As a contribution toward understanding intellectual and moral growth in late adolescence in a pluralistic society, a developmental scheme representing an evolution in forms of thought and values was abstracted from students' reports of their experience. The raw data consisted of transcripts of recorded "open" interviews held with volunteer students at Radcliffe and Harvard Colleges at the end of each college year. Two samples were used. Of the 9 "positions" in the scheme's main line of development, the first 3 represent a simple right-wrong structure and their adjustment to diversity, the middle 3 trace the move to a generalized relativistic structure in which students face the issue of identity through personal commitment in a relative world, the last 3 represent stages in the growth of commitment. Included in the scheme are 3 conditions of delay or alienation expressing defection from the main line. Testing the validity of the scheme, judges rated interviews under 4 conditions. Within strict limits, the findings are valuable because they demonstrate the feasibility of assessing the epistemological and axiological development of late adolescents, and it validates a common theme of commitment in human development. (JS)

Patterns of Development

in

Thought and Values

of

Students in a Liberal Arts College

A Validation of a Scheme

William G. Perry, Jr.

April 1968

Final Report

Project No. 5-0825
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PATTERNS OF DEVELOPMENT IN THOUGHT AND VALUES

OF

STUDENTS IN A LIBERAL ARTS COLLEGE

A Validation of a Scheme

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U. S. DEPARTMENT OF
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Office of Education
Bureau of Research

NOTE

Certain sentences, paragraphs and materials pertaining to work completed before the initiation of Contract SAE-8973 are included in the INTRODUCTION of this report as they appear in W. G. Perry, Jr., Forms of Intellectual and Ethical Development in the College Years, Copyright President and Fellows of Harvard College, 1968. For any such sentences, paragraphs and materials appearing in this report: Reproduction in whole or in part is permitted for any purpose of the United States Government.

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PREFACE

In this report we describe the validation of a
scheme of development which the staff of the Bureau
of Study Counsel at Harvard College had derived from
students' reports of their experience during their
four years in a liberal arts college. The students
gave their reports in "open" interviews at the end of
each college year. The developmental scheme which we
abstracted from these reports traces the evolving
forms through which the students appeared to construe
the world, with special focus on those forms through
which they considered the nature and origin of
knowledge, value, and responsibility.

Any abstraction of a common theme from such
variegated documents as our students' reports must
face the question of being solely the product of the
observer's way of making order in chaos. The validity
of our abstract scheme of development--that is its
"existence" in the students' reports--could be
assessed, we felt, through the reliability of agree-
ment of lay judges in positioning the students'
reports within the framework of the scheme. This
assessment of validity, carried out under varied con-
ditions, was the central work supported by Contract
SAE-8973 on which we here report.

In this assessment, our developmental scheme
functions as the hypothesis under test. As an hypo-
thesis it cannot be stated as a simple proposition.

It consists of nine stages or "Positions" of structural evolution in a person's outlook toward the world (and of himself in it), one condition of delay in this evolution, and two conditions of alienation from it. Since this hypothesis was elaborated in advance of the tests of validity which are the subject of this report, the reader's convenience will require that we make some departures from the ordinary format of scientific reports, the most important being the provision of a comprehensive introduction.

In the INTRODUCTION which follows the usual SUMMARY, we shall therefore first review the general study from which we derived the developmental scheme, and then proceed to outline the scheme itself, illustrating each stage or "Position" with brief excerpts from the students' reports. We trust that these explanations, though necessarily quite condensed, will provide the reader with the requisite information about the work and thinking of the study prior to the efforts at validation covered by this report itself.*

In CHAPTER I of the report we then address directly the central procedures and findings of the work supported by the present contract (SAE-8973). These procedures and findings are those of validation of the scheme. We considered the validity of the developmental scheme, in respect to the students' reports, as an inference to be drawn from the reliability of agreement among lay judges in independent

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*For the reader interested in examining the developmental scheme and its derivation in more detail, a full account is available: W. G. Perry, Jr., Forms of Intellectual and Ethical Development in the College Years, Monograph, Bureau of Study Counsel, Harvard University, 1968 (357 pp.).

placing or "rating" of students' reports against the several Positions in the scheme. The judges performed such rating under a variety of conditions, and rated students' reports drawn both from the sample from which the scheme was derived (First Sample) and also from a sample obtained subsequently (Second Sample).

CHAPTER II then reports on our procedures in sampling and compares the student samples obtained against the population from which they were drawn. We felt that these matters should be open to scrutiny in this report in more detail than could be provided in the INTRODUCTION.

Similarly, CHAPTER III describes the design and performance of the Checklist of Educational Views, an instrument which we used in the selection of the First Sample. In connection with the Second Sample, more highly compressed in academic abilities than the First, the Checklist failed to replicate its previous covariance with academic performance and choice, and we have therefore accorded it a subordinate place in this report. We include a discussion of this instrument, however, for more reasons than that its statistical study was a part of the work under contract. First of all, such a scale might well be functional in less compressed populations. Secondly, researchers concerned with Likert-type scales may be interested in those revisions of format through which we endeavored to resolve not only certain internal technical problems common to such scales but also certain closely related external problems arising from the use of such scales in an educational milieu.

In the CONCLUSION of the report we summarize in the conventional manner the implications we draw from the study. At the end of the report we include as a fold out, the GLOSSARY and CHART OF DEVELOPMENT as used by the judges in their experiments.

SUMMARY

Purpose

The intent of the work covered by this report was
to assess the validity of a developmental scheme repre-
senting an evolution in the forms of thought and of
values abstracted from students' reports of their
experience in the college years. The raw data con-
sisted of transcripts of recorded interviews held with
volunteer students at Harvard and Radcliffe Colleges at
the end of each college year in two samples: a First
Sample drawn from students in the Class of 1958; a
Second Sample drawn from students in the Classes of 1962
and 1963 (see Chapter II). The developmental scheme
abstracted from these data presents a main line of nine
stages or "Positions" of development and three subsidi-
ary conditions of delay or alienation. In the main line
of development the first three Positions trace the stu-
dents' elaboration of a simple dualistic, right-wrong
view of the world in their endeavor to assimilate to it
their perception of diversity. The middle three Posi-
tions trace the breakdown of this dualistic frame, the
substitution of a relativistic frame for all knowledge
and value, and the students' intimation of the challenge
of personal commitment as a necessity of orientation and
identity in a relativistic world. The last three Posi-
tions trace the evolution of style in personal commit-
ment. Conditions subsidiary to this main line of
development include one of delay, one of escape and one
of retreat, interpreted as alternatives to each step of
the development (see INTRODUCTION).

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Procedures

We assembled in the fall of 1963 a group of six lay judges--graduate students in the humanities. We gave each of these judges a chart outlining the developmental scheme (see Chart, rear of volume), a sample interview protocol, and a manual of instructions. The manual contained a general, non-technical description of the study, a Glossary of twenty terms to which we ascribed special definitions (see Chart), observations on the task of rating interviews against the chart, and a sample rating form (see Chapter I). After the judges had studied these materials, they met with us for one hour of discussion and then undertook the following tasks of independent ratings:

Findings: Rating of Four-year Protocols

We presented the judges with complete, unedited transcripts of four-year sequences of the interviews with 20 students, one student's set at a time. Ten of the students were selected at random from the sample of the Class of '58, ten from the sample of the Classes of '62 and '63. Each judge made his ratings independently of the other judges and rated all of the four interviews in a set. After rating each set, the judges met with us to hand in their rating sheets and then to discuss their experience. These discussions helped to sharpen definitions of terms, but we made no attempt to develop a consensus through revision of the independent ratings previously made.

Assuming that our scheme of development had no validity at all, our nul hypothesis read: "The judges will agree in matching interviews with positions on the chart at a level of agreement not exceeding that attributable to chance."

In the test of this hypothesis, the mean reliabil-
ity of the mean rating for individual interviews for
each of the four years was found to be, respectively,
+0.966, +0.875, +0.872, and +0.916. The probability of
these agreements occurring by chance is less than .0005
(see Table 2, p. 68).

The range of the reliabilities of the mean ratings
of the four interviews of individual students was
between .815 and .978. The narrowness of this range
warrants the conclusion that the judges were able to
agree reliably in relating the scheme to the reports of
all students in the sample (see p. 72).

Findings: Rating of Single Interviews

Since the agreement among the judges exceeded our
expectations for the rating of such complex materials,
we wondered if the judges' knowledge of the student's
year in college was affecting their estimate of his
degree of development. The possibility was contradicted
by the range in the Positions agreed upon for different
students in any one college year, but we nonetheless
undertook a test by giving the judges single interviews
from which we had deleted cues which might identify the
student's college year. Though the judges proved un-
able to guess, beyond the level of chance, which college
year a given interview represented, their agreement
about the student's position on the chart remained at
the level reached with four-year sequences (see pp. 80ff.).

