The purpose of this study was to develop an observation system which would describe some of the important phenomena in groups that have the task of making a decision about a controversial issue involving value conflicts. The basic design to develop the observation system involved the analysis of transcriptions of group discussions of controversial issues. The resulting observation system included tentative criteria for two sets of subcategories for two independent components of activities, operation and content. The 13 operation subcategories included, for example, Stating, Challenging, Interpreting, and Integrating. The 11 content subcategories included, for example, Value Terms, Criteria, Facts, and Value Judgments. The criteria developed for the subcategories were tentative since certain strategic and conceptual difficulties encountered in carrying out the design made it virtually impossible to obtain reliable criteria. An interpretation of value discussions involving resolution of value conflict was based on two fundamentally different but related games, namely the rationality game and the ego game. The aims and roles of the ego game involve winning or persuading, whereas the aims and rules of the rationality game involve achieving a solution to value conflicts which maximizes the values of the participants. Implications of the study were discussed. (Author)
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THE DEVELOPMENT OF A VALUE OBSERVATION SYSTEM FOR GROUP DISCUSSION IN DECISION MAKING

May, 1972

U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
National Center for Educational Research and Development
(Regional Research Program)
AUTHOR'S ABSTRACT

The purpose of this study was to develop an observation system which would describe some of the important phenomena in groups that have the task of making a decision about a controversial issue involving value conflicts.

The basic design to develop the observation system involved the analysis of transcriptions of group discussions of controversial issues.

The resulting observation system included tentative criteria for two sets of subcategories for two independent components of activities, operation and content. The 13 operation subcategories included, for example, Stating, Challenging, Interpreting, and Integrating. The 11 content subcategories included, for example, Value Terms, Criteria, Facts, and Value Judgments. The criteria developed for the subcategories were tentative since certain strategic and conceptual difficulties encountered in carrying out the design made it virtually impossible to obtain reliable criteria.

An interpretation of value discussions involving resolution of value conflict was based on two fundamentally different but related games, namely the rationality game and the ego game. The aims and rules of the ego game involves winning or persuading, whereas the aims and rules of the rationality game involve achieving a solution to value conflicts which maximizes the values of the participants. Implications of the study were discussed.
The research reported herein was performed pursuant to a grant with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.
ERRATA

Page 1, line 22:
Scriven (1966) should be Scriven (1966b)

Page 1, line 42:
1971 should be 1970

Page 25, Footnote 15, line 3:
(1966) should be (1966a)

All references reading:
Smith et al. 1971 should read Smith et al. 1970
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ACKNOWLEDGMENT

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We would also like to express our deep appreciation to Dr. Jerrold Coombs for his constructive reactions to an early draft of the report.
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CHAPTER I
INTRODUCTION

One of the important phenomena in human affairs is decision-making about human affairs themselves. Such decision-making necessarily involves fundamental questions of values and value analysis (Rescher, 1969). Not only are many of these decisions and value judgments very complex and difficult to make, but the consequences of the decisions turn out to involve many people in many important ways—as we are finding out in such problems and issues as pollution, civil rights, population, and war.

Such problems and issues have long been of considerable concern to educators in the Social Studies because of their unavoidability and importance. It is supposedly the province of the Social Studies in our school system to provide pupils with the necessary knowledge, perspectives, and conceptual tools to handle decisions about human affairs in a competent and responsible way. Indeed, without this preparation it is often claimed that the capability for active and responsible citizenship would be fundamentally inadequate. Broudy, Smith, and Burnett (1963), for example, end their curriculum with a molar problems course which ties together a variety of courses by using a problem-solving approach in the intensive discussion of two or three problems confronting our society. Hunt and Metcalf (1955) argue that the role of education in reducing the fundamental value conflicts of our society is to teach a method of moral choice. Scriven (1966) argues for the importance of developing methods and materials for teaching both teachers and students how to handle value analysis.

Although one could ask for a more convincing argument for the importance of decision-making and value analysis or for clear evidence of current inadequacies in the way these are handled in the schools, we argue that the most payoff is not in this direction. Rather, the payoff is in the development and vigorous pursuit of a number of different approaches to decision-making and value analysis in the Social Studies, each approach striving for greater clarification of possible objectives, development of teaching strategies and materials, and sound assessment of these. One of the best examples to date is the work of Oliver and Shaver (1966) in developing a comprehensive jurisprudential conceptual framework at the curriculum level for the Social Studies.

The approach of the principal investigator to decision-making and value analysis in the Social Studies has involved a number of lines or work on several interrelated dimensions of value problems. We have focused on four main dimensions: philosophical, psychological, teaching, and assessment. In a study of the logical dimensions of teaching (Smith, Meux, Coombs, Eierdam, and Szoke, 1971), an observation system was developed which identified and classified kinds of episodes; these included in
addition to Evaluating, such episodes as Defining, Describing, Conditional Inferring, and Explaining. In a study of the strategic dimensions of teaching (Smith, Meux, Coombs, Nuthall, and Precians, 1967), an observation system was developed which identified and classified kinds of ventures; these included, in addition to Evaluative, such ventures as Conceptual, Causal, Reason, and Interpretive. The results from the Evaluative episodes and ventures were amplified by Meux (1963, 1967a), both presenting a value model with elements corresponding to the thing evaluated, and a criterion. Whereas the studies up to this point had been logical-empirical analyses of teaching, we then turned to an experimental investigation of Evaluative teaching strategies for fluoridation and pesticides (Meux, Evans, Endo, and Hogben, 1971), the results suggesting that strategies with the most direct logical support for a value judgment produced greater changes in good reasons and in attitude change. Further work in developing a practical approach to the teaching of controversial issues and the other dimensions of our strategy were summarized and integrated in a comprehensive statement of the dimensions and results of our strategy (Metcalf, 1971).

While developing this comprehensive statement, we identified a variety of interrelated needs on the four dimensions of our strategy. In the philosophical dimension, we needed to identify ways in which teachers and students follow or deviate from the epistemic rules or standards of rationality for value judgments. In the psychological dimension, we needed to identify those conditions which facilitate and those conditions which inhibit the making of rational decisions and value judgments. In the teaching dimension, we needed to gather systematic data on (1) what happens within the value discussions occurring in the classroom so that we can cumulate knowledge about antecedents and consequences of teaching strategies for value analysis, and (2) on the group discussions which are part of our general teaching procedure (Chadwick and Meux, 1971). In the assessment dimension, we needed an accurate and comprehensive instrument by which we can assess what happens in value discussions and compare behavior across value discussions.

The soundest and most efficient way to meet these interrelated needs is to develop a theory-based, multiaspect observation system designed specifically for value discussions. As the principal investigator has pointed out elsewhere (Meux, 1967b), classroom observation systems have a number of uses: conceptualization, control of variables, test construction, and teacher training. Such uses are especially relevant for the needs of our strategy described above. For the philosophical dimension, an observation system can provide reliable criteria for identifying epistemic behavior. For the psychological dimension, an observation system can provide precise operationalization for theoretical variables and for the conditions which facilitate or inhibit rational decisions and value judgments. For the teaching dimension, an observation system can provide for observational control of
variables and for precise variables which can serve as a basis for outcome tests. For the assessment dimension, an observation system can provide an instrument for describing and assessing behavior.

Unfortunately there are no current observation systems which satisfy the needs for our research strategy, including the two developed by Smith et al. (Smith, et al., 1967; Smith, et al. 1971). Current observation systems have at least one of the following disadvantages: lack of sufficient relevance to value discussions, insufficient scope of variables to describe the important aspects of value analysis and valuing (such as conjecture-refutation, role-taking, and integration), or insufficient applicability to the important manipulable variables in teaching strategies for value analysis.

The general purpose of this study, then, is to develop an observation system to meet the interrelated needs in our strategy. More specifically, the purpose of the study is to develop an observation system to meet general methodological criteria such as generality and reliability, and criteria specific to value discussions such as identifying activities and influencing factors in rational decision-making.

The remainder of this report will include: a brief description of the original purpose and design; a statement of the nature and justifications of modifications in the design; the results, focusing on some tentative categories and criteria for a variety of phenomena in value discussions, and on an interpretation of phenomena in value discussions in terms of two interrelated games we designate as the rationality and the ego game; and the implications of these games for both educational and noneducational contexts.
 CHAPTER II
PROCEDURE

This chapter will describe the original purpose and design, the modifications required as a result of difficulties encountered in carrying out the original design, and a justification of these modifications.

Original Purpose and Design

The original purpose of this study was to develop an observation system which would describe some of the most important phenomena in groups that have the task of making a decision about what to do on a controversial issue involving value conflicts. The basic design to develop this observation system involved the analysis of transcriptions of group discussions of controversial issues under several conditions varying with respect to issue and orientation (where orientation refers to whether justification or resolution of value conflict is the group goal).

Briefly, the categories in the observation system to accomplish the purpose of this study were to meet the following criteria:

(1) The categories are to identify activities, i.e. things participants do, which are involved in rational decision-making, especially in an individual’s formulation of his own value judgment (Coombs, 1971; Coombs and Meux, 1971) and in the resolution of value conflicts (Meux, 1971).

(2) The categories are to identify factors which are judged likely to facilitate rational decision-making and factors which are judged likely to inhibit rational decision-making.

(3) The categories are to have the following modes of conceptualization: synthetic, molar, natural, rigorous, and specific (Meux, 1967b).

(4) The categories are to have generality, reliability, and feasibility (Smith et al., 1967; Smith et al., 1971).

In the original design, we had three stages. The first stage was to involve the administration of a questionnaire to 11th-grade students to help select issues on the basis of ratings of knowledge, interest, and importance. We completed this stage in two substages. First, we had approximately 100 11th- and 12th-grade students list any problems and issues they would like to discuss with other students in small groups. Second, on the basis of these
student responses we compiled a list of the 20 most frequently specified issues. These were put into a questionnaire requiring a rating of each of the 20 issues in terms of knowledge, interest, and importance. (This questionnaire is contained in Appendix A.) The same students then took this questionnaire. Finally, we constructed information booklets for the most frequently selected issues. We completed several of these; those for Population Growth and Legalized Abortion were used in the fourth stage of the modified design. (For copies of these booklets see Appendix B.)

The second stage was to involve the taping and transcribing of 20 group discussions with six 11th-grade students in each group (balanced pro and con on the issue) varying in both issue and orientation (instructions to justify their own position or to resolve the value conflict). The third stage was to involve a reliability study to assess interjudge agreement on the categories. Neither of these stages were completed because of difficulties to be discussed in the next section.

Modifications and Justification

A variety of considerations led to a modification of the original design, such as difficulties encountered in attempting to carry out the original design, initial results from the modified design, and the complexity of the categories of the observation system. The nature of these considerations, the modifications in design, and the justification of these modifications are discussed in this section.

I. Difficulties Encountered in Original Design

In attempting to carry out the original design, we encountered the following difficulties.

(1) After we completed the first stage of the original design, i.e. the administration of the above-mentioned questionnaire to select issues for discussion, the school district that had agreed to participate in our study withdrew from the agreement; thus we could not continue in the district.

(2) We then submitted a proposal for our study to another school district that seemed likely to cooperate, but our proposal was rejected.

(3) Since the rejection of our proposal by the second school district came at the end of the school year, we had no time to find another district.
II. Modified Design

In view of the above difficulties, we decided to move ahead somewhat on our schedule, modifying the design so as to use tapes and transcripts from another project in our general research program on values, a project devoted to developing personal procedures for the resolution of value conflicts. Since the first stage of the original design had been completed, i.e. the administration of the questionnaire to select issues, we treated this administration of the questionnaire as the first stage of the modified design. The completed booklets on Population Growth and Legalized Abortion and information from the responses were used in the fourth stage of the modified design.

Second Stage. In the second stage of the modified design, five group discussions were taped and transcribed. In each discussion there was a moderator and two participants--graduate students in educational research—who had read material on the issue discussed. The issues were guaranteed minimal yearly income, legalization of abortion (for two groups), the Organized Crime Control Bill of 1970, and behavior modification.

