm$.001 *
Task 3 - Task 9	.072 $\pm$.001 *
Task 4 - Task 6	.073 $\pm$.001 *
Task 4 - Task 7	.088 $\pm$.001 *
Task 4 - Task 8	.039 $\pm$.001 *
Task 4 - Task 9	.028 $\pm$.001 *
Task 5 - Task 6	.145 $\pm$.001 *
Task 5 - Task 7	.160 $\pm$.001 *
Task 5 - Task 8	.111 $\pm$.001 *
Task 5 - Task 7	.100 $\pm$.001 *

* $p < .05$.

that satisfy the criteria for statistical significance. In addition, scores on each of the three individual tasks which measure ability to identify examples were higher than any of the scores on each of the four tasks that measure the ability to specify defining attributes. Again the differences are statistically significant.

The discussion of the results which follows includes comment on the validity of the findings, suggestions for further inquiry, and statements regarding the practical and theoretical implications of the findings.

The usefulness of the results is a function of their validity. In an empirical investigation the validity of the findings may be thought of as a function of their accuracy within the context of the investigation, that is, their internal validity, and as a function of their generalizability to the universe which they are intended to represent, that is, their external validity.

Most of the factors which are of concern in the assessment of internal validity were discussed in Chapter II. The validity of the instrument, the suitability of the data collection procedures, and the statistical design were all presented as part of the description of the experimental design.

Three issues of relevance to internal validity will, however, be briefly noted here. The first of these is

treatment independence. In a study where subjects are asked many questions about the same topic there is a danger that the information contained in one question will affect the subject's capacity to answer another question. TCSL includes eleven questions pertaining to each concept. Careful examination of the eleven questions will reveal that item independence has not been maintained. The threat this poses to treatment independence in the current study has, however, been avoided by the use of multiple matrix sampling techniques. Each student was asked to write only a sample of the items and care was taken to guarantee item independence within each of the samples of items that were included in the nine test books.

A second issue of relevance to the internal validity of the results relates to the veridicality¹. Veridicality is a property similar to replicability. It is the degree to which findings are verifiable by use of a perspective or modality different from that with which the results were originally obtained. It will be recalled that each task in TCSL corresponds to a different item form (see Table III). Ability to identify examples of grammar concepts is thus measured in a different way by each of Tasks three, four,

¹ Bertrand Russell, cited in Jerome Bruner, "On Perceptual Readiness", in Psychological Review, Vol. 64, No. 2, 1957, p. 126.

or five. Ability to specify defining attributes is also measured from a different perspective by each of Tasks six, seven, eight, and nine. The consistency of the superiority of the scores on the three different ways of assessing ability to identify examples of grammar concepts to the scores on each of the four different ways of measuring ability to specify defining attributes of the same concepts indicates that the results enjoy a reasonable degree of veridicality. Thus the confidence which one can place in the findings is considerably increased.

A third concern regarding the internal validity of the findings relates to the operationalization of the hypothesis. The validity of the present study depends upon the confidence one can place in the inference made from the comparison of the two types of ability to the two types of grammar concept learning processes. The rationale for the inference is introduced in Chapter II but is reviewed here in the light of the obtained results. The results clearly indicate that ability to specify defining attributes of grammar concepts is inferior to the ability to identify examples of the same concepts. The results are consistent with the description of the concept development process in which knowledge of defining attributes is said to follow ability to identify examples of concepts. They are clearly not consistent with the description of the concept

assimilation process in which knowledge of defining attributes precedes, and serves as the instrument for, the identification of examples of concepts.

It is, therefore, concluded that the process of grammar concept attainment in the Franco-Ontarian junior school child is better described as a function of concept development than as a function of concept assimilation.

The operationalization of the hypothesis so as to infer the process of concept learning from the products of that process allowed the current study to employ a large sample and to study the learning of many grammar concepts. The current study thus enjoys wide generalizability gained at the expense of having to make an inferential leap from product to process. It is suggested here that a valuable project for further research would be to observe the process of concept attainment more directly in a clinical study using a small sample of students who are learning a few concepts. Such a study would serve as a valuable complement to the current investigation. The proposed study would, of course, not be as widely generalizable as the present one but it would also not be as dependent on inference from product to process.

Having dealt with issues of relevance to the internal validity of the findings, the discussion now turns to a

consideration of their external validity. Bracht and Glass² divide external validity into population validity and ecological validity. Population validity refers to generalizability from the sample employed in the investigation to the target population. Ecological validity refers to the degree to which one can generalize from the circumstances of experimental design to the circumstances in the universe which they purport to represent.

With respect to population validity, the size of the sample, over 3,500 students in 133 classrooms, and the method of sampling, simple random choice of the experimental unit, give one no reason to doubt the generalizability of the results from the sample to the experimentally accessible population. The broad geographical area covered by the thirteen school districts of the experimentally accessible population suggests that inferences from the accessible population to the target population of all Franco-Ontarian junior school students may also be made with a reasonable degree of confidence.

The question of generalizability to other populations, however, requires careful consideration. The results were obtained with students from grades four, five, and six. One

² Glenn H. Bracht and Gene V. Glass, "The External Validity of Experiments", in American Educational Research Journal, Vol. 5, No. 4, 1968, p. 438.

may ask if they can be generalized to other grade levels. Although no interaction of the independent variables with grade level was detected, the range of grade levels in the current sample is narrow and interaction may well occur with a sample containing a broader age range. Caution is, thus, called for in generalizing to other age ranges. Older children, for example, will have a more developed metalinguistic capacity and, therefore, will be more capable of employing defining attributes in the assimilation of new concepts. Young children, however, will be less developed in metalinguistic capacity and, thus, more likely to depend on the developmental process for moving toward the formal level of grammar concept mastery.

Further research using other grade levels seems to be called for. However, a note of caution is required here. The current experimental design employs the pattern of the child's knowledge of concepts to infer the process by which this knowledge is being obtained. The applicability of this design to other grade levels is suspect. The younger child will be just beginning to attain knowledge of grammar at the formal level and the older child will have nearly completed the process. In both cases, the pattern of knowledge of concepts is not so likely to reflect the process of concept learning as it does with junior school students who are actively engaged in the process of concept attainment at

the formal level of mastery. The suggestion for research with other grade levels must, therefore, also include a suggestion that alternative methodologies be employed.

Another question relevant to population validity is the degree to which the results of the research may be applied to students who are not Franco-Ontarian. The results should be generalizable to groups who share some of the attributes of Franco-Ontarians. The ambiguity of traditional grammar is certainly not limited to French. In addition, the Franco-Ontarian child's rate of language development and of metalinguistic development has not been shown to be substantially different from that of other groups^{3,4}. The position of being a linguistic minority may, however, lead to more emphasis being placed on grammar in Franco-Ontarian classrooms than is found elsewhere. It nevertheless seems reasonable to tentatively suggest that the results may be applied to other populations who are learning traditional grammar.

3 Lionel Desjarlais and Avrim Lazar, An Inquiry into the Psychopedagogy of Language Acquisition in the School Age Child (A Study of Readiness), Ottawa, Ontario, Faculty of Education, 1976, p. 108-145.

4 Jacques Vachon, A Proposal for a Structural Analysis of the Language Development of the Child as a Base for Learning a Mother Tongue, unpublished report presented to the Minister of Education in Ontario, 1973, p. 246-670.

Generalizability to groups studying grammars other than traditional grammar is a question of ecological validity. TCSL includes a sample of twenty-seven traditional grammar concepts. Generalizability to other traditional grammar concepts is not difficult to propose but generalizability to the study of other grammars requires careful consideration. A major distinction between traditional and other grammars is that the former relies less on syntactic function and more on semantic referent to define its categories. The use of syntactic attributes requires greater metalinguistic maturity than the use of semantic attributes if one employs the concept assimilation process. There is thus reason to expect that the developmental process will also predominate in the learning of grammars other than traditional grammar.

A final concern regarding the generalizability of the results is the extent to which they apply to the learning of concepts in fields other than grammar. The need for the current study is presented in the introduction as a function of the sensitivity to circumstances of the process of concept learning. The results should thus not be looked upon as reflecting the general case in concept learning. They may, however, be considered as representative of those cases where circumstances approximate those found in grammar learning. More specifically, the developmental process seems likely to predominate in those situations where, like in grammar, a

broad intuitive grasp of a field is gained by a student prior to the commencement of formal schooling. These circumstances often obtain in adult education. The adult student may bring a well developed practical knowledge of a field to the classroom. It is frequently the task of schooling to develop that practical knowledge into formal theoretical knowledge. It is accordingly suggested here that adult education may be a fruitful area for further inquiry into the developmental process of concept attainment.

In concluding, it should be noted that the results reflect favourably on the usefulness of Klausmeier's Model of Concept Learning and Development. Its treatment of the development of knowledge of classificatory concepts is one of the distinctive features of the model and it is precisely this aspect of Klausmeier's model that is supported by the results of the current empirical investigation.

In addition, it is important to note that the successful conduct of this inquiry contributes to the confidence which one may place in the heuristic power of Klausmeier's formulations. In the course of the theoretical analysis, the CLD succeeded in drawing attention to what proved to be the critical elements in the learning situation being studied. These elements included the two levels of concept knowledge, the developmental prerequisites for

concept attainment at the formal level of mastery, and the alternative processes of concept attainment.

Finally, consideration should be given to the practical implications of the results. The findings indicate that the child attains grammar concepts at the formal level by the developmental process, that is, by associating the concept name and defining attributes with the previously formed classificatory level conceptual structures. It would thus seem reasonable to suggest that emphasis be placed on a well selected set of contextual examples and non-examples in presenting concept theory. The use of many examples and non-examples should facilitate the process of associating the theoretical information being taught about a concept with the already existing classificatory level of conceptual knowledge.

The study is summarized and the conclusions restated in the following pages.

SUMMARY AND CONCLUSIONS

The present study was undertaken to obtain information regarding the process of grammar classificatory concept attainment in the Franco-Ontarian junior school child. The investigation employed the theoretical framework of Klausmeier's Model of Concept Learning and Development.

The first part of the study consisted of an exploratory theoretical analysis of the grammar concept learning process. It was demonstrated that knowledge of grammar can be differentiated into practical knowledge and theoretical knowledge. It was further pointed out that Klausmeier's classificatory level of concept mastery is an element of practical knowledge and that his formal level of concept mastery is an element of theoretical knowledge. Reference was made to theories of linguistics so as to demonstrate that the classificatory concepts in grammar that the school child must master at the formal level are a subset of the grammar concepts that he masters at the classificatory level.

A review of the empirical literature led to the conclusion that the junior school child has already acquired at the classificatory level of mastery the concepts that are found in the school grammar course of studies prior to entering school. Furthermore, the literature indicated that the junior school child is just developing the metalinguistic awareness required for the attainment of most grammar concepts

at the formal level. It was decided to focus the study on the process of attaining grammar concepts at the formal level of mastery. It was reasoned that this process is better described as a function of reception learning than as a function of discovery learning. Two reception processes of concept attainment were presented as potential descriptions of the process by which the junior school child attains grammar concepts at the formal level. These were concept assimilation and concept development. It was hypothesized that concept development was the better description of this process. Three observations were cited in support of that hypothesis. The first of these was the junior school child's prior mastery of the concepts at the classificatory level. The second was the low degree of metalinguistic development of the junior school child, and the third was the ambiguity of traditional grammar concepts.