Findings: Rating of Excerpts

We then examined the kinds of statements in the
interviews which had been noted by the judges as con-
tributing most significantly to their rating of

interviews. One judge and the chief investigator then
excerpted from other interviews 40 statements which
seemed similar in character to those which the judges
had noted. These excerpts ran from one sentence to a
page in length. The rating agreed upon for each
excerpt by the one judge and the chief investigator was
then entered as the rating of a single judge and the
remaining judges were asked to rate each excerpt inde-
pendently. Agreement remained at its customary level
(see pp. 83 ff.).

This finding confirmed our notions about some of
the evidence through which the judges developed their
ratings in complete interviews. However, its immediate
usefulness was in validating the use of excerpts in com-
municating to others the nature of the developmental
scheme itself.

Findings: Rating of Condensed Four-Year Reports

In another test of means of communication, we
examined the validity of short, readable portraits pro-
duced by drastic condensation of full-length transcripts.

To test the integrity of such condensed reports,
three judges rated the complete form and three rated the
condensed form of four students' four-year reports.
The results indicated that the condensed version gave a
faithful portrayal for the purposes of rating, with the
exception of the tendency of the edited form to exagger-
ate the simplicity of the impression conveyed of a stu-
dent's outlook in his freshman year (see pp. 86 ff.).
These results encouraged our hope that such condensed,
readable reports would make useful public documents—a
hope with which we had begun our study ten years before.

Limits of the Study

These experimental validations apply only within the most stringent limits of our study. The major limits are dictated by the following conditions:

1) The subjects were student volunteers in a single college during the years 1954 to 1963.

2) The investigators abstracted the developmental scheme from oral reports given by the students during annual interviews with the investigators themselves.*

3) In testing the validity of the scheme the judges performed operations in relation to the data from which the scheme was derived.

Conclusions

Within its own strictest limits the study demonstrates the possibility of assessing, in developmental terms, abstract structural aspects of knowing and valuing in intelligent late-adolescents. Substantively the study confirms the validity of one scheme of such development, showing it to be reliably evident as a theme common to all students' reports sampled. The developments traced in the scheme are of construal rather than of content, of contextual configuration rather than of linear increment, and involve what might be called the growth of hierarchies. Of special

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*The question of the degree of interviewer influence may be partially answered by the fact that we developed the first outlines of our scheme after completing our interviews of the sample from the Class of '58 and before interviewing the sample from the Classes of '62-'63. No difference appeared in the reliability of the rating of interviews from the two samples. (For a discussion of interviewing procedures and interviewer influences see Perry, op. cit.)

interest in respect to the advanced levels of the
scheme is the assessment of the evolution of personal
commitments, again in terms of structuring activity and
style rather than simply of content.

The findings confirm also the feasibility of illus-
trating such developments, at the level of the data
itself, through excerpts and highly condensed student
reports.

INTRODUCTION

We summarize here the derivation and nature of the developmental scheme which is tested by the work covered by the report proper. A full account is available in W. G. Perry, <u>Forms of Intellectual and Ethical Development in the College Years</u>.* We refer the reader to that full account for such matters as the historical setting of the study, its philosophical assumptions, its problems of conceptualization, its psychological derivations, its own assumptions about values, its techniques of data gathering, and its relation to the work of the researchers. In this summary, all such matters--including notation of references--will be kept at a minimum in order to present a concise outline of substance fundamental to this report.

1. Origins of the Developmental Scheme

In 1954 the staff of the Bureau of Study Counsel at Harvard College undertook to explore the experience of the generality of undergraduates over and beyond those who applied to us for counsel. Our purpose was purely descriptive: to sample the great variety of experience we felt to be represented in the student body. Our work as counselors had, however, given us a particular interest in one aspect of this variety: the great range in the ways in which different students

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*Bureau of Study Counsel, Harvard University, Copyright, President and Fellows of Harvard College, 1968.

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appeared to address the diversity and relativism of
thought and values that characterized their liberal
education in the setting of a pluralistic university.
Our initial intent was simply to collect the accounts
of twenty or thirty quite different students as they
might tell us about their experience in open inter-
views at the end of each of their four years in
college.

Procedure

We started out, then, to illustrate the variety
in students' response to the impact of intellectual
and moral relativism. Wishing to secure this variety
in a small sample of students, we felt it best to
obtain the largest possible range between those fresh-
men bringing with them a strong preference for dualis-
tic, right-wrong thinking and those bringing with them
a strong affinity for more qualified, relativistic and
contingent thinking. We considered such differences
as manifestation of differences in "personality" (in
keeping with much psychological thinking of the time).
It had not yet occurred to us that it might be more
fruitful, at least for our purpose, to consider such
differences primarily as expressions of stages in the
very experience we were setting out to explore.

Starting, then, from the research on the authori-
tarian personality (Adorno and Brunswik, et al., 1950)
and G. G. Stern's work at Chicago using the Inventory
of Beliefs (Stern, 1953), we devised a measure which
we called A Checklist of Educational Views (CLEV). In
preliminary trials in 1953 to 1954, the measure
promised to identify students along the dimension we
desired (see Chapter III).

We administered CLEV to a random sample of 313
freshmen in the fall of 1954 and to the same students
in the spring of 1955. On the basis of their scores
on the measure, we then sent invitations to 55 students,
31 of whom volunteered to tell us in interview about
their college experience. Among these freshmen were
some who had scored at the extreme of dualistic think-
ing, some at the extreme of contingent thinking, some
from the mean, and some who had changed their scores
markedly from fall to spring (see Chapter II).

Our interviews with these students in late May and
June of each of their college years resulted in 98 tape-
recorded interviews, including 17 complete four-year
records. We conducted the interviews themselves in as
open-ended a way as possible so as to avoid dictating
the structure of a student's thought by the structure
of our questions. That is, we asked only for what
seemed salient in the student's own experience, begin-
ning interviews with an invitation of the form: "Would
you like to say what has stood out for you during the
year?" After the student's general statements, we then
asked: "As you speak of that, do any particular
instances come to mind?" (Cf. Merton, Fiske and
Kendall, 1952.)

Perhaps as a consequence of these procedures, the
variety in the form and content of the students'
reports appeared at first to exceed our expectations
and to exclude any possibility of orderly comparison.
However, we gradually came to feel that we could detect
behind the individuality of the reports a common
sequence of challenges to which each student addressed
himself in his own particular way. For most of the
students, their address to these challenges as they

experienced them in their academic work, in the social
life of the college, and in their extra-curricular
activities or employment, seemed to represent a coher-
ent development in the forms in which they functioned
intellectually, in the forms in which they experienced
values, and the forms in which they construed their
world. The reports of those few students who did not
evidence this development seemed meaningful as des-
criptions of deflection from some challenge in the
sequence. In this sequence, tendencies toward dualis-
tic thinking and tendencies toward contingent thinking
now appeared less as the personal styles we had
originally conceived them to be and more saliently as
characteristics of stages in the developmental process
itself.*

At this point we radically extended the purpose
of our study and committed ourselves to experimental
as well as descriptive procedures. We undertook 1) to
abstract the sequence we had detected in the students'
reports to form an articulated developmental scheme,
2) to obtain a larger sample of students' reports of
their experience over their four years of college,
3) to prepare the developmental scheme for a test of
validity.

1) We first spelled out the development we saw
in the students' reports in first-person phenomenologi-
cal terms—that is, in the words that might be used by
an imaginary "modal" student moving along the center
line of that generalized sequence of challenges and

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*The developmental aspect of these tendencies was
observed by other researchers of the period (Loevinger,
1959), (Sanford, 1956, 1962), (Harvey, et al., 1961).

resolutions which we thought we saw behind all the
variegated reports of our individual volunteers. We
then described in abstract terms, from the outside,
the structure of each of the major stages (i.e., the
more enduring or stable forms in which the students
construed the world). Concomitantly, we attempted to
articulate those transitional steps (i.e., the more
conflicted and unstable forms) which appeared to lead
from stage to stage, transforming one structure to the
next. With the main theme roughed out, we then traced
around it the major variations which our data suggested
to us, or which our scheme suggested through its own
logic. Among these variations were included those
deflections and regressions which we had interpreted
as "opting out" or alienation from the course of matur-
ation presumed by the scheme.

2) To obtain a second and enlarged sample, we
sent invitations to 50 freshmen from the Class of '62
and 104 freshmen from the Class of '63. These freshmen
were drawn from a random third of their classmates who
had filled out a revised form of the Checklist of Edu-
cational Views in fall and spring. In this instance,
however, we ignored their scores on this instrument
and selected those we would invite through a random
procedure. A total of 109 students responded, result-
ing later, in June of 1963, in 366 interviews, includ-
ing 67 complete four-year reports (see Chapter II).

3) Concurrently with sending out invitations to
the Second Sample, we returned once again to our
developmental scheme in order to reduce its form and
terminology to a kind of scale which would be amenable
to the tests of validation which are the subject of
this report. These efforts resulted in a Glossary of
twenty terms to which we ascribed special meanings, and

a Chart of Development expressing the scheme through a
layout on a single sheet. The reader will find this
Glossary and Chart at the end of this volume and may
wish to fold the sheet out for reference in connection
with the following resumé of the scheme.