Third Stage. The third stage of the modified design was the development of a tentative set of categories for the observation system using a portion of the transcripts from the second stage of the modified design. The procedure used was essentially that used in previous studies (Smith, et al., 1967; Smith, et al., 1971). These tentative categories were treated as hypotheses and checked on those parts of the transcripts not used as a basis for the initial formulations of the categories.

Fourth Stage. The fourth stage of the modified design involved the taping and transcribing of more group discussions to check further the tentative categories. We decided to use fewer groups than in the original design. There were two reasons for including fewer group discussions than we had anticipated would be necessary to provide an empirical basis for categories meeting the criteria listed above.

(1) It became clear early during the development of the categories that category-occurrences were highly redundant. Thus the same kind of category-occurrences would be found in fewer groups.

(2) The original design included variation in orientation across groups, i.e. instructions to justify one's position or instructions to resolve the conflicts in the group. However, we observed that students from the second stage and students in concurrent projects in our values research program almost completely ignore instructions to resolve conflict and justify their own positions. Thus, we dropped the distinction between orientations, so that only half the number of groups is required.
On the basis of these high redundancies and the students' failure to distinguish between orientations, we decided that the fourth stage of the modified design should essentially involve testing the tentative categories by taping, transcribing, and analyzing six new discussion groups. If no new categories were found, we would terminate the taping and transcribing of group discussions. If new categories were found, we would then tape, transcribe, and analyze six more groups.

We administered to approximately 100 11th-grade students a Student Opinion Questionnaire requiring the student to respond either for or against or "No opinion" to each of the 20 issues selected in the first stage. The students were also requested to mark those issues which they were strongly for or strongly against. (This Student Opinion Questionnaire is contained in Appendix C.) Students were then selected at random to form six groups, with the restrictions that each group have three pro and three con, that each student had indicated strongly for or strongly against the issue to be discussed, and that each group be essentially balanced on sex. Three groups were to discuss Population Growth and the other three to discuss Legalized Abortion.

The students read the appropriate information booklet on the day prior to the group discussion. The groups were told that half of them were for the issue and half against, and that they were to identify and resolve their differences. (A copy of these instructions are contained in Appendix D.) Each discussion was supervised by one of the experimenters (one of the staff) but were conducted freely, such that the only reason for his presence was to keep the students on the topic. The discussion lasted approximately 90 minutes. (Students showed great enthusiasm for the discussions, and would not terminate the discussion after the planned 60 minutes.)

After transcribing and analyzing the six group discussions, no new categories were found. Thus it was not necessary to tape any more group discussions.

Deletion of Reliability Assessment. The final stage of the original design had involved a reliability study to assess interjudge agreement. However, for two reasons we did not include such a reliability study.

(1) We found in developing the criteria for the categories that complex judgments of intent, motives, functions, content, and context were required to identify those activities which

These transcripts confirmed our earlier observations that students instructed to resolve conflict ignore these instructions and justify their own positions.
seem central to the value discussions—for example, such activities as challenging a position, countering a fact, raising objections to a criterion, or proposing a solution. Thus it seemed clear that to develop reliable criteria for the complex judgments involved in identifying such categories of activities would require much more work than is possible within the scope and resources of the project.

(2) It seemed best to devote the resources of the project to the interpretation and conceptualization of our value discussions in terms of the rationality game and ego game, since the main implications of this project seem to be in this direction.
CHAPTER III

RESULTS

This chapter will treat two main kinds of results in our study. The first kind of result involves the observation system developed, i.e. the initial interpretations, the categories, and tentative criteria for these categories. Here we encountered further difficulties in our design, these stemming mainly from the variety and complexity of the judgments required of the categories to meet the four criteria specified at the start of Chapter II. The second kind of result involves our proposed interpretations of group decision-making involving value discussions in terms of two games which we designate as the rationality and ego games.

Initial Interpretations of Discussions

In the initial phases of developing the observation system we attempted to find an interpretation which would encompass the variety of rather distinct phenomena we observed in the discussions. Three of these interpretations seemed fruitful.

One interpretation of the discussions was in terms of dialectic. Dialectic involves, in general, some form of argument in ordinary discourse, and is exemplified most clearly by the familiar Socratic method. Participants in the discussions countered, challenged, made distinctions, raised objections, pointed out inconsistencies, and the like, all with regard to another person's position, his proposed solutions, facts, concerns, and principles. However, after working with this interpretation, we decided that it was too imprecise and context-bound to meet our criteria.

The second interpretation of the discussions emphasized the resolution of value conflict, which involves participants reducing their differences in some way. This interpretation is based mainly on the resolution of value conflict as a kind of "logical" analysis of conflict into its sources, i.e. component differences, and then attempting to reduce these differences. Making distinctions, focusing on differences in meanings of terms, facts involved, etc., would all be involved. This interpretation had been used elsewhere in our research program on values with fruitful results (Meux, 1971). However, this interpretation did not seem to account for much of the discourse. Further, this interpretation required excessively complex judgments of the discourse to yield reliable categories, whether of the outcome of an activity or of the intent of an activity.
A third interpretation of the value discussions also turned out to be too narrow in that it did not describe much of the discourse. It seemed initially that the basic idea of a value discussion was to solve some problem in an area of concern more or less commonly shared by the participants. In such an interpretation, participants propose solutions, compare solutions, test implications, etc. However, we found very little of this, especially in the high school students, who spent most of the time in stating and justifying their own position.

It finally became clear that in order to meet the criteria for our observation system we would have to develop categories which specified a limited number of "basic" activities involved in value discussions. As it turned out, these categories of activities incorporated the kinds of phenomena which were the focus of our three initial interpretations. This will be described after the presentation of categories and criteria.

Categories for Activities

We indicated in the previous section three interpretations we considered initially for the variety of phenomena in value discussions. After considerable analysis of these phenomena, and the relations among them it seemed that they could be described essentially in terms of a limited number of activities, such as stating viewpoints, proposing solutions, discussing cases, checking hypotheses, testing a criterion, interpreting a position, challenging a fact, counteracting a meaning-scheme, supporting a value judgment, and the like. Thus we decided to make such activities the basis for our categories.

We then noticed that these activities could be described rather briefly, typically by two terms, where each of these terms refers to a different component of the activity.

One may be called the operation component, and is identified by the verb in the description, such as stating, expressing, refuting, supporting, and testing. The other component may be called the content component, and is identified by the noun in the description, such as value judgment, viewpoint, concern, case, hypotheses, solution, criterion, principle, and meaning-scheme. Meaning-schemes are discussed below.

Dividing the activity into the two components, although oversimplified, seems to have several advantages. (1) The two components seem essentially independent. This allows for a considerable degree of economy of description, which is important for both understanding and feasibility. (2) Briefer description of the criteria is facilitated. Since there are 13 subcategories for the operation component and 11 subcategories for the content component, the assumption of independence allows separate
criteria for the 13 operation subcategories and separate criteria for the 11 content subcategories, thus yielding criteria for a total of 24 subcategories instead of criteria for the total set of 143 categories. Thus, to describe the criteria it is sufficient to have each operation component and each content component represented at least once. (3) The content component emphasizes the elements conceptually involved in rational decision-making and value analysis (Coombs, 1971), especially such elements as value object, value term, value judgment, fact, reason, criterion, and principle. (4) The operation component emphasizes the variety of ways participants operate on the conceptual elements of decision-making and value analysis so as to arrive at some decision about the issue. This should be helpful to educators in deciding which skills and capabilities must be developed to improve group decision-making. (5) It is easier to relate our subcategories to categories and criteria in other observation systems, thus increasing continuity and feasibility.

The categories for activities, then, are obtained from the two independent sets of subcategories, i.e. the subcategories for the operation component of an activity and the subcategories for the content component of an activity. The subcategories for the operation component are designated as follows:

I.A. Stating
   B. Restating, Reshaping, Elaborating

II.A. Requesting
   B. Challenging, Countering

III.A. Distinguishing, Differentiating
   B. Qualifying

IV.A. Interpreting, Reinterpreting
   B. Explaining

V. Integrating

VI. Proposing, Conjecturing

VII.A. Checking, Testing
   B. Agreeing, Accepting, Supporting
   C. Disagreeing, Rejecting, Refuting

2 Assuming the components are independent, of course, the subcategories for the components can be simply multiplied to yield the total number of categories.
The subcategories for the content component are designated as follows:

1. Value Object
2. Value Term
3. Value Judgment
4. Fact
5. Reason
6. Criterion
7. Principle
8. Viewpoint, Position
9. Concern
10. Case
11. Meaning-scheme

(Note that Arabic numerals are used to follow outline form, so that a category may be designated by combining the operation and content designations, e.g. II.A.3 or VII.C.7.)

Since the set of categories is obtained from the two independent sets of subcategories, the categories can be conveniently represented by a grid, as in Figure 1, to be designated as the Category Grid. The use of the Category Grid both presupposes and emphasizes the independence of the operation and content components of activities. The operation subcategories are on the vertical dimension at the left of the Category Grid, and the content subcategories are on the horizontal dimension along the top of the Category Grid. Entries in the Category Grid indicate those categories for which criteria are presented in the next section.

Tentative Criteria for Categories

In this section we present examples of the tentative criteria for the categories. As already indicated, the categories illustrated are those indicated in the Category Grid in Figure 1.

Since we have two independent sets of subcategories, we have two independent sets of criteria, one for the operation subcategories and the other for the content subcategories. However, instead of developing the two sets of criteria equally, we developed more detailed criteria for the operation subcategories rather than the content subcategories. Our reasons for this were that it seemed best to devote project resources to the more complex operation component, that the content subcategories have detailed criteria developed in other observation systems (e.g., Smith, et al., 1967; Smith, et al., 1971),

3At least they seem similar enough to be of some help--our perspective and purposes are sufficiently different to prevent a simple substitution or use of other criteria for our categories.
FIGURE 1

CATEGORY GRID FOR ACTIVITIES

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<tr>
<th>SUBCATEGORIES FOR CONTENT COMPONENT</th>
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<th>11</th>
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<tr>
<td>FOR OPERATION COMPONENT</td>
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<td>Value</td>
<td>Value</td>
<td>Object</td>
<td>Term</td>
<td>Judgment</td>
<td>Fact</td>
<td>Reason</td>
<td>Criterion</td>
<td>Principle</td>
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<td>I.A. Stating</td>
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<td>B. Restating, Reshaping, Elaborating</td>
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<td>III.A. Distinguishing, Differentiating</td>
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<td>IV.A. Interpreting, Reinterpreting</td>
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<td>B. Explaining</td>
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<td>V. Integrating</td>
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<td>VI. Conjecturing, Proposing</td>
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<td>VII.A. Checking</td>
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<td>C. Disagreeing, Rejecting, Refuting</td>
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that the content subcategories are sufficiently identifiable through ordinary language use, or that they are partially specified in sample passages below. (For brief characterizations of the content subcategories, however, see Appendix E.)

I.A. Stating

This subcategory involves a person engaging in an act or activity which includes such things as what is (was) deduced, inferred, concluded, decided, recommended, believed, or what are the issues, criticisms, obligations, etc. More specifically to value discussions, a person may state a value judgment, state a fact, state a reason, state a principle, state a position, etc.

I.A.5. Stating a Reason. In this example, the previous discussion has involved the cost of abortion to the middle class and above. The following utterance states a reason for high abortion costs:

D: If they have legalized abortion, then they are going to have a socialized medicine deal so they can go in and they don't have to pay for them. The reason why we have to pay so much for abortion now is because it's illegal.

I.A.8. Stating a Viewpoint, Position. In this example, the participant is one of several who are starting off the discussion by stating their viewpoints:

B: F said that it should be voluntary...up to the people to make...I mean, make their own decision to control the population. I don't think that people are going to do this mainly because of religious factors and out of ignorance. I think that the government should step in and something should be done about it right now because it is out of hand already. And it is going to go even further.