In the second part of the study the hypothesis was tested by comparing the ability to identify examples of grammar concepts with the ability to specify the defining attributes of the same concepts. The instrument employed was the Test de Compréhension de Structures Linguistiques. A sample of 133 classrooms from grades four, five, and six in French Ontario schools were tested. A three-factor univariate analysis of variance and post hoc Scheffe simultaneous contrasts of means were used to analyze the results.

The level of α was set at .95. In all cases the results favoured the hypothesis at levels that satisfied the criteria for statistical significance.

It was concluded that grammar concept attainment at the formal level of mastery in the Franco-Ontarian junior school child is better described as a function of the process of concept development than as a function of the process of concept assimilation. The results of the theoretical analysis were considered to be evidence of the heuristic power of Klausmeier's Model of Concept Learning and Development. The results of the empirical investigation were also interpreted as supporting Klausmeier's model.

It was suggested that the results point in the direction of a grammar concept teaching technique which employs a great number of examples and non-examples in teaching a concept's name and defining attributes. It was further suggested that the results may be of interest in areas other than grammar where the student brings considerable practical knowledge to the formal learning situation, such as is the case of adult education. Recommendations for further research included the extension of the current investigation to other age ranges and to other subject matter areas and the use of clinical research techniques to study the same topic.

Allen, J. P. B., and P. Van-Buren, Chomsky: Selected Readings, New York, Oxford UP, 1971, 166 p.

Noam Chomsky's major theoretical statements are presented. The book is organized by topic, allowing the evolution of Chomsky's thought to be seen more clearly than it is when his complete works are read in chronological order.

Ausubel, David, Educational Psychology: A Cognitive View, New York, Holt, Rinehart, 1968, xviii-685 p.

A systematic treatment of learning and teaching from a cognitive perspective. The discovery and reception learning paradigms are clearly differentiated and concept assimilation is examined.

Bourne, Lyle E., Human Conceptual Behavior, Boston, Allyn and Bacon, 1966, viii-139 p.

A comprehensive review and integration of the theory and research characteristic of the American tradition in concept learning studies.

Chomsky, Carol, The Acquisition of Syntax in Children from 5 to 10, Cambridge, Massachusetts, M.I.T. Press, 1969, 126 p.

This book presents the rationale, the methodology, and the results of a study of syntactic development in the school age child. The study is based on transformational generative grammar. The acquisition of four exceptional structures is examined.

Chomsky, Noam, Aspects of the Study of Syntax, Cambridge, Massachusetts, M.I.T. Press, 1965, vii-251 p.

The transformational generative approach to grammar is largely based on the arguments presented in this book.

Desjarlais, Lionel and Avrim Lazar, An Inquiry into the Psychopedagogy of Language Acquisition in the School Age Child (A Study of Readiness), Ottawa, Faculty of Education, University of Ottawa, 1976, 297 p.

The report presents the results of a large scale theoretical and empirical study of readiness for grammar learning. The development of the Test de Compréhension de Structures Linguistiques is one of the topics reported on.

Faust, George B., "Basic Tenets of Structural Linguistics", in Harold B. Allen, (ed.), Readings in Applied Linguistics, New York, Appleton-Century-Crofts, 1958, p. 63-67.

This paper presents a concise statement of the basic tenets of structural linguistics.

Fodor, T. A., T. G. Bever and M. F. Garrett, The Psychology of Language, An Introduction to Psycholinguistics and Generative Grammar, New York, McGraw-Hill, 1974, xviii-537 p.

An original comprehensive treatment of linguistics as psychology. Attention is paid to the systematic aspects of language theory.

Frayer, Dorothy, Wayne C. Fredrick and Herbert J. Klausmeier, A Schema for Testing the Level of Concept Mastery, Working Paper No. 16, Wisconsin Research and Development Center for Cognitive Learning, University of Wisconsin, Madison, Wisconsin, 1969, vii-32 p.

A presentation of the underlying rationale and item forms for the Frayer-Klausmeier concept testing paradigm. The Test de Compréhension de Structures Linguistiques is based on this paradigm.

Hunt, Kellogg W., Grammatical Structures Written at Three Grade Levels, NCTE Report No. 3, Champaign, Illinois, NCTE, 1965, xix-159 p.

The paper presents the results of a study of the increase in the use of sentence combining transformations in school children.

Klausmeier, Herbert J., Elizabeth Schwenn Ghatala and Dorothy A. Frayer, Conceptual Learning and Development, New York, Academic Press, 1974, vii-273 p.

The Model of Concept Learning and Development is presented. The theoretical and empirical implications of the elements of the model are explored at some length. Some original research is reported.

Landa, L. N., Algorithmization in Learning and Instruction, Englewood Cliffs, N.J., Educational Technology Publications, 1974, xxviii-713 p.

A logical and exhaustive analysis of the process of algorithmizing instruction. Results of research on the algorithmization of grammar instruction are presented.

Markle, Susan, "They Teach Concepts, Don't They?", in Educational Researcher, Vol. 4, No. 6, 1973, p. 3-9.

An insightful analysis of the process of learning concepts from instruction is presented. Several suggestions for concept teaching are included.

McNeill, David, The Acquisition of Language, A Study of Developmental Psycholinguistics, New York, Harper and Row, 1970, vii-183 p.

A systematic integration of theory and research in language learning is presented in this book.

Ryle, Gilbert, The Concept of Mind, Harmondsworth, England, Penguin, 1949, 316 p.

The book presents Ryle's analysis of the epistemology of psychology. One chapter deals with the dichotomy between "knowing how" and "knowing that".

Shoemaker, David M., Principles and Procedures of Multiple Matrix Sampling, Cambridge, Ballinger, 1973, xviii-306 p.

This work presents the rationale on which multiple matrix sampling procedures are based. Considerable attention is also paid to practical methods of employing the technique.

Sinclair, Hermine, and Joanna Papandropoulou, "What Is a Word", Human Development, Vol. 17, 1974, p. 241-258.

The paper presents the results of a developmental study of word awareness. Metalinguistic development is divided into a sequence of four stages.

Slobin, Dan I., Psycholinguistics, Glenview, Illinois, Scott Foresman and Company, 1971, x-148 p.

A concise logical statement of the psychological foundations of transformational generative grammar.

Strickland, Ruth G., "The Language of Elementary School Children. Its Relationship to the Language of Reading Textbooks and the Quality of Reading of Selected Children", in Bulletin of the School of Education, Indiana University, Vol. 38, No. 4, July 1962, xii-131 p.

A large-scale study of language development in the school child. The study employs a "structuralist" approach to grammar. One of the conclusions is that the basic structures of a language are mastered by the child prior to school entrance.

Tucicov-Bogdan, Ana, "Abstraire et Concrétiser dans l'Apprentissage de la Grammaire", in Revue Roumaine de Sciences Sociales-Psychologie, Vol. 9, No. 2, 1965, p. 211-222.

An elegant experimental study which illustrates the young child's confusion of a word with its referent.

Vygotsky, Lev Semenovich, Thought and Language, Cambridge, Massachusetts, M.I.T. Press, 1962, 153 p.

A perceptive analysis of the relationship between thought and language. Grammar learning is treated in terms of attaining both spontaneous concepts and scientific concepts.

APPENDIX 1

The Instrument

TEST DE COMPREHENSION DE STRUCTURES LINGUISTIQUES

Nom de l'élève.....

Sexe M..... F..... Date de naissance.....

Ecole..... Année du cours.....

DIRECTIVES A L'ELEVE

Afin d'en arriver à savoir ce que les jeunes de ton âge connaissent en grammaire française, j'ai besoin de ton aide. Je te demande donc de répondre aux questions suivantes, en faisant de ton mieux.

Pour chaque question, tu as un choix de trois ou de quatre réponses. Après avoir lu attentivement une question, choisis la réponse qui te semble la bonne. Si tu n'es pas certain de la réponse, choisis celle qui te semble la meilleure.

N'oublie pas de lire chaque numéro au complet avant de faire ton choix.

Pour indiquer ta réponse, encercle la lettre qui est placée devant la réponse que tu crois être la bonne. Ne choisis qu'une seule réponse par numéro.

Travaille à ta propre vitesse.

EXEMPLES:

1. Dans la phrase: "Le gros chat noir dort.", le mot le est
 - a. un adjectif
 - b. une phrase
 - c. un article
2. Quel est le mot souligné qui est un nom de personne?
 - a. Tous les jours, je vais à l'école.
 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le mot souligné qui ajoute une idée au verbe?
 - a. Ce danseur paraît élégant.
 - b. Un éléphant est très pesant.
 - c. Viviane chante joliment.
 - d. On craint un vent violent.

2. Quel est le mot souligné qui nous dit qui fait l'action?
 - a. Je nage avec mes amis.
 - b. La souris se cache dans un coin.
 - c. Trois élèves sont absents.
 - d. Tu sais tricoter des bas.

3. Quel est le verbe souligné qui exprime l'état?
 - a. Pose tes livres sur la table.
 - b. Charles joue avec son ami.
 - c. La pluie tombe encore.
 - d. L'instituteur semble fatigué.

4. Dans la phrase: "Place tes livres sur le pupitre.", le mot tes
 - a. s'accorde avec le verbe
 - b. dit qui fait l'action
 - c. indique la possession
 - d. se rapporte au verbe

5. Dans la phrase: "Le chauffeur conduit le camion.", le mot conduit nous dit
 - a. l'état de la personne dont on parle
 - b. ce que fait la personne dont on parle
 - c. qui fait l'action
 - d. qui reçoit l'action

6. Dans la phrase: "L'élève ouvre son livre.", le mot livre
- a. nous dit qui ouvre
 - b. s'accorde avec le mot "son"
 - c. reçoit l'action du verbe à l'aide d'une préposition
 - d. répond à la question "ouvre quoi?"
7. Quel est le mot souligné qui est un adjectif qualificatif?
- a. Paul porte un béret brun.
 - b. J'aime jouer avec mes amis.
 - c. Le chien jappe souvent.
 - d. Le soleil brille dans le ciel.
8. Quel est le mot souligné qui est un attribut?
- a. La lettre est sur la table.
 - b. La crème est sûre.
 - c. Il reçoit de l'aide.
 - d. Le laitier aime travailler fort.
9. Quel est le verbe souligné qui est conjugué à un temps composé?
- a. Georges avait un beau manteau.
 - b. Gisèle est une jolie fille.
 - c. Ils vont chercher les meubles.
 - d. Les cadeaux sont emballés.
10. Quel est le mot souligné qui N'EST PAS un adjectif démonstratif?
- a. Ces enfants sont gentils.
 - b. J'ai acheté cette plume.
 - c. Ce livre est à moi.
 - d. Je vois ce que tu fais.

