

ELABORATED AND RESTRICTED CODES:
AN ANALYSIS OF CHILDREN AND ADULT
TELEVISION PROGRAMS

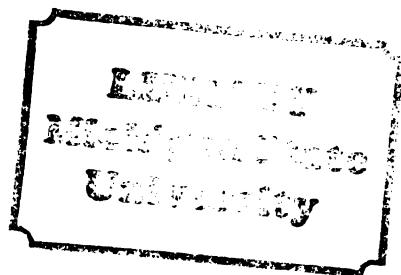
THESIS FOR THE DEGREE OF
MASTER OF ARTS

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GARY WALLACE SELNOW

1978

THESIS



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ABSTRACT

ELABORATED AND RESTRICTED CODES: AN ANALYSIS OF CHILDREN AND ADULT TELEVISION PROGRAMS

By

Gary Wallace Selnow

The theory of elaborated and restricted code systems, proposed by British sociolinguist Basil Bernstein, considers language system categorizations distinguished on a linguistic, syntactic and lexical level. An elaborated code selects from a more extensive range of syntactic and lexical options, and provides a stimulating learning milieu by encouraging verbal challenge. Conversely, the restricted code, selecting from a limited set of syntactic and lexical options, is more predictable in nature. It further impedes a continuous learning process by discouraging verbal inquiries through frequent role-directed displays of social power.

Previous research has, almost exclusively, been limited to identifying correlations between an individual's linguistic code orientations and his socio-economic background. This present research deals with Bernstein's theory from a different perspective, analyzing not subject message outputs, but potential message inputs available through television. The investigation is guided by a question dealing with the influence of an individual's linguistic code orientation on his media program selection: Will he tend to select messages within his own code system, or is this feature of the message unimportant?

This study analyzes media linguistic codes according

to Bernstein's measures, attempting to identify any differences between adult and child-oriented programs. It was expected that such a dichotomy would most readily expose variations in television programs along the elaborated-restricted continuum, and, if any were noted, provide evidence that Bernstein's measures were valid in such a setting.

Data was obtained from analysis of three child-oriented and three adult-oriented television programs. Fifteen-minute samples from each of these six programs were recorded, transcribed and analyzed, using eight measures proposed by Bernstein. Statistical analysis involved the use of chi-square tests on two portions of the data; first, each of the eight measures was analyzed individually to disclose any differences among the six samples, then the programs were grouped according to their adult-child orientation and tested for differences on each variable.

None of the eight hypotheses were verified in support of Bernstein's predictions, and although several measures conformed to predicted directionality, they were statistically not significant. These findings suggest two interpretations:

- (1) Either the measuring device cannot be applied to script directed television programs, or
- (2) The programs themselves are not differentiated along the restricted-elaborated code continuum.

Based on results of this research, there is no support for the hypothesis that adult-oriented television programs display a more elaborated linguistic code than child-oriented television programs.

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INTRODUCTION

Current sociolinguistic research based on Bernstein's theory of elaborated and restricted codes has been confined almost exclusively to the analysis of subject message output. This thesis approaches Bernstein's theory from a different perspective, by investigating potential message inputs available to individuals through the media. Basically, it deals not with language that subjects display, but with language to which they may be exposed through television.

Bernstein's theory considers language system categorizations distinguished on a linguistic, syntactic and lexical level. The restricted code system selects from a smaller set of syntactic and lexical options than the elaborated system, and is consequently more predictable in nature. The elaborated system displays characteristics which create a greater learning environment, encouraging reinforcement of continued verbal challenge. Conversely, the restricted system impedes a continuous learning process, does not foster verbal challenge and relies strongly on role-directed dialogue.

According to Bernstein, it is the family, and

specifically the maternal parent, which provides the dominant influence on development of a child's linguistic code. Bernstein has found that restricted code families display a "closed role" system which assigns family members a rigid set of responsibilities, dictating very clearly the positional hierarchy. Such a system generates a greatly constrained communication environment and fails to encourage novel interpretations of experiential stimuli. Families displaying an elaborated code, however, are noted to employ an "open role" system which permits a less rigid role structure. Decisions are made jointly, or according to an individual's capabilities, not his position within the group. Bernstein suggests this system encourages individual interpretation and allows a more flexible communication setting. These role orientations are vital because they create the milieu in which a child acquires his linguistic code.

To date there has been no research to investigate the types of messages to which an individual will selectively expose himself. Specifically, are people likely to selectively expose themselves to media programs employing linguistic codes which match (or approximate) their own linguistic codes? This present research attends to one aspect of this question: In contemporary television programming, do viewers have a choice between elaborated and restricted code programs? The task here

is to analyze a variety of programs and attempt to identify them according to Bernstein's linguistic measures. This was accomplished with taped samples from three adult and three child oriented television programs which were subjected to linguistic analysis.

This present investigation is organized into the following chapters: Chapter I will examine current socio-linguistic theory, review experimental research, and present the rationale for this research; Chapter II develops specific hypotheses for the present study, outlines the general design and details experimental procedures employed; Chapter III presents the results, and finally, Chapter IV discusses conclusions and implications for future research and provides a summary for this present research.

CHAPTER I

SOCIOLINGUISTIC THEORY
OF ELABORATED AND RESTRICTED CODES

Despite the interest in a systematic study of language as a social phenomenon shown by several early social psychologists and linguists, it was only during the last two decades that researchers combined the tools of sociology and social psychology with linguistics in the study of socialization and language behavior. Scholars like George Herbert Mead and Antoine Meillet attempted to place language in its social setting, combining social analysis with the investigation of language acquisition and change. From these distant beginnings, contemporary sociolinguistics appears even more encompassing, reaching beyond mere regionalized linguistic "grammar" into social and linguistic constraints on speech, a dimension of investigation which draws from anthropology, ethnography, sociology, psychology, linguistics and other disciplines.

Work of more recent investigators represented by Irwin (1948), Anatasi (1958), and Templin (1958), have indicated that features associated with sex, race, social class, age and education are related to an individual's acquired language system. Other researchers offer

language and information processing as major determinants of cognitive structure. Bereiter (1965) reports that information processing abilities are at the core of intellectual functioning. Chomsky (1965) characterizes linguistics as a branch of cognitive psychology, where Smith and Miller (1966) claim that studies of linguistic competence have made significant contributions to the understanding of human learning.

Behavioral learning theorists Hall and Lindzey (1957) further suggest the importance of language in stimulating arousal states:

Not only may words serve to facilitate or inhibit generalization, they may also serve the important function of arousing drives. Further, words may be used to reward or reinforce. And, most important of all, they serve as time-binding mechanisms, permitting the individual to instigate or reinforce present behavior in terms of consequences which are located in the future but susceptible to verbal representation in the present. It is clearly the verbal intervention in the drive-cue-response-reinforcement sequence which makes human behavior so complex and difficult to understand.¹

Much current sociolinguistic research is concerned with cultural factors influencing language acquisition and usage, focusing on aspects of "cultural deprivation,"

¹G. S. Hall and G. Lindzey, Theories of Personality (New York: Wiley, 1957), pp. 438-439.

which Bereiter and Englemann (1966) relate to language deprivation, or a failure to learn the uses of language. The culturally deprived or educationally disadvantaged, these authors suggest, display problems of encoding and decoding information provided by the environment, i.e., to use language as the primary information processing system for data manipulations. Those individuals, displaying such inadequacies, often cannot linguistically differentiate events in their environment and may overlook or distort these elements.

Directly related to this point are observations from research in education and child psychology (Deutsch, 1967; Bernstein, 1962; Robinson, 1965; Petersen, 1970) which have suggested that a relationship exists between the language processing abilities of a child and his social class level. Linguistic rules, like social rules, help determine the choice among available cultural options of behavior and strategies guided by the setting, intent and relationships of the interactants. Research into this sociolinguistic environment frequently proceeds along three dimensions briefly outlined here: speech communities, speech events and subgroup differentiations.

Gumperz (1964) defines speech communities as groups which share knowledge of the communicative constraints and options governing a significant number of social situations. Boundaries of these groups frequently tend

to coincide with wider social units such as countries, tribes and ethnic groups because the shared knowledge depends on intensity of contact and the nature of communication networks. Ethnic identity or territorial delineations will not necessarily identify a speech community. All that is required is a common language, and a shared set of rules governing basic communication strategies, enabling speakers to decode social meanings carried by alternative modes of communication. These speech communities are particularly important since they provide the linguistic milieu in which individuals acquire language patterns.

Analysis of "speech events" focuses on individual verbal interactions between speakers, specifically how one interactant, by choice of topic and linguistic variables, adapts to other participants and how others, in turn, react to him. Dundes (1972) refers to these interactions as "verbal duels" which can be analyzed along two dimensions: (1) syntagmatic, which involves the temporal ordering of sub-units, including allocation of rights to speaking, and (2) paradigmatic, referring to the selection of alternates within a contextual frame. Speech events provide a natural setting whereby investigators can observe the association between linguistic form and social meaning as part of a community's rules for speaking. This method of analysis further affords the researcher a means of

identifying elements in verbal interactions for categorization as to status, role and rapport of the speakers. Also, by noting these individual speech events, influence of the general community's repertoire on various individual subgroups within that community can be analyzed.

