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THE UNIVERSITY OF ALBERTA

AN ANALYSIS OF SEMIOTIC FACTORS IN CARTOON VISUALS AND THEIR EFFECT
ON CONVEYING MEANING IN SECOND LANGUAGE TEACHING

by
(C) LOUIS J. MAURICE

A DISSERTATION
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

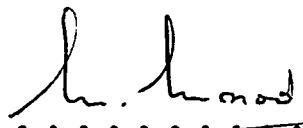
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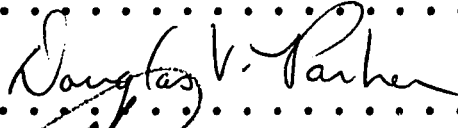
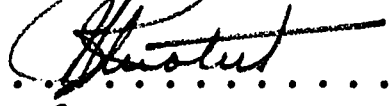
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The undersigned certify that they have read, and recommend
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"Semiotic Factors in Visual Communication" submitted by Louis J.
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ABSTRACT

In order to determine some of the factors in conveying meaning with cartoon filmstrip visuals, a random sample of thirty pictures from Voix et Images de France was analyzed into categories of the medium and categories of the content of the intended messages. The dimensions of the content selected for this study were: style, modality, relations of the topic and comment, and the total message. The elements of the medium were analyzed according to the nature of the relationship between the element and its intended meaning, the mode of signifying of the elements of the medium, and the type of code used. The pictures were further analyzed for complexity and use of ideographemes.

In order to elicit responses from the students, the sample of thirty pictures was divided into two sets of fifteen pictures each. One group of grade seven students interpreted pictures one to fifteen in isolation and pictures fifteen to thirty in context. The mode of presentation was reversed for the other group of students.

It was hypothesized that for pictures in isolation and in context neither the semantic nor the syntactic categories of the message would be associated with a significant difference in response to style, modality, and relations of the messages. It was further hypothesized that neither complexity nor use of ideographemes either in isolation or in context would be related to a difference on the total message. A two-way analysis of variance with repeated measures on one factor was used. The levels of factor A were the syntactic and semantic categories, the levels of complexity and use of ideographemes. The repeated measures were mode of

presentation. To test the significance of the difference between means, Scheffe's Test was used.

The results indicated that mode of presentation had the same overall effect on the semantic and syntactic categories for style, modality, and relations of the messages, and on the levels of complexity as well as the use of ideographemes and the total message.

The responses to style were not associated with a significant difference between modes of presentation. The responses to modality and to the relations of the message, on the other hand, were influenced by mode of presentation. The pictures in context were associated with a higher level of response.

The semantic categories of the messages were related to a significant difference on the students' responses both in isolation and in context for style, modality, and relations. The level of response was affected by the syntactic categories of elements to express modality. For relations, however, the level of response was not affected by the syntactic categories used to express the content.

The responses to pictures of three levels of complexity differed from one another. The most complex pictures were associated with the lowest level of correct interpretation. Although ideographemic pictures elicited a higher mean response than non-ideographemic pictures, there was no significant difference between the response elicited by either ideographemic or non-ideographemic pictures.

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CHAPTER I

THE PROBLEM

I. BACKGROUND OF THE PROBLEM

The recent advances in psychology and linguistics have made it difficult to establish a comprehensive and adequate theory for second language learning and teaching. Complications arise from the divergent views held with regard to the nature of language and the most appropriate strategies for research in language.

Skinner¹ strongly advocates that inquiries into natural languages should be restricted to verbal behavior, and insists that research into conditions and effects of usage proceed as if nothing were known about the design features of the system. He, therefore, deliberately rejects terms like "idea", "meaning", and "information".

On the other hand, a psychology which is becoming increasingly less behavioristic, such as that of Miller, Galanter and Pribram,² shifts the focus of attention from the speech signal as a response to some external situation to a domain of cognitive states.

Linguistics has had a similar evolution. Bloomfield³ claims

¹B. F. Skinner, Verbal Behavior (New York: Appleton, 1957), p. 2.

²G. A. Miller, E. Galanter, and K. H. Pribram, Plans and the Structure of Behavior (New York: Holt, 1960)

³Leonard Bloomfield, Language (New York: Holt and Co., 1945), p. 17.

that meanings should not enter into consideration. "The only evidence for these mental processes is the linguistic process; they [meanings] add nothing to the discussion, but only obscure it." Chomsky⁴ on the other hand, sets as his goal the assessment of rules of speech as embodied in the competence of the individual speaker-listener. Although Chomsky is more directly concerned with the phonological and syntactic components of a grammar, he allows for the semantic component in his description of a grammar.

Faced with these divergent views concerning research in language, it is not surprising that teachers are perplexed about the nature of language and the appropriate strategies for teaching second languages.

Among linguists there has been a growing desire to apply scientific principles to the language learning process. Applied linguistics has exerted its influence not only on the linguistic content of language teaching courses but also on the very methodology of the classroom and the language laboratory. The development of audio-lingual and audio-visual courses have been efforts in this direction. One of the scientific principles to exert the greatest influence upon methodology has been that of "conditioning" or "habit formation". Politzer emphasizes the importance of this principle:

To summarize them, the psychological triangle underlying second language learning is: (1) pattern perception; (2) habit formation; (3) a set of already existing speech habits. All of these three are of necessity interlocked; all of them may in fact interfere with

⁴Noam Chomsky and Morris Halle, The Sound Pattern of English (New York: Harper & Row, Publishers, 1968), pp. 3-7.

each other. The answer of the linguistic approach as advocated in this text is: (1) creation of pattern perception; (2) automatization of response, especially at (3) the points of interference.⁵

Renard in describing the audio-visual structuro-global method of Saint Cloud stresses the importance of conditioning:

En conséquence, un véritable reconditionnement est indispensable à qui veut apprendre une langue étrangère. Il faut créer des automatismes, des réflexes, il faut stimuler le cerveau. Il suffit pour cela d'appliquer autant que faire se peut les grandes lois du conditionnement.⁶

Guberina⁷ adds that nobody can speak a foreign language if he has to think in advance about constructions and rules.

Language acquisition, however, involves much more than habit formation or conditioning. The need for meaningful use of language which involves intelligence and creativity is always stressed whenever imitation, repetition, and various drills are elevated to a privileged position. The phases of "exploitation" and "selection" of the audio-visual and audio-lingual courses are efforts to go beyond this initial stage and to allow for flexible application of the mastered structures to meet new contexts or situations.

⁵Robert L. Politzer, Teaching French: An Introduction to Applied Linguistics (Boston: Ginn and Company, 1960), p. 16.

⁶Raymond Renard, L'enseignement des langues vivantes par la méthode audio-visuelle et structuro-globale de Saint Cloud - Zagreb (Paris: Didier, 1965), p. 52.

"Consequently, a true reconditioning is necessary for anyone who wants to learn a foreign language. One must create automatisms, reflexes; one must stimulate the mind. An adequate way of accomplishing this result is to apply as much as possible the main laws of conditioning." (Writer's translation)

⁷Petar Guberina, "The Audio-Visual Global and Structural Method," Advances in the Teaching of Modern Languages, B. Libbich, editor (New York: The Macmillan Company, 1964), p. 7.

S. Pit Corder,⁸ stressing the importance of the visual element in language teaching, submits that language teachers have largely ignored what he calls the semantic skill. He describes the semantic skill as the acceptable use of patterns of a language in the right circumstances to communicate or produce the desired result in the hearer. This whole area of meaning, according to Corder, needs to be taught methodically. He postulates, therefore, that in teaching, a clear distinction should be made between motor-perceptive skills, organizational skills and the semantic skill.

Classroom practice in teaching the semantic skill reflects divergent approaches to the problem of meaning acquisition and to the problem of interference from the native tongue. On one hand, the audio-lingual method is based on an acceptance of the principle that meaning can be conveyed most effectively and most economically by the use of equivalent forms in the students' native language. On the other hand, Corder disagrees with this position:

But then we know we cannot achieve the learning of meaning any quicker by description or translation, however attractive the latter may appear superficially. It only takes a second to give a translation, but we should be fools if we thought that the meaning had been learnt in a second also!⁹

The audio-visual structuro-global method was devised to overcome the difficulty of conveying meaning. It is based on the assumptions that meaning can be conveyed by means of visuals and that the visuals act as

⁸S. Pit Corder, The Visual Element in Language Teaching (London: Longmans, Green and Co. Ltd., 1966), pp. 6-31.

⁹Ibid., p. 27.

a neutral relay to correct the interference which arises from the use of the students' native language to convey meaning. Guberina in justifying the use of the audio-visual structuro-global method unreservedly accepts the effectiveness of pictures in conveying meaning:

A picture can represent not only objects, people and natural phenomena, but also the basic situations of everyday life. When the meaning is represented by a picture and a corresponding sound-signal, the basic function of language is achieved, i.e. the expression of meaning by sound....From a picture, or pictures, which represent a certain situation, the sentence will arise as its conventional signal to be mastered by the student.¹⁰

Greimas¹¹ argues that this simultaneous presentation of the picture and an utterance in the target language does not convey meaning directly. The visual element may serve as a screen hiding the native language from the student, but it does not eradicate the existence of the native language patterns which are deeply rooted in the student. He goes on to suggest the visual element in an audio-visual course should be viewed as an artificial visual symbolic system based on conventions established from the beginning. He suggests using colours, for instance, to indicate gender, tense, and other grammatical categories difficult to externalize. With respect to the preponderant use of dialogue, Greimas advocates a greater use of narrative style as being less limiting than dialogue.

¹⁰Guberina, op. cit., pp. 4-6.

¹¹A. J. Greimas, "Observations sur la méthode audio-visuelle de l'enseignement des langues vivantes," Etudes de linguistique appliquée, B. Quéhada, editor (Paris: Didier, 1962), pp. 137-155.

Fleming¹² adopts the view that meaning can be conveyed by the use of visuals and that they should be used as a link, a bridge built to avoid the use of the mother tongue during primary and secondary language learning. Contrary to Greimas, Fleming et al.¹³ stress the importance of using pictorial reality and of avoiding artificial means of pictorial clarification. According to Fleming, the use of balloons is totally unjustified for the reason that it adds complexity and defeats the purpose of the exercise, namely the use of pictures to convey meaning clearly and efficiently.

Cole¹⁴ does not place in doubt the value of the picture in teaching languages. He does express the opinion, however, that it is being justified with wrong arguments based on false ideas about meaning acquisition and these, in turn, lead to a wrong use of the picture in teaching. He agrees with Fleming¹⁵ that the association of text and picture is valuable and effective from the viewpoint of memorizing and recalling structures and vocabulary. Good pictures are a motivating factor and they inject an element of life into any story presented as a linguistic text. He raises the question, however, whether the chief

¹²Gerald Fleming, "The Structured Response-Evoking Potential of Organized Visual Communicators," Audio-Visual Language Journal, 5 (1967-1968), pp. 71-74.

¹³Gerald Fleming, E. Spaleny, and J. Peprnik, "The Didactic Organisation of Pictorial Reality in the New Language Teaching Media," Praxis, 14 (April, 1967), pp. 160-172.

¹⁴Leo R. Cole, "The Psychology of Language Learning and Audio-Visual Techniques," Modern Languages, 49 (Dec., 1968), pp. 166-172.

¹⁵Fleming et al., op. cit., p. 170.

function of a visual is to act as a substitute for a translation into the mother tongue. To answer this question he cites an experiment by C. J. Dodson.¹⁶ Dodson compares the results of different sequencing or phasing of visual (picture, printed phrase) and aural (mother tongue, foreign language) stimuli. Conclusions are arrived at which support the giving of English equivalents in the early stages of teaching younger children.

The meaning experiments clearly indicated that the most efficient and rapid method of presentation for the learner is the one where the meaning of the foreign language sentence is acquired by means of the mother tongue equivalent and retained by means of pictures.¹⁷

Cole agrees with Greimas in disputing the assumption that using the visual element automatically overcomes any interference from the mother tongue. For him the interference may be present in a covert way.

Cole concludes that:

It must not be assumed by audio-visual exponents that the picture serves as a kind of universal neutral relay and acts as an effective agent in lessening interference from the mother tongue. If it does not forcefully lessen interference, then it may be a long way round to establish foreign language structures and be too time-consuming unless it has other merits. These other merits I think it does have: it focuses attention, stimulates and adds interest, provides a means of revision and aids recall, and can provide semantic elements distinctive of the foreign culture in question. The issue we have been considering, however, is still in need of further research of a psychological nature: in practice the meaning-acquisition problem is momentarily overcome by using translation or pictures, or a combination of both.¹⁸

¹⁶C. J. Dodson and J. E. Price, "The Role of the Printed Word in Foreign-Language Learning," Modern Languages, 47 (June, 1966), pp. 59-63.

¹⁷Ibid., p. 60.

¹⁸Cole, op. cit., pp. 170-171.

In summary, the development of an adequate methodology of second-language teaching rests upon an adequate theory of the nature of second-language learning. Divergent views of psychologists and linguists in what constitutes adequate theory and relevant strategies of inquiry make this a difficult task. The area of greatest concern to the language teacher at the present is that which concerns problems of meaning acquisition.

II. SIGNIFICANCE OF THE PROBLEM

The preceding survey reveals different points of view with respect to the use of pictures in second language teaching. On one hand, there are those who maintain that meaning can be effectively conveyed by the use of visuals, and that visuals should be used to minimize the interference from the native language. On the other hand, other authors claim that conveying meaning through the visual element does not lessen interference from the native language and that the process is too time consuming and not sufficiently effective to be used to convey meaning. In the latter instance, however, visuals may be used to help the student develop and retain meaning once it has been acquired.

Before conclusions can be reached as to the use of pictures in teaching second languages, the following questions, among others, need to be answered:

1. Can all types of meanings be conveyed equally well?

2. Are the elements of the picture equally effective in conveying meaning?
3. What are the effects of context, complexity, and use of ideographs on interpretation?

This study is an attempt to find answers to these questions.

III. STATEMENT OF THE PROBLEM

The primary object of this study was to investigate the role of semiotic factors in communicating meaning through the visual element in second language learning. In order to do so a framework of research based on semiotics, the general theory of signs, was elaborated. Secondly, the information obtained from the study of these factors was used in an attempt to reach conclusions with respect to the use of visuals in second language teaching.

To determine the factors involved, the intended messages of a random sample of thirty pictures were analyzed with respect to the components of meaning of these intended messages and with respect to the pictures used to convey these components of meaning. The subjects' responses to these pictures were analyzed to determine the degree of correspondence between the intended messages and the received messages.

The study, then, tested the effect of the syntactic categories of the medium and the semantic categories of the content in conveying the intended messages.

The investigation also dealt with the effect of mode of presentation. It tested the effect of the syntactic and semantic categories by

a comparison of the subjects' responses to pictures presented in isolation and in context.

Pictures were further categorized for the pictorial characteristics of complexity and use of ideographemes. The effect of these factors on interpretation were investigated.

In summary, then, the object of this study was to identify some of the relevant semiotic factors involved in communicating meaning and to shed some light on some of the semiotic processes involved in interpretation of pictures used to convey situational meaning.

IV. PLAN OF THE REPORT

Chapter II, first, deals with a review of the research in interpreter factors in conveying meaning through the visual element. Secondly, it gives a brief overview of the theoretical and descriptive research which will serve as a guide in establishing the framework for the study. Chapter III elaborates the framework for research in the semiotic factors involved in communicating meaning. Chapter IV outlines the research methodology and Chapter V deals with the conclusions and suggestions for further research.

CHAPTER II

PREVIOUS RESEARCH

The preceding chapter has been devoted to a survey of various points of view related to the function of the picture in language teaching. These divergent views stem from an area of uncertainty concerning problems of the communication process in language teaching. Communication involves an interpreter, something to be communicated, and an instrument of communication. With a view to establishing a framework for research in what is being communicated and how it is being communicated, the first part of this chapter will deal with empirical research involving the interpreter; the second part will deal with research in the communicative process.

I. RESEARCH IN INTERPRETER FACTORS IN COMMUNICATING MEANING THROUGH THE VISUAL ELEMENT

Although much has been written in the past decade about the use of pictures in language teaching, few empirical studies have been reported. The main contributors to research directly related to this study have been primarily concerned with mode of presentation, comprehension versus recall, and factors involving interpreters. Some factors related to pictures, however, are mentioned and they will be reported in this review of the research.

Mialaret and Malandain¹ conducted an exploratory study on psychological factors involved in the use of pictures in teaching a second language. They compared four groups of students in their ability to interpret three series of pictures from the course, Voix et Images de France². The subjects were from four different grade levels:

cours élémentaire 1^{ère} année (seven to eight years of age)

cours élémentaire 2^e année (eight to nine years of age)

cours moyen 1^{ère} année (nine to ten years of age)

cours moyen 2^e année (ten to twelve years of age)

The responses to the pictures were coded as enumerations, descriptions, and interpretations, using Binet and Simon's³ criteria.

The authors report a substantial difference in the ability of the groups to interpret pictures correctly. The seven and eight year old subjects experienced difficulty in producing a correct synthesis. Only 4.4 per cent of them succeeded compared with 54.8 per cent for the ten to twelve year old subjects. The number of enumerations decreased with age while conversely, the number of interpretations increased with age.

The authors of this study conclude that the pictures used in Voix

¹G. Mialaret and C. Malandain, "La perception du film fixe chez l'enfant," Etudes de linguistique appliquée, (Publications du centre de linguistique appliquée, No. I, Paris: Didier, 1962), pp. 95-103.

²P. Guberina and P. Rivenc, Voix et Images de France, méthode rapide de Français: cours de débutants adultes (Paris: Didier, 1961), p. 195.

³A. Binet and Th. Simon, La mesure du développement de l'intelligence chez les jeunes enfants (Paris: Bourrellier, 1951), p. 46.

et Images de France cause problems for students below the age of ten.

They may be used, however, for students above that age since the subjects in that age group show an ability to interpret pictures close to adult norms. With respect to pictures the authors have the following comments to make:

- (1) The results obtained vary greatly as a function of the picture.
- (2) It is imperative that pictures contain only the essential elements to convey the general idea of the sequence.
- (3) For subjects below the age of ten pictures should represent only concrete actions.
- (4) For that same age group, pictures should have sufficient unity to be interpreted independently of the context or sequence of pictures.
- (5) A picture in isolation may elicit several meanings. Only the use of context will induce students to choose between them. Subjects below the ages of eleven and twelve, however, experience great difficulty in interpreting a series of pictures.

Mialaret and Malandain⁴ conducted the following study to discover the difference between comprehension and recall using the same projected filmstrip sequences and the same division of subjects by grade level as in the previous experiment.

In this study, results similar to those of the previous study with respect to synthesis and type of response, i.e., enumerations,

⁴G. Mialaret and C. Malandain, "Etude de la reconstitution d'un récit chez l'enfant à partir d'un film fixe", Enfance (mars-avril, 1962), pp. 169-190.

descriptions, and interpretations, were obtained and the same general conclusions were reached. Two further findings, however, are of importance to the present study. (1) The mean number of correct responses for each film sequence was appreciably different. Filmstrips one, two, and three elicited 13, 27, and 30 per cent correct responses respectively. These results point to the differential effects of sequences of pictures on interpretation. (2) A first viewing of the picture is a determining factor in subsequent interpretation. A student who misinterprets a picture in the first viewing will show a marked tendency to persist in making the same error subsequently.

Using pictures from a course designed to teach English⁵ as a second language, Guénot, Sturge-Moore, and Tardy⁶ designed a study (1) to investigate whether subjects improve in the ability to interpret pictures and (2) to identify pictorial characteristics which influence comprehension. Tests of comprehension of pictures were conducted prior to teaching lessons one, four, seven, ten, thirteen, and seventeen.

The responses were classified into two groups: acceptable and unacceptable responses. The responses judged acceptable were:

- (1) sentences whose meaning was equivalent to the meaning of the English dialogue,

⁵J. Guénot, Lend Me Your Ear (Saint-Cloud: Ecole Normale Supérieure, 1960)

⁶J. Guénot, C. J. Sturge-Moore, and M. Tardy, "Etudes sur l'évolution de l'aptitude des sujets à lire les vues fixes et introduction à une étude sur la lisibilité des vues fixes," Etudes de linguistique appliquée, 1 (1962), pp. 104-135.

- (2) sentences whose meaning was equivalent but contained additional information,
- (3) sentences shorter than those of the dialogue but which respected its meaning.

The following were classified as unacceptable responses:

- (1) sentences containing a slight misinterpretation with respect to the dialogue,
- (2) sentences containing a gross misinterpretation,
- (3) no response.

The results of this study showed that, as the course progressed, there was an increase in acceptable responses paralleled by a decrease in grossly incorrect and unanswered items.

The test of comprehension on lesson seven was also administered to a group of nine adult students from the British Institute who had not previously been initiated to the course. Their results were compared to those of the experimental group. These results showed a larger percentage of acceptable responses and a smaller percentage of unacceptable responses for the experimental group over the control group.

An inspection of four of the pictures which showed a high degree of misinterpretation revealed the following pictorial characteristics which impede comprehension: (1) an important detail is too small; (2) a person in a balloon is the same size as the one in the picture; (3) the person speaking is in the background.

Malandain⁷ developed a series of sixteen pictures primarily intended to investigate (1) the differences between modes of presentation (projected filmstrips and pictures on paper), (2) the ability of students in perceiving the link between pictures forming a sequence, (3) the effect of structuring the series of pictures according to chronological sequences of events or in terms of characters of the story, and (4) the effect of presenting the dialogue with or without the picture.

The sixteen pictures dealt with the description of daily events in the life of a family. These pictures were presented simultaneously either on a screen or on paper. They were interpreted by students at four grade levels:

cours préparatoire (six to seven years of age)

cours élémentaire 1^{ère} année (seven to eight years of age)

cours élémentaire 2^e année (eight to nine years of age)

cours moyen 1^{ère} année (nine to ten years of age)

Malandain found no significant difference in productivity in interpretation of pictures between grade levels. The same results were obtained for chronological age within grade levels and for mode of presentation (projected filmstrips and pictures on paper). A significant difference was reported, however, in correct responses between grade levels. The results varied from 33 per cent correct responses for cours préparatoire (six to seven years of age) to 70 per cent

⁷Claude Malandain, Utilisation des films fixes pour l'enseignement des langues vivantes aux enfants (Paris: Didier, 1966), pp. 20-53.

for cours moyen 1^{ère} année (nine to ten years of age). Malandain concludes that almost all the students nine to ten years of age are able to interpret pictures correctly.

Malandain also found a substantial range in correct responses to the sixteen pictures. The range in percentage of correct responses varied from 18 per cent for picture eight to 65 per cent for picture two. Although no significance test was performed on these results, this range is greater than that between grade levels.

In the next study designed to determine the ability of students to perceive the link between pictures, Malandain⁸ considered two main factors: (1) the subjects' ability to recognize the characters from one picture to another and (2) the subjects' ability to perceive the temporal succession of events.

There was a significant difference as in previous studies between grade levels in recognizing the characters from one picture to another and in expressing the periods of the day. There was also a significant difference between modes of presentation (on filmstrip and on paper). The author explains the latter results by referring to Piaget's⁹ distinction between "activité perceptive" and "activité exploratrice".

In a subsequent study aimed at exploring the effects of structuring the series of pictures according to chronological sequence of events

⁸Ibid., pp. 55-67.

⁹J. Piaget, Le développement de la notion de temps chez l'enfant (Paris: P. U. F., 1946).

or in terms of characters, Malandain¹⁰ divided his subjects into three groups. Group A saw the sixteen pictures of the previous experiments in chronological order on filmstrip. Group B saw the same pictures, also on filmstrip, organized in terms of characters. Group C saw the pictures grouped together and projected by means of a slide.

Subjects in group A were significantly better at perceiving the chronological development of events; subjects in group B were significantly better at identifying the characters; subjects in group C obtained almost as high results as subjects in group A in expressing the chronological development of events and as the subjects in group B in identifying characters. Subjects in groups A and B, however, gave more detailed and better elaborated responses than the subjects in group C.

The final experiment reported by Malandain¹¹ investigated the effect of presenting the pictures with and without dialogue. The sixteen pictures of the previous experiments served as stimuli. The subjects, ranging from eight to ten years of age, were divided into three groups. The subjects in group A saw the pictures without dialogue; the subjects in group B heard the dialogue in their native tongue without the accompanying pictures; the subjects in group C saw the pictures and heard the accompanying dialogue in their mother tongue.

The subjects saw or heard the story once and then were asked to tell the story. The same procedure was followed a second time. This

¹⁰Malandain, op. cit., pp. 97-113.

¹¹Ibid., pp. 115-148.

time, however, the subjects' responses were recorded.

The results of this investigation led the experimenter to the following conclusions: (1) In telling a story, the subjects observe a logical rather than a chronological order. When subjects adopted a chronological order of presentation of facts, they seldom completed the story. (2) The subjects exposed to the verbal stimulus were more successful in organizing their narratives. The subjects exposed to the visual stimulus without dialogue, on the other hand, had to organize the messages of the pictures in an adequate narrative. They were, therefore, at a disadvantage. (3) Some subjects' narratives show a preponderance of dialogue; others show a predominance of descriptions of actions or events. (4) Subjects who saw the pictures without the dialogue show a tendency to describe. Subjects who heard the dialogue with or without pictures show a tendency to express their responses in dialogue form.

Malandain concluded that using visual aids effectively in the classroom entails certain consequences. The visual element must take precedence over the linguistic element. The visual elements used must present a clear, unambiguous situation. It follows, then, that a course making use of visual aids must be organized around the pictures and not around a linguistic corpus the meaning of which must be conveyed.

It is only at the age of eleven or twelve that the child becomes capable of formal operations. Malandain considers a formal operation as "une opération du second degré, procédant sur des signes."¹² At this

¹²Ibid., p. 147.

"second degree operation, dealing with signs." (Writer's translation.)

stage, the student no longer interprets a picture solely as a reality with its own existence but as a sign of something else.

The picture, thus, becomes a means of communication. At this stage in the student's development, problems of interpretation are a result of the quality and the pedagogical uses of the picture.

The studies reported in this section have dealt mainly with modes of presentation of visual materials and factors due to the interpreter, his age, grade level, and mental age in the acquisition of meaning. These studies, however, consider pictures as global stimuli eliciting either enumerations, descriptions, or interpretations. The pictures are not considered as compounds of elements of reality to convey intended messages. If pictures become means of communication, as Malandain concludes, then, they must be studied from the point of view of signs intended to communicate intended meanings.

II. RESEARCH IN COMMUNICATION

Research in the communication process pertinent to this study may be divided into (1) theoretical and descriptive research, and (2) empirical research in communicating emotional meaning. In this brief review the stress will be placed on those elements of communication that are amenable to visual representation.

Theoretical and Descriptive Research

The elaboration of a framework for research into stimulus factors in conveying meaning must take into consideration two main sources of contribution to communication: (1) information theory and (2) linguis-

tic studies.

Information theory. Several studies in linguistics have made use of the information theory model. Spaleny and Peprnik¹³ suggest that this same model may be adopted for the investigation of factors in conveying meaning through visuals.

Shannon and Weaver¹⁴ present the general model that mathematicians have constructed of the communication process in the theory of telecommunications engineering. This process involves a source selecting a message that is encoded into signals by a transmitter; a channel transmits the message; a receiver decodes the signals so that the destination can recover the original message. Norbert Wiener¹⁵ adds the concept of feedback which introduces circular processes into the model.

Although cybernetics and information theory have an important role to play in suggesting empirical leads and theoretical perspectives for studies in communication, Colin Cherry cautions:

In fact, we should warn the reader the theory is not concerned with communication at all--only with the semantic information "contained in" statements. Care must be taken to guard against temptation to use this theory, and the information measure it sets up, in relation to experimental psychological work. The theory

¹³E. Spaleny and J. Peprnik, "Foreign Language Teaching Picture as an Organised System," International Review of Applied Linguistics in Language Teaching, 4 (Nov., 1967), p. 172.

¹⁴C. E. Shannon and W. Weaver, The Mathematical Theory of Communication (Urbana: University of Illinois Press, 1949).

¹⁵Norbert Wiener, "Cybernetics," Scientific American, 179 (1948), pp. 14-18.

relates only to the semantic and syntactic aspects of language systems and abstracts from pragmatics.¹⁶

Rommetveit adds this warning about extrapolating from the principles of information theory to communication of messages.

Note, furthermore, that no unequivocal inference is possible from transmission of message to transmission of information as defined within the framework of information theory. . . In the case of the message concerning the wet paint, for instance, my wife might under certain conditions have absolutely no expectations that the door would be painted. Under other conditions, she might have a firm belief that such would be the case before she happened to read my written note. The latter would convey the same message in the two situations but the amount of information transmitted would be strikingly different.¹⁷

For the reasons mentioned, information theory has serious limitations with respect to establishing a framework for research in the communication process as envisaged in this study. It will, however, provide some general guidelines in constructing the framework.

Linguistic studies. Although studies in linguistics since de Saussure,¹⁸ Sapir,¹⁹ and Bloomfield²⁰ became almost exclusively the study of linguistic form for its own sake, some linguists have played a significant role in developing a theory of the process of communication.

¹⁶Colin Cherry, On Human Communication (Cambridge, Massachusetts: The M. I. T. Press, 1966), p. 238.

¹⁷Ragnar Rommetveit, Words, Meanings, and Messages (New York: Academic Press, 1968), p. 41.

¹⁸F. de Saussure, Cours de linguistique générale (Paris: Payot, 1916).

¹⁹E. Sapir, Language: An Introduction to the study of Speech, (New York: Harcourt, Brace & World, 1939).

²⁰Leonard Bloomfield, Language (New York: Holt and Co., 1945).

The main concern of these linguists has been the study of various modalities of communication accompanying speech and of the codes in terms of which they are interpreted. Generally, the work of these linguists has come under the rubric of "semiotics", the general study of systems of signs.

The main areas of research under this rubric are (1) paralinguistics, (2) studies of body motion, and (3) proxemics.

Paralinguistics. Paralinguistics has been adopted as the name for the study of phenomena of voice apart from the linguistic code. Trager²¹ has given a provisional systematic outline of the phenomena, and has drawn up an initial transcriptional system. These phenomena comprise voice set as a background against which are measured voice qualities and vocalizations.

Pittenger, Hockett, and Danehy²² have conducted an extensive investigation using Trager's linguistic description. Since paralinguistic features are not open to pictorial representation, however, they have little relevance to this study. In its basic principles, however, paralinguistics has relevance to this study since it has served as a model for studies in kinesics.

Studies in body motion. The function of body motion in the communication process has been the object of extensive study. Several

²¹G. L. Trager, "Paralinguistics - A First Approximation", Studies in Linguistics, 13 (1958), pp. 1-12.

²²R. E. Pittenger, C. F. Hockett, and J. J. Danehy, The First Five Minutes (New York: Paul Martineau, 1960).

coding systems have been elaborated. The main contributors to this area of research, in recent years, have been Birdwhistell,²³ Greimas,²⁴ Koechlin,²⁵ Kristeva,²⁶ Rastier,²⁷ Cresswell,²⁸ Sebeok,²⁹ Hayes,³⁰ La Barre,³¹ Rommetveit,³² and Monod.³³

From the studies in body motion two main areas of conflict

²³R. L. Birdwhistell, "Implications of Recent Developments in Communication Research for Evolutionary Theory, Georgetown University Monograph Series on Languages and Linguistics, 11 (1958), pp. 149-155.

²⁴A. J. Greimas, "Conditions d'une sémiotique du monde naturel," Langages, 10 (juin, 1968), pp. 3-35.

²⁵B. Koechlin, "Techniques corporelles et leur notation symbolique," Langages, 10 (juin, 1968), pp. 36-47.

²⁶J. Kristeva, "Le geste pratique ou communication," Langages, 10 (juin, 1968), pp. 48-64.

²⁷F. Rastier, "Comportement et signification," Langages, 10 (juin, 1968), pp. 76-86.

²⁸R. Cresswell, "Le geste manuel associé au langage," Langages, 10 (juin, 1968), pp. 119-127.

²⁹T. A. Sebeok, "Coding in the Evolution of Signalling Behavior," Behavioral Science, 7 (1962), pp. 430-442.

³⁰Alfred S. Hayes, "Paralinguistics and Kinesics: Pedagogical Perspectives," Approaches to Semiotics, Thomas A. Sebeok, Alfred S. Hayes and Mary Catherine Bateson, editors (The Hague: Mouton & Co., 1964), pp. 145-169.

³¹Weston La Barre, "Paralinguistics, Kinesics, and Cultural Anthropology," Approaches to Semiotics, Thomas A. Sebeok, Alfred S. Hayes and Mary Catherine Beateson, editors (The Hague: Mouton & Co., 1964), pp. 191-220.

³²Rommetveit, loc. cit.

³³Pierre A. R. Monod, "La langue et le geste" (unpublished doctoral dissertation, Université de Strasbourg, 1969).

emerge. The first is the distinction between cultural information or cultural meaning, on one hand, and communication of messages, on the other. Dell Hymes expresses the need for this distinction as follows:

It is precisely the determination of where the participants in an event or the members of a community distinguish between messages, on the one hand, and signs and information, on the other, that must be basic to ethnographic studies of communication. . . The import of the notion is much like that of the equation of culture with communication. . . To adduce a specific case: furniture and the furnishings and makeup of a house, may be considered messages from such a standpoint, which considers material culture, like the rest of culture, to be part of a semiotic system. . . An observer may be able to obtain a wealth of information about the inhabitants from their house. What portion of its manifest features is information from them, in the sense of expressing choices they have themselves made or accepted, is problematic without inquiry.³⁴

Buyssens presses the point still further:

La sémiologie peut se définir comme l'étude des procédés de communication, c'est-à-dire des moyens utilisés pour influencer autrui et reconnus comme tels par celui qu'on veut influencer. . . Il est possible d'agir sur autrui sans le vouloir: la façon de parler de notre ami peut vous suggérer qu'il est soucieux; la prononciation d'un inconnu peut révéler qu'il est étranger. . . Il s'agit là d'indices; nous les identifions, nous les interprétons, mais il n'y a pas communication.³⁵

³⁴Dell Hymes, "The Anthropology of Communication," Human Communication Theory, Frank E. X. Dance, editor (New York: Holt, Rinehart and Winston, Inc., 1967), pp. 1-32.

³⁵Eric Buyssens, La communication et l'articulation linguistique (Bruxelles: Presses Universitaires de Bruxelles, 1967), pp. 11-12.

"Semiotics may be defined as the study of communicative processes, i.e. as a study of the means used to influence others and recognized as such by the addressee. . . It is possible to exert influence on others without intending to do so; a friend's speech may suggest that he is anxious; the pronounciation of a stranger may reveal that he is a foreigner. . . These are indices; they are identified and interpreted but there is no communication." (Writer's translation).

Communication, therefore, involves intention to communicate on the part of the sender of the message. It also involves the use of means with the intention of communicating.

The second main point of controversy, with respect to body motion, concerns the nature and the structure of this communication process. Birdwhistell³⁶ has adopted the term "kinesics" for the study of the visual aspects of interpersonal communication, in so far as they are of body motion. He has defined body motion in terms of "kines," "kinemes," "kinemorphs," and "kinemorphemes." These terms are analogous to those of linguistic description. This author states, however, that gestures do not seem to have any statable meanings of their own apart from the linguistic expression. They are kinemorphs which would roughly correspond, in linguistics, to morphemes but they are really bound kinemorphs which cannot appear in isolation as a complete action with a statable meaning. "Just as we have built dictionaries of the 'meanings' of words," Birdwhistell states, "we have heretofore acted as though a gesture had a meaning in and of itself. Such preconceptions as these have interfered with our understanding of the communication process."³⁷ He is also of the opinion that body motion does not seem to have an internal structure comparable to that of language. Koechlin,³⁸ on the other hand, posits the possibility of applying the methodological principles of the

³⁶R. L. Birdwhistell, Introduction to Kinesics (Louisville: University of Louisville, 1952), pp. 14-23.

³⁷R. L. Birdwhistell, "Paralanguage 25 years after Sapir," Lectures in Experimental Psychiatry (Pittsburgh, 1961), p. 43.

³⁸Koechlin, op. cit., p. 40.

linguist Martinet to the study of gestures. Monod,³⁹ in a study of a corpus of gestures in two language courses, identified distinctive features of gestures which he called "mobilèmes." These combine to form units of communication with stable meanings which he calls "gestèmes."

This author concludes:

Ces "mobilèmes" peuvent être comparés aux phonèmes qui sont les unités de la deuxième articulation de la chaîne parlée; comme ces derniers, on les isole les uns des autres par l'épreuve de la commutation. . . En retenant, avec Martinet, que cette double articulation est une preuve formelle de l'existence d'une sémie, nous pouvons avancer qu'il y a un "langage" gestuel utilisé par les membres d'une société afin de communiquer.⁴⁰

A third source of contribution to the communication process is that of proxemics. Hall⁴¹ has called attention to the problems of intercultural misunderstanding in the use of space in communication and has developed a technical system for the identification and transcription of these phenomena. He defines proxemics as "the study of how man unconsciously structures microspace--the distance between men in the conduct of daily transactions, the organization of space in his houses

³⁹Monod, op. cit., pp. 677-753.

⁴⁰Ibid., p. 680.

"These "mobilemes" may be compared to phonemes which are the units of the second articulation of the speech act; as is the case with the latter, the "mobilemes" are isolated one from the other by the process of commutation. . . Taking Martinet's position that this double articulation is a proof of the existence of a semiotic system, we may say that there is a "language" of gestures used by the members of a society in order to communicate." (Writer's translation.)

⁴¹E. T. Hall, "A System for the Notation of Proxemic Behavior," American Anthropologist, 65 (1963), pp. 1003-1026.

and buildings, and ultimately the layout of his towns."⁴² Fabbri⁴³ contends, however, that Hall's term "proxemics" should be replaced by "proxetics" because the categories of his analysis are not based on distinctive features. They can only be used as preliminary models for the analysis of the spatial features of communicative behavior.

Empirical Research in Communicating Emotional Meaning

Literature on research in pictorial presentation of cues in conveying meaning is not extensive. Davitz⁴⁴ and a team of colleagues, however, have conducted experiments in communicating emotional meaning in a variety of nonverbal media. Vocal communication was the principal focus of attention. They also studied facial, musical, and graphic modes of expression.

Some of the main conclusions of these researchers were: (1) emotional meanings can be communicated in a variety of nonverbal media; (2) the accuracy with which emotional meanings were communicated far exceeded chance expectation; (3) there were marked individual differences in ability to understand emotional messages expressed in all modes of communication; (4) a person who is accurate in identifying the emotional meaning of vocal expressions also tends to be accurate in identifying facial expressions; (5) erroneous responses in identifica-

⁴²Ibid.

⁴³P. Fabbri, "Considérations sur la proxémie," Langages, 10 (juin, 1968), pp. 65-75.