11. Quel est le mot souligné qui N'EST PAS un complément indirect?
- a. Ce manteau appartient à Marc.
 - b. Il gagnera la course.
 - c. Le timbre colle à ses doigts.
 - d. Je joue aux billes.
12. Quel est le mot souligné qui N'EST PAS une conjonction?
- a. Il fait très chaud à l'Equateur.
 - b. Il pleure car il a mal.
 - c. Je dors puisque je suis fatigué.
 - d. Je viendrai si tu le veux.
13. Dans la phrase: "Ma soeur a vingt ans.", le mot vingt est
- a. un nom qui est un nombre
 - b. un adjectif numéral
 - c. un nombre ordinal
 - d. un complément numéral
14. Dans la phrase: "Pierre sourit toujours.", le mot sourit est un verbe au temps
- a. futur
 - b. imparfait
 - c. présent
 - d. plus-que-parfait
15. Dans la phrase: "On patine sur la glace.", le mot glace est un complément
- a. direct
 - b. indirect
 - c. circonstanciel
 - d. du nom

16. Le nom doit toujours

- a. être sujet du verbe
- b. être placé au début de la phrase
- c. être accompagné d'un article
- d. désigner une personne, un animal ou une chose

17. Le passé doit toujours

- a. être un temps composé
- b. faire partie du mode indicatif
- c. indiquer ce qui a déjà eu lieu
- d. se terminer par "é"

18. Le verbe d'état doit toujours

- a. être le verbe "être"
- b. être un verbe au temps présent
- c. être au mode indicatif
- d. exprimer l'état de son sujet

19. Il N'EST PAS nécessaire que le pronom personnel

- a. prenne toujours la place d'un nom
- b. soit toujours placé au début de la phrase
- c. soit toujours à la 1^{ière}, 2^{ième} ou 3^{ième} personne
- d. soit toujours du même genre et du même nombre que le nom dont il prend la place

20. Il N'EST PAS nécessaire que l'adjectif possessif

- a. indique toujours la possession
- b. se rapporte toujours au nom
- c. soit toujours au singulier
- d. soit toujours placé devant le nom

21. Il N'EST PAS nécessaire que le futur
- a. indique toujours ce qui aura lieu
 - b. indique toujours une action ou un état
 - c. soit toujours un temps du verbe
 - d. soit toujours un temps simple
22. Un mot qui donne une qualité au nom s'appelle
- a. un pronom
 - b. un adjectif qualificatif
 - c. un nom commun
 - d. un nom qualificatif
23. Un mot qui prend la place d'un nom en indiquant la possession est
- a. un adjectif possessif
 - b. un pronom possessif
 - c. un article possessif
 - d. un nom possessif
24. Un verbe formé d'un auxiliaire et d'un participe passé est un verbe
- a. au temps composé
 - b. au temps simple
 - c. au participe présent
 - d. au futur simple
25. L'adjectif démonstratif est un mot qui
- a. se rapporte au nom en montrant la possession
 - b. prend la place d'un nom en montrant ce dont on parle
 - c. se rapporte au nom en montrant l'être ou l'objet dont on parle
 - d. prend la place d'un nom en montrant la personne qui parle

26. La proposition indépendante est une proposition qui
- a. dépend de la subordonnée
 - b. dépend de la principale
 - c. dépend de la principale et de la subordonnée
 - d. dépend d'aucune autre et dont aucune autre ne dépend
27. Le pronom démonstratif est un mot qui
- a. prend la place du pronom en indiquant la personne dont on parle
 - b. prend la place du nom en montrant l'être dont on parle
 - c. se rapporte au nom en indiquant la possession
 - d. se rapporte au pronom en montrant l'être dont on parle
28. La proposition principale est une sorte de
- a. complément
 - b. locution
 - c. phrase
 - d. proposition
29. Le pronom relatif est une sorte
- a. d'adjectif
 - b. de conjonction
 - c. de pronom
 - d. de proposition
30. Le présent est une sorte de
- a. mot accompagnant le verbe
 - b. temps du verbe
 - c. mode du verbe
 - d. terminaison du verbe

31. Quelle est la phrase qui est vraie?

- a. Le sujet est toujours placé devant le verbe.
- b. Le sujet fait l'action ou subit l'état exprimé par le verbe.
- c. Le sujet reçoit toujours l'action du verbe.
- d. Chaque verbe n'a qu'un seul sujet.

32. Quelle est la phrase qui est vraie?

- a. La proposition subordonnée complète la proposition principale.
- b. La proposition principale dépend de la proposition subordonnée.
- c. La proposition principale et la proposition subordonnée sont indépendantes l'une de l'autre.
- d. La proposition principale est toujours placée devant la proposition subordonnée.

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EXEMPLES:

1. Dans la phrase: "Le gros chat noir dort.", le mot le est
 - a. un adjectif
 - b. une phrase
 - c. un article
2. Quel est le mot souligné qui est un nom de personne?
 - a. Tous les jours, je vais à l'école.
 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le groupe de mots soulignés qui prend la place d'un nom en indiquant la possession?
 - a. Votre maison est située près de la gare.
 - b. Nous visiterons la soeur de Paul.
 - c. Mon frère a perdu son couteau de poche.
 - d. Tes cheveux sont noirs et les miens sont bruns.

2. Quel est le mot souligné qui exprime l'action?
 - a. Ce jeu paraît amusant.
 - b. Le feuillage semble épais.
 - c. La pluie tombe sur les toits.
 - d. L'oiseau est dans les feuilles.

3. Quel est le mot souligné qui reçoit l'action exprimée par le verbe?
 - a. Monique bat sa soeur.
 - b. Jean mange une pomme.
 - c. Nicole écrit de beaux mots.
 - d. Pierrette est une jolie fille.

4. Dans la phrase: "Ces cahiers sont à toi mais ceux-ci sont à moi.",
ceux-ci
 - a. qualifie le nom
 - b. donne une qualité au verbe
 - c. prend la place du pronom
 - d. prend la place du nom

5. Dans la phrase: "Le vent a déraciné ces arbres.", le mot souligné est
 - a. un adverbe
 - b. un complément
 - c. un auxiliaire
 - d. un participe passé

6. Dans la phrase: "Les voisins sont gentils.", le mot gentils
- a. fait l'action du verbe
 - b. donne une qualité au sujet
 - c. détermine le genre et le nombre du sujet
 - d. reçoit l'action du verbe
7. Quel est le mot souligné qui est une conjonction?
- a. Paul et Marc sont des frères.
 - b. Il est le meilleur athlète.
 - c. La glace est lisse.
 - d. Pierre joue au hockey.
8. Quel est le mot souligné qui est un complément indirect?
- a. Léon aime la tarte aux pommes.
 - b. Il y a des filles et des garçons sages.
 - c. Le chien dort toute la journée.
 - d. Il parle à son frère.
9. Quel est le mot souligné qui est un adjectif démonstratif?
- a. Le poisson nage dans l'eau.
 - b. Le petit chat joue avec la laine.
 - c. Je vois cette fille.
 - d. Le canot de mon père est rouge.
10. Quel est le mot souligné qui N'EST PAS un verbe au temps présent?
- a. Michel est un beau garçon.
 - b. Maman porte une belle robe.
 - c. Mon père ira au bureau.
 - d. Je connais Pierre.

11. Quel est le mot souligné qui N'EST PAS un complément circonstanciel?
- a. Les étoiles brillent ce soir.
 - b. Dans le champ, il y a des fleurs.
 - c. Le ski est un sport d'hiver.
 - d. Le chasseur marche dans la forêt.
12. Quel est le mot souligné qui N'EST PAS un adjectif numéral?
- a. Pierre est le cinquième garçon de la rangée.
 - b. Dans le tiroir, je vois six fourchettes.
 - c. Treize est un numéro chanceux.
 - d. Il y a quatre éléphants au cirque.
13. Dans la phrase: "Il faut absolument laver la vaisselle.", le mot absolument est
- a. une locution verbale
 - b. un adjectif
 - c. un adverbe
 - d. une locution adverbiale
14. Dans la phrase: "Pierre a cueilli une rose pour Marie.", a cueilli est un verbe au temps
- a. présent
 - b. passé
 - c. simple
 - d. futur
15. L'adjectif possessif doit toujours
- a. être immédiatement suivi d'un nom
 - b. être au singulier
 - c. indiquer la possession
 - d. se rapporter au sujet

16. Le pronom personnel doit toujours
- a. indiquer la possession
 - b. prendre la place d'un nom
 - c. se placer devant le verbe
 - d. être sujet du verbe
17. Le futur doit toujours
- a. être un temps simple
 - b. exprimer ce qui aura lieu
 - c. être un temps composé
 - d. exprimer une action
18. Il N'EST PAS nécessaire que la proposition
- a. soit toujours une phrase ou fasse toujours partie d'une phrase
 - b. ait toujours un verbe conjugué
 - c. soit toujours accompagné d'une autre proposition
 - d. ait toujours un groupe verbe
19. Il N'EST PAS nécessaire que l'adjectif qualificatif
- a. donne toujours une qualité au nom auquel il se rapporte
 - b. s'accorde toujours en genre avec le nom auquel il se rapporte
 - c. soit toujours placé devant le nom auquel il se rapporte
 - d. s'accorde toujours en nombre avec le nom auquel il se rapporte
20. Il N'EST PAS nécessaire que le pronom possessif
- a. indique toujours la possession
 - b. soit toujours formé de deux mots
 - c. prenne toujours la place d'un nom
 - d. commence toujours par "le"

21. Un mot invariable qui ajoute une idée à un verbe, à un adjectif ou à un adverbe est
- a. un verbe
 - b. un adjectif
 - c. une conjonction
 - d. un adverbe
22. Un mot qui prend la place d'un nom en montrant l'être dont on parle est
- a. un adjectif démonstratif
 - b. un pronom démonstratif
 - c. un adverbe démonstratif
 - d. un nom démonstratif
23. Une proposition qui ne dépend d'aucune autre et dont aucune autre ne dépend est une proposition
- a. dépendante
 - b. indépendante
 - c. principale
 - d. subordonnée
24. L'adjectif numéral est un mot qui
- a. se rapporte au verbe en lui donnant une qualité
 - b. se rapporte au pronom personnel
 - c. prend la place du nom en indiquant le nombre, le rang ou l'ordre
 - d. se rapporte au nom en indiquant le nombre, le rang ou l'ordre
25. Le pronom relatif est un mot qui
- a. prend la place d'un nom ou d'un pronom en reliant deux phrases
 - b. relie deux propositions indépendantes
 - c. prend la place d'un nom ou d'un pronom en reliant deux propositions
 - d. relie la proposition indépendante à la proposition principale

26. La proposition principale est un groupe de mots
- a. dont dépend une ou plusieurs autres propositions qui la complètent
 - b. qui dépend d'une autre proposition et la complète
 - c. qui a un sujet mais qui ne dépend pas de la présence d'un verbe
 - d. qui n'a aucune autre proposition qui dépend d'elle
27. La proposition subordonnée est une sorte de
- a. proposition principale
 - b. phrase
 - c. phrase composée
 - d. proposition
28. L'adjectif démonstratif est une sorte
- a. de groupe de mots
 - b. d'adjectif
 - c. de pronom démonstratif
 - d. de pronom
29. Le verbe est
- a. une partie du discours
 - b. une sorte de terminaison
 - c. une sorte d'adverbe
 - d. une partie du groupe complément
30. Quelle est la phrase qui est vraie?
- a. Le nom et le pronom personnel se rapportent l'un à l'autre.
 - b. Quand le pronom personnel est singulier, le nom qu'il remplace est pluriel.
 - c. Le pronom personnel peut prendre la place d'un nom.
 - d. Le pronom personnel contient toujours moins de lettres que le nom qu'il remplace.

31. Quelle est la phrase qui est vraie?

- a. Le verbe d'état et le verbe d'action peuvent avoir un complément direct.
- b. Le verbe d'action s'accorde avec le sujet et le verbe d'état s'accorde avec l'attribut.
- c. Le verbe d'action peut avoir un complément direct et le verbe d'état peut avoir un attribut.
- d. Le verbe d'état est une sorte de verbe d'action.