2. Outline of the Developmental Scheme

General

The process traced by the scheme may be considered
roughly analogous to that which Piaget calls "de-
centering" at each of his several "periods" of develop-
ment (Flavell, 1963). In parallel with Piaget's theo-
ries also, this "de-centering" will be considered as
mediated by "assimilations" and "accommodations" in
those structures (roughly Piaget's "schema") through
which the person finds meaning in his experiences. Here
this process of developing an "equilibrium" between the
person and the environment would be considered as
occurring at a level or "period" as yet unexplored in
Piaget's publications--a period of philosophizing in
which the capacity for meta-thinking emerges. This
capacity provides for detachment, enabling the person
to become "his own Piaget" (Bruner, 1959), and involves
the person in radical redefinitions of responsibility.

Our scheme departs in major ways from Piagetian
forms, but the analogy will serve for initial orienta-
tion and will explain in particular why our scheme
begins, in Positions 1 and 2, with a recapitulation of
highly simplistic and egocentric forms at a philosophical
level.*

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*The most interesting parallel to our scheme lies in the
work of Harvey, Hunt and Schroeder (1961) and D. E. Hunt

Overview of the Scheme

The Chart which the reader may open out from the
flyleaf of this volume outlines the nine Positions of
development of our scheme, and below these the three
conditions of deflection: Temporizing, Escape and
Retreat.

Most broadly, the development may be conceived in
two major parts centering on Position 5. The outlook
of Position 5 is that in which a person first perceives
man's knowledge and values as generally relative, con-
tingent and contextual. The sequence of structures pre-
ceding this Position describes a person's development
from a dualistic absolutism and toward this acceptance
of generalized relativism. The sequence following this
Position describes a person's subsequent development in
orienting himself in a relativistic world through the
activity of personal Commitment.

In a somewhat more detailed way of conceiving the
scheme, it may be seen in three parts each consisting
of three Positions. In Positions 1, 2 and 3, a person
modifies an absolutistic right-wrong outlook to make
room, in some minimal way, for that simple atomistic
pluralism we have called Multiplicity. In Positions 4,
5 and 6 a person accords the diversity of human outlook
its full problematic stature, next perceives in the
simple pluralism of Multiplicity the patternings of
contextual Relativism, and then comes to foresee the
necessity of personal Commitment in a relativistic
world. Positions 7, 8 and 9 then trace the development

(in Harvey, 1966), work of which we were quite ignor-
ant while completing our formulations in 1960. Termi-
nology differs but the similarities of conceptualiza-
tion are confirmatory.

of Commitments in the person's actual experience.

The Positions of deflection (Temporizing, Escape and Retreat) offer alternatives at critical points in the development. The scheme assumes that a person may have recourse to them whenever he feels unprepared, resentful, alienated or overwhelmed to a degree which makes his urge to conserve dominant over his urge to progress. In the first three Positions in the development, the challenge is presented by the impact of Multiplicity, in the middle three Positions by the instability of self in a diffuse Relativism, and in the final Positions by the responsibilities of Commitment.*

Layout of the Chart

The main line of development extends from left to right as Position 1, Position 2, through Position 9. Above these headings, overlapping bands group these Positions by the most generalized characteristics of their structure: Simple Dualism, Complex Dualism, Relativism and Commitment in Relativism. Each Position is then given its own descriptive title directly below its number. This is followed by a brief outline and diagrammatic representation of the major structure of the Position and its alternates or substructures. The

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*The Glossary of the special terms used, together with their codes, will be found on the page at the end of this volume immediately preceding the Chart. These terms will appear throughout the remainder of this summary. They will be identified in most instances by the upper case initial letter, e.g., Multiplicity, Relativism, Authority, Adherence, Opposition, etc. When a distinction depends on the use of lower-case vs. upper-case initial letters, e.g., authority vs. Authority, the point will be made explicit in context.

alternatives and substructures of a given Position
express the major variations of the central theme as we
found them in the students' reports. Or to use another
metaphor, various linkages of these options offer alter-
native routes and by-ways through which the development
can be achieved.

Positions departing from the main line of develop-
ment are represented in parallel to the development,
below it on the chart: Temporizing, Escape, and Retreat.
The structures of these special categories may have the
form of any of the main Positions directly above, with
some addition, subtraction, or alteration which func-
tions as a delay, detachment, or rejection of the move-
ment expressed in the main line.

As we expected, no freshman in the study was found
to express the structure of Position 1 at the time of
his interview in June. A few did attempt to describe
themselves as having arrived at college in just such a
frame of mind, but none could have remained in it and
survived the year. Position 1 is therefore an extra-
polation generated by the logic of the scheme. At the
end of the year, freshmen normatively expressed the out-
looks of Positions 3, 4, or 5. Most seniors were found
to function in Positions 6, 7, and 8. The Position at
which a student was rated as a freshman was not predic-
tive of the Position at which he would be rated in his
senior year.

Position 9 expresses a maturity of outlook and
function beyond the level we expected the experience of
a college senior to make possible for him, though he
might have intimations of it. Like Position 1, it is an
extrapolation rounding out the limits of the scheme.
On rare occasions, however, one or another of our judges

was so impressed with some senior's report that he did
rate the student at Position 9. In discussion, the
judge would reveal that the rating was a kind of tribute
made in humble, and even somewhat envious, respect.

The tests of the scheme's validity covered by the
present study concern the reliability of the judges'
agreement solely as to the number of the Position (and
special category of Temporizing, Escape and Retreat)
most expressive of a given student's report. The tests
do not extend to the judges' agreement about the sub-
structures and stylistic distinctions coded on the Chart.
In addition to rating each report as to numerical Posi-
tion (and special category) the judges did note on their
rating forms the coding of the substructure and style
they felt to be most evident. Inspection of these rat-
ings suggests to the eye that the judges were in reli-
able agreement about these finer distinctions, but the
demonstration of this reliability required a number of
ratings and a complexity of analysis beyond the limits
of the present study.

In the summary of the scheme that follows, there-
fore, we shall describe the abstract outlines of each
Position and its major substructures rather baldly,
with a minimum attention to particular variations.
This generalized description will serve the reader for
his purposes in this report, but it will leave each
Position rather static and reduce the sense of the
scheme's experiential flow. For a livelier portrayal
of the students' experience we again refer the reader
to the full account (Perry, op. cit.) where the richness
of the data is explored for its own sake.

Position 1, Basic Duality

The outlook of Position 1 is one in which the world
of knowledge, conduct and values is divided as the
small child divides his world between the family and
the vague inchoate outside. From this Position, a per-
son construes all issues of truth and morality in the
terms of a sweeping and unconsidered differentiation
between in-group vs. out-group. This division is
between the familiar world of Authority-right-we, as
against the alien world of illegitimate-wrong-others.
In the familiar world, morality and personal responsibil-
ity consist of simple obedience. Even "learning to be
independent," as Authority asks one to, consists of
learning self-controlled obedience. In the educational
aspect of this world, morality consists of committing
to memory, through hard work, an array of discrete
items--correct responses, answers, and procedures, as
assigned by Authority. This set of assumptions may
indeed be the simplest which a person in our culture may
hold on epistemological and axiological matters and
still be said to make any assumptions at all.

Only three or four of our students seem to have
come to college while still viewing the world from this
Position's epistemological innocence. Furthermore its
assumptions are so incompatible with the culture of a
pluralistic university that none of these few could
have maintained his innocence and survived to speak to
us directly from it in the Spring of his freshman year.
Within the confines of our data, therefore, our portrayal
of this Position involves inferences beyond those
required for structures from which our students spoke
directly. The inferences are derived in two ways:
1) by examination of students' efforts to describe the

outlook in retrospect, 2) by considering the outlook
of students in slightly more advanced positions with
the question: What would the world seem like to these
students without what they describe as new discoveries?

Our construction from these inferences, however,
finds confirmation outside of these data. In our coun-
seling practice we have consulted with entering fresh-
men who have spoken directly from this structure in
sharing with us their efforts to make sense of their
new milieu. The outlook is also quite familiar in
school settings where it sometimes receives explicit or
implicit institutional support. Indeed, there is so
little that is novel about it that it finds an almost
full expression in the Book of Genesis. A freshman
looks back:

> S. When I went to my first lecture, what the
>   man said was just like God's word, you know.
>   I believed everything he said, because he
>   was a professor, and he's a Harvard professor,
>   and this was, this was a respected position.
>   And-ah, ah, people said, "Well, so what?" . . .
>   and I began to-ah, realize.