Directly stemming from studies in speech communities and speech events, of particular interest to this thesis, is research which investigates how different subgroups, co-resident within larger speech units develop and maintain different linguistic codes. Bernstein's notion of "public" and "formal" codes, later relabeled "restricted" and "elaborated" codes, attempt to categorize two linguistic forms he identified in Great Britain. He found working class groups operated within a restricted code and middle class groups generally employed an elaborated code system. The function of language, Bernstein states:

...exists in relation to a desire to express and communicate; consequently, the mode of a language structure--the way in which words and sentences are related--reflects a particular form of the structuring of feeling and so the very means of interaction and response to the environment.¹

This statement outlines the very essence of Bernstein's thesis, illuminating the vital function of language in an

¹Basil Bernstein, "Some Sociological Determinants of Perception," British Journal of Sociology (1958), p. 161.

individual's socialization, interpretation, and rapport with his world.

It is the cultural or social milieu in which an individual is born, Bernstein argues, which determines the subset of rules he will acquire, thus determining the particular linguistic code for communication. Early research neglected to identify any meaningful differences among subgroups claiming that English is English and aside from recognizing various degrees of vocabulary sophistication and pronunciation imposed by geographic boundaries, no investigations were undertaken to identify any structural or grammatical differences. It is precisely this concept of Bernstein's restricted and elaborated codes which recognizes differences in language systems distinguished on a linguistic, syntactic and lexical level. These codes create different orders of relevance and relations for the individual where he learns his role and position in his environment through language.

These varied orientations become more easily recognized when the two code users engage in a common communication interaction. Environmental stimuli identical to both will likely be perceived differently, where ordering and interpreting the significance of these stimuli is guided by a different set of ground rules. Bernstein has proposed that restricted code-users are more aware of the content of an object, where structural relationships of

the same objects are more salient to the elaborated code-user. Petersen (1970) offers the example of a student-teacher relationship where a verbal confrontation between the restricted and elaborated code-user respectively results in a communication breakdown. The student may consider the teacher very impersonal and unfriendly because the teacher employs a less frequent use of non-verbal cues which are necessary for the restricted code-user to interpret meanings. The teacher may similarly assume a guarded position in this situation, perceiving the student as aggressive, coarse or hostile because of the absence of identification of linguistic specification in the student's restricted code. The teacher is looking for a status difference which is identifiable in the language of the student, unaware that the restricted code system does not make such a distinction linguistically. Such misevaluations between code users may frequently result in inhibiting social interaction.

There are two features of the restricted code which further explain the events observed above. First, personal qualification need not be symbolically expressed by the restricted code-user who relies on various nonverbal techniques (vocal inflections, gesticulation, etc.) for this purpose. This stems from his sensitivity to the content of an object rather than its structure which, in turn, induces a sensitivity to relationships among component

parts. Language of the restricted code user is very much in the present, or very "now oriented," emphasizing immediate satisfactions in place of a means-end orientation. In schools, instruction focuses on structural features of the environment which may be utilized in the future to comprehend more sophisticated concepts, an orientation generally unfamiliar to the restricted code-user. These elements of the restricted code display some of the characteristic distinctions between the two codes which tend to present difficulties in academic situations. Bernstein (1969) points out that teachers tend to be unable to deal with culturally different modes of communication, accounting for a frequent lack of success.

At this point, the discussion turns to a detailed review of Bernstein's theories of elaborated and restricted code systems.

A. Bernstein's Theory

Bernstein makes quite clear the significance of language in the socialization of an individual when he suggests that the genes of social class may well be transmitted not through a genetic code, but through a communication code, specifically language codes and information processing programs. As a child acquires speech patterns which regulate his verbal acts, he also learns the rules and requirements of his social structure, and, in fact, his own relationships to other elements within his

environment. This linguistic process becomes an important denominator to his perception of social networks and ultimately to the psychological processes of his cognitive development.

Acquisition of these linguistic codes takes place quite apart from an individual's intellectual capabilities and depends almost entirely on his family's class position in society. Bernstein distinguishes two major codes he identified in Great Britain as elaborated and restricted, generally stating they can be distinguished according to the ease of predicting their linguistic alternatives. The restricted code system selects from a smaller set of syntactical and lexical options than the elaborated system, and is consequently more predictable in nature. It is generally less specific and informative in that the repertoire of speech structures are limited or considerably constrained, restricting the individual's ability to make fine discernments. By contrast, the elaborated code-user selects from a more extensive range of syntactic and lexical alternatives available in the language, enabling him to differentiate a greater spectrum of objects and events in his environment.

Although Bernstein never claims restricted code-users are incapable of operating in abstractions, he maintains that the degree is held to a low level. DeNeal (1972) offers the following example as a display of the degree

of specificity observed in a simple narrative:

(a) Three boys are playing football and one boy kicks the ball and it goes through the window--and the boys are looking at it--and a man comes out-and shouts at them because they've broken the window-and then that lady looks out of her window and she tells the boys off.

(b) They're playing football and he kicks it-and it goes through there-it breaks the window and they're looking at it-and he comes out and shouts at them because they've broken it-so they run away-and then she looks out and tells them off.¹

Based on descriptions provided by Bernstein, the first example could be considered of the elaborated variety, where the recount is less context bound, providing sufficient description to relay a coherent sequence of elements in the event. The latter example, however, depends upon a universalistic knowledge about the event to derive meaning from the narrative.

It is important to note at this point that a considerable amount of communication by restricted code-users is conducted on the nonverbal band, often obviating the need for a detailed verbal account. This is not to be misunderstood as an explanation suggesting that nonverbal elements of a communication adequately compensate for omitted verbal description, rendering the total communication

¹Larry DeNeal, Bernstein's Elaborated and Restricted Language Codes as a Function of Socio-Economic Class, Race and Sex, unpublished Masters thesis, Michigan State University, 1972.

package as sensitive as one employing the elaborated code. This is not the case, according to Bernstein, who states that fine elements of differentiation in an experience, which are perceived by an elaborated code-user, may go unnoticed by a restricted code-user. Implications of this are that although each of these individuals may have identical experiences, they are more linguistically differentiated for the elaborated code-user, effectively creating more experiences for him.

The process which predisposes a child to differentiate experiences in his environment begins with language acquisition, which, according to Bernstein, is primarily through maternal influence. He further states: "A virtuous circle is set up which is continually reinforced, for the mother will elaborate and expand the embryo personal qualificatory statements that the child makes."¹ When a child is led to recognize a greater differentiation in his experiences, he will possess a greater ability to differentiate events and objects in his environment. Since language is the mother's primary tool to elaborate these experiential differentiations, the significance of these verbal lessons becomes particularly important, for they provide the lenses through which this child will

¹ Bernstein, "Some Sociological Determinants of Perception," British Journal of Sociology, p. 163.

view his world.

Inherent in the restricted code, which displays short, rigid and often platitudinous phrases, is the impeding of a continuous learning process which requires constant reinforcement through descriptive response to interrogatory statements. Bernstein provides a concrete example of the difference between the elaborated and restricted mother-child interactions. The scene is in a bus with the child on his mother's lap:

Elaborated Code-Users

Mother: Hold on tight, darling.
 Child: Why?
 Mother: If you don't, you will be thrown forward and you'll fall.
 Child: Why?
 Mother: Because if the bus suddenly stops you'll jerk forward on the seat in front.
 Child: Why?
 Mother: Now, darling, hold on tightly and don't make such a fuss.

Restricted Code-Users

Mother: Hold on tight.
 Child: Why?
 Mother: Hold on tight.
 Child: Why?
 Mother: You'll fall.
 Child: Why?
 Mother: I told you to hold on tight, didn't I?¹

Although the same effect was achieved at the end of both discussions, an explanation for the command by the

¹Bernstein, "Some Sociological Determinants of Perception," British Journal of Sociology, pp. 163-164.

elaborated code mother provided a simple learning experience exposing the child to various linguistic connections and reasons. More importantly, however, the elaborated code encouraged curiosity and further questioning. When one answer was not accepted by the child and he further challenged his mother's reasoning, a new set of arguments were presented, and although this scenario, like the restricted code scene, eventually terminated with the display of social power, it was not before the child was exposed to several simple lessons. In the second example, the abrupt, role-dictated restricted code exchange quickly truncated the discussion and discouraged further inquiry. Upon being challenged, the mother repeated a previous order or offered a feeble reason for the dictate, an approach which limits a wide range of potential learning experiences for the child.

The notion of status, social power, and more specifically, "role" relationships has crept into this discussion and warrants further description at this point. Bernstein (1972) identifies two types of role systems, the "open" type which permits a range of alternatives for the realization of verbal meanings, and the "closed," which reduces this range of alternatives. In the former system, which permits a greater spectrum of alternatives, individualized verbal meanings are tolerated, the syntactic and vocabulary selection is more flexible, and the code is recognized as

more elaborated. The closed role system has a reduced range of alternatives, is more communal or collective in verbal meanings, more rigid in syntactic and vocabulary selection, and can be considered more restricted.