I.A.9. Stating a Concern. In this example, the participant is one of several who are starting off the discussion by stating their viewpoints and concerns:

M: One of my concerns has been not only for the hunger but for the amount of room, total, there is on the world to live on. If we continue at this rate whether you are rich or poor, there is not going to be enough room for parks or open spaces. I know I've always loved open spaces.

4For more detailed criteria of a similar category, see the Stating criteria in Smith, et al. (1971).
M continued:

You won't be able to look out on the desert and see nothing. There will be buildings or...the world just cannot support that many...increase of people. The standard of living will ultimately be diminished because of a lack of room. No matter if a person's income is increased, his standard of living will be reduced.

I.B. Restating, Reshaping, Elaborating

This subcategory involves a person engaging in restating, reshaping, or elaborating on some--either his own or another's--value judgment, fact, reason, criterion, and the like. In reshaping, the content of the original statement is modified somewhat by emphasizing something needing explicit rendering. In elaboration, some amplification, clarification, and development of some point is made; thus the scope is rather restricted to specific matters.

I.B.2. Reshaping a Fact. In this example, the previous discussion has involved one of the participants stating a fact relevant to legalization of abortion, namely that we do not know when what society has called a human being begins. The participant then reshapes this fact:

J: Yeah, I want to say human being. We had that before, I don't know how we got it switched over to human life. Yeah, human being is what I have here...liberalized abortion involves destroying life which is in the range about which there is controversy about the meaning of the term "human being."

II.A. Requesting

This subcategory involves a person asking for information relevant to the issue being discussed. The request is straightforward, with no intent to raise objections, challenge, or counter.

5 For more detailed criteria for a similar kind of category, see criteria for the Reshaping aspect of episodes in Smith, et al. (1971).

6 For more detailed criteria for a similar category, see the Reporting criteria in Smith, et al. (1971).
II.A.4. Requesting a Fact. In this example, the previous discussion about a criterion associated with an important fact has finished, and the participants are about to discuss a criterion associated with another important fact:

T: Give me a fact that you think has high priority.

II.B. Challenging, Countering

This subcategory involves a person expressing dissatisfaction with what another participant has just said. Rather than the intent being a straightforward request for an increase in the amount of "information" in the discussion, as in Requesting, the intent in Challenging and Countering is to request an increase in the adequacy of the "information" in the discussion. The inadequacy in the "information" pointed out in Challenging and Countering, then, can be in any of the content components. Thus a person may point out inconsistencies in the use of value terms, inadequacies in evidence for facts, confusions in criteria and principles, irrelevance of cases, and lack of justification for concerns.

Challenging and Countering differ, however, in that Challenging is limited to implying or pointing out some inadequacy or deficiency in what another participant has just said, whereas Countering also explicitly offers something believed to be more adequate than what the other participant has just said.

II.B.1. Challenging a Value Object. In this example, the previous discussion has involved whether education will work in controlling population. The participant challenges education as a sound solution (value object):

M: I want to refer to Don's...I think he is relying on the...humans to make wise decisions. I think they will be selfish and will not make the wise decision.

II.B.6. Challenging a Criterion. In this example, the previous discussion has involved the criterion that abortion is acceptable as

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7 A weak sense and a strong sense of challenging can be distinguished, in which the weak sense involves just pointing out that something is inadequate, whereas the strong sense involves specifying what is inadequate.

8 A weak sense and a strong sense of countering can also be distinguished, in which the weak sense involves offering something which is believed to better fit criteria agreed upon by both (all) participants, whereas the strong sense involves offering something which is believed to involve better criteria than the criteria of the other participant(s).
long as the fetus can't be seen. The participant challenges the criterion:

M: Okay, what if you have a new born premature baby at five months, does it really make a difference whether he's outside of the mother or inside. Why does that make such a difference whether he's inside or outside?

II.B.8. Countering a Position. In this example, the previous discussion has involved a position that mandatory control will solve the population problem. The participant counters with his own position:

E. I think there are other solutions to the problem. But I think this world would be in a much worse state if we tried using mandatory control over birth rate and everything. I think that through education, which I already mentioned, that is the only way we will ever reduce the population of the world. Through education, I don't think compulsory sterilization and birth control will work.

III.A. Distinguishing, Differentiating

This subcategory involves a person suggesting or specifying some difference between two (or more) things, objects, actions, etc. with respect to appearances, characteristics, components, and the like. More specifically to value discussions, a person may distinguish, e.g., value objects, value terms, facts, reasons, positions, and cases.

III.A.6. Distinguishing Criteria. In this example, the previous discussion involves when during the course of pregnancy it is acceptable to have an abortion. The participant distinguishes three criteria:

M: I made a distinction as I was reading through this between reverence for life, that's in my first statement by the way, reverence for human life, reverence for a person, gradually it gets closer and closer to what we think of reverence for human beings and the infanticide brings in the value of the person.

III.B. Qualifying

This subcategory involves a person modifying what has been said by adding information, qualifying terms, etc., in order to temper what has been said or to make it more acceptable.

9 For more detailed criteria for a similar category, see the Comparing and Contrasting criteria in Smith, et al. (1971).
III.B.3. Qualifying a Value Judgment. In this example, the previous discussion has involved the complexity of the abortion issue. The participant qualifies his initial value judgment so as to allow for this complexity:

M: So my value judgment is actually a little oversimplified. It should read more that the liberalization of abortion laws is undesirable at this present time until we get more clear on this.

III.B.4. Qualifying a Fact. In this example, the previous discussion has focused on the fact that reverence for life would decrease as a result of legalized abortion. The participant modifies this:

M: No, I want to put a "might" in it somewhere. What I want to say is that reverence for life might decrease as a result of legalized abortion.

IV.A. Interpreting, Reinterpreting

This subcategory involves a person providing a perspective with which to view some position, problem, or aspect of such. Interpretation includes a type of comprehension. To interpret is to tell what a viewpoint or position means; to have the meaning is to have an interpretation. One may interpret his own position, another's position in the discussion, another's position not present, or some general position (social, philosophical, etc.).

IV.A.8. Interpreting a Position. In this example, the discussion has involved trying to clarify society's apparent position on abortion. The participant focuses on the aspect involving reverence for life:

M: Because that's becoming like saying, "Well we're going to put a price now on life." We won't... you're putting a price on life, responsibility, and so forth, 'cause what you're saying is, "Well, society doesn't have the resources to express it's value of reverence for life."

IV.B. Explaining

This subcategory involves a person setting forth an antecedent condition of which the particular event or process to be explained is taken as the effect, or else, giving the rules, definitions, or facts which are used to justify decisions, judgments, actions, etc.

10 For more detailed criteria for a similar category, see the Interpretive Ventures criteria in Smith et al., (1967).
Interpreting and explaining are closely related, of course, in that both are concerned with further understanding. The difference focused on here is that explaining is more concerned with why something is said or done, why something happens as it does, or why something happened as it did.\footnote{For more detailed criteria for a similar category, see the Explaining criteria in Smith et al. (1971).}

IV.B.8. Explaining a Position. In this example, the previous discussion has involved trying to understand the society's position on liberalization of abortion. The participant tries to explain how this position can still express a reverence for life:

\textbf{M:} Yeah, so maybe what happens is some kind of compartmentalization. That all these positive things that you list, all these are so important that they swing the balance toward liberalization of abortion laws and then we shut it off, and say "okay, I guess in that area we have to sacrifice reverence for life somewhat because of all these other important values. But let's not do it anywhere else. You know, let's stop right there."

V. Integrating

This category involves a person bringing together two or more elements of the issue being discussed. These elements may be objects, courses of action, aspects of plans, criteria, and the like. More extensive integrating may involve a higher level of generality or abstraction, such as proposing a new solution, new generalization, new criterion, new principle, or even a new viewpoint or position. Integrative solutions may turn out to be especially important in facilitating rational resolutions of value conflict.

V.4. Integrating a Fact. In this example, the previous discussion has involved specific facts about how people react to legalization of drugs and abortion. The participant integrates these specific facts into a more general and abstract generalization called "anti-rule behavior":

\textbf{M:} There's a guy called Szasz, you've read some of his stuff. He has a phenomenon he calls Anti-Rule Behavior. It doesn't make any difference what the rule is some people are going to want to go against it. So the question would be the percentage reduction in illegal abortion. Would it be fantastic or would it be a little tiny drop-off.

V.6. Integrating a Criterion. In this example, the previous discussion has involved elements of a new abortion law and how it might embody various values. The participant integrates these elements...
into the highly general and abstract value of quality of life for the child and society:

S: Maybe we should talk about, it seems to me that all this is tied up in making some kind of a judgment about either what kind of life this child is going to have or maybe the people around him and how he's going to affect society. With Rubella the child is born blind usually and possibly deaf.

VI. Proposing, Conjecturing

This category involves the first phase of some variation of trial and error. For example, a person may propose something for consideration, suggest something to check on, offer a conjecture as a focus for refutation, develop a hypothesis to test, introduce a supposition for the sake of argument, and the like.

In this category, some value object, value judgment, criterion, case, or the like is proposed or conjectured, with a request -- implicit or explicit-- for some kind of reaction, check, test, what might happen, whether what might happen is desirable or not, etc. 12

VI.1. Conjecturing a Solution (value object). In this example, the previous discussion has involved how the population can be controlled. The participant proposes his own solution:

D: I think we have heard enough on the pros and cons on the issue and how we stand. So let me make a proposal here of what I would do or how I feel the problem should be attacked. Again, remembering that I am against mandatory control, I think that if a massive educational program was instituted, and there's no question that the government has the resources when the vast majority of our tax money is spent on war...I mean, you know, some of that money can be diverted and it won't be nearly as costly...nearly. So if some of this money was diverted and some workable educationed systems and institutions were set up...family planning, you know, all sorts of groovy things like that...then we could educate the people and teach them what the problems of overpopulation are, and for the poor family, what problems they run into by having too

12 For more detailed criteria for a similar category, see the Conditional Inferring criteria in Smith et al. (1971).
D continued:

many people in their families as dependents to have
to put their limited income on and that. Then if we
could educate the people so that they can make
their own decisions, their own choices wisely, then
those that can support the children...then that's
good.

VI.10. Proposing a Case. In this example, the previous dis-
cussion has involved voluntary control as a solution to the popu-
lation problem. The participant proposes the following case:

D. What are you going to do with the man that says I
don't give a damn about your voluntary population,
I'm going to raise them all and he is living in
the slums. What are you going to do with that type
of man? Are you going to tell him, well, I'm sorry
sir there's nothing we can do about it if you want
to have those twenty children. That's his problem,
yet you have welfare right now...you have living in
the slums right now. You don't go out and support
them, you give them welfare sure, but you don't try
to go out and support them. It is the same thing
as the man who would have twenty kids in the slums.
It is the same thing.

VII. A. Checking, Testing  B. Agreeing, Accepting, Supporting
C. Disagreeing, Rejecting, Refuting

This category involves a variety of interrelated activities
related mainly to the category of Proposing and Conjecturing. Thus
after a person proposes or conjectures a value judgment, fact,
criterion, or position, there then is an attempt to support or to
refute it. Activities in this category vary with respect to whether
a process or product is involved, whether an attempt is to support
or to refute, and the extent to which criteria are used or stated.
These variations are the basis of the subcategories.

In VII.A the activities involve a process, whereas in VII.B
and VII.C the activities involve a product. In VII.B the activities
involve agreeing and supporting, whereas in VII.C the activities
involve disagreeing and refuting.13 Within each of VII.B and VII.C,
the activities vary from no criterion (even implicit) as in agreeing
and disagreeing; to at least one reason or criterion necessarily
involved, either that it was used or could be provided on request.

13 See Popper (1968) for the logical differences between support-
ing and refuting.
as in accepting and rejecting; to at least one reason or criterion explicitly given, even ahead of time, as in supporting and refuting.

VII.A.7. Testing a Principle. In this example, the discussion has involved the participant using the role exchange to test his value principle on guaranteed minimal yearly income (Coombs and Meux, 1971; Meux, 1971). First he identified the people most adversely affected by his judgment, exchanged roles with these people, then clarified his feelings in this role. He then states the final results of testing his principle:

T: I think it softens my position, the role exchange does, because of the moral concern getting a little more over-ride than the economic concern. So, perhaps role exchange is beneficial in this particular case, bringing the conflict a little closer.