32. Quelle est la phrase qui est vraie?

- a. Le verbe s'accorde en genre et en nombre avec son sujet.
- b. Le verbe s'accorde parfois avec son sujet.
- c. Le verbe s'accorde en personne et en nombre avec son sujet.
- d. Le sujet s'accorde en personne et en nombre avec son verbe.

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EXEMPLES:

1. Dans la phrase: "Le gros chat noir dort.", le mot le est
 - a. un adjectif
 - b. une phrase
 - c. un article
2. Quel est le mot souligné qui est un nom de personne?
 - a. Tous les jours, je vais à l'école.
 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le mot souligné qui donne une qualité au nom?
 - a. Le joueur de balle s'est blessé.
 - b. Le méchant loup fait peur aux poules.
 - c. Maman m'a donné un cadeau.
 - d. Bientôt papa arrivera à la maison.

2. Quel est le groupe de mots soulignés qui contient un verbe conjugué?
 - a. Avant de partir, habille-toi chaudement.
 - b. Il a donné un cadeau à ma soeur.
 - c. J'aime mon oncle parce qu'il m'apporte des cadeaux.
 - d. Il semble être très jeune.

3. Quel est le mot souligné qui peut être remplacé par un nom?
 - a. Les enfants glissent avec leur traineau.
 - b. Le nouveau chandail de Marie est jaune.
 - c. La neige cache les plantes.
 - d. Jean va au magasin avec elle.

4. Dans la phrase: "Ces fleurs sont fanées.", le mot ces
 - a. indique à qui appartiennent les fleurs
 - b. indique de quelles fleurs on parle
 - c. donne une qualité au verbe
 - d. prend la place d'un nom

5. Dans la phrase: "Le garçon brise la fenêtre et il s'excuse", le groupe de mots il s'excuse
 - a. dépend du reste de la phrase
 - b. ne dépend pas du reste de la phrase
 - c. relie les deux parties de la phrase
 - d. ne contient pas de verbe conjugué

6. Dans la phrase: "Mes souliers sont vieux tandis que les tiens sont neufs.", les tiens
- a. donne une qualité au verbe
 - b. indique la possession
 - c. prend la place du pronom
 - d. s'accorde avec l'adjectif
7. Quel est le mot souligné qui est un adjectif numéral?
- a. Le mécanicien répare la voiture neuve.
 - b. Tous les enfants s'amusent.
 - c. Il a deux yeux bleus.
 - d. Sept est un numéro chanceux.
8. Quel est le mot souligné qui est un pronom relatif?
- a. La fille qui t'a parlé est ma soeur Julie.
 - b. Le lit de poupée est à moi.
 - c. Il joue au hockey.
 - d. Quel mot as-tu souligné?
9. Quel est le groupe de mots soulignés qui est une proposition principale?
- a. Quand on est en classe, on doit écouter.
 - b. Bien qu'il soit malade, il va à l'école.
 - c. Il ouvre la porte et il entre.
 - d. Je suis certain qu'il peut venir
10. Quel est le mot souligné qui N'EST PAS un nom?
- a. Alice apprend la musique.
 - b. Il grimpa dans l'arbre.
 - c. Mon grand frère est en Angleterre.
 - d. La forêt abrite beaucoup d'oiseaux.

11. Quel est le mot souligné qui N'EST PAS un verbe?
- a. Regardez les enfants.
 - b. La lumière est forte.
 - c. Il mange lentement.
 - d. Jean part demain.
12. Quelle est la partie soulignée qui N'EST PAS une proposition subordonnée?
- a. Il faut que tu sois présent.
 - b. Avant qu'il entre, je lui demande son nom.
 - c. Quand j'ai téléphoné, quelqu'un m'a répondu.
 - d. Parce que c'était important qu'il parte vite, je l'ai conduit à la gare.
13. Dans la phrase: "Il saute à la corde.", Il est
- a. un nom commun
 - b. un pronom possessif
 - c. un pronom personnel
 - d. un nom propre
14. Dans la phrase: "Le chat est dans son panier.", le mot souligné est
- a. un verbe d'action
 - b. un verbe d'état
 - c. un attribut du verbe
 - d. un adverbe
15. Dans la phrase: "La reine du pays voyage souvent.", le mot reine est
- a. complément du nom
 - b. complément du sujet
 - c. sujet du verbe
 - d. attribut du sujet

16. Le pronom possessif doit toujours
- a. prendre la place d'un nom
 - b. être placé devant le verbe
 - c. commencer par le mot "le"
 - d. se rapporter au nom
17. Le verbe d'action doit toujours
- a. être le mot qui dit ce qui se passe
 - b. être placé après son sujet
 - c. être le seul verbe de la phrase
 - d. être à un temps composé
18. Un complément direct est toujours un mot qui
- a. répond à la question "quoi"?
 - b. répond à la question "qui"?
 - c. suit le verbe
 - d. reçoit l'action
19. Il N'EST PAS nécessaire que le pronom démonstratif
- a. prenne toujours la place d'un nom
 - b. montre toujours l'être dont on parle
 - c. commence toujours avec la lettre "c"
 - d. soit toujours composé de deux mots
20. Il N'EST PAS nécessaire que le temps composé
- a. ait toujours plus d'un mot
 - b. soit toujours au passé
 - c. ait toujours un auxiliaire
 - d. ait toujours un participe

21. Il N'EST PAS nécessaire que l'attribut
- a. s'accorde toujours en nombre avec le sujet
 - b. soit toujours introduit par un verbe d'état
 - c. soit toujours un adjectif
 - d. se rapporte toujours au sujet
22. Un mot qui prend la place d'un nom en reliant deux propositions est
- a. une conjonction
 - b. un pronom relatif
 - c. une préposition
 - d. un pronom personnel
23. Un mot qui unit des mots de même fonction ou des propositions est
- a. une conjonction
 - b. un adverbe
 - c. une interjection
 - d. un article
24. Un mot qui reçoit l'action du verbe à l'aide d'une préposition est
- a. un sujet du verbe
 - b. un attribut du sujet
 - c. un complément direct
 - d. un complément indirect
25. Un verbe est un mot qui
- a. décrit l'action ou l'état
 - b. fait l'action
 - c. reçoit l'action
 - d. donne une qualité à l'action

26. Le présent indique
- a. ce qui aura lieu plus tard
 - b. le lieu où se passe l'action
 - c. ce qui a lieu au moment où l'on parle
 - d. la personne qui fait l'action
27. Le complément circonstanciel est un mot qui
- a. ajoute une idée au sujet
 - b. fait connaître ce qui reçoit l'action du verbe
 - c. s'accorde avec un adverbe
 - d. fait connaître "où", "quand", "comment" ou "pourquoi" se passe l'action
28. Un adverbe est une
- a. forme de ponctuation
 - b. sorte d'adjectif
 - c. partie du discours
 - d. sorte d'auxiliaire
29. Le verbe d'état est une sorte
- a. de mode
 - b. d'adverbe
 - c. de verbe
 - d. de temps
30. Le passé est une sorte
- a. d'auxiliaire
 - b. de temps
 - c. de mode
 - d. de terminaison

31. Quelle est la phrase qui est vraie?

- a. L'adjectif possessif s'accorde en genre et en nombre avec le nom.
- b. L'adjectif possessif prend la place du nom.
- c. Le nom s'accorde en genre et en nombre avec l'adjectif possessif.
- d. Le nom prend la place de l'adjectif possessif.

32. Quelle est la phrase qui est vraie?

- a. Le futur est un temps du verbe.
- b. Le futur et le verbe sont des terminaisons.
- c. Le futur ne fait pas partie de tous les verbes.
- d. Le futur s'accorde avec le verbe.

33. Quelle est la phrase qui est vraie?

- a. Le nom s'accorde en genre et en nombre avec l'adjectif.
- b. Le nom s'accorde en personne et en nombre avec l'adjectif.
- c. L'adjectif s'accorde en genre et en nombre avec le nom.
- d. L'adjectif est toujours placé devant le nom.

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 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

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REPRODUCTION INTERDITE DE QUELQUE MANIERE QUE CE SOIT

1. Quel est le mot souligné qui prend la place d'un nom en montrant l'être dont on parle?
 - a. A l'automne, cet oiseau quitte notre pays.
 - b. Le garçon que tu vois est dans ma classe.
 - c. Maman vient à l'école avec nous.
 - d. Celle qui chante demeure près de chez-moi.

2. Quel est le mot souligné qui est un auxiliaire?
 - a. Claude semble énervé.
 - b. Les champs sont arrosés par la pluie.
 - c. Plusieurs élèves lisent ce livre.
 - d. La porte a été fermée par Pierre.

3. Quel est le mot souligné qui donne une qualité au sujet?
 - a. Le garçon est souvent malade.
 - b. Le garçon a frappé le chien enragé.
 - c. L'eau est trop salée.
 - d. Les lumières s'allument rapidement.

4. Dans la phrase: "La robe que tu portes est très belle.", le mot que
 - a. qualifie le pronom
 - b. prend la place du nom
 - c. qualifie le nom
 - d. indique la possession

5. Dans la phrase: "Tu boiras du lait ou du jus.", le mot ou
 - a. sert à unir deux noms
 - b. sert à unir un nom à un article
 - c. introduit une proposition
 - d. indique un lieu

6. Dans la phrase: "Luc parle de ses cadeaux.", le mot cadeaux
- a. fait l'action du verbe
 - b. décrit le sujet du verbe
 - c. reçoit directement l'action
 - d. reçoit indirectement l'action
7. Quel est le mot souligné qui est un verbe?
- a. La neige tombe lentement.
 - b. Nicole fait une balle de neige.
 - c. Nous avons froid.
 - d. Vous aimez jouer dehors.
8. Quel est le mot souligné qui est un verbe au temps présent?
- a. Il portait un béret vert.
 - b. Il connaît mon frère Jean.
 - c. Il regardait la télévision.
 - d. Papa arrivera tard aujourd'hui.
9. Quel est le mot souligné qui est un complément circonstanciel?
- a. Pour être en bonne santé Pierre boit du lait.
 - b. Un ours dort dans cette caverne.
 - c. Les élèves marchent le long du sentier.
 - d. Il y a des épingles au fond de ce panier.
10. Quel est le mot souligné qui N'EST PAS un adverbe?
- a. Nicole écrit soigneusement ses devoirs.
 - b. Maintenant, il faut faire des tartines.
 - c. Le beurre est très froid.
 - d. Jean rit parce que je récite.