⁴⁴Joel R. Davitz (ed.), The Communication of Emotional Meaning (New York: McGraw-Hill, Inc., 1964).

tion tend to be similar to the intended meaning in terms of activity level. For example, two active emotions such as anger and joy are frequently mistaken for each other, but expressions of two unpleasant emotions such as anger and sadness, or two strong emotions such as love and joy are rarely confused for one another.

In summary, then, the review of research reveals that different theoretical positions may be taken with respect to a framework for research in communication. Although the principles of information theory have been used in linguistic investigations and have been proposed as a framework for research in conveying meaning with visuals, they have certain limitations. There are dangers in extrapolating from the definition of information to that of meaning as envisaged in this study. The position taken in this study agrees with that of Buyssens that a communication system involves the intention to communicate and with that of Monod that the compounds of elements of body motion have statable meanings.

CHAPTER III

THEORETICAL BASE

The previous chapter has dealt with a survey of the empirical research on interpreter factors in communicating meaning with pictures and a brief overview of the theoretical and descriptive studies on the communication process. The purpose of this chapter is to establish a framework for inquiry into visual semiotic factors in communicating meaning.

I. FRAMEWORK OF THE STUDY

Traditionally, language has been considered the main mode of communication. It has, consequently, been the object of extensive theoretical and empirical research. Structural linguists, however, have generally explored language as a purely formal system. Their main concern has not been with meaning but with rules for concatenation of atomic elements such as phonemes into complex strings of morphemes, words, phrases, and sentences. Notwithstanding these limitations, the linguistic model will be used as a theoretical model for establishing a conceptual framework for inquiries in visual communication. Some of the insights of anthropological linguists, social psychologists, and information theorists will be used to modify the framework in order to adapt the model to investigations in visual communication.

Saussure¹ and Buyssens² hold the view that language is a system of signs and as such linguistics is only a part of semiotics, the general theory of signs. Morris makes a similar claim when he defines semiotics as:

. . .a general theory of signs in all their forms and manifestations whether in animals or men, whether normal or pathological, whether linguistic or nonlinguistic, whether personal or social. Semiotic is thus an interdisciplinary enterprise.³

We may thus conceive of inquiries into visual communication as constituting a subfield of semiotics.

A recurrent theme in discussions of research strategy in linguistics is the distinction between language and verbal behavior. Greenberg comments upon this distinction as follows:

It is parallel to the contrast langue: parole (de Saussure), syntactics and semantics: pragmatics (Morris, Carnap), and code: message (information theorists). . .A complete knowledge of the language system, including the phonology, the semantics and the grammar cannot tell us a priori which of the indefinitely large number of possible sentences can be construed in accordance with the rules will actually be employed. This latter is verbal behavior.⁴

This distinction is also an important one in semiotics. A sign

¹Ferdinand de Saussure, Course in General Linguistics (New York: The Philosophical Library, Inc., 1959), p. 16.

²Eric Buyssens, La Communication et l'articulation linguistique (Bruxelles: Presses Universitaires de Bruxelles, 1967), pp. 11-14.

³Charles Morris, Signification and Significance (Cambridge, Massachusetts: The M. I. T. Press, 1964), p. 1.

⁴J. H. Greenberg, "Concerning Inferences from Linguistic to Non-linguistic Data," Psycholinguistics, Sol Saporta, editor (New York: Holt, 1961), p. 473.

may be defined in terms of a system (la langue, semantics, and syntactics) or it may be defined in terms of its effect upon the interpreter (la parole, pragmatics). Saussure⁵ defines a sign as a two-sided psychological entity which unites, not a thing and a name but a concept and a sound-image. He proposes to retain the word "signe" to designate the whole and to replace concept and sound-image by "signifié" and "signifiant" respectively. The relationship between "signifiant" and "signifié" is an arbitrary, conventional relationship. Saussure, thus, defines the sign in terms of a particular system. Morris,⁶ on the other hand, in his definition of a sign, takes a pragmatic point of view. For him, a given entity is a sign only by virtue of its capacity to induce, in an interpreter, a disposition to respond in certain ways toward some kind of object or state of affairs. The resultant disposition to respond is the interpretant, and the state of affairs toward which the disposition is oriented is the signification.

In an empirical study, in order to avoid prejudging the nature of a sign, Morris' definition of a sign in terms of the interpreter will be adopted.

Rommetveit,⁷ however, makes one important reservation with regard to the "disposition to respond". According to him, an assumption that

⁵Saussure, op. cit., pp. 66-68.

⁶Morris, op. cit., p. 2.

⁷Ragnar Rommetveit, Words, Meanings, and Messages (New York: Academic Press, 1968), p. 11.

all kinds of signs, e.g. smoke from a fire, clenched fist, and the word "Fire!", all encompass a disposition to respond will prejudice the nature of the interpretant. Whether the processing of these different types of signs differs in kind or only in complexity are issues to be left open for subsequent theoretical and empirical enquiries.

With this reservation in mind, we may describe a partial semiotic process as including a sign, an interpreter, and a signification. We may also adopt Morris' definition of a communication system as a set of signs linked together by syntactic, semantic and pragmatic rules.

This subdivision of research on language into syntactics, semantics, and pragmatics, as Rommetveit⁸ cautions, is probably neither exhaustive nor unequivocal in the sense that we can trisect the whole field into entirely independent and mutually exclusive areas of research.

In this study, the syntactic and semantic rules will be considered purely as descriptive rules. The semantic rules are rules which explicate or describe the intended significations. If we assume that the system has been invented by a group of people for conveying meaning, the semantic analysis will consist in finding out which meanings or significations were intended when certain iconic elements or categories of elements were used. The syntactic rules of this system of communication will be explored by observing which signs, entities, or iconic elements were used to convey a meaning. The syntactic descriptive rules will also consist in categorizing these signs on the basis of their

⁸Rommetveit, op. cit., p. 14.

nature and mode of signifying. Chomsky and Miller⁹ adopt the same point of view when they maintain that ". . . identifying an observed acoustic event as such-and-such a particular phonetic sequence is, in part, a matter of determining its syntactic structure".

Pragmatic rules, on the other hand, will be assessed by observing what happens when subjects are faced with certain types of signs and sign compounds, and with certain categories of intended meanings. Pragmatic rules are thus rules of relationship between syntactic and semantic categories and efficiency of message transmission.

In summary, then, a system of communication may be conceived as essentially consisting of syntactic categories of signs and semantic categories of meanings. The information from the subjects' responses to these syntactic and semantic categories may be used as evidence by which the effectiveness and inherent properties of the system may be explored.

There are, however, other design features of a communicative system which must be examined.

Design Features of a Communication System

Under this rubric, the following topics will be discussed:

- (1) medium, content, and message, (2) the process of encoding,
- (3) the unit of communication, and (4) the context.

⁹N. Chomsky and G. A. Miller, "Introduction to the Formal Analysis of Natural Languages," Handbook of Mathematical Psychology, D. R. Luce, R. R. Bush, and E. Galanter, editors (New York: Wiley, 1963), p. 318.

Medium, content, and message. Any communication process will comprise two separate and distinctive phases: the message has to be sent and received. The necessary elements of that process are: first, an intended message; second, an act of encoding; finally, an act of decoding. Successful transmission may be assessed by comparing received and intended messages.

Rommetveit¹⁰ depicts a complete communicative process as in Figure 1. In the discussion on the medium, the content, and the message, the writer has drawn heavily upon Rommetveit's ideas.

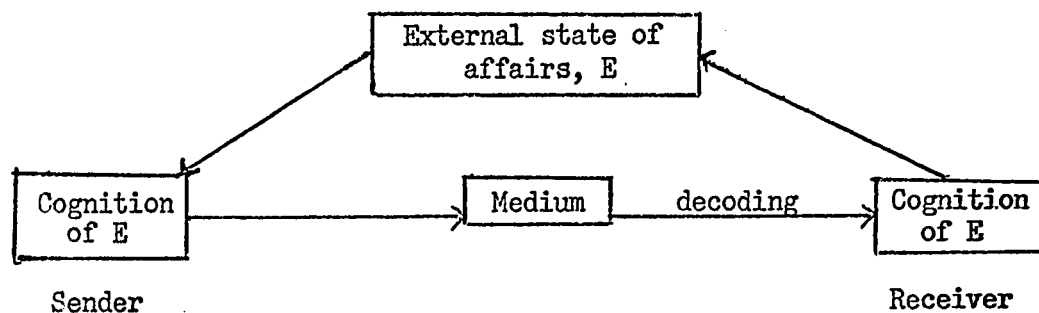


FIGURE 1

A COMMUNICATIVE ACT

In this representation of a communicative process no slot has been provided for the message. One may, for instance, put a chair in front of a door which he has just finished painting or otherwise place the written words "Wet Paint". The medium, in the first instance, may be the location of the chair relative to the door and in the second

¹⁰Rommetveit, op. cit., p. 38.

instance the written words "Wet Paint". The content may be said to be a belief in or a cognition of the particular state of affairs, that the paint is wet.

Neither the medium nor the content of the communicative act, however, constitutes the message. The medium can not be said to constitute the message. A visitor who is not familiar with the room may attribute the location of the chair to some other reason or simply fail to reflect upon it. The chair will thus serve its communicative purpose only insofar as it brings to mind the intention underlying the act of putting it there. The words "Wet Paint", on the other hand, appear to portray the content of the message in a somewhat more direct manner. In this instance, however, the prerequisites for communication are the ability to read and some mastery of the English language. The medium is, thus, in either case linked to the message by the processes of encoding and decoding and will not convey the message at all unless sender and receiver adopt the same code. On the other hand, the content, i.e. a belief in or a cognition of a state of affairs, can not be said to constitute the message. My belief may be false and the sign "Wet Paint" will make the visitor behave toward the door as if it had been recently painted. Furthermore, a shared belief or cognition of state of affairs can be established in a variety of ways other than by transmission of messages.

A sent message, then, presupposes both content and medium and may hence be conceived as a linkage of the two by a process of encoding. The received message will then, hopefully, be generated by some decoding operation performed upon that particular medium.

The message, therefore, must be broken down into sent, received, and transmitted message. The sent message may be conceived of as some cognitive representation encoded in a given iconic medium. Operationally, the sent message will be determined by an analysis of the content or the semantic categories of significations intended paralleled with an analysis of the medium, i.e. the iconic elements and syntactic categories used to convey the given cognitive representations.

The received message is some cognitive representation generated by the decoding of the medium by the subjects. In this study, the received messages will be determined by an analysis of the responses given by the subjects to the pictures presented for interpretation. The transmitted message will be assessed as the subjects' responses which are in agreement with the intended messages of the course.

Encoding. The sent message was defined as consisting of a medium and a content linked by a process of encoding. The process of encoding, then, can not be studied in vacuo; it must be examined in connection with both the content and the medium. The message may be said to portray a hierarchical structure. The medium is subordinate relative to the content; the latter is expressed by means of the former. The encoded cognition and the cognitive representation generated by decoding of the message belong to the superordinate level of the message proper. The medium belongs to the level of expressive tools. The writer will, therefore, proceed to a brief discussion of the categories of signification considered in this study. A more detailed analysis of the categories of content will be postponed.

An act of communication, according to Buyssens,¹¹ consists of establishing a social rapport. One communicates to inform an addressee, to question him, to greet him, or to give him an order. Modality, however, is only one part of the signification. It is combined with the object of the assertion, interrogation, or command. In the corpus of pictures analyzed, a further element of signification was observed. This element of signification concerns the form of expressing the content. The content must be interpreted either as a dialogue or as a description of events. The justification for including style as a category of signification rests on the presence of an iconic element of the medium to express an element of the content. The content of the sent message, then, is defined as the conjunction of three categories of significations: (1) style, (2) modality, and (3) core of the content.

These categories of the content are the types of cognitions of the sent message. Communication of the cognitions in this visual system is accomplished by a pictorial representation of entities and events of the external world. Bateson¹² defines codification as the substitution of one type of event for another such that the event substituted shall in some sense stand for the other. One of the conditions necessary for communication is that codification be systematic. Whatever entities or events of the external world are used to communicate certain internal

¹¹Buyssens, op. cit., pp. 17-18.

¹²Gregory Bateson, "Information and Codification: A Philosophical Approach," Communication, Jurgen Ruesch and Gregory Bateson, editors (New York: W. W. Norton and Company, Inc., 1951), pp. 168-176.

significations, there must be a systematic relationship between the internal and the external, otherwise communication is not possible. Elements of the medium, however, can be classified on the basis of their relationship with elements of the content in a number of respects.

Monod,¹³ in his analysis of films, distinguishes three types of rapport between an iconic element and its signification. These are called "l'information", "les indices", and "les signes". "L'information" is tautological and it conveys its message directly. "Les indices" and "les signes" are the result of a rapport of presence of an "indiquant" and a "signifiant" to express an absent "indiqué" and "signifié". The rapport between "indiquant" and "indiqué", however, is the result of a cause-effect relationship while the rapport between "signifiant" and "signifié" is one established by convention.

Perhaps, as a result of the different techniques used in communicating meaning through film and by using still slides, it was found by the writer that the two characteristics of nature of the relationship between the iconic element and its signification, and of the mode of signifying, described above, do not combine in a symmetrical way. It was found necessary by the writer to analyze the relationship between the elements of the medium and the elements of the content (1) on the basis of the nature of this relationship, (2) the mode of signifying of the external entity in relation to the content, and (3) according to the structure of the code used. The relationship between an entity and its

¹³Pierre A. R. Monod, "La langue et le geste." (Unpublished doctoral dissertation, Université de Strasbourg, 1969), pp. 38-44.

signification, from the point of view of the nature of this relationship, may be intrinsic or extrinsic. This terminology, adopted from Buyssens,¹⁴ is considered as describing the nature of the relationship better than the terms motivated and arbitrary, which have been the subject of controversy in linguistics. An intrinsic relationship between an object or an event and its signification is one which is the result of resemblance or isomorphism between the two. An extrinsic relationship is one that results, not from an inherent resemblance, but from some extrinsic relationship such as causality or convention. The elements of the medium which show an intrinsic relationship to their referents are called representational elements; those which show an extrinsic relationship of causality to their significations are called indexical elements; those which show an extrinsic relationship based on convention are called conventional elements.

Let us suppose that the content of an intended message is "There is a table" and that the elements of the medium to communicate this signification consists of a boy, arm extended, pointing to a table. With respect to the nature of the relationship between the elements of the medium and their significations, the table is categorized as a representational element and the gesture, arm extended, is classified as a conventional element, i.e. the relationship is extrinsic and established by convention. If the boy's mouth is open to express "the content of this message is to be expressed as direct speech or conversa-

¹⁴Buyssens, op. cit., pp. 63-65.

tional style", this element is classified as an indexical element, i.e. based on an extrinsic relationship of cause and effect.

A second basis for classification is with respect to function or mode of signifying. Weinreich¹⁵ distinguishes between (1) formators, (2) designators, and (3) mixed signs. Formators are sign-vehicles (events or objects that function as signs) which contain an implicit instruction for an operation such as negation, generalization, inference, and the like. Designators are sign-vehicles to which a semantic analysis may be applied. Mixed signs are sign-vehicles to which a semantic analysis may be applied and which also contain an implicit instruction for an operation.

In the pictures analyzed for this study, the characteristics of the elements with respect to nature and mode of signifying combine in an asymmetrical fashion (see Figure 2). The indexical elements are always

	Nature of Relationship		
	Indexical	Representational	Conventional
Forma tors	+	-	+
Designa- tors	-	+	+
Mixed signs	-	+	+

FIGURE 2

COMBINATION OF CHARACTERISTICS OF THE ELEMENTS OF THE
MEDIUM ON THE BASIS OF THEIR NATURE AND
MODE OF SIGNIFYING

¹⁵Uriel Weinreich, "On the Semantic Structure of Language," Universals of Language, J. H. Greenberg, editor (Cambridge, Mass.: M.I.T. Press, 1963), pp. 116-125.

used as formators; the representational elements are not used as formators but may be used as either designators or mixed signs. Conventional elements may be used as formators, designators, or mixed signs.

The third basis of classification of elements of the medium with respect to the relationship between iconic elements and their signification is the structure of the code. Bateson,¹⁶ in his discussion of varieties of codification, identifies three kinds which possibly occur in human mental processes. These are digital, analogic, and Gestalten. All three types of codification are exemplified by various sorts of electronic machinery.

In the Gestalten codification, the machine is doing something very closely comparable to the recognition of a Gestalten whereby a human being knows that a square is a square even though it may be of almost any size and presented at almost any angle. The essential characteristic of such machines is that they can identify formal relations between objects or events in the external world and classify groups of such events according to certain formal categories. A message denoting the presence or absence of an event which fits a certain formal category is transmitted. In human communication the ability of the brain to use the absence of a certain impulse in the interpretation of those impulses which do arrive seems to be a primary condition of interpretation. A piece of information makes a positive assertion and at the same time a denial of the opposite of that assertion. Many pieces of information

¹⁶Bateson, loc. cit.

may be more complex than this, according to Bateson,¹⁷ but always the elementary unit of information must contain at least this double aspect of asserting one truth and denying the opposite.

Prieto,¹⁸ however, makes a distinction between two types of codes: (1) "codes à sème unique" which we will call single sign code, and (2) "codes à signifiant zéro" which we will call zero sign code. In the single sign code the absence of an iconic element does not act as a sign, i.e. does not induce the interpreter to infer the opposite of the assertion of the presence of the iconic element. For instance, the presence of a white cane induces the interpreter to believe that the person is blind. The absence of the white cane, however, can not be said to induce the opposite belief, i.e. that the person is not blind. The second type of code, the zero element code, is one in which the absence of an iconic element constitutes a sign. An admiral's flag hoisted aboard a warship conveys the information that the ship carries an admiral. The absence of such a flag conveys the opposite information, absence of an admiral.

In the system of visual communication used in V. I. F., the types of code just described seem to apply only to formators which are used to convey style and modality. The designators and mixed signs to express the core of the message do not seem to function in this manner.

¹⁷Bateson, op. cit., p. 175.

¹⁸Luis Prieto, Messages et signaux (Paris: Presses Universitaires de France, 1966), p. 45.

They are better described by what Barthes¹⁹ calls denotative and connotative systems. The designators function denotatively while the mixed signs connotatively.

The unit of communication. A further design feature of communication systems is that they are composed of units of communication. The unit of communication in this study is the picture. Except for a few instances which will be indicated later, a picture corresponds to a predication. The intended message of the unit of communication, then, will consist of a predication composed of a style, a modality, and a core of content expressed by a compound of categories of iconic elements. The picture will be assumed to function within the context of other pictures as the word does in a linguistic context. The picture and the elements of the picture in isolation have a plurivocalness which eliminates the ambiguity by the context. It is assumed, therefore, that this will result in the elements of the picture being more effective in context.

Context. The notion that meaning is not something which is solely an inherent quality of words or grammatical items is a commonplace in modern linguistic theory. There is controversy, however, as to what constitutes the unit of analysis and what constitutes context. Some linguists consider the sentence as the unit of analysis. Others use the word while still further others consider the morpheme.

¹⁹Roland Barthes, "Éléments de sémiologie," Communications (Centre d'études des communications de masse, No. 4. Paris: Editions du Seuil, 1964), pp. 130-132.

Martinet²⁰ makes a distinction between linguistic context which he calls formal context, expressing formal meaning and situational context (the events and things present when a bit of language is uttered), expressing situational meaning. Monod,²¹ in his study of films, distinguishes between intericonic and intraiconic contextual effect and intersequential and intrasequential effect. Contextual effect is that phenomenon which results from the interaction of iconic elements in a picture or in a sequence of pictures. Sequential effect is the phenomenon which results from the implications between pictures within one sequence or between sequences. In this study the distinction will not be made between contextual and sequential effect. The effectiveness of a category of iconic elements will be investigated in a picture in isolation and compared with that of a picture in a context of three pictures.

II. PURPOSE OF THE STUDY

This study attempted to establish a framework for research in visual communication in teaching a second language to beginning students. It does so by analyzing a sample of pictures from a semiotic point of view into semantic categories of intended meanings and syntactic categories of the medium to express these. Pictures are also analyzed for the characteristics of complexity and use of ideographemes.

²⁰André Martinet, *Eléments de linguistique générale* (Paris: Armand Colin, 1967)

²¹Monod, *op. cit.*, pp. 50-60.

Secondly, it attempted to investigate some of the factors involved in communicating meaning. By having a sample of subjects interpret these pictures, it is assumed that their responses will reflect the effect of the semantic categories of meaning upon interpretation and give some indication of the effectiveness of the categories of the medium to express these categories of meaning.

The pictures were interpreted in isolation and in context to find out whether the addition of context is a factor in visual communication. If either mode of presentation proves more effective than the other, this fact will have consequences both for the course writer and for the use of visuals in the classroom.

Information about the relative effect of semantic categories of meaning upon interpretation in either mode of presentation will give some indication about what meanings are most effectively communicated in isolation and in context. Some dimensions of meaning may have to be avoided in either case or communicated differently.

If the nature, mode of signifying and the coding of the syntactic categories of the medium are factors in conveying meaning, these factors should be taken into consideration when visuals are constructed and used in teaching.

If a high degree of coding is necessary to convey meaning, then, information about the effect of complexity of the picture is needed. This study attempts to provide this information.

Finally, this study provides the course writer some information on the effect of the use of ideographemes in pictures.

CHAPTER IV

METHOD OF INVESTIGATION

An attempt was made in the preceding chapter to elaborate a framework for inquiry in visual communication. It was proposed that factors in visual communication can be explored within the framework of semiotics. It was postulated that the evidence obtained from the subjects' responses to syntactic categories of iconic elements and to semantic categories of content would reveal some of the factors involved.

This section describes the selection of pictures, the categories of the analysis, the selection of the subjects, the data gathering procedures, and the coding of the subject's responses. Then, it provides a list of hypotheses and concludes with limitations of the study.

I. SELECTION OF PICTURES

A sample of thirty pictures was selected from the "sketchs" of Voix et Images de France. The "sketch" is an everyday situation that establishes a setting, characterizes people, and presents the circumstances of a simple plot. The purpose of the "sketch" is to convey meaning. The "mécanismes" also present a visual situation but their purpose is primarily to offer a visual support for grammatical exercises once the meaning has been conveyed. For this reason, the sample was selected from the "sketchs".

Each lesson and each picture in a lesson were assigned a number.

Using a table of random numbers, the first number was used to select the lesson and the next to select the picture in the lesson. The three pictures selected to constitute the context were taken from the same "sketch" as the picture randomly selected. In most cases, they were not, however, the pictures immediately preceding or following the selected picture. The selection of the three pictures which constitute the most adequate context was validated by two judges, who had done extensive work in the interpretation of visuals.

II. CATEGORIES OF THE ANALYSIS: DEFINITIONS AND DESCRIPTION

In order to determine the effectiveness of the categories of iconic elements and the effect of the semantic categories of the content on interpretation, each picture was analyzed for these categories (Appendix A). Under each of the following headings, the semantic categories of the content are defined, followed by the syntactic categories of the medium intended to express them.

Style

Style is defined as the form of the expression of the core of the content. Two semantic categories of style are distinguished: conversational and narrative style.

Conversational style takes the form of a dialogue. The content of the intended message of picture one, for instance, is "May I light the candles?" This picture is classified as conversational. The content of the intended message of picture four is expressed as "Mrs. Thibaut leaves her apartment". On the dimension of style this picture

is classified as narrative.

The semantic categories of style are expressed by the use of one iconic element of the medium, i.e. mouth open. Since the interpretation of this iconic element involves a perception of the cause-effect linkage between sign and signification, it is classified as to nature of the relationship as an indexical element. With respect to mode of signifying it is a formator.

A picture intended to express conversational style may be marked or unmarked for that dimension. If the iconic element (mouth open) is present in the picture, it is classified as marked. If the iconic element is absent, the picture is classified as unmarked absent for the dimension of conversational style (U.A.). When a picture is intended to express narrative style, the absence of the iconic element (mouth open) is indicated as unmarked neutral (U.N.). The presence of this iconic element, when the content of the message is intended to be narrative, is categorized as an interference. This is the case for picture twenty-seven.

Modality

Modality is defined as the dimension of the content of the intended message which indicates the social rapport established.

Four categories of social rapport are considered: (1) requests, (2) social situation responses (S.S.R.), (3) questions, and (4) assertions.

Request. The category of request is a broad category including social rapports ranging from polite requests to orders and prohibitions.

Social Situation Responses. Social rapports of greeting, thanking, and excusing oneself are classified as social situation responses (S.S.R.). Social situation responses are a special case in that they do not take the form of a predication. The only possible dimensions of classification for these are style and modality.

Question. Questions are limited to solicitations of information. The intended message of picture one, for instance, takes the linguistic form of a question: "May I light the candles?" It is classified as a request, however, since the social rapport established is one of asking permission.

Assertion. An assertion is defined as the social rapport established in giving information.

With respect to the nature of the relationship between the medium and the content, the iconic elements used to convey modality are classified as indexical and conventional; on the basis of mode of signifying they are all formators. The conventional formators are sub-divided into simple, conventional and graphic on the basis of degree of explicitness of the formator. It is assumed, for instance, that there is a difference in the degree of explicitness or implicitness between the use of a question mark and the use of a conventional element raised eyebrows, to express the social rapport of questioning.

On the basis of the coding system the category of assertion is categorized as the unmarked neutral category (U.N.). All others are classified as either marked or unmarked absent (U.A.).

In picture sixteen the iconic element, index pressing telephone

button, is intended to convey the meaning, beginning of conversation or greeting. This element, however, is not understood in the socio-cultural milieu of the subjects and is classified as interference.

Since the intended messages, which are classified as narrative on the basis of style, involve a description of objects or events, they are considered as excluding modality.

Core of the Message.

The core of the message is defined as the substance of a predication encoded in an iconic medium. It consists, then, of a content and a medium of expression.

Since the core of the content of the message takes the form of a predication it consists of "something talked about and something said about that subject of discourse," using Sapir's²² definition. These two elements are called argument and relation respectively. In the proposition "Aristotle was a Greek", Reichenbach²³ distinguishes between two elements of different logical nature, i.e. a thing and a property. The proposition tells us which thing has this property; in order to do so it contains the phrase "was a" which indicates that the thing-property relation holds between the objects represented by the words "Aristotle" and "Greek". The argument is defined as the thing variable expressed in the predication. The relation variable is defined as the property or

²²E. Sapir, Language: An Introduction to the Study of Speech (New York: Harcourt, Brace & World, 1939)

²³Hans Reichenbach, Elements of Symbolic Logic (New York: The Macmillan Company, 1947), p. 80.

situational function of the predication.

On the basis of the relationship of the argument and the relation to the context, they are classified as topic or comment. In the predication "Tom is a thief", whether "Tom" or "thief" is the topic or the comment must be decided on the basis of what is already known or presupposed and what is not known. If the theft is already known to the receiver of the message who is curious to know who the thief is, "Tom" becomes the comment. If only the name "Tom" has been mentioned, on the other hand, he may ask "Who is Tom?" Then "thief" becomes the comment.

The topic, then, is defined as that element of the predication which is already known or which has been established by the context. The comment is the element of the predication which is introduced as a novel element.

In the few instances where the topic has not been established by the context, the subject of the predication is arbitrarily assigned as the topic and the predicate as the comment.

The argument or the relation is classified as the topic or the comment on the basis of whether the argument or relation is the subject of discourse or the novel element added.

When the topic or the comment include both a relation and an argument the relation only is considered as the topic or the comment. In picture one, for instance, the content of the intended message is "May I light the candles?" The topic is "candles" since the established subject of discourse is a birthday party. The comment or novel element is "May I light?" The comment includes an argument "I" and a relation

"light". In the latter instance, the relation alone is considered as the comment and is underlined in the analysis (Appendix A).

The relations are further analyzed on the basis of clustering or configuration of their semantic features. Weinreich calls an unordered set of features a cluster and an ordered set a configuration:

Suppose the meaning of daughter is analyzed into the components 'female' and 'offspring'. Anyone who is a daughter is both female and an offspring; we represent the features 'female' and 'offspring' as a cluster. But suppose the meaning of chair is represented in terms of features 'furniture' and 'sitting'. Whatever is a chair is 'furniture' but is not 'sitting', it is 'to be sat on'. We would represent this fact by saying that the feature 'furniture' and 'sitting' form a configuration. We will use parentheses to symbolize both types of sets, but the symbols for features in a cluster will be separated by commas, while those in a configuration will be separated by arrows. Letting a and b be semantic features, we introduce the following definitions:

Cluster: $(a, b) = (b, a)$

Configuration: $(a \rightarrow b) \neq (b \rightarrow a)$ ²⁴

Weinreich²⁵ goes on to state that the meaning of some verbs may accordingly be represented as a configuration of two elements; the first is a feature meaning performance or action, whereas the other element represents the semantic residue. Transitive verbs are described as forming a configuration. Intransitive verbs such as "stand", on the other hand, do not seem to contain any but the cluster features of the adjectival predicate (be) erect.

²⁴Uriel Weinreich, "Explorations in Semantic Theory," Current Trends in Linguistics, T. A. Sebeok, editor (The Hague: Mouton, 1966), pp. 420-421.

²⁵Ibid., pp. 425-426.

In this study, transitive verbs are categorized as configurations, while passive verbs, adjectival and nominal predicates are classified as forming clusters.

To express the content of the core of the message, certain syntactic categories of the medium are used. On the basis of the nature of the relationship between the medium and the content, the elements of the medium are categorized as either representational or conventional. With respect to mode of signifying they are classified as either designators or mixed signs.

The representational elements are divided into representations of objects, symbolized as R1, representations of actions, symbolized as R2, and representations of conditions, symbolized as R3. The only iconic elements used to convey the relations are R2, R3, and conventional elements. If they are used as designators, i.e. to be interpreted literally, they are symbolized as L1. If they are used as mixed signs, i.e. as elements consisting of a semantic content and an implicit instruction for an operation such as inference, abstraction and the like, they are classified as L2. The pictures selected for the study are analyzed for two other characteristics, complexity and use of ideogrammes.

Complexity

Complexity is defined in terms of the number of iconic elements contained in the picture:

- C1 refers to pictures containing six or fewer elements;
- C2 refers to pictures containing seven, eight, or nine elements;
- C3 refers to pictures containing ten or more elements.

Ideographemes

There is some controversy about the effect of pictorial or ideographemic representation in communicating meaning. The controversy revolves around the problem of using pictorial reality to convey meaning as opposed to making use of ideographemes or balloons to isolate a referent or to represent some aspect of the core of the message. On the basis of this distinction, the pictures are categorized as pictorial or ideographemic.

The semantic categories of the intended message are summarized in Figure 3. The thirty pictures were analyzed on all these dimensions; only some of them, however, are formally investigated. These will be mentioned in the limitations of the study. Figure 4 presents an outline of the main categories of the content of the sent message and the categories of the medium used to express them.

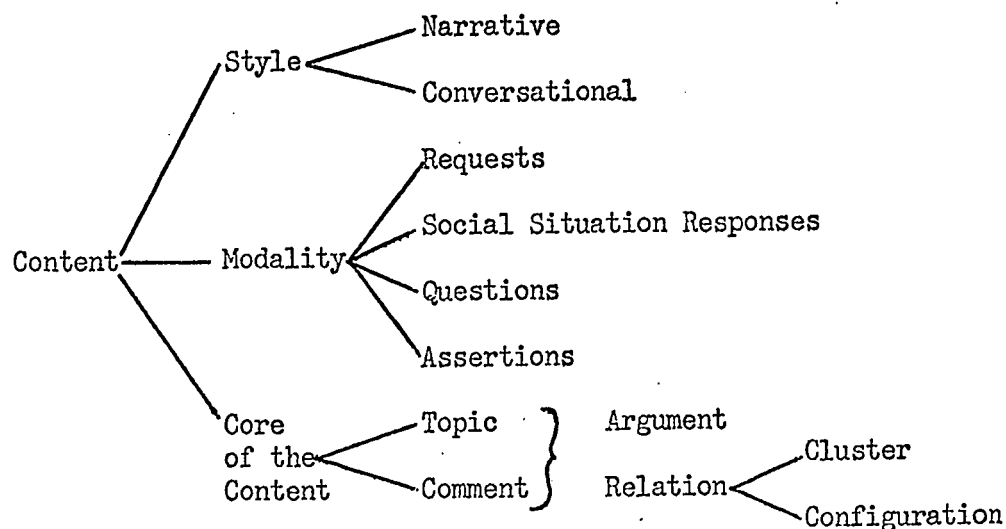


FIGURE 3

SUMMARY OF THE SEMANTIC CATEGORIES OF THE CONTENT

SENT MESSAGE				
CONTENT	MEDIUM			
	Mode of Signifying	Nature of Relationship	Coding System	
Style Modality	Formators	Indexical	Single sign code	
		Conventional	Zero sign code	
Core of the Content	Designators	Representational L1	Denotative system	
		Conventional L1		
	Mixed signs	Representational L2	Connotative system	
		Conventional L2		

FIGURE 4

OUTLINE OF THE MAIN CATEGORIES OF THE CONTENT OF THE SENT MESSAGE AND THE MAIN CATEGORIES OF THE MEDIUM

III. SELECTION OF THE SUBJECTS

The subjects were selected from the grade seven students of the Winnipeg School Division No. 1. To avoid a bias in the results five of the schools of the division were selected for their lack of obvious imbalance in a social, ethnic, and socio-economic direction. Of this number two schools were chosen at random.

Both schools have seven grade seven classes whose students studied French. Each class and each student in each class was assigned a number. A sample of twenty-five students was obtained by random selection. The sample of twenty-five was divided into two groups. Group A1 of school A consisted of thirteen students assigned at random to that group. Group A2 consisted of twelve students assigned in the same way. The same procedure was followed in school B except that group B1 consisted of twelve students and group B2 of thirteen students.

Although precautions were taken to ensure that the subjects had not been exposed to a course using visual material to communicate meaning, one of the responses of two subjects indicated that they were familiar with V. I. F. An inspection of their responses, however, showed no evident difference between their responses and the responses of the other subjects. They were, therefore, kept in the sample.

No information was obtained about age, sex, intelligence, and previous knowledge of French because these factors were not objects of the study.

IV. DATA GATHERING PROCEDURES

The research instrument consists of thirty pictures shown in isolation and in context to a sample of fifty subjects from two schools. The arrangement of presentation is indicated in Figure 5.

A1 -- 1-13 Pictures 1-15 in Isolation Pictures 16-30 in Context	B1 -- 1-12 Pictures 1-15 in Isolation Pictures 16-30 in Context
A2 -- 1-12 Pictures 16-30 in Isolation Pictures 1-15 in Context	B2 -- 1-13 Pictures 16-30 in Isolation Pictures 1-15 in Context

FIGURE 5

ARRANGEMENT OF PRESENTATION OF PICTURES IN ISOLATION AND IN CONTEXT
TO THE SUBJECTS OF GROUPS A1, A2, B1, AND B2

The subjects in groups A1 and B1 saw pictures one to fifteen in isolation and pictures sixteen to thirty in context. The subjects in groups A2 and B2 saw pictures sixteen to thirty in isolation and pictures one to fifteen in context.

The students responded by writing their interpretations in English on answer sheets provided by the investigator. The subjects were seated so that they would have a good view of the screen but spaced from one another so that they could not copy.

The instructions were given on tape. The time allowed for viewing the pictures and for writing the interpretations were also regulated on tape.

For interpreting pictures in isolation, the subjects were allowed ten seconds for viewing the picture and twenty seconds for writing their interpretation. In context they first viewed each picture of the context

and the picture selected for study for four seconds. The sequence of pictures was shown a second time and the students were given six seconds for viewing and twenty seconds for writing their interpretation of each picture. The time of ten seconds, allowed for viewing the pictures in isolation was more than ample, most students writing before that period of time elapsed. The six seconds allowed for viewing the picture in context was also found sufficient.

In previous experimentation with the instrument, the length of time allowed for writing the interpretations was found suitable. In the study it was found that students had sufficient time to write their answers.

The slides, duplicated from the filmstrips of Voix et Images de France, were shown by automatic Kodak Carousel 850 with auto focus. The size of the projection on screen was the same for all groups.

In the instructions to the subjects (Appendix B), care was taken not to influence the subjects' interpretation. To this effect, the subjects' task was indicated by means of examples. Examples, expressing different categories of meaning, were interpreted for the subjects in the course of explaining the procedures followed. The examples included narrative and conversational style. With respect to modality they expressed question, request, and assertion.

V. CODING OF THE DATA

All the subjects' interpretations were corrected three times by the investigator. The responses and the coding of the responses appear

in Appendix C. They were coded according to correct identification of style, modality, topic, and comment. If the subject's response indicated that he had identified the dimension in question, his response was coded as 1 for that dimension and as 0 otherwise.

Each of the four dimensions of the content, i.e. style, modality, topic, and comment, were coded separately. For uniformity of correction the coding of the style of a certain picture was done for all responses to pictures in isolation, then for all responses to pictures in context. The same procedures were followed for the other pictures and dimensions of the content.

Whenever the subject's response did not indicate clearly whether he had identified a certain category of the content, especially for pictures in isolation, the investigator had the interpretation of those responses verified by two judges, one a graduate student doing research in visuals and another graduate student. In a few cases where the doubt could not be resolved, the subject was given the benefit of the doubt.

Simple enumerations and blank responses were coded as 0 on all dimensions. Titles, however, were coded as zero for style and modality, but the correctly identified elements of the topic and comment were recorded as being correct. Substitutions of nouns or pronouns for proper names were accepted as correct responses. "The boy is in the attic" or "He is in the attic" were both accepted for the intended message "Paul is in the attic". Responses expressed by such formulas as "The lady asks. . ." were recorded as 0 for style. The modality was marked as correct or incorrect in relation to the intended modality. All other categories were coded separately in the same way.

VI. THE HYPOTHESES

The following hypotheses are proposed to investigate factors in conveying meaning (in this study the experimental unit was the picture and not the student):

- Hypothesis 1 - For pictures in isolation and in context, there are no significant differences between semantic categories of style in interpreting style.
- Hypothesis 2 - For pictures in isolation and in context, there are no significant differences between syntactic categories of style in conveying style.
- Hypothesis 3 - For pictures in isolation and in context, there are no significant differences between semantic categories of modality and the responses to modality.
- Hypothesis 4 - For pictures in isolation and in context, there are no significant differences between syntactic categories of modality in conveying modality.
- Hypothesis 5 - For pictures in isolation and in context, there are no significant differences between the semantic categories of clustering and configuration of the relations on the interpretation of the relations of the message.
- Hypothesis 6 - For pictures in isolation and in context, there are no significant differences between the syntactic categories of the relations in conveying the relations of the message.

Hypothesis 7 - For pictures in isolation and in context, there are no significant differences between the syntactic categories L1 and L2 of the relations in conveying the relations of the message.

Hypothesis 8 - For pictures in isolation and in context, there are no significant differences between the levels of complexity in conveying the total message.