VII.B.8. Supporting a Position. In this example, the previous discussion has involved a person stating a position on population control which includes compulsory sterilization. The participant gives his reasons for supporting this position:

B: I agree with A. I think something has to be done right now. I mean like all you who say like well, he has ten kids and he doesn't want to get sterilized that is his problem. I think it is going to be our problem very shortly and it already is now. And I believe it's going to get worse and I think we should do something about it right away.

VII.C.8. Rejecting a Position. In this example, the previous discussion has involved the morality of population control if it benefits society. The participant gives his reasons for rejecting this position:

D: I take exactly the opposite stand. I feel that society is for the betterment of the people and not for the betterment of society. And I again, there is no stand that we can take as...against mandatory population control; only that on a moral basis the facts say it must be controlled. But to change the whole value system of, well... they are talking about the entire world...the whole values and beliefs and norms within so many societies, that is such a great step to take. As far as the government saying only one wife,

14See Popper (1968) for a discussion of refuting as necessarily involving an attempt to falsify some conjecture.
D continued:

it's been pretty well that way all along down history until the Mormons came and said, "Well, let's try polygamy out." But you see they... the beliefs and the values of the country and the society around the Mormons said "No." And so I think that that's why that came up to such a head was because the Mormons were trying to step out of their limits. And I think that you are going to be stepping on toes in trying to step out again when you start to talk about mandatory population control.

Meaning-Schemes

The purpose of this section is to describe briefly a new and interesting phenomenon we identified in the discussions. The reader has undoubtedly noticed that there are no entries in the Category Grid in Figure 1 under the Meaning-Scheme content sub-category. We delayed discussion of this content component to give it special attention in this section. Here we will describe meaning-schemes briefly, suggest a number of functions for meaning-schemes, relate meaning-schemes to the rest of our scheme, and give examples of meaning-schemes from our discussions.

The concept of a meaning-scheme is described briefly by Fingarette (1963) as a pattern for organizing behavior and experience. Included in such patterns are rules, principles, strategies—all of which offer ways of interpreting and understanding behavior and experience, and to some extent, ways of guiding behavior. Concepts similar to meaning-schemes include metaphors, similes, and proverbs. Examples of meaning-schemes are:

Let's get to the root of the problem.
Any apple can turn sour.
One swallow does not a summer make.
You're babbling again.
You're wandering from the main point.

(Note that the meaning-scheme in the last two examples consists of or is conveyed by only one word, that underlined.)

Meaning-schemes seem to have a number of functions. We have identified several: (1) Meaning-schemes classify a situation or some aspect of it as part of a more general but familiar and comprehensible class of situation.\(^{15}\) (2) Meaning-schemes integrate the aspects or parts of the situation. (3) Meaning-schemes directly or

\(^{15}\) Compare with Scriven's conception of understanding as the reduction of the incomprehensible to comprehensible relations among comprehensible components (1966).
indirectly evaluate the situation, often in a negative and pejorative way, since the more familiar class of situations is often one which is already evaluated in the often negative and pejorative way. (4) Meaning-schemes guide behavior and action because one of the jobs of evaluation is to guide behavior and action, and because the meaning-scheme may have associated with it actions specific to that meaning-scheme. (5) Some meaning-schemes seem to function so as to stop rational discussion of a point.

Meaning-schemes relate to both our activity components and content components. Since meaning-schemes function to give meaning to a situation, they are similar to our Interpreting subcategory. Since meaning-schemes function to integrate aspects of the situation, they are similar to our Integrating subcategory. Since meaning-schemes function to evaluate a class of situations and to guide behavior and action, they are similar to criteria. (See Coombs, 1971, and Coombs and Meux, 1971, for functions of criteria.)

The similarities of meaning-schemes to both activity and content components present a problem about which component to place meaning-schemes with. Our tentative decision was to place meaning-schemes with the content component, in spite of the clear resemblances to Interpreting and Integrating. Our reasons essentially were: (1) meaning-schemes are essentially like criteria, and criteria presuppose some extent of interpreting and integrating; and (2) meaning-schemes are a way of conveying imagery and salient, important, and common experiences in our lives—both of which are kinds of content.

In the remainder of this section we will present a set of examples of meaning-schemes.

In this example, the previous discussion has involved one of the participants (M) saying that we have a choice as to what kind of race of people we want on earth. The following meaning-scheme on the quality of life is a response to this position:

MI: What M said about what kind of race of people do we want, good heavens, it's not like we're raising rats for a better breed, you know, bigger and better, and we're planning out all the strains and everything.

The evaluative and critical function of this meaning-scheme is that anything like raising rats for a better breed is undesirable. The imagery is of something abhorrent, probably because to achieve a situation in which our choices are realized may involve a degree of control over our lives that we would find highly unacceptable.

In this example, the participants are starting the discussion with statements of their positions on abortion. To state his position, the participant uses two meaning-schemes on not getting at
the cause of the problem, the second an elaboration of the first:

B: But I don't think abortion is the way to get to the root of the problem. It's like a...you know, I don't know, it would be something like say a weed or something you keep snipping off at the top but it keeps growing.

The evaluative and criterial function of these meaning-schemes is that courses of action, plans, or policies which do not get at the cause of a problem are not particularly desirable, so that the implications for behavior are that one shouldn't do things that don't get at the cause of a problem. The imagery in the second meaning-scheme is much more of a vivid elaboration of the imagery of the first.

In this example, the previous discussion has involved various moral aspects of the abortion problem. The following meaning-scheme is on the relevance of morals to the abortion problem:

E: What you are actually killing is a blastostyle. It is a thing like this, a ball with cells, and there is no morals against squashing a bug.

The evaluative and criterial function of this meaning-scheme is, of course, that in an argument or deliberation on abortion one need not consider moral questions. The most striking aspect of this meaning-scheme, however, was that it completely stopped what had been a rather rational discussion of the moral aspects of abortion, as can be seen easily in the transcript of the subsequent discussion.

In the following two examples, the main function of the meaning-scheme is its implication for action. The first meaning-scheme is on the need for caution in restricting our freedom to choose abortion, whereas the second is on the need for action in controlling population:

D: You just can't jump into it.

B: ...it is out of hand already.
The Rationality Game and
The Ego Game

Our main aim in this section is to propose an interpretation which attempts to make sense or improve the understanding and practice of value discussions in group decision making--i.e. a group of people having to make a decision which involves some form of resolution of value conflict. The interpretation proposed is that two fundamentally different but related games are played in value discussions involving resolution of value conflicts. We will designate these games the rationality game and the ego game. We shall indicate briefly the arguments for this interpretation and the ways in which this interpretation corporates the variety of phenomena and activities described above.

The rationality game involves the gathering of a range of information relevant to the decision to be made, the assessment of this relevant information, and the testing in some form or another of the principles involved in the decision. The aim of this rationality game is to arrive at as sound or rational a decision as possible, i.e. one which resolves the value conflict rationally, and has implicit in it certain ideals or standards which function as rules of the game. The aim of the ego game, on the other hand, is to win a victory or persuade the opposition to adopt one's own position. The rules which highlight the ego game are strategy rules which maximize the probability of the person winning, persuading, or at least maintaining his position in the situation. Power and influence play a significant part in the ego game. In our proposed interpretation of value discussions, much of what goes on is some variation, mixture, or blend of these two games.

The clearest cases of the rationality game are those in which reasons and facts are being discussed with moderate levels of feeling intensity, and their relevance tested in some form of dialectic devoted to discussing reasons and facts and increasing the understanding of each participant's viewpoint. The clearest cases of the ego game are those in which participants use various power plays and defense mechanisms such as denial and bolstering to help maintain and strengthen their position in the face of attack and challenge.

We have several reasons for proposing the rationality and ego game interpretations. Some of these are reasons for any game interpretation. Others would apply to the particular games we have proposed. A number of reasons for any game interpretation are important. (1) The game interpretation provides a quick terminology that has an immediate sense to it; thus participants in a conflict resolution can spot more quickly what is going on--"Ah, now you've switched to the
ego game, haven't you?" or "Why have you suddenly switched to the ego game when we agreed we were going to play the rationality game?"

(2) The interpretation in terms of games may make it easier for participants to catch on to a value discussion, since they will find it easier to interpret games in terms of their own conceptions of games, and also because their initial interpretations can be broadened and deepened. (3) A related point is that since the notion of playing games is so widespread at any developmental level (in several aspects of development—cognitive, moral, etc.), our interpretation may help facilitate communication and understanding among the levels. (4) The notion of "playing the game better" seems to fit into educational purposes. For example: (a) There may be a motivational advantage in that a student can see himself as making progress even though he may improve in any of a variety of aspects of the games. (b) It is possible that a sense of identity and continuity may result from one learning more and more of "the same thing." (One of the difficulties we have had in our work with students is a sense of all of this hanging together: "What are we doing all of this for?") (c) The rationality and ego game interpretations might also fit quite well into the playing of simulation games. (d) Since games are defined in terms of rules, participants in the rationality and ego games may be stimulated to learn the rules of the game. (Berne, 1964). (e) Finally, this interpretation makes it easier to relate layman's and expert's conceptions of rule-related phenomena.

Why have we proposed the particular game interpretations, i.e. the rationality and ego game interpretations? First, let us examine the reasons for proposing the rationality game interpretation. As we indicated above, activity descriptions contain a content component. This content component includes elements from evaluative schemes, such as value judgments, facts, criteria, and principles. These form an essential part of concepts of rationality, and make explicit four standards of rationality which are implicit in our evaluative decision-making behavior. Coombs also points out the relevance of these standards for resolution of value conflicts. In short, aspects of behavior observed in value discussions are also essential aspects of the concept of rationality.

Let us now examine the reasons for proposing the ego game interpretation. (1) One depends somewhat on a logical interpretation or analysis of viewpoint. Moore (1967) points out that the concept of viewpoint has three components: the frame of reference, the values,
and the self. Thus, since one of the important phenomena of a value discussion is the stating, expressing, and maintaining of one's viewpoint, this must involve the self or ego. (2) A variety of interruptions, discontinuities in the flow of the discussion, and various seemingly irrational behaviors seem best interpreted in the light of such ego defense mechanisms, as denial, bolstering, compartmentalizing, and the like.18 (3) Such activities as disputing, challenging, discrediting, and strengthening one's position by weakening the other's position all seem interpretable in the light of the operation of the ego. (4) At this point it seems that we can link the ego game interpretation to ego development theory, which contains in one conceptual framework both conflict and conflict-free conceptions of ego functioning (Hartmann, 1958; Loevinger, 1966, 1969; Bower, 1967). Thus this will include both the defense mechanisms and reasoning phenomena.

How shall we conceptualize the rationality and ego games so as to maximize important theoretical criteria, such as fruitfulness and power, along with the practical criteria presupposed in our reasons for the game interpretations? Clearly a variety of choices and alternative conceptualizations are open to us, so that we are faced with a "blend" of conceptual and empirical questions that has been expressed succinctly by Toulmin (1971):

> Where the concepts of a science are changing, accordingly, the crucial questions are never purely empirical ("What is the case about X?") nor are they ever purely analytical ("What do we already mean by X?"). They are always, in Hamlyn's word, a "blend" of the conceptual and the empirical ("What is there for one to mean by X?").

(Page 38)

Three ways of clarifying the choices involved in our conceptualization of the two games will be indicated briefly here: the initial stages of the conceptualization, a clarification of the aims of the games, and an initial formulation of the rules of the games.

Initial Formulation

We started with rather simple notions of the two games, corresponding to rather commonsense notions of rationality and ego. Thus, in the rationality game we observed the gathering and proposing of relevant information and reasons, and the support of these when questioned. In the ego game we observed the advocating of one's own position on whatever was judged to be effective, attempts to weaken and even discredit the other's position, and denial and bolstering of one's own position when challenged.