A salient characteristic of this structure, and
the source of its innocence, is its lack of any alter-
native or vantage point from which the person may ob-
serve it. Detachment is therefore impossible, especi-
ally regarding one's own thought. A person therefore
cannot explicitly describe such an outlook while
embedded in it. This quality is evident in the diffi-
culty our students experienced in trying to describe
the state even in retrospect. Most students who made
the effort could shape only such brief summaries as,
"Well, then I just wouldn't have thought at all," or
"These questions [of different points of view] just

weren't there to worry over, sort of; I mean, I guess
everything seemed too settled. But I wouldn't have
even thought of saying that."

The following excerpt is from a senior's effort
at retrospect:

> S. I certainly couldn't - before that I was,
>   you know, I wouldn't ask. /Yeah/ I
>   wouldn't have - I wouldn't be able to talk
>   on this subject at all. I mean, the-these
>   four years have really sort of set this all
>   up, because I never read any - well, I've
>   practically never read any philosophies or
>   theologies before, so that what I have is
>   just - well, was there you know.

The extraordinary stability of this structure--
expressed by the student's remark "I wouldn't ask"--
results from the consignment of all that might contra-
dict Authority to the outer-darkness of the illegitim-
ate-wrong-other. This dualism leaves the world of
Authority free of conflict. All differences from
Authority's word, being lumped together with error and
evil, have no potential for legitimacy. As illegitim-
ate, they complement and confirm the rightness of
Authority instead of calling it into question:

> S. Well I come, I came here from a small town.
>   Midwest, where, well, ah, everyone believed
>   the same things. Everyone's Methodist and
>   everyone's Republican. So, ah, there just
>   wasn't any . . . well that's not quite
>   true . . . there are some Catholics, two
>   families, and I guess they, I heard they
>   were Democrats, but they weren't really,
>   didn't seem to be in town really, I guess.
>   They live over the railroad there and they
>   go to church in the next town.

This structuring of the world is clearly the pro-
totype of the structure of bigotry and intolerance;
but in its naive origins, as the above excerpt makes

clear, it may simply be the derivative of a homogeneous
cultural setting. A person with this kind of outlook,
then, cannot be termed intolerant or bigoted until he
is confronted with the challenge of change, as he will
be in the later Positions.

Epistemologically, the outlook assumes that
knowledge consists of a set of right answers known by
the Authorities and existing in the Absolute. There
is assumed to be a right answer for everything, and all
answers are either right or wrong. There are no better
or worse answers. In an educational setting, therefore,
the comparative merit of students is presumed to be
determined by the sum of their right answers minus the
sum of their wrong answers, as on spelling tests. From
this and the next two Positions, therefore, instructors'
efforts to get students to think relativistically will
be consistently misperceived, as: "He wants me to put
in _more_ generalizations," or, conversely, "He wants me
to put in _more_ facts."

Knowledge and value are closely intertwined. A
right answer is valid only if it has been obtained by
hard work, and Authority is presumed to know whether
the work has been done or not. Against this background
the perception that some students receive high grades
for little work will precipitate a moral crisis. Acts,
like propositions, are also either right or wrong
rather than better or worse, and virtue is a quantita-
tive accretion of good deeds balanced by not too many
bad deeds, as in "how good I've been this week." Truly
qualitative distinctions of better and worse would
involve contingent judgments by the observer that are
incompatible with the structure. In the same sense
there can be nothing truly neutral, only things which
are "all right," meaning approved or condoned by

Authority and therefore "not wrong." A category for
the intrinsically neutral, which opens a domain into
which Authority has "no right" to intrude, is a later
development (see Multiplicity in Position 4). Here at
the outset "all right" means "permitted" and though the
category opens some area of freedom and diversity, as
for play, it remains strictly within Authority's domain.
Obedience, therefore, solves all moral problems.

> S. Well the only thing I could say to a pros-
> pective student is just say, "If you come
> here and do everything you're supposed to
> do, you'll be all right," that's just about
> all.

In our records the first loosening and accommoda-
tion in this structure will arise from the pressing
need to assimilate diversity in the peer group, especi-
ally in conversations in the dormitory. This is
seconded by a more gradual realization of pluralism in
the ranks of society itself. This latter accommodation
is facilitated, however, by a differentiation that can
be made within the bounds of the structure itself. In
its earliest form, no distinction may be made between
Authority and Knowledge-in-the-Absolute: "the truth"
and "what they want" may be synonymous. However, the
very fact that Authorities themselves constantly refer
to truth as outside themselves and as binding even upon
them--this fact tends to separate out the Absolute from
Authority and to give it an existence of its own in a
kind of Platonic world of ideas. The system then
becomes vulnerable from within, as was the Garden of
Eden. The Tree of Knowledge sooner or later may be
approached directly without the mediation of Authority.
Until this radical approach is made, however, the
structure places Authority, especially in educational

settings, as the mediator between the student and the Absolute. And if the task of Authority is to mete out knowledge in manageable and digestible portions, this makes instructors vulnerable to judgment as good or bad mediators between the students and the Absolute.

In this distinction, Authorities--as mediators--can even be indulged somewhat by being granted their peculiar interest in "theories" and "interpretations" but only so far as these do not seriously obscure the solid truths it is their duty to communicate:

> S. A certain amount of theory is good but it should not be dominant in a course. I mean theory might be convenient for them, but it's nonetheless--the facts are what's there. And I think that should be, that should be the main thing.

An instructor can be perceived as failing of adequate mediation on two grounds. The older and admittedly "experienced" instructors are usually perceived as "knowing their subject" but may be criticized for failing of that "teaching method" which outlines procedure:

> S. He must have taught it for the past thirty years. He uses books, but they were, they were very bad. And the teacher himself didn't eluci-, didn't help us much at all. He came in and he would do problems on the board without thinking of whether the, it was ever getting through to the class. And it usually wasn't.

The young teaching assistant, however, is liable to perception as an outright fraud, a kind of older-brother pretender who arrogates the perquisites of Authority without its justification in knowledge:

> S. I don't know how many guys feel that way, but I, I (laughs) feel, I think a lot of the students do. Just-ah, well, they don't

> have much respect for these men. No kidding,
> they just don't. They really, they really
> think, they think sometimes that they just
> are, the worse things in the world. They ah,
> and, and I think some of them are not as, half
> as smart as some of the students there. The
> students can talk circles around these guys.
> And it doesn't really do your, do them any
> good. For one thing, Professor Black who
> taught us [previously] . . . Christmas! you
> couldn't lose him on one point. Man, he
> wouldn't, you couldn't, you couldn't find a
> question he couldn't answer. I doubt. And
> you respected him for it. Not that you're
> trying to trick the, the section man, but you,
> when you come up with any kind of a reasonable
> question, he can answer it for you, and he can
> answer it well. Whereas the section men
> dwiddle around and, and talk a lot of nonsense.

One might suppose that this distinction between
good and bad Authority might make possible the direct
perception of pluralism in Authority's ranks. In the
records expressive of the early Positions in our scheme,
however, the assumption that there is one right answer
to all questions seems too firm to allow of this assimil-
ation. A revered professor who actually teaches a
pluralistic or relativistic address to his own subject
is initially misunderstood; he is perceived as "teaching
us to think independently," meaning "to find the right
answer on our own" (see Positions 2 and 3).

In our records, the confrontation with pluralism
occurs most powerfully in the dormitory. Here divers-
ity emerges within the in-group with a starkness
unassimilable to the assumptions of Position 1 by any
rationalizations whatever. The accommodations of struc-
ture forced by this confrontation make possible a more
rapid and clear perception of pluralism in the curricu-
lum:

S. So in my dorm I, we've been-ah, a number
of discussions, where, there'll be, well,
there's quite a variety in our dorm,
Catholic, Protestant, and the rest of them,
and a Chinese boy whose parents-ah follow
the teachings of Confucianism. He isn't,
but his folks are. . . . And a couple of
guys are complete-ah agnostics, agnostics.
Of course, some people are quite disturbing,
they say they're atheists. But they don't
go very far, they say they're atheists, but
they're not. And then there are, one fellow,
who is a deist. And by discussing it-ah,
it's the, the sort of thing that, that
really-ah awakens you to the fact that-ah
. . . (words lost)

Pluralism seems to be perceived next in the read-
ings assigned by Authority in the curriculum.

S. Well the one thing, I would say, that strikes
me most, ahh, of course just, just one point-
ah, there are many other ones, but I would
say that course-ah Philosophy 1b takes up,
we've been-ah discussing the modern philoso-
phers, introduction to modern philosophy, it
includes-ah the reading of Descartes, Spinoza--
Descartes, Spinoza, Hume, Kant and James,
and so there, you see it right there, it's
the same, same thing, it's, it's a very wide
range.