Hypothesis 9 - For pictures in isolation and in context, there are no significant differences between ideographemic and non-ideographemic pictures in conveying the total message.

VII. DELIMITATIONS OF THE STUDY

1. The following factors in communicating meaning are not considered in this study: (a) directionality of message, (b) density of message, (c) effect of socio-cultural elements, (d) effect of elements causing interference, (e) characteristics of types of contexts and their effects.

2. The hypotheses are not offered as an exhaustive list of the factors analyzed in the pictures. In the content of the message, only the main constituents of the topic and comment are considered. The delimitations of time, place, degree, manner, self-reference, quality, are not specifically studied unless they are the constituent elements of the topic or the comment.

3. The French oral stimulus accompanying each picture is not given.

4. The sample of subjects is taken from a population of grade seven students. The findings may, therefore, have only limited applications for eliciting meaning at other grade levels.

5. Since the use of pictures for this experiment is different from the use of pictures in teaching Voix et Images de France, the findings will apply only to general factors of conveying meaning with cartoon pictures expressing situational meaning.

CHAPTER V

DATA, THEIR ANALYSES, AND RESULTS

The data for the nine hypotheses are presented in the following four tables: Table I, Table VII, Table XIV, and Table XXII. In each table column one indicates the number of the picture; the next two columns present the criterion, i.e. the number of correct responses elicited by the pictures in isolation and in context; the next columns indicate the categories to which each picture in question belongs.

To test the hypotheses of no significant relationship between the categories and the treatment, a two-factor analysis of variance with repeated measures is used. The categories constitute the levels of factor A and the two observations made on each picture, one in isolation and the other in context, constitute the levels of factor B.

Two-factor Analysis of Variance with Repeated Measures on One Factor

A two-factor analysis with repeated measures on one factor is considered to be appropriate for the following reasons:¹

1. It provides a statistical control over individual differences between treatments. Treatment effects for a given picture are measured relative to the average response made to the picture on the two-treatments. The separation of individual error from treatment effects and experimental error increases the sensitivity of the experiment.

2. An advantage of the repeated measures design is in terms of economy of subjects. By using each picture as its own control, it is possible to work with a smaller sample and still obtain meaningful results.

¹B. J. Winer, Statistical Principles in Experimental Design (New York: McGraw-Hill, 1962), pp. 105-124; 298-306.

3. This design offers the possibility of spreading the sequence effects on all treatments. In this study, however, because of the possibility that the interpretation of pictures in context might have an influence upon the interpretation of pictures in isolation, the order of presentation was not randomized.

The selection of this design is based on the following assumptions:

1. The subjects (in this case the pictures) are a random sample taken from a population.

2. The variance is the same for all treatments since the same subjects are observed under all treatments.

3. The population variances and covariances are homogenous.

If the homogeneity assumptions are not met the differences will appear to be more significant than they are. The homogeneity of variance will be tested by using χ^2 . Caution in the interpretation of results arising when the homogeneity assumption is not met will, therefore, be observed. The homogeneity of variance tables will be reported in Appendix D.

Style

Two hypotheses are related to style. They deal with the relationship between the categories of style and mode of presentation. In these two hypotheses, the criterion is the number of correct responses to style. Pictures 16 and 27 were removed from the sample because of the presence of interference. Picture 16 causes interference because of a socio-cultural element present in the picture (pressing button to indicate the beginning of a conversation, i.e. greeting). Picture 27 causes interference because of the presence of the indexical element, mouth open, which in this case is meant to indicate action of shaving but which may be interpreted as an indication of conversational style.

In testing this hypothesis and subsequent hypotheses, the object of the study is to isolate factors related to the effectiveness of pictures in conveying meaning. Since the effect of the presence of interference in a picture is not one of the factors of this study and may lead to a wrong interpretation of the results, those pictures in which there is an obvious presence of interference were removed.

The first hypothesis serves to investigate the relationship between the semantic categories of style and mode of presentation on the interpretation of style.

Hypothesis 1 - For pictures in isolation and in context, there are no significant differences between the semantic categories of style in interpreting style.

Table I presents the number of correct responses to style in isolation and in context and the categories of factor A to which each picture belongs. The levels of factor A for hypothesis 1 are narrative and conversational style.

A summary of the results of the analysis of variance appears in Table II. As Table II shows there is a significant difference in responses in the interpretation of the two categories of style. This difference is significant at the .01 level. Null hypothesis 1 is, therefore, rejected. An inspection of the means in Table III shows that conversational style is more readily interpreted correctly than narrative style.

The results of Table II also indicate that the mode of presentation

TABLE I
RESPONSES TO STYLE CLASSIFIED BY PICTURE, MODE OF PRESENTATION,
SYNTACTIC AND SEMANTIC CATEGORIES

Picture	Isolation	Context	Semantic Categories	Syntactic Categories
1	16	23	Conv.	I.
2	22	22	Conv.	I.
3	18	10	Conv.	I.
4	7	7	Nar.	U.N.
5	16	22	Conv.	I.
6	24	22	Conv.	I.
7	11	20	Conv.	U.A.
8	7	4	Nar.	U.N.
9	16	21	Conv.	I.
10	4	11	Nar.	U.N.
11	23	23	Conv.	I.
12	20	23	Conv.	I.
13	22	22	Conv.	I.
14	24	21	Conv.	U.A.
15	24	23	Conv.	I.
16	--	--	Conv.	Interference
17	10	20	Conv.	U.A.
18	20	17	Conv.	I.
19	25	21	Conv.	I.
20	20	18	Conv.	I.
21	24	22	Conv.	I.
22	24	21	Conv.	U.A.
23	21	24	Conv.	U.A.
24	23	21	Conv.	I.
25	23	23	Conv.	I.
26	16	18	Conv.	U.A.
27	--	--	Nar.	Interference
28	23	21	Conv.	U.A.
29	22	22	Conv.	I.
30	15	17	Conv.	I.

TABLE II
ANALYSIS OF VARIANCE OF SEMANTIC CATEGORIES OF
STYLE AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. Categories (A)	1	1037.039	79.298**
Sub. within groups	26	13.078	
Bet. modes of presentation (B)	1	7.292	0.919
Interaction (A X B)	1	0.148	0.019
BX sub. within groups	26	7.936	

TABLE III
MEANS OF SEMANTIC CATEGORIES OF STYLE
IN ISOLATION AND IN CONTEXT

Categories	Isolation	Context
Narrative	6.000	7.333
Conversational	20.080	21.080

**Significant at the .01 level.

factor was not significantly different. Also the interaction between presentation mode and the semantic categories of style was not significant. It can, thus, be inferred that the mode of presentation has the same effect on the two categories of style.

The next hypothesis deals with the difference between the syntactic categories of style in isolation and in context in eliciting correct responses to style.

Hypothesis 2 - For pictures in isolation and in context, there are no significant differences between the syntactic categories of style in conveying style.

The dependent variable and the syntactic categories of style appear in Table I page 67. The analysis of variance consists of three levels of factor A (syntactic categories of style) and two levels of factor B (mode of presentation). The three levels of factor A are (1) indexical elements (I), (2) unmarked neutral elements (U.N.), and (3) unmarked absent elements (U.A.). A summary of the results of the analysis of variance is reported in Table IV.

As Table IV shows, the syntactic categories of style elicit mean responses differing at the .01 level. On the basis of these results, null hypothesis 2 of no significant differences between syntactic categories is rejected. The syntactic categories seem to be a contributing factor in conveying style. The difference between the means of the three categories in Table V was submitted to Scheffe's Multiple Comparison of Means to determine which means were significantly differ-

TABLE IV
ANALYSIS OF VARIANCE OF SYNTACTIC CATEGORIES OF
STYLE AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	2	701.734	54.782**
Sub. within groups	25	12.810	
Bet. modes of presentation (B)	1	15.952	2.011
Interaction (A X B)	2	2.252	0.284
BX sub. within groups	25	7.932	

TABLE V
MEANS OF SYNTACTIC CATEGORIES OF STYLE
IN ISOLATION AND IN CONTEXT

Categories	Isolation	Context
I.	20.722	21.222
U.A.	18.429	20.714
U.N.	6.000	7.333

ent from each other. The means for indexical elements and U.A. elements are different from U.N. elements in isolation and in context at the .01 level, as shown in Table VI. From these results and from an inspection of the means in Table V, it appears that the absence of the indexical element to indicate narrative style does not, in most cases, elicit

TABLE VI
PROBABILITY MATRIX FOR SCHEFFE'S MULTIPLE COMPARISON
OF MEANS OF SYNTACTIC CATEGORIES OF STYLE

Categories	I.	U.A.	U.N.
<u>IN ISOLATION</u>			
I.	1.000	0.454	0.000**
U.A.		1.000	0.000**
U.N.			1.000
<u>IN CONTEXT</u>			
I.	1.000	0.864	0.000**
U.A.		1.000	0.000**
U.N.			1.000

narrative style. The syntactic categories of style, therefore, would appear to function as a single sign code. On the other hand, the means for indexical and U.A. elements to elicit conversational style are not significantly different from each other. Although care was taken in the instructions to the students not to influence them to interpret

the pictures either conversationally or narratively, these results seem to show a tendency of the subjects to interpret pictures as dialogue.

With respect to the difference in means associated with mode of presentation, the results, presented in Table IV, show that they are not significant. On the basis of these results hypothesis 2 is not rejected with respect to factor B. Mode of presentation does not appear to be related to the conveying of style.

The interaction between syntactic categories and mode of presentation in Table IV is not significant. It appears that the subjects have an equal tendency to interpret pictures as dialogue in either mode of presentation.

Modality

The next two hypotheses pertain to the factors in communicating modality. The first one considers the effect of the semantic categories of modality on interpretation. The second deals with the effectiveness of the syntactic categories of the medium to communicate modality.

The response to modality for the thirty pictures presented in isolation and in context appear in Table VII. Pictures 16 and 27 were removed from the sample because of presence of interference. Pictures 4, 8, and 10 do not express a modality and were, therefore, also removed from the sample.

Hypothesis 3 - For pictures in isolation and in context, there are no significant differences between the semantic categories of modality and the responses to modality.

TABLE VII

RESPONSES TO MODALITY CLASSIFIED BY PICTURE, MODE OF
PRESENTATION, SEMANTIC AND SYNTACTIC CATEGORIES

Picture	Isolation	Context	Semantic Categories	Syntactic Categories
1	7	2	Request	C.
2	11	14	Request	I.
3	12	19	Assertion	U.N.
4	--	--	--	--
5	9	17	Assertion	C.
6	5	2	S.S.R.	C.
7	12	13	Assertion	U.N.
8	--	--	--	--
9	6	2	Question	Gr.
10	--	--	--	--
11	4	10	S.S.R.	C.
12	11	20	Question	C.
13	13	17	Question	Gr.
14	23	22	Request	C.
15	0	12	S.S.R.	U.A.
16	--	--	S.S.R.	Interference
17	7	20	Assertion	U.N.
18	16	16	Assertion	U.N.
19	0	0	S.S.R.	U.A.
20	16	16	Assertion	U.N.
21	19	22	Assertion	U.N.
22	4	3	Request	U.A.
23	5	18	Request	U.A.
24	20	12	Request	C.
25	1	9	Question	U.A.
26	11	19	Assertion	U.N.
27	--	--	--	Interference
28	15	19	Assertion	U.N.
29	13	21	Question	Gr.
30	15	20	Assertion	U.N.

The results of the analysis of variance for hypothesis 3 appear in Table VIII. The incidence of correct responses in identifying the modality differed at the .01 level of significance. There is, therefore, a relationship between the semantic categories of modality and the incidence of correct responses in interpreting modality. The results in Table VIII indicate that null hypothesis 3 is rejected for the semantic categories of modality. The means for the semantic categories are shown in Table IX. The difference between the means of the four categories were submitted to Scheffe's Test to determine which means were significantly different from each other. The results of this test appear in Table X. For pictures in isolation and in context the differences between assertions and S.S.R. are significant at the .05 level.

The results in Table VIII also show that mode of presentation is related with a significant difference in the interpretation of modality. This difference is significant at the .01 level. With respect to mode of presentation, null hypothesis 3 is rejected by these results. Mode of presentation is a factor in the interpretation of modality. An inspection of the means in Table IX indicates that the context means are higher than the isolation means.

The results in Table VIII show no significant interaction between semantic categories of modality and mode of presentation. It may be assumed that the effect of mode of presentation is the same for all semantic categories.

Hypothesis 4 refers to modality. It is related to the effectiveness of the syntactic categories in communicating modality in isolation

TABLE VIII
ANALYSIS OF VARIANCE OF SEMANTIC CATEGORIES OF
MODALITY AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	3	257.472	5.496**
Sub. within groups	21	46.847	
Bet. modes of presentation (B)	1	133.186	8.293**
Interaction (A X B)	3	14.303	0.891
BX sub. within groups	21	16.059	

TABLE IX
MEANS OF SEMANTIC CATEGORIES OF MODALITY IN
ISOLATION AND IN CONTEXT

Categories	Isolation	Context
Requests	11.667	11.833
S. S. R.	2.250	6.000
Questions	8.800	13.800
Assertions	13.200	18.100

TABLE X

PROBABILITY MATRIX FOR SCHEFFE'S MULTIPLE COMPARISON OF MEANS
OF SEMANTIC CATEGORIES OF MODALITY

Categories	Requests	S. S. R.	Questions	Assertions
<u>IN ISOLATION</u>				
Requests	1.000	0.079	0.843	0.954
S. S. R.		1.000	0.346	0.018*
Questions			1.000	0.513
Assertions				1.000
<u>IN CONTEXT</u>				
Requests	1.000	0.527	0.959	0.277
S. S. R.		1.000	0.312	0.023*
Questions			1.000	0.636
Assertions				1.000

*Significant at the .05 level.

and in context. The four levels of syntactic categories are (1) conventional and indexical elements (C.I.), (2) graphic elements (Gr.), (3) unmarked absent elements (U.A.), and (4) unmarked neutral elements (U.N.). The syntactic categories of modality are all formators with different degrees of explicitness in inducing the interpreter to respond correctly. This hypothesis, therefore, tests the difference between the effectiveness of these formators in communicating modality in isolation and in context.

Hypothesis 4 - For pictures in isolation and in context, there are no significant differences between syntactic categories of modality in conveying modality.

The results of the analysis of variance for hypothesis 4 appear in Table XI. The resulting F-ratio of 4.293 for syntactic categories gives reason to reject the null hypothesis at the .05 level of significance and the F-ratio of 8.820 for mode of presentation gives reason to reject the null hypothesis at the .01 level of significance.

The absence of significant interaction, in Table XI, indicates that the syntactic categories are not differentially affected by mode of presentation.

Table XII gives the means of successful responses to formators of different explicitness in isolation and in context. Table XIII shows which of these differences are significant. In isolation there is a significant difference between conventional and indexical elements, on one hand and unmarked absent elements, on the other, at the .05 level of significance. The difference between the means of unmarked absent

TABLE XI

ANALYSIS OF VARIANCE OF SYNTACTIC CATEGORIES OF
MODALITY AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	3	206.274	4.293*
Sub. within groups	21	48.047	
Bet. modes of presentation (B)	1	141.321	8.826**
Interaction (A X B)	3	13.621	0.850
BX sub. within groups	21	16.023	

TABLE XII

MEANS OF SYNTACTIC CATEGORIES OF MODALITY
IN ISOLATION AND IN CONTEXT

Categories	Isolation	Context
C.I.	11.250	12.375
Gr.	10.667	13.333
U.A.	2.000	8.400
U.N.	13.667	18.222

TABLE XIII
PROBABILITY MATRIX FOR SCHEFFE'S MULTIPLE COMPARISON OF
MEANS OF SYNTACTIC CATEGORIES OF MODALITY

Categories	C.I.	Gr.	U.A.	U.N.
<u>IN ISOLATION</u>				
C.I.	1.000	0.998	0.025*	0.784
Gr.		1.000	0.139	1.000
U.A.			1.000	0.003**
U.N.				1.000
<u>IN CONTEXT</u>				
C.I.	1.000	0.997	0.757	0.342
Gr.		1.000	0.774	0.728
U.A.			1.000	0.085
U.N.				1.000

elements and unmarked neutral elements is significant at the .01 level. In context, on the other hand, there are no significant differences. The only difference approaching significance at the .05 level is between unmarked absent elements and unmarked neutral elements. It may be concluded from these results and from an inspection of the means in Table XII that, for pictures in isolation and in context, the absence of an iconic element to indicate modality is interpreted as indicating an assertion. It would appear, therefore, that the syntactic elements of modality operate as a zero sign in isolation and in context.

The degree of explicitness associated with conventional and indexical elements, on the one hand, and with graphic elements, on the other, are not related to a significant difference in means either in isolation or in context.

The means of the syntactic categories of modality in context, which appear in Table XIII, appear to be higher than the isolation means.

Core of the Message

The core of the content of the message was divided into arguments and relations. In the following three hypotheses, only the relations will be considered. The first hypothesis is related to the effect of the semantic categories; the next two hypotheses deal with the syntactic categories used to express the relations. The dependent variable in these three hypotheses is the number of correct responses to the relations of the message. These appear in Table XIV.

The semantic categories of the relations investigated are clusters and configurations. They are the two levels of factor A in the analysis

TABLE XIV

RESPONSES TO RELATIONS CLASSIFIED BY PICTURE, MODE OF PRESENTATION,
SEMANTIC, AND SYNTACTIC CATEGORIES

Picture	Isolation	Context	Semantic Categories	Syntactic Categories	
				Nature of Relationship	L1, L2
1	9	19	Configuration	R2	L2
2	11	15	Configuration	R2	L2
3	4	10	Cluster	R3	L2
4	7	0	Cluster	R2	L1
5	5	11	Cluster	R3	L2
6	--	--	--	--	--
7	6	1	Configuration	R2	L2
8	0	3	Cluster	R3	L1
9	6	16	Configuration	R2	L1
10	0	3	Cluster	R3	L1
11	--	--	--	--	--
12	2	20	Configuration	R2	L2
13	1	0	Cluster	C	L1
14	13	20	Configuration	C	L2
15	--	--	--	--	--
16	--	--	--	--	--
17	16	11	Configuration	R2	L1
18	--	--	Cluster	U.A.	--
19	--	--	--	--	--
20	13	11	Configuration	R2	L1
21	1	5	Cluster	U.A.	--
22	4	7	Configuration	C	L2
23	4	19	Configuration	C	L2
24	--	--	Configuration	Interference	Interference
25	0	3	Cluster	U.A.	--
26	2	12	Cluster	R3	L1
27	--	--	Configuration	Interference	Interference
28	3	11	Cluster	R3	L2
29			Cluster	R1	L2
30	0	3	Cluster	R2	L2

of variance. Configurations, by definition, contain an element of activity that the clusters do not possess. Hypothesis 5 serves to investigate the effect of the difference in activity level of the relations on interpretation.

Hypothesis 5 - For pictures in isolation and in context, there are no significant differences between the semantic categories of clustering and configuration of the relations on the interpretation of the relations of the message.

Pictures 16, 18, 24 and 27 were removed from the sample because of the presence of interference in these pictures. In Picture 18, the presence of flowers is likely to cause interference. In picture 24, the intended message is "open the cupboard door". The fact, however, that the door is wide open is likely to induce the subject to interpret the message as "close the door". Pictures 6, 11, 15 and 19 are social situation responses and as such express only style and modality. They were, therefore, withdrawn from the sample.

Table XV presents the results of the analysis of variance for this hypothesis. Both the semantic categories of clustering and configuration and mode of presentation are associated with a significant difference in response at the .01 level. On the basis of these results, null hypothesis 5 is rejected for the levels of factors A and B. Table XV indicates that there is no overall interaction between factors A and B. It may be assumed that mode of presentation has a constant effect upon clusters and configurations.

The means of the responses to clusters and configurations in isolation and in context appear in Table XVI. An inspection of these means, along with the results of the analysis of variance lead to the conclusion that the higher level of activity of the configurations is associated with a significantly higher level of response both in isolation and in context.

An inspection of the means in Table XVIII shows that the means for pictures presented in context are higher than the means in isolation.

Hypothesis 6 concerns the investigation of the effectiveness of the syntactic categories of relations in expressing the core of the message.

Hypothesis 6 - For pictures in isolation and in context, there are no significant differences between the syntactic categories of the relations in expressing the relations of the core of the message.

The levels of factor A include (1) unmarked absent elements (U.A.), (2) elements representing actions (R2), (3) elements representing conditions or situations (R3), and (4) conventional elements (C.). Pictures 16, 24 and 27 were removed because of interference and pictures 6, 11, 15 and 19 were removed because of the absence of a core of message. Picture 29 was also removed because the relation (delimitation of time) is expressed by the representation of an object (R1).

The data for hypothesis 6 appear in Table XIV, page 81. The results of the analysis of variance, in Table XVII, show that there is no

TABLE XV

ANALYSIS OF VARIANCE OF SEMANTIC CATEGORIES OF CLUSTER AND
CONFIGURATION OF RELATIONS AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	1	584.138	27.784**
Sub. within groups	20	21.024	
Bet. modes of presentation (B)	1	267.597	13.626**
Interaction (A X B)	1	4.557	0.232
BX sub. within groups	20	19.638	

TABLE XVI

MEANS OF SEMANTIC CATEGORIES OF CLUSTER AND CONFIGURATION OF
RELATIONS IN ISOLATION AND IN CONTEXT

Categories	Isolation	Context
Cluster	1.846	6.077
Configuration	8.400	13.900

TABLE XVII

ANALYSIS OF VARIANCE OF SYNTACTIC CATEGORIES OF RELATIONS OF
TOPIC AND COMMENT AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	3	85.947	2.034
Sub. within groups	18	42.247	
Bet. modes of presentation (B)	1	234.218	10.966**
Interaction (A X B)	3	5.095	0.239
BX sub. within groups	18	21.358	

TABLE XVIII

MEANS OF SYNTACTIC CATEGORIES OF RELATIONS OF TOPIC AND
COMMENT IN ISOLATION AND IN CONTEXT

Categories	Isolation	Context
U.A.	0.333	5.333
R2	7.778	10.667
R3	1.800	7.800
C.	5.400	11.400

significant difference between the levels of factor A. The hypothesis of no significant difference between the syntactic categories of the relations, therefore, is supported by these results. Although some of the differences between the means of the syntactic categories of the relations, as shown in Table XVIII, appear relatively important, the absence of significance may be due to other factors not investigated.

On the basis of the results presented in Table XVII with respect to mode of presentation, null hypothesis 6 is rejected. Mode of presentation is significant at the .01 level. The means in Table XVIII are higher in context than those in isolation. The interaction between the syntactic categories of relations and mode of presentation is not significant. It may, therefore, be concluded that mode of presentation has an over-all similar effect upon these syntactic categories.

Hypothesis 7 deals with the difference in effectiveness of pictures in isolation and in context in conveying the relations when the elements of the medium are to be interpreted denotatively (L1) and when they are to be interpreted connotatively (L2).

Hypothesis 7 - For pictures in isolation and in context there are no significant differences between the syntactic categories L1 and L2 of the relations in conveying the relations of the message.

The pictures causing interference and those which do not include a modality were removed from the sample. Pictures 21 and 25 were also removed because of the absence of iconic elements to express the rela-

tions. The criterion for the two categories of factor A in isolation and in context is reported in Table XV page 84. The results of the analysis of variance for the categories L1 and L2 are presented in Table XIX. With respect to factor A, null hypothesis 7 is not rejected. There is no significant difference between the pictures to be interpreted denotatively and connotatively. With respect to treatment effects, however, hypothesis 7 is rejected. The difference in treatment is significant at the .01 level.

The F-ratio of 4.093 for interaction between factor A and mode of presentation is not significant at the .05 level. Since it is approaching significance at the .05 level of confidence, it may, however, be viewed as an indication that one of the treatments may be superior for one of the levels of factor A.

The results of the one-way analysis of variance on the effect of treatment upon L1 and L2, in Table XX, show that L2 is associated with a significant effect of mode presentation at the .01 level of confidence. These results, along with an inspection of the means in Table XXI, show that context may be superior for pictures intended to convey meaning connotatively.

Complexity

Hypothesis 8 deals with the relationship between levels of complexity and responses on the total message in isolation and in context. The total message is determined by adding the correct responses to style, modality, topic, and comment. Pictures 16, 18, 24 and 27 were removed from the analysis because of interference. Pictures 6, 11, 15 and 19 were also removed because they do not include a core of the message.

TABLE XIX

ANALYSIS OF VARIANCE OF SYNTACTIC CATEGORIES OF L1 AND L2 OF
THE RELATIONS AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	1	53.204	1.138
Sub. within groups	18	46.737	
Bet. modes of presentation (B)	1	168.336	9.074**
Interaction (A X B)	1	75.941	4.093
BX sub. within groups	18	18.552	

TABLE XX

EFFECT OF MODE OF PRESENTATION ON THE SYNTACTIC CATEGORIES
OF L1, L2 OF RELATIONS OF TOPIC AND COMMENT

Categories	DF	MS	F
L1	1	7.562	0.231
L2	1	294.000	9.004**
error	36	32.65	

TABLE XXI

MEANS OF SYNTACTIC CATEGORIES OF L1 AND L2 OF THE RELATION
IN ISOLATION AND IN CONTEXT

Categories	Isolation	Context
L1	5.625	7.000
L2	5.167	12.167

Hypothesis 8 - For pictures in isolation and in context, there are no significant differences between the levels of complexity in conveying the total message.

The scores on the total message for each picture in isolation and in context and the levels of complexity of each picture appear in Table XXII.

The results of the analysis of variance of the effect of the levels of complexity are shown in Table XXIII and indicate that the levels of complexity are associated with a difference in means significant at the .05 level. On the strength of these results, null hypothesis 8 is rejected. Complexity of the picture is a factor in the interpretation of the total message.

The means of the levels of complexity, reported in Table XXIV, show that the most complex pictures are the least effective both in isolation and in context. Scheffe's Multiple Comparison of Means, in Table XXV, indicates, however, that the difference in means in context is not significant. In isolation, on the other hand, the differences between C2 and C3 are significant at the .05 level.

Table XXIII also shows that mode of presentation is associated with a significant difference at the .01 level of confidence. An inspection of the means in Table XXIV indicates that the context means are higher than the isolation means.

Table XXIII shows no interaction between levels of complexity and mode of presentation. It can be inferred that all levels of complexity are related in the same way to mode of presentation.

TABLE XXII

RESPONSES ON THE TOTAL MESSAGE CLASSIFIED BY PICTURE, MODE OF
PRESENTATION, LEVEL OF COMPLEXITY AND
USE OF IDEOGRAPHEMES

Picture	Isolation	Context	Level of Complexity	Use of Ideographemes
1	43	62	C2	Non-Ideo.
2	56	67	C2	Non-Ideo.
3	34	54	C3	Ideo.
4	22	13	C2	Non-Ideo.
5	35	65	C2	Non-Ideo.
6	--	--	C2	Non-Ideo.
7	45	46	C1	Non-Ideo.
8	13	10	C3	Non-Ideo.
9	30	39	C3	Ideo.
10	4	14	C3	Non-Ideo.
11	--	--	C2	Non-Ideo.
12	34	64	C1	Non-Ideo.
13	50	60	C2	Ideo.
14	73	84	C2	Ideo.
15	--	--	C3	Non-Ideo.
16	--	--	C1	Non-Ideo.
17	33	66	C1	Non-Ideo.
18	--	--	C1	Ideo.
19	--	--	C2	Non-Ideo.
20	54	56	C2	Ideo.
21	46	55	C1	Non-Ideo.
22	35	41	C2	Non-Ideo.
23	48	83	C1	Non-Ideo.
24	--	--	C3	Non-Ideo.
25	24	38	C1	Non-Ideo.
26	33	58	C1	Non-Ideo.
27	--	--	C1	Non-Ideo.
28	41	65	C3	Non-Ideo.
29	40	67	C2	Ideo.
30	33	44	C3	Ideo.

TABLE XXIII

ANALYSIS OF VARIANCE OF LEVELS OF COMPLEXITY ON
TOTAL MESSAGE AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	2	1590.774	3.595*
Sub. within groups	19	442.531	
Bet. modes of presentation (B)	1	2239.400	30.454**
Interaction (A X B)	2	58.844	0.800
BX sub. within groups	19	73.534	

TABLE XXIV

MEANS OF LEVELS OF COMPLEXITY ON TOTAL MESSAGE
IN ISOLATION AND IN CONTEXT

Categories	Isolation	Context
C1	38.000	56.750
C2	45.333	57.222
C3	25.833	37.667

Ideographemic Characteristics of the Picture

The final hypothesis deals with the difference between the effect of the presence or absence of ideographemic elements in a picture on the total message. The same pictures as those for complexity were used in the analysis of variance. The responses on the total message and the classification of pictures into ideographemic and non-ideographemic appear in Table XXII page 90.

Hypothesis 9 - For pictures in isolation and in context, there are no significant differences between ideographemic and non-ideographemic pictures in conveying the total message.

Table XXVI shows that ideographemic and non-ideographemic pictures are not related to a significant difference in eliciting the total message. On the basis of this evidence, null hypothesis 9 with respect to factor A is supported. The presence or absence of ideographemes in a picture is not a factor in conveying the total message.

On the other hand, mode of presentation is associated with a significant difference in conveying the total message. It is significant at the .01 level. The treatment effects for ideographemic and non-ideographemic pictures are significant at the .01 level of confidence.

Conclusions

The findings of the investigation of factors in conveying meaning with film strip visuals were presented in this chapter. Of the first seven hypotheses, two dealt with style, the next two with modality and the following three were concerned with relations of the message. By

TABLE XXV

PROBABILITY MATRIX FOR SCHEFFE'S MULTIPLE COMPARISON OF
MEANS OF LEVELS OF COMPLEXITY

Categories	C1	C2	C3
<u>IN ISOLATION</u>			
C1	1.000	0.508	0.235
C2		1.000	0.030*
C3			1.000
<u>IN CONTEXT</u>			
C1	1.000	0.998	0.196
C2		1.000	0.168
C3			1.000

TABLE XXVI

ANALYSIS OF VARIANCE OF NON-IDEOGRAPHIC AND IDEOGRAPHIC
PICTURES ON TOTAL MESSAGE AND MODE OF PRESENTATION

Source of Variation	DF	MS	F
Bet. categories (A)	1	705.204	1.340
Sub. within groups	20	526.211	
Bet. modes of presentation (B)	1	1943.030	26.297**
Interaction (A X B)	1	42.636	0.577
BX sub. within groups	20	73.887	

comparing the students' scores on style, modality, and relations with mode of presentation and with the semantic and syntactic categories of the pictures, it was found that mode of presentation had the same overall effect on the semantic and syntactic categories of the message.

The pictures in context were associated with a higher score on the criterion for modality and relations but not for style. The semantic categories were related with a significant difference on the criterion both in isolation and in context for style, modality, and relations. The syntactic categories of the medium to express the different categories of meaning showed a significant difference in response for style and modality. The syntactic categories intended to express the relations both from the point of view of the nature of the relationship between the iconic elements and the referent and with respect to denotative and connotative interpretation, however, did not differ significantly in effectiveness in conveying relations.

The last two hypotheses dealt with the effect of pictorial characteristics in conveying meaning. For complexity and use of ideographemes, the dependent variable was the students' score on the total message. As in the previous hypotheses the mode of presentation had the same overall effect on the levels of complexity and on ideographic and non-ideographic pictures. Pictures presented in context were related with a significantly higher score than those in isolation. There was a significant difference in response associated with the levels of complexity, but not with ideographic and non-ideographic pictures.

The next chapter presents the summaries of the research and the findings. The findings and the information gained from the review of the literature on conveying meaning with film strip visuals are used as a basis for some conclusions about the factors in conveying meaning in second language teaching and about the use of visuals in the classroom.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

I. SUMMARY OF THE RESEARCH

In order to determine some of the factors in conveying meaning through cartoon filmstrip visuals, a semiotic framework of study was developed. A random sample of thirty pictures from Voix et Images de France was analyzed into categories of the medium and categories of the content of the intended messages. The dimensions of the content of the intended messages selected for this study were: style, modality, relations of the topic and comment, and the total message. The elements of the medium were analyzed according to the nature of the relationship between the element and its intended meaning, the mode of signifying of the elements of the medium, and the type of code used. With respect to the nature of the relationship, the elements of the pictures were divided into indexical, conventional, and representational elements; with respect to mode of signifying into formators, designators, and mixed signs; with respect to code into single sign code, zero sign code, denotative and connotative systems. The pictures were further analyzed for complexity and use of ideographemes.

In order to elicit responses from the students, the sample of thirty pictures was divided into two sets of fifteen pictures each. One group of grade seven students interpreted pictures one to fifteen in isolation and pictures fifteen to thirty in context. The mode of presentation was reversed for the other group of students.

It was hypothesized that for pictures in isolation and in context neither the semantic nor the syntactic categories of the message would be associated with a significant difference in response to style, modality, and relations of the messages. It was further hypothesized that neither complexity nor use of ideographemes either in isolation or in context would be related to a difference in response on the total message.

A two-way analysis of variance with repeated measures on one factor was used. The levels of factor A were the syntactic and semantic categories, the levels of complexity and use of ideographemes. The repeated measures were mode of presentation. One set of observations consisted of the scores, for pictures presented in isolation, the other consisted of pictures presented in context. To test the significance of the difference between means, Scheffe's Test was used.

II. SUMMARY OF THE MAIN FINDINGS

The evidence presented indicated that mode of presentation has the same over-all effect on the semantic and syntactic categories for the dimensions of style, modality, and relations of the messages. The same was also true of the relationship between the levels of complexity and between ideographemic and non-ideographemic pictures and mode of presentation on the total message.

The responses to style were not associated with a significant difference between modes of presentation. Style which expresses the subjects' attitude to the interpretation did not vary significantly as

a result of being interpreted either in isolation or in context. The responses to the modality and the relations of the message, on the other hand, were influenced by mode of presentation. The pictures presented in a context were associated with a higher level of response.

The semantic categories of the messages were related to a significant difference on the students' responses both in isolation and in context for style, modality, and relations.

The level of response was affected by the syntactic categories of elements to modality. For relations, however, both from the point of view of nature of the relationship between the iconic element and the referent, and with respect to literal and inferential interpretation, the level of response was not affected by the syntactic categories used to express the content.

The responses to pictures of three levels of complexity differed from one another. The most complex pictures were associated with the lowest level of correct interpretation.

Although ideographemic pictures elicit a higher mean response than non-ideographemic pictures, there was no significant difference between the response elicited by either ideographemic or non-ideographemic pictures.

III. CONCLUSIONS ABOUT FACTOR IN COMMUNICATING MEANING WITH FILMSTRIP VISUALS

1. For a system of communication to operate effectively, the first condition that must be met is that the elements of the medium used

to convey meaning, i.e. the pictures, induce the subjects to interpret. The interpreter must take a certain attitude before pictures. Consequently, the first question to be answered is whether the students adopt an interpretive attitude to pictures.

There is evidence in this study that grade seven students take an interpretive attitude. The dimension which reflects the students' attitude is style. Style indicates whether a student looks upon a picture as a source to be described or interpreted as dialogue. The results of this study show that students adopt this interpretive attitude for pictures presented in isolation and in context. Students have a tendency to overinterpret; pictures which are meant to be described are interpreted as dialogue. In pictures intended to be interpreted as dialogue, the absence of the indexical element elicits a correct response as effectively as the presence of an indexical element.

2. A second condition for a system of communication to operate effectively is that the elements of the medium communicate the message or dimensions of the message which were intended. Although no absolute norms for an acceptable level of effectiveness exist, Jacob,¹ in discussing the problem of an acceptable level of response in comprehension of films, suggests that a level of 75 per cent correct response is acceptable. An inspection of the dependent

¹Jean-Noël Jacob, L'enfant devant le film (Montréal: Marcel Didier (Canada) Ltée., 1969), p. 59.

variable in Tables I, VII, XIV, and XXII in relation to the possible total of twenty-five correct responses shows that, adopting this figure as a norm, the only dimensions of the content which were communicated at this level were conversational style in isolation and in context and assertions in context. The only elements of the medium which communicated their intended meanings at this level were indexical and U.A. elements for style in isolation and in context, and U.N. elements for modality in context. On the total message, only Pictures 14 and 23 in context met this specification for level of effectiveness. The relations which are the nucleus of the messages were elicited correctly from 18.7 per cent of the interpreters for pictures in isolation and 37.9 per cent for pictures in context.

It would appear, therefore, that Corder's remarks about the difficulty of conveying meaning by translation into the native language apply equally to conveying meaning through visuals. The decision, then, as to which of those two methods should be used or as to whether a combination of the two should be used must be based on factors other than those investigated in this study. Whether pictures are used to convey meaning or to retain meaning, however, they must express the meaning clearly and effectively.

3. In the discussion of conclusions some practical suggestions are made with respect to the different factors in conveying the components of meaning of the message. These practical suggestions refer either to the improvement of pictures or to the use of visuals in the classroom by the teacher. These suggestions, however, must be considered

only as tentative and subject to further research since changing the markedness of one of the elements of the picture to express a certain dimension of meaning may change the relationship to the other elements. These changes may eliminate one type of misinterpretation but cause another.

4. The effectiveness of pictures may be increased by what the teacher does in the classroom. This fact has implications for teacher training. Prospective teachers must be trained in recognizing the elements which cause interference; they must also be made aware of the factors which influence interpretation.

If the decision is made not to use the students' native language in the classroom, the students should be given a training session in interpretation of pictures prior to starting with the course material. If the decision is made to use the students' native language but to keep it to a minimum, then the students' native language could be used to convey those elements which are particularly ineffective, e.g. relations whose semantic features form a cluster.

5. Situational meaning is best conveyed by means of pictures in a context. Presenting pictures in a context resulted in a higher level of response for modality, relations and the total message. In order to convey situational meaning, therefore, the established practice of showing pictures in a context of pictures should be continued.

One possible explanation for the fact that style is not affected by the context is that style, unlike the other components of the content of the message, reflects the interpretive attitude of the

student. This attitude is present in the interpretation of pictures in isolation as well as in context.

Many of the differences evident in the interpretation of pictures presented in isolation are not significant in the responses to pictures presented in context. This effect may be explained by the fact that the types and characteristics of the context were not a part of this study. It would, therefore, appear that the contexts used to disambiguate the meaning of pictures vary independently from the elements of the picture to convey the meaning.

6. The responses to the semantic category of narrative style were significantly lower than those for conversational style. Similar results were obtained for the syntactic category of U.N. elements to express narrative style. Since the absence of an element of the medium to convey narrative style is not effective, some other means of indicating this dimension should be devised. With respect to the use of visuals in the classroom, the convention could be established that when the indexical element is absent the picture should be interpreted as narrative. The students should be cautioned, however, to rely on the context when a person's mouth is not shown either because the speaker is not facing the student or because the picture is focused on some other element of the message.