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18 Note how forms of these appear as fallacies in logic and critical thinking books.
Then we started broadening the notions of both rationality and ego. The analyses of Taylor (1961) and Coombs (1971) and ego development theory (e.g. Loewinger, 1966, 1969; Kohlberg, 1969) were important in broadening the conception of ego. Ego development theory highlights the desirability of conceptualizing the two games so that they are level-independent. It gradually had become clear that we had been conceptualizing the rationality game in terms of lower levels—such as the zero-sum game. Our initial attempts at a level-independent conceptualization are reported in the sections below on the aims and rules in the two games. The distinctions are, of course, somewhat oversimplified at this point.

Aims of the Games

Rationality Game. The rationality game can take either a strong form or a weak form, the form determined by the aim of the game. The aim of the strong form is to have each participant accept a solution to the conflict which meets the standards of a rational value judgment. Such a solution could be called an integrative solution. The aim of the weak form of the rationality game is to have each participant accept the solution to the conflict on the basis of a minimax standard. One example of such a solution is a compromise. In this weak form of the game, the participants would probably attempt for a while to achieve the strong aim but after a while would settle for this weak aim. We found an exemplary statement of this by one of our high school participants:

It seems that we are both taking...that everybody here is taking very rigid stands either very pro or very con. Could we maybe pool our ideas together and come up with some sort of compromise maybe between the two problems? Where you are not going to be stepping on individual rights and yet helping...oh, well, alleviating the problem of a too rapid growth in population. Anybody got any ideas?

Ego Game. The ego game also can take either a strong form or weak form, the form determined by the aim of the game. The aim of the strong form is winning a victory, the achieving of superiority—in extreme form crushing the opposition. Debate provides an example of the strong form of the game, although in a somewhat different context. The aim of the weak form of the game would be to advocate, to persuade, or to urge one's position on the other participant(s). Kinds of things done in advertising and propaganda provide examples of the weak form of the game, again in a somewhat different context.

Rules in the Rationality and Ego Games

One way of developing our conceptualization of the two games is by elaborating the implications of two kinds of rule, definitional rules and strategy rules. The first kind of rule, definitional rules, determines what the game is in terms of correct performance in a game. For example, definitional rules for chess include the rules of how to move each piece in the game, what constitutes a stalemate, etc.
Strategy rules, on the other hand, provide guides for playing a game well, successfully, or effectively. For example, the various strategies in chess are of this type. When performance does not meet strategy rules, we do not speak of incorrect performance, but rather of poor, inept, or even thoughtless, ineffectual performance.

Rules in the Rationality Game. Our initial conceptualization of the definitional rules for the rationality game would include Coombs' (1971) analysis of such rules as the standards of rationality—with the various epistemic rules subsumed by the various standards—and Taylor's (1961) analysis of normative discourse—including rules of relevance, rules of inference, rules for normative sentences, rules for verification sentences, and rules for validation sentences. Assuming that these various rules are definitional rules, these would imply that informal and material fallacies are incorrect performance in the rationality game.

Our initial conceptualization of the strategy rules in the rationality game would include such rules as the following:

- Avoid tendentious references to side issues (Naess, 1965).
- Avoid tendentious renderings of other people's views (Naess, 1965).
- Avoid tendentious ambiguity (Naess, 1965).
- Define conflict as a small conflict rather than a large conflict (Deutsch, 1969).
- Minimize commitment before attempting to resolve conflict (Deutsch, 1969; Maier, 1970).

Rules in the Ego Game. Our initial conceptualization of the definitional rules for the ego game assumes that there is a similarity between the definitional rules of the rationality game and the definitional rules of the ego game, since a certain minimal level of performance on the activities falling under the rationality rules—e.g. the standards of rationality—is required even to play the ego game. Further, it looks as though any kind of activity which would facilitate winning or persuading would be, almost by definition, a part of the ego game. Note, for example, that informal and material fallacies are not considered to be incorrect performance in the ego game, as they are in the rationality game; rather, they are considered to be strategy rules (assuming they work)!

Our initial conceptualization of the strategy rules in the ego game is in terms of activities to which one could apply such terms as clever, brilliant, sneaky, ineffectual, and the like. The kind of behavior specified as incorrect in the rationality game may be
effective in the ego game, so that it is not only acceptable, but is actually to be encouraged or even prescribed. The participant in this game thus may use persuasive definitions, fallacies, stifling and discussion-terminating meaning-schemes such as "That's too much wandering" or "Any apple can turn sour," or appealing meaning-schemes such as "Well, that ought to give us something to hang our hats on" or "Well, now we'll be able to see the end of the tunnel with my plan."

Passages Illustrating Rationality and Ego Games

The previous sections have emphasized the conceptual aspects of the conceptual-empirical blend in our developing conceptualization. This section emphasizes the empirical aspects--passages which indicate activities in one of the games.

Passages Illustrating Rationality Game. In the following passage from a discussion of reverence for life, the participant states his reason for his concern:

M: I think one reason I'm emphasizing this is that I think that the issue has gotten so complex, not just this issue, a lot of things in society have gotten so complex we can barely handle the short term things, and because of that we've gradually lost sight of this; other things become more important and so I'm stressing this value because it's been lost in the shuffle.

In the following passage from a discussion of legalization of abortion, the participant distinguishes several principles:

M: I made a distinction as I was reading through this between reverence for life; that's in my first statement by the way, reverence for human life, and reverence for a person. Gradually it gets closer and closer to what we think of reverence for human beings, and the infanticide brings in the value of the person.

In the following passage from a discussion on voluntary birth control, the participant proposes a case to test the position discussed:

D: What are you going to do with the man that says I don't give a damn about your voluntary population, I'm going to have twenty kids. I'm going to raise them all and he is living in the slums. What are you going to do with that type of man? Are you going to tell him, well, I'm sorry sir there's nothing we can do about it if you want
to have those twenty children. That's his problem, yet you have welfare right now...you have living in the slums right now. You don't go out and support them, you give them welfare sure, but you don't try to go out and support them. It is the same thing as the man who would have twenty kids in the slums. It is the same thing.

In the following passage from a discussion on population control, the participant proposes a solution for group consideration:

D: I think we have heard enough on the pros and cons on the issue and how we stand. So let me make a proposal here of what I would do or how I feel the problem should be attacked. Again, remembering that I am against mandatory control, I think that if a massive educational program was instituted, and there's no question that the government has the resources when the vast majority of our tax money is spent on war...I mean, you know, some of that money can be diverted and it won't be nearly so costly...nearly. So if some of this money was diverted and some workable educational systems and institutions were set up...family planning, you know, all sorts of groovy things like that...then we could educate the people and teach them what the problems of overpopulation are, and for the poor family, what problems they run into by having too many people in their families as dependents to have to put their limited income on and that. Then if we could educate the people so that they can make their own decisions, their own choices wisely, then those that can support the children...then that's good.

Passages Illustrating Ego Games. In the following passage from a discussion on reverence for life in the abortion issue, participant S attempts at first to discredit the position of the Chinese as not really involving a reverence for life (but then retracts her attack somewhat right at the end):

S: They could look at it like the Chinese and the way they used to kill girl children and keep boy children and that was sort of specific reverence for life. A certain kind of life, I suppose.

M: That was a quality of life, that's an issue we term "quality of life" per se.

S: But that seems like kind of funny distinction to be able to make and still value life that you could just say that's kind of compartmentalized
S continued:

thing. And I mean the Chinese I think really valued...is it the Chinese and Japanese both that value old people, I think and the elders and things like that and yet at a certain point if you're ready to die they take them to those houses and we would think that that would be cruel and not valuing them and yet in a way they...it's acceptable to them.

In the following passage from a discussion on population control, the participant attempts to protect his position by denying that there is a problem in the United States, and even uses a pejorative meaning-scheme (harping on that) to try and stop the discussion of the problem in the United States:

K: Well, let's get off this thing about the United States. The problem is not in the United States, it is over in the other countries. So the whole argument probably about schools will fall right apart. You have got to have some other kind of thing. They have to go to have their people talking to them or people that will easily come into somebody's society and talk with them such as missionaries. Such as they did many years ago introducing the Christian religion. You have got to have somebody that can talk to them and can persuade them. So, well, let's just get off the United States, that's not where the problem is, it's in the other countries, not here. The main problem is not in the United States, though. I really don't think we should discuss this right now and just harp on that all the time. But, yeah, you have got to control it all over.

In the following passage from a discussion on a viewpoint involving population control through education, the participant attempts to "crush the opposition" by asserting that "you have just defeated yourself completely:"

D: If they don't have the pride to go and get contraceptives then...you just defeated yourself. Education isn't any good then. You can educate the people about contraceptives, but they are not going to go get them because the poor people can't afford them and they don't have...they have too much pride to go get them. So that is their habit...they become pregnant and so they have to have the abortion to avoid having the children. So you have just defeated yourself completely.
Problems in Our Current Conceptualizations

Several questions arise with our initial conceptualizations. One question involves the relations between definitional rules and strategy rules, and involves the basic issue already mentioned concerning the blend of the conceptual and empirical: "What is there for one to mean by X?" Since definitional rules are rules for the use of a term, and since we are still in the stage where we must continue to search for the best of alternative conceptualizations, we are not now able to delineate definitional rules for either of the games. Our problem is one of gradually specifying (the conceptual aspect) and determining (the empirical aspect) the activities which are to count as the ego game.

Another question involves the relations between the definitional rules in the rationality game and the definitional rules in the ego game. One way of characterizing the relations between the definitional rules of the two games is that the definitional rules of the ego game presuppose the definitional rules of the rationality game. This relation is similar to that between telling the truth and lying. One cannot have the concept of lying before one has the concept of telling the truth, for clearly one cannot decide to or intend to deceive another person--i.e. intentionally not tell the truth--before he has the concept of telling the truth. Similarly, one probably cannot play the ego game before one can play the rationality game with at least some minimal level of skill. Some form of argumentation is necessary to defend one's position against attack and to attack the other person's position. Thus it seems that a person's success at the ego game presupposes some skill at the rationality game. As an extreme, e.g., one can decide to play the rationality game in order to win the ego game if he thinks that by so doing he will win the ego game.

The third question involves the restriction imposed by a game conceptualization, a restriction which would not appear with behavioral phenomena over which a person has no control. Since these are game conceptualizations the definitional rules must refer to activities over which persons have control, i.e. which allow for rule-following. Otherwise the concept of incorrect performance would make no sense.

19 A separate point is whether a person can be more successful at the ego game if the other participant thinks it is a rationality game.
CHAPTER IV

CONCLUSIONS

A tentative observation system was developed for activities in group decision-making. Activities are assumed to be describable in terms of two independent components, the operation component and the content component. The categories in the observation system are then generated by two independent sets of subcategories, one for the activity component.

The subcategories for the operation component are designated as follows:

I. A. Stating
   B. Restating, Reshaping, Elaborating
II. A. Requesting
    B. Challenging, Countering
III. A. Distinguishing, Differentiating
     B. Qualifying
IV. A. Interpreting, Reinterpreting
     B. Explaining
V. Integrating
VI. Proposing, Conjecturing
VII. A. Checking, Testing
    B. Agreeing, Accepting, Supporting
    C. Disagreeing, Rejecting, Refuting

The subcategories for the content component are designated as follows:

1. Value Object
2. Value Term
3. Value Judgment
4. Fact
5. Reason
6. Criterion
7. Principle
8. Viewpoint, Position
9. Concern
10. Case
11. Meaning-Scheme

Examples of the categories generated are: Stating a Value Judgment, Challenging a Fact, Interpreting a Principle, and Proposing a Position.

One content subcategory in particular was especially interesting, the one called meaning-schemes. A meaning-scheme is a pattern
for organizing behavior and experience, such as a strategy, metaphor, simile, and the like, which functions to interpret and integrate aspects of a situation by means of some imagery, to guide behavior and action, to evaluate a situation as similar to a more general class of situations, and at times to stop rational discussion.

In addition to the observation system, an interpretation of group decision-making was developed in terms of two games, designated as the rationality game and the ego game. The games were conceptualized in terms of aims of the games and rules in the games.