In an open role system setting, novel meanings of experiences are likely to be encouraged, leading to the exploration of a complex conceptual order. Here, the individual is more apt to achieve meaning on his own terms with the potential of altering the patterns of perceived environmental stimuli. The closed role system, however, does not encourage novel meanings and consequently limits the conceptual order. Verbal meanings are likely to be assigned, and the individual has little potential to alter it in any way.

Bernstein carries this one step further:

Where the role system is open, the individual or child learns to cope with ambiguity and isolation in the creation of verbal meanings; where the role system is closed, the individual or child forgoes such learning. On the contrary, he learns to create verbal meanings in social contexts which are unambiguous and communalized. Such an individual or child may experience considerable tension and role conflict if he persistently attempts to individualize the basis of his syntactic and vocabulary selections, and thus attempts to create or point toward an open role system.¹

¹Basil Bernstein, "A Sociolinguistic Approach to Socialization with Some Reference to Educability," Directions in Sociolinguistics, Ed. Gumperz (New York: Holt, Rinehart and Winston, Inc., 1972), pp. 478-479.

Since Bernstein places considerable emphasis on family and particularly maternal influence on the development of a child's language system, it is important to bring one additional concept into this discussion of role. Bernstein postulates two types of families delineated according to the extent and type of interactions used in decision-making processes within that family. A "positional family" vests its decision-making process in the member's formal status, e.g., father, mother, age of child. Here there is a clearly defined separation of roles where situations requiring decisions are formally categorized into a specified family member's jurisdiction. Such positional families, it is suggested, would support a weak or closed communication system. A "person" oriented family, by contrast, employs a decision-making system whereby judgments are a function of the psychological qualities of an individual rather than his formal status. Here, there is greater opportunity for communication interaction among family members as mutual decisions are investigated, and either community decisions made or the decision maker is appropriately appointed. It follows that this person oriented family employs a strong or open communication system.

Consider the child who is reared in a positional family where communication processes are weak largely because of the overriding emphasis placed on a role status

heirarchy. Early in his life the child learns his position is, in effect, "to be seen--not heard," where his questioning of parental decisions is not encouraged or even tolerated, and his opinions rarely solicited. Since the child's role is not one of responsibility and decision making, he is rarely brought into discussions of objects and events pertinent to the family's affairs. He may even be omitted from decision processes which relate directly to him, such as health problems or schooling considerations. Since, according to Bernstein, these positional families generally display restricted codes, those occasional parent-child interactions which do take place still offer the child no opportunity to experience a finely differentiated environment. Peterson highlights the significance of this observation when he explains that:

The intellectual and social procedures by which individuals relate themselves to their environment may very much be a question of their "speech modes" within the family and the codes these speech modes employ.¹

Bernstein (1959) has associated middle-class families with the restricted code, and working-class families with the elaborated code, hypothesizing that it is the family which perpetuates the maintenance of these codes. Research

¹Duane D. Petersen, A Sociolinguistic Study of Elaborated and Restricted Code Systems, unpublished Ph.D. dissertation, Michigan State University, 1970, p. 17.

in the United States generally supports this position of family influence on the child's linguistic code acquisition. Bloom claims that the home is the most important influence on a child's cognitive development, and that this is accomplished primarily through verbal interactions.¹ Petersen also found empirical evidence to confirm maternal influence on a child's language acquisition.

Bernstein suggests that language of restricted code families display the following characteristics:

1. Short, grammatically simple, often unfinished sentences with a poor syntactical form stressing the active voice.
2. Simple and repetitive use of conjunctions (so, then, because).
3. Little use of subordinate clauses to break down the initial categories of the dominant subject.
4. Inability to hold a formal subject through a speech sequence; thus a dislocated informational content is facilitated.
5. Rigid and limited use of adjectives and adverbs.
6. Constraint on the self-reference pronoun; frequent use of personal pronouns.
7. Frequent use of statements where the reason and conclusion are confounded to produce a categoric statement.

¹Duane Petersen discusses Bloom's position of home influence on language development in his dissertation, A Sociolinguistic Study of Elaborated and Restricted Code Systems.

8. A large number of statements/phrases which signal a requirement for the previous speech sequence to be reinforced: "Wouldn't it?", "You see," "You know," etc. This process is termed "sympathetic circularity."

9. Individual selection from a group of idiomatic phrases or sequences will frequently occur.

10. The individual qualification is implicit in the sentence organization; it is a language of implicit meaning.

11. Symbolism is of a low order of generality.

Families employing the elaborated code use language which displays the following characteristics:

1. Accurate grammatical order and syntax regulate what is said.

2. Logical modifications and stress are mediated through a grammatically complex sentence construction, especially through the use of a range of conjunctions and subordinate clauses.

3. Frequent use of prepositions which indicate logical relationships as well as prepositions which indicate temporal and spatial contiguity.

4. Frequent use of the personal pronoun "I," and impersonal pronouns "it," and "one."

5. A discriminative selection from a range of adjectives and adverbs.

6. Individual qualification is verbally mediated through the structure and relationships within and between sentences.

7. Expressive symbolism discriminates between meanings within speech sequences rather than reinforcing dominant words or phrases, or accompanying the sequence in a diffuse, generalized manner.

8. A language use which points to the possibilities inherent in a complex conceptual hierarchy for the organizing of experience.¹

These characteristics which have been identified with the restricted and elaborated language codes portray verbal systems which lead to a variety of effects mentioned previously in this paper. In review, the restricted code selects from a smaller set of syntactical and lexical options, is more predictable, blocks verbal challenge and relies strongly on role-directed interactions. The elaborated code allows for greater learning opportunity by widening the spectrum of differentiation in experiential perception, reinforcing interrogatory statements, and allowing a person-oriented rapport to establish for greater individual fulfillment.

Bernstein warns that with presentation of such a dichotomy as the elaborated and restricted codes, dichotomous thinking may inappropriately result. He states that a given individual, family, or group may commonly make use of both types of codes.

It is not a question of assigning persons, families, or classes to a single type of code but rather of ascertaining the scope of their repertoire of types of coding, and any hierarchy among them.²

¹Basil Bernstein, "Some Sociological Determinants of Perception," British Journal of Sociology, p. 311.

²John Gumperz and Dell Hymes, Directions in Sociolinguistics (New York: Holt, Rinehart and Winston, Inc., 1972), p. 466.

Context is a major control upon syntactic and lexical selection, and quantitative measures may vary by social position and situation. He further cautions that his distinctions should not be considered evaluations of personality types which may employ either code. "Either type of coding may show warmth, respect for personal dignity, etc."¹

B. Current Sociolinguistic Research

1. Bernstein: In the first of two supportive empirical studies conducted by Bernstein, he recorded samples of verbal interactions among his subjects which consisted of 61 males from a working-class background, and 45 which attended public school, all between the ages of 15 and 18.² He measured mean phrase length, mean number of pauses between phrases, and mean word length. He concluded from this study that socio-economic class was a significant variable in identifying those who displayed an elaborated or restricted code. I.Q. appears to be completely independent of whether a restricted or elaborated

¹John Gumperz and Dell Hymes, Directions in Sociolinguistics, p. 467.

²Basil Bernstein, "Linguistic Codes, Hesitation Phenomena and Intelligence," Language and Speech, No. 5, Part 1 (1962a), pp. 31-46.

code is employed.¹

Bernstein's second study (1962b) employed a similar sample, only this time using ten middle-class and 14 working-class boys. With the same set of linguistic measures, Bernstein found support for his position that social class is a significant variable in the selection of language codes.

Bernstein's research revealed the following discriminating hypotheses concerned with interaction between socio-economic status and language code:

Hypothesis 1: Working-class families will exhibit a greater portion of pronoun/total words than will middle-class families.

Hypothesis 2: Working-class families will exhibit a greater proportion of pronouns "you" and "they" to total pronouns than will middle-class families.

Hypothesis 3: Working-class families will exhibit a greater proportion of socio-centric sequences/total words than will middle-class families.

Hypothesis 4: Middle-class families will exhibit a higher proportion of the pronoun "I"/total pronouns than will working-class families.

Hypothesis 5: Middle-class families will exhibit a higher proportion of ego-centric sequences/total words than will working-class families.

¹This author recognizes that there is considerable evidence which suggests a high correlation between an individual's linguistic skills and performance on standard I.Q. tests. Bernstein does not specify the methods of testing I.Q. in his studies.

Hypothesis 6: Middle-class families will exhibit a higher proportion of subordinate clauses/total finite verbs than will working-class families.

Hypothesis 7: Middle-class families will exhibit a greater proportion of passive verbs/total finite verbs than will working-class families.

Hypothesis 8: Middle-class families will exhibit a higher proportion of the preposition "of"/"of",¹ and "in" and "into" than working-class families.

In order to operationalize these hypotheses, Bernstein used the following variables:²

Hypothesis 1: Pronouns/total words are essentially a type of noun that cannot take the word "the" immediately in front of it. Doubtful words are tested by trying to insert a "the" in a sentence similar to the one in question, e.g., _____ is very sad. _____ went away. Examples of pronouns are: I, you, he, she, it, we, they, me, yours, him, her, its, us, them, mine, yourself, his, hers, itself, ours, their, myself, themselves, this, that, such, some, several, all, any, most, each, either, both, few, many, none, anyone, somebody, something, everyone, nobody, no one, nothing, one, two, three, etc.