The suggestion, made by Greimas,² that greater use of the narra-

²A. J. Greimas, "Observations sur la méthode audio-visuelle de l'enseignement des langues vivantes," Etudes de linguistique appliquée, B. Quéhada, editor (Paris: Didier, 1962), pp. 152-153.

tive style should be made because it is less limiting than dialogue, must be viewed with caution because of the interpretive attitude of students before pictures.

7. The four syntactic categories of elements to express modality (conventional and indexical, graphic, U. A., and U. N.) operate as a zero sign code for pictures presented in isolation. In other words, the absence of an element is interpreted as indicating assertion, Although the results for pictures in context are not quite significant, the fact that they are interpreted correctly more often may lead one to conclude that the categories which are not assertions should be marked whenever possible.

Some semantic categories of modality, however, may be more difficult to mark than others. In the sample of pictures for this study, for instance, the semantic category S.S.R. was the most difficult to convey. In interpreting greetings, students had a tendency to interpret these pictures either as social situation responses following the greeting or as questions or assertions related to the purpose of the meeting. These pictures were marked for the modality of greeting but the conventional element used was not effective in communicating that dimension. This difficulty, however, may be solved by training in interpreting modality. Differences in marking modality are exemplified by pictures 15 and 19. Pictures 15 and 19 express social rapports of thanking and excusing oneself respectively. Neither of these pictures is marked for modality and neither elicited a correct response in iso-

lation. In context, on the other hand, picture 15 elicited twelve correct responses out of a possible twenty-five. In this case the context by specifying the time of the act of speech induced fifty per cent of the interpreters to respond correctly. Picture 19 in context did not elicit one correct response. In the case of picture 15, it would seem that it would be almost impossible to mark the picture in isolation. One must rely on context. For picture 19, on the other hand, whether the representation of the lady partially in front of the other would induce the interpreters to respond correctly is a matter for further research. As a general rule, however, categories of modality other than assertions should be marked whenever possible.

8. The level of response for the relations expressed in the topic and comment of the message reveal that this is the most difficult dimension to convey. Clusters elicited correct responses from 7.3 per cent of the students in isolation and from 24.3 per cent of the students in context. Configurations were interpreted correctly by 33.6 per cent in context. The level of activity present in the configuration of the semantic features of the relations appear to make them more amenable to visual presentation. The level of abstraction associated with the clustering of the semantic features of the relations make them difficult to present visually. Since the relations constitute the nucleus of the message, it is the most important dimension of the message. This fact along with the results obtained on the relations indicate an important area of

research. Malandain's³ suggestion that a course using visuals should be organized around those situations or messages which can be communicated visually and not upon a corpus of linguistic elements to be taught is supported by this evidence.

In a classroom situation, a teacher using visuals to communicate situational meaning may have to resort to the students' native language to convey the meaning of relations whose semantic features form a cluster.

There is an important difference between the syntactic categories in expressing the relations of the message. The representations of conditions or situations in context, for instance, elicit a correct response from 21.3 per cent of the interpreters, the representations of actions from 42.6 per cent, U.A. elements from 31.2 per cent, and conventional elements from 45.6 per cent of the interpreters. The fact that these differences do not result in a significant difference in the analysis of variance may indicate a possible interaction between clusters and configurations and the syntactic categories to express them.

9. Although the interaction between the syntactic categories L1 and L2 to express the relations and mode of presentation approaches significance, it is not quite significant at the .05 level. The one-way analysis of variance, however, points to a potential interaction.

³Claude Malandain, Utilisation des films fixes pour l'enseignement des langues vivantes aux enfants (Paris: Didier, 1966), p. 141.

There is an indication that context may be superior when the message is to be interpreted inferentially. These results underline the importance of research in factors involved in what constitutes adequate context.

10. In the discussion of the dimensions of style and modality, it was suggested that because of the coding system used in those two components of the message the effectiveness of pictures in conveying meaning could be increased by adding marks for certain categories of these dimensions. The results of the analysis of variance on complexity show that a complex picture elicits the lowest level of response both in isolation and in context. It would seem, therefore, that adding marks to a complex picture may not greatly increase its effectiveness in communicating meaning. In the course of developing visuals for second language teaching, a decision, based on research, must be made with respect to how much information can ideally be presented by the picture itself and what elements must be assigned to the context.
11. The use of ideographemes (balloons) in pictures has come in for some criticism by Fleming.⁴ The main criticism is that the use of ideographemes interferes with correct interpretation. In this study, the level of correct responses was higher for ideographemic than for non-ideographemic pictures. The difference, however, was not

⁴Gerald Fleming, E. Spaleny, and J. Peprnik, "The Didactic Organization of Pictorial Reality in the New Language Teaching Media," Praxis, 14 (April, 1967), pp. 160-172.

significant. It would seem that the use of balloons to convey meaning is effective dependent upon what meaning it is intended to convey and how it conveys it rather than upon the use of ideographs as such. Picture 14, for instance, which elicited the highest level of response makes use of a balloon to indicate an absent referent. In picture 3, on the other hand, a balloon is used to express the relation, but also to express the argument "we". The correct interpretation of the argument, in this picture, rests upon the interpreter's ability to perceive the identity of the addressor and the addressee and the persons in the balloon.

IV. SUGGESTIONS FOR FURTHER RESEARCH

1. The factors which are the object of this study should be investigated separately with a sample of pictures chosen for the purpose of the investigation to find out whether the conclusions of this study are well founded or whether they are a function of a limited sample.
2. Further factors in conveying meaning must be investigated. Some factors which may prove to be important are (1) directionality of the message, (2) arguments, (3) delimitations of time, place, and manner, (4) effect of the density of the message, (5) the effect of using socio-cultural elements, (6) effect of elements causing interference.
3. The effects of a training session on the interpretation of pictures should be investigated. Rules for interpreting style, modality, topic and comment, and context could be given to an experimental

group of subjects and their results compared to a control group.

4. This study did not investigate the effect of different types of contexts upon interpretation of pictures. Since the context is an important factor there is need to know more about its effects on interpretation. Some of the factors that may be investigated are:
(1) pro-active and retroactive effects, (2) length of context,
(3) type of relation between the context and the picture.
5. Since the relations constitute the nucleus of the message, more should be known about their interpretation. A study could be set up to investigate the effects of the syntactic categories on the different semantic categories of the relations. Although the dimensions of clusters and configurations are important, the relations should be studied with a view to determine types of clusters and configurations and their effects on interpretation.
6. Several experiments could be conducted in changing the elements of the medium of a picture in order to convey certain dimensions of the message more effectively. These pictures could be compared with the original ones for their effect on interpretation.

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APPENDIX A

Analysis of Pictures

APPENDIX A
ANALYSIS OF PICTURES

Each of the analyses of the thirty pictures was done from the projected visuals. Some elements, therefore, which are said to be marked may not be clear from the reproductions at the top of the page.

The first number to appear on the page is the number of the picture. This is followed by the title of the lesson. The four numbers which appear below the title are the numbers of the pictures forming the context. The number of the picture in question is underlined. At the left hand side of the page above the analysis the number of the lesson followed by the number of the picture appear in parentheses.

The first line of the analysis gives the French intended message. The second line gives the English counterpart of the intended message.

Legend

1. m.o. - mouth open
2. U. A. - unmarked absent
3. U. N. - unmarked neutral
4. R - representational element
5. R1 - representation of an object
6. R2 - representation of an action
7. R3 - representation of a condition of a situation
8. C. - conventional element
9. C. I. - conventional or indexical element
10. Gr. - graphic element

11. L1 - element to be interpreted denotatively
12. L2 - element to be interpreted connotatively
13. C1 - picture containing six or fewer elements
14. C2 - picture containing seven, eight, or nine elements
15. C3 - picture containing ten or more elements
16. a, b - semantic features of relations
17. (a, b) - semantic features forming a cluster
18. (a \rightarrow b) - semantic features forming a configuration



(8 - 5)

Est-ce que je peux allumer les bougies?			
May I light the candles?			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	mouth open m.o.	Indexical
	Modality Request	questioningly looking up	Conventional
Candles	Topic Argument	candles	R1
I <u>light</u>	Comment Relation Configuration	action of holding matches	R2 L2

Picture Characteristics

Complexity

Persons	1
Objects	3 cake, candles, matches
Conventional El.	0
Indexical El.	2 questioning look, m.o.
Background	1
Ideographemes	0
Graphic Symbols	0
Actions	1 holding matches
Total	8

Type of Picture
non-ideographemic

Level of Complexity
C2



(23 - 26)

Fais voir			
Let me see			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	mouth open m.o.	Indexical
	Modality Request	action of pulling paper	Indexical
paper	Topic Argument	paper	R1
I <u>see</u> (a --> b)	Comment Relation Configuration	action of pulling paper	R2 L2

Picture Characteristics

Complexity

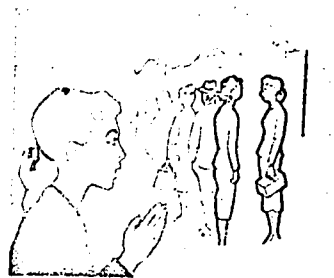
Persons	2
Objects	1 paper
Conventional El.	0
Indexical El.	1 mouth open
Background=	1
Ideographemes	0
Graphic Symbols	0
Actions	2 pulling paper, holding paper
Total	7

Type of Picture

Non-ideographemic

Level of Complexity

C2



(20 - 14)

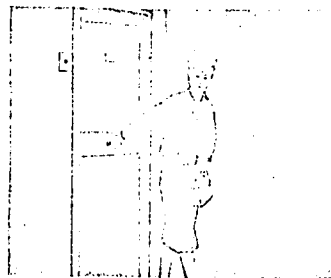
Nous serons obligées d'attendre.			
We will have to wait in line.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Assertion	nil	U. N.
WE	Topic Argument	Indication of identity by gesture and outline	<u>Conventional</u> and R1
<u>Wait in line</u> (a, b)	Comment Relation Cluster	Respective position of persons	R2 L2

Complexity		Picture Characteristics	
Persons	3	Type of picture	Ideographemic
Objects	2 wicket, parcel	Level of Complexity	C3
Indexical El.	2 m.o. position of line up		
Conventional.El.	1 gesture		
Background	1		
Ideographemes	1 balloon		
Graphic Symbols	1 marked outline of persons		
Actions	0		

4

Dans l'ascenseur
7 - 1 - 2 - 5

125



(10 - 1)

Madame Thibaut sort de chez elle.			
Mrs. Thibaut leaves her home.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Narrative	nil	U. N.
	Modality nil	nil	nil
Madame Thibaut	Topic Argument	Lady	R1
<u>is leaving</u> (a, b)	Comment Relation Cluster	Action (walking back turned to door arm extended backward pulling on knob	R2 R2 R2 L1

Picture Characteristics

Complexity

Persons	1	Type of Picture	non-ideographemic
Objects	2		
Conventional El.	0	Level of Complexity	
Indexical el.	0	C2	
Background	1		
Ideographemes	0		
Graphic Symbols	0		
Actions	3	walking, back turned to door, pulling knob	
Total	7		



(12 - 33)

Regardez comme je suis beau!			
See how great I look!			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Assertion	Straw hat falling over eyes black heavy coat too large, smile	U. N.
I	Topic Argument	arms out showing off (attracting attention to self)	Conventional
look great am funny (a, b)	Comment Relation Cluster	Size of boy opposed to size of boy Clothes	R3 L2

Picture Characteristics

Complexity

Persons

1

Objects

4 hat, shoes,
trousers, coat

Conventional El.

2 arms stretched out,
smile

Indexical El.

1 m.o.

Background

0

Ideographemes

0

Graphic Symbols

0

Actions

0

Total

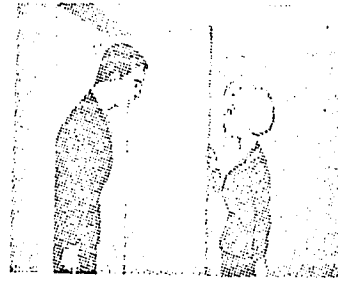
8

Type of Picture

non-ideographemic

Level of Complexity

C2



(1 - 4)

Bonjour, mademoiselle.			
Hello, Miss.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality S.S.R. Greeting	inclination of head and graphic representation of movement	Conventional
	Topic nil		
	Comment nil		

Picture Characteristics

Complexity

Persons

2

Objects

1 door

Conventional El.

1 inclination of head

Indexical El.

1 m.o.

Background

1 inside of home

Ideographemes

0

Graphic Symbols

1 graphic representation of movement

Actions

1 lady opening door

Total

8

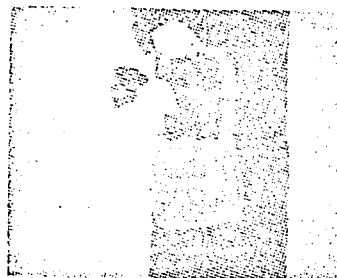
Type of Picture

non-ideographemic

Level of Complexity

C2

Catherine s'habille.
29 - 30 - 31 - 32



(13 - 31)

Bien sûr! Je prends mon sac.			
Of course! I am taking my purse.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	nil	U. A.
	Modality Assertion	nil	U. N.
I <u>am taking</u> (a --> b)	Topic Relation Configuration	action of placing purse on arm	R2 L2
my <u>purse</u>	Comment Argument	purse	R1

Picture Characteristics

Complexity

Persons	1
Objects	3 coat, gloves, purse
Conventional El.	0
Indexical El.	0
Background	0
Ideographemes	0
Graphic Symbols	0
Actions	<u>1</u> placing purse on arm
Total	5

Type of Picture
non-ideographemic

Level of Complexity
C1

Au grenier

1 - 7 - 14 - 5

(12 - 1)

Paul est au grenier.			
Paul is in the attic.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Narrative	nil	U. N.
	Modality nil		
Paul	Topic Argument	boy	R1
<u>is</u> in the attic. (a, b)	Comment Relation Cluster	standing in attic	R3 L1

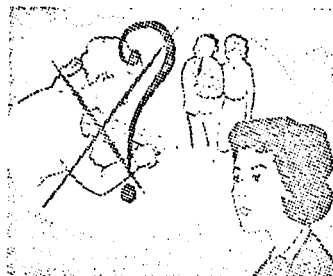
Picture Characteristics

Complexity

Persons	1
Objects	7 bicycle, trunk, tailor's dummy, stairs, 3 other objects
Conventional El.	0
Indexical El.	0
Background	1 attic
Ideographemes	0
Graphic Symbols	0
Actions	1 looking away from objects
Total	10

Type of Picture
non-ideographemicLevel of Complexity
C3

A la poste
13 - 35 - 32 - 31



(20 - 35)

Vous n'écoutez pas quelques mots à vos parents?			
Are you not writing a few lines to your parents?			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Question	Question mark	Graphic symbol
<u>writing</u> a letter (a --> b)	Topic Relation Configuration	action of writing	R2 L1
you	Comment Argument	person in balloon is not the same as speaker; representa- tion of non-identity	Indexical

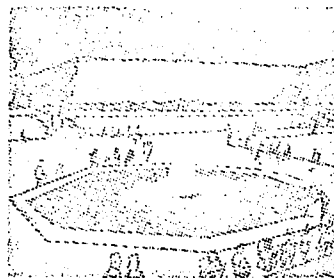
Picture Characteristics

Complexity

Persons	4
Objects	2 pen, letter
Conventional El.	0
Indexical El.	2 m.o., representation of non-identity
Background	0
Ideographemes	1 balloon
Graphic Symbols	2 question mark, mark for negation
Actions	2 lady holding gentleman's arm, lady writing
Total	13

Type of Picture
ideographemic

Level of Complexity
C3



(24 - 6)

Autour du bassin (Tous les bancs verts sont occupés)			
Around the fountain (All the green benches are occupied)			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Narrative	nil	U. N.
	Modality nil		
All the green benches <u>are</u> <u>occupied</u> (a, b)	Topic Relation Cluster	people seated	R3 L1
<u>around the</u> fountain	Comment Delimitation of place	around the fountain	R3

Picture Characteristics

Complexity

Persons	5 five groups of people
Objects	6 pool, fountain, boats, stairs, trees, carriage
Conventional El.	0
Indexical El.	0
Background	0
Ideographemes	0
Graphic Symbols	0
Actions	1 boy playing in pool
Total	12

Type of Picture
non-ideographemicLevel of Complexity
C3

Au café
1 - 2 - 5 - 6



(25 - 1)

Bonjour, madame.			
Good day, Mrs.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality S.S.R. Greeting	inclination of head	Conventional
	Topic nil		
	Comment nil		

Picture Characteristics

Complexity

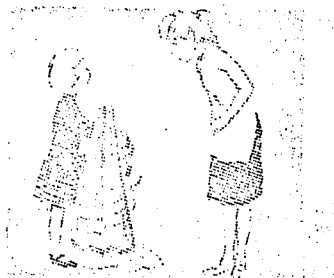
Persons	2
Objects	2 waiter's clothes, lady's outdoor clothes
Conventional El.	1 inclination of head
Indexical El.	1 m.o.
Background	1
Ideographemes	0
Graphic Symbols	1 Cafe de la Paix
Actions	1 persons standing in front of cafe terrace
Total	9

Type of Picture
non-ideographemic

Level of Complexity
C2

En rangeant l'armoire.

17 - 16 - 24 - 15



(14 - 24)

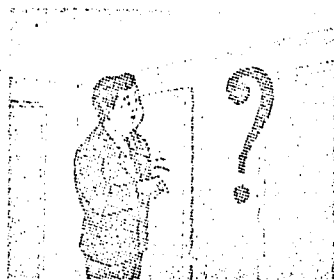
Est-ce que tu ranges la couverture?			
Are you putting away the blanket?			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Question	raised head and eyebrows	Conventional
are you <u>putting</u> <u>away</u> (a --> b)	Topic Relation Configuration	action of holding up toward addressee	R2 L2
the blanket	Comment Argument	blanket	R1

Picture Characteristics

Complexity

Persons	2
Objects	1 blanket
Conventional El.	1 raised head and eyebrows
Indexical El.	1 m.o.
Background	0
Ideographemes	0
Graphic Symbols	0
Actions	1 holding blanket
Total	6

Type of Picture
non-ideographemicLevel of Complexity
C1



(5 - 12)

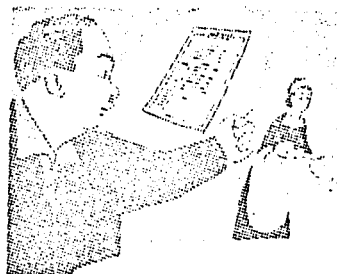
Est-ce que les enfants sont là?			
Are the children at home?			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Question	question mark	graphic symbol
Are they at home? (a, b)	Topic Relation Cluster	finger pointing downwards and graphic representation of movement	Conventional L1
children	Comment Argument	outline of children	R1

Picture Characteristics

Complexity

Persons	1
Objects	0
Conventional El.	1 pointing downward
Indexical El.	1 m.o.
Background	1 inside of home
Ideographemes	2 outlines of children
Graphic Symbols	2 question mark, representation of movement
Actions	0
Total	8

Type of Picture
ideographemicLevel of Complexity
C2



(27 - 7)

Mademoiselle! La carte, s'il vous plaît.

Waitress! The menu, please.

Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	nil	U. A.
	Modality Request	arm extended toward addressee; index raised	conventional
menu	Topic argument	menu	R1
<u>bring</u> (a --> b)	Comment Relation Configuration	arm extended toward addressee, index raised and menu	Conventional L2

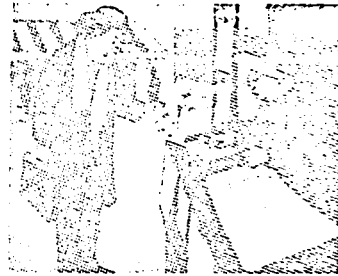
Picture Characteristics

Complexity

Persons	2
Objects	2 menu, waitress' uniform
Conventional El.	2 arm extended, index raised
Indexical El.	0
Background	1 restaurant
Ideographemes	1 balloon
Graphic symbols	0
Actions	1 waitress carrying tray
Total	9

Type of Picture
ideographemicLevel of Complexity
C2

Monsieur Robin achète son journal
20 - 21 - 24 - 23



(22 - 23)

Merci.			
Thank you.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality S.S.R. thanking	nil	U. A.
	Topic nil		
	Comment nil		

Picture Characteristics

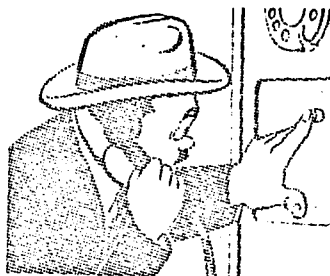
Complexity

Persons. 2
Objects 3 magazine, brief case, street clothes
Conventional El. 0
Indexical El. 2 m.o., counter-vendor
Background 1 street stalls
Ideographemes 0
Graphic Symbols 0
Actions 2 holding paper, looking at paper
Total 10

Type of picture
non-ideographemic

Level of Complexity
C3

Le téléphone.
7 - 44 - 45 - 47



(29 - 45)

Allô, c'est toi Marie? Ici Charles.			
Hello. Is this you Marie? This is Charles.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality S.S.R. greeting	pressing button	cultural Interference
	Topic nil		
	Comment nil		

Picture Characteristics

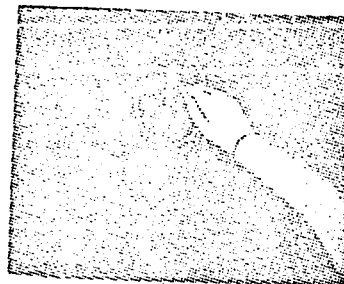
Complexity

Persons	1
Objects	1 telephone
Conventional El.	0
Indexical El.	1 m.o.
Background	0
Ideographemes	0
Graphic Symbols	0
Actions	1 pressing button
Total	4

Type of Picture

non-ideographemic

Level of Complexity
C1



(7 - 6)

les yeux (Je dessine)			
the eyes (I am drawing)			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	nil	U. A.
	Modality Assertion	nil	U. N.
I <u>am drawing</u> (a → b)	Topic Relation Configuration	action of drawing	R2 L1
the eyes	Comment Argument	eyes	R1

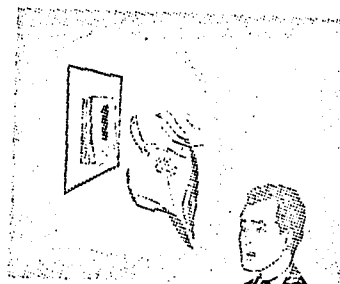
Picture Characteristics

Complexity

Persons	1 (arm implies one person)
Objects	2 drawing, chalk
Conventional El.	0
Indexical El.	0
Background	1 blackboard
Ideographemes	0
Graphic Symbols	0
Actions	<u>1</u> action of drawing
Total	5

Type of Picture
non-ideographemic

Level of Complexity
C1



(18 - 28)

le 1 ^{er} mai (L'usine est fermée)			
The first of May (The factories are closed)			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Assertion	nil	U. N.
The factories are closed (a, b)	Topic Relation Cluster	nil	U. A.
<u>on</u> the first of May	Comment delimitation of time	calendar lily of the valley	R1 conventional cultural element causing interfer- ence

Picture Characteristics

Complexity

Persons	1
Objects	2 calendar
Conventional El.	1 lily of the valley (1st of May)
Indexical el.	1 m.o.
Background	0
Ideographemes	1 balloon
Graphic Symbols	1 1 Mai
Actions	<u>0</u>
Total	6

Type of Picture
ideographemic

Level of Complexity
C1



(1 - 14)

Pardon.			
Excuse me.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m. o.	Indexical
	Modality S.S.R. excusing oneself	nil	U. A.
	Topic nil		
	Comment nil		

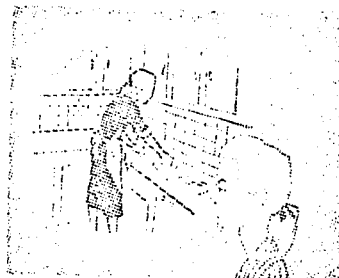
Picture Characteristics

Complexity

Persons	3
Objects	1 door
Conventional El.	0
Indexical El.	1 m.o.
Background	1 inside home
Ideographemes	0
Graphic Symbols	0
Actions	<u>2</u> lady holding door, 2 persons entering
Total	8

Type of Picture
non-ideographemicLevel of Complexity
C2

La journée de madame Thibaut
4 - 6-8 - 9



(17 - 9)

Je nettoierai la cuisine.			
I will clean the kitchen.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Assertion	nil	U. N.
I <u>will clean</u> (a → b)	Topic Relation Configuration	action of cleaning	R2 L1
the kitchen	Comment Argument	in kitchen	R1

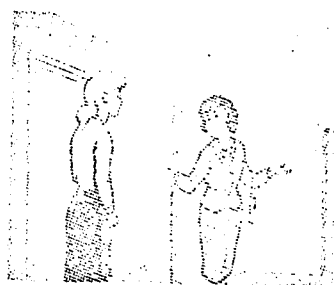
Picture Characteristics

Complexity

Persons	2
Objects	2 counter, apron
Conventional El.	0
Indexical El.	1 m.o.
Background	1 kitchen (counter & stove & tiles)
Ideographemes	1 balloon
Graphic Symbols	0
Actions	1 lady cleaning
Total	8

Type of Picture
ideographemic

Level of Complexity
C2



(4 - 46)

Oui, il me plaît beaucoup.			
Yes, I think it is very nice.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Assertion	nil	U. N.
It (The apartment)	Topic Argument	arms outstretched sideways indicating apartment	Conversational
<u>is</u> nice (a, b)	Comment Relation Cluster	nil	U. A.

Picture Characteristics

Complexity

Persons	2
Objects	0
Conventional El.	1 arms extended
Indexical El.	1 m.o.
Background	1 doors of home
Ideographemes	0
Graphic Symbols	0
Actions	0
Total	5

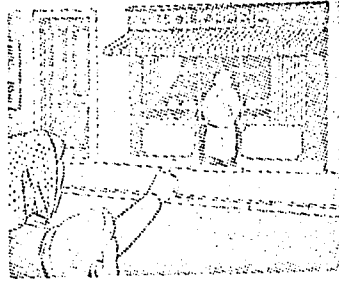
Type of Picture

non-ideographenic

Level of Complexity

C1

Madame Thibaut fait ses courses.
47 - 39 - 40 - 41



(21 - 40)

Maintenant, allons chez le boucher.			
Now, let's go to the butcher shop.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	nil	U. A.
	Modality Request	nil	U. A.
<u>Let's go to</u> (a --> b)	Topic Relation Configuration	arm extended index finger pointing at butcher shop	Conventional L2
the butcher shop	Comment Argument	the butcher shop	R1

Picture Characteristics

Complexity

Persons	3
Objects	1 butcher's apron
Conventional El.	1 index finger pointing
Indexical El.	0
Background	1 street and shop
Ideographemes	0
Graphic Symbols	1 BOUCHERIE
Actions	0
Total	7

Type of Picture

non-ideographemic-

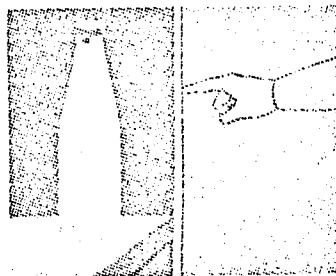
Level of Complexity

G2

23

Madame Thibaut fait ses courses
12 - 13 - 26 - 24

144



(21 - 24)

Une bouteille de lait. (Donnez-moi)			
A bottle of milk. (Give me)			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	nil	U. A.
	Modality Request	nil	U. A.
<u>Give me</u> (a --> b)	Topic Relation Configuration	arm extended index finger pointing	Conventional L2
a bottle of milk	Comment Argument	bottle of milk	R1

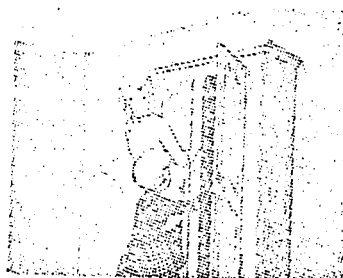
Picture Characteristics

Complexity

Persons	1
Objects	2 milk bottle, shelf
Conventional El.	1 index finger pointing
Indexical El.	0
Background	0
Ideographemes	0
Graphic Symbols	0
Actions	0
Total	<u>4</u>

Type of Picture
non-ideographemic

Level of Complexity
C1



(14 - 4)

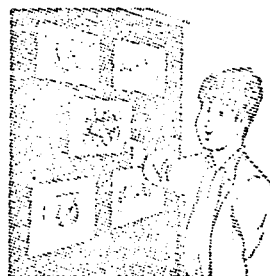
Ouvre la porte de l'armoire.			
Open the cupboard door.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Request	index pointing at door	Conventional
Cupboard door	Topic Argument	door	R1
open (a --> b)	Comment Relation Configuration	arm extended finger pointing at open door	Conventional L2 interference

Complexity

Persons	2
Objects	3 cupboard, door, linen
Conventional El.	1 index pointing
Indexical El.	1 m.o.
Background	1 corner of room
Ideographemes	0
Graphic Symbols	0
Actions	2 girl holding door, lady carrying linen
Total	10

Picture Characteristics

Type of Picture
non-ideographemicLevel of Complexity
C3



(31 - 19)

Qui est cet artiste?			
Who is this actor?			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Question	nil	U. A.
this <u>actor</u>	Topic Argument	arm extended and index pointing at person in picture	Conventional R1
What <u>is</u> his name? (a, b)	Comment Relation Cluster	nil	U. A.

Picture Characteristics

Complexity

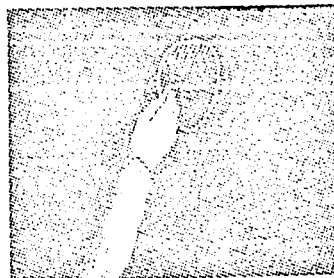
Persons	1
Objects	2 pictures, billboard
Conventional El.	1 arm extended, index pointing at picture
Indexical El.	1 m.o.
Background	0
Ideographemes	0
Graphic Symbols	0
Actions	0
Total	5

Type of Picture

non-ideographemic

Level of Complexity

C1



(7 - 21)

L'oeil droit est fermé.			
The right eye is closed.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	nil	U. A.
	Modality Assertion	nil	U. N.
The right <u>eye</u>	Topic Argument	arm extended point- ing with chalk to eye	Conventional R1
<u>is closed</u> (a, b)	Comment Relation Cluster	closed eye	R3 L1

Picture Characteristics

Complexity

Persons	1
Objects	2 drawings of head and eye
Conventional El.	1 arm extended pointing with chalk
Indexical El.	0
Background	1 blackboard
Ideographemes	0
Graphic Symbols	0
Actions	<u>1</u>
Total	6

Type of Picture

non-ideographemic

Level of Complexity

C1



(15 - 14)

et il se rase.

and he shaves.

Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Narrative	m.o.	Interference
	Modality nil		
Mr. Thibaut He	Topic Argument	man	R1
shaves	Comment Relation Configuration	action of shaving	R2 L1

Picture Characteristics

Complexity

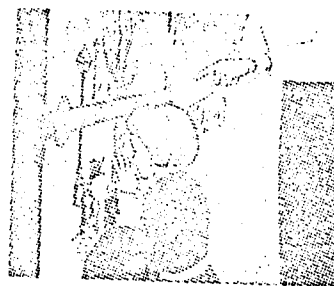
Persons	1
Objects	2 shaving cream, razor
Conventional El.	0
Indexical El.	1 m.o.
Background	0
Ideographemes	0
Graphic Symbols	0
Actions	1 shaving
Total	5

Type of Picture

non-ideographemic

Level of Complexity

C1



(13 - 23)

parce qu'il fait froid aujourd'hui.			
because it is cold today.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	nil	U. A.
	Modality Assertion	nil	U. N.
<u>Wear your coat</u> (a --> b)	Topic Relation Configuration	nil	U. A.
<u>it is cold</u>	Comment Relation Cluster	people heavily clad snow	R3

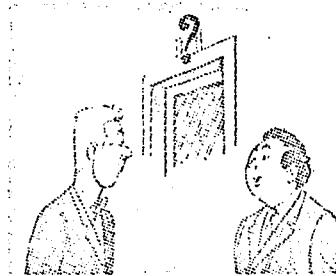
Picture Characteristics

Complexity

Persons	4
Objects	4 leafless tree, heavy clothes, window, snow
Conventional El.	1 arm extended, index pointing
Indexical El.	1 girl's hands against windowpane
Background	1 Street scene
Ideographemes	0
Graphic Symbols	0
Actions	0
Total	11

Type of Picture .
non-ideographicLevel of Complexity
C3

La maison.
1 - 3 - 4 - 7



(3 - 4)

A quel numéro? (demeurez-vous?)			
At what number? (do you live?)			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality question	question mark	graphic symbol
You <u>live</u> (a, b)	Topic Relation Cluster	door of the house	R1 L2
at what number?	Comment Delimitation of place	number indicator over door	R1

Picture Characteristics

Complexity

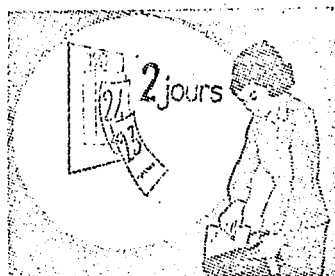
Persons	2
Objects	2 door, number plate
Conventional El.	0
Indexical El.	1 m.o.
Background	0
Ideographemes	1 balloon
Graphic Symbols	1 question mark
Actions	0
Total	7

Type of Picture
ideographemic

Level of Complexity
C2

30

A la poste
17 - 10 - 2 - 13



151

(20 - 9)

J'ai une lettre dans mon sac depuis deux jours.			
I have had a letter in my purse for two days.			
Content		Medium	
Core	Semantic Cat.	Iconic Element	Syntactic Cat.
	Style Conversational	m.o.	Indexical
	Modality Assertion	nil	U. N.
I have had a letter (a, b)	Topic Relation Cluster	pulling letter out of purse	R2 L2
for two days	Comment Delimitation of time	calendar, two pages removed	R1

Picture Characteristics

Complexity

Persons	1
Objects	3 purse, letter, calendar
Conventional El.	0
Indexical El.	2 m.o., calendar pages
Background	0
Ideographemes	1 balloon
Graphic Symbols	2 23, 2 jours
Actions	1 taking letter from purse
Total	10

Type of Picture
ideographemic

Level of Complexity
C3

APPENDIX B

Directions to Students

APPENDIX B

I. Directions for Interpreting Pictures in Isolation

This series of pictures will be shown to grade seven students to investigate the factors involved in interpreting pictures.

In this first group of pictures, you will be interpreting single pictures. You will, first, hear a buzzer which sounds like this (). When you hear this buzzer a picture will be shown to you, on the screen, for ten seconds. After the ten seconds for viewing the picture have elapsed, you will hear the word "write". When you hear the word "write", you will have twenty seconds to write your interpretation. If you are ready to start writing before you hear the word "write", you may do so. Stop writing when you hear the buzzer for the start of the next picture even if you are not finished writing your answer.

The next four pictures that you will see are labelled A, B, C, and D on your answer sheets. You may look at your answer sheets now. These are examples and are not part of the research.

Let us now do example A. You will not be asked to write the interpretation for this example, as it is already given on the answer sheet. Let's begin.

(Show picture A, ten seconds for viewing, twenty seconds for writing.)

In example A you heard the buzzer and were given ten seconds to look at the picture. When you heard the signal "write", or before if you were ready, you could have written the following possible inter-

pretation: "Would you fill this form, please?" Notice that you have to place your answer next to the corresponding letter or number, in this case next to the letter A.

Let's do examples B, C, and D in the same manner. You will not have to write the answer for picture B as it is given on your answer sheet. Write the answers for C and D.

(Show B, C, and D.)

A possible interpretation for picture B could be: "Do you live in Paris?"; for picture C: "Miss Smith takes the elevator."; for picture D: "Have a seat, please."

Are there any questions?

Now, let's begin.

II. Directions for Interpreting Pictures in Context

In this next part you will be shown four pictures that form a sequence.

The first time you see the story you will not be required to write. You will be given four seconds to view each picture in the sequence. This sequence will be shown to you a second time. You will hear the buzzer and you will have six seconds to view the picture. Then, you will hear the word "write", and you will have twenty seconds to write your interpretation.

We will now practise one example. Write the interpretation for each picture in the appropriate space. In this case it will be A, B, C, and D.

Are there any questions?