The aim of the rationality game is either to achieve a solution to the issue which maximizes the values of all participants (strong form of the game) or a solution which meets a minimax standard for each participant (weak form of the game). The aim of the ego game is to achieve a victory (strong form of the game) or to persuade the other participants to adopt one's own position (weak form of the game).

The rules of the games, of two kinds, define the game (definitional rules) or provide guides for successful or effective activities in the game (strategy rules).

Definitional rules of the rationality game include such rules as those for assessing truth and relevance of facts and criteria, whereas strategy rules include such rules as those for avoiding tendentious rendering of issues, defining a conflict as a small conflict, and avoiding excessive commitment before a discussion.

Definitional rules in the ego game include those for any activity which helps win or persuade, whereas strategy rules include such rules for activities using persuasive definitions, fallacies, and pejorative or appealing meaning-schemes.
CHAPTER V
IMPLICATIONS

In this chapter we propose a variety of implications for the observation system and the interpretations of value discussions in terms of the rationality and ego games.

Implications of the Observation System

We found that the descriptions of participants' natural activities in a value discussion corresponded closely to the language used in our ongoing research strategy for the development of capabilities for arriving at a rational value judgment and for resolution of value conflict. This correspondence implies that the student will benefit in terms of a savings, since he will be learning things with which he already has some degree of familiarity.

The observation system can also be used as a basis for developing a "live" observation system which can be used by teachers, moderators and participants to improve their performance and subsequent outcomes in value discussions.

Implications of the Game Interpretations

It is our judgment that the implications of the rationality and ego games are sufficiently far-reaching both in and out of educational settings to warrant considerable further theoretical and practical research and development.

Research. Two implications for research seem clear. (1) In the results section we mentioned the temptation to make interpretations of the rationality and ego games in terms of conceptions of ego development and moral development. Currently in progress is a doctoral dissertation by one of the authors investigating the relationships of ego and moral development concepts to the usage of the operation and content subcategories of the observation system developed in this project. It is expected that this thesis will also shed light on the relationships of the developmental notion and the rationality and ego games. (2) An interesting speculation is that the conception of the aim of winning in the ego game changes from stage to stage (of ego development or moral development). In the lower stages the conception of winning will be associated with a zero-sum game, in which if one person wins the other(s) must lose. However, at the highest stage the conception of winning will be that everybody can win if and only if everyone's values are maximized in the group decision. Thus in this speculation the two games would coalesce at the highest stage.
Further, the conception of the rules for problem-solving—including conjecture and refutation (subcategories VI and VII)—will also change so that the rules at the highest stage will be geared toward integrative solutions.

Program Development. We have found that the activities required to meet the standards of rationality—which specify the definitional rules of the rationality game—can be programed to facilitate their learning by students and teachers. This development is currently being undertaken in a Title III project directed by the principle investigator.20

Research-Practice Relations. The game interpretation makes it easier to relate the layman's conceptions of rule-related phenomena to the expert's conceptions of rule-related phenomena. To the extent to which the expert's conceptions are relevant to value discussions, this should help reduce the lag between the development of new ideas in research and their application in the classroom.

Motivation for Learning Group Decision-Making. A knowledge of the game interpretation will allow a student to see himself as making progress in the games, even though he may improve in a variety of aspects of the games among which he cannot readily see the connections. Since games are defined in terms of rules, participants in group discussions may be stimulated to learn the rules of the games and thus improve their performance.

Application to Conduct of Group Decision-Making. The game interpretation provides both moderators and participants with a terminology and an associated set of concepts to help identify and understand more easily what is going on in the discussion. For example, since the notion of playing games is so widespread at any developmental level, our game interpretation may help facilitate communication and understanding among participants at different developmental levels. With respect to moderators, the game interpretation should help pinpoint problems associated with participants playing the ego game when they should for some reason be playing the rationality game.

One situation involving a form of group decision-making is simulation games. The game interpretation might allow participants to integrate these games into the playing of simulation games.

20 The title of the project is Value Analysis Capability Development Programs.
REFERENCES


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Meux, M. Studies of learning in the school setting. Review of Educational Research, 1967, 37, 539-562. (b)


RESPECTS Continued


Scriven, M. Values in the curriculum. Social Science Education Consortium Newsletter, 1966, 2, 1-3. (b)


Rating of Topics

In this booklet, you will find a list of 20 topics concerned with controversial issues. We would like you to rate each topic on a 5-point scale on the following dimensions:

a. **Knowledge**—How much you know about the topic compared with other high school students.

b. **Interest**—How interested you are in the topic.

c. **Importance**—How important you think the topic is.

For example, you might think that your knowledge of the topic "Drugs in the High Schools" is about average; you are very interested in the topic; and you think it is very important. You would then mark the scales as follows:

1. **Knowledge** (compared to other high school students).

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Remember to mark all three scales—Knowledge, Importance and Interest—for each topic. If you have any questions, ask the monitor.
Topic: Liberalized Abortion

1. Knowledge (compared to other high school students).

Know   Know   Know   Know   Know
Nothing  A Little  Average  Quite A Bit  A Lot

2. Interest.

Not At All  Interested  Interested  Interested  Very Intersted
Interested  A Little  Average  Quite A Bit  Interested

3. Importance.

Not  Somewhat  Important  Quite  Very
Important  Important  Average  Important  Important

Topic: Revolution in U.S.

1. Knowledge (compared to other high school students).

Know   Know   Know   Know   Know
Nothing  A Little  Average  Quite A Bit  A Lot

2. Interest.

Not At All  Interested  Interested  Interested  Very Intersted
Interested  A Little  Average  Quite A Bit  Interested

3. Importance.

Not  Somewhat  Important  Quite  Very
Important  Important  Average  Important  Important
### Topic: Pornography

1. **Knowledge (compared to other high school students).**

   - Know
   - A Little
   - Average
   - Quite A Bit
   - A Lot

2. **Interest.**

   - Not At All
   - Interested
   - A Little
   - Average
   - Quite A Bit
   - Interested

3. **Importance.**

   - Not
   - Somewhat
   - Important
   - Quite
   - Very

### Topic: Socialized Medicine

1. **Knowledge (compared to other high school students).**

   - Know
   - A Little
   - Average
   - Quite A Bit
   - A Lot

2. **Interest.**

   - Not At All
   - Interested
   - A Little
   - Average
   - Quite A Bit
   - Interested

3. **Importance.**

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   - Important
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### Topic: Overpopulation

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### Grades vs. Learning

**Topic:**

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### Topic: Capital Punishment

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Topic: Mafia

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Topic: Inflation

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## Present-day Morality

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### Topic: Communism in America

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### Topic: Prostitution

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### Pre-marital Sex

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### Women's Liberation

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### 18-year old Vote

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### SST (Supersonic Transport)

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### Utah Liquor Laws

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APPENDIX B

INFORMATION BOOKLETS:
LEGALIZATION OF ABORTION
POPULATION GROWTH
LEGALIZED ABORTION

The passages in this booklet were taken from:

*The Terrible Choice: the abortion dilemma*
Edited by Cooke, Robert E., *et. al.*
THE PROBLEM

In most nations, laws do not exist for the regulation of tonsillectomies; yet all states and most nations have laws or statutes, liberal or conservative, concerning abortions. But why this difference in hospital regulations and national laws?

Both tissues are alive; both are composed of material substances, chemical compounds, DNA and RNA molecules. Their physical structures may vary slightly, but basically they are both globs of matter composed of cells which, in turn, are composed of chemicals.

Modern thought appears to reveal only three ways in which fetal tissue and tonsillectomy tissue are different.

First, fetal tissue is unique. There never was nor ever will be another piece of tissue identical to it; whereas the tonsil tissue removed is closely related to all the other tissue in the same person's body. Second, fetal tissue is different from the parent organism. Every biologist can testify to this difference. Modern genetics has proven that the chromosome composition of fetal tissue, its genetic makeup, is fixed at conception and differs from that of the parents—-from that of the mother as much as from that of the father. Your tonsils are yours and yours alone—but a mother’s fetal tissue is not hers. Which raises the interesting question: Whose is it?
THE PROBLEM (cont.)

The third difference reveals the answer. It is the potential of the human fetal tissue which concerns us. Unless molested, unless life-support is interfered with or withdrawn, human fetal tissue has the potential or capability—indeed the likelihood—of developing into an individual like ourselves, to be like us, to be in our image, to be human. It is the humanlike potential of the tissue involved that has moved society to set abortion apart from other surgical procedures. p 2

A BIOLOGICAL BACKGROUND TO DEBATE

At twelve weeks the fetus is about 3½ inches in length, p 37

Regardless of when the movements of the fetus are first felt, the event is called "quickening". The legal implications of this phenomenon will be discussed later, but this twelve-week stage is important to the medical issue of abortion. Before this point it is possible to perform an abortion by the relatively simple method of dilation and curettage. After twelve weeks, however, doctors can no longer use this procedure with safety. p 37

The twentieth week is another major milestone. Not only has half the pregnancy now passed, but from the twentieth week medical terminology no longer refers to the birth of the fetus as an abortion or a miscarriage. Now, any birth will be called premature delivery. p 38

While the legal profession might for obvious reasons have to settle on a system of fixed definitions, the development of the fetus is obviously a continuous process. The ability to survive varies with the state of medical art and science. Two, five, or ten years from now scientific progress may well reduce actual viability from twenty weeks to eighteen to fourteen, perhaps even to twelve. If the law kept pace with such scientific progress it would have to change its definition of "legal abortion" regularly. p 38

The potential for future development is as great in the fertilized egg as in the blastocyst, as in the embryo, as in the fetus, as in the premature, as in the infant, as in the child. When is there a difference in this process that permits intervention or interference with life at one stage but not at another? Why? At what stage? For what reasons? p. 39

THE STATISTICAL BACKGROUND

A committee, appointed in 1955, reached the conclusion that there might be in the United States anywhere from 200,000 to 1,200,000 abortions per year. p 42

The general assumption has been made that the greater the contraceptive knowledge, and the greater the effectiveness of the contraceptive, the smaller the need for abortion will be; but here again no evidence has been adduced to substantiate the assumption. p 42
THE STATISTICAL BACKGROUND (cont.)

Based on the same studies, the Conference participants did make some comments on who seeks an abortion. They pointed out that in the studies cited four out of five abortions are performed on married women who already have children, but who want no more. p 43

THE LAW IN THE UNITED STATES AND ELSEWHERE

During the middle of the nineteenth century in both England and throughout the United States, laws were passed prohibiting abortions altogether, with a few exceptions regarding the life and sometimes the health of the mother. p 48

There are only a few countries, particularly in Western Europe, where the laws against abortions are even more restrictive—virtually forbidding any abortions—than they are in the United States. The countries of Northern Europe—Norway, Denmark, Sweden, and Finland—occupy about the middle ground between restrictive and permissive abortion laws. p 49

Several other countries have policies which amount to permitting abortion simply upon the request of the mother. Abortion at the request of the most is permitted in the Soviet Union, Bulgaria, and Hungary. p 51

In Poland, Yugoslavia, and Czechoslovakia, abortions are permitted under a broadly written set of circumstances. Japan permits abortions under a broad set of circumstances which relate to the health of the mother, but in effect amount to abortion on request. p 51

Recent figures indicate that in the Northern European countries there are about 3 to 7 abortions for every 100 births. In Eastern Europe and Japan the number of legal abortions ranges from about 30 per 100 live births to 140 per 100 live births (in Hungary).

It is a subject of some debate how much, if at all, the wider availability of legal abortions has diminished illegal abortions in these countries. It is agreed, however, that illegal abortions have not disappeared, and it is believed that in some countries they have not decreased. A number of reasons have been offered for this. One is that in the Northern European countries women must still seek official approval for abortion, and that the illegal abortions are probably undergone by women who do not want to do this, by women who do not receive permission, and by women who seek illegal abortions because of bureaucratic delays in receiving official permission. Another suggested reason for the continuation of illegal abortion in Northern Europe and in countries where abortions are virtually available on request is that a legal abortion still involves a lack of privacy; it is believed that this is particularly a problem for women who do not live in the larger cities.