11. Quel est le mot souligné qui N'EST PAS un verbe d'état?
- a. Les canards sont sur le lac.
 - b. Maman semble inquiète.
 - c. Ce jeu paraît amusant.
 - d. La pluie tombe sur les toits.
12. Quel est le groupe de mots soulignés qui N'EST PAS un verbe au temps passé?
- a. La journée fut agréable.
 - b. Il ne sont pas allés au cirque.
 - c. Regarde! L'avion atterrit sur la piste.
 - d. J'ai fini mon devoir.
13. Dans la phrase: "Leur chat est perdu.", le mot leur est
- a. un article
 - b. un adjectif qualificatif
 - c. un pronom personnel
 - d. un adjectif possessif
14. Dans la phrase: "Le chat boit son lait.", le mot boit est:
- a. un verbe d'état
 - b. un verbe d'action
 - c. un adverbe
 - d. un complément du verbe
15. Dans la phrase: "Je partirai tôt demain matin.", le verbe partirai est au temps
- a. passé
 - b. futur
 - c. présent
 - d. imparfait

16. L'adjectif qualificatif doit toujours
- a. dire la grandeur d'un objet
 - b. dire quelque chose d'un nom ou d'un pronom
 - c. être suivi d'un nom ou d'un pronom
 - d. donner une qualité à un adjectif
17. Le temps composé doit toujours être formé
- a. de l'auxiliaire avoir et d'un participe passé
 - b. de l'auxiliaire être et d'un participe passé
 - c. d'un auxiliaire et d'un participe présent
 - d. d'un auxiliaire et d'un participe passé
18. La proposition doit toujours
- a. avoir un verbe conjugué
 - b. commencer par un pronom relatif
 - c. être dépendante d'une autre proposition
 - d. commencer par une conjonction
19. Il N'EST PAS nécessaire que l'adjectif démonstratif
- a. s'accorde toujours en genre et en nombre avec le nom
 - b. se rapporte toujours au nom
 - c. montre toujours ce dont on parle
 - d. soit toujours immédiatement suivi d'un nom
20. Il N'EST PAS toujours nécessaire que la conjonction
- a. soit toujours invariable
 - b. serve toujours à unir
 - c. soit toujours entre les mots ou les propositions qui sont unis
 - d. soit toujours placée au milieu de la phrase

21. Il N'EST PAS nécessaire que la proposition indépendante
- a. ait toujours un verbe conjugué
 - b. ait une autre proposition qui dépend d'elle
 - c. ait toujours un groupe verbe
 - d. soit toujours la seule proposition dans la phrase
22. Un mot qui se rapporte au nom en indiquant le nombre, le rang ou l'ordre est
- a. un pronom relatif
 - b. un adjectif numéral
 - c. un adjectif qualificatif
23. La proposition dont dépend une ou plusieurs autres propositions qui la complètent s'appelle
- a. une proposition dépendante
 - b. une proposition indépendante
 - c. une proposition principale
 - d. une proposition verbale
24. Un mot qui dit quelque chose du sujet à l'aide d'un verbe d'état est
- a. un attribut
 - b. un complément direct
 - c. un article
 - d. un adjectif possessif
25. Un complément indirect est un mot qui
- a. remplace le verbe
 - b. se rapporte au sujet
 - c. reçoit l'action du verbe à l'aide d'une préposition
 - d. s'accorde avec le complément à l'aide d'une préposition

26. Le nom est un mot qui
- a. s'accorde en genre et en nombre avec un adjectif
 - b. désigne une personne, un animal ou une chose
 - c. est placé au début de chaque phrase
 - d. détermine le temps et le mode du verbe
27. La proposition subordonnée est une proposition
- a. qui dépend d'une autre proposition et la complète
 - b. qui ne dépend d'aucune autre proposition
 - c. qui complète une proposition indépendante
 - d. qui a moins de mots que les autres propositions
28. Le pronom personnel est une sorte
- a. d'adjectif possessif
 - b. de pronom possessif
 - c. de temps
 - d. de pronom
29. Le sujet est une partie
- a. de l'attribut
 - b. de la préposition
 - c. du verbe
 - d. de la proposition
30. Le complément circonstanciel est une partie
- a. de la locution verbale
 - b. du complément indirect
 - c. du groupe sujet
 - d. du groupe complément

31. Quelle est la phrase qui est vraie?

- a. Le pronom possessif est du même genre et du même nombre que le nom dont il prend la place.
- b. Le pronom possessif indique le possesseur du nom dont il prend la place.
- c. Le pronom possessif et le nom indiquent la possession.
- d. Le nom prend la place du pronom possessif.

32. Quelle est la phrase qui est vraie?

- a. Le complément direct fait l'action du verbe.
- b. Le complément direct reçoit l'action du verbe.
- c. Le complément direct donne une qualité au verbe d'action.
- d. Le complément direct s'accorde avec le verbe d'action.

33. Quelle est la phrase qui est vraie?

- a. Le passé et le verbe sont toujours des temps composés .
- b. Le passé est un temps du verbe
- c. Le verbe s'accorde avec le passé
- d. Le passé et le verbe sont des terminaisons

TEST DE COMPREHENSION DE STRUCTURES LINGUISTIQUES

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Afin d'en arriver à savoir ce que les jeunes de ton âge connaissent en grammaire française, j'ai besoin de ton aide. Je te demande donc de répondre aux questions suivantes, en faisant de ton mieux.

Pour chaque question, tu as un choix de trois ou de quatre réponses. Après avoir lu attentivement une question, choisis la réponse qui te semble la bonne. Si tu n'es pas certain de la réponse, choisis celle qui te semble la meilleure.

N'oublie pas de lire chaque numéro au complet avant de faire ton choix.

Pour indiquer ta réponse, encercle la lettre qui est placée devant la réponse que tu crois être la bonne. Ne choisis qu'une seule réponse par numéro.

Travaille à ta propre vitesse.

EXEMPLES:

1. Dans la phrase: "Le gros chat noir dort.", le mot le est
 - a. un adjectif
 - b. une phrase
 - c. un article
2. Quel est le mot souligné qui est un nom de personne?
 - a. Tous les jours, je vais à l'école.
 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le mot souligné qui se rapporte au nom en montrant la chose dont on parle?
 - a. La petite lampe de poche est brisée.
 - b. L'institutrice est contente de notre travail.
 - c. Ce chapeau appartient à ma soeur.
 - d. Le verre est rempli d'eau.

2. Quel est le mot souligné qui unit des mots de même fonction?
 - a. Le samedi et le dimanche sont jours de congés.
 - b. Le bébé apprend à parler.
 - c. Ton crayon est sur la table.
 - d. J'écris pour la première fois.

3. Quelle est la proposition soulignée qui ne dépend d'aucune autre et dont aucune autre ne dépend?
 - a. C'est un pays qui fait la guerre.
 - b. Croyez-vous que Luc se dépêche?
 - c. Ma soeur lave le plancher et elle le cire.
 - d. Quand il s'ennuie, il visite ses amis.

4. Quelle est la phrase qui indique ce qui aura lieu?
 - a. Je prendrai des vitamines.
 - b. J'ai acheté une bicyclette.
 - c. J'aimais ma grand-mère.
 - d. Je souris parce que je suis heureuse.

5. Dans la phrase: "Jean est assis dans le troisième banc.", le mot troisième indique
 - a. la possession
 - b. la grandeur
 - c. le temps
 - d. le rang

6. Dans la phrase: "L'oiseau vole très haut.", le mot vole exprime une action
- a. qui a lieu au moment où l'on parle
 - b. qui aura lieu demain
 - c. qui a eu lieu hier
 - d. qui n'a pas eu lieu encore
7. Dans la phrase: "Je ne suis pas sorti parce que j'étais fatigué.", la partie soulignée
- a. est la seule proposition de la phrase
 - b. dépend d'une autre proposition
 - c. a une autre proposition qui dépend d'elle
 - d. n'a aucune autre proposition qui dépend d'elle
8. Quel est le mot souligné qui est un nom?
- a. Le soleil brillera demain.
 - b. Il soigna sa blessure.
 - c. Mon père sera là dans un instant.
 - d. Mon maître aime jouer à la balle.
9. Quel groupe de mots soulignés est un verbe au temps passé?
- a. Maman me connaît trop bien.
 - b. Mon grand-père est déjà très vieux.
 - c. Mon maître a fini son travail tard.
 - d. Le policier ira visiter mon oncle.
10. Quelle est la partie soulignée qui est une proposition subordonnée?
- a. Le crime a eu lieu la semaine dernière dans la nuit.
 - b. L'erreur que tu as faite n'est pas grave.
 - c. Parce que j'étais malade, je suis resté au lit.
 - d. Paul s'est assis et a regardé une émission de télévision.

11. Quel est le mot souligné qui N'EST PAS un pronom personnel?
- a. Papa viendra avec nous au théâtre.
 - b. Notre maison a quatre chambres à coucher.
 - c. Vous irez à l'école.
 - d. Veux-tu avoir un tour de bicyclette?
12. Quel est le mot souligné qui N'EST PAS un verbe au temps futur?
- a. Le soleil brillera demain.
 - b. La lune ne paraîtra pas ce soir.
 - c. L'avion avertira la tour de contrôle.
 - d. Il soigna sa blessure.
13. Quel est le mot souligné qui N'EST PAS un sujet?
- a. Ce chien veut me mordre la main.
 - b. Pendant les vacances, il s'amuse.
 - c. Toutes les plumes servent à écrire.
 - d. Le lapin a de grosses dents blanches.
14. Dans la phrase: "Mon ballon est rouge, le leur est vert.", le leur est
- a. un pronom personnel
 - b. un pronom relatif
 - c. un pronom possessif
 - d. un pronom démonstratif
15. Dans la phrase: "Lucie lance la balle.", le mot balle est
- a. un attribut
 - b. un complément direct
 - c. un complément indirect
 - d. un sujet

16. Le pronom démonstratif doit toujours
- a. montrer ce dont on parle
 - b. être le sujet de la phrase
 - c. prendre un trait d'union
 - d. s'accorder avec le verbe
17. Un attribut doit toujours
- a. être un adjectif
 - b. dire quelque chose du sujet
 - c. suivre le verbe être
 - d. être un nom
18. Le sujet doit toujours
- a. être placé devant le verbe
 - b. faire l'action ou subir l'état
 - c. être un nom
 - d. être un pronom
19. Il N'EST PAS nécessaire que le verbe d'action
- a. indique toujours ce qui se passe
 - b. s'accorde toujours avec son sujet
 - c. puisse toujours se conjuguer
 - d. soit toujours au mode indicatif
20. Il N'EST PAS nécessaire que le pronom relatif
- a. prenne toujours la place d'un nom ou d'un pronom
 - b. se place toujours au milieu de la phrase
 - c. relie toujours deux propositions
 - d. soit toujours le premier mot de la proposition subordonnée

21. Il N'EST PAS nécessaire que le complément indirect
- a. réponde à une question telle que "à qui?", "à quoi?", "de quoi?" posée après le verbe
 - b. reçoive toujours indirectement l'action du verbe
 - c. soit toujours placé après le verbe
22. Un mot qui décrit l'action ou l'état est
- a. un attribut
 - b. un complément
 - c. un sujet
 - d. un verbe
23. Un mot qui dit ce qui a lieu en ce moment est un verbe au temps
- a. présent
 - b. passé
 - c. futur
 - d. composé
24. Un mot qui ajoute une idée au verbe en faisant connaître "où", "quand" ou "comment" se passe l'action est un complément
- a. du nom
 - b. circonstanciel
 - c. direct
 - d. indirect
25. L'adverbe est un mot qui
- a. donne une qualité au sujet du verbe
 - b. remplace un verbe, un adjectif ou un autre adverbe
 - c. ajoute une idée à un verbe, à un adjectif ou à un autre adverbe
 - d. est une partie d'un verbe à un temps composé

26. Le verbe d'état est un mot qui
- a. exprime une action
 - b. peut servir à introduire un attribut
 - c. désigne une personne, un animal ou une chose
 - d. donne une qualité à un verbe
27. Le passé est un temps qui indique
- a. ce qui aura lieu
 - b. ce qui a lieu
 - c. ce qui a déjà eu lieu
 - d. ce qui doit avoir lieu
28. L'adjectif possessif est une sorte
- a. de groupe de mots
 - b. d'adjectif
 - c. d'adjectif démonstratif
 - d. de pronom
29. Le verbe d'action est une sorte
- a. d'adverbe
 - b. de mode
 - c. de participe
 - d. de verbe
30. Le futur est une sorte de
- a. mode du verbe
 - b. mot accompagnant le verbe
 - c. temps du verbe
 - d. terminaison du verbe

31. Quelle est la phrase qui est vraie?

- a. L'adjectif qualificatif prend la place du nom.
- b. L'adjectif qualificatif s'accorde en genre et en nombre avec le nom.
- c. L'adjectif qualificatif est toujours suivi d'un nom.
- d. L'adjectif qualificatif indique à qui appartient le nom.