In short it appears that it is the extension of
potential legitimacy to "otherness" that brings the
implicit background of Position 1 into foreground where
transformations in its structure may occur. Otherness
in the implicit, unquestioned structure had been con-
signed to an unconsidered limbo--on the other side of
the tracks. Pluralism forcefully demands legitimacy in
the peer group or is more gradually accorded its legi-
timacy in the curriculum offered by Authority itself.
Its assimilation requires accommodations in the most
fundamental assumptions of outlook. These changes can
be rapid or extended through time, but our records

suggest that there are a limited number of paths
through which these changes can lead coherently from
Position 1 to a relativistic view of man's predicament.
The linkages among the variant structures within Posi-
tions 2, 3, and 4 reveal these sequences. The progres-
sion is from thinking to meta-thinking, from man as
knower to man as critic of his own thought.

Position 2, Multiplicity Pre-Legitimate

Looking outward through the structural assumptions
of Position 1, a student will first perceive such
matters as contingencies of thought, contextual con-
siderations, diverse interpretations and relative values
as an undifferentiated, unpatterned mass of discrete
impedimenta which seem to becloud what should be a
direct view of the Right Answers. Where this complex-
ity is presented by Authority itself, which is expected
to elucidate the Right Answers, the anomaly may be
assimilated to the assumptions of Position 1 in either
of two ways. Both of these assimilations reduce com-
plexity to the status of a mere artifact without real
epistemological significance. No accommodations need
therefore be made in the basic assumptions about the
nature of the Truth which is presumed to be "really
there" behind the complexity.

The choice between these two assimilations which
form the alternative substructures of Position 2 appears
to be dictated by the student's temperamental and
developmental tendency toward either compliance (Adher-
ence) or revolt (Opposition) in relation to Authority.
In the Oppositional alternative, the student perceives
the Authorities in question as bad and as failing of
their mediational role:

> S. One comes to Harvard expecting all sorts of
> great things, and then one hits these, these
> Gen. Ed. courses which are extremely, ah, I
> don't know, they're just <u>stupid</u>, most of them.
> I've taken two, I'm taking Nat. Sci. and Hum.
> both of which I found, well, it's an extremely
> confused sort of affair, nobody seems to know
> anything. . . . [about Nat. Sci.] It's
> supposed to teach you to-ah, reason better.
> That seems to be the, the excuse that natural
> science people give for these courses, they're
> supposed to teach you to arrive at more logi-
> cal conclusions and look at things in a more
> scientific manner. Actually what you get out
> of that course is you, you get an idea that
> science is a terrifically confused thing in
> which nobody knows what's coming off anyway.

In contrast the more trusting Adherent student
sees Authority as presenting complexities for his own
good--to help him learn to find the Right Answer on his
own:

> S. I found that you've got to find out for your-
> self. You get to a point where you, ah, see
> this guy go through this rigamarole and every-
> thing and you've got to find out for yourself
> what he's talking about and think it out for
> yourself. Then try to get to think on your
> own. And that's something I never had to do,
> think things out by myself, I mean. In high
> school two and two was four; there's nothing
> to think out there. In here they try to make
> your mind work, and I didn't realize that
> last year until the end of the year.
>
> I. You kept looking for the answer and they
> wouldn't give it to you . . .?
>
> S. Yeah, it wasn't in the <u>book</u>. And that's what
> confused me a lot. <u>Now</u> I know it isn't in the
> book for a purpose. We're supposed to think
> about it and come <u>up</u> with the answer!

These two perceptions are equivalent in providing
no legitimate place, in their common epistemological

assumptions, for human uncertainty. Truth is not per-
ceived as inherently problematical. Even that proced-
ure which the students will later refer to as "inter-
pretation" is here perceived either as needless confu-
sion or a mere exercise. It is in this sense that we
saw them as developmentally equivalent structures in
our scheme.*

Position 3, Multiplicity Subordinate

A Sophomore-to-be is speaking of his preference
for physics:

> S. I'd feel (laughs) rather insecure thinking
> about these philosophical things all the
> time and not coming up with any definite
> answers. And definite answers are, well,
> they, they're sort of my foundation point.
> In physics you get definite answers to a
> point. Beyond that point you know there
> are definite answers, but you can't reach
> them.

In the concession "but you can't reach them," this
student makes room in his epistemology for a legitimate

---

*In the sense of personal individuation, however, the
Oppositional alternative is more advanced: the student
taking this stand has dared to set himself apart from
Authority in a recapitulation, at a philosophical level,
of primary adolescent revolt. Our records reveal, how-
ever, a paradox in the consequences of this forward
step. In the early Positions of the scheme, a student
taking a firm stand in Opposition to Authority rejects
the tools of relativistic thinking which his instruc-
tors in a modern liberal university are endeavoring to
teach. He then has no recourse, but to entrench him-
self in all-or-none dualistic thought. Ironically,
then, the student who is more compliant in these earlier
Positions acquires more rapidly the tools of rational
and productive dissent. This irony may be shown to
result from the revolution in the university's own
epistemological assumptions in the past fifty years
(see Perry, op. cit.) and its consequences will be
remarked on below under Retreat and in the Conclusion
of this report.

human uncertainty. It is a grudging concession and
does not affect the nature of truth itself (only man's
relation to it!), but the accommodation has loosened
the tie between Authority and the Absolute. Uncertainty
is now unavoidable, even in physics. As a consequence,
a severe procedural problem becomes unavoidable too.
How, in an educational institution where the student's
every answer is evaluated, are answers judged? Where
even Authority doesn't know the answer yet, is not any
answer as good as another?

So far Authority has been perceived as grading on
amount of right-ness, achieved by honest hard work, and
as adding an occasional bonus for neatness and "good
expression." But in the uncertainty of a legitimized
Multiplicity, coupled with a freedom that leaves
"amount" of work "up to you" and Authority ignorant of
how much you do, rightness and hard work vanish as
standards. Nothing seems to be left but "good expres-
sion":

> S. If I present it in the right manner it is
> well received. Or it is received . . . I
> don't know, I still haven't exactly caught
> onto what, what they want.

Authority's maintenance of the old morality of
reward for hard work is called into serious question:

> S. A lot of people noticed this throughout the
> year, that the mark isn't proportional to the
> work. 'Cause on a previous paper I'd done
> a lot of work and gotten the same mark, and
> on this one I wasn't expecting it. . . . I
> just know that you can't, ah, expect your
> mark in proportion to the amount of work
> you put in. . . . In prep school it was more
> of a, more, the relationship was more per-
> sonal and the teacher could tell whether
> you were working hard, and he would give
> you breaks if he knew you were working.

> It wasn't grading a student on his aptitude, it was grading somewhat on the amount of work he put in.

This amount of uncertainty can again raise Opposition:

> S. This place is all full of bull. They don't want anything really honest from you. If you turn in something, a speech that's well written whether it's got one single fact in it or not is beside the point. That's sort of annoying at times, too. You can put things over on people around here; you're almost given to try somehow to sit down and write a paper in an hour, just because you know that whatever it is isn't going to make any difference to anybody.

And temptation is set in the way:

> S. It looks to me like it's (laughs) kind of not very good, you know? I mean you can't help but take advantage of these things.

A legitimate though still subordinate place has been accorded for diversity of opinion in Authority's domain. The anomaly of Authority's continuing to grade one's opinions, even in areas of legitimate uncertainty as to the Right Answer, is not satisfactorily resolved by the notion of "good expression." The tension of the quest to find out "what They want" is high.

Position 4, Multiplicity Correlate or Relativism
Subordinate

The students' accounts reveal that in finding some resolution of the question left unanswered by Position 3 they again split into two groups, depending on their tendency toward Opposition or Adherence.

The Oppositional students seize on the notion of legitimate uncertainty as a means of raising

Multiplicity to the status of a realm of its own, correlate with and over against the world of Authority in which Right Answers are known. In the new realm, freedom is, or should be, complete: "Everyone has a right to his own opinion," and "They have no right to say we're wrong":

> S. I mean if you read them [critics], that's
> the great thing about a book like Moby
> Dick. [Laughs] Nobody understands it!

This new structure, consisting of two domains, represents an accommodation of earlier structures which preserves their fundamental dualistic nature. Instead of the simple dualism of the right-wrong world of Authority, we now have the complex or dual-dualism of a world in which the Authority's dual right-wrong world is one element and Multiplicity is the other. The categorization of all epistemological and moral propositions in accordance with this structure remains atomistic and all-or-none.

The student has thus succeeded in preserving a categorical dualism in his world and at the same time has carved out for himself a domain promising absolute freedom. Here again, then, it is difficult to see how the Oppositional student can assimilate from this structure a perception of contextual relativistic thought. However the structure does derive strength from the daring behind its creation, and it is a strength that can serve the student well in the future. The establishment of a domain separate and equal to that of Authority, in which the self takes a stand in chaos, will provide (once contextual thought is discovered to provide some order) a platform from which certain Authorities, and knowledge itself, may be viewed with entirely new eyes.

By whatever means it is discovered, the bridge to
the new world of comparative thought will lie in the
distinction between an opinion (however well
"expressed") and a supported opinion:

> S. Well--it's an opinion, but it's got to be an
> educated opinion. Have something behind it,
> not just a hearsay opinion. I mean, you
> can't form an opinion unless you have some
> knowledge behind it, I suppose.