Hypothesis 2: The pronouns "you" and "they"/total pronouns were defined simply by counting each instance of use of the pronouns by the subjects.

¹Basil Bernstein, "Social Class, Linguistic Codes, and Grammatical Elements," Language and Speech, No. 5, Part 4 (1962b), pp. 221-240.

²Specific examples are drawn from Duane D. Petersen in A Sociolinguistic Study of Elaborated and Restricted Code Systems.

Hypothesis 3: Examples of socio-centric sequences/total words are "isn't it," "wouldn't it," "wouldn't you," "hadn't it," "you know," "ain't it," etc. Socio-centric sequences are usually used at the end of a sentence. Bernstein suggests that "socio-centric sequences which are generated basically by uncertainty may be transmitted as a response of the speaker to the condensation of his own meaning. The speaker requires assurance that the message has been received and the listener requires an opportunity to indicate the contrary.... socio-centric sequences test the range of identifications which the speakers have in common." (1967, p. 205)

Hypothesis 4: The pronoun "I"/total pronouns is defined simply by counting each instance of use of the pronoun in a subject's speech.

Hypothesis 5: Examples of ego-centric sequences/total words are: "I think," "I believe," "I know," "I mean," etc. As with socio-centric sequences, ego-centric sequences are generally found at the end of a sentence, although sometimes at the beginning when the verb of the sequence is not the main verb of a clause. Ego-centric sequences do not usually require affirmation but "often invites a further 'I think' on the part of the listener," according to Bernstein. "The sequence signals difference and relates the sequence to the person." (1967, p. 206) Ego-centric sequences allow greater freedom for the listener and may suggest to the receiver that he develop the communication on his own terms with further elaboration. Both ego-centric sequences, used more frequently by elaborated code-users, and socio-centric sequences, used more frequently by restricted code-users, "...play an important role in maintaining the equilibrium which characterizes the different codes." (1967, p. 207)

Hypothesis 6: Subordinate clauses/finite verbs or dependent clauses are introduced by subordinate conjunctions such as: as, as if, because, before, if, since, that, till, unless, when, where, and whether. According to Walsh, a subordinate clause does not make sense when standing alone, that is, it is dependent upon

other words to give it meaning. The subordinate conjunctions connect two clauses of unequal rank, a dependent clause and an independent clause on which it depends. Examples of subordinate clauses are:

- (1) I was here before you came.
- (2) Robert delivers papers before he comes to school.
- (3) When I leave, I will head toward Little Rock.

Hypothesis 7: Passive verbs/finite verbs are verbs of the passive voice which denote that the subject of a sentence receives the action. The passive always has a verb phrase composed of a form of the auxiliary verb "be," followed by a past participle. Examples of passive verbs are:

- (1) The dog was called by the man.
- (2) This plane has been flown by two pilots.

Hypothesis 8: The preposition "of" in proportion to the use of prepositions "of" plus "in" plus "into" were counted by noting each instance in which a subject used one of the three prepositions in his speech.

2. Lawton: Lawton's (1968) investigations tested the Bernstein hypothesis under a variety of situations including written messages, group discussions, and individual interview communication settings. In the first case his subjects (five 15-year-olds from each of these classes) were asked to write four essays on a variety of topics. Phase Two attempted to replicate informal discussion sessions used by Bernstein, and finally individual interviews were conducted to provide a context wherein the level of coding difficulty might better be controlled.

In all three modes of this research, Bernstein's

theory was basically substantiated, showing that significant differences in use of linguistic forms could be identified with social class. One important consideration emerged in this study substantiating Bernstein's claim that the restricted and elaborated codes are not dichotomous, but exist along a continuum where, under appropriate settings, a restricted code user may assume characteristics similar to his elaborated code counterpart.

3. Petersen: Petersen (1970) employed Bernstein's hypothesis in investigating eight working-class family discussions and eight middle-class family discussions in an American setting. In addition to subjecting Bernstein's theory to a varied cultural orientation, he was able to test Bernstein's theory of dominant maternal influence as opposed to Labov's theory of peer group dominance on linguistic development.¹

Petersen found support for Bernstein's socio-linguistic theory both in predicted differences between social classes along linguistic variables, and the significance of maternal influence rather than peer influence on language development. Since this research was conducted

¹Where Bernstein suggests the home provides the dominant influence on a child's linguistic development, American sociolinguist William Labov contends that peer groups present the most significant influence. Labov's studies in New York found that a child's language code more closely resembled that of his peers rather than that of his parents. He is in agreement with Bernstein, however, that linguistic codes may differ between working and middle-class families.

in the United States, it has particular importance in providing a testing ground for the universality of Bernstein's theory.

4. Robinson: Robinson (1965) argued that Bernstein's experimental design can be questioned along several dimensions; there is a possibility of differential amounts of relevant information available to both groups due to the selection of topic for discussion; because of the informal conversational setting used in the experiment working-class boys may have been prone to use a restricted code; since the discussions were held only among boys of similar social class, they may have been deterred from using a code different than that encouraged by the group; and perhaps the verbal mode of communication may not offer the best opportunity for working-class boys to use the elaborated code, where writing may.¹

Robinson utilized 120 boys and girls between the ages of 12 and 13 in his study, asking each to write two messages, one formal and one informal letter. He found partial support for Bernstein's hypothesis. With the formal letter, social class differences did not appear along dimensions of linguistic codes. Differences did emerge,

¹W. P. Robinson, "The Elaborated Code in Working Class Language," Language and Speech, Vol. 8, 1965.

however, in the language codes used to construct informal letters.

Since the methods of research varied along several dimensions, comparison of Robinson's research with Bernstein's should be made with caution.

First, design and operationalization of the experimental procedures were often dissimilar, including different topics and constraints, measuring devices, and basic differences in the setting and required tasks. Subjects varied along two dimensions, age (Robinson's subjects aged 15 through 18) and sex (Robinson used males and females; Bernstein just males).

5. DeNeal: DeNeal (1972) investigated the Bernstein theory as applied to black and white male and female subjects from four major socio-economic groups. He correlated eight of the discriminating hypotheses with the main effects of race, sex and socio-economic status, and possible significant interactions.¹

DeNeal found significant effects for only four of the eight measures in distinguishing between a restricted and elaborated code. Of these, only two were related to race, and both were dependent upon the interaction of sex and socio-economic status. Results showed that only one of the

¹Larry J. DeNeal, Bernstein's Elaborated and Restricted Language Codes as a Function of Socio-economic Class, Race and Sex.

eight hypotheses formulated by Bernstein was verified. According to this research, the restricted and elaborated code distinction is not applicable to an American population consisting of black and white males and females along socio-economic delineations.

To date all research concerned with Bernstein's sociolinguistic theory of restricted and elaborated codes has focused on one or more of several facets to test its inherent strength. For instance, a variety of populations have been investigated to ascertain its cultural universality, e.g., McLaren (1968), Australian subjects; Petersen (1970), American subjects; DeNeal (1972), American black versus white populations. Not only subject populations, but modes of communication have been varied to determine if Bernstein's theory would endure under a variety of communication settings. Bernstein (1962a and 1962b), Petersen (1970), DeNeal (1972) and others employed dialogue situations according to Bernstein's original design. Robinson (1965) applied the hypothesis to letter-writing sessions, essay writing, informal discussions similar to Bernstein's and individual interviews with researchers.

In summary, support was obtained for Bernstein's language code theory by Bernstein (1962a and 1962b), Petersen (1970), Lawton (1965) and Robinson (1968). DeNeal (1972) found no support for this theory in his study with black

and white American populations.

C. Rationale for Present Study

In previous studies, researchers dealt almost exclusively with their subjects as sources of messages, learning their social class through basic demographic information, then analyzing their message outputs in terms of restricted and elaborated codes. They have sought answers to questions of maternal and peer influence on language development, social class determinants of language code used, type of language used in various communication modes, and language used under diverse situational constraints, but the subject as message originator is always under investigation.

Since social psychologists like Bruner, Asch, Hovland and others began investigations on the concepts of selective perception, attention and retention, a fourth element to this set has become evident: selective exposure. Validity of this concept is substantiated by its applicability in a number of cognitive consistency theories which recognize selective exposure as one means of assisting in the maintenance of balance, congruence, avoidance of dissonance, etc. In the first three selective processes mentioned, an individual can interpret a message through bias predispositions, remain inattentive during message delivery and forget particular portions of a message, in that respective order. The fourth, however, is possibly most effective

since it obviates the need to employ any of the others, for if an individual does not allow himself to be exposed to a message, he need not bother to psychologically deal with it in any way.

It is this selective exposure consideration which suggests an interesting dimension of study into the Bernstein theory. Basically, the question may be posed: When the choice is made available, will an individual select messages within his own code system, outside his code system, or is this feature of the message unimportant in his selection? Considering the extensive use of mass media and particularly television in the United States, the question of selective exposure to programs with particular language code orientations takes on significant meaning.