32. Quelle est la phrase qui est vraie?

- a. Le participe passé est une partie du temps composé.
- b. Le participe passé s'accorde avec le temps composé.
- c. Le participe passé est une sorte de temps composé.
- d. Le participe passé et le temps composé sont toujours au temps passé.

33. Quelle est la phrase qui est vraie?

- a. Dans une phrase, il peut y avoir plus d'une proposition.
- b. Dans une phrase il y a toujours une seule proposition.
- c. Toute proposition est une phrase.
- d. Dans une proposition il peut y avoir plus d'une phrase.

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EXEMPLES:

1. Dans la phrase: "Le gros chat noir dort.", le mot le est
 - a. un adjectif
 - b. une phrase
 - c. un article

2. Quel est le mot souligné qui est un nom de personne?
 - a. Tous les jours, je vais à l'école.
 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le mot souligné qui relie deux propositions?
 - a. Tu vois le garçon qui aide son père.
 - b. La nouvelle émission de télévision est intéressante.
 - c. Marie part de bonne heure pour l'école.
 - d. Les nuages blancs se promènent dans le ciel.

2. Quelle est la proposition soulignée dont dépend une autre proposition?
 - a. Il faudrait que je voie ma mère.
 - b. Parce qu'il est mort, son frère pleure.
 - c. Pierre joue du piano et Marie danse.
 - d. Mon père chante quand il neige.

3. Quel est le mot souligné qui reçoit l'action du verbe à l'aide d'une préposition?
 - a. Il fait noir très tôt.
 - b. Louise cueille toutes les pommes.
 - c. Il le donne à son père
 - d. Jacques est très brave.

4. Dans la phrase: "Le chien saute.", le mot saute
 - a. exprime l'action
 - b. décrit le nom
 - c. fait l'action
 - d. reçoit l'action

5. Dans la phrase: "Le canard vole dans le ciel.", le mot ciel fait connaître
 - a. celui qui fait l'action
 - b. celui qui reçoit l'action
 - c. l'action du verbe
 - d. une circonstance de lieu

6. Dans la phrase: "Le jeune enfant joue avec son ami.", le mot jeune
- a. se rapporte au verbe
 - b. donne une qualité au nom
 - c. s'accorde avec l'article
 - d. prend la place du nom
7. Quel est le mot souligné qui est un adverbe?
- a. C'est la nourriture du cheval.
 - b. Il y a des trous dans mes gants.
 - c. On cueille délicatement ces fleurs.
 - d. Il a perdu son nouveau cadran.
8. Quel est le mot souligné qui est un verbe d'état?
- a. Je patine avec mon ami.
 - b. Nous sommes au mois de décembre.
 - c. Le soleil se lève le matin.
 - d. Il soigne sa blessure.
9. Quelle est la proposition soulignée qui est une proposition indépendante?
- a. Elle et son frère se baignent et reviennent tôt.
 - b. J'achète un gâteau pour Georges qui demain aura dix ans.
 - c. La crème que vous aimez est sur la table.
 - d. Quand ils dorment, nous sommes tranquilles.
10. Quel est le mot souligné qui N'EST PAS un adjectif possessif?
- a. Paul est allé à ta maison.
 - b. Demain, je porterai mon manteau neuf.
 - c. Le chat a renversé son bol de lait.
 - d. Les élèves préparent cette pièce.

11. Quel est le mot souligné qui N'EST PAS un verbe d'action?
- a. Les élèves visiteront le musée vendredi.
 - b. Le feu détruit la forêt.
 - c. L'avion atterrit sur la piste.
 - d. Il me paraît sage.
12. Quel est le mot souligné qui N'EST PAS un pronom relatif?
- a. L'école que je fréquente est située près de chez-nous.
 - b. Il a brisé quelques fenêtres à l'école.
 - c. Nous aiderons les familles qui sont dans la misère.
 - d. La personne dont tu parles viendra nous visiter.
13. Dans la phrase: "Lise a de beaux cheveux.", le mot beaux est
- a. un adjectif possessif
 - b. un pronom personnel
 - c. un adjectif qualificatif
 - d. un complément du nom
14. Dans la phrase: "Nicolas a écrit une lettre.", a écrit est un verbe
- a. au temps présent
 - b. à un temps simple
 - c. à un temps composé
 - d. au temps futur
15. Dans la phrase: "Il est avec sa maman et maintenant tout va bien.", la partie soulignée est
- a. un groupe verbe
 - b. une préposition
 - c. un groupe sujet
 - d. une proposition

16. L'adjectif démonstratif doit toujours

- a. se rapporter à l'adjectif en montrant la chose dont on parle
- b. se rapporter au nom en montrant la chose dont on parle
- c. se rapporter au nom en indiquant la possession
- d. se rapporter au nom en indiquant l'ordre

17. Une conjonction doit toujours unir

- a. deux noms, deux pronoms ou deux verbes
- b. deux adjectifs qualificatifs
- c. deux mots qui sont sujets du verbe
- d. des mots de même fonction ou des propositions

18. La proposition indépendante doit toujours

- a. être celle qui n'a aucune autre proposition qui dépend d'elle
- b. être la première proposition de la phrase
- c. être la seule proposition de la phrase
- d. avoir un sujet, ~~et~~ verbe et un complément

19. Il N'EST PAS nécessaire que l'adjectif numéral

- a. se rapporte toujours à un nom
- b. indique toujours le nombre, le rang ou l'ordre
- c. s'accorde toujours avec le nom
- d. finisse toujours en "-ième"

20. Il N'EST PAS nécessaire que le présent

- a. exprime toujours une action ou un état
- b. indique toujours ce qui a lieu au moment où l'on parle
- c. soit toujours un verbe du premier groupe
- d. fasse toujours partie d'un mode

21. Il N'EST PAS nécessaire que la proposition principale
- a. ait toujours une autre proposition qui dépend d'elle
 - b. soit toujours la plus longue de la phrase
 - c. contienne toujours au moins un verbe
 - d. ait toujours une proposition subordonnée
22. Il N'EST PAS nécessaire que le complément direct
- a. ajoute toujours une idée au verbe
 - b. reçoive toujours l'action exprimée par le verbe
 - c. réponde toujours à la question "qui?" ou "quoi?"
 - d. soit toujours placé après le verbe
23. Un mot qui désigne une personne, un animal ou une chose est
- a. un adjectif
 - b. un adverbe
 - c. un nom
 - d. un verbe
24. Un mot qui dit ce qui a déjà eu lieu est un verbe au temps
- a. présent
 - b. passé
 - c. futur
 - d. infinitif
25. La proposition qui dépend d'une autre proposition et la complète est
- a. une proposition indépendante
 - b. une proposition principale
 - c. une proposition subordonnée
 - d. une proposition composée

26. Le pronom personnel est un mot qui
- a. prend la place d'un nom et qui indique une des personnes grammaticales
 - b. se rapporte au nom en montrant l'être ou la chose dont on parle
 - c. prend la place d'un pronom en indiquant le possesseur
 - d. relie l'adjectif qualificatif au nom
27. Le futur est un temps qui indique
- a. ce qui a lieu
 - b. ce qui aura lieu
 - c. ce qui a eu lieu
 - d. ce qui avait lieu
28. Un sujet est un mot qui
- a. remplace le nom
 - b. fait l'action ou subit l'état
 - c. reçoit l'action ou décrit l'état
 - d. complète le verbe
29. Le pronom possessif est une sorte
- a. de pronom
 - b. d'adjectif
 - c. de pronom personnel
 - d. d'adjectif possessif
30. La proposition peut être
- a. une phrase
 - b. un groupe sujet
 - c. un groupe complément
 - d. une locution

31. Le complément direct est une partie

- a. de l'adverbe
- b. de l'attribut
- c. de la phrase
- d. du groupe verbe

32. Quelle est la phrase qui est vraie?

- a. Le pronom démonstratif est du même genre et du même nombre que le nom qu'il remplace.
- b. Le pronom démonstratif et le nom qu'il remplace ne sont jamais dans la même phrase.
- c. Le pronom démonstratif et le nom qu'il remplace sont toujours dans la même phrase.
- d. Le pronom démonstratif est toujours placé au début de la phrase tandis que le nom peut être placé n'importe où.

33. Quelle est la phrase qui est vraie?

- a. L'attribut s'accorde avec le sujet du verbe.
- b. Tout sujet a un attribut.
- c. Quand le sujet est au début de la phrase, l'attribut est à la fin.
- d. L'attribut s'accorde en genre et en nombre avec le verbe.

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Année du cours.....

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EXEMPLES:

1. Dans la phrase: "Le gros chat noir dort.", le mot le est
 - a. un adjectif
 - b. une phrase
 - c. un article

2. Quel est le mot souligné qui est un nom de personne?
 - a. Tous les jours, je vais à l'école.
 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le mot souligné qui se rapporte au nom en indiquant le nombre?
 - a. Les oreilles du lapin sont roses.
 - b. Paul a trois petits canards.
 - c. J'ai acheté une douzaine d'oeufs.
 - d. Je suis le treizième.

2. Quelle est la phrase qui indique ce qui a lieu en ce moment?
 - a. Paul travaillait souvent le soir.
 - b. Jean quitte la maison.
 - c. L'autobus est parti déjà.
 - d. Je mangerai en arrivant chez nous.

3. Dans la phrase: "Jean est parti.", le mot Jean
 - a. décrit une action passée
 - b. détermine le temps du verbe
 - c. désigne une personne
 - d. exprime un état

4. Dans la phrase: "L'autobus est parti à deux heures.", est parti indique
 - a. ce qui a lieu au moment où l'on parle
 - b. ce qui aura lieu dans un instant
 - c. ce qui a déjà eu lieu
 - d. ce qui va se passer plus tard

5. Dans la phrase: "Jean aime la fille qui a les cheveux blonds.", la proposition soulignée
 - a. ne dépend d'aucune autre proposition
 - b. dépend d'une autre proposition
 - c. est celle dont une autre dépend
 - d. est la seule proposition de la phrase

6. Quel est le mot souligné qui est un pronom personnel?
- a. Ma cousine viendra me visiter.
 - b. Le chien dresse les oreilles.
 - c. Il court très vite.
 - d. Paul marche à pas de loup.
7. Quel est le mot souligné qui est un verbe au temps futur?
- a. Pierre a averti Paul.
 - b. Maman m'aimait beaucoup.
 - c. Mon ami caressa son chien.
 - d. Mon père sera là dans un instant.
8. Quel est le mot souligné qui est un sujet?
- a. La lecture est facile.
 - b. Les bonbons sont durs.
 - c. Le lait vient des vaches.
 - d. Il a frappé la balle.
9. Quel est le groupe de mots soulignés qui N'EST PAS un pronom possessif?
- a. Ton dessin est aussi beau que le mien.
 - b. La robe de Lise est pareille à la mienne.
 - c. Notre père est allé au concert avec nous.
10. Quelle est la partie soulignée qui N'EST PAS une proposition?
- a. Tais-toi!
 - b. Julie ira voir un concert au centre récréatif.
 - c. Marc a passé son examen de français parce qu'il a étudié.
 - d. Elle entre, elle se retourne et elle ferme la porte.