In this transitional statement it is not yet clear
that a better opinion would not still be one which
simply has "more" knowledge behind it in the purely
quantitative sense; and yet an "educated" opinion is
surely something else than a right answer or a wrong
answer or any opinion. The step to truly qualitative
comparison is now a short one.

There is, however, another pathway from Position 3
to the vision of general Relativism in Position 5. This
path, which the majority of our students followed, does
not involve setting Multiplicity, as a world of its own,
over against the world of Authority. Rather, it allows
the discovery of Relativism in Multiplicity to occur in
the context of Authority's world where Multiplicity is
still a subordinate to Authority as something "They
want us to work on" (Relativism Subordinate):

> S. Another thing I've noticed about this more
> concrete and complex approach--you can get
> away without . . . trying to think about
> what they want--ah, think about things the
> way they want you to think about them.
> But if you try to use the approach the
> course outlines, then you find yourself
> thinking in complex terms: weighing more
> than one factor in trying to develop your
> own opinion. Somehow, for me, just doing
> that has become extended beyond the
> courses. . . . Somehow what I think about

> things now seems to be more–ah, it's hard
> to say right or wrong––but it seems (pause)
> more sensible.

Here the correction from "what they want" to "the
way they want you to think" signals the discovery of
the articulation of the "concrete" with the "complex"
in "weighing" in Multiplicity––a mode of thought which
is the structural foundation of Relativism. The weigh-
ing of "more than one factor," or, as this student
later explained, "more than one approach to a problem,"
forces a comparison of patterns of thought, that is, a
thinking about thinking. For most students, as for
this student, the event seems to be conscious and
explicit; that is, the initial discovery of meta-thought
occurs vividly in foreground, as figure, against the
background of previous ways of thinking, and usually as
an item in the context of "what They want."

Now the capacity to compare different approaches
to a problem in "developing one's own opinion" is
presumably the ordinary meaning of "independent thought."
The paradox for liberal education lies in the fact that
so many of our students learned to think this way
because it was "the way They want you to think," that
is, out of a desire to conform. The challenge of a
more genuine independence then confronted these stu-
dents in the revolutionary perception of the general
relativism of all knowledge, including the knowledge
possessed by Authority itself (Position 5).

Position 5, Relativism Correlate, Competing, or Diffuse

Up to this point the students have been able to
assimilate the new, in one way or another, to the funda-
mental dualistic structure with which they began. The

new, to the extent that it has been anomalous or
contradictory, has naturally forced them to make cer-
tain accommodations in the structure, but these have
been achieved either by the elaboration of dualism
into a dual dualism or by the addition of a new sub-
category of "critical thinking" to the general category
of "what Authority wants."

The students now achieve a revolution in their
view of the world by making a transposition in the
hierarchy or forms of Position 4. They promote Relativ-
ism from its status as a special case (or subordinate
part within a broad dualistic context) to the status of
context, and within this new context they consign dual-
ism to the subordinate status of a special case.

A student makes a transitional statement in which
the revolution is all but complete; in context his word
"complexity" refers to a relativistic approach to
knowledge:

> S. I don't know if complexity itself is always
> necessary. I'm not sure. But if complex-
> ity is not necessary, at least you have to
> find that it is not necessary before you can
> decide, "Well, this particular problem needs
> only the simple approach."

Here it is the "simple" right-or-wrong that has
become a special case. The student now finds it safer
to assume complexity as a general state and then to dis-
cover simplicity if it happens to be there. The state-
ment would represent the fully-developed structure of
Position 5 except for the fact that the "simple," when
it occurs, is still assumed to be simple and not itself
a derivative of complexity (e.g., 2 + 2 does equal 4;
the simplicity of the proposition is not perceived as a
derivative within a relativistic theory of sets).

The notion that some or most knowledge may be relativistic while some remains absolute and dualistic is the structuring we termed Relativism Correlate. In other records, where the student wavered between absolutistic and relativistic assumptions without appearing to notice that he held two incompatible generalized frames, we called the structure Relativism Competing. Both of these structures may be considered partly transitional. The complete revolution, expressed in the assumption of general Relativism in all knowledge, we named Relativism Diffuse.

The nature of this revolution of outlook--through a transposition between the structure of part and the structure of context--has been revealed as a major strategy in the development of scientific theory (Kuhn 1962). As a strategy of personal growth it would seem to deserve a prominent place not only in theory of cognitive development but also in consideration of emotional maturation and the formation of identity.

The vision of generalized Relativism, and of the procedural skills of contextual analysis and comparison appropriate to it, provides students with a new sense of having "caught on" in their studies and of possessing a new way of looking at life:

> S. It's a method that you're dealing with, not, not a substance. It's a method, a purpose- ah, "procedure" would be the best word I should imagine, that you're, that you're looking for. And once you've developed this procedure in one field, I think the important part is to be able to transfer it to another field, and the example that I brought up about working with this, this crew of men. It's probably-ah, the most outstanding at least one of the achievements that I feel that I've been able to make as far as transferring my academic experience to the field of everyday life.

It presents a serious problem, however. This is
the problem of identity and decision making in a world
devoid of certainty, a world in which differing values
may be legitimate on differing grounds:

> S. It has involved the tearing away of a lot
>   of beliefs in what has been imposed by con-
>   vention and I think that it does come down
>   to you tearing away your faith in the fact
>   that-ah . . . [seeing that] conforming to
>   any standard, that other people have decided,
>   is selfish. I'm (laughs) not trying to drum
>   it up into an emotional issue, but it's that
>   on the important questions of what you're
>   going to do, well, then I think you do see
>   that ideals that have been set up elsewhere
>   aren't necessarily the right thing. And
>   you're exposed to more-ah, perfect ways of
>   life that contradict each other. And you
>   sort of wonder how could all the things be
>   perfect?
>
>   You know, in the past months, it's been a
>   matter of having really . . . having reduced
>   to the level where I really wasn't sure there
>   was anything in particular to follow. I, you
>   do begin to wonder on what basis you'd judge
>   any decision at all, 'cause there really
>   isn't-ah . . . too much of an absolute you
>   can rely on as to . . . and even as to whether
>   . . . there are a lot of levels that you can
>   tear it apart, or you can base an ethical
>   system that's a, presupposes that there are
>   men who . . . or you can get one that doesn't
>   presuppose that anything exists . . . and
>   try and figure out of what principles you're
>   going to decide any issue. Well, it's just
>   that right now I'm not sure that, . . . of
>   what the-ah, what those de-, how to make any
>   decision at all. When you're here and are
>   having the issues sort of thrust in your
>   face at times . . . that is, just seeing the
>   thinking of these men who have pushed their
>   thought to the absolute limit to try and find
>   out what was their personal salvation, and
>   just seeing how that fell short of an all-
>   encompassing answer to, for everyone. That
>   those ideas really are individualized. And
>   you begin to have respect for how great their
>   thought could be, without its being absolute.

It is this problem, then, that confronts the
student with the realization that he, too, faces the
challenge of taking a stand, of affirming his own
values and decisions through acts of personal Commit-
ment, and that these Commitments will require of him
not only all the reason at his disposal but the cour-
age of something beyond the security which reason alone
can provide.

Position 6, Commitment Foreseen

In this study the word Commitment refers to a
person's affirmative acts of choice and orientation in
a relative world. The upper case "C" is used to dis-
tinguish such acts from unconsidered commitments deriv-
ing solely from familial and cultural absorptions in a
dualistic world. The difference has its analogy in
the theological distinction between Faith, affirmed in
doubt, and simple belief. An illustration from our
records would be a student who had always shared the
familial expectation that he would go to medical school,
and, when admitted, suddenly faced for the first time
the real decision of whether he wished to become a
doctor.

In common usage the word often refers more narrowly
to the object or content of Commitment alone rather
than to the whole act or relation. Thus, "a man's com-
mitments" may suggest his wife, children, job, and
whatever obligations or causes or expectancies he has
undertaken. If, however, one includes not only these
external objects but also a man's acts of choice, and
the personal investment he makes in them, the word
refers to an affirmatory experience through which the
man continuously defines his identity and his

involvements in the world (cf. Polanyi, 1958).*

This experience is then characterized by its stylistic qualities as well as by content. These qualities involve decisions as to balance in dimensions such as: narrowness vs. breadth, number vs. intensity, wholeheartedness vs. tentativeness, stability vs. flexibility, continuity vs. diversity, etc. Space will not allow of illustrations of these stylistic issues here, but it is important to note their importance for the person. Identity derives from both the content and the forms, or stylistic aspects, of Commitments, e.g., "I am a politician" and "I find I really prefer a wide range of acquaintances to narrowing down to one or two close friends." The stylistic, however, often feels to the person more proximal to the self, being experienced as the origin of choices in content, e.g., "I'm just the kind of person who ought never to get married." Being proximal, stylistic affirmations usually feel less open to alternatives than the area in which they find expression: "It doesn't matter what I'm doing so long as I feel I'm building something."