To underscore the salience of television in the process of adolescent cognitive development, Watson (1967) states that:

During recent years it would appear that the average oral vocabulary of the young child has shown an increase. This superior loquacity of today's children Templin attributes to the superior communication media available to them, such as television and radio.¹

Neilsen studies have shown that young children are exposed to television for five or more hours per day,

¹Robert I. Watson, Psychology of the Child (New York: John Wiley and Sons, Inc., 1967), p. 329.

highlighting the tremendous potential influence of this medium. Placing these observations in context of Bernstein's theory of restricted and elaborated codes, it might be suggested that restricted code system children can be exposed to an elaborated code through selected television programs. If this were the case, perhaps the pervasive influence of maternal linguistic orientations as proposed by Bernstein may become somewhat diluted and less important.

In order to empirically research these questions a design with two distinct phases would be required, only the second portion of which is the operational concern of this thesis. First, analysis of subject linguistic orientation would be necessary to determine where these individuals could be placed along the restricted-elaborated continuum. This could be accomplished using techniques previously utilized by Bernstein, Petersen, Lawton and others. The second phase of this research, and that considered here, concerns an investigation of the linguistic codes employed by the media to determine where they lie along this elaborated-restricted continuum. This portion of the study, in effect, would provide information not of message outputs by subjects, but of the linguistic nature of programs to which these subjects are inclined to be exposed.

D. Statement of Problem

To date, Bernstein's discriminating hypotheses concerning elaborated and restricted codes have been applied only to subject message outputs. Empirical research in this area has been conducted by Bernstein (1962a and 1962b), Petersen (1971), Lawton (1965), DeNeal (1972), and Robinson (1968) and others. There is another dimension, however, which appears to be fruitful for research, and this concerns the type of media input selected by individuals. Specifically, are people likely to selectively expose themselves to media programs employing linguistic codes which match (or approximate) their own linguistic codes? Answers to this question would shed light on whether restricted code children can reach out of the home and neighborhood environment and be exposed to an elaborated code via television.

In order to operationalize research which would probe this question, two areas must be investigated. First, as performed in previous research, subjects must be identified as to their placement along the elaborated-restricted code continuum. Television programs available to these subjects must then be analyzed to determine their position on this continuum; this thesis deals with the second consideration.

The present research study is designed to answer the following questions:

1. Can the linguistic measures, proposed by Bernstein, to distinguish between the elaborated and restricted codes, be applied to script-oriented dialogue situations on American television programs?

2. Are language codes of adult-oriented television programs relatively more elaborated than language codes of child-oriented television programs?

In general, this study seeks to test Bernstein's hypotheses in a different setting, not on an impromptu discussion, but rather on script-directed speech, and further, to determine if selected television programs display any linguistic differences between those oriented toward adults and those oriented toward children.

CHAPTER II

HYPOTHESES, DESIGN, EXPERIMENTAL PROCEDURES

A. General Study Design

Bernstein's concept of elaborated and restricted codes provides the theoretical framework for this present research. To date, previous studies have analyzed subject message outputs and correlated these to the subject's socio-economic background. This thesis, however, approaches the study from a different perspective, analyzing the linguistic orientation of potential message inputs, i.e., television programs. This objective suggests two questions which this research is designed to investigate:

(1) Can Bernstein's linguistic measures be applied to script-oriented dialogue situations in American television programs?

(2) Do adult-oriented television programs display a relatively more elaborated linguistic code than child-oriented television programs?

These two questions lead to the specific hypotheses stated below.

B. Specific Hypotheses

Eight of Bernstein's linguistic measures will be employed to investigate three adult and three child-oriented

television programs in order to establish the relative position of these programs on an elaborated-restricted code continuum. Specific one-alternative hypotheses are outlined here.

Hypothesis 1: Child-oriented television programs will exhibit a greater proportion of pronouns/total words than will adult-oriented television programs.

Since it is predicted that child-oriented programs are more restricted in nature than adult-oriented programs, it follows that children's programs should display a greater proportion of pronouns per total words as outlined by Bernstein. A high percentage of pronouns indicates an insufficient specificity, where pronouns replace a more exact noun or noun phrase. In face-to-face encounters between restricted code users, pronoun referents are frequently identified nonverbally, obviating the need for a precise linguistic account.

Hypothesis 2: Child-oriented television programs will exhibit a greater proportion of pronouns "you" and "they" per total pronouns than will adult-oriented television programs.

These pronouns are quite nonspecific in nature, and generally appeal to an amorphous group referent. The pronoun "they" frequently refers to an unidentifiable source, displaying undifferentiated characteristics of the restricted code.

Hypothesis 3: Child-oriented television programs will exhibit a greater proportion of socio-centric sequences/total words than will adult-oriented television programs.

Use of socio-centric sequences has two primary effects. First, since these phrases request comment on the speaker's immediate statement, they tend to limit discussion to the level directed by the speaker. They also fail to encourage listener elaboration. Consequently, curiosity is limited, since the listener is not expected to present an argument challenging the speaker's original position.

Hypothesis 4: Adult-oriented television programs will exhibit a higher proportion of the pronoun "I"/total pronouns than will child-oriented television programs.

Strong group identifications of restricted code-users does not encourage a differentiation between self and others; consequently, there is a limited usage of personal pronouns. Elaborated code-users stress "person" relationships, making very important the individuality expressed by use of these personal pronouns.

Hypothesis 5: Adult-oriented television programs will exhibit a higher proportion of ego-centric sequences/total words than will child-oriented television programs.

These ego-centric phrases do not usually require an affirmation, but allow the listener to develop the communication on his own terms, and, in fact, encourage this by making clear the position is attributed solely to the

speaker. In addition, these phrases invite the listener to express his viewpoint, thus facilitating the logical development and exploration of a theme. It would, therefore, be expected that adult-oriented programs display a greater portion of ego-centric sequences.

Hypothesis 6: Adult-oriented television programs will exhibit a higher proportion of subordinate clauses/total finite verbs than will child-oriented television programs.

The use of subordinate clauses clearly demonstrates a more complex sentence structure, and is indicative of an elaborated code system. It is expected that adult programs will display a greater portion of subordinate clauses than children's programs.

Hypothesis 7: Adult-oriented television programs will exhibit a greater proportion of passive verbs/total finite verbs than will child-oriented television programs.

Use of the passive voice requires a high degree of language control and indicates a fairly sophisticated language system. Petersen notes that the passive voice may be used when there are special reasons, like tact or delicacy, for not mentioning the active subject, and where the passive may facilitate a connection between one sentence and the next.

Hypothesis 8: Adult-oriented television programs will exhibit a higher proportion of the preposition

"of"/"of" and "in" and "into" than child-oriented television programs.

Bernstein suggests that the elaborated code selects from a greater range of prepositions symbolizing logical relationships, than from those indicating spatial or temporal relationships. The preposition "of," according to Peterson, has the logical relationship connotation as well as an adjectival quality, and thus greater restraint is placed on this form of qualification and use.

It is important to note that Bernstein did not plan his measures to distinctly identify and label a message as either elaborated or restricted. He states that his measures are designed to ascertain the scope of a message and possibly determine any hierarchy that may exist among several messages. In this study, each of the eight measures will be considered separately and no final "grand total" will be calculated.

C. Samples

Samples used in this study consisted of three child-oriented television programs (Sesame Street, Josie and the Pussycats, and Scooby Doo) and three adult-oriented programs (Ironside, The Tonight Show, and All in the Family).

These programs were selected on the basis of their varied subject material and high viewer ratings. Nielsen

ratings displaying the number of viewers for each program used in this sample per 100 viewing households are presented in Table 1.

TABLE 1. VIEWERS/100 HOUSEHOLDS¹

| | Adults | Children (2-5) |
|-------------------------|--------|----------------|
| Ironsides | 144 | 5 |
| Tonight Show | 136 | 1 |
| All in the Family | 162 | 9 |
| Scooby Doo | 27 | 57 |
| Josie and the Pussycats | 27 | 51 |
| Sesame Street | 10 | 30 |

¹Taken from the Nielsen Television Index First Report for December, 1972.

A brief description of the six television programs is provided below; times of programs are noted in Eastern Standard time.

1. Adult-Oriented Programs: All in the Family began as the pioneer of situation comedies to deal candidly with a variety of social problems. The main character, Archie Bunker from New York, conservative and bigoted, is very outspoken in his observations of racial situations and of the "new morality." Although this program occasionally related some moral lesson, it generally attracted its massive audience by exposing ideologies which have traditionally been confined to selective interpersonal situations. (Time: 8:00 p.m.)

Ironside is a mystery series in which the main character is a paraplegic veteran detective assisted by a staff of maverick policemen. This program has maintained consistently high ratings for several years. (Time: 9:00 p.m.)

For over a decade, the Tonight Show has monopolized midnight audiences, maintaining high ratings despite the nature of competing programming. The format provides for entertainment and informal discussions with celebrities. (Time: 11:30 p.m.)

2. Child-Oriented Programs. The main character, and namesake, of Scooby Doo is a large dog who solves dilemmas confronting him and his adolescent companions.

(Time: 9:30 a.m.)

Josie and the Pussycats is an animated program dealing with the escapades of several children in a futuristic setting. (Time: 10:30 a.m.)