11. Quel est le mot souligné qui N'EST PAS un complément direct?
- a. Il joue du violon.
 - b. Je donne un cadeau à mon père.
 - c. Je prends ma place.
 - d. Mon frère chante cette chanson.
12. Dans la phrase, "De toutes ces voitures, j'aime celle-ci", celle-ci est
- a. un pronom possessif
 - b. un pronom indéfini
 - c. un pronom démonstratif
 - d. un pronom personnel
13. Dans la phrase, "L'auto arrête et je traverse la rue.", le groupe de mots "L'auto arrête" est une proposition
- a. dépendante
 - b. indépendante
 - c. principale
 - d. subordonnée
14. Dans la phrase: "Le vent est froid", le mot froid est
- a. attribut
 - b. complément circonstanciel
 - c. complément direct
 - d. complément indirect
15. Dans la phrase: "Les enfants aiment manger des bonbons.", le mot aiment est
- a. un verbe conjugué
 - b. un verbe à l'infinitif
 - c. un adverbe
 - d. un participe présent

16. Dans la phrase: "Tu connais bien ta grammaire.", le mot grammaire est
- a. un nom
 - b. un pronom
 - c. un adjectif
 - d. un adverbe
17. Le pronom relatif doit toujours
- a. être le sujet du verbe
 - b. avoir trois lettres
 - c. relier deux noms
 - d. relier deux propositions
18. La proposition principale doit toujours
- a. être complétée par une subordonnée
 - b. être au début de la phrase
 - c. avoir un sujet, un verbe et un complément
 - d. contenir plus de mots que le reste de la phrase
19. Le complément indirect doit toujours
- a. répondre à la question "qui?"
 - b. compléter le verbe
 - c. être placé à la fin d'une phrase
 - d. suivre immédiatement son verbe
20. Il N'EST PAS nécessaire que le verbe
- a. décrive toujours l'action ou l'état
 - b. s'accorde toujours avec son sujet
 - c. puisse toujours se conjuguer
 - d. ait toujours un complément

21. Il N'EST PAS nécessaire que le complément circonstanciel
- a. fasse toujours connaître une circonstance
 - b. ajoute toujours une idée au verbe
 - c. soit toujours placé après le verbe
 - d. réponde toujours à une question posée après le verbe
22. Un mot qui se rapporte au nom en montrant la personne, l'animal ou la chose dont on parle est
- a. un nom commun
 - b. un pronom personnel
 - c. un verbe d'action
 - d. un adjectif démonstratif
23. Un mot qui relie un attribut au sujet est
- a. un verbe d'état
 - b. une conjugaison
 - c. un verbe d'action
 - d. un complément direct
24. Un groupe de mots qui contient un verbe conjugué est
- a. un groupe sujet
 - b. une proposition
 - c. une locution adverbiale
 - d. une préposition
25. L'adjectif possessif est un mot qui
- a. prend la place du nom en indiquant la possession
 - b. se rapporte à l'adjectif en indiquant la possession
 - c. se rapporte au nom en indiquant la possession
 - d. prend la place de l'adjectif en indiquant la possession

26. Le verbe d'action est un mot qui
- a. indique ce que sont les personnes, les animaux ou les choses
 - b. désigne une personne, un animal ou une chose
 - c. indique ce que font les personnes, les animaux ou les choses
 - d. indique celui qui reçoit l'action exprimée par le verbe
27. Le temps composé est un verbe qui est formé
- a. d'un auxiliaire avoir et d'un participe passé
 - b. d'un auxiliaire être et d'un participe passé
 - c. d'un auxiliaire et d'un participe présent
 - d. d'un auxiliaire et d'un participe passé
28. L'adjectif qualificatif est une sorte
- a. d'adjectif
 - b. d'adjectif démonstratif
 - c. de nom
 - d. de pronom
29. Le temps composé est une sorte
- a. de participe passé
 - b. de passé composé
 - c. de temps
 - d. d'auxiliaire
30. Le nom est
- a. une forme de ponctuation
 - b. une partie du discours
 - c. une sorte de genre
 - d. une sorte de pronom

31. Quelle est la phrase qui est vraie?

- a. Le nom et l'adjectif démonstratif sont toujours suivis d'un verbe.
- b. Le nom et l'adjectif démonstratif sont unis par un trait d'union.
- c. L'adjectif démonstratif s'accorde avec le nom.
- d. L'adjectif démonstratif prend la place du nom.

32. Quelle est la phrase qui est vraie?

- a. Une conjonction peut unir deux propositions indépendantes.
- b. Toute proposition indépendante contient une conjonction.
- c. Toute conjonction sert à compléter une proposition indépendante.
- d. Une proposition ne contient jamais de conjonction.

33. Quelle est la phrase qui est vraie?

- a. L'adjectif se rapporte à l'adverbe.
- b. L'adjectif et l'adverbe sont invariables.
- c. L'adverbe peut être formé à l'aide de l'adjectif.
- d. L'adjectif ajoute une idée à l'adverbe.

TEST DE COMPREHENSION DE STRUCTURES LINGUISTIQUES

Nom de l'élève.....
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EXEMPLES:

1. Dans la phrase: "Le gros chat noir dort.", le mot le est
 - a. un adjectif
 - b. une phrase
 - c. un article

2. Quel est le mot souligné qui est un nom de personne?
 - a. Tous les jours, je vais à l'école.
 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le mot souligné qui exprime l'action?
 - a. Jean mange un biscuit.
 - b. Luc aime la pluie ce matin.
 - c. Tous les enfants jouent.
 - d. Nicole berce la jolie poupée.

2. Quelle partie soulignée est une proposition qui dépend d'une autre proposition?
 - a. Il est évident que j'étudie beaucoup.
 - b. Jean Vanier est un homme reconnu.
 - c. L'ami, qu'il a connu en France, arrive ce matin.
 - d. Parce que je travaille bien, ma mère me récompense.

3. Quel est le mot souligné qui indique le temps de l'action?
 - a. Je parle parce que je veux.
 - b. Il travaille ce matin.
 - c. Le cheval mâche le foin.
 - d. Le train partira bientôt.

4. Dans la phrase: "Aujourd'hui, il fait très froid.", le mot très ajoute une idée
 - a. au pronom
 - b. au verbe
 - c. à l'adjectif
 - d. au nom

5. Dans la phrase: "L'automobile de mon maître est blanche.", le mot souligné
 - a. exprime l'état
 - b. exprime l'action
 - c. fait l'action
 - d. subit l'état

6. Dans la phrase: "Les enfants écoutent la radio.", le mot enfants nous dit
- a. ce qui se passe
 - b. qui reçoit l'action
 - c. qui fait l'action
 - d. comment l'action se passe
7. Quel est le mot souligné qui est un adjectif possessif?
- a. Jean appelle ses amis.
 - b. Ce verre est brisé.
 - c. Le chat a des griffes pointues.
 - d. La jeune fille se réveille tôt le matin.
8. Quel est le mot souligné qui est un verbe d'action?
- a. Nous sommes au mois de décembre.
 - b. Le chien paraît blessé.
 - c. L'hiver, je patine avec mes amis.
 - d. Le maître semble de bonne humeur.
9. Quel est le mot souligné qui est un complément direct?
- a. Cette blouse se lave bien.
 - b. Je connais la réponse juste.
 - c. Le facteur apporte les lettres.
 - d. Le lait est frais.
10. Quel est le mot souligné qui N'EST PAS un adjectif qualificatif?
- a. Les jolies robes sont à ma mère.
 - b. L'oiseau est perché sur une branche.
 - c. Mon livre de lecture est intéressant.
 - d. Le grand frère de Paul s'appelle Michel.

11. Quel est le groupe de mots soulignés qui N'EST PAS un verbe au temps composé?
- a. Les fenêtres restent ouvertes le jour.
 - b. Les roses sont fanées.
 - c. L'avion a atterri sur la piste.
 - d. La neige avait couvert le toit.
12. Quelle est la partie soulignée qui N'EST PAS une proposition principale?
- a. Je suis content qu'il viendra à ma fête.
 - b. Parce qu'il fait très chaud, ouvre la porte.
 - c. Quand il entrera, ne lui parle pas.
 - d. Viens me voir demain afin que l'on puisse discuter.
13. Dans la phrase: "Le chien saute.", le mot saute est
- a. un adjectif
 - b. un adverbe
 - c. un complément
 - d. un verbe
14. Dans la phrase: "Je suis allé au magasin, parce que maman avait besoin de lait.", la partie soulignée est
- a. une proposition démonstrative
 - b. une proposition indépendante
 - c. une proposition principale
 - d. une proposition subordonnée
15. Dans la phrase: "Ce hibou me fait peur.", le mot ce est
- a. un adjectif démonstratif
 - b. un adjectif qualificatif
 - c. un pronom personnel
 - d. un pronom démonstratif

16. Dans la phrase: "Il tremblait car il avait peur.", le mot car est

- a. une proposition
- b. une préposition
- c. un article
- d. une conjonction

17. L'adjectif numéral doit toujours

- a. être au pluriel
- b. indiquer le nombre, le rang, ou l'ordre
- c. s'accorder avec le sujet
- d. se placer devant le verbe

18. Le présent doit toujours

- a. finir en "e", "es", "e", "ons", "ez", "ent"
- b. être au mode indicatif
- c. indiquer ce qui a lieu en ce moment
- d. exprimer une action

19. L'adverbe doit toujours

- a. ajouter une idée à un verbe, à un adjectif ou à un autre adverbe
- b. finir en "ment"
- c. être placé après le verbe
- d. ajouter une idée à un nom ou à un pronom

20. Il N'EST PAS nécessaire que le nom

- a. ait toujours un genre et un nombre
- b. désigne toujours une personne, un animal ou une chose
- c. soit toujours propre ou commun
- d. soit toujours accompagné d'un article

21. Il N'EST PAS nécessaire que le passé
- a. indique toujours ce qui a déjà eu lieu
 - b. finisse toujours en "é"
 - c. exprime toujours une action ou un état
 - d. soit toujours un temps d'un verbe
22. Il N'EST PAS nécessaire que la proposition subordonnée
- a. donne toujours une explication au reste de la phrase
 - b. soit toujours plus courte que la proposition principale
 - c. contienne toujours au moins un verbe
 - d. dépende toujours d'une autre proposition
23. Un mot qui prend la place d'un nom et qui indique l'une des trois personnes grammaticales est
- a. un pronom personnel
 - b. un adjectif
 - c. un pronom possessif
 - d. un complément
24. Un mot qui dit ce qui aura lieu dans un moment est un verbe au temps
- a. présent
 - b. futur
 - c. passé
 - d. imparfait
25. Un mot qui indique qui fait l'action exprimée par le verbe est
- a. un complément
 - b. un attribut
 - c. un sujet
 - d. un adverbe

26. Le pronom possessif est un mot qui
- a. prend la place d'un pronom en indiquant la possession
 - b. prend la place d'un nom en indiquant la possession
 - c. se rapporte au nom en indiquant la possession
 - d. se rapporte au pronom en indiquant la possession
27. La proposition peut être
- a. un groupe de mots qui contient un verbe conjugué
 - b. un groupe sujet et un groupe complément
 - c. deux phrases
 - d. un mot qui donne une qualité au nom
28. Le complément direct est un mot qui
- a. indique l'état ou l'action
 - b. reçoit l'action du verbe avec l'aide d'une préposition
 - c. fait l'action exprimée par le verbe
 - d. reçoit l'action du verbe sans l'aide d'une préposition
29. Le pronom démonstratif est un sorte
- a. de pronom
 - b. d'adjectif
 - c. d'adjectif démonstratif
 - d. de pronom personnel
30. La proposition indépendante est une sorte de
- a. principale
 - b. subordonnée
 - c. groupe sujet
 - d. proposition

31. L'attribut est

- a. une forme de ponctuation
- b. une sorte d'adverbe
- c. une partie du groupe sujet
- d. une partie du discours

32. Quelle est la phrase qui est vraie?

- a. Le nom peut être sujet du pronom relatif.
- b. Le pronom relatif relie deux noms ou deux pronoms.
- c. Le nom et le pronom relatif prennent toujours la place d'un autre mot.
- d. Le pronom relatif est du même genre et du même nombre que le nom qu'il remplace.