For the purposes of this scheme, Commitments are considered creative acts of structuring in that through them the individual orients himself in a world

---

*There are, of course, aspects of identity that appear to be passively acquired and none of one's doing, such as one's height, one's limp, or the fact that as a child one was never schooled in the arts. The question is, however, one's address to these facts: One can refuse to "accept" them, investing one's honor in stubborn battle against the irremediable; one can "resign" oneself, denying any responsibility; or one can affirm, "I am one who is so high, limps, and wishes he had been schooled in the arts as a child. This is part of who I am."

perceived as relativistic in knowledge and values.
In Position 6 Commitments are foreseen as necessary to
a responsible life, but they have not yet been made
and experienced:

> S. A lot of people must go through a phase of
> sort of finding themselves alone in the
> world, in a way. Sort of splitting away
> from their family to some extent, if it's
> only geographically. Sometimes not geo-
> graphically; he could be at home and the
> same thing might happen, but geography
> emphasizes it. And, and then they must
> work out new relationships to the world,
> I think.

> S. There was one other thing I expected--I
> expected that when I got to Harvard--I was-ah
> slightly ahead of my time in that I was an
> atheist before I got here--I came up here
> expecting that Harvard would teach me one
> universal truth . . . (pause). Took me
> quite a while to figure out . . . that if
> I was going for a universal truth or some-
> thing to believe in, it had to come within
> me.

The initial intimation of the need for Commitment
may come in any content area: vocation, standards of
conduct, involvement in academic work, extra-curricular
activities, or religion. It usually awakens a fear of
a "narrowing" which is too reminiscent of the old dual-
istic narrowness from which the student has so recently
emerged:

> S. Just have to sort of make the most of it,
> as it comes, and I say that's one thing
> you learn out of college that life is, is
> not one set narrow little plain. You just
> have to sort of, it's a very big thing, you
> just sort of have to ma-make your way
> through it as best you can after you've,
> experience of course is always the best
> teacher. That's just a question of, well,
> say, broadening your outlook and learning

to be yourself. Everybody they say as they
get older tends to get more set in their
ways but we hope not. If, if we can stay
flexible as much as you can, it's better.
It's not good to get too narrow-minded or
set in your ways.

One must somehow hold one's breath and plunge,
trusting:

> S. You just have to jump into it, that's all,
> before, before it can have any effect on
> you. And the farther in you force yourself
> to get in the first place, the more possi-
> bilities there are, the more ideas and con-
> cepts there are that can impinge on you and
> so the more likely you are to get involved
> in it. Actually you have to make some kind
> of an assumption in the first place that
> it's worthwhile to get into it, and that
> you're capable of doing something once you
> get into it.

Position 7, Initial Commitment

This Position is marked quite simply by the stu-
dent's report of some first experience of Commitment:

> S. This may sound sort of silly, but I've
> developed a sense of, ah, a set of morals.
> I never had to use them before I got here,
> but since I got here and, ah, have seen
> what goes on--they may be unusual, sort of
> but I don't think so--I, ah, had to develop
> them because it's something I never ran
> into before. It's, well, I'm out of high
> school now, I'm out of that sort of thing,
> kid stuff I might call it now. I'm a fresh-
> man in college, I find that kid stuff kind
> of ridiculous. Ah, here I'm out in the big
> world, more or less. And I've come to
> things and decisions I've never had to make
> before, and I've made them. And afterwards,
> thinking it over, I've said I've done this
> because, well, it was right, and the alterna-
> tive wouldn't have suited me and I wouldn't
> have felt good about it. Ah, maybe somebody
> else wouldn't have cared, maybe somebody else
> would have told me just the opposite.

From this experience there begins to evolve a
more intimate realization of its nature:

> S.   There are so many values you can't possibly
> line up all of them. Maybe what you do is
> pick out one, or two, or three, after a
> while. It's not a fast thing. It's slow.
> But you pick out something that you kind of
> like after a while, rather than trying to
> do what you see is being liked. I mean,
> you come here, and you get a total view of
> everything, and you see a whole lot of
> values. I mean, you're confronted with
> them. Every one of them is a good thing in
> its own way, and so you instinctively want to
> be at least a little bit aware and take part
> in all of them. But you can't. I mean, it's
> impossible just from a pure mechanical point
> of spending time. You kind of focus on the
> type of career you want and when you think
> about that, then if you're going to work
> toward it, it has its own imperatives. It
> means that you have to drop certain things
> and focus more on others. If you want to
> teach, that means you emphasize studies and
> drop clubs, and a certain amount of social
> life and some athletics. You just let these
> things become peripheral. (Pause) And
> you're sure about that.

The further unfolding of the personal meaning of
Commitment as an on-going activity--particularly in that
balancing of its qualitative aspects from which one
creates one's life style--will be represented in Posi-
tions 8 and 9.

Position 8, Orientation in Implications of Commitment

Position 9, Developing Commitments

In these last Positions of development the steps
are qualitative rather than structural, representing
degrees of ripeness in an art of living. Position 8
represents a period of exploration of the implications

of Commitment(s) made. The initial Commitment, say
of "deciding what I want to do," does not solve as
many problems as was hoped; indeed it raises others:

> S. I don't think it reduces the number of
>   problems I face or uncertainties, it just
>   was something that troubled me that I
>   thought was—I always thought that it was
>   an unnecessary problem and based on my
>   limited experience with a broadened world
>   . . . (Now) I don't see it as something
>   that is passed; it is something I have to
>   decide continually.

Many of these new problems are the stylistic
issues mentioned above, such as those of tentativeness
vs. certainty:

> S. [correcting his own word] Well "tentative"
>   implies . . . perhaps, I mean, uncertainty
>   and, and readiness to change to anything,
>   and—ah, it's not that. It's openness to
>   change but, but not looking for change, you
>   know—ah. . . . At the same time—ah, believ-
>   ing pretty strongly in what you do believe,
>   and so it's not, you know, it's not tenta-
>   tive. . . .

And again:

> S. So it's a commitment. It's a real, defin-
>   ite commitment, with a possibility of
>   (laughs) of withdrawing from the commitment,
>   which I think is the only realistic kind of
>   commitment I can make, because there _is_ a
>   possibility of change here.

And between contemplative awareness and action:

> S. I don't . . . I don't brood. . . . I think
>   that's a waste of time (laughing), I mean
>   I'd rather do something than just sit around
>   and . . . brood about it. Sometimes I . . .
>   I'm just about . . . sometimes you do hasty
>   things . . . it's a certain amount of relief
>   to . . . just . . . just to do something.
>   But . . . now the only . . . the only

> broodiness is sort of an inward broodi-
> ness . . . about whether . . . whether I'm
> on the right track . . . the right field.
> There are all kinds of pulls, pressures and
> so forth . . . parents . . . this thing and
> that thing . . . but there comes a time
> when you just have to say, "Well . . . I've
> got a life to live . . . I want to live it
> this way. I welcome suggestions. I'll
> listen to them. But when I make up my
> mind, it's going to be me. I'll take the
> consequences."

The elaborations of these evolving experiences
require illustration by excerpts too lengthy to
include here. Their destiny is clearly suggested in
several of our students' records: a way of life in
which the person finds in the development of his
Commitments, and in the style of his responsibility,
a sense not only of his identity but of his community.
Position 9, representing this open and developing
maturity, rounds out the scheme. We had thought the
Position might lie beyond that reach which experience
could provide a college student, but the judges did
in fact use the rating on occasion. The average rat-
ing for one senior placed him between Positions 8 and
9.

In view of popular notions of this particular
generation of students as "uncommitted," "alienated,"
or "silent," the following finding of this study
seems impressive: on the basis of their average rat-
ing by the judges, seventy-five per cent of our sample
were judged to have attained the degree of Commitment
characterized by Positions 7 and 8. A sense of the
meaningfulness with which the judges used the concept
of Commitment to describe the maturation evident in the
students' reports may be derived from two tables:

TABLE A

NUMBER OF SENIORS WITH AVERAGE RATING
IN POSITIONS OF COMMITMENT
(Total Sample N=20)

Position		N
Average rating	6.5 - 7.4	8 seniors
Average rating	7.5 - 8.4	7 seniors
Total		15

TABLE B

INSTANCES OF INDIVIDUAL RATINGS
IN POSITIONS OF COMMITMENT
(Six Judges, 20 Students = 120 Ratings Per Year)

Position	Fresh	Soph	Junior	Senior
7 (Initial Commitment)	3	11	48	42
8 (Experience of Implications)	0	0	14	55
9 (Developing Commitment)	0	0	0	13
Totals	3	11	62	110

(Note: the reliability of ratings was proved
to be independent of the judge's knowledge of a stu-
dent's year in college. See Chapter I.)