Unlike the first two child-oriented programs, Sesame Street attempts to provide educational material in an entertainment setting. Aimed primarily at pre-school children, it drills viewers on elementary arithmetic, the alphabet, basic vocabulary and other fundamental studies. (Time: Varies, usually between 9:00 and 10:00 a.m.) (In order to restrict the sample to dialogue situations, it was necessary to edit Sesame Street, eliminating musical and nonverbal lessons. The fifteen-minute sample used for analysis was distributed over approximately 50 minutes of original program time.)

By selecting these two distinct groups (adults versus young children), it was expected that any differences which may exist in language code orientation among television programs would be most readily exposed. The children's programs were predicted to lie more at the restricted end of the restricted-elaborated code continuum than the adult programs. All programs were televised between February 24, 1973, and May 28, 1973; the actual dates of recording were selected at random.

Fifteen minutes of sequential dialogue was extracted from each program using a Wollensak tape recorder. All

commercials and non-program breaks were eliminated from this fifteen-minute total, leaving almost continuous dialogue for analysis. The recordings were then transcribed verbatim in a form convenient for analysis.

D. Linguistic Analysis

Eight of Bernstein's measures were employed in this study:

- (1) Pronouns per total words
- (2) Pronouns "you" and "they" per total pronouns
- (3) Socio-centric sequences per total words
- (4) Pronoun "I" per total pronouns
- (5) Ego-centric sequences per total words
- (6) Subordinate clauses per total finite verbs
- (7) Passive verbs per total finite verbs
- (8) Number "of's" per total "of," "in," and "into"

A coding system was adapted from DeNeal (1972) which enabled the researcher to re-evaluate any portion of the analysis. Each linguistic measure was assigned a coding number as indicated above. Since measures number six and seven each involved two measures, an "F" was selected to indicate a finite verb. Considering the measures individually, the researcher analyzed each word and phrase in the transcript according to its grammatical set and placed the appropriate number above the word or the set of words. It is not uncommon to have a word or phrase categorized according to two or more measures since its grammatical

set may meet several criteria as specified in each category.

A sample of the linguistic analysis is presented to demonstrate the final appearance:

Oh, they ain't from any country, they're from New
 Jersey. They were in this Now Family magazine. See, I
 found it on the subway, and right here, in the swap
 section where they swap unusual things, you know. This
 is really an unusual ad.

The numbers for each measure were tallied and recorded on a separate form. Since each measure is expressed as a ratio, totals were computed, and finally percentage scores calculated, e.g., measure number four, pronoun "I" per total pronouns, 81/373, or, as a percentage, 21.71 percent.

All recording and coding of programs involved in this study were accomplished by a single investigator. Specific questions regarding the appropriate identification and labeling of linguistic variables were presented to Dr. Theresa Azzawi, of the Department of Linguistics and Oriental and African Languages, Michigan State University.

Statistical analysis involved the use of chi-square tests on two portions of the data. First, each of the eight measures was analyzed individually to test if any

differences existed among the six program samples. Programs were then grouped according to their adult-child orientation, and the chi-square statistic employed to test any differences among the two groups on any one given variable.

In summary, this study examined the following hypotheses:

(1) Child-oriented television programs will exhibit a greater proportion of pronouns/total words than will adult-oriented television programs.

(2) Child-oriented television programs will exhibit a greater proportion of pronouns "you" and "they" per total pronouns than will adult-oriented television programs.

(3) Child-oriented television programs will exhibit a greater proportion of socio-centric sequences/total words than will adult-oriented television programs.

(4) Adult-oriented television programs will exhibit a higher proportion of the pronoun "I"/total pronouns than will child-oriented television programs.

(5) Adult-oriented television programs will exhibit a higher proportion of ego-centric sequences/total words than will child-oriented television programs.

(6) Adult-oriented television programs will exhibit a higher proportion of subordinate clauses/total finite verbs than will child-oriented television programs.

(7) Adult-oriented television programs will exhibit a greater proportion of passive verbs/total finite verbs than will child-oriented television programs.

(8) Adult-oriented television programs will exhibit a higher proportion of the preposition "of"/"of" and "in" and "into" than child-oriented television programs.

CHAPTER III

RESULTS

The results of this thesis are based on data collected in the investigation of six contemporary television programs. Linguistic content analyses were performed on transcriptions of fifteen-minute segments of selected programs, utilizing eight measures proposed by Bernstein (1962) to identify elaborated and restricted language codes. Program samples were selected on the basis of popularity ratings within two distinct age groups: young children (ages two to five) and adults. With programs of such divergent appeal it was expected that any differences that might exist among current television shows along the elaborated-restricted code continuum would be most readily exposed. Such a design reveals a two-fold purpose of this study: first, to extract the Bernstein measure from its original context of real-life dialogue situations and apply it to a script directed setting, then to determine if the adult-oriented programs display a more elaborated linguistic code than child-oriented programs.

It was predicted that adult appeal programs would be found to display a more elaborated code than child-oriented programs.

The eight measures incorporated in this study are as follows: Pronouns/total words, pronouns "you" and "they"/total pronouns, socio-centric sequences/total words, pronoun "I"/total pronouns, ego-centric sequences/total words, subordinate clauses/total finite verbs, passive verbs/total finite verbs, and total "of's"/total "of" plus "in," plus "into."

Raw data expressed in proportions, as directed by the Bernstein measure, is presented in Table 2. It must be noted that no predetermined "rating" necessarily committed a program to either the elaborated or restricted code designation, for each sample must be placed along that continuum in relation only to the other five entries within each measure. For reasons detailed in a subsequent portion of this chapter, no grand total or final ranking was attempted.

TABLE 2. PROPORTIONS FOR EIGHT LINGUISTIC VARIABLES
ON SIX SELECTED TELEVISION PROGRAMS

| | Tonight Show | | All in the Family | | Sesame Street | Scooby Doo | Josie and the Pussycats |
|---|--------------|-------|-------------------|--|---------------|------------|-------------------------|
| | Ironside | | | | | | |
| 1. Pronouns/total words | 20.11 | 19.43 | 17.98 | | 20.42 | 17.76 | 15.93 |
| 2. Pronouns "you" and "they"/total pronouns | 28.08 | 30.12 | 31.09 | | 36.61 | 20.37 | 24.17 |
| 3. Socio-centric sequences/total words | 0.42 | 0.52 | 0.19 | | 0.43 | 0.00 | 0.00 |
| 4. Pronoun "I"/total pronouns | 18.29 | 24.44 | 21.71 | | 40.66 | 13.33 | 15.23 |
| 5. Ego-centric sequences/total words | 0.21 | 0.47 | 0.28 | | 0.39 | 0.46 | 0.36 |
| 6. Subordinate clauses/total finite verbs | 4.96 | 9.60 | 4.28 | | 9.44 | 4.44 | 3.12 |
| 7. Passive verbs/total finite verbs | 0.00 | 0.00 | 0.00 | | 2.36 | 0.00 | 0.00 |
| 8. "Of's"/total "of," "in" and "into" | 47.91 | 38.29 | 28.94 | | 40.00 | 75.00 | 63.15 |
| TOTAL WORDS IN SAMPLE | 2,337 | 2,084 | 2/074 | | 2,047 | 1,520 | 1,895 |

A chi-square analysis was employed for each of these eight measures, testing the significance of each. The exact probability levels obtained are included in Table 3.

TABLE 3. RESULTS OF CHI-SQUARE TESTS FOR EACH OF THE EIGHT MEASURES

| | Ironside | Tonight Show | All in the Family | Sesame Street | Scooby Doo | Josie and the Pussycats | χ^2 |
|---|----------|--------------|-------------------|---------------|------------|-------------------------|----------|
| 1. Pronouns/total words | 2.49 | 0.65 | 0.57 | 3.19 | 0.69 | 7.91 | 15.50 |
| 2. Pronouns "you" and "they"/total pronouns | 0.51 | 2.10 | 3.30 | 2.62 | 3.60 | 0.61 | 12.74 |
| 3. Socio-centric sequences/total words | 1.69 | 2.34 | 0.61 | 1.73 | 4.32 | 5.39 | 16.08 |
| 4. Pronoun "I"/total pronouns | 1.04 | 3.52 | 0.32 | 5.69 | 6.56 | 3.68 | 20.81 |
| 5. Ego-centric sequences/total words | 1.37 | 0.84 | 0.28 | 0.05 | 0.42 | 0.00 | 2.96 |
| 6. Subordinate clauses/total finite verbs | 0.43 | 5.26 | 1.16 | 5.35 | 0.82 | 3.38 | 16.40 |
| 7. Passive verbs/total finite verbs | 1.13 | 0.91 | 1.03 | 24.65 | 0.90 | 1.02 | 29.64 |
| 8. "Of's"/total "of," "in" and "into" | 0.01 | 0.73 | 2.59 | 0.54 | 4.74 | 2.15 | 10.76 |

One further test of the hypothesis involved a statistical analysis of the combined scores on each measure for adult and child-oriented programs. The purpose here is to determine if any significant differences do, in fact, exist between these two categories of programs.