APPENDIX C

Coding of Students' Responses

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
A1 - 1	1	It's a surprise party	0	0	0	0
	2	May I see the sports page?	1	1	0	1
	3	There might be a lineup at the zoo	1	1	0	1
	4	Miss Jones is late again.	1	-	1	0
	5	Jake looks like his father.	0	0	0	1
	6	Would you like to buy a new product?	1	0	-	-
	7	My purse looks nice with my new coat.	1	1	0	1
	8	This shop is neat.	0	-	0	0
	9	Should I marry him?	1	1	0	0
	10	The fountain is a busy sport in the summer.	1	-	0	0
	11	May I show you to your table?	1	0	-	-
	12	Will you wash my blanket?	1	1	0	1
	13	Aren't the children coming?	1	1	0	1
	14	Would you bring me a menu?	1	1	1	1
	15	How much?	1	0	-	-
	16A	They are on the phone, Bill?				
	16B	Is her number 49.43?				
	16C	My money won't come out.	1	0	0	0
	16D	Wrong number?				
	17A	I drew the teacher!				
	17B	Where are her eyes?				
	17C	I'll show you how.				
	17D	See! That's better!	1	1	0	0
	18A	I wonder if Jake made school on time?				
	18B	He should be getting home soon!				
	18C	Hes not home; I'm worried!				
	18D	Maybe he's dead.	1	1	0	0
	19A	You must have the wrong house.				
	19B	He was here but he left.				
	19C	Oh! come in!				
	19D	I'm glad you found him!	1	0	-	-
	20A	I have so much work to do!				
	20B	Maybe I should do the dishes?				
	20C	Or clear the kids room?				
	20D	Now, that looks better!	1	1	0	0
	21A	Your children aren't in here!				
	21B	They aren't in the playroom either!				
	21C	Where could they be?				
	21D	Maybe they went home?	1	1	0	0
	22A	Lets go to the meat market!				
	22B	Come on!				
	22C	There it is!	1	0	0	1
	22D	What would you like Bill?				
	23A	Come in Miss Jones!				
	23B	What would you like?				
	23C	Eggs are on sale!				
	23D	The milk is about all gone.	1	0	0	0

Student Picture Number	Student Response Number	Student Response	Coding			
			S	M	T	C
	24A	Where is my good linen?				
	24B	Oh, she's going to be mad!				
	24C	Did you take it?				
	24D	Put it all back!	1	1	0	0
	25A	Would you like to go to a show?				
	25B	Look at him.	1	1	1	1
	25C	Who is he?				
	25D	I don't know.				
	26A	Look at my picture.				
	26B	It has no eyes!				
	26C	Let me put some.	1	0	0	0
	26D	Know he's blinking!				
	27A	Oh, another hard day!				
	27B	This should make me feel awake!				
	27C	Know for a shave.				
	27D	I'm so tired I could fall asleep!	0	-	0	0
	28A	Where your heavy coat!				
	28B	This one?				
	28C	Yes, it's cold out!	1	1	1	1
	28D	Don't forget your mittens!				
	29A	Do you live over there?				
	29B	No, I live over that way.				
	29C	What is your suite number?	1	1	1	1
	29D	Number 13.				
	30A	Go mail this parcel!				
	30B	Oh, a letter from Jake.				
	30C	I better write back to him!	1	1	0	0
	30D	Where can I find a mail box.				
A1 - 2	1	Sally is putting candles in the cake	0	0	1	0
	2	Look what happened to that car yesterday	1	1	0	0
	3	Bless all my friends	1	0	0	0
	4	Would you come in	0	-	0	0
	5	Let's play house	1	0	0	0
	6	Come in please	1	0	-	-
	7	I put my perse on my arm	1	1	1	1
	8	Our attic is durty	0	-	0	0
	9	I will wright a letter to my parents	1	0	1	0
	10	Have you ever seen a funtine	0	-	0	0
	11	Would you like a table mandam	1	0	-	-
	12	I found your old dress in the trunk	1	0	0	0
	13	The are two fugiers boy and ages on the Black board	0	0	0	0
	14	I would like to order now	1	1	0	0
	15	How much is the book	1	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	16A	Its time to phone my mother				
	16B	Her number is 49-43				
	16C	Now the operator is to dille	1	0	0	0
	16D	Hello is mother there				
	17A	Here is a picture of you				
	17B	My eyes are not on the puctire				
	17C	I will draw another one				
	17D	Now I'll put the nose in and moth	1	1	1	0
	18A	Every body is going to the crise				
	18B	Now the crise is over and everyone going				
	18C	Its closed now				
	18D	It's not open till the 1 of may	1	1	1	0
	19A	Come in sir and sit down				
	19B	Hello Miss Brown come in				
	19C	Come in Mr. and Mrs. Thomson				
	19D	Let me take your coat and hat Miss Thomson	1	0	-	-
	20A	My mother is always clean up				
	20B	First she washes dishes				
	20C	Then clean my bedroom				
	20D	After its all clean up	0	1	0	0
	21A	I like your house				
	21B	My room is always messy				
	21C	This is our bead room				
	21D	I'll buy it	1	1	1	0
	22A	How much is a pound of that meat				
	22B	Come lets go to the park				
	22C	Could I see you for a minit	1	0	0	0
	22D	Wait hear and I'll buy a cake				
	23A	Come in Mrs. Baker				
	23B	Here is some new stock of foods				
	23C	And fresh eggs				
	23D	Here is our las bottle of milk	1	0	0	0
	24A	July come here				
	24B	Yes mother				
	24C	I'll put it up here folded				
	24D	Could I help you. Don't mes them	1	0	0	0
	25A	Lets go to the show				
	25B	Look what showing				
	25C	Would you like to see this one	1	1	0	0
	25D	I don't know witch one to see				
	26A	Here is a picture of you				
	26B	No it is no I have eyes				
	26C	Well I will draw sume in ok	1	1	0	0
	26D	finish drawing--eye closed/open				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	27A	Tim to shave				
	27B	First ot put sop on my wiskes				
	27C	This to use the razer blade				
	27D	The to shave	0	-	0	1
	28A	I would like to buy a coat				
	28B	I'll try it on.				
	28C	Now to show people my coat	1	1	0	0
	28D	I'll buy a pair of gloves				
	29A	Hello peater cane and I'll show you				
	29B	See hov wide the streets are				
	29C	This is wher I live	1	0	1	1
	29D	I live in number 13				
	30A	Would you take this parcil ove there please				
	30B	Time to mail a letter				
	30C	I'll mail it on the 23	1	1	0	0
	30D	Now I have finished mailing it				
A1 - 3	1	The candles must be lite before he comes.	1	0	1	1
	2	What an interesting story!	1	0	0	0
	3	To be alone is, is to be sad.	1	1	0	0
	4	Oh, I hate that girl!	0	-	0	0
	5	Halloween'en is Over isn't?	1	0	0	0
	6	Could I interest you to buy insurance?	1	0	-	-
	7	An old red purse is on he arm	0	0	0	1
	8	The attic is ful of old stuff.	1	-	0	0
	9	Why is she write a story on old people.	1	1	1	0
	10	A Beautiful Park	0	-	0	0
	11	Good morning Miss. Can I help you	1	1	-	-
	12	When will I be big enough to wear it	1	1	0	0
	13	Which is boys room which is girls	1	1	0	0
	14	May I have a menu?	1	1	1	1
	15	What a beautiful girl on the cover of this maginize	1	0	-	-
	16A	What time do you me at home I better phone				
	16B	I'll phone her her number is 49-43				
	16C	The phone is broken, my chance word & come out	1	0	0	0
	16D	Hello, Mother, what time is it				
	17A	Isn't that a good picture				
	17B	Where are the eyes				
	17C	His head is like this not flat				
	17D	I'll put in the eyes, nose, eye-brow, but something missing	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
18A		I must get to work on time				
18B		At 5:00 it will be over.				
18C		Everyone goes past here.				
18D		May is very wind month.	1	1	0	0
19A		I'am interested in buy your apartment.				
19B		I'am his wife can I come in				
19C		Please od it your aparment to look at				
19D		You first Debbie	1	0	-	-
20A		All that work I have to do.				
20B		Washing dish!				
20C		Cleaning the kids room.				
20D		Cleaning the kitchen.	1	1	1	1
21A		Don't mess the place!				
21B		What a mess, clean it up.				
21C		Why is your room a mess.				
21D		I don't know, I must go. Bye.	1	1	0	0
22A		Meat cost a mint.				
22B		I'll walk you home, Bob.				
22C		That butcher is very happy.	1	0	0	0
22D		wait here, Bob				
23A		Good morning, Miss				
23B		What would you like.				
23C		6 eggs, Please.				
23D		1 milk, too,	1	1	1	1
24A		I must put the buisse away.				
24B		What is she doing.				
24C		I'm just putting some lines away.				
24D		Colore the door.	1	1	1	1
25A		Come to the cirrcwa Debbie, with me.				
25B		Look at some of the senses.				
25C		Look at this one.	1	0	0	0
25D		I don't know if I should				
26A		Nice isn't it.				
26B		Still no eyes.				
26C		One eye closed.	1	1	1	1
26D		One eye open.				
27A		Have to wash up before I go.				
27B		Have too have a clean face.				
27C		A shave won't hurt.				
27D		Oh, NO!	0	-	0	0
28A		I want that coat.				
28B		May I please, mother?				
28C		It look like a fine day.	1	1	0	0
28D		Still better take gloves.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	29A	Where do you live				
	29B	Across from the cinema.				
	29C	What address is it	1	1	1	1
	29D	It's no 13, see.				
	30A	Take this to the post office.				
	30B	I for got these letter.				
	30C	Only 2 days to do it, too	1	1	0	0
	30D	I'll sent it air mail.				
A1 - 4	1	Oh no! what happened?	1	0	0	0
	2	Let me have that newspaper.	1	1	1	1
	3	I wounder what the other ladies are doing.	1	1	0	0
	4	What happed to the living room,	0	-	0	0
	5	Lets play House	1	0	0	0
	6	Would you please come in.	1	0	-	-
	7	There's my purse.	1	1	0	1
	8	I think I'll go outside.	0	-	0	0
	9	Those boys and girls are lazy.	0	0	0	0
	10	What a beautiful park.	0	-	0	0
	11	What would you like madame.	1	0	-	-
	12	What are you doing Susan.	1	1	0	0
	13	I wounder what their doing in there.	1	0	0	0
	14	Waitress would you come here and take my order.	1	1	0	0
	15	How much is the newspaper.	1	0	-	-
	16A	Should I phone my wife.				
	16B	Whats the Phone number.				
	16C	I put in the wrong change.	1	0	0	0
	16D	Hello what are you doing.				
	17A	"Look at your face," Jane.				
	17B	There is no eyes in me.				
	17C	I'll show you how to draw a face.				
	17D	There it is.	1	1	0	0
	18A	I shouldn't have let them ride their bikes.				
	18B	There they come.				
	18C	Where did they go.				
	18D	It's been along time Joe.	1	1	0	0
	19A	Come on in Jim.				
	19B	Wait I'd like you to meet my wife, Joan.				
	19C	Well don't stand there, come in.				
	19D	Hi Jim were are your children.	1	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
20A		Those ladies have a lot of work to do.				
20B		She's washing our dishes.				
20C		Joan is cleaning the counter.				
20D		They shure are busy.	1	0	0	0
21A		Hi, come on in.				
21B		Those children are a nusense.				
21C		Take off your coat.				
21D		Thats no problem.	1	1	0	0
22A		I wounder if he cheeted me.				
22B		Hi, whats that you have.				
22C		You cheeted us.	1	0	0	0
22D		He's going to give us more cheese.				
23A		Doing your shopping? Yes.				
23B		You'd like some chocolate bars.				
23C		No, six dozen eggs.				
23D		Some milk too.	1	1	1	1
24A		Give me that doll.				
24B		No, why should I.				
24C		Go help your sister.				
24D		Take some clothes and put them away.	1	1	0	0
25A		Whoud you like to go to the show?				
25B		I wonder whats playing.				
25C		Oh, Runaway Joe.	1	0	0	0
25D		Whats that like.				
26A		Theres your face, Joan.				
26B		Theres no eyes in my face.				
26C		Did you have to make me blink.	1	0	0	0
26D		Theres your other eye then.				
27A		I'd beter wash up.				
27B		Man that water is hot.				
27C		I'd better shave to.				
27D		That blade is to sharp.	0	-	0	0
28A		Can I get this coat mother.'				
28B		Oh no, it's to small on me.				
28C		Hi Joan, come up here for a second.	1	0	0	0
28D		Mother can I go and play with Joan.				
29A		Whats your name.				
29B		Whould you like to come to my appartment.				
29C		Whats your appartment number.	1	1	1	1
29D		My Appartment number is (13).				
30A		I have to mail this, could you wait.				
30B		There is my letter but no stamp.				
30C		December 27. Oh no!	1	1	0	0
30D		There we go, just my luck.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
A1 - 5	1	"Did you know we were out of matches"	1	0	0	0
	2	"Did you see the latest news?"	1	0	0	1
	3	"My these line ups are long!"	1	1	0	1
	4	"That did it! I'm leaving."	0	-	0	1
	5	"I'm pretending to be an adult!"	1	1	1	0
	6	"Do come in Mr. Jones."	1	0	-	-
	7	Mrs. Jones taking her purse off her hand.	0	0	1	1
	8	Peter examining an abandoned room.	1	-	1	0
	9	"I feel guilty for not writing to my parents."	1	0	1	0
	10	A beautiful day at the park.	0	-	0	0
	11	"Do come with me, please."	1	0	-	-
	12	"Mommy, could you hang up my cloths."	1	1	1	0
	13	"What did you do here?"	1	1	0	0
	14	"Waitress, could you pass me a menu?"	1	1	1	1
	15	"I think I'll buy this magazine."	1	0	-	-
	16A	"I should phone my wife and tell her why I'm late."				
	16B	The man dials the no. 49.43.				
	16C	He presses the button.	0	0	0	0
	16D	He talks to his wife.				
	17A	"Look at the picture I drew."				
	17B	"Where are the eyes?"				
	17C	The girl draws another circle.				
	17D	She adds the eyes and other details.	0	1	1	1
	18A	The man looks sad because he has to go to work.				
	18B	He thinks of closing time.				
	18C	He thinks of all the people and directions and no. of times he's been there.				
	18D	He thinks of Mothers day in May.	0	0	0	1
	19A	"Do come in please" the hostess says to the man.				
	19B	The hostess welcomes his wife.				
	19C	The couple comes in.				
	19D	---	0	0	-	-
	20A	The lady wonder how she can get all her work done.				
	20B	She decides to do washing dishes.				
	20C	She thinks of cleaning a room.				
	20D	She appears happy after most of her works done.	0	0	0	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	21A	"This is our dining room".				
	21B	"This is our children's room".				
	21C	"Would you like to see more?"				
	21D	"No, excuse me, but I have to leave."	1	1	0	0
	22A	The lady thinks of buying meat of Sat.				
	22B	She invites her son along.				
	22C	She points to the bucher store she's going to.	0	0	1	1
	22D	She points to the meat she's buying.				
	23A	"Hello, do come in please".				
	23B	"What would you like here?"				
	23C	"I'll take six eggs".				
	23D	"And a qt. of milk please."	1	1	1	1
	24A	"Would you help me?" says the mother.				
	24B	The girls say "With what, because I want to play"				
	24C	"I'd like you to help me put this away."				
	24D	"But you can tidy it up in here."	1	0	0	0
	25A	The boy asks, "would you like to go to the movie?"				
	25B	They go to the entrance and look at the pictures."				
	25C	The boy asks, "Do you know who this actor is?"	0	1	1	1
	25D	The girl says no.				
	26A	The boy says he drew a picture of a boy winking.				
	26B	The girl shows there are no eyes.				
	26C	She draws in one eye closed.	0	0	1	1
	26D	And she draws an open, which shows a boy wink.				
	27A	A man pours water into a sink.				
	27B	He then applies shaving cream on his face.				
	27C	Next he picks up a razor, inserts it into shaving apparattus.				
	27D	He then shaves.	1	-	1	1
	28A	The father says for the little girl to put on her coat.				
	28B	She protests, and says she doesn't need a coat.				
	28C	The father shows it is cold and every- body is wearing a coat.	0	0	1	1
	28D	She puts it on, and he hands he gloves.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	29A	A man asks another man questions on where he was.				
	29B	The man shows the direction to the building he went.				
	29C	The man asks the no. of the elevator.	0	1	0	1
	29D	The man points to the no. 13.				
	30A	A lady asks another lady to mail a parcel for her.				
	30B	One lady finds out she forgot an envelope.				
	30C	Two day ago she remembered something.	0	0	0	0
	30D	She had mailed the envelope.				
A1 - 6	1	Please light the candles, Mary.	1	1	1	1
	2	Could I please see this page?	1	1	1	1
	3	There they are in streets.	1	1	0	0
	4	She is leaving the doctors.	1	-	1	1
	5	How do you like my costum mother?	1	0	0	0
	6	Please, come in!	1	0	-	-
	7	She is taking her purse to pay money.	0	0	1	1
	8	He brought some things.	1	-	1	0
	9	They are paying a bill.	0	0	0	0
	10	People going here and there.	0	-	0	0
	11	What would you like, Madame?	1	0	-	-
	12	Mom, the curtains fell from my room.	1	0	0	0
	13	What are your names?	1	1	0	0
	14	I would please like a drink etc.	1	1	0	0
	15	I will buy this paper.	1	0	-	-
	16A	Hello. What time is it?				
	16B	dialing a phone number.				
	16C	calling for the operator	0	0	0	0
	16D	talking to each other.				
	17A	I draw a face, look!				
	17B	"Where are the eyes," she said.				
	17C	drawing the head first.				
	17D	drawing the eyes, nose, and	0	0	0	0
	18A	thinking where to go				
	18B	thinking that the people are coming back.				
	18C	the gate is closed, all the people are gone				
	18D	looking at the date where it will open	0	0	1	0
	19A	He says if the man is in his office.				
	19B	She is greating her.				
	19C	She lets the people come in.				
	19D	She tells the people that they can come in now	0	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
20A		Everbody is working.				
20B		her mother is doing the dishes.				
20C		cleaning the room for her.				
20D		cleaning the kitchen.	0	0	1	0
21A		We are having people for dinner.				
21B		She has to clean her sisters room.				
21C		She is going away.				
21D		She saying I'll be back at 9:00	0	1	0	0
22A		thinking to go to the store.				
22B		bringing her brother at school.				
22C		she is going to the store with her brother.	0	0	1	0
22D		He wants a cake.				
23A		She is at the store.				
23B		He says what would you like?				
23C		Would you like to have 6 fresh eggs.				
23D		or would you like to have a milk jug.	1	0	0	1
24A		She is calling his sister to help her.				
24B		her sister was playing with her doll.				
24C		She says what to do.				
24D		Her sister starts to help her.	0	0	0	0
25A		He asked her to go to the show.				
25B		A good movie is playing he says.				
25C		He look at a exciting picture	0	0	0	0
25D		she said she hasn't have any money.				
26A		He says I draw a face.				
26B		She says there isn't any eyes.				
26C		He puts one eye in like if he was sleeping.	0	0	1	1
26D		He puts another eye in like if he is blinking.				
27A		He is going to shave himself.				
27B		He first washing his face.				
27C		Then he gets the shaver.				
27D		The he shaves himself.	1	-	1	1
28A		Her mother wants her to wear a heavy coat.				
28B		Then she says if she has to.				
28C		Her mother shows her to the window.	0	0	1	0
28D		Then when she has put her coat on her mother gives her gloves.				
29A		Where is alum street? he asked.				
29B		He shows him the house and street.				
29C		He asked, "what number is it?"	0	1	0	1
29D		He says, "number 13".				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	30A	Her mom says to deliver a package.				
	30B	Then her mother gives her a letter to.	0	1	0	0
	30C	She says that it will take 2 days.				
	30D	She is now going to deliver the package and letters				
A1 - 7	1	A birthday for someone	0	0	0	0
	2	bying a paper	0	0	1	0
	3	identifying someone	0	0	0	0
	4	comming out the door to leave	0	-	0	0
	5	dressed up to be funny looking	0	0	0	1
	6	someone comming in or to the door	0	0	-	-
	7	a women's purse on her hand with glove	0	0	0	0
	8	statues of things	0	-	0	0
	9	saying not this person please	1	0	0	0
	10	a beautiful park.	0	-	0	0
	11	In paris a resterent a man showing a women to her seat	0	0	-	-
	12	thinking from the farms who is the girl	0	0	0	0
	13	---	0	0	0	0
	14	in a resturent a man calling a waitress	0	0	0	0
	15	by or looking at the papers	0	0	-	-
	16A	thinking what time wife said to be home				
	16B	dialing the number four (4)				
	16C	purshing the button to get back his dime	0	0	0	0
	16D	two people speaking to each other on the phone				
	17A	starting a fase on the board				
	17B	she is asking where the eyes are.				
	17C	she starts him over by putting the round of his face				
	17D	she finishes it off	0	0	1	0
	18A	thinking of when he was on his trip				
	18B	thinking of the fun he had.				
	18C	thinking of all the trouble he had				
	18D	back to his job or home	0	0	0	0
	19A	saying hellow or letting in.				
	19B	saying or shaking hands with the women				
	19C	letting two people in, man and women				
	19D	the man lets the young lady go first in the door	0	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	20A	thinking of all the work that has to be done				
	20B	doing dishes first.				
	20C	then gathering the cloths				
	20D	taking a stain out of the cloth	0	0	0	0
	21A	showing the lady the dianing room				
	21B	showing the bedroom				
	21C	the women is thinking				
	21D	she says no thankyou, or it's very hard to choose one	0	0	0	0
	22A	thinking the last time she bought heat here				
	22B	she is saying I'll take you there				
	22C	she points it out to him	0	0	0	1
	22D	she says I'll take you there myself				
	23A	letting the women into the store				
	23B	she doesn't know what to take				
	23C	she wants six (6) eggs and is pointing them out				
	23D	that jug of milk she says she wants	0	0	1	1
	24A	waying I must put these sheets away				
	24B	girl thinks she wants he dool and				
	24C	the women says no I have to put the sheets away				
	24D	the girl opens the door and the women says no	0	0	1	1
	25A	want to go to the show in paris				
	25B	they deside to go to the art garer and look a picture				
	25C	I like this one	1	0	0	0
	25D	she says I don't know which one I like I like them all				
	26A	he draws a picture with no eyes				
	26B	she says where are his eyes				
	26C	she puts one closed	0	0	1	1
	26D	and one eye opened				
	27A	going to wash himself				
	27B	washes his face & behind his ears				
	27C	ready to shave now				
	27D	cuts himeself & it hurts	1	-	1	0
	28A	nice coat this is				
	28B	the lady says try it on				
	28C	the girl takes the coat and goes to the window	0	0	0	0
	28D	the women says here are your gloves				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	29A	the man says where do I go for-----				
	29B	he poins to which one he shall go				
	29C	he wants to know what floor it is on or what the number is	0	1	0	0
	29D	he shows him (13) thirteen				
	30A	go & mail this for me please thankyou				
	30B	recieves the letter "bad news"				
	30C	wants to mail some letters back	0	0	0	0
	30D	goes and puts them in the mail box to be delievered				
A1 - 8	1	lite up the birday cake	1	1	1	1
	2	did you see this	1	0	0	1
	3	Will you come with dinner with me	1	0	0	0
	4	What a day this is.	0	-	0	0
	5	this is a scar-crow	0	0	0	1
	6	hello whon't you come in	1	1	-	-
	7	I have to go to the bank	1	1	0	0
	8	Boy want a mess in the room	0	-	0	0
	9	I wonder if I would get married	1	0	0	0
	10	enjoy were evening out side.	0	-	0	0
	11	What do you what.	1	0	-	-
	12	Will you wash this.	1	1	0	0
	13	I wonder what they are doing	1	0	0	1
	14	You better make it good				
	15	How much does it cost	1	0	-	-
	16A	Do you know what time it is.				
	16B	I butto tell her I can't come				
	16C	She is not home were is she	1	0	0	0
	16D	Hello were were you all the time				
	17A	You did not put on a month				
	17B	And were are is eyes?				
	17C	That is much better.				
	17D	That is more I it.	1	1	0	0
	18A	time to get to work				
	18B	Bye see you later on				
	18C	I am to late I no				
	18D	Time to harvest the corn	1	1	0	0
	19A	Would you please come in				
	19B	Hello how are you				
	19C	Won'tyou come in				
	19D	Thank you very much	1	0	-	-
	20A	Man what a hard time				
	20B	It would be fun to wash the dishes				
	20C	what an untide dawe this is				
	20D	Now everthing is nice and clean	1	0	0	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	21A	this is the living room.				
	21B	and this is the big bedroom.				
	21C	and that is all the rooms				
	21D	I don't think I will buy it	1	1	1	0
	22A	All what he wants is money				
	22B	Come I will take you to hill.				
	22C	Here he is over there	1	0	0	0
	22D	We wil go and buy something to eat				
	23A	What do you what				
	23B	do you want milk peas and bakind soad				
	23C	there are only 6 in a dozen				
	23D	and one qatuer of milk please	1	1	1	1
	24A	That will be hard				
	24B	You can not take me doll away				
	24C	There it is all very nice				
	24D	That is still dirty	1	0	0	0
	25A	lets go in for a an hour				
	25B	do you know those people				
	25C	Do you know that man	1	1	1	1
	25D	No I don not know that man				
	26A	Where is eye bows				
	26B	They are is eyes				
	26C	there thats what I mean	1	1	0	0
	26D	That looks even better doesn't it				
	27A	A man wash is hands				
	27B	The same man wash his ears				
	27C	A man who is going to shave				
	27D	Then the man shaves him self and cuts him self	1	-	1	1
	28A	May I go outside				
	28B	I am going to put on my coat				
	28C	look at all those people outside	1	1	1	0
	28D	Here are youre mitts				
	29A	Were in the big new aprembblock sweet 13				
	29B	right arcoss the street				
	29C	were is the elevator?	1	1	0	0
	29D	It is right over there				
	30A	Were could I mail this				
	30B	How can I mail the letter				
	30C	It will cost 2 jours	1	1	0	0
	30D	There now I can mail the letter				
A1 - 9	1	I better hurry up	1	0	0	0
	2	"Look what is here"	1	1	0	0
	3	Oh I wish I was there	1	1	0	0
	4	I am finally out of the house	0	-	0	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	5	Don't I look funny	1	1	1	1
	6	"Hello, what do you want."	1	1	-	-
	7	"I better pull my purse up."	1	1	1	1
	8	Not much in this room.	0	-	0	0
	9	Are they married	1	1	0	0
	10	such a lovely place fountain & trees	0	-	0	0
	11	"May I help you madame."	1	0	-	-
	12	Look what I found	1	0	0	0
	13	"Are you thosts"	1	1	0	0
	14	"Come here & wait on me"	1	1	0	0
	15	How much is this book	1	0	-	-
	16A	"I better phone my wife because it is nearly six"				
	16B	Now I think I will				
	16C	Push to talk	0	0	0	0
	16D	"Hello, Mary, I won't be home for s supper."				
	17A	"This is you"				
	17B	Where are my eyes				
	17C	"I am going to draw him"				
	17D	"I leave his mouth & maybe his eye out"	1	1	0	0
	18A	It is almost work time				
	18B	"Now it is home time for supper"				
	18C	"Open the gates"				
	18D	May 1st spring is here	1	1	0	1
	19A	"Hello may I help you"				
	19B	"Hello I am his wife"				
	19C	Won't you come in				
	19D	I am so glad you came	1	0	-	-
	20A	"All my work today I'll never get it done"				
	20B	"First to wash the dishes"				
	20C	"Then to tody up the drawers"				
	20D	Then to clean up this sink	1	1	1	1
	21A	"Hi"				
	21B	Oh look at this mess				
	21C	Do you have those troubles too?				
	21D	But it is such a lovely house	1	1	1	1
	22A	Oh no where is he				
	22B	Oh there you are come her now				
	22C	"We're going over there"	1	1	1	0
	22D	"Now don't go away this time"				
	23A	Come in may I help you				
	23B	Would you like some groceries				
	23C	six eggs maybe				
	23D	1 bottle of milk	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	24A	"Oh did she take the blankets out again"				
	24B	I should take that doll away				
	24C	Now leave them in there				
	24D	Okay you may have one	1	0	0	0
	25A	Want to go to a show?				
	25B	Look whats playing				
	25C	I like this one don't you?	1	1	0	0
	25D	I don't know what one I like				
	26A	"This is you"				
	26B	But where are my eyes				
	26C	I'll make one closed	1	1	1	1
	26D	And one open				
	27A	"Now to wash myself"				
	27B	"Oh that feels good"				
	27C	"Now to shave"				
	27D	Ouch I cut myself	0	-	0	0
	28A	Put on your rain coat				
	28B	This one daddy? Why?				
	28C	Because it is raining	1	1	1	0
	28D	Okay, "now put on your gloves"				
	29A	Hi Tom what's new				
	29B	I live there				
	29C	Where do you live	1	1	1	1
	29D	You live there hey!				
	30A	"Would you mail this over there for me"				
	30B	Oh I have a letter				
	30C	I will put it in my purse for a few days	1	1	0	1
	30D	And then I will mail it.				
A1 - 10	1	Susans decorating a birthday cake	0	0	0	0
	2	This is very stooped.	0	0	0	0
	3	She wishes she was grown up.	0	0	0	0
	4	She is pressing the door bell	1	-	1	0
	5	Bill is trying on dads cloths	0	0	0	0
	6	May I come in	1	0	-	-
	7	Miss Smith has just bought a hand bag	0	0	0	1
	8	he found some old clocks in the	1	-	1	0
	9	she is thinking about geting married	0	0	0	0
	10	they are all wathing the fountion.	1	-	0	0
	11	where would you like to sit madame.	1	0	-	-
	12	can you please sew this for me	1	1	0	0
	13	jack and jill come hear please	1	0	0	1
	14	Menu please	1	1	1	1
	15	I think I will take this one	1	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	16A	he is going to dial 49.43				
	16B	he is going to talk to				
	16C	I will meet you ad three	1	0	0	0
	16D	he says goodbye and she says too				
	17A	that looks good enough.				
	17B	look what she drew				
	17C	where are the eyes				
	17D	she put in the eyes	0	0	1	1
	18A	to bad he died.				
	18B	I wish I was there				
	18C	it would have been fun'				
	18D	which way did I coaw	1	0	0	0
	19A	my husbands coming behind me.				
	19B	your wifes hear already comon in.				
	19C	maby you can come back soon.				
	19D	your back so soon.	1	0	-	-
	20A	I've got somany things to do.				
	20B	I have to do the dishes.				
	20C	clean up the house				
	20D	and wash the cabnets.	1	1	1	1
	21A	I cant set the table for you mom.				
	21B	what a mess it will take me years to clean up				
	21C	sorry I have to clean up my brothers room				
	21D	well see you later mabe.	1	1	0	0
	22A	I have to go to the grocers today				
	22B	hurry up slow poke.				
	22C	theres the grocer now lets nurry	1	0	0	0
	22D	You stay hear. I will be out in a second				
	23A	come right in madame				
	23B	whould you like any of these				
	23C	I'll take 6 eggs.				
	23D	and a quart of milk	1	1	1	1
	24A	what are you doing				
	24B	you can't take my doll.				
	24C	help me put them away.				
	24D	don't take any out for your doll.	1	1	0	0
	25A	Would you like to go with me				
	25B	that look like a good one				
	25C	but this is the goryest. can you come	1	1	0	0
	25D	but I have homework				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	26A	no eyes ha ha very funny				
	26B	What are eyes.				
	26C	he is drawing an eye lash	0	0	0	0
	26D	he is drawing an eye				
	27A	I think I'll shave my face.				
	27B	this lather is cool.				
	27C	he's taking his razor to save his face				
	27D	oche my poor face is going to be all cut up	0	-	0	0
	28A	I think I will buy it.				
	28B	do's it look the right lenth.				
	28C	now I'm sure I will take it.	1	1	0	0
	28D	thanks for the mittens.				
	29A	do you now what hapend to me yesterday				
	29B	I come down the levator				
	29C	I crossed the street and got hit by a car	1	0	0	0
	29D	that number 13 is a very bad number				
	30A	shes received some letters				
	30B	I think I will mail them tomorow				
	30C	I have to mail these today	1	1	0	0
	30D	Will you please mail this for me!				
A1 - 11	1	Don't play with matches	1	1	0	0
	2	I like to buy a paper	1	1	1	0
	3	It my sisters	1	1	0	0
	4	Good by for good	0	-	0	0
	5	Hallo hope you like our art.	1	1	0	0
	6	Would you like to comeout with me.	1	0	-	-
	7	I lost one of my glove	1	1	0	0
	8	Girl look for something	0	-	0	0
	9	Bad report card	0	0	0	0
	10	Water fountain	0	-	0	0
	11	Would you like to sit over here	1	0	-	-
	12	I found this in my room	1	0	0	0
	13	Who at the door	1	1	0	0
	14	Waiter, Menu please	1	1	1	1
	15	I like to buy a mazgine	1	0	-	-
	16A	What time is it.				
	16B	I better phone my wife.				
	16C	The phone won't work.	1	0	0	0
	16D	Hello I am sorry I phoned so late.				
	17A	Come and see my drawing				
	17B	Where are the eyes.				
	17C	Here let me show you.				
	17D	There see the eyes?	1	0	0	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	18A	Almost time for the kids to get our of school				
	18B	Here they come now.				
	18C	The kids will go in there own direction				
	18D	Soon they will get there summer hot days	1	1	0	0
	19A	Hello how are you?				
	19B	Hello is Dony here?				
	19C	Please come in.				
	19D	Thankyou.	1	0	-	-
	20A	Everyone is that work.				
	20B	Mother is doing the dishes.				
	20C	She is also cleaning the rooms.				
	20D	Now she is getting supper ready.	0	0	0	0
	21A	The boy is not here.				
	21B	He is not in is room.				
	21C	I can not find him.				
	21D	I don't know where he is?	1	1	0	0
	22A	I have to go shopping				
	22B	Would you like to come shopping				
	22C	We will go there.	1	0	1	0
	22D	What would you like				
	23A	Please come in.				
	23B	Would you like anything here.				
	23C	We have a sale on eggs 6 for 30¢				
	23D	Or maybe a quart of milk	1	0	0	1
	24A	Oh I forgot about those.				
	24B	Mom are you putting something in there				
	24C	Yes, these sheets				
	24D	Here will open the door	1	0	1	1
	25A	Would you like to go to a movie				
	25B	Want to see this one				
	25C	Or maybe this one	1	1	0	0
	25D	Which one are we going to see.				
	26A	Look at my drawing				
	26B	Where the eyes				
	26C	Here it is.	1	1	0	0
	26D	Here is the eye.				
	27A	I guess I will take a shave.				
	27B	First some foam.				
	27C	Now my shaver and blade.				
	27D	Easy does it	0	-	0	0
	28A	Would you like this coat.				
	28B	Can I have it.				
	28C	Lots of kids are wearing that kind.	1	1	0	0
	28D	And here are gloves.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	29A	Where is Elmwood St.?				
	29B	It down here.				
	29C	Where aparment 13?	1	1	0	0
	29D	Right here.				
	30A	Will you mail this please?				
	30B	I better buy some envoler.				
	30C	2 more days for christmas	1	1	0	0
	30D	I'd mail this letter.				
A1 - 12	1	Light the match please Mary.	1	1	0	1
	2	Did you see the pictures at the back.	1	0	0	1
	3	I hope they are going to be all right.	1	1	0	0
	4	She must hurray.	1	-	1	0
	5	Lets play dad & mom or house.	1	0	0	0
	6	Hello Miss may I see your father please	1	-	-	-
	7	I wish my purse would stay on my arm.	1	1	0	1
	8	I'll clean-up the place.	0	-	0	0
	9	I hope she doesn't write to mom and dad.	1	0	1	0
	10	Mary said. "This is a bueatiful dountain"	0	-	0	0
	11	Bonjour, Miss may I help you.	1	1	-	-
	12	Mother may I use this.	1	0	0	0
	13	The are invisable.	0	0	0	1
	14	Bring that paper here, please.	1	1	0	1
	15	This is an interesting magazine.	1	0	-	-
	16A	How long will I talk on the phone.				
	16B	The number is 49.43.				
	16C	Change please.	1	0	0	0
	16D	Hello mom.				
	17A=	See the face I drew.				
	17B	You forgot his eyes.				
	17C	I'll show you how.				
	17D	See theres the eyes.	1	1	0	1
	18A	I wish those boys would quit riding there.				
	18B	There going away.				
	18C	Now the gates closed				
	18D	Now the flowers in the garden can grow and those boys won't hurt them.	1	1	1	0
	19A	Hello Marion. Hello Sam.				
	19B	Hello Marion. Hello Jane.				
	19C	Come on in and sit down.				
	19D	OH! Marion I like your apartment.	1	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	20A	All that work has to be done.				
	20B	The dinner dishes have to be done also.				
	20C	Look at this messy room.				
	20D	Almost done everything.	1	1	0	1
	21A	Hi Jane. How are you.				
	21B	Look at this mess				
	21C	Jane will you help me I'm having company tonight				
	21D	Sorry I have to be going now.	1	1	0	0
	22A	I haven't got enough money				
	22B	Sam come with me. Hurray!				
	22C	See that store. I haven't got enough to buy that meat	1	0	0	1
	22D	Oh! I'll help pay!				
	23A	Gooday Miss Jameson.				
	23B	What would you like.				
	23C	Six of those please.				
	23D	And a bottle of milk thank you.	1	1	1	1
	24A	I have to put the sheets away.				
	24B	I'll have to hurry.				
	24C	Last one. I need a sheet for my bed.				
	24D	Close the door please.	1	1	1	1
	25A	Want to go to the movie				
	25B	There's a good movie on tonight.				
	25C	It's about war. See!	1	0	0	0
	25D	I don't know if I want to go				
	26A	See the face I drew				
	26B	There's no eyes.				
	26C	I'll draw them.	1	1	0	1
	26D	One eye closed and one eye open.				
	27A	I'd better hurray				
	27B	I'll wash first				
	27C	Now I have to shave.				
	27D	Almost done. Nicked myself.	0	-	0	0
	28A	Wear this coat.				
	28B	How come. Do I have to.				
	28C	Yes! It snowed out last night.	1	1	1	1
	28D	Here's some mitts also.				
	29A	Hello Joe were's Sam				
	29B	He went to the apartment.				
	29C	This is the first floor we have to go up.	1	0	0	0
	29D	We went up to far he is on the 7th floor.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	30A	Would you take this to the post office				
	30B	Oh! I have to mail these letters.				
	30C	I was suppost to mail them on the 23rd	1	1	0	0
	30D	Now there mailed.				
A1 - 13	1	happy Birthday to you.	1	0	0	0
	2	Want to buy a paper?	1	0	1	0
	3	---	0	0	0	0
	4	Hurry we'll be late.	0	-	0	0
	5	Hope you liked the play	1	1	0	0
	6	Come in and wait.	1	0	-	-
	7	Well I'm ready.	1	1	0	0
	8	Let's look in the attic	0	-	0	0
	9	Now sign on the dotted line	1	0	0	0
	10	Let go take a picture of the fountain	0	-	0	0
	11	Will you order now Madam?	1	0	-	-
	12	How do you like your new coat.	1	1	0	0
	13	Where are you hiding?	1	1	0	1
	14	Oh waitress I'll order now	1	1	0	0
	15	I'll have a copy of this.	1	0	-	-
	16A	What time is it?				
	16B	I'll phone the radio and ask.				
	16C	Why won't the phone work.	1	0	0	0
	16D	Ah now it works.				
	17A	That you				
	17B	It is not.				
	17C	Yeah well this is you.				
	17D	Sure looks like you to	1	1	0	1
	18A	School starts.				
	18B	School closes.				
	18C	Weedend school closes.				
	18D	Saturaday morning	0	0	1	0
	19A	Welcome Mr. Lindsay				
	19B	Hello Mrs. Davidson come in and wait				
	19C	Welcome Mr. & Mrs. Eshadmade.				
	19D	The docter will see you now	1	0	-	-
	20A	Hurry clean up the house.				
	20B	Do the dishes quick.				
	20C	Clean up the bedrooms.				
	20D	Hurry company will be here any minute.	1	1	0	1
	21A	Would you like to come in.				
	21B	This is the boys room.				
	21C	How do you like our new house?				
	21D	Good byb Mrs. Prentice.	1	0	0	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	22A	Do you have Roast Beef?				
	22B	The butcher soaked you.				
	22C	He the butcher.	1	0	0	0
	22D	He will give us our money back.				
	23A	Come in I'm open.				
	23B	What kind of milk do you want.				
	23C	My eggs are grade a.				
	23D	That 22¢ for the milk miss.	1	0	0	1
	24A	Whats this doing up here?				
	24B	It's mine.				
	24C	How did it get up there?				
	24D	Don't let me find it up there again,	1	1	0	1
	25A	Want to go to the movie?				
	25B	Oh boy John Wayne.				
	25C	Look at the fight scene	1	0	0	0
	25D	I don't like John Wayne any way.				
	26A	That you pucker lip.				
	26B	That is not me.				
	26C	This is you.	1	1	0	1
	26D	And there's your eyes.				
	27A	What a night.				
	27B	Ah this water is refreshing.				
	27C	Now to shave.				
	27D	Ouch cut myself.	0	-	0	1
	28A	A new coat.				
	28B	Can I wear it to school?				
	28C	There's Mary.	1	1	0	0
	28D	Don't forget your gloves.				
	29A	How do you get to Long St.				
	29B	You go 1 block East.				
	29C	Oh I know the house you mean.	1	0	0	1
	29D	Is this it, number 13.				
	30A	Will you mail this package for me.				
	30B	And these letters.				
	30C	It has to be there by June 25.	1	1	0	1
	30D	Of Course I will.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
B1 - 1	1	Oh, its almost time for the party.	1	0	0	0
	2	Did you read this add in the paper?	1	0	0	1
	3	I wonder if I should go also?	1	1	0	0
	4	Boy, he was a very mean person.	0	-	0	0
	5	This coat is too big for me.	1	1	0	0
	6	Yes, sir, what would you like?	1	0	-	-
	7	I better take my perce.	1	1	1	1
	8	Where is my bicycle?	0	-	0	0
	9	No, I better no rwrite a letter.	1	0	1	0
	10	What a beautiful sight.	0	-	0	0
	11	Yes, mame, where would you like to sit?	1	0	-	-
	12	Mother my curtains fell down.	1	0	0	0
	13	I thought I saw my children there.	1	0	0	1
	14	Would you br the menu please?	1	1	1	1
	15.	How much is that paper.	1	0	-	-
	16A	Oh, it is time to phone granma.				
	16B	I think her first number if four.				
	16C	I forgot to push the ubtton.	1	0	-	-
	16D	Hello is that you granma?				
	17A	Is this the way to draw your face?				
	17B	You forgot to put in the eyes.				
	17C	My head is also shaped like this.				
	17D	And my eye go about right here.	1	1	0	1
	18A	It must be time for my son's school.				
	18B	It's five o'clock he should be getting out.				
	18C	I wonder if they all got out.				
	18D	It's March 1 thats means its pay day.	1	1	0	1
	19A	A Good day sir I've been waiting for you.				
	19B	And is this your wife.				
	19C	Will you come in please.				
	19D	Its been very nice meeting you.	1	0	-	-
	20A	I got to get home to do the work.				
	20B	First I will do the dishes.				
	20C	My room is a dump.				
	20D	I also have to clean the counter.	1	1	1	1
	21A	Look it isn't look clean.				
	21B	Why is all these things up there?				
	21C	I forgot where it is.				
	21D	Oh well I'll go look for them.	1	1	0	0
	22A	I'm going to pay some too.				
	22B	Hurry up you will be late.				
	22C	There see. you are just on time.	1	0	0	0
	22D	He is going to wait for us.				
	23A	Yes, mame what can I do for you?				
	23B	Here is all the things you need.				
	23C	I need six eggs.				
	23D	And I need a gug of milk.	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	24A	Sister did you clean the cupboard.				
	24B	I better check just in case.				
	24C	I need the towel for the kitchen.				
	24D	Look at that what is it doing in there.	1	0	0	0
	25A	Say, lets go in there for a moment.				
	25B	Ha look at the funny pictures.				
	25C	Look at this funny one.	1	0	0	0
	25D	I cannot find a real funny one.				
	26A	Is this what you look like?				
	26B	You forget my eyes again.				
	26C	First I need eyelicks.	1	1	0	0
	26D	And then I need eyes.				
	27A	I better wash my face.				
	27B	I need lots of soap.				
	27C	Now I'll need a shave.				
	27D	Oh, that is sharp.	0	-	0	0
	28A	Is this the kind of coat you what?				
	28B	May I try it on?				
	28C	Look I would like one like that.	1	1	0	0
	28D	Oh, yes, I almost forgot my gloves.				
	29A	I don't know where to go sir.				
	29B	Here it is the place.				
	29C	Do you know want room this is.	1	1	0	0
	29D	Here this room is room 13.				
	30A	Would you please put this in the post office?				
	30B	I must mail this to letters.				
	30C	---	0	0	0	0
	30D	---				
B1 - 2	1	Light the candles.	1	1	1	1
	2	did you read this article?	1	0	0	1
	3	What a line up	1	1	0	1
	4	good-bye.	0	-	0	0
	5	their too big	1	1	0	0
	6	come in	1	0	-	-
	7	---	0	0	0	0
	8	---	0	-	0	0
	9	don't sign	1	0	0	0
	10	look at the fountain	0	-	0	0
	11	would you like a table.	1	0	-	-
	12	will you wash this for me.	1	1	0	0
	13	where is everybody	1	1	0	0
	14	come here waitress	1	1	0	0
	15	Id like to buy this magazine	1	0	-	-
	16A	It's time to phone home.				
	16B	---				
	16C	where is the change	1	0	-	-
	16D	hello dear				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	17A	look at my picture				
	17B	where are the eyes?				
	17C	I'll draw a better one.				
	17D	I'll put the eyes in this time.	1	1	1	1
	18A	the people are pouring in.				
	18B	there coming out now				
	18C	It's closed.				
	18D	its getting	0	0	0	0
	19A	hello, come in				
	19B	glad to meet you				
	19C	won't you both come in.				
	19D	thankyou don't mind if we do	1	0	-	-
	20A	is she doing the housework				
	20B	I should wash the dishes				
	20C	I should pick up all the clothes				
	20D	and clean the table	1	1	1	1
	21A	I cleaned the dinning room				
	21B	and put away the toys				
	21C	is that all you want me to do.				
	21D	yes this is just fine.	1	1	0	1
	22A	I should get some meat.				
	22B	come on with me				
	22C	lets go to the butcher shop	1	1	1	1
	22D	Ill buy some of this.				
	23A	come in				
	23B	My I help you?				
	23C	I'd like half a dozen eggs.				
	23D	and a bottle of milk	1	1	1	1
	24A	help me put these away				
	24B	No I want to play with my doll				
	24C	---				
	24D	put them in there.	1	1	0	0
	25A	Do you want to see a movie				
	25B	here are some shots of it.				
	25C	Its the hunchback of Noterdam	1	0	0	0
	25D	I don't know if I want to				
	26A	look at my picture				
	26B	where are it's eyes				
	26C	Ill draw it with one eye shut	1	1	1	1
	26D	and one eye opened				
	27A	I'll wash now				
	27B	first his face				
	27C	now I will shave.				
	27D	ouch I cut myself	0	-	0	0
	28A	put on this coat				
	28B	oh its to heavy do I have to				
	28C	look at the other people they were their heavy coats	1	1	1	0
	28D	you better put on your gloves too				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	29A	where are you going				
	29B	to the building across the street				
	29C	what floor are you going to	1	1	0	1
	29D	floor thirteen				
	30A	would you mail this for me.				
	30B	I forgot to mail mine				
	30C	I've got two hours	1	1	0	0
	30D	I'd better mail it fast				
B1 - 3	1	out of matches	0	0	0	0
	2	man takes the paper	0	0	1	0
	3	meets her friends	0	0	0	0
	4	leaves the house mad	0	-	1	1
	5	boy out on halloween	0	0	0	0
	6	Does Miss Davis live here	1	0	-	-
	7	bought new gloves & pure to match	0	1	0	1
	8	David is exploring the attic	1	-	1	0
	9	Mr & Miss	0	0	0	0
	10	Gathering at the park's fountain	0	-	0	0
	11	Would you like a table	1	0	-	-
	12	Do you live downstairs	0	0	0	0
	13	---	1	1	0	0
	14	Could I have the menu	1	1	1	1
	15	Now much is this	1	0	-	-
	16A	I must phone my mother at 6 o'clock				
	16B	Her phone number is 49.43				
	16C	It isn't working	1	0	-	-
	16D	Hello mother				
	17A	Look what I drew				
	17B	Wheres his eyes				
	17C	I'll draw him with eyes				
	17D	See mine has eyes	1	1	0	1
	18A	Men are going to work				
	18B	Men are going home from work				
	18C	They all go different ways				
	18D	Its now March the 1st	1	1	0	0
	19A	Is my wife here				
	19B	Did you see my husband				
	19C	come on in and have a seat				
	19D	It is nice of you to invite us in	1	0	-	-
	20A	I have to do my chores				
	20B	I must wash the dishes				
	20C	and clean the bedroom				
	20D	also scrub the stove	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	21A	This is the dinning room				
	21B	this is the childrens bedroom				
	21C	do you like it				
	21D	I must go and it is very nice	1	1	1	1
	22A	how much is it				
	22B	lets go do the shopping				
	22C	There is the meat store	1	0	0	1
	22D	would you like some of this				
	23A	How do you do				
	23B	what would you like to buy				
	23C	how about 6 eggs for 12¢				
	23D	or maybe a quart of milk	1	0	0	1
	24A	don't break your doll				
	24B	don't worry I wouldn't				
	24C	open the door so I can put these away				
	24D	don't slam it back	1	1	1	1
	25A	would you like to go to a movie				
	25B	look how stars in it				
	25C	this is a exciting scene	1	0	0	0
	25D	I don't have any money				
	26A	---				
	26B	but it dosent have any eyes				
	26C	Ill put them in	1	1	0	1
	26D	one's close & ones open				
	27A	he runs the water				
	27B	puts soap on his face				
	27C	gets the razor blade				
	27D	starts to shave	1	-	1	1
	28A	wear you winter jacket				
	28B	But it is to heavy				
	28C	wear it because it is cold out	1	1	1	1
	28D	wear these red gloves				
	29A	which is Elm street				
	29B	it is over there				
	29C	what number does Mr. Jones live at	1	1	1	1
	29D	number 13 is where he lives				
	30A	I need to have some stamps				
	30B	and I needs a envelope				
	30C	It has been 2 days	1	1	1	1
	30D	put you just have to put it in the box				
B1 - 4	1	Baking a birthday cake	0	0	0	0
	2	Would you like to buy a newspaper.	1	0	1	0
	3	---	0	0	0	0
	4	Closing a door	0	-	0	0
	5	---	0	0	0	0
	6	May I come in?	1	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	7	---	0	0	0	0
	8	Looking in an attic.	0	-	0	0
	9	Are you married?	1	1	0	1
	10	A pond in a park.	0	-	0	0
	11	A cafe in Paris	0	0	-	-
	12	---	0	0	0	0
	13	A they your children	1	1	0	1
	14	Bring me a menu please	1	1	1	1
	15	How much is this book	1	0	-	-
	16A	What time is it?				
	16B	Dialing a number.				
	16C	---	0	0	-	-
	16D	Hello				
	17A	I drew a face				
	17B	Where is it's eyes?				
	17C	I'll show you.				
	17D	Here's where you put the eyes	1	1	1	1
	18A	Going home.				
	18B	Going out.				
	18C	---				
	18D	---	0	0	0	0
	19A	Hello!				
	19B	Meet my wife.				
	19C	Won't you come in?				
	19D	Thank you.	1	0	-	-
	20A	I have to do some cleaning up.				
	20B	I'll do dishes now.				
	20C	Then I'll clean up.				
	20D	---	0	0	0	0
	21A	Will you set the table.				
	21B	I'll clean the bedroom.				
	21C	Where have you been?				
	21D	I've been out,	1	1	0	0
	22A	I have to go to the butchers.				
	22B	Will you come with me?				
	22C	There it is.	1	0	0	1
	22D	Do you want that meat?				
	23A	May I help you?				
	23B	What do you want.				
	23C	Half a dozen eggs please.				
	23D	A quart of milk too.	1	1	1	1
	24A	I have to put the sheets away.				
	24B	---				
	24C	Do you want to help?				
	24D	They go in here	1	0	0	0