33. Quelle est la phrase qui est vraie?

- a. Le complément indirect reçoit l'action du verbe à l'aide d'une préposition.
- b. Le complément indirect reçoit l'action du verbe sans l'aide d'une préposition.
- c. Le verbe reçoit l'action de son complément indirect.
- d. Le complément indirect s'accorde en genre et en nombre avec son verbe.

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 - b. Mon petit frère s'appelle Pierre.
 - c. Les élèves chantent dans la classe.
 - d. L'automobile de mon père est bleue.

1. Quel est le mot souligné qui désigne une chose?
 - a. Luc vient justement d'arriver.
 - b. Le livre de lecture est déchiré.
 - c. Le vieux soulier n'est plus utile.
 - d. Quand ça lui plaît, il sourit.

2. Quelle est la phrase qui indique ce qui a déjà eu lieu?
 - a. Jean a couru tout le long du chemin.
 - b. Le chasseur tue l'ours.
 - c. Papa salue son voisin chaque matin.
 - d. Je mesure la hauteur de la porte.

3. Quel est le mot souligné qui peut être remplacé par un nom?
 - a. Les enfants glissent avec leur traineau.
 - b. Le nouveau chandail de Marie est jaune.
 - c. La neige cache les plantes.
 - d. Jean va au magasin avec elle.

4. Dans la phrase: "Nous sommes contents.", le mot nous
 - a. peut prendre la place d'un nom
 - b. donne une qualité au verbe
 - c. indique la possession
 - d. exprime un état

5. Dans la phrase: "Le train partira dans une heure.", le mot partira indique
 - a. ce qui a lieu en ce moment
 - b. ce qui aura lieu bientôt
 - c. ce qui a déjà eu lieu
 - d. ce qui se passe maintenant

6. Quel est le groupe de mots soulignés qui est un pronom possessif?
- a. Tes amies sont toujours très gentilles.
 - b. Il faut que le soldat se tienne bien droit.
 - c. L'automobile de ton oncle est dans le garage.
 - d. Je te prêterai ma plume si tu me prêtes la tienne.
7. Quel est le mot souligné qui est un pronom démonstratif?
- a. Celui qui parle fort me fatigue.
 - b. J'aime cette chanson française.
 - c. Ces sauterelles font peur au bébé.
 - d. Ecrivez avec ce crayon.
8. Quel est le groupe de mots soulignés qui est une proposition?
- a. Elle a enseigné les mathématiques à ma soeur.
 - b. Les garçons de la classe aiment jouer au hockey.
 - c. L'homme, que tu as vu à l'hôpital, est mort.
 - d. Pourtant, il a fait son possible.
9. Quel mot souligné N'EST PAS un pronom démonstratif?
- a. Des deux cadeaux, je préfère celui de Marc.
 - b. Ces timbres sont à Jean mais je cherche ceux de Pierre.
 - c. Cette voiture file très rapidement.
 - d. Cela intéresse tous les enfants.
10. Quel est le groupe de mots soulignés qui N'EST PAS une proposition indépendante?
- a. Il fait noir et il faut rentrer à la maison.
 - b. Il se trouve drôle quand il raconte cette histoire.
 - c. Je multiplie par deux ou j'ajoute quatre.
 - d. Le vent souffle.

11. Quel est le mot souligné qui N'EST PAS un attribut?
- a. Le velours est doux.
 - b. Marcel semble très habile.
 - c. Maman paraît fatiguée.
 - d. Il veut gagner.
12. Dans la phrase: "C'est dans le tiroir que tu trouveras tes gants.", le mot que est
- a. pronom relatif
 - b. pronom possessif
 - c. pronom personnel
 - d. pronom démonstratif
13. Dans la phrase: "Bien que je l'aime beaucoup, il semble me détester.", la partie soulignée est une
- a. proposition d'état
 - b. proposition indépendante
 - c. proposition principale
 - d. proposition subordonnée
14. Dans la phrase: "Lucie parle de son chien.", le mot chien est un complément
- a. direct
 - b. indirect
 - c. circonstanciel
 - d. attribut
15. Le verbe doit toujours
- a. avoir un complément
 - b. exprimer l'action ou l'état
 - c. être placé après le nom
 - d. faire l'action

16. La proposition subordonnée doit toujours
- a. commencer par le mot "qui"
 - b. être accompagné d'une seule autre proposition
 - c. dépendre du reste de la phrase
 - d. être la dernière proposition de la phrase
17. Le complément circonstanciel doit toujours
- a. être placé à la fin d'une phrase
 - b. être un adverbe
 - c. suivre une préposition
 - d. compléter l'idée exprimée par le verbe
18. Il N'EST PAS nécessaire que l'adverbe
- a. ajoute toujours une idée à une autre mot
 - b. soit toujours invariable
 - c. ajoute toujours une idée à un autre adverbe
19. Il N'EST PAS nécessaire que le verbe d'état
- a. indique toujours l'état de son sujet
 - b. s'accorde toujours avec son sujet
 - c. puisse toujours se conjuguer
 - d. soit toujours le seul verbe dans la phrase
20. Il N'EST PAS nécessaire que le sujet
- a. détermine la personne du verbe
 - b. détermine le nombre du verbe
 - c. soit toujours placé devant le verbe
 - d. fasse l'action ou subisse l'état exprimé par le verbe

21. Un mot qui se rapporte au nom en indiquant la possession est
- a. un pronom relatif
 - b. un adjectif possessif
 - c. un pronom personnel
 - d. un adjectif qualificatif
22. Un mot qui indique ce que font les personnes, les animaux ou les choses est
- a. un nom
 - b. un pronom
 - c. un verbe d'état
 - d. un verbe d'action
23. Un mot qui reçoit l'action du verbe sans l'aide d'une préposition est
- a. un attribut
 - b. un complément direct
 - c. un complément indirect
 - d. un sujet
24. L'adjectif qualificatif est un mot qui
- a. qualifie le verbe
 - b. qualifie l'adverbe
 - c. donne une qualité au nom
 - d. donne une qualité à un adjectif
25. Une conjonction est un mot qui
- a. unit des mots de même fonction ou des propositions
 - b. unit seulement des propositions indépendantes
 - c. sert à exprimer la joie, la douleur ou un autre sentiment
 - d. sert à unir le complément indirect au verbe

26. L'attribut est un mot qui
- a. dit quelque chose du sujet à l'aide d'un verbe d'état
 - b. complète le verbe sans l'aide d'une préposition
 - c. reçoit l'action exprimée par le verbe
 - d. fait l'action exprimée par le verbe
27. Une conjonction est
- a. une partie du discours
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 - d. une sorte de pronom
28. Le complément indirect est une partie
- a. du groupe verbe
 - b. de la phrase
 - c. du complément circonstanciel
 - d. du groupe sujet
29. L'adjectif numéral est une sorte
- a. d'adjectif
 - b. d'adverbe
 - c. de pronom
 - d. de nom
30. Quelle est la phrase qui est vraie?
- a. Un verbe au temps présent est toujours au mode indicatif.
 - b. Le mode indicatif est une sorte de temps présent.
 - c. Le temps présent et le mode indicatif sont deux sortes de verbe.
 - d. Le temps présent est un des temps du mode indicatif.

31. Quelle est la phrase qui est vraie?

- a. L'adjectif numéral indique le nombre tandis que le nom indique le rang.
- b. L'adjectif numéral se rapporte au nom.
- c. Quand l'adjectif numéral est pluriel, le nom est singulier.
- d. L'adjectif numéral doit être placé immédiatement devant le nom.

32. Quelle est la phrase qui est vraie?

- a. Dans chaque phrase le verbe conjugué a un complément circonstanciel.
- b. Le complément circonstanciel est toujours placé après le verbe.
- c. Le complément circonstanciel s'accorde avec le verbe.
- d. Le complément circonstanciel complète l'idée exprimée par le verbe.

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An Inquiry into the Process of Grammar Concept Attainment in the Franco-Ontarian Junior School Child¹

The purpose of this study is to obtain information regarding the process of attaining classificatory concepts in grammar. The study focuses on Franco-Ontarian students of grades four, five, and six. There are two parts to the study, a theoretical analysis, and an empirical investigation. Klausmeier's Model of Concept Learning and Development is used as the central theoretical perspective throughout.

The theoretical analysis includes the examination of several elements relevant to the grammar concept learning process. It relies heavily on the distinction between practical and theoretical knowledge of grammar. The relationship between these two types of knowledge is studied in some detail. It is suggested that Klausmeier's classificatory level of concept mastery is an element of practical knowledge and that his formal level of concept mastery is an element of theoretical knowledge.

Another element examined in the theoretical analysis is the nature of a grammar concept as it is understood by the various theories of linguistics. The grammar concepts

¹ Avrim Lazar, doctoral thesis presented to the School of Graduate Studies of the University of Ottawa, Ontario, 1976.

likely to be attained at the classificatory level and those likely to be attained at the formal level are studied separately and it is suggested that the concepts likely to be attained at the formal level are a subset of those likely to be already learned at the classificatory level.

A review of the empirical literature on language development and metalinguistic development is included and it is concluded from it that the two levels of concept mastery must be studied separately. The study is then focused to concentrate on the attainment of grammar concepts at the formal level of mastery.

Several descriptions of the process of concept attainment are evaluated for their applicability to the case of grammar concept learning at the formal level of mastery in the Franco-Ontarian junior school child. It is suggested that concept assimilation and concept development are the two most likely descriptions. Three observations are cited as favouring the likelihood of the concept development process. They are the student's high degree of grammar concept mastery at the classificatory level, the student's low degree of metalinguistic maturity, and the ambiguity of traditional grammar definitions.

The empirical investigation was conducted in order to test the hypothesis that for the Franco-Ontarian junior school child grammar concept attainment at the formal level

of mastery is better described as a function of concept development than as a function of concept assimilation. The inquiry is based on a comparison of ability to identify examples of grammar concepts and knowledge of the defining attributes of the same concepts. The instrument employed is the Test de Compréhension de Structures Linguistiques. The sample includes 133 classes. Multiple matrix sampling procedures are used in the data collection. The data is analyzed using univariate analysis of variance with a three-factor unbalanced nested design ($p < .05$). The results are interpreted as favouring the hypothesis.

It is concluded that the process of attaining grammar concepts at the formal level of mastery in the Franco-Ontarian junior school child may be described as concept development. The results are interpreted as supporting Klausmeier's theory. In addition, it was noted that the theoretical analysis provides evidence of the heuristic power of Klausmeier's Model of Concept Learning and Development.

Practical implications and directions for further research are presented.