Table 4 displays the results of this analysis. Chi-square statistics for measures one (pronouns/total words, $\chi^2 = 1.92$), four (pronoun "I"/total pronouns, $\chi^2 = 1.37$), five (ego-centric sequences/total words, $\chi^2 = 0.500$), and six (subordinate clauses/total finite verbs, $\chi^2 = 0.10$) were not significant. Measures two (pronouns "you" and "they"/total pronouns, $\chi^2 = 11.23$), three (socio-centric sequences/total words, $\chi^2 = 5.04$), seven (passive verbs/total finite verbs, $\chi^2 = 6.29$), and eight (number "of"/"of" plus "in" plus "into", $\chi^2 = 3.57$) are significant at least to the $\alpha = .10$ level of confidence, with measures two, three and seven significant to the $\alpha = .025$ level of confidence. On none of these four measures did directionality bear out predictions..

TABLE 4. RESULTS OF CHI-SQUARE TESTS FOR TWO GROUPS:
ADULT VERSUS CHILD-ORIENTED PROGRAMS

| Measure | Adult | Child | χ^2 |
|---------|-------|-------|----------|
| 1 | 0.89 | 1.03 | 1.92 |
| 2 | 4.96 | 6.13 | 11.23 |
| 3 | 2.30 | 2.74 | 5.04 |
| 4 | 0.66 | 0.71 | 1.37 |
| 5 | 0.22 | 0.28 | 0.50 |
| 6 | 0.05 | 0.05 | 0.10 |
| 7 | 3.07 | 3.21 | 6.28 |
| 8 | 1.70 | 1.87 | 3.57 |

At this point, each hypothesis will be considered individually.

Hypothesis 1: Child-oriented television programs will exhibit a greater proportion of pronouns/total words than will adult-oriented television programs.

Results for the chi-square test revealed there was no significant difference between the two groups studied ($\chi^2 = 1.92$). Directionality of the order of frequency of usage was reversed from predictions, providing no support for the hypothesis that adult-oriented programs are more elaborated than child appeal shows.

Hypothesis 2: Child-oriented television programs will exhibit a greater proportions of pronouns "you" and "they" per total pronouns than will adult-oriented television programs.

The chi-square test revealed a significant difference between the two groups for the measure considered by this hypothesis ($\chi^2 = 11.23$). However, directionality did not conform to predictions, where adult-oriented programs displayed a greater proportion of pronouns of "you" and "they." The results did not support the hypothesis.

Hypothesis 3: Child-oriented television programs will exhibit a greater proportion of socio-centric sequences/total words than will adult-oriented television programs.

Once again, results of the statistical test were

significant ($\chi^2 = 5.04$), but directionality was not as predicted. Where children's programs were expected to display a greater proportion of socio-centric sequences/total words, the opposite was observed. Results did not support the hypothesis.

Hypothesis 4: Adult-oriented television programs will exhibit a higher proportion of the pronoun "I"/total pronouns than will child-oriented television programs.

Although the order of frequency of usage was in the predicted direction, no significant differences were obtained ($\chi^2 = 1.37$). Results did not support this hypothesis.

Hypothesis 5: Adult-oriented television programs will exhibit a higher proportion of ego-centric sequences/total words than will child-oriented television programs.

Statistical tests were not significant ($\chi^2 = 0.50$) and observed directionality did not bear out predictions that adult programs would display a higher proportion of ego-centric sequences. This hypothesis was not supported.

Hypothesis 6: Adult-oriented television programs will exhibit a higher proportion of subordinate clauses/total finite verbs than will child-oriented television programs.

Predicted directionality of frequency of usage was observed in the measure considered by this hypothesis, that adult programs display a greater proportion of subordinate

clauses per finite verbs. Statistical tests, however, were not significant ($\chi^2 = 0.10$); the hypothesis was not supported.

Hypothesis 7: Adult-oriented television programs will exhibit a greater proportion of passive verbs/total finite verbs than will child-oriented television programs.

Statistically, results were significant; directionality failed to support predictions. Hasty conclusions, however, must be cautioned in light of the raw data. The chi-square statistic is particularly striking ($\chi^2 = 29.64$), but somewhat hollow when it is noted that only one program (Sesame Street) contained any passive verbs at all. It would be erroneous to state that the child-oriented programs, in general, displayed more passive verbs. Although the statistics may suggest this, it is clearly not the case.

Hypothesis 8: Adult-oriented television programs will exhibit a higher proportion of the preposition "of"/"of" and "in" and "into" than child-oriented television programs.

Although tests reveal the observations as statistically significant ($\chi^2 = 3.57$), the observed directionality of order of usage did not follow predictions. Results did not support this hypothesis.

In summary, none of the eight hypotheses were supported by this research. Hypotheses two (pronouns "you" and "they"/total pronouns), three (socio-centric sequences/total words), seven (passive verbs/total finite verbs), and eight (number "of's"/total "of" and "in" and "into") were statistically significant but failed to bear out predictions on directionality of frequency of usage. Hypothesis six (subordinate clauses/total finite verbs) conformed to predictions of directionality, but was not statistically significant. Hypothesis one (pronouns/total words), hypothesis four (pronoun "I"/total pronouns), and hypothesis five (ego-centric sequences/total words) were neither statistically significant nor supported predictions of directionality. Table 5 displays a summary of these observations.

TABLE 5. SUMMARY OF DIRECTIONALITY
AND STATISTICAL SIGNIFICANCE OF HYPOTHESES

| Hypothesis | Directionality | Statistical Significance | Overall Support of Hypotheses |
|------------|------------------|--------------------------|-------------------------------|
| 1. | Not as predicted | Insignificant | Not supported |
| 2. | Not as predicted | Significant | Not supported |
| 3. | Not as predicted | Significant | Not supported |
| 4. | Not as predicted | Insignificant | Not supported |
| 5. | Not as predicted | Insignificant | Not supported |
| 6. | As predicted | Insignificant | Not supported |
| 7. | Not as predicted | Significant | Not supported |
| 8. | Not as predicted | Significant | Not supported |

CHAPTER IV

DISCUSSION

A. Interpretation of Results

This present research was concerned with the linguistic content of six selected television program samples consisting of three adult-oriented and three child-oriented shows. It was expected that with programs of such divergent appeal, any differences that might exist among current television programs along the elaborated-restricted code continuum would be most readily exposed. Data consisted of analysis of fifteen-minute segments from these television programs according to eight measures proposed by Bernstein. It was expected that the results would provide a foundation for further research into the question of selective exposure according to linguistic code orientation. Statistical analysis was conducted to investigate the validity of each measure across the selected programs and test the significance of differences between adult and child-oriented programs for each measure.

All previous research based on Bernstein's theory of elaborated and restricted codes concentrated on the analysis of subject message output, attempting to correlate this with subject socio-economic background. This

research is adequately represented by Bernstein (1962a and 1962b), Peterson (1970), Lawton (1968), and DeNeal (1972). This present research recognized psychological mechanisms of selective exposure, and originated the position that an individual's linguistic code may dispose him to select messages employing a code similar to his own. In order to research this, a two-stage investigation is required, only the second of which was considered in this thesis. First, as in previous research, subject linguistic codes must be analyzed and identified. In the second phase, messages available to the subjects must be analyzed as to their elaborated-restricted orientation.

This last task, which was the concern of this investigation, employed Bernstein's linguistic measures in an area somewhat removed from their original setting. Extemporaneous discussion situations generally provided the messages for analysis as described by Bernstein (1962). In this present study, however, samples originated from script directed dialogue, clearly designed to be presented in the mass media. Thus, one of the purposes of this study was to investigate the applicability of Bernstein's hypotheses in such a setting.

Although this research employed Bernstein's measures in a setting quite different from previous research, such use can be justified on grounds that the validity of a theory must be tested in a variety of situations to

determine its inherent strengths and effective boundaries. In previous research, investigators applied the theory to a wide variety of message modes, and subject populations. For instance, Bernstein (1962), Petersen (1970), and DeNeal (1972) employed dialogue situations in accordance with Bernstein's original design. Robinson (1965) sought to test the applicability of these measures in letter-writing communications, and Lawton (1968) investigated essay writing, informal discussions and individual interview settings. Populations varied in the research of McLaren (1968) who used Australian subjects, Petersen (1970) who studied American populations, and DeNeal (1972) who investigated the validity of this theory as it applied to black versus white populations. Such a form of multiple operationalism provides greater strength for the theory where it is supported, and defines its limitations where it is not supported. By extending the application of Bernstein's measures to script directed dialogue situations, this investigative "triangulation" process further defines the scope of this measuring device.

Results from the eight measures considered by this study to identify the extent of elaborated-restricted code orientation for three adult and three child-oriented television programs did not support the general hypothesis. It was predicted that adult-oriented programs would display a more elaborated linguistic code than

children's programs as identified by Bernstein's measures. For none of the eight measures were results supportive of the hypothesis; in each case, either the predicted direction of the frequency of usage, or statistical significance was not obtained. Such findings suggest two interpretations:

- (1) Either the measuring device cannot be applied to script directed television programs, or
- (2) The programs themselves are not differentiated along the restricted-elaborated code continuum.

One additional interpretation which must always be considered in such research deals with an unintentionally biased sample selection. Those programs utilized in this study may not be representative of the general population of television programs, and for reasons not immediately obvious, display characteristics which are, in fact, not typical of the larger groups of adult and child-oriented television programs.