Doctors as well as social scientists caution against trying to draw conclusions from the experiences of other countries about the likely effects of changes in the abortion laws in the United States. p 52
The AMA's new policy position is that it is opposed to induced abortions except when: (1) There is documented medical evidence that continuance of the pregnancy may threaten the health or life of the mother, or (2) There is documented medical evidence that the infant may be born with incapacitating physical deformity or mental deficiency, or (3) There is documented medical evidence that continuance of a pregnancy, resulting from legally established statutory or forcible rape or incest may constitute a threat to the mental or physical health of the patient; (4) Two other physicians chosen because of their recognized professional competence have examined the patient and have concurred in writing; and (5) The procedure is performed in a hospital accredited by the Joint Commission on Accreditation of Hospitals. p 53

Some others believe that the law ought to withdraw altogether, leaving the question of abortion up to the individual. Most of these people believe that before there is an abortion, there should be a "cooling-off period," during which there would be some counseling. The point out, by the way, that one of the penalties of restrictive abortion laws is that so many women undergo secret abortions without the benefit of prior counseling—counseling which might turn an unwanted pregnancy into a wanted pregnancy or might lead women to the supportive services they need. p 56

THE SOCIAL SCIENTIST's PERSPECTIVE

The social scientist suggest that the abortion laws have these social functions:

---They express a responsibility ethic which lies very deep in the psychosocial structure of our society. They say, in effect, that individuals are and must be responsible for the consequences of their acts; that whether or not they are, they ought to be.

---They are a way of holding up certain explicit ideals about sex relations, marriage, and children in our society, which are important even if they are not always adhered to.

---They are an expression of male superiority and female subjection, and a way of expressing and enforcing what we conventionally call a double standard. p 61

What we have is not simply a situation in which large numbers of people break the abortion laws, but a situation in which large numbers of people feel that this is the acceptable thing to do. p 62

One thing that can occur, indeed has occurred, in this situation is a de facto decision that, with few exceptions, we will not enforce the law. p 62

Spokesmen for the poor fear that at some point, there might be attempts to force abortions on welfare recipients. p 64

When the working code and the law clash, as they do in the case of the abortion laws, the likely result, according to the social scientists, is a change in the law. With development of the "morning-after" pill, taken within a few hours after intercourse, the line between contraception and abortion becomes increasingly blurred. p 65
THE SOCIAL SCIENTIST'S PERSPECTIVE (cont.)

What, then, are likely to be the effects of liberalizing the abortion laws--for whatever reason, and to whatever degree? Here there are two kinds of questions: What are the likely effects in terms of the number of women who seek, and actually undergo, abortions? What are the likely effects on our society--in terms of our attitudes and behavior? The truth is that it is impossible to offer any certain, even any probable, answers. p 65

It is reasonable to assume, or it is at least possible to assume, that a loosening of the abortion laws would result in a rise of the number of women who seek abortions.

The next question therefore is: What would be the effects on our society of more permissive abortion laws? A major concern is, of course, that this would diminish our reverence for life, our instinct for protecting the helpless, our concern that all forms of human life receive protection. But we simply cannot know whether this sort of thing will result. Again, cross-cultural comparisons are not very helpful. There is no evidence that in, say Sweden, where abortions are more widely condoned and practiced, reverence for life is any less than it is in the United States. To take a more dramatic example, it could be pointed out that at one time the Eskimos practiced infanticide, but there are no indications that in other regards they did not respect life—that they were particularly warlike, or particularly inclined toward killing in general. p 66

It has been observed that under the current situation we do not, as a culture in practice define a previable fetus (before the 20th week of pregnancy) as human life; we do not baptize each fetus (even all Catholics do not, despite the fact that Canon Law requires it), nor do we hold abortionists guilty of murder.

On the other hand, it also is not clear to what extent liberalization of the abortion laws will solve some of the stated problems with the present system. Perhaps, in fact, it will not make much difference for the poor, since they are always at the end of the line for services. It is also argued that, nevertheless, a structure of equality of opportunity is very important in itself. p 67

A way to look at the possible effects of changes in the abortion laws is not in terms of their effects on society, but, simply, on women who want abortions. Should individuals be permitted to be self-determining in this matter, or should they not? p 67

Because the prospective effects of different actions are indeterminable, we are left with making judgments about resolving conflicting values and conflicting interests within existing contexts. p 67

THE PHYSICIAN'S PERSPECTIVE

The geneticists tell us that the genetic material to produce an adult is in the fertilized egg. "It doesn't matter," said a geneticist, "whether it is at three months of pregnancy, at birth, or at ten years of age ... you are destroying the same human being." Biologically, therefore, human development is a continuous process from conception to birth and beyond. However, there are medical and medical-legal differences attached to the fetus at different stages. The fetus aborted—naturally (in a miscarriage) or in an induced abortion—before twenty weeks does not require a birth, death, or stillbirth certificate, does not require legal interment, and is treated as a pathological specimen. p 72
To decide to abort a potentially defective child involves making very difficult and serious decisions: that a certain degree of defect is or is not tolerable; that the possibility of a certain degree of defect is or is not tolerable; that someone else's life is or is not worth living. 

No generally accepted psychiatric criteria for abortion have been established as yet. The inherent imprecision of the psychiatrist's indices leads some to say that since so little is known there ought to be minimal permission for abortion on the grounds of mental health; it leads others to say that if a woman says that she does not want the child, that ought to be reason enough for granting an abortion, and that there ought to be broad legal permission for this.

Many, perhaps most, physicians believe that abortions should not be treated as strictly a medical matter, like appendectomies, subject only to decisions by doctors and patients; they believe that society, through the law, should have a voice. One thing that doctors quite naturally agree on is that they prefer that women receive medically safe abortions from licensed physicians than from unqualified, illegal abortionists.

The abortion issue turns in part on the question: When does human life begin? The ethics panel's statement of consensus framed its conclusion modestly: "The fetus, therefore, at least from blastocyst, deserves respect as human fetal life."

On the basis of the scientist's finding that human development is a single continuous process from the fertilization of the ovum to the achievement of adult personhood, the argument concludes that it would be arbitrary and irrational to choose a given point in the continuum (whether the detection of a fetal heartbeat, or "quickening" or viability, or birth) and assign it as the beginning of human life.

Some ethicists see the conceptus as a genetic package, to be respected for its potentialities but not to be equated with fully human life. Others will make distinctions between the few-week-old fetus and the viable fetus.

Wider acceptance of abortion, rather than indicating a lack of reverence for life, may seem to the secular humanist to demonstrate new respect for the quality of life and new willingness to lessen needless, meaningless physical and spiritual suffering.

At least some, however, find no serious ethical problem with abortion, since they believe that humanness is "an achievement not an endowment," and thus is present only when the socialization process has begun outside the womb.
Views such as these, it should be noted, are not confined to secular humanists. Elements within liberal Protestantism and Reform and Conservative Judaism may share all or some of the secular humanist views, just as Protestants—notably Professor Ramsey and Karl Barth—defend positions popularly identified with the Roman Catholic Church. p 87

Some medical advances tend to reinforce the "natural-law" position shared by most Roman Catholic moralists and some Protestants. They argue that the shifting point in time of viability suggest the arbitrariness of selecting any fixed point within the continuum of development which can sensibly be defined as the beginning of humanity. Viability has been one of the most popular methods of establishing humanity. If it can move around in time through medical developments, we are, according to this argument, basing our judgment on extraneous factors which will change.

Therefore, one clear-cut ethical position of evident relevance to the political problem affirms that (1) the product of conception is from its beginning a truly human person; (2) the direct taking of innocent human life is always wrong. (One exception is admitted by some: direct abortion to save the mother's life.) In political terms, the position states that any society which grants to itself or to individuals license to override the inviolable right of life of any person, including an unborn child, has radically exceeded its competence and violated its own integrity. p 88

The reasons offered for rejecting this approach are many and various. If the fetus is to be defined, these critics believe, it would be reasonable to affirm that "essentially" it may be regarded as a part of the woman's body; or, even if a separate entity, as a coherent system of unrealized capacities rather than as a person.

Other critics of the natural-law approach believe that regardless of the status of the fetus, the rights assigned to it should not be automatically regarded as absolute, superior to all the other rights and values which may be present in the special circumstances which give rise to requests for abortion. p 89

Many who are against permitting abortions would say that rather than extend permission for getting rid of unwanted children, we ought to extend the resources of our society to take care of those children. Some express concern that to the extent the moral pressure against abortion is relaxed, so will the incentives to relieve conditions which lead to abortions. p 91

THE LAWYER'S PERSPECTIVE

One participant in the discussion of the legal panel pointed out that to some lawyers the present state of the law provides a basis for challenging the concept that the fetus is a human being whose right to life is no more subject to cancellation than any other innocent person's. The very existence of a special term for the act—"abortion"—it is argued, differentiates it from murder, and the sanctions applied for illegal abortion are much less serious than the penalties for deliberate homicide. Though the woman who undergoes an abortion is necessarily a party to the act, a conspirator and accessory, she is never prosecuted. This suggests a generalized social perception, implicitly recognized in law, that while pregnancy is ordinarily to be respected and supported, termination of pregnancy is not the same thing as the taking of human life. p 94
THE LAWYER'S PERSPECTIVE (cont.)

Abortion is punished less severely than murder because it threatens society less seriously—and protection of society, not the assignment of degrees of moral guilt, is the chief business of the law. p 94

Acknowledging that moral values have relevance to law, Dean Manning said that not all acts regarded as socially immoral ought to be proscribed by criminal law. p 95

Because he believes that "probably the major cause of our juvenile problem today is unwanted children," Judge Ketcham concludes that "the criminal law should withdraw from its present position in this country of prohibiting the termination of pregnancy within the first twenty weeks of pregnancy." Society should see to it, however, that "a mother, making this important decision... receives judgment and concern and understanding." p 96

American Civil Liberties Union questions the constitutionality of laws which permit abortion only to save the life of the mother, offering these grounds: such laws are vague; as applied, they deny equal protection of the law to the lower socioeconomic groups; they are so unreasonable and arbitrary as to constitute a deprivation of life and liberty without due process of law; they arbitrarily deny to physicians the liberty to practice their profession in accordance with their best professional judgment; they are a denial of the right of marital privacy, with its concomitant right to decide whether and when to have children, in violation of various constitutional provisions held to have been contravened in the Griswold case by the Connecticut statute forbidding the use of contraceptives; they are possibly violative of the First Amendment clause forbidding the establishment of religion and guaranteeing separation of church and state. p 96

A fourth argument advanced for change is that the law is enforced chiefly against the poor. To this, opponents reply that nearly all of the criminal laws bear most heavily on the poor both in terms of the poor being more likely to be apprehended and more likely to be inadequately defended and so more likely to be punished.

There is no reason for picking out this law unless on other grounds one favors abortion. p 98

The argument that abortion laws resemble those permitting heresy trials calls forth the rejoinder that heresy trials attempted to control belief and opinion, whereas abortion laws are concerned with behavior. p 98

Against the view that abortion laws, to the extent they are founded on belief that the fetus is a person, constitutes an establishment of religion, it is evident that this belief need not derive from specifically theological tenets. p 99

A compromise approach, not necessarily associated with any fixed position on the morality of abortion, calls for postponement of further changes in abortion laws pending the availability of more information. p 103
POPULATION GROWTH

The passages contained in this booklet were taken from:

Population in Perspective
THE WORLD POPULATION EXPLOSION

The population of the world at the beginning of this century was estimated at just over 1.5 billion. By 1950 it was 2.5 billion and by 1961 it had reached 3 billion. By the end of 1969 it was over 3.55 billion.