Student Number	Picture Number	Students Response	Coding			
			S	M	T	C
	25A	Do you want to go to the show				
	25B	Hey look at this picture.				
	25C	That one looks like me.	1	0	0	0
	25D	I don't think so.				
	26A	See my face.				
	26B	Where are the eyes				
	26C	I'll draw the eyes	1	0	0	0
	26D	There, finished.				
	27A	I'll wash my face.				
	27B	Now I'll put shaving cream on				
	27C	I'll get my razor.				
	27D	Then I'll shave.	0	-	0	1
	28A	Get your winter coat.				
	28B	I need some mitts.				
	28C	See how cold it looks.	1	1	1	1
	28D	Here are some gloves.				
	29A	Where do you live?				
	29B	Across from the theatre.				
	29C	What suite?	1	1	1	1
	29D	Suite no. 13.				
	30A	I have to mail this parcel.				
	30B	Will you mail my letters?				
	30C	----	0	0	0	0
	30D	----				
B1 - 5	1	This is a nice cake.	0	0	0	0
	2	May I borrow your paper?	1	1	1	1
	3	Wonder how its going to be working	1	0	0	0
	4	Boy am I mad	0	-	0	0
	5	I am Daddy	1	1	1	0
	6	Excuse me does Richard Boe live here?	1	0	-	-
	7	Securing a purse	0	0	0	1
	8	This is neat	0	-	0	0
	9	I wonder if I failed my Test	1	0	0	0
	10	A beautiful park fountain	0	-	0	0
	11	Would you like something	1	0	-	-
	12	Was this yours mommy.	1	1	0	0
	13	I wonder whos that.	1	0	0	0
	14	May I have a menu?	1	1	1	1
	15	I'd like to buy a magazine	1	0	-	-
	16A	Oh its almost 6 oclock				
	16B	his number is 49.43				
	16C	I will see if I got change back	1	0	-	-
	16D	Hello, Momma dear?				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	17A	Look at that funny face?				
	17B	Who is it supposed to be?				
	17C	This is a face you should know.				
	17D	this is a better drawing any way.	1	1	0	0
	18A	Some men go to work on bikes				
	18B	and some come home on bikes				
	18C	the factory does many things				
	18D	I like it when the flowers bloom	1	1	0	0
	19A	Hello I'm your neighbour across the hall				
	19B	Im his wife, Mrs. Burn.				
	19C	Won't you come in?				
	19D	Thank you very much.	1	0	-	-
	20A	I'm happy I don't have to work.				
	20B	I hate washing dishes.				
	20C	I hate cleaning up the kids room.				
	20D	I don't mind cooking	1	1	0	0
	21A	oh how do you do!				
	21B	Sorry but the kids room is a mess.				
	21C	What did you want?				
	21D	I'd let you when the kids are home	1	1	0	0
	22A	I had better go and get some lunch.				
	22B	Billy do you want to go some where?				
	22C	Good he's open today	1	0	0	0
	22D	You wait out here okay?				
	23A	Good day how are you?				
	23B	What would you like today?				
	23C	I would like half a dozen eggs please.				
	23D	and one quart of milk.	1	1	1	1
	24A	What are you doing!				
	24B	I had better not show her my doll.				
	24C	Were you in the train closet?				
	24D	Is it your stuff out.	1	1	0	0
	25A	Want to go to the show?				
	25B	Look at these scenes!				
	25C	This one is the best	1	0	0	0
	25D	I don't know whether we should go?				
	26A	Look at the face!				
	26B	There are no eyes.				
	26C	I'll put some eyes in	1	1	0	0
	26D	That looks better now.				
	27A	He is going to clean up.				
	27B	putting a damp cloth over his face.				
	27C	He is going to shave!				
	27D	He's shaving.	1	-	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	28A	Do you want to wear your new coat?				
	28B	Can I really wear it?				
	28C	Well you better its cold out.	1	1	1	1
	28D	Here are some gloves too.				
	29A	I wonder which Hotel is better?				
	29B	How far is it across the street?				
	29C	Do you have a elevator.	1	1	0	0
	29D	Yes its no. 13!				
	30A	Would you mail this for me?				
	30B	I better get an envelope.				
	30C	Two days have passed	1	1	0	1
	30D	I'm lucky I mailed it.				
B1 - 6	1	My I light the candles please?	1	1	1	1
	2	It's my paper.	1	0	1	0
	3	Stand in line please.	1	0	0	1
	4	Goodbye.	0	-	0	0
	5	Im a father.	1	1	1	0
	6	Good morning sir.	1	1	-	-
	7	my purse	0	0	0	1
	8	Where is everybody?	0	-	0	0
	9	Do you take this man to be your husband?	1	1	0	1
	10	What a beautiful sight to see.	0	-	0	0
	11	What would you like please.	1	0	-	-
	12	please fix this mom.	1	0	0	0
	13	Wheres the children?	1	1	0	1
	14	Could I have a menu please.	1	1	1	1
	15	I would like to buy this please.	1	0	-	-
	16A	May I speak to Miss Smith.				
	16B	Dial this number please?				
	16C	It's the wrong number.	1	0	-	-
	16D	Hello. Miss Smith, how are you?				
	17A	I'm drawing a face.				
	17B	There's no eyes on the face.				
	17C	Here's the head.				
	17D	and here's the face.	1	1	0	0
	18A	I'm going to see the game.				
	18B	The games over already.				
	18C	Its closed on Sunday.				
	18D	It's May the 1st today.	1	1	1	0
	19A	Hello Mr. Smith.				
	19B	Hello Mrs. Smith.				
	19C	Won't you both come in and sit down.				
	19D	Ladies first Mr. Smith.	1	0	-	-

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
20A		I've got to get the house work done.				
20B		I'll do the dishes first.				
20C		Then I'll clean out the drawers.				
20D		Then I wash the rooms and kitchen.	1	1	1	1
21A		Won't you come in please.				
21B		This is Johnny's room.				
21C		But I don't know where he is right now.				
21D		Oh well I'll see him next time.	1	1	0	0
22A		How much is it please?				
22B		Come on Peter.				
22C		Let's go to the grocier store for some grocierys.	1	1	1	0
22D		What should we get today?				
23A		Hello Miss Smith what would you like today.				
23B		There's soup milk peas everything you need here.				
23C		A half a dozen eggs please.				
23D		and one jug of milk for today.	1	1	1	1
24A		I forgot the towels.				
24B		Where are they mother.				
24C		There in there aren't they				
24D		What that in there Suzy.	1	0	0	0
25A		Joan do you want to see a show.				
25B		Oh this ones good.				
25C		look at that one there	1	0	0	0
25D		What's so funny about that one.				
26A		Here's my picture.				
26B		There's no eyes on the face.				
26C		I'll put some in.	1	1	0	1
26D		There's one open and the other closed.				
27A		A gold wash for me.				
27B		scrubb a dub, dub.				
27C		I have to shave this morning, to look nice.				
27D		la, la, la, la, la, la.	0	-	0	0
28A		Here's your coat Sharron.				
28B		Thankyou mother.				
28C		It looks cold outside.	1	1	1	1
28D		Then you better take your gloves along with you.				
29A		Hello, Tom, Hello George how are you.				
29B		There's the arrow leading there.				
29C		Where's the number?	1	1	0	0
29D		There it is; its number 13.				
30A		Would you take this back to the store please?				
30B		It's a letter from Jane.				
30C		It took to days to get here.	1	1	0	0
30D		I better mail her one to.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
B1 - 7	1	Mary places the candles on the cake.	0	0	1	0
	2	I'll have a paper, please	1	1	1	0
	3	I would like to see that movie.	1	1	0	0
	4	Mrs. Smith leaves the apartment house.	1	-	1	1
	5	Is it too big?	1	0	0	0
	6	Do come in, please.	1	0	-	-
	7	Mrs. Jones puts on her gloves.	0	0	0	0
	8	Mikele explores the old attic.	1	-	1	0
	9	Should I sign the contract?	1	1	0	0
	10	This is the fountain of youth.	1	-	0	0
	11	Bonjour, Mademoiselle.	1	1	-	-
	12	Is this mother's coat?	1	1	0	0
	13	I wonder when the children will arrive?	1	0	0	1
	14	Oh miss, what's on the menu?	1	0	1	0
	15	I think Ill buy this magizine.	1	0	-	-
	16A	I must phone home by 2:00 o'clock.				
	16B	Mr. Jones dials.				
	16C	I will call again.	1	0	-	-
	16D	Hello? Mother?				
	17A	John draws a face.				
	17B	You must put in eyes.				
	17C	I'll show you how.				
	17D	See? First you put in eyes.	1	1	1	1
	18A	John rides his bike in the yard.				
	18B	He must hurry home!				
	18C	---				
	18D	He has been missing since yesterday.	1	1	0	0
	19A	Well, Hello!				
	19B	Hello, miss.				
	19C	Won't you both come in?				
	19D	Yes, we will, thank-you.	1	0	-	-
	20A	I have many things to do.				
	20B	Mother washes the dishes.				
	20C	I'm tired of always cleaning-up.				
	20D	Ah, finished at last!	1	1	0	0
	21A	Here is the living room.				
	21B	This is the twein's room.				
	21C	When will I see you again?				
	21D	Tommorrow, maybe.	1	1	0	0
	22A	I must get some samedi.				
	22B	Will you come to the butchers with me?				
	22C	Ah, there it is!	1	0	0	1
	22D	Wait here john.				
	23A	Would you like to purchase something?				
	23B	I'm not sure yet. . . .				
	23C	I'll have 6 eggs. . . .				
	23D	and one quart of milk.	1	1	1	1

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	24A	Jooooonie?				
	24B	Yes, mother?				
	24C	Will you put these in the laundry?				
	24D	Right away, mother.	1	0	0	0
	25A	Lets go to a show.				
	25B	Ah, here is a good one.				
	25C	The hunchback of Notre dame.	1	0	0	0
	25D	I have no money.				
	26A	Lets draw another face.				
	26B	The eyes!!!?				
	26C	Jon draws eye brows.	0	1	0	0
	26D	Ill draw an open eye on the other side.				
	27A	Ill shave now.				
	27B	Ill put on some shaving creme.				
	27C	Ow?!! That's sharp!				
	27D	Dum dee dumm dee. . . .	0	-	0	0
	28A	I'd better leave now.				
	28B	Thanks for everything!				
	28C	Oooh! there is Joanie.	1	1	0	0
	28D	Good-Bye, Mrs. Smith.				
	29A	Do you live near here?				
	29B	Right across the road from the cinema.				
	29C	How many floors up?	1	1	1	0
	29D	Thirteen.				
	30A	Ill mail it now.				
	30B	Oh!! I forgot the envelope!				
	30C	2 days pass.	0	0	0	0
	30D	I'll mail it today for sure?				
B1 - 8	1	Mary is lighting the candles on her cake.	0	0	1	1
	2	I didn't here the whole story.	1	0	0	0
	3	Betty is praying for everyone.	1	0	0	0
	4	Miss Turner is mad when she leaves.	1	-	1	1
	5	Bill is doing a play at school.	0	0	0	0
	6	Would you life to come in and have coffee	1	0	-	-
	7	Betty is about to set her purse down.	0	0	1	0
	8	Bill decides to play in the attic.	1	-	1	0
	9	---	0	0	0	0
	10	Isn't it a nice day?	0	-	0	0
	11	May I ehlp you find a seat?	1	0	-	-
	12	Mother where should I put these?	1	1	1	0
	13	I wonder what Bill and Jane look like now.	1	0	0	1
	14	I have decided on what I will eat.	1	0	0	0
	15	I would like this magazine Please.	1	0	-	-

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
16A		I wonder if it is the time to phone my wife.				
16B		Mr. Brown phones his wife.				
16C		The phone does not work and he gets back his change.	0	0	-	-
16D		Finally he reaches his wife.				
17A		Bill asks Joan to look at what drew.				
17B		Joan asks where the eyes are.				
17C		Now Joan tries to draw a face.				
17D		Joan remembers to draw in the eyes.	0	0	1	1
18A		Tom remembers back when he was young.				
18B		He would go bicycle riding.				
18C		---				
18D		---	0	0	0	0
19A		Mr. Daniels arrives home.				
19B		There is a party at the Daniels this is their first guest.				
19C		Another couple arrive.				
19D		Mrs. Daniels invites them in.	0	0	-	-
20A		I wonder has done all the chores?				
20B		I hope she has done the dishes.				
20C		Oh no I wonder if she remembered about my room.				
20D		I bet when I get home the house will be clean.	1	1	0	0
21A		Mary has to babysit.				
21B		I must get that balloon down for Tom.				
21C		Could you please tell me when you are coming home.				
21D		I am not sure I think in about 2 hours.	1	1	0	0
22A		Mrs. Martin remembers it is saturday.				
22B		---				
22C		She asks Tom if he wants to go to the shop across the street.	0	0	1	0
22D		She asks Tom what he would like.				
23A		Good afternoon! May I help you?				
23B		Is this what you are looking for?				
23C		May I have 6 eggs please?				
23D		Oh yess and a bottle of milk.	1	1	1	1
24A		I suppose I need two more towels.				
24B		I don't want mom to find out I broke my doll.				
24C		---				
24D		Please close the door for me.	1	1	1	1
25A		Would you like to go and see that show.				
25B		Is this ever a good picture.				
25C		Don't you think that is a funny picture?	1	1	0	0
25D		I am not sure whether I like this.				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	26A	What do you think is missing on this?				
	26B	Mary replies "There are no eyes."				
	26C	Bob draws in one shut eye.	0	0	1	1
	26D	And then he completes the face by drawing in another eye.				
	27A	I must hurry and clean myself if I do not want to be late.				
	27B	Mr. Moore is washing his face.				
	27C	He picks up his razor.				
	27D	Mr. Moore needs a shave.	1	-	1	1
	28A	Mother will you please get down my coat.				
	28B	Would you please help me put it on.				
	28C	I think you will need your mittens cause it is a cold day.	1	1	1	1
	28D	Mother gives Mary her mittens.				
	29A	Could you please tell me where the Whales Hotel is.				
	29B	I guess it is that hotel.				
	29C	Will you please take me to the 15 floor.	1	1	0	0
	29D	This is the 13th not 15th.				
	30A	Could you please take this to the post office.				
	30B	I must mail this letter before its to late				
	30C	Oh my goodness I still have not mailed that letter	1	1	1	0
	30D	I am near a mail box and now I must go and mail it.				
B1 - 9	1	May I light the candles?	1	1	1	1
	2	Would you like to buy a paper?	1	0	1	0
	3	---	0	0	0	0
	4	---	0	-	0	0
	5	---	0	0	0	0
	6	May I come in?	1	0	-	-
	7	---	0	0	0	0
	8	----	0	-	0	0
	9	---	0	0	0	0
	10	---	0	-	0	0
	11	May I take your order	1	0	-	-
	12	---	0	0	0	0
	13	Are you in there	1	1	1	1
	14	"Waitress!"	1	1	0	0
	15	How much?	1	0	-	-
	16A	---				
	16B	fourty nine fourty three				
	16C	---	0	0	-	-
	16D	Wrong number.				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
17A		Look what I'm drawing				
17B		You forgot his eyes!				
17C		Let me show you.				
17D		See, there's his eyes.	1	1	0	1
18A		---				
18B		---				
18C		---				
18D		---	0	0	0	0
19A		Would you like to come in.				
19B		Pleased to meet you				
19C		Come in				
19D		Sit down please.	1	0	-	-
20A		---				
20B		---				
20C		---				
20D		---	0	0	0	0
21A		Come in				
21B		---				
21C		---				
21D		---	0	0	0	0
22A		I'm going to the butcher.				
22B		Come along.				
22C		There's the butcher shop.	1	0	0	1
22D		We'll buy this.				
23A		Come on in				
23B		Do you want some milk				
23C		How about 1/2 dozen eggs				
23D		I'll take some milk.	1	1	1	1
24A		---				
24B		---				
24C		---				
24D		---	0	0	0	0
25A		What playing at the Cinema				
25B		Look here's a good one.				
25C		Which one	1	1	0	0
25D		I don't know				
26A		Look at my drawing.				
26B		He doesn't have any eyes.				
26C		---	0	0	0	0
26D		---				
27A		---				
27B		---				
27C		---				
27D		---	0	-	0	0
28A		Here's your coat				
28B		Help me do up the buttons please				
28C		Don't go out yet.	1	0	0	0
28D		Here's your mitts.				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	29A	Where are you going				
	29B	It's right across from the Cinema				
	29C	What floor is it at?	1	1	0	1
	29D	Thirteen				
	30A	Please mail my parcel.				
	30B	You need an envelope				
	30C	Two days left	0	1	0	0
	30D	---				
B1 - 10	1	That should be enough candles.	1	0	1	0
	2	Did you see this in last night's paper?	1	0	0	1
	3	I wonder if I'll get to do that.	1	1	0	0
	4	I guess I'll close the door nobody's there	0	-	0	0
	5	This is what I'll wear when I grow up	1	1	0	0
	6	Hello! I'm Mr. Brown. How do you do.	1	1	-	-
	7	Now I have a red bag to match my red gloves	1	1	0	1
	8	I wonder if there is anything interesting in this attic.	0	-	0	0
	9	I don't think I'll ever get married.	1	0	0	0
	10	What a beautiful scene of the park.	0	-	0	0
	11	Hello! May I help you.	1	1	-	-
	12	Mom I accidentally knocked down the curtains	1	0	0	0
	13	I wonder if there are any kids in this suite.	1	0	0	1
	14	Would you mind bringing me a menu please.	1	1	0	0
	15	I think I'll pick this up how much?	1	0	-	-
	16A	Oh no I was supposed to phone my wife at six.				
	16B	I think four is the first no.				
	16C	Oh no my dime is stuck	1	0	-	-
	16D	Hello! Gloria I'm sorry I phoned late but..				
	17A	Hey Sally come and see my drawing				
	17B	Tommy you forgot his eyes.				
	17C	Here I'll show you how to draw it.				
	17D	there now I put in his eyes.	1	1	1	1
	18A	I remember when I used to go to school.				
	18B	And then at four everyone went home.				
	18C	All my friends went different ways home.				
	18D	Yes those were the good old days when I was younger.	1	1	0	0
	19A	Hello remember me I'm George Brown				
	19B	And this is my wife Carol.				
	19C	Won't you please Come in.				
	19D	Yes thank you for a while.	1	0	-	-

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
20A		How will I ever get time to do all those things.				
20B		I've got to wash the dishes.				
20C		Clean out the boy's bedrooms draus.	1	1	1	1
20D		And I have to clean the kitchen then I'll be finished.				
21A		See this is our dining room area here.				
21B		And this is little Jan & John's bedrooms.				
21C		Well how do you like it?				
21D		Its very nice I;ll come back & see again one time	1	1	1	1
22A		I wonder if John will eat that?				
22B		Come John I want to see if you like this.				
22C		Its over in that butcher shop over there.	1	0	0	0
22D		The man will show it to you come over here				
23A		Hello may I help you today.				
23B		Would you care for any of these goods.				
23C		Yes I'd like six eggs please.				
23D		And also a quart of milk.	1	1	1	1
24A		Joan come and help me put away the linen.				
24B		You aren't going to put my dolly up there are you.				
24C		No I'm going to put the sheets into the closet.				
24D		Now you close that door & go play with your dolly	1	1	1	1
25A		Would you like to go to the cinema				
25B		Hey look who's playing in it				
25C		Here he makes his dive Let's go	1	0	0	0
25D		I still don't know Billy				
26A		Look at my drawing he's yawning				
26B		But you forgot his eyes				
26C		I'll make this eye closed is if he is yawning	1	1	1	1
26D		And this eye open to show he is not wide awake yet.				
27A		I guess I'll start to shave now				
27B		First I'll put some lather on.				
27C		There now I'll just change the blade.				
27D		Ouch! That new blade is really sharp.	0	-	0	0
28A		Look at my coat a button is coming off.				
28B		Mother could I go outside anyway.				
28C		Its awfully cold out but I guess you can go.	1	1	0	1
28D		Don't forget your mitts I don't want your hands to freeze.				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	29A	Whereabouts do you live George?				
	29B	I live right across from the cinema				
	29C	What suite no. is yours?	1	1	1	1
	29D	My number is thirteen.				
	30A	Would you go & post this for me?				
	30B	Oh that reminds me I'd better get this letter away				
	30C	I better make it fast or it won't arrive on the day I want it	1	1	0	0
	30D	There I finally got it mailed.				
B1 - 11	1	I'll light the candles.	1	0	1	1
	2	Hey mac, look at this.	1	1	0	0
	3	----	0	0	0	0
	4	She closed the door.	1	-	1	0
	5	Stick -em up.	1	0	0	0
	6	Boy, what a mess.	0	-	0	0
	7	She checks her hand bag.	0	0	0	1
	8	Boy, what a mess.	0	-	0	0
	9	----	0	0	0	0
	10	The fountain of youth.	0	-	0	0
	11	Have you a reservation Madame.	1	0	-	-
	12	Can I dress up in your old cloths.	1	0	0	0
	13	Children come here please!	1	0	0	1
	14	Waitress I will place my order now.	1	1	0	0
	15	How much is this magazine	1	0	-	-
	16A	Oh I had better phone Martha				
	16B	Let me see. 49.43				
	16C	Now in goes the dime	1	0	-	-
	16D	Hello Martha? Yes this is Gorge.				
	17A	Hey June look at the face I drew.				
	17B	Yes, But, where are the eyes?				
	17C	Here I'll draw a face for you.				
	17D	There, see, all it needed was eyes.	1	1	0	1
	18A	I better not be late for work.				
	18B	Boy just wait till after work.				
	18C	Oh no the gates will be closed.				
	18D	Late for the first time this month.	1	1	0	0
	19A	Well hello Fred! Where's Jane.				
	19B	I'm right here Luce. Hi.				
	19C	Please come in!				
	19D	My what a nice home, so big	1	0	-	-
	20A	I have to clean this place up				
	20B	I have to do the dishes.				
	20C	Then do the laundry.				
	20D	And then clean the kitchen.	1	1	1	1

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	21A	Come on in Alice.				
	21B	Oh no look at this mess.				
	21C	Oh-a, its too messy in there!				
	21D	Yes but you still have a lovely home.	1	1	1	1
	22A	I had better get some meat.				
	22B	You want to come later?				
	22C	Look there having a sale.	1	0	0	0
	22D	You wait here Peter				
	23A	Come in Mrs. Jones.				
	23B	What would you like?				
	23C	I'll have a half a dozen eggs.				
	23D	and a quart of milk.	1	1	1	1
	24A	Jane come here.				
	24B	You want me to help mom?				
	24C	I want you to help with this linen.				
	24D	Carefull you don't drop any.	1	1	0	0
	25A	Want to see a movie.				
	25B	Hey look at those cool senes.				
	25C	Here's where he gets wipped	1	0	0	0
	25D	But I have no mony.				
	26A	Look at this funny face.				
	26B	but you still forgot the eyes.				
	26C	We'll have one closed eye.	1	1	1	1
	26D	And one open eye.				
	27A	I think I'll have a shave				
	27B	Now for some lather.				
	27C	Now I take my shaver & shave				
	27D	Ouch! This thing pulls.	0	-	0	0
	28A	Put your heavey coat on.				
	28B	Why?				
	28C	Because it's cold out.				
	28D	Don't forget your gloves.				
	29A	Hey, where do you live?				
	29B	Accross from the show.				
	29C	What number?	1	1	1	1
	29D	13.				
	30A	I've got to post this.				
	30B	I better write a letter.				
	30C	There's only two days left.	1	1	0	0
	30D	I thing I'll air mail it.				
B1 - 12	1	Oh good, it's a pin.	1	0	0	0
	2	Let me see that paper!	1	1	1	1
	3	Help all of the people.	1	0	0	0
	4	I'm getting out of here right now!	0	-	0	1
	5	There is a very funny little boy.	0	0	0	1

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	6	Won't you please come in?	1	0	-	-
	7	I must be careful not to lose my purse.	1	1	0	1
	8	Boy, this sure looks like a spooky place.	0	-	0	0
	9	Jane is writing home to her parents.	0	0	1	0
	10	A great crowd gathers to see the beautiful fountain.	1	-	0	0
	11	May I help you, Madame?	1	0	-	-
	12	Mary shows her mother that her costume is ruined.	0	0	0	0
	13	Why are you children here?	1	1	0	1
	14	Waiter, please come here and bring the menu.	1	1	1	1
	15	I'm sure my wife will like this one.	1	0	-	-
	16A	Oh my, It's time to call my wife!				
	16B	I have to dial the number fast.				
	16C	Oh no! It doesn't work. I'll push the button.	1	0	-	-
	16D	Good. I finally got her on the phone.				
	17A	Did you draw that?				
	17B	No. Somebody forgot to put in the eyes.				
	17C	I'll show you how to draw a face.				
	17D	see, I didn't forget to put the eyes in.	1	1	1	1
	18A	Everyone is rushing to school.				
	18B	School is dismissed.				
	18C	The school is closed for the holidays.				
	18D	It will open after the holidays.	1	1	1	0
	19A	Won't you please come in?				
	19B	Oh. Is this your wife?				
	19C	Come in and I'll give you some tea.				
	19D	That will be fine. We're delighted.	1	0	-	-
	20A	What are they all doing?				
	20B	Mrs. Jones is doing the dishes.				
	20C	Mrs. Brown is cleaning up the dining room.				
	20D	Mrs. White is wiping the kitchen counter.	0	0	1	1
	21A	I'm sure you'll like this dining room.				
	21B	This is the child's bedroom.				
	21C	Do you like it?				
	21D	Oh, I'll have to talk it over with my husband.	1	1	0	0
	22A	I think I'll go to the butcher shop tomorrow.				
	22B	Here comes Tom. He'll come along with me.				
	22C	There it is. We're here already.	1	0	0	1
	22D	I think I'll find some fine meat here.				
	23A	Come in. Come in. Hello!				
	23B	Didn't you know? This is a grocery store.				
	23C	I would like a half a dozen eggs, please.				
	23D	I might as well have a bottle of milk, too.	1	1	1	1