It was previously discussed that the most legitimate rationale for applying a theory to a variety of operational designs is to test its inherent strengths and search the limits of its boundaries of application. As successive researchers investigate the original propositions, their varied designs and operational constraints expand the scope of these propositions. Research in this thesis employed Bernstein's hypotheses in a design considerably different from the original extemporaneous

dialogue setting, and applied it to script directed dialogue designed for use in the mass media. In view of the results, which clearly do not support the hypotheses, it may well be argued that such a setting is not within the boundaries of Bernstein's measures of restricted and elaborated codes. It may be that in this setting, an alternate set of criteria is necessary to identify the linguistic codes Bernstein terms elaborated and restricted.

A second interpretation of the results assumes the measuring device is valid in this setting, but that there are, in fact, no overall differences between adult and children's television programs along the elaborated-restricted continuum. If this were the case, it would be expected that results display no regular pattern of directionality, and that statistical tests of individual measures would frequently show no significance. Such observations were noted in all of the eight measures, lending support to this interpretation.

It would serve well, at this point, to consider each measure individually in light of these two interpretations.

The first hypothesis suggested that child-oriented television programs would exhibit a greater proportion of pronouns/total words than adult-oriented television programs. Results show there was no support for the hypothesis. The chi-square test indicates the results are clearly not significant, and directionality of frequency of usage was

not as predicted. Since there was no statistical significance noted in this case, the directionality can be assumed to be unimportant in evaluating the validity of the measure. Such an observation would be consistent with both interpretations, specifically, that the measure is not valid in identifying the elaborated-restricted orientations, or that there are no actual differences between the two types of programs.

Hypothesis two predicted a greater use of "you" and "they" in child-oriented television programs. Directionality of frequency of usage in the measure considered here was not as predicted, where adult programs actually displayed a greater use of these pronouns. These results were statistically quite significant, suggesting that perhaps there was, indeed, a difference between the two types of programs, but in a direction contrary to predictions.

The third hypothesis predicted a greater use of socio-centric sequences by child-oriented television programs. Results of this measure were similar to those in the second hypothesis with statistical significance and observed directionality opposite predictions. A similar interpretation would apply in this case.

Hypothesis four suggested that adult programs would exhibit a higher proportion of the pronoun "I". Results indicate that either interpretation could be considered here. The statistical tests were not significant and

directionality was reversed from predictions. Such results might be expected if the measuring device was not valid or if there were no real differences in linguistic codes between the two types of programs.

Results of hypothesis five were similar to those of hypotheses one and four with respect to statistical significance and directionality of frequency of usage. Chi-square tests indicate the results were not significant, and where it was predicted that adult-oriented shows would exhibit a greater proportion of ego-centric sequences, the data revealed this was not the case. Interpretations of these findings are similar to the other two hypotheses, where measure validity may be questioned or actual linguistic orientation of the programs may be very much the same.

Predicted directionality of frequency of usage in hypothesis six was supported by the results; adult programs displayed a higher proportion of subordinate clauses. These findings were not statistically significant, however, suggesting that results of the measure used to test this hypothesis be interpreted as results of hypotheses one, four and five.

Statistical tests of the results for hypothesis seven were significant beyond the $\alpha = .01$ level of confidence, and thus quite significant. Directionality of frequency of usage was not in accordance with predictions that adult

programs would exhibit a greater proportion of passive verbs. However, in this case, any conclusions must be made in light of the raw data noting that only one program contained any passive verbs at all. This accounts for the strong statistical significance and suggests it may be presumptuous to conclude that child-oriented programs, in general, display a greater proportion of passive verbs.

Hypothesis eight suggested that adult programs would exhibit a higher proportion of the preposition "of"/"of" plus "in" plus "into." Directionality of frequency of usage generally did not support predictions, but statistically, the results were significant. This suggests that there may be a difference between the two programs along this measure, but that directionality does not support the hypothesis.

Of the eight measures considered in this study, predicted directionality was observed in only one, the number of subordinate clauses per total finite verbs. Results of this measure, however, were not statistically significant, and the hypothesis, therefore, was not supported. Four other measures, pronouns "you" and "they"/total pronouns, socio-centric sequences/total words, passive verbs per total finite verbs, and number "of's"/"of" plus "in" plus "into" were statistically significant but failed to support the hypotheses as to predicted directionality.

From the data analyzed in this present research, it appears there is no support for the hypothesis that adult-oriented television programs display a more elaborated linguistic code than child-oriented television programs.

B. Implications for Future Research

The purpose of this thesis was to extract Bernstein's linguistic measures from analysis of extemporaneous dialogue situations and apply them to script directed discussion settings of television programs. It was expected that these measures would identify linguistic differences between adult and child-oriented programs along the elaborated-restricted code continuum. Rationale for this operational design was that a theory receives greater strength when it is supported in a variety of situations, and, if, in fact, it is not supported, its limitations will be more clearly defined. This research initiates studies in an area of investigation which probes the potential message inputs available to individuals. Implications here are quite important in context of Bernstein's sociolinguistic theory, and suggest several general questions:

(1) Are television programs with varied language code orientations available to individuals, i.e., are some programs considerably more elaborated or restricted than others?

(2) Do individuals select programs on the basis of how these shows compare to their own linguistic code

orientations?

(3) Can a child raised in a restricted code setting be exposed to an elaborated code via television?

(4) If this exposure is possible, what effects will it have on the child?

Based on results of this present research, little support was found for the position that there is a variety of linguistic codes available within contemporary television programming. Although program samples represented the most divergent audiences possible (children aged two to five and adults), and the programs selected rated most popular on national surveys (Nielsen), it still was a highly limited sample, considering the entire population of available shows. It is entirely possible that the linguistic codes of all "popular" programs, regardless of audience appeal, tend to be oriented toward an "average viewer," allowing no clear differences to emerge in a study such as this. Other programs may display more differentiated codes which could be distinguished by Bernstein's measures. This suggests continued research guided by the following questions:

(1) Are there programs available which display linguistic codes that can be identified as relatively more elaborated or restricted? Research could be similar to that in this thesis, employing different samples.

(2) Are there differences in linguistic codes in

other message modes, e.g., movies, radio programs?

Since the more important question is not concerned with just message linguistic code, but with a correlation between message linguistic code and receiver linguistic orientations, future research must be designed to specifically deal with this. This thesis has suggested that the message linguistic codes be identified, then an analysis be conducted on those who selectively receive these messages. There is, however, a method which may more efficiently deal with the general question stated above. As in previous research by Bernstein (1962), Petersen (1970), Lawton (1968), and others, individuals should be identified according to their linguistic code orientations. With these identifications clearly noted, individuals would be polled about their customary media exposure, noting specific programs. These programs might then be grouped according to the orientations of viewers and analyzed according to linguistic considerations. This approach appears more directed and may more effectively deal with the question.

C. Summary

This research was based upon a linguistic analysis of three adult-oriented and three child-oriented television programs. These programs were selected on two dimensions:

- (1) Divergent audience appeal. Programs which aimed at an adult audience and those popular with young children

were selected. It was expected that with such diversified appeal, linguistic differences would most likely emerge.

(2) Popularity. Three of the most popular programs with each selected audience were chosen for this study.

The eight hypotheses used in this thesis were developed by British sociolinguist Basil Bernstein of the University of London. Bernstein maintains that control patterns within the family give rise to linguistic codes that can be distinguished on a linguistic, syntactic and lexical level. A "person-oriented" family operates with an open role system, fostering personal expression and allowing individualized interpretation of environmental stimuli. There is a flexible communication rapport within this family that generally employs what Bernstein terms an "elaborated code system." This system is more flexible, selecting from a more extensive syntactical framework, with greater lexical options, and is consequently not highly predictable in nature. It allows for a greater learning opportunity and reinforcement of interrogatory statements.

Conversely, the "positional" family employs a closed role system, clearly defining the role responsibilities assigned to each individual. This system does not encourage individual interpretation and novel meanings since events must always be formed into an existing experiential

matrix. Communications in such a family are rigid since interpretations of events are implicit and often need not be discussed. Bernstein suggests that such a setting encourages use of a restricted code system which selects from a smaller set of syntactical and lexical options and is more predictable. Further, this code impedes a continuous learning process and does not encourage verbal challenge.

Previous research attempted to identify subjects as to their linguistic code orientations along the elaborated-restricted continuum, using the hypotheses originated by Bernstein. This was, then, generally correlated with subject socio-economic background.

This present investigation employed Bernstein's hypotheses in a different setting, studying not subject message outputs, but potential message inputs through television. This was designed to provide information for a larger question of whether there is a correlation between the linguistic code an individual employs and the linguistic code of the television programs he selects.

It was concluded from this research that results from only one measure supported predictions of directionality of frequency of usage, but even this was not statistically significant. Four other measures were statistically significant, but directionality failed to bear out predictions of the hypotheses. None of the eight hypotheses

Bernstein formulated were verified. Therefore, it must be concluded that there is no support for the hypothesis that adult-oriented television programs display a more elaborated linguistic code than child-oriented television programs.

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