United Nations projections in 1963 estimated a total world population by the year 2000 at a minimum of 5.4 billion (on the assumption that fertility will drop more than it is expected to do), at a medium of 6.1 billion, and at a maximum of 7 billion (on the assumption that fertility will undergo a comparatively small decline). Since 1963 even the high projections have been increased. The high projections now predict a population of over 7 billion by A.D. 2000, possibly as much as 7.5 billion. On the whole, so far, actual population increase has tended to conform more to the high than the low expectation. It is therefore reasonable to project a doubling of world population in the remaining thirty-one years of this century. p6

Among the major difficulties faced by specialists is uncertainty about the validity of existing data for many of the less developed countries of the world. p7

The rapid growth of world population in this century is particularly striking when compared to the slow rates of the past. For example, it took the human race from the beginning of its existence until the year A.D. 1650 to reach the 500-million mark. By contrast, at present rates of expansion, it will take less than ten years to add another 500 million to the population of the world. p8

The population of the world in 1969 was approximately 3.55 billion; its annual rate of natural increase is reckoned to be 1.9 percent. Therefore the population of the world is increasing at present by about 67 million per year. p9

If world population continues to increase at the present rate of 1.9 percent per year, the total population of the globe will be 25 billion by about A.D. 2065 and 50 billion by about A.D. 2110. p9

50 billion people seems to be the limit of the world’s population if people are to live at all in comfort and convenience. p9

By the end of this century, Asia will have as many inhabitants as the world has now, and 75 percent of the world’s population will be in the lands now known as less developed. p11

It should be stressed that the data given so far do not necessarily constitute accurate predictions. It is important to realize that these projections are mathematical manipulations of figures. They tell us what will happen, based on certain given facts, from a mathematical point of view. Predictions are an attempt to forecast what will actually happen by taking everything into consideration, including factors not open to mathematical calculation. Only the people who are alive in the year 2000 will know the actual population of the world and its various areas. Sensational breakthroughs in population-restriction policies could obviously affect the situation very much, and there are possibilities that such a breakthrough might occur. Nevertheless, at least for the next two decades, population projections will come very near to being accurate. p12
THE WORLD POPULATION EXPLOSION

Few experts would regard population limitation as the only way to cope with the population-resources problem of the actual world today. And there are not many, even among the keenest advocates of the technological optimistic school, who would deny that in present world circumstances population-restriction policies are desirable in many cases. p17

FOOD AND THE WAR ON HUNGER

The population problem is serious enough simply from the standpoint of assuring a reasonably adequate supply of food for the anticipated increase in numbers. But it is far deeper than that since it affects health and nutrition, literacy and education, productive employment and living standards. In essence it is concerned, not with the quantity of human life, but with its quality. At the same time, solving the population problem will not solve everything. Reducing excessive rates of population growth will speed development in the poorer nations. But reductions in birth rates must be accompanied by positive programs of economic development. p19

At present, then there are tens of millions who lack adequate food. It is clear that very great efforts will be required to supply them with what they need. In addition, the number of people in want is growing fast; a good proportion of the 45-50 million increase per year that is the developing countries’ share of the annual world population increase of nearly 70 million is born to hunger. This makes the outlook for the future even more serious. p26

Much of the infant mortality in the developing countries is the direct or indirect result of malnutrition or undernutrition even when children do not actually die of diseases caused by lack of food. In the United States, approximately 25 children out of every 1,000 births fail to survive to the age of one year, and most of the deaths result from prematurity or congenital defects. But in the poor countries of Asia, Africa, and Latin America, published infant mortality rates (and these may be higher in reality) range from 100 to nearly 200 per 1,000 live births. p31

Considering these conditions it is not to be wondered at that married couples in developing countries desire a higher number of children than those in the developed nations. Even so, the average number of live births per woman in the developing countries is 30 percent greater than the desired number of children. p31

Food production in most developing countries has not kept pace with population increase. On account of this, while there has indeed been an absolute increase in food production since the war, per capita food production—food productivity—has not risen greatly in the developing countries. p32

A report published by the OECD sums up the food situation:
(1) Food production in the developing countries taken together has grown more slowly than the demand.
(2) The area of good new land that could easily be brought under cultivation in developing countries has been growing at an increased and unexpected rate.
(3) The population of developing countries has been growing at an increased and unexpected rate.

(4) The surplus stocks of grain in North America have, roughly speaking, been exhausted mainly through exports to less developed areas.

(5) The development aid from the richer countries has, on the whole, not increased.

(6) The debt burden of many developing countries has been rising fast.

FUTURE PRODUCTION AND FUTURE DEMAND

(1) The scale, severity, and duration of the world food problems are so great that a massive, long-range, innovative effort unprecedented in human history will be required to master them.

(2) The solution of the problems that will exist after about 1985 demands that programs of population control be initiated now. For the immediate future the food supply is critical.

(3) Food supply is directly related to agricultural development; agricultural development and overall economic development are in turn critically inter-dependent in a country lacking an adequate food supply.

(4) A strategy for attacking the world food problems will of necessity involve the entire foreign economic assistance effort of the United States in concert with other developed countries, voluntary organizations, institutions, and international organizations. p39

POPULATION GROWTH AND ECONOMIC DEVELOPMENT

In the past decade population growth was partly responsible for the slow increase in per capita income almost universally experienced in the developing countries. It did not constitute the main factor, but it aggravated the other factors by precisely the amount of increase that there was. p127

Reduction of fertility rates would lessen the burden of dependency. There would immediately be fewer children to support. If the decline in fertility continued, the decrease in the number of dependent children would go on. With a lower dependency burden, income per head would rise, as we have seen.

The first effect of this would probably be higher consumption, and there would be a general rise in standards of living. Everyone would eat better and be better housed; all would have a larger share in educational and health services. But there would also be available more money for savings and investment, and even for "forced savings" through taxation. p134
The effect of high birth rates (with lower infant mortality) on these factors may be summarized as follows:

1. High birth rates produce high percentages of dependent children, who are a burden on productivity and increase the burden of near subsistence in relation to income.

2. High birth rates increase the financial burden of education and other public services in relation to income.

3. High birth rates increase population pressure on already densely settled land and thus reduce productivity, the capacity to save, and the possibilities of escape from a poverty trap by succeeding generations.

4. High birth rates create overcrowding, promote disease, and thereby undermine health and reduce productivity; and low productivity means low income and savings. p 141

EDUCATION

The cost of education is one of the burdens of dependency that rapid population causes, as we have already seen. But there is another aspect of the relationship. The level of literacy and the proportion of the population of school age being educated are low in the developing countries, and chances of improving the situation are not enhanced by increasing numbers. p 147

The low literacy rate also explains the imbalance, with grave political consequences, already indicated, between a comparatively small educated elite and the mass of the population that is uneducated and illiterate. p 149

This brings us to the crucial point to which all these considerations have been leading. Educational efforts are largely nullified by rapid population increase. This is a situation that must be faced by positive means, especially by specific assistance from abroad to the educational plans of the developing countries. But also it indicates the need for fertility control, if the problem is not to become completely unmanageable. p 150

Another point with regard to the relationship between education and fertility is that education in the long run also promotes a decline in fertility (though this is not immediately or universally true). An increase in educational facilities will help to strengthen and make successful a program of population regulation. There is a hint of a vicious circle here: population-control measures help to increase education but they themselves are dependent on a certain amount of education. No doubt this is one of the reasons why rapid results cannot be expected, but recent developments seem to suggest that some progress can be made in population-restrictive policies by popular programs without a high degree of education among those who are involved in them. p 151
POPULATION CONTROL

During the early sixties, and especially during the Vatican Council, an important minority of bishops, theologians, and lay people came to the view that responsible parenthood, being a positive and approved value, could be practiced by any effective artificial means, short of surgical sterilization or abortion, as well as by the use of the rhythm method. This view has spread so much since the Council that it could hardly be called a minority point of view, at least in the developed countries; and many married couples have been following it without condemnation from their priests and even with their active encouragement. p 162

WILL FAMILY PLANNING SOLVE THE POPULATION PROBLEM?

Some scientists believe that family planning will fail to solve the population problem. Among them is Dr. Kingsley Davis, who advocates stronger measures, such as a target of zero increase, which certainly would hardly be accepted by most people in developed and developing countries. Therefore the very suggestion is counterproductive. Moreover, the necessity he alleges for these stronger measures seems to me to stem partially from a very pessimistic attitude toward the population programs succeeding in the rapidly changing social conditions of the developing countries. We really are only at the beginning of these programs, and to prejudge their failure at this stage is to my mind not completely in keeping with the scientific attitude. The target to be aimed for should be a considerable reduction in the number of children in the average family in developing countries. It seems much more reasonable to aim at the reduction of really large families of say ten, eight, or six children, to a size of three or four children, and then to assess the economic and social consequences. p 199

The most important point to stress with regard to population policies is the attitude toward them. The focus of such policies must be the quality of human life, of family life, and of the human dignity of the individual, which excessive population growth places in jeopardy. p 200

THE UNITED NATIONS AND ITS AGENCIES AND POPULATION GROWTH

United Nations agencies have been increasingly concerned with population growth and its relation to the various fields of human welfare. They stress in their work programs the importance of the problem of population increase and the need to deal with it by population-restriction policies. However, there have been controversies and reservations in some agencies about different aspects of these programs, and some have not accepted the need for United Nations aid to family-planning programs, or even the need for family-planning programs in any form.

The most urgent conflict confronting the world today is not between nations or ideologies, but between the pace of growth of the human race and the insufficient increase in resources necessary to support mankind in peace, prosperity, and dignity. The present population of 3.5 billion is expected to practically doubled by the year
2000. With the current unsatisfactory growth of resources the world will become more hungry, more crowded, more pressed in every sense. Half of those now living and two thirds of those still to be born in this century face the prospect of malnutrition, poverty, and despair. p 204

There are several points with regard to family-planning programs that may be usefully stressed in concluding the treatment of them.

Such programs must be regarded from a totally human point of view. In other words, they should be intended to improve human life individually and socially, threatened as it is by an overly rapid increase in population. They should not be motivated, however unconsciously, by an anti-life bias, which some extreme proponents seem to have, or by a lack of love for children or lack of respect for the sacred privilege of passing on new life. The purpose must be that those who are born may have a chance of a life more in keeping with their human dignity and right to seek happiness. This applies also to the women who bear the children. p 205
APPENDIX C

STUDENT OPINION QUESTIONNAIRE
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<td>Eighteen-Year-Old Vote</td>
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Below you will find several questions relating to contemporary social issues. In the space provided indicate with an "X" your opinion (yes/no) concerning each issue.

YES  NO

Is pollution really a critical problem?

Is capitalism better than socialism?

Is the C.I.A. too powerful?

Is education in the U.S. today relevant?

Is there a generation gap?
APPENDIX D

INSTRUCTIONS TO PARTICIPANTS OF GROUPS
INSTRUCTIONS TO PARTICIPANTS OF GROUPS

1. This group is made up of three participants who favor (topic) and three who are against (topic).

2. We would like for you to determine the points on which you differ with the overall aim of resolving your differences.

3. Please talk into the microphone and identify yourself. Use a pseudonym if you wish.
APPENDIX E
CHARACTERIZATIONS OF CONTENT SUBCATEGORIES

1. Value Object. A thing being evaluated, such as an object, event, practice, person, or idea. (This includes any course of action, plan, policy, etc., considered as a solution to a problem.)

2. Value Term. A term expressing the value applied to a value object, such as 'good', 'beautiful', 'desirable', 'reliable', 'safe', and 'expensive'.

3. Value Judgment. A statement expressing the application of the value term to the value object, such as 'Pollution is undesirable' and 'Education is good'.

4. Fact. A well-confirmed statement giving a characteristic of a value object.

5. Reason. A consideration relevant to a value judgment, usually a relevant fact but sometimes a relevant criterion.

6. Criterion. A value judgment involving a general class of things, used as a basis for a more specific value judgment such as 'Conditions producing cancer are bad'.

7. Principle. A complex criterion adjudicating the positive and negative characteristics of a class of things.

8. Viewpoint, Position. This includes any of the following viewpoints or positions: any participant, a person not present, a social group organization, institution, culture, or general-abstract (e.g. idealism or behaviorism).


11. Meaning-Scheme. See discussion in Results chapter.