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
24A		I have to put all of these towels in the' linen closet.				
24B		Susie runs away because she doesn't want to help.				
24C		Her mother calls her back.				
24D		Soon they finish putting the towels away.	0	0	0	0
25A		Would you like to go to the movies with me?				
25B		You can take you're pick.				
25C		You might like this one. I do.	1	0	0	0
25D		Gee! I really don't know which one I want to see.				
26A		This face has no eyes on it!				
26B		Did you forget the eyes?				
26C		No, but I'll show you how to do them.	1	1	0	0
26D		Oh, no! I made a mistake!				
27A		Boy, do I feel sleepy this morning.				
27B		I'll have to wash my face real good.				
27C		Now I'll shave.				
27D		Poor Mr. Jones. He cut his face while shaving.	1	-	1	0
28A		Do I have to wear my coat today?				
28B		Look! It looks so big on me.				
28C		Her mother shows her how cold it is outside.	0	1	1	1
28D		I think you'd better wear your gloves, too.				
29A		What are all those buildings?				
29B		Look. The theator is right across from the apartment block.				1
29C		I wond er what the number is?	1	0	0	1
29D		See! The number is 13.				
30A		Jane asks Mary to mail some parcels for her.				
30B		Mary takes the letters out of the envelope to look at them.				
30C		She put them in her purse for 2 days.	0	0	0	1
30D		Then she goes to mail them.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
A2 - 1	1A	Oh! its moms birthday cake				
	1B	I'll light the candles.	1	0	1	1
	1C	Oh! no you don't I will.				
	1D	Boy I never get to do anything.				
	2A	May I see the sports section				
	2B	Oh! No get your own paper				
	2C	See mines gone anyway				
	2D	Ah! Here it is here you go.	1	0	1	0
	3A	Would you mail this for me.				
	3B	Just takt it in there.				
	3C	All you have to do is go up.				
	3D	That girl is pobably talking	1	1	0	0
	4A	I'm going out.				
	4B	There the doors locked.	0	-	0	0
	4C	Ah mary.				
	4D	I don't think Ill go. . .				
	5A	I'll put on dads coat				
	5B	And his coat too!				
	5C	Oh some shoes too!				
	5D	Now I look like dad does!	1	1	1	0
	6A	Hello Joan				
	6B	Id like you too met bob				
	6C	Oh high bob.	1	1	-	-
	6D	Come in and make yourself at home.				
	7A	Hears your handbag				
	7B	And your gloves.				
	7C	Now too get ready.	1	1	0	0
	7D	Ok I'm just about ready to go.				
	8A	Boy Im going to find alot up here.	0	-	0	0
	8B	Look at all this old clothing				
	8C	Hey Jim wound you mind looking for an old hat				
	8D	I found it dad.				
	9A	I better mall my letters.				
	9B	I'd better not make a mess of writing them.	1	0	1	0
	9C	Now to get the stamps.				
	9D	And phone home to tell them Im come.				
	10A	What a sight!				
	10B	Look at all the grass and bushes				
	10C	Look at all the old geckers, too!				
	10D	What a nice fountain	0	-	0	0
	11A	Hello madam are you coming in.	1	1	-	-
	11B	Would you like a separate table.				
	11C	There's one ne's leaving now.				
	11D	See now you may have your table.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	12A	Just put the linen down there.				
	12B	right down beside the undershirts				
	12C	Where should I put this quilt	1	1	1	1
	13A	Hello! is your husband home.				
	13B	I'm hangng up my coat okay				
	13C	Oh high Jim. High				
	13D	Where is Billy and Bettsy	1	1	0	1
	14A	Im going into the restront				
	14B	Ah! this is a good enough place				
	14C	Please! watress the menu	1	1	1	1
	14D	Im going to have a steak.				
	15A	Could I see that magazine please				
	15B	Its call Claire sir It's 35¢				
	15C	I'll see if I have the change				
	15D	Thats quite a good magazine	1	0	-	-
	16	operator would you give me a mr smiths number	1	0	-	-
	17	What a funny looking picture.	1	1	0	0
	18	It's the boy how time flys.	1	1	0	0
	19	Come in please.	1	0	-	-
	20	I'd better go pack your lunch	1	1	0	0
	21	I don't know how I lost my watch	1	1	0	0
	22	Lets go too the bakary	1	1	1	0
	23	May I have a glass of milk	1	1	1	1
	24	Close the closet, dear.	1	1	1	0
	25	That was me playing baseball	1	0	0	0
	26	Is that a womans or mans fase	1	0	0	0
	27	Ouch! I cut myself	0	-	0	0
	28	Look! theres John	1	1	0	0
	29	I wonder whats the matter with the elevators	1	0	0	0
	30	Two days have gone by already	1	1	0	0
A2 - 2	1A	What a beautiful cake. But it needs candles.				
	1B	I'll light the candels.	1	0	1	1
	1C	No, Jane, don't light them.				
	1D	Okay, I won't light them.				
	2A	Are you looking at the Sports Pages?				
	2B	Yes, but I am not finished.				
	2C	You can look at the picture on the front page.				
	2D	Can I have the paper no?	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
3A		Here's the post office.				
3B		Can you mail this parcel for me?				
3C		Look at the line-up.				
3D		I'm not going there no more. Its to crowded.	1	1	0	0
4A		I'm nere at last.				
4B		Now, if I can only open the door.	0	-	0	0
4C		Hello. Do you want to go shopping?				
4D		Who's that girl by the elevator.				
5A		This hat is a bit to big.				
5B		My dad's coat is way to big.				
5C		Here son. heres my old shoes.				
5D		I look funny in my father's clothes.	1	1	1	1
6A		Hello, may I help you?				
6B		Can I help you?				
6C		I would like to see Mr. Jones.	1	0	-	-
6D		You may come in to see him now.				
7A		Here dear, take your purse.				
7B		And your gloves.				
7C		Put your purse over your arm.	1	0	0	1
7D		And put on your gloves.				
8A		This attic is nearly empty.	0	-	0	0
8B		I wonder whats in here?				
8C		Did you find anything Tom.				
8D		Yes your hat. See.				
9A		I mailed the letter yesterday.				
9B		I wrote it to Mr. and Mrs. Jones	1	0	1	0
9C		I wonder if I put the right postage on.				
9D		I'll phone them and ask.				
10A		Theres nearly no one here.				
10B		There are a few more people in this area.				
10C		There are 3 more old men and women.				
10D		This area of the park is more crowded.	1	-	1	0
11A		I would like to eat something.	1	0	-	-
11B		Do you want a table?				
11C		That man took the last table.				
11D		But he is leaving now.				
12A		Bring me those sheets.				
12B		Lay them down here.				
12C		What shall I do with your dress.	1	1	1	0
12D		Layit down on the bottom shelf.				
13A		Hello John, come in.				
13B		I'll hang my coat here.				
13C		Hi John. Hello Harry.				
13D		Do you have and children Harry?	1	1	0	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	14A	Heres a restraunt.				
	14B	Lets sit at this table.				
	14C	Waiter. Menu please.	1	1	1	1
	14D	These prices are so high.				
	15A	I would like to buy a magazine.				
	15B	How about this one. Its only 40¢				
	15C	I have the money here.				
	15D	Thank you. It looks like a good magazine.				
	16	Mr. Smith finished his call.	0	0	-	-
	17	Joe is drawing a face.	0	0	1	0
	18	It is the first of the month today.	1	1	0	0
	19	Welcome, Mr. and Mrs. Smith.	1	0	-	-
	20	Mother is washing the dishes.	1	1	1	0
	21	Are you waiting for Dr. Flett, too?	1	0	0	0
	22	There's the butcher.	1	0	0	0
	23	The milk is on the table.	0	0	0	1
	24	Please pick that cover up for me.	1	1	0	0
	25	This is a good picture.	1	0	0	0
	26	He is drawing a person's eyes.	0	0	1	0
	27	He is shaving.	1	-	1	1
	28	Carol is coming up the sidewalk	1	1	0	0
	29	There is something hanging over the door	1	0	0	0
	30	Shes picking up the paper and putting it in her purse.	0	0	0	0
A2 - 3	1A	You put the candles on.				
	1B	I'll get the matches.	1	0	0	0
	1C	You my not light the candles.				
	1D	I'm about to blow the candles.				
	2A	Does it have an article on sports				
	2B	Yes it does				
	2C	Here they are				
	2D	I'll take the newspaper instead	1	0	1	1
	3A	Here's the post office				
	3B	You have to mail this parcel				
	3C	You have to wait in a line				
	3D	Here you do it.	1	1	0	1
	4A	I'm going out to shopping				
	4B	I better lock the door	0	-	0	0
	4C	Oh here is Mrs. Dupont				
	4D	Do you know that lady.				
	5A	I'll wear this big hat.				
	5B	I'll get this long coat				
	5C	I'll wear these old shoes				
	5D	Now look like my father	1	1	1	0

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	6A	Oh hello Jan				
	6B	Oh hello John				
	6C	Jan and I came to visit you	1	0	-	-
	6D	Come in				
	7A	Here's your purse				
	7B	Here's your gloves				
	7C	Put on your purse	1	0	0	1
	7D	Now put on your gloves				
	8A	This is the attic	0	-	0	0
	8B	What's in here				
	8C	What are you doing here?				
	8D	Oh just looking for this hat				
	9A	Should I mail this letter				
	9B	I will not write to them	1	0	1	0
	9C	How many stamps do I need				
	9D	I'll make a telephone call				
	10A	Look at these trees				
	10B	Look at this view				
	10C	Look at that man sleeping				
	10D	Look at that fountain	1	-	0	0
	11A	Oh hello Madame	1	1	-	-
	11B	Would you like a seat				
	11C	I get you a seat overthere				
	11D	See that man is going				
	12A	Here give me that load				
	12B	Put it by here				
	12C	whatshould I do with this?	1	1	1	0
	12D	Put it here too				
	13A	Oh hello Jan may I come in				
	13B	I'll hang my coat				
	13C	Hello John				
	13D	Where are the girls?	1	1	0	0
	14A	Let's go over there				
	14B	Lets have a seat				
	14C	May I have the Menu?	1	1	1	1
	14D	What do you wat?				
	15A	I would like to have that journal				
	15B	It's 85 cents				
	15C	Here is the money				
	15D	Thank you	1	1	-	-
	16	Hello operator	1	1	-	-
	17	This is a drawing of you	1	1	0	0
	18	It's the first of May	1	1	0	0
	19	Come in	1	0	-	-
	20	Mom can I help you	1	0	0	0
	21	I have to leave	1	1	0	0
	22	Let's get some meat from there	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	23	There's the milk	1	0	0	1
	24	Close the door	1	1	1	0
	25	That's a picture of me	1	0	0	0
	26	This boy is sleepy	1	1	0	0
	27	I have to be careful	0	-	0	0
	28	Look there's Bob	1	1	0	0
	29	What floor	1	1	1	1
	30	Two days have passed	1	1	0	0
A2 - 4	1A	My what a delicious cake!				
	1B	I'll light one of the candles	1	0	1	1
	1C	Don't play with matches, Sue!				
	1D	But I won't anymore.				
	2A	Can I join your group? please!				
	2B	Sorry, old boy, you're too fat.				
	2C	But you can take de-weighting jobs.				
	2D	Gee, thanks.	1	0	0	0
	3A	Will you please take my parsel there?				
	3B	Why, don;t you take it?				
	3C	Because there's such a crowd!				
	3D	I'll ask Betty and Joan.	1	1	0	0
	4A	I'm so glad I'm at home!				
	4B	Oh, the key is stuck.	0	-	0	0
	4C	Hey, what are you doin' here?				
	4D	You'd Better go back Home where you belong				
	5A	This hat is pretty big.				
	5B	So is this coat! but it'll do.				
	5C	Do I have to wear those old shoes?				
	5D	Oh, well, its better than nothing.	1	1	0	0
	6A	Hello Ann, Where's Paul?				
	6B	Oh, I didn't see you, Hi.				
	6C	I'm glad you invited us.	1	0	-	-
	6D	Won't you come in?				
	7A	Here is a new purse Lynn!				
	7B	And some new red gloves				
	7C	Goodby mother	1	0	0	0
	7D	I have to wear my beautiful Gloves				
	8A	Boy, this attic is keen.	0	-	0	0
	8B	Hey, whats in here?				
	8C	Hey, boy, what are you doin'?				
	8D	I found this old hat in there.				
	9A	I better mail this letter.				
	9B	Maybe I shouldn't	1	0	0	0
	9C	I can't pay this postage.				
	9D	I'll phone them!				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	10A	Isn't this a wonderful day in the park?				
	10B	Yes, the scenery is beautiful.				
	10C	Now, for a short rest.				
	10D	And a drink at the fountain.	0	-	0	0
	11A	I request a table please!	1	0	-	-
	11B	Sorry, every one is taken.				
	11C	Look there is one!				
	11D	He is Leaving!				
	12A	Put them in here dear.				
	12B	Right beside these				
	12C	What shall I do with this?	1	1	1	0
	12D	Put in there too.				
	13A	Hello Honey, what are you don' tonite?				
	13B	I thought you would be out today.				
	13C	Hi Jim, can I help				
	13D	By the way, where are the kids?	1	1	0	1
	14A	A table please				
	14B	Yes this one will do.				
	14C	The menu, please	1	1	1	1
	14D	I don't know what I will have.				
	15A	What is this about?				
	15B	It is about Madame Claire!				
	15C	I'll take it, here.				
	15D	Thanks a lot sir!	1	1	-	-
	16	Is this a coin return button?	1	0	-	-
	17	This is our teacher!	1	1	0	0
	18	It is spring today!	1	1	0	0
	19	Will you please come in?	1	0	-	-
	20	May I help? Mother?	1	0	0	0
	21	I'm sorry I dropped your dish	1	1	0	0
	22	There's Mr. Reed.	1	0	0	0
	23	There is the milk.	1	0	0	1
	24	Today use that dress!	1	1	0	0
	25	That is my brother.	1	0	0	0
	26	I am drawing father!	1	1	0	0
	27	Ouch, I cut myself?	0	-	0	0
	28	There's old man Flit!	1	1	0	0
	29	What time is it.	1	1	0	0
	30	I must go now to the post office.	1	1	0	0
A2 - 5	1A	Should I light the candels				
	1B	Im going to light them	1	0	1	1
	1C	Stop don't light them				
	1D	I already lit them				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	2A	Here is the sports pages				
	2B	Hi look at the newspaper				
	2C	There are so many activities in here				
	2D	Let me see	1	1	1	1
	3A	Im going to the post office				
	3B	Do you want to come with me				
	3C	There are so many people				
	3D	I think thats my sister	1	1	0	0
	4A	I better lock the door				
	4B	It must be stuck	0	-	0	0
	4C	Do you want to come with me				
	4D	Let's not go down the elevator				
	5A	This hat is too big				
	5B	The coat is too long				
	5C	Try these shoes on				
	5D	There all too big on me	1	1	0	0
	6A	How do you do Miss Brown				
	6B	Hi I am her husband				
	6C	Would you please come in	1	0	-	-
	6D	We will stay only a while				
	7A	My I take a look at your perse				
	7B	Your gloves also				
	7C	The perse is very pretty	1	1	0	1
	7D	So are the gloves				
	8A	Where did I put that hat	0	-	0	0
	8B	It must be in the chest				
	8C	What are you looking for				
	8D	I look for my hat. Here it is				
	9A	I forgot to mail the letters				
	9B	My sister also forgot	1	0	0	0
	9C	She forgot to buy the stamps too				
	9D	Id better phone her				
	10A	The park is very beautiful				
	10B	It has nice grass and trees				
	10C	It is also a good place for old people				
	10D	The park has a beautiful fountain	1	-	0	0
	11A	Do you have a table for me	1	0	-	-
	11B	I think there is one				
	11C	There's a man sitting in it				
	11D	Oh he just got up				
	12A	Where should I put these				
	12B	Put them over here				
	12C	And where should these be put	1	1	1	0
	12D	Put them in the bottom shelf				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	13A	May I come in				
	13B	Hany you coat up here'				
	13C	Hi Mr. Brown				
	13D	I forgot to bring the children	1	0	0	1
	14A	There is John White				
	14B	Whould you pay the check				
	14C	Whould you come here for a min.	1	1	0	0
	14D	Do our lunch cost this much				
	15A	This looks interasting				
	15B	It's called Chaire				
	15C	Here's the money				
	15D	It seem I read this before	1	0	-	-
	16	operator give me the polic	1	0	-	-
	17	here is a picture of myself	1	1	0	0
	18	today is May the firist	1	1	0	0
	19	would you please come in	1	0	-	-
	20	I forgot to do the dishes	1	1	0	0
	21	I have to go shopping	1	1	0	0
	22	There's the store	1	0	0	1
	23	Do you want some milk	1	0	0	1
	24	help me take the sheets downstairs	1	1	0	0
	25	This is a picture of me when I was small	1	0	0	0
	26	This is how teacher looks when he's tired	1	1	0	0
	27	I cut myself.	0	-	0	0
	28	may I go out and play	1	0	0	0
	29	I went up the elevaotr	1	0	0	0
	30	This is an old calendar,	1	1	0	0
A2 - 6	1A	The girl is going to light the candles				
	1B	The girl goes for some matches	0	0	0	0
	1C	Her father says for her not to start				
	1D	She says she has.				
	2A	Do you like sports?				
	2B	No. I just like reading about them				
	2C	Here are some good sports activities				
	2D	Let me borrow the paper.	1	1	1	1
	3A	There is the post office.				
	3B	Go and mail this parcel.				
	3C	Wait in line over there.				
	3D	I will meet you there later.	1	1	0	0
	4A	A lady is closing the door				
	4B	Now she locks it.	1	-	1	0
	4C	Her friend calls to her.				
	4D	The girl says to use the elevator.				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
5A		The boy tries on his father's hat.				
5B		The boy tries on his father's coat.				
5C		His father hands him his shoes.				
5D		The boy is dressed up in his fathers clothes.	0	0	0	0
6A		The girl greets the lady.				
6B		The girl greets the man.				
6C		---	0	0	-	-
6D		The girl asks them to come in.				
7A		The girl's mother hands her her purse.				
7B		She hands her her gloves				
7C		The girl puts her purse over her arm.	0	0	0	1
7D		Now she puts her gloves on.				
8A		A boy is in the attic	1	-	1	1
8B		The boy looks in a chest or box.				
8C		His father asks him what is he looking for.				
8D		The boy was looking for a hat.				
9A		The lady plans to mail a letter.				
9B		The lady decides not to write it to her parents.	0	0	1	0
9C		She is not able to finds some stamps.				
9D		She decides to use the telephone.				
10A		You pass through a gate bordered by bars.				
10B		You come into a square.				
10C		Old ladies and gentlemen are resting on benches.				
10D		In the middle is a fountain.	1	-	0	0
11A		May I help you?	1	0	-	-
11B		Would you like a table?				
11C		That one is almost avleable				
11D		You may have the table				
12A		The girls bringing some clothes.				
12B		He mother says to put th T-shirts there				
12C		The girl asks where to put the dress	0	1	1	0
12D		The mother says by the t-shirts.				
13A		The lady greets the man at the door.				
13B		The man hanges his coat up				
13C		the man says hello to her husband				
13D		the man asks where are the children	0	1	0	1
14A		The lady points to a restaurant				
14B		They seat themselves at a table.				
14C		A man asks for the menu.	0	1	1	1
14D		The man wonders what the other wants.				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	15A	The man askes to see the book				
	15B	The salesman shows it to him				
	15C	The man says he'll take it.				
	15D	The man says it looks like a good book.	0	0	-	-
	16	The man is phoning	0	0	-	-
	17	The boy is drawing a face	0	0	1	0
	18	Is it the first of May	1	0	0	0
	19	Would you please come in	1	0	-	-
	20	Mother will do the cleaning	1	1	1	0
	21	Where is all the furnichure	1	0	0	0
	22	There is the baker	1	0	0	0
	23	There is the milk.	1	0	0	1
	24	Would you take that for me.	1	1	0	0
	25	This is a picture I drew.	1	0	0	0
	26	He is drawing a oval face.	0	0	0	0
	27	The man is taking a shave	1	-	1	1
	28	Where does this door lead	1	0	0	0
	29	The lady is leaving on the 25th.	1	1	0	0
	30	---	0	0	0	0
A2 - 7	1A	I finished the cake isn't it beautiful				
	1B	Now I will lite the candels	1	0	1	1
	1C	Stop you will burn yourself				
	1D	Now can I blow them out.				
	2A	Who wone the baseball game.				
	2B	come look for yourself				
	2C	thanks now lets see.				
	2D	May I have it	1	1	1	1
	3A	Theres the post office				
	3B	Would you post this fore me				
	3C	You go over there				
	3D	I am waiting to post this fur my sister	1	1	0	0
	4A	I better close the door				
	4B	and I will lock it.	0	-	0	0
	4C	Hello Mrs. Brown				
	4D	There goes my sister				
	5A	Heres a hate that is to big				
	5B	here is a coat that is to big				
	5C	Here are a pair of shoes for you				
	5D	Now everything om me is to big	1	1	0	0
	6A	glad to meet you				
	6B	come in please				
	6C	I'm glad you could make it	1	0	-	-
	6D	come in and meet the others				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	7A	here is your purse.				
	7B	Don't forget your gloves.				
	7C	put your purse over your arm so ycu won't loose it	1	0	0	1
	7D	Put your gloves on because its cold out.				
	8A	where is that trunk	0	-	0	0
	8B	oh here it is				
	8C	where is that hat				
	8D	this hat is much too big				
	9A	That reminds me.				
	9B	I write to mom & dad to come & visit me	1	0	1	0
	9C	I go get the stamps				
	9D	first I will have to pur money in the stamp machine				
	10A	Lets go into the park for awhile				
	10B	lets go over there				
	10C	lets site down for awhile				
	10D	Theres a big fountain over there	0	-	0	0
	11A	come this way	1	0	-	-
	11B	We don't have any single seats availible				
	11C	That man will leave soon				
	11D	You can have that table know.				
	12A	Bring me the sheets.				
	12B	put them on that shelf.				
	12C	where do I put this	1	1	1	0
	12D	in the cupboard bottom shelf				
	13A	come in Dad				
	13B	I hang my coat up first				
	13C	Hi son. Hi dad.				
	13D	Where are the children?	1	1	0	1
	14A	lets go in there				
	14B	lets sit here				
	14C	waitress menu please	1	1	1	1
	14D	I guess we will have this.				
	15A	may I see that paper				
	15B	how much is it				
	15C	I'll by it				
	15D	thanks goodbye mister	1	1	-	-
	16	Emergency the elevator has stopped	1	0	-	-
	17	I am drawing a picture	1	1	1	0
	18	Today is Mar. 1	1	1	0	0
	19	come in please	1	0	-	-
	20	I am doing the dishes	1	1	1	0
	21	I don't know where he is	1	1	0	0
	22	There is the Pastry shope	1	0	0	0

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	23	heres the milk	1	0	0	1
	24	close the dore please	1	1	1	0
	25	Theres a picture of my brother	1	0	0	0
	26	That picture looks sad.	1	0	0	0
	27	Mr. Al is shaving	1	-	1	1
	28	There comes your Dad	1	1	0	0
	29	There your elevator	1	0	0	0
	30	Todays the 23rd	1	1	0	0
A2 - 8	1A	It would look better lit.				
	1B	I'll light them now	1	0	1	1
	1C	No dear, you must not use match let me light it				
	1D	That's is better				
	2A	Are reading sport section				
	2B	Yes you'll have to wait till I'm finished				
	2C	You read this part while I read this				
	2D	---	0	0	0	0
	3A	I'm to get a stamp for this parcile				
	3B	So after I get a stamp				
	3C	I'll be at the bank				
	3D	And you meet me here at the bank	1	0	0	0
	4A	I guess no one is home				
	4B	Oh dear, the door is locked	0	-	0	0
	4C	Do you know where Mrs. Taylor is				
	4D	Oh there she is it is all				
	5A	This hat looks funny				
	5B	And this coat is to big				
	5C	David his some shoe you'd look funy with them				
	5D	See I don't	1	1	1	0
	6A	Well hello Mary				
	6B	Welcome John				
	6C	How do you do Anne	1	1	-	-
	6D	Well don't just stand there come in				
	7A	Bev I bought you a new purse				
	7B	And some gloves.				
	7C	The gloves and purse match	1	1	0	0
	7D	The gloves fit beautifl				
	8A	Boy! I never been in the attic before	0	-	0	0
	8B	I wonder what's in this old chest				
	8C	You should find my hat I wore year ago				
	8D	---				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	9A	I'd better mail my letter today				
	9B	But it would take long	1	0	0	0
	9C	And i'd have to spend money on stamps				
	9D	It would be cheaper				
	10A	I like visiting park				
	10B	It's so beautiful with trees and green grass				
	10C	Most of the old fdk come and rest here				
	10D	And I like sailing my boat in the fountain	0	-	0	0
	11A	Welcome Madame	1	1	-	-
	11B	Would you like a table for one				
	11C	That man should be finished soon				
	11D	He is leaving now, you may have that one				
	12A	I show you where to put it				
	12B	It goes below the undershirts				
	12C	Where should i put this dress	1	1	1	0
	12D	Right beside the undershirts				
	13A	Hello Sull				
	13B	Where is Tom?				
	13C	Oh hi Tom!				
	13D	I wonder where the two children are?	1	0	0	1
	14A	Oh let eat here!				
	14B	This is a good table.				
	14C	Oh waiter bring the menu	1	1	1	1
	14D	I don't know what to have				
	15A	How much is that picture				
	15B	It's 85¢				
	15C	Okay I'll take it here's the money				
	15D	I think it is worth it's money	1	0	-	-
	16	I use the emergency phone.	1	0	-	-
	17	Draw a head of a man with chalk	1	0	1	0
	18	May the 1st is full of flowers	1	1	0	1
	19	Oh, John and I thank you for inviting us	1	0	-	-
	20	I better start at those dishes now	1	1	1	0
	21	I don't know if I can go shopping	1	1	0	0
	22	There is our new butcher	1	0	0	0
	23	That milk is clean and fresh	1	0	0	1
	24	Eck up all the sheet in the closet floor	1	1	0	0
	25	This picture is the best	1	0	0	0
	26	Draw a man with his eyes shut	1	0	1	1
	27	Mr. Hill sings while he shaves	1	-	1	0
	28	There is grandpa.	1	1	0	0
	29	Do you have a new window	1	1	0	0
	30	I must remember what to write on my shopping list	1	1	0	0

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
A2 - 9	1A	I think I should like the candles				
	1B	So I got the box of candles	1	0	1	1
	1C	Bert Dad said Yes				
	1D	---				
	2A	May I see the paper.				
	2B	Wate till I'm finish				
	2C	I give it sport & I take something else				
	2D	Then they switched	0	0	0	0
	3A	I'm go into the post offic				
	3B	I got a parsil from the post offic				
	3C	Look at the long line				
	3D	---	0	0	0	0
	4A	I just got out of my house				
	4B	But I forgot something	0	-	0	0
	4C	I neighbour called me in her house				
	4D	Do you no that girl				
	5A	I think I'm put on my father's hat				
	5B	And my father's coat				
	5C	So my father give me his shoes too				
	5D	And I looked funny said dad	1	1	1	1
	6A	Hi did you see my husband				
	6B	Hi did yousee my wife				
	6C	Yes I seen you wife she went home	1	0	-	-
	6D	Thanks for helping us				
	7A	Thanks for finding my purse				
	7B	Heres your gloves that were in my purse				
	7C	---	0	0	0	0
	7D	and put on my gloves				
	8A	I wonder if there is any good stuff around here for my father	0	-	0	0
	8B	Maybe in this box				
	8C	A man saw me looking				
	8D	And gave my a hat				
	9A	I have to sent a letter				
	9B	To my mother and father	1	0	0	0
	9C	I better go get some stamp				
	9D	---				
	10A	Let go into the park				
	10B	Its a beatifully park & many people				
	10C	There are mostly old people				
	10D	There a big pond at the centre	1	-	0	0
	11A	Would you have seat for me	1	0	-	-
	11B	Yes I think we would				
	11C	One like that one.				
	11D=	There is one.				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	12A	Where would you like me to put these				
	12B	Right here, please.				
	12C	There would yo like me to put this	1	1	1	0
	12D	Right over in the corner				
	13A	Hi, is your husband home.				
	13B	I'll just hang up my coat				
	13C	Hi Mr Smith. Hi				
	13D	I wonder if they have children	1	0	0	1
	14A	There he is				
	14B	Saying Hi to every				
	14C	My your bring a menu, please, over here	1	1	1	1
	14D	What are you going to have				
	15A	I like that picture				
	15B	How much will it cost. 85¢ sir.				
	15C	Here is 85¢ for it.				
	15D	It sure is nice.	1	0	-	-
	16	making a phone call pressing a	0	0	-	-
	17	drawing a face	0	0	1	0
	18	Is May the time for flowers	1	0	0	1
	19	Please, come in	1	0	-	-
	20	I should have did the dishes	1	1	1	0
	21	---	0	0	0	0
	22	There is the busher.	1	0	0	0
	23	There is a mike jug	1	0	0	1
	24	Will you please get some blacket.	1	1	0	0
	25	Look at this picture	1	0	0	0
	26	Do you like the face I am going	1	0	0	0
	27	I just cut the self with a razer	0	-	0	0
	28	Would you like to go outside	1	0	0	0
	29	Are you taking the elevator	1	1	0	0
	30	----	0	0	0	0
A2 - 10	1A	That's pretty				
	1B	I'm gong to light the cake	1	0	1	1
	1C	Don't light the candels yet.				
	1D	Don't blow yet				
	2A	You like Sports				
	2B	bye, thanks for the paper				
	2C	I like sports				
	2D	I want the paper, No I want it.	1	1	1	1
	3A	Will you come with me				
	3B	Will you take this for me				
	3C	That is my mom and dad				
	3D	----	0	0	0	0

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	4A	Miss Baker is going out.				
	4B	Miss baker is home	1	-	1	0
	4C	Are you home now				
	4D	Who is that lady over there				
	5A	This hat is sure big				
	5B	The sleeves are long				
	5C	Here put these shoes on too				
	5D	All the clothes are big	1	1	0	0
	6A	Thanks buy.				
	6B	Is she here. No she just left				
	6C	Do you know were she went.	1	0	-	-
	6D	Come in				
	7A	Here's your purse.				
	7B	Here's gloves to math.				
	7C	That's a nice match.	1	1	0	0
	7D	It's cold. I'm going to put my gloves on				
	8A	What a spooky place.	0	-	0	0
	8B	There sure are a lot of things				
	8C	Stop I see you boy				
	8D	Can I have this hat				
	9A	----				
	9B	Shirly can I work	0	0	0	0
	9C	----				
	9D	Sirly's phoning				
	10A	Let's go to the park				
	10B	----				
	10C	----				
	10D	----	0	-	0	0
	11A	Could i help you	1	0	-	-
	11B	All by myself.				
	11C	There's a seat over there.				
	11D	Now you may go there.				
	12A	Watch you don't drop them				
	12B	Pick these up after.				
	12C	----	0	0	0	0
	12D	Put them there or (Pick these up)				
	13A	Could I see your husband				
	13B	Where is he.				
	13C	Hi - come in				
	13D	Where's your children	1	1	0	1
	14A	Let's go over there.				
	14B	Let's sit down.				
	14C	Come here we want a menu	1	1	1	1
	14D	What are you going to have				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	15A	Could I have that one				
	15B	This one				
	15C	How much is it				
	15D	Well, bye. thanks alot.	1	1	-	-
	16	Mr. Joan's is phoning.	0	0	-	-
	17	He is drawing a picture.	0	0	1	0
	18	Spring is hear.	1	1	0	0
	19	come in	1	0	-	-
	20	Do you want any help with dishes	1	0	0	0
	21	I sorry I was late.	1	1	0	0
	22	Look at that fat man	1	0	0	0
	23	He wants some milk.	0	0	0	1
	24	Don't put the door back to far.	1	1	1	1
	25	I like that picture	1	0	0	0
	26	This is what you look like.	1	1	0	0
	27	Oh! I hurt myself.	0	-	0	0
	28	Look at all the people outside.	1	0	0	0
	29	Is it going up or down	1	1	0	0
	30	Two days alredy went buy	1	1	0	1
A2 - 11	1A	A girl sees a birthday cake				
	1B	See was going to light them	0	0	1	1
	1C	Her father says No!				
	1D	I didn't burn myself.				
	2A	A man likes sports.				
	2B	A man said Hi				
	2C	He was looking at sports paper.				
	2D	The man said "Can I see it?"	1	1	1	1
	3A	An old Post office.				
	3B	---				
	3C	People in the Post office.				
	3D	---	0	0	0	0
	4A	A woman coming out of a room				
	4B	A woman is opening a door	1	-	0	0
	4C	Two women talking together				
	4D	Two women talking together.				
	5A	A boy with a hat on				
	5B	A boy with a coat on				
	5C	A man giving him a pair of shoes				
	5D	A boy with a hat, gloves, shoes, pants on.	0	0	0	0
	6A	A woman greeting a woman				
	6B	A woman greeting a man				
	6C	A woman talking to the man	0	0	-	-
	6D	A man and woman entering her house				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	7A	A red purse				
	7B	A red pair of gloves				
	7C	Both gloves and purse are red	0	1	0	0
	7D	Purse on an arm, gloves in a hand				
	8A	A boy				
	8B	A boy looking in an attic				
	8C	A boy looking for clothes				
	8D	A boy with a hat				
	9A	A person mailing a letter				
	9B	---	0	0	0	0
	9C	---				
	9D	A person phoning.				
	10A	A park with trees				
	10B	A park with people sitting down				
	10C	Old people sitting down				
	10D	A water fountain in a park with people	1	-	0	0
	11A	Two people talking	0	0	-	-
	11B	---				
	11C	---				
	11D	She found a table				
	12A	A little girl				
	12B	Under shirts in a closet				
	12C	A dress	0	0	0	0
	12D	A clean closet				
	13A	To people				
	13B	A man hanging his coat up				
	13C	To men talking together				
	13D	---	0	0	0	0
	14A	A person out a restaurant				
	14B	Two people sitting down				
	14C	A man calling for a menu	0	0	0	1
	14D	A man looking at the menu				
	15A	A man picking out a poster.				
	15B	The seller showing him it.				
	15C	The man bying it.				
	15D	The man taling it.	0	0	-	-
	16	---	0	0	-	-
	17	---	0	0	0	0
	18	---	0	0	0	0
	19	Enter in the house	1	0	-	-
	20	Cleaning kitchen	0	0	1	1
	21	That is Mr. Brown	1	1	0	0
	22	A bottle of milk	1	0	0	1
	23	---	0	0	0	0
	24	Cleaning a closet	0	0	0	0
	25	---	0	0	0	0

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	26	An eyelash on a face	0	0	0	0
	27	----	0	-	0	0
	28	A girl looking out the window.	0	0	0	0
	29	----	0	0	0	0
	30	----	0	0	0	0
A2 - 12	1A	What a nice Birthday Cake				
	1B	I think I'll light the candles	1	0	1	1
	1C	Oh no you don't				
	1D	Okay daddy				
	2A	What is in the paper today				
	2B	Will you quit looking over my shoulder				
	2C	Look at the sports section				
	2D	Can I read it now	1	1	1	1
	3A	I'm going in their				
	3B	Will you take this for me				
	3C	Get in that line				
	3D	Know she won't have anyone to talk to	1	1	0	0
	4A	Oh I forgot something				
	4B	The door won't open	0	-	0	0
	4C	Hello Aunt Betty				
	4D	do you want to take the elevator up to the apartment				
	5A	This hat is nice				
	5B	And so is this coat				
	5C	do you want these shoes				
	5D	Know I am a dad	1	1	1	0
	6A	Hello Marge				
	6B	Hello Don				
	6C	Come in	1	0	-	-
	6D	Come in Marge & Don				
	7A	Heres your purse				
	7B	Heres your gloves				
	7C	You purse goes on your arm	1	1	0	1
	7D	The gloves go on your hands				
	8A	This is a nice attic	0	-	0	0
	8B	I wonder what's in this chest				
	8C	What are you doing				
	8D	Looking for a hat				
	9A	I wonder if I should				
	9B	Know not that	1	0	0	0
	9C	Yes I might.				
	9D	I think I will				
	10A	What a park				
	10B	Its a beatiful veiw				
	10C	What a lot of old folk				
	10D	What a beatiful fountain	0	-	0	0

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	11A	Bonjour Madame	1	1	-	-
	11B	Would you like a table				
	11C	You can take that one				
	11D	See he's going.				
	12A	give them to me				
	12B	What is this landry doing here				
	12C	Who's is this	1	1	0	0
	12D	Put your stuff in the drawer				
	13A	Hi can I speak to Peter				
	13B	I'll put my coat here				
	13C	hi Peter				
	13D	Just like little kids	1	0	0	1
	14A	I'd like to go there				
	14B	have a seat				
	14C	waiter come here	1	1	0	0
	14D	Roast Beef for me				
	15A	How much is it				
	15B	85 cents				
	15C	Here keep the change				
	15D	This will be a good presnt	1	0	-	-
	16	Operator please	1	0	-	-
	17	This is a man	1	1	0	0
	18	His birthday	0	0	0	0
	19	Come in please	1	0	-	-
	20	Time to wash the dishes	1	1	1	0
	21	Sorry I have to go	1	1	0	0
	22	Let's get some Breach	1	1	1	0
	23	Can I have some milk	1	1	1	1
	24	Clean this up will you	1	1	0	0
	25	Who drew this	1	1	0	0
	26	This is a woman	1	1	0	0
	27	Ouch that hurt.	0	-	0	0
	28	Look outside dear	1	0	0	0
	29	My picture was taken	1	0	0	0
	30	2 days till Christmas	1	1	0	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
B2 - 1	1A	I made these cake.				
	1B	I am going to light the candels.	1	0	1	1
	1C	What not yet.				
	1D	Now don't blow them yet.				
	2A	What does the paper say.				
	2B	What I will tell you.				
	2C	There is the pape it is talking about sports.				
	2D	Leat me readet.	1	1	1	1
	3A	There is the telegraphy telephones.				
	3B	Here go and bring these in those.				
	3C	Where in there.				
	3D	How are those people.	1	0	0	0
	4A	Miss Jane is coming home.				
	4B	She cand get the door open.	1	-	1	0
	4C	Yes what do you whont.				
	4D	Where did you come the elevator.				
	5A	He put on his hat.				
	5B	It is a little too big.				
	5C	Here are your shoes kid.				
	5D	How do I look boys.	1	0	1	1
	6A	Hi how are you Miss Smith.				
	6B	How are yor toes.				
	6C	May I please come in.	1	0	-	-
	6D	Will you please come in.				
	7A	Here is your purse.				
	7B	I think this are your gloves.				
	7C	She got her purse on her arm.	0	0	0	1
	7D	I am putting on my gloves.				
	8A	What are you doing here.	0	-	0	0
	8B	What are you looking for.				
	8C	What are you doing kid.				
	8D	I found my new hat.				
	9A	She mailed the letter.				
	9B	I wounder what she put on the letter.	1	1	1	0
	9C	I need a six sence stamp.				
	9D	She made a phone call.				
	10A	They whent to the park.				
	10B	They whent for a walk. . .				
	10C	They are resting theirself.				
	10D	The people are looking at the nice water.	1	-	0	0
	11A	Yes may I help you dolly.	1	0	-	-
	11B	There is a table for you.				
	11C	Right at the cornor.				
	11D	Good bi ladys and gentlemen.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	12A	Put them in the closet.				
	12B	Put them in a nice pile.				
	12C	Where do we put this.	1	1	1	0
	12D	In the same place that you put the others.				
	13A	hi nice to meat you mr. smith.				
	13B	I am hencing up my coat.				
	13C	hellow sir how are you.				
	13D	What are you kids doing here.	1	1	0	1
	14A	There his is sitting down.				
	14B	They are sitting down.				
	14C	Woud you please bring me a note.	1	1	1	1
	14D	did you find anything that you like.				
	15A	Could I please see the peacture.				
	15B	She is a vary good picture.				
	15C	How much does it coast.				
	15D	Thank you sior very mach.	1	1	-	-
	16	Are you calling some one.	1	0	-	-
	17	Are you drawing a face.	1	0	1	0
	18	What is the date.	1	0	0	0
	19	Wont you please come in.	1	0	-	-
	20	Cleaning up the chicken.	0	0	1	1
	21	Were are you going.	1	0	0	0
	22	There is the Mr. Smith.	1	0	0	0
	23	There is the milk.	1	0	0	1
	24	Will you please close the clouset.	1	1	0	1
	25	There is a nice picture.	1	0	0	0
	26	He only has one eye.	1	1	1	0
	27	Oh I cut my self.	0	-	0	0
	28	There is alot of people outside.	1	1	0	0
	29	Are you Mr. Jonkson.	1	1	0	0
	30	The pages are coming off the calender.	0	0	0	0
B2 - 2	1A	blow out the candels.				
	1B	this is for you.	1	0	0	0
	1C	watch the cake.				
	1D	oh! No!				
	2A	reading the sports section.				
	2B	hold it sir have you read this.				
	2C	look at this.				
	2D	let me see this.	1	1	0	1
	3A	I have to go in hear.				
	3B	would you mail this for me.				
	3C	look at all the people.				
	3D	we're last in line.	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
4A		Miss leaving her apartment.				
4B		Miss unloaking her apartment.	1	-	1	0
4C		Caretaker asking her if she can get in.				
4D		Miss asking who that other lady is.				
5A		This hat is to big.				
5B		This coat is to big.				
5C		Here are some shoes.				
5D		Every thing is to big on me.	1	1	0	0
6A		How do you do Miss.				
6B		How do you do.				
6C		Won't you come in.	1	0	-	-
6D		Won't you both come in.				
7A		Hold this please.				
7B		Miss giving her mite to a little girl.				
7C		Thank you for holding it.	1	0	0	0
7D		Miss putting on her gloves.				
8A		Boy going down stairs.	0	-	0	0
8B		Girl going threw a chest.				
8C		father watching her.				
8D		I found a Hat.				
9A		Miss maling invatations.				
9B		I must right invelations to the wedding.	1	0	1	0
9C		I must by some stamps.				
9D		I'll phone				
10A		People at the Zoo looking threw a cage.				
10B		People waking in the zoo.				
10C		Old age people sitting on a bench.				
10D		A fountain in the park.	0	-	0	0
11A		What would you like Miss.	1	0	-	-
11B		A table for one Sir.				
11C		Right over there Miss.				
11D		He is gust leaving.				
12A		bring them over here.				
12B		Here are the under shirts.				
12C		Where should this go Mom?	1	1	1	0
12D		I'll put them right here.				
13A		How do you do Miss.				
13B		I'll hang up my coat.				
13C		Hi Hary! how are you?				
13D		Do you have any children.	1	1	0	1
14A		There she is over there.				
14B		Right here Miss.				
14C		Wayter can we have a menu.	1	1	1	1
14D		What did you want.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	15A	How much is this magasene.				
	15B	It is eighty-five cents.				
	15C	I'll takt it! please.				
	15D	Than you very much Mr.	1	1	-	-
	16	phoning in an elevator.	0	0	-	-
	17	drawing with chach	0	0	1	0
	18	beginning of summer	0	0	0	0
	19	come in please.	1	0	-	-
	20	mother doing the dishes	0	0	0	0
	21	Sorry I've got to go now.	1	1	0	0
	22	there's the groceria.	1	0	0	0
	23	there is the milk.	1	0	0	1
	24	here are some blakets.	1	0	0	0
	25	this is me.	1	0	0	0
	26	sketching a face.	0	0	0	0
	27	shaving (a man)	0	-	1	1
	28	looking out a coirido.	0	0	0	0
	29	two men discusing something	0	0	0	0
	30	filing in an office.	0	0	0	0
B2 - 3	1A	---				
	1B	I,ll light them.	1	0	1	1
	1C	no it's not time				
	1D	why isn't it time				
	2A	Look a journal program.				
	2B	I'm goining would you				
	2C	look what it says				
	2D	---	0	0	0	0
	3A	The building right here.				
	3B	take in there.				
	3C	get in line with those people				
	3D	she's making new friends already.	1	1	0	0
	4A	wrong apartment..				
	4B	the key won't work	0	-	0	0
	4C	can you help me				
	4D	whats she over there for				
	5A	I'm a priest				
	5B	I'm rich now				
	5C	Here's some old shoes what.				
	5D	do I look intelligent.	1	0	1	1
	6A	How do you I'm Mr. Smith				
	6B	hello, oh you must be mr. Smith				
	6C	come in, thankyou	1	0	-	-
	6D	you may see him now.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
7A		here's your purse				
7B		and your gloves				
7C		I'll put my purse on my arm	1	1	0	1
7D		and put my gloves on to.				
8A		What an old dusty attic	0	-	0	0
8B		I found a trunk I'll see whats in it.				
8C		he's going into the old trunk				
8D		fathers old hat				
9A		I wonder if I should write				
9B		no I better not.	1	0	1	0
9C		the stamps, I don't have any				
9D		I'll phone them				
10A		they went into the park				
10B		It's a big park				
10C		they sat on the bench resting				
10D		the fountain was beautiful	1	-	0	0
11A		Mrs. Smith went into a French restaurant	0	0	-	-
11B		a table for she asked yes				
11C		there's one with a man it's the only one				
11D		look he's leaving.				
12A		put them in your closet				
12B		be side your tops				
12C		here is another thing oh	1	0	0	0
12D		put it at the bottom to				
13A		how do you do I'm here to see your husband				
13B		I'll hang up my jacket.				
13C		Mr. Smith waved to him.				
13D		I though you had two children	1	0	0	1
14A		there is a table				
14B		let's sit down				
14C		the man wanted the menu.	0	0	1	0
14D		I wonder what we should order.				
15A		can I see that				
15B		I'll buy it				
15C		85¢ said the man				
15D		thank you very much.	1	1	-	-
16		Mr. Smith's change didn't come back.	0	0	-	-
17		He is making a face.	0	0	1	0
18		It is my first oh no.	1	1	0	0
19		Would you please come in.	1	0	-	-
20		Mrs. smith pictured herself washing	0	0	0	0
21		Oh I hope I'm not to early.	1	1	0	0
22		Look at the lo	1	0	0	0
23		There is only a quart of milk left	1	0	0	0
24		Oh look the points comming off.	1	0	0	0
25		Thats a funny picture of me.	1	0	0	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	26	that boy looks like a girl	1	1	0	0
	27	I cut myself shaving	0	-	0	0
	28	Look at the snow outside.	1	1	0	0
	29	I wonder what floor it's at	1	0	0	1
	30	To much work to do my calander full.	1	1	0	0
B2 - 4	1A	their not lite				
	1B	May I light them?	1	1	1	1
	1C	No No you must not do that.				
	1D	Now their all lite up.				
	2A	May I see the Sports page, please				
	2B	Wait I am not finished yet.				
	2C	Don't read over my shoulder.				
	2D	Here, now I am finished.	1	0	0	0
	3A	You mail it here.				
	3B	Go mail it now hurry				
	3C	Look at that line up.				
	3D	Go stand in Line.	1	0	0	1
	4A	I had better hurry or I will be late.				
	4B	Oh I have to close the door first	0	-	0	0
	4C	Hello are you ready to go?				
	4D	There's the elevator				
	5A	Oh at hat!				
	5B	A coat too. Oh am I ever lucky.				
	5C	Here's a pair of shoes too.				
	5D	How marvulous do I look now?	1	0	1	1
	6A	Hello is Mr. Smith there				
	6B	Hello I am Mrs. Smith there				
	6C	No I am sorry she sin't	1	0	-	-
	6D	Oh I see you found her won't you come in				
	7A	Take your hand bag with you.				
	7B	Here are your gloves don't forget them				
	7C	They match perfectly.	1	1	0	0
	7D	I better put them on first.				
	8A	I wonder where I can find it?	0	-	0	0
	8B	Maybe in here.				
	8C	Son what are you doing				
	8D	Looking for this hat.				
	9A	I had better write them a letter.				
	9B	I wonder if they are married?	1	1	0	0
	9C	Oh I need some stamps				
	9D	I think I'll phone them instead				
	10A	Go for a walk in the park				
	10B	What a beatiful place it is.				
	10C	I am getting tired.				
	10D	Let's look at the fountain.	0	-	0	0

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	11A	I would like a table	1	0	-	-
	11B	Where would you like to sit?				
	11C	There is a table over there.				
	11D	Oh he is going to leave now.				
	12A	Put those away.				
	12B	They belong right here.				
	12C	Where does this go?	1	1	1	0
	12D	It belongs there also.				
	13A	Hello I would like to Mr. Smith				
	13B	May I hang up my coat?				
	13C	Hi Mr. Smith				
	13D	Where are the children?	1	1	0	1
	14A	There they are				
	14B	May I sit down				
	14C	May I have some nenus please.	1	1	1	1
	14D	What will we order.				
	15A	May I see that magazine.				
	15B	There you go.				
	15C	I'll take it please.				
	15D	Thank you sir.	1	1	-	-
	16	Calling the operator	0	0	-	-
	17	Drawing a face.	0	0	1	0
	18	What is the date?	1	0	0	0
	19	Come in please.	1	0	-	-
	20	I better wash the counter.	1	1	1	1
	21	Have you seen Johnny?	1	0	0	0
	22	There's the butcher at the door.	1	0	0	0
	23	Jug of Milk	0	0	0	0
	24	Close the cupboard please, dear.	1	1	1	0
	25	I like that one best	1	0	0	0
	26	Making her eyes.	0	0	0	0
	27	Ouch it hurts	0	-	0	0
	28	Please can I go out?	1	0	0	0
	29	The elevator is up.	1	0	0	0
	30	The days sure have flown.	1	1	0	0
B2 - 5	1A	I should light the candes				
	1B	I guess Ill start	1	0	1	1
	1C	Stope, you might burn yourself				
	1D	Why did it daddy				
	2A	Hey bud is that the sports page				
	2B	Yeh and is it good				
	2C	Look at this page				
	2D	Hey mack can I have this	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
3A		Is this where you mail . . .				
3B		Will you take this in there				
3C		You just wait in line				
3D		I hope she does it	1	1	0	1
4A		I guess I should close the door				
4B		Locking the door	0	-	0	0
4C		Oh look who is coming				
4D		Is she the new wonder				
5A		Neat hat				
5B		Neat jacket				
5C		Beautiful shoes				
5D		I look just great	1	1	1	1
6A		Hello, how are you				
6B		Hello, and how are you				
6C		Won't you come in	1	0	-	-
6D		Welcome, come on in				
7A		Here is your purse				
7B		Here are your gloves				
7C		Maybe I should put them on	1	1	0	0
7D		Yes I think I will				
8A		Boy are there lots of things up hear	0	-	0	0
8B		I wonder whats in this trunk				
8C		What's he doing in there				
8D		Hey dad I found a hat				
9A		I'll have to mail a letter				
9B		I might wright it wrong	1	0	1	0
9C		Ill need stamps				
9D		Ill phone instead				
10A		Look at the high fences				
10B		Is this a nice spot				
10C		Nice park benches				
10D		Nice pool	0	-	0	0
11A		May I have a table	1	0	-	-
11B		You want a table just for 1 person				
11C		There's one right there				
11D		Oh now you may sit				
12A		May I have those				
12B		Put them right there				
12C		What about this	1	1	1	0
12D		Put it there				
13A		Hello				
13B		I hang up my coat				
13C		Hello boss				
13D		I wonder who that is	1	0	0	0
14A		Ill go to the resteraunt				
14B		Oh this is a nice table				
14C		Waitress, may I have a menu	1	1	1	1
14D		I don't know what to eat				

Student Number	Picture Number	Student response	Coding			
			S	M	T	C
	15A	I'll take that				
	15B	85 cents please				
	15C	Hear you are				
	15D	Thanyou sir	1	1	-	-
	16	Dillalling a telephone number	0	0	-	-
	17	Draw a face	0	0	1	0
	18	1st day of May	0	0	0	0
	19	"Come in, please"	1	0	-	-
	20	"I should clean the kitchen"	1	1	1	1
	21	"Sorry, I have to go"	1	1	0	0
	22	"There's the butcher Mom"	1	0	0	0
	23	"There's a milk bottle"	1	0	0	1
	24	See what is in the closet	1	1	0	0
	25	There is an army man	1	0	0	0
	26	His eyes will be closed	1	1	1	1
	27	Shaveing isn't hard	0	0	0	1
	28	Look outside	1	0	0	0
	29	Were you in jail?	1	1	0	0
	30	2 days	0	0	0	0
B2 - 6	1A	Can I light the candles				
	1B	I've got the matches	1	0	0	0
	1C	No you may not				
	1D	I won't to light them				
	2A	Did you see the sport Section				
	2B	---				
	2C	Look Tom.				
	2D	Let me see.	1	1	1	1
	3A	Lets go into the Post office.				
	3B	It's over there.				
	3C	I'll line up there.				
	3D	We'll have to wait quite long.	1	1	1	1
	4A	I think I forgot something.				
	4B	I better check in case it is something I need	0	-	0	0
	4C	Oh hello Mrs. Jones				
	4D	Do you no I forgot my change purse at home, and had to go back				
	5A	It fits good.				
	5B	The coats way to big.				
	5C	I don't like to shoes.				
	5D	Every looks so funny on me.	1	1	0	1
	6A	Hello Mrs. Brown.				
	6B	Hello Mr. Brown.				
	6C	Won't you come in.	1	0	-	-
	6D	John will be home soon.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
7A		Here's your purse Lyan.				
7B		Don't forget your gloves.				
7C		Im almost ready.	1	1	0	0
7D		I'll just put my gloves on.				
8A		Does the Attic ever look weird	0	-	0	0
8B		This box s sure is dusty				
8C		Johnny what are you doing.				
8D		Look at the hat I've found Dad.				
9A		I'll have to mail my letter.				
9B		Maybe now I should write a letter	1	0	1	0
9C		I'll have to buy more stamps				
9D		I think I'll phone instead.				
10A		The zoo looks very beautiful.				
10B		The park also looks good				
10C		The older people have a good time in the park.				
10D		I think I like the park the best.	0	-	0	0
11A		Hello Miss.	1	1	-	-
11B		I would like a table for one.				
11C		There is one there Miss.				
11D		The man is leaving now.				
12A		Diane put the blankets away.				
12B		Here put them by the under shirts.				
12C		What about this here.	1	1	1	0
12D		You put it also with the blankets.				
13A		Hello Sir.				
13B		I'll put my coat here.				
13C		Hi John.				
13D		Where are the children.	1	1	0	1
14A		Look Bill lets sit there.				
14B		What would you like.				
14C		Waiter bring me a menu.	1	1	1	1
14D		I think I'll have just one minute.				
15A		I'll have this book here.				
15B		It's eighty-five cents.				
15C		Here you go.				
15D		It looks like a intersting book.	1	0	-	-
16		Hello operator.	1	1	-	-
17		She's drawing	0	0	1	0
18		It's May again.	1	1	0	0
19		Welcome home.	1	0	-	-
20		Time to wash the dishes again.	1	1	1	0
21		Its been nice seeing you.	1	1	0	1
22		There's Father.	1	0	0	0
23		Here's the milk	1	0	0	1
24		Please close the door.	1	1	1	0
25		This one is mine.	1	0	0	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	26	Do you like my drawing.	1	0	0	0
	27	Ouch!	0	-	0	0
	28	There's Treasa.	1	1	0	0
	29	What floor are you going to.	1	1	0	1
	30	My appointments today.	1	1	0	0
B2 - 7	1A	That's a very nice cake.				
	1B	Can I light the candles?	1	1	1	1
	1C	No it's not time yet.				
	1D	But it is time				
	2A	What sport are you reading about				
	2B	I'm not reading any sport				
	2C	Here you can read it if you want				
	2D	Thanks very much, sir.	1	0	0	0
	3A	I have to go to the post office.				
	3B	Would you come with me to deliver this?				
	3C	Oh no! look at the crowd!				
	3D	We'll be there for hours!	1	1	1	1
	4A	I think I will go out				
	4B	I better lock the door.	0	-	0	0
	4C	Hello, are you going out too?				
	4D	There is the new tennant				
	5A	I'm going to dress up in these old clothes.				
	5B	This is a real old coat.				
	5C	What are my shoes doing here?				
	5D	How do I look to you like this?	1	0	1	1
	6A	Oh! Hello. I'm Mrs. Jones.				
	6B	And I'm her husband.				
	6C	I'm glad to meet you Mrs. Smith.	1	0	-	-
	6D	Well, why dont you come in.				
	7A	Mrs. Smith is handed her bag.				
	7B	And her gloves are given to her.				
	7C	She puts her bag on her arm.	0	0	0	1
	7D	And fixes on her gloves to go out.				
	8A	Johnny climbs up to the attic.	1	-	1	0
	8B	He starts skrownging around in old trunk				
	8C	His dad begins to wonder what he's doing.				
	8D	Finally he finds an old cap.				
	9A	Shall I write them a letter.				
	9B	No, I dont think I will	1	0	1	0
	9C	I havent any stamps and today's Sunday.				
	9D	Yes, I thonk I'll phone.				
	10A	It's a great day for the park.				
	10B	There are many people in the park.				
	10C	Most people are just relaxing				
	10D	The fountaing attracts many people	1	-	1	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	11A	Hello man how are you?	1	1	-	-
	11B	Would you like a table?				
	11C	How about that one over there.				
	11D	That man is just leaving.				
	12A	Thank you for bringing it.				
	12B	Put them write here meatly.				
	12C	What shall I do with this?	1	1	1	0
	12D	Put it right here.				
	13A	Hello Jane how are you?				
	13B	I'll hang up my coat.				
	13C	Hi Goerge everything alright				
	13D	Where are your two kids	1	1	0	1
	14A	Ah, here's a good restraunt.				
	14B	Alright sit down everyone				
	14C	Miss could we have a menu.	1	1	1	1
	14D	They have some good things				
	15A	I'll have that magazine please.				
	15B	Yes but it is eighty-five cents				
	15C	Oh I dont mind, here eighty five.				
	15D	My wife likes the reports.	1	0	-	-
	16	Hello, Op	1	1	-	-
	17	John draws a face on the board.	0	0	1	0
	18	I can't wait to spring.	1	1	0	0
	19	Hello, come on in.	1	0	-	-
	20	I have to clean the kitchen.	1	1	1	1
	21	I've lost the key to the apartment!	1	1	0	0
	22	There's a meat store.	1	0	0	1
	23	Here's the milk in the closet	1	0	0	1
	24	Close the door for me.	1	1	1	0
	25	This is my picture.	1	0	0	0
	26	John is drawing on the board.	0	0	0	0
	27	Mr. Smith is singing while he shaves.	1	-	1	0
	28	It's very cold out today.	1	1	0	1
	29	Was that you on the elevator?	1	1	0	0
	30	She is taking a holiday	0	0	0	0
B2 - 8	1A	What a lovely cake				
	1B	I'll light the candles	1	0	1	1
	1C	No you might burn yourself				
	1D	Everyone sing happy birthday.				
	2A	My what an interesing journal				
	2B	You should have seen the game				
	2C	Look its on this page				
	2D	May I look at that	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	3A	Here is the post office				
	3B	You take it and get it wieghed				
	3C	You stand in that line				
	3D	She found a friend	1	1	0	0
	4A	Oh the door it's locked				
	4B	I'll use my key to open it	0	-	0	0
	4C	Good afternoon to you				
	4D	Would you like to take a walk				
	5A	Oh here is a hat I can wear				
	5B	What a lovely coat				
	5C	do I have to wear those shoes				
	5D	Aren't I hadsome now.	1	1	1	1
	6A	How do you do				
	6B	Yes she is here				
	6C	Would you like to come in	1	0	-	-
	6D	come right on in.				
	7A	Here is your purse				
	7B	You had better take your gloves				
	7C	Wear your purse on your arm.	1	0	1	1
	7D	Put on your gloves too				
	8A	look at all this stuff.	0	-	0	0
	8B	here is some old clothing				
	8C	he had better be carefull				
	8D	look at this silly old hat				
	9A	I had better mail this				
	9B	Write to mom & dad.	1	0	1	0
	9C	I need some stamps				
	9D	Maybe I'll phone them instead				
	10A	What a lovely park				
	10B	There are so many trees				
	10C	Old people rest here too				
	10D	They rest by this lovely fountain	1	-	1	0
	11A	Where would you like to sit?	1	0	-	-
	11B	A small table for one				
	11C	Where that man is he is leaving soon				
	11D	Now you may sit there				
	12A	Put them in here.				
	12B	Right beside these				
	12C	Where does this go.	1	1	1	0
	12D	Where did you put them				
	13A	Good morning sir won't you come in				
	13B	Should I hang up my coat?				
	13C	Hi There good to see you				
	13D	---	0	1	0	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	14A	lets eat over there				
	14B	sit down at this table				
	14C	May we have a menu Miss	1	1	1	1
	14D	What should we have				
	15A	I would like that magazine				
	15B	You mean this one here				
	15C	how much is it.				
	15D	It Looks interesting.	1	0	-	-
	16	----	0	0	-	-
	17	Draw a picture please	1	0	1	0
	18	----	0	0	0	0
	19	Please do come in.	1	0	-	-
	20	Do the dishes now	1	0	1	0
	21	I don't like it.	1	1	1	0
	22	Look theres the butcher	1	0	0	0
	23	Get the milk please	1	1	1	1
	24	Put them in here	1	1	0	0
	25	this is my picture	1	0	0	0
	26	A tired person	0	0	0	0
	27	I can't keep my eyes open	0	-	0	0
	28	It's very nice outside	1	1	0	0
	29	Oh! through there	1	0	0	0
	30	----	0	0	0	0
B2 - 9	1A	Susan is helping getting the party ready				
	1B	I'll light the candles	1	0	1	1
	1C	Carefull not to burn yourself				
	1D	Now blow out the candles				
	2A	What's happening in sports				
	2B	Oh hi harry				
	2C	there's a lot in the sports page to-day				
	2D	here you can have the papper	1	0	1	0
	3A	I have to go mail this parcel				
	3B	will you come with me to the post office?				
	3C	There is quite a long line up				
	3D	It will take a while to mail this	1	1	1	1
	4A	Miss Brown must go shopping				
	4B	she forgot her wallet and will have to go back for it	1	-	1	0
	4C	Mrs. Smith is going out also				
	4D	Miss Brown asked Mrs. Smith if she was going grocery shopping				
	5A	here's dad's old hat				
	5B	and his coat too				
	5C	here you might as well wear my shoes				
	5D	John looks funny in his dad's old clothes	0	0	0	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
6A		Hello I Mrs. Smith				
6B		Hello I'm Mr. Smith				
6C		My wife and I just moved in next door	1	0	-	-
6D		please come in both of you				
7A		Here is your purse Jane				
7B		and here are your gloves				
7C		hang on to your purse and don't lose it	1	0	0	1
7D		and make sure you put your new gloves on				
8A		This is the first time Tim has been in the attic	1	-	1	1
8B		He sees the old trunk of clothes				
8C		His fathers sees him looking in the trunk				
8D		Tim finds a very old hat of his fathers a long time ago				
9A		I should send a letter to my sister				
9B		She just got married	1	0	0	0
9C		I don't have any stamps though				
9D		Maybe I could phone her instead				
10A		Let's take a walk through the park				
10B		It is beautiful this time of year				
10C		A lot of old people sit on the benches admiring the view				
10D		I think the fountain is the loveliest	0	-	0	0
11A		Welcome to our restaurant	1	1	-	-
11B		Would you like a table for one				
11C		there will be one over there soon				
11D		See the gentleman is just leaving				
12A		Be careful you don't drop the sheets				
12B		put them right there pleas				
12C		What should I do with the curtains	1	1	1	0
12D		Just put them on the shelf				
13A		Hello, please come in				
13B		I'll hang up my coat				
13C		Hi Larry, how are you				
13D		Where are the children	1	1	0	1
14A		Lets go to that restaurant				
14B		This table looks fine				
14C		Oh miss may we have a menu	1	1	1	1
14D		What would you like to order				
15A		I would like a calendar please				
15B		This one?				
15C		Fine. How much is it?				
15D		Thank you very much	1	1	-	-
16		---	0	0	-	-
17		Johnny's drawing a picture of his father	0	0	1	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	18	The lily is the flower of the month	1	1	0	0
	19	Welcome aboard flight nine	1	0	-	-
	20	I should clean up the kitchen	1	1	1	1
	21	I'm sorry I'm late but. . .	1	1	0	0
	22	Mr. Smith thinks the day is lovely	0	0	0	0
	23	There is only one bottle of milk left	1	0	0	0
	24	Susan will hang up her clothes	0	0	0	0
	25	Tom sees a picture of him as a baby	0	0	0	0
	26	The boy is getting sleepy	1	1	0	0
	27	Father shaves every morning	1	-	1	1
	28	It looks cold outside	1	1	0	1
	29	---	0	0	0	0
	30	time goes quickly	1	1	0	0
B2 -- 10	1A	The candles aren't lit yet.				
	1B	Heres a box of matches.	1	0	0	0
	1C	Don't light the match toward you				
	1D	Now I can blow and the candles				
	2A	Is that the sports page?				
	2B	Sorry I bought the last paper				
	2C	I'll show you some pictures				
	2D	Thank you for letting me see it.	1	0	1	0
	3A	There is the post office.				
	3B	I have to mail this parcel.				
	3C	Look at that long line up.				
	3D	It will take hours for my turn.	1	1	1	1
	4A	I have to lock the door.				
	4B	Its locked now.	0	-	0	0
	4C	Hello Mrs. Laden.				
	4D	I have to catch the elevator.				
	5A	Heres an old hat for me.				
	5B	Now I've got a big coat to go with it.				
	5C	You can where these old shoes.				
	5D	I must look funny.	1	1	1	1
	6A	Hello I'm pleased meet you.				
	6B	I'm also glad to meet you to.				
	6C	We came to look at the house.	1	0	-	-
	6D	Come in. I hope you will like it.				
	7A	I have an old purse that you can use.				
	7B	Here are some gloves to match it.				
	7C	I'll put the purse on my arm.	1	1	0	1
	7D	These gloves fit me perfectly.				
	8A	I wonder what I can find yp here?	0	-	0	0
	8B	Here is an old pair of Dads pants.				
	8C	I wonder what he has my pants out for?				
	8D	I found your old hat, Dad.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	9A	Should I mail my letter?				
	9B	I should write one to Mum & Dad.				
	9C	The stamps will cost 25¢				
	9D	It would be cheaper to phone.				
	10A	This is the park near our house.				
	10B	It has many paths.				
	10C	A lot of elderly people go there.				
	10D	There is even a little pond where the boys float boats.	1	-	0	0
	11A	We are almost all filled up.	1	0	-	-
	11B	Would you like a table for one?				
	11C	That man is ready to leave.				
	11D	You may sit there now.				
	12A	Put the towels in the cupboard.				
	12B	There is room beside these.				
	12C	Where should I put the curtains	1	1	1	0
	12D	They can go beside the undershirts				
	13A	Hello nurse.				
	13B	I'll just hang my coat up.				
	13C	Hello Dr. Campbell.				
	13D	Where are your two children?	1	1	0	1
	14A	There is a restaurant we can go to.				
	14B	Here is a table where we can sit.				
	14C	Could you give us a menu?	1	1	1	1
	14D	I don't know what to order				
	15A	I'd like to buy that magazine.				
	15B	This costs 85¢				
	15C	Here is enough money.				
	15D	This looks pretty good.	1	0	-	-
	16	He has the wrong number.	0	0	-	-
	17	Bill is drawing a picture of his brother.	0	0	1	0
	18	April showers bring May flowers.	1	1	0	0
	19	Hello How are you.	1	0	-	-
	20	I can see myself as a grown lady.	1	1	0	0
	21	I don't know where to go first.	1	1	0	0
	22	Theres a bakery.	1	0	0	0
	23	Is that milk sour?	1	0	0	0
	24	Close the cupboard door.	1	1	1	0
	25	This is my brother.	1	0	0	0
	26	This is a boy that is sleeping.	0	1	0	0
	27	I just cut my cheek with the razor.	0	-	0	0
	28	It looks cold out.	1	1	0	1
	29	Are you an elevator operator?	1	1	0	0
	30	Only 2 days till Christmas	1	1	0	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
B2 - 11	1A	It's a lovely birthday cake.				
	1B	I'll light the candles.	1	0	1	1
	1C	No, I'll do it. You'll burn yourself.				
	1D	Well, it's my birthday cake.				
	2A	Hello, Buddy.				
	2B	Well, look at this.				
	2C	Oh, let me have the paper.				
	2D	Let me see the sports page, too.	1	1	0	1
	3A	I have to go mail this package.				
	3B	Will you wait for me while I go.				
	3C	I can't go in, right now.				
	3D	There's my mother talking to Mrs. Amy.	1	1	0	0
	4A	I've got to hurry.				
	4B	I'll just take time to lock up.	0	-	0	0
	4C	Oh, there's Carroll.				
	4D	I've got to run, my elevator is leaving.				
	5A	I am going to be daddy.				
	5B	And here's his old coat.				
	5C	You can play with these old shoes.				
	5D	Now, I am really a man!	1	1	1	0
	6A	I'm pleased to meet you, Mrs. Jones.				
	6B	And you, Mr. Jones				
	6C	Won't you come in.	1	0	-	-
	6D	I'm so glad you have come.				
	7A	Here's your purse, Suzie.				
	7B	And don't forget your gloves.				
	7C	Now, what have I forgotten.	1	0	0	0
	7D	There, now I'm ready.				
	8A	What a treasure chest.	0	-	0	0
	8B	Hats and shirts and everything.				
	8C	What, are you going, Jim.				
	8D	Looking through my treasure chest.				
	9A	I wonder if I mailed that letter.				
	9B	I can't even remember writing it.	1	0	1	0
	9C	Did I put on postage?				
	9D	Maybe, I should telephone I am coming.				
	10A	I love the Park.				
	10B	It's kept in such beautiful condition.				
	10C	All the elderly people love to come & sit here.				
	10D	It's no wonder, it's so lovely.	0	-	0	0
	11A	Welcome to our restruant, Madame.	1	1	-	-
	11B	Is it a table for one?				
	11C	Our only one is taken, I'm sorry.				
	11D	Oh, but look, the gentleman is leaving.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	12A	You put those right there, for now.				
	12B	But they must be put away, later.				
	12C	And, where can I put my dresses	1	1	1	0
	12D	See everything can go in the big cupboard.				
	13A	Please, come in, Mr. Smith.				
	13B	I'll just hang my coat here.				
	13C	Hi, Bob, How's everything going?				
	13D	And where are your children.	1	1	0	1
	14A	I think I'll eat here.				
	14B	We can sit here.				
	14C	May we have a menu, waitress.	1	1	1	1
	14D	I think I'll have a steak, with fried potatoes.				
	15A	What's that magazine?				
	15B	It's our newest one out.				
	15C	I think I'll take it. How much is it?				
	15D	I'll like it but my wife won't.	1	0	-	-
	16	Get me the police!	1	0	-	-
	17	Now, this is the way you draw faces.	1	1	1	0
	18	The first of the month brings flowers.	1	1	0	1
	19	Hello, is the doctor in.	1	0	-	-
	20	I really should be home doing the dishes.	1	1	0	0
	21	I am sorry I am late. But, it couldn't be helped.	1	1	0	0
	22	There's Mr. Apples fruit shop.	1	0	0	0
	23	Bring me some milk, please.	1	1	1	1
	24	I'll help you make the beds, Mother.	1	0	0	0
	25	This is my picture.	1	0	0	0
	26	And this is a drowsy fellow.	1	1	0	0
	27	I am so sleepy in the morning.	0	-	0	0
	28	I can hardly wait to get outside.	1	1	0	0
	29	Does this elevator take you to the 14th floor?	1	1	0	0
	30	This month is flying by so fast.	1	1	0	0
B2 - 12	1A	Hmm, I think I'll light my candles.				
	1B	I'll just use these matches.	1	0	0	0
	1C	Here, let me do that, you shouldn't touch matches.				
	1D	No, No, I did it myself.				
	2A	You, reading the sports section?				
	2B	Yes, but buy your own paper.				
	2C	It's a really great article, though.				
	2D	Here just let me see it.	1	1	1	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
3A		I'll show you how to mail your parcel.				
3B		Here, we'll take it in there.				
3C		Just go into one of those lines and mail it.				
3D		I wonder if I should have gone with her?	1	1	0	0
4A		Mrs. Brians leaves her house to go shopping.				
4B		She carefully locks the door behing her.	1	-	1	0
4C		Just as she is leaving Miss Lyons comes out.				
4D		They seperate as they come out of the elevator, as they are going different directions.				
5A		This hat would be just perfect!				
5B		And this coat is just the thing.				
5C		Here, these shoes go with the costume.				
5D		There, how do I look?	1	0	1	1
6A		Hello, Mrs. Bruce wer'e expecting you.				
6B		Hello, Mr. Bruce.				
6C		Is the dentist ready yet?	1	0	-	-
6D		Yes come right in he is ready for you now.				
7A		Here's a purse, it has matching gloves.				
7B		Yes here they are I hope they fit.				
7C		They go quite nicely with my coat.	1	1	0	0
7D		And yes, the gloves fit very well.				
8A		The old clothes should be somewhere down here.	0	-	0	1
8B		Yes, here's the trunk, and these are perfect pants.				
8C		Hey Bill what are you doing down here in my old pants				
8D		Just fooling around, I'll put them all back but can I keep the hat?				
9A		I wonder if I should write Marge.				
9B		But then I don't think she'll write me back.	1	0	1	0
9C		And she never puts enough stamps on.				
9D		I think maybe I'll phone her.				
10A		Let's go into the park to look at the scenery.				
10B		Ah, its all beautiful and green.				
10C		And its good to sit back and rest awhile.				
10D		The fountain looks terribly inviting too.	1	-	0	0
11A		Hello, how many are in the party, just youl	1	-	-	
11B		Would you like a table by yourself.				
11C		There's one over there and I think that man is just leaving.				
11D		There we can seat you over there.				

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	12A	Pile the sheets down here.				
	12B	Put them beside these.				
	12C	Where should I put this dress?	1	1	1	0
	12D	It can go down here too.				
	13A	Hello, Mary. So nice of you to ask me over.				
	13B	I can only stay awhile though.				
	13C	Hello George, how have you been?				
	13D	Where's little Lucy and Fred?	1	1	0	1
	14A	Let's go over there to eat.				
	14B	Here is a nice place but we'll have to get another setting.				
	14C	Menu please, Miss.	1	1	1	1
	14D	I wonder what we should have.				
	15A	I'd like to buy that magazine how much is it?				
	15B	Claire? Why it's 85 cents.				
	15C	Thank you I'll buy it.				
	15D	I don't know why Martha wants this.	1	0	-	-
	16	Hello, is this 475.7560?	1	1	-	-
	17	Billy draws a face on the board.	0	0	1	0
	18	I was born on May 1st.	1	1	0	1
	19	Come in please.	1	1	-	-
	20	I worked so hard today!	1	1	0	0
	21	Could you help me? Is this the Brick Apt.?	1	0	1	0
	22	Theres the bakery.	1	0	0	0
	23	Is that all the milk we have left?	1	0	0	0
	24	Bring the other sheets, they're in the closet.	1	1	0	0
	25	This is a picture of me, playing.	1	0	0	0
	26	Bill is drawing a tired lady on the board.	0	0	0	0
	27	Mr. Smith is shaving.	1	-	1	1
	28	Look is that Mrs. Smith?	1	0	0	0
	29	Is this floor number 7?	1	1	0	1
	30	I must remember the party.	1	1	0	0
B2 - 13	1A	I sode light the candles.				
	1B	I think I will	1	0	1	1
	1C	don't dow that sasau				
	1D	I'll light thom				
	2A	is there any sports pchure				
	2B	wate a numut, there one today				
	2C	Its at the stadam				
	2D	how mush is the amution	1	0	0	0

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
	3A	semi your telgages there				
	3B	post this for me				
	3C	wate in line there				
	3D	its a long line	1	1	0	1
	4A	bogy meldel				
	4B	---	0	-	0	0
	4C	---				
	4D	---				
	5A	dess up like dady hs hat				
	5B	his coat				
	5C	take thes to shoe maker				
	5D	Ill do it later	1	1	1	0
	6A	hello Miss wondow				
	6B	hello who are you,				
	6C	---	0	0	-	-
	6D	your married! come in.				
	7A	you can play ther this				
	7B	and the gloves				
	7C	you look good when thenr	1	1	0	0
	7D	put your gloves on				
	8A	Im tired of riding my bike	0	-	0	0
	8B	I wond to do comething down				
	8C	hey get out of those				
	8D	I ohnly wand your hat to play their				
	9A	---				
	9B	---	0	0	0	0
	9C	---				
	9D	---				
	10A	a day in the park				
	10B	---				
	10C	---				
	10D	It wosed like this wene we where yony	0	-	0	0
	11A	good afternoon welcome to cafe	1	1	-	-
	11B	would you like this table				
	11C	I would give you that one but has you can see				
	11D	o well you may have it know				
	12A	give thom to me				
	12B	put them right ther				
	12C	please help me flod this up	1	0	0	0
	12D	we'll put it hear				
	13A	go moning				
	13B	may I hang my coat up				
	13C	hi joe				
	13D	wear are the kids	1	1	0	1

Student Number	Picture Number	Student Response	Coding			
			S	M	T	C
14A		---				
14B		trels lets sit hear				
14C		walter come hear	1	1	0	0
14D		we do'dt have a menu				
15A		---				
15B		how mush is that magacen				
15C		85¢ cents				
15D		Ill take it thankyou	1	1	-	-
16		trying to get operortor	0	0	-	-
17		fishing a pictuce	0	0	1	0
18		flowers blomm in may	1	1	0	1
19		come on pleace	1	0	-	-
20		wishing she was grow up	0	0	0	0
21		I don't no what to wear	1	1	0	0
22		lets go get so food aross the steet	1	1	1	0
23		hove some milk	1	1	0	1
24		You wear your pink bols	1	1	0	0
25		that's the one i made	1	0	0	0
26		draw the eye lass	1	0	0	0
27		I got to get a new razzer	0	-	0	0
28		thers dady aross the steet	1	1	0	0
29		thenking of going to football game	1	0	0	0
30		I havend seen	1	0	0	0

APPENDIX D

Homogeneity of Variance Tables

HOMOGENEITY OF VARIANCE TESTS

Variable	CHISQ	Probability
Semantic Categories of Style		
Isolation	1.580	.208
Context	1.647	.199
Syntactic Categories of Style		
Isolation	5.236	.072
Context	1.700	.427
Semantic Categories of Modality		
Isolation	5.732	.125
Context	8.821	.031
Syntactic Categories of Modality		
Isolation	5.707	.126
Context	7.869	.048
Semantic Categories of Relations		
Isolation	5.112	.023
Context	1.358	.243
Syntactic Categories of Relations		
Isolation	9.142	.027
Context	3.593	.308
Syntactic Categories of L1 and L2		
Isolation	1.554	.212
Context	.025	.872
Complexity		
Isolation	2.340	.310
Context	1.062	.587
Ideo-graphemic and Non-ideographemic pictures		
Isolation	.008	.925
Context	1.419	.233