Alternatives to Growth: Temporizing, Retreat, Escape

In any of the Positions in the main line of
development a person may suspend, nullify, or even
reverse the process of growth as our scheme defines
it: 1) He may pause for a year or more often quite
aware of the step that lies ahead of him, as if wait-
ing or gathering his forces (Temporizing). 2) He may
settle for exploiting the detachment offered by some
middle Position on the scale, in the avoidance of per-
sonal responsibility known as alienation (Escape).
3) He may entrench himself, in anger and hatred of
"otherness," in the white vs. black dualism of the
early Positions (Retreat).

Temporizing, defined as a pause in growth over a
full academic year, does not itself involve aliena-
tion, even though it may contain that potential.
Sometimes it is even a time of what one might call
lateral growth--a spreading out and a consolidation
of the structure of a Position recently attained.
At other times it seems more fallow, suspended,
poised. Often enough a student will say, "I'm just
not ready yet."

The destiny of such periods--whether they will
terminate in a resumption of growth or in a drifting
into Escape--seems to be foretold in the tone in
which a student waits. He may speak as one waiting
for agency to rise within himself, for himself to
participate again in responsibility for his growth.
Or he may speak as one waiting for something to
happen to him, something to turn up that will inter-
est him enough to solve all problems.

Temporizing can occur at any Position on our
scale. Here, for example, a sophomore finds himself

still wandering, after two years, in the diffuse
relativism of Position 5 into which his opposition
to Authority had led him in high school:

> S. Well, I can't say much except a complete
> ah, relativistic outlook on everything. I
> used to be a very militant agnostic in high
> school, and though I'm no longer militant,
> I'm . . . still an agnostic. I don't do
> the debating with anybody any more, prob-
> abaly because I've come to the conclusion
> that in many respects the other side is
> quite worthwhile for a great many people
> . . . and . . . even for me perhaps thirty
> years from now. But not right at the moment.
> I've become, my whole dominant theme has
> been sort of just a pragmatic approach to
> everything. At times I feel this is highly
> inadequate and it perhaps is just all an
> excuse for . . . thinking what you want to
> think.
>
> But I can't see any other answer to the
> problem. It doesn't seem possible to, to,
> to determine any absolute, so . . . so I'm
> sort of stuck with the relativism that
> leaves me a little bit dissatisfied. . . .
> It's still basically the same relativism
> that I, that I had when I was back in high
> school.

Waiting for experience to inform one can slip
toward letting fate be responsible:

> S. Well, I've got a pretty--well my problem is
> that I've got a clear view of three or four
> things that I'd like to be doing. Can't
> for the life of me figure out which one I
> want to follow. Ah, foreign service,
> college teaching, politics. . . . I don't
> know which one I want to follow. Again
> here is the-ah . . . the problem, I think,
> is . . . one between activism and detached
> analysis, and I can't figure out which one,
> ah, I'm best for, and whether I can figure
> out a synthesis of both in some field. I
> don't know, perhaps I'll wait and see what,
> see what time brings, see if I pass the
> foreign service exam. Let that decide.

Followed a few steps further, the temptation leads into the style of alienation and irresponsibility we call <u>Escape</u>. "Temptation" and "irresponsibility" are moral terms, and I use them advisedly. In our records, students who speak from Escape express guilt--a malaise they experience not so much in regard to the social responsibilities from which they are alienated as in regard to their own failure toward themselves.

Our records reveal two roads leading to two forms of Escape which differ in quality and structure. The following excerpts illustrate mid-points along each of these roads. The first leads toward a limp dissocia-tion:

> S. It ah, . . . well, I really, I don't know, I just, I don't get particularly worked up over things. I don't react too strongly. So that I can't think. I'm still waiting for the event, you know, everyone goes through life thinking that something's gonna happen, and I don't think it happened this year. So we'll just leave that for the future. Mainly you're, you're waiting for yourself to change, see after you get a good idea, continued trial and effort, exactly how you're going to act in any period of time, once you get this idea, then you're constantly waiting for the big change in your life. And, it certainly didn't happen this year. . . .

"Dissociation," the term we used to denote the potential of this "drifting," refers to a passive delega-tion of all responsibility to fate. Its tone is depressed, even when pleasure is still possible in irresponsibility. The sense of active participation as an agent in the growth of one's identity is abandoned. Its final destiny lies in the depersonal-ized looseness of Multiplicity (Multiplicity Correlate,

Position 4) dissociated from the challenge of meaning.

In contrast, the more strenuous intellectual demands of Relativism provide an escape in which a vestigial identity can be maintained in sheer competence. Here the self is a doer, or a gamesman, and its opportunism is defended by an encapsulation in activity, sealed off from the implications of deeper values.

> S. I know that I had trouble-ah first of all in just listening to the lectures, trying to make out what they meant. . . . These-ah-ah, the pursuit of the absolute first of all. . . . And then I ₒ . . (laughs) sort of lost the absolute, and stuff like that. I think that gradually it sunk in, and, I don't know, maybe it's just. . . . Well, it came to me the other night: if relativity is true on most things, it's an easy way out. But I don't think that's . . . maybe that's just the way I think now. . . . Well, in, in a sense I mean that you don't have to commit yourself. And maybe that's just the push button I use on myself . . . right now, because I am uncommitted.

The sense of full alienation in either of these modes of Escape cannot be conveyed by short excerpts, but the following are suggestive if considered as expressive of the tone of an entire report:

Dissociation:

> S. I never get particularly upset about anything, but my father feels I'm wasting my time and potential and his money, and all that. But I don't know, I don't really see any way this thing can be resolved; I've just accepted it. . . . But I would like to make my peace with the family.

> S. I can always rationalize my way out of anything. I mean, if I ever start to feel this way, I feel that it's all sort of

futile; I haven't done anything yet and
it's too late, why start now? . . .
defeated, and all that. Oh, I can always
find something to do to forget about it,
or just tell myself it's ridiculous, and
it never really bothers me for any length
of time.

S. I've thought quite a bit about this: I've
never really identified myself definitely
with anything. I hadn't permitted myself
to so far as grades were concerned or as
far as friends--particularly in a few iso-
lated cases. I had just a sort of "I'm me,
and I just like to stand out there and look
things over" attitude, and I don't know
whether this is good or bad.

S. It turns out to be tough because of the
fact that, that you have these courses that
tempt you to, to not do anything at all
about them and therefore you're apt to, ah,
get slightly lower grades than you would
anyway, and it was, you know, what the heck,
I wasn't interested anyway--next year, you
know, it'll all be different when I'll be
able to take almost all courses that I want
to take, and so forth and so forth.

Encapsulation:

S. It seems to me that the security that you
gain from knowing how you're going to
handle . . . a situation which isn't
really that important now . . . is
completely overshadowed by the worry . . .
that it causes if you try to ascertain
what you're going to do. And I think . . .
oh, if you have, if your development is
such that you can handle situations as they
arise . . . and that you have more or less
an intelligent point of view and a rational
outlook, that you could solve any problem
that comes up with a minimum of time,
trouble, and . . . I don't think that it's
necessary to worry about things so far in
the future. I mean, opportunities may pre-
sent themselves, or completely change my
life, and the, the, and of course my wife

and baby's life, too. I may be offered who
knows what, right after I graduate, you
know, you never know, and there's no chance
of really-ah . . . planning so far ahead as
to take into account; you can't do it. . . .

It's just like, I mean, it's just like
playing football. As long as you have the
right position and the right balance now,
you're ready for anything that may come,
. . . whereas, if you plan for one special
move, a change of plan on the opponent's
side and you're right off on left field,
and get faked out. As long as you're ready
for anything and, and, and, and in good
condition, more or less, and in football it
takes a good body and a clear mind, and the
same thing applies to . . . anything in
general and being alert you're ready to . . .
handle any situation as it arises and
that's more or less the "full philosophy,"
unquote, that I've, that I've used through-
out my life . . . if I may be so bold as to
say that; and . . . since I, it has been
successful for me, and I've, I've found it
very satisfactory to me, I . . . that's,
that's just the way it is with me. And I
don't think I recommend it for anyone, of
course. I, I'd be a fool to, but I do
think it has its merits, and for me it's
the, the one way to do things.

S. So the best thing I have to do is just for-
get about deciding, and try to . . . I mean,
not give up on any scheming or any basic set
of ideas . . . that'll give myself, they'll
give me a direction. Just give up com-
pletely, and when it comes down to indi-
vidual choices, make them on what I feel
like doing emotionally at the moment.

A particular form of Escape, long recognized by
philosophers and theologians, is "escape into commit-
ment." The distinction between Commitment as a step
of growth _in_ a relativistic world and commitment as
an escape _from_ complexity is usually quite clear in

our records. In the latter, commitment is yearned for
as a reinstitution of embeddedness. The hope seems
to be that through intensity of focus, all ambivalences
will be magically resolved. The event is envisaged
either as something one hurls oneself into through
despair of choosing, or as some "interest" that emerges
from the environment to absorb one totally, and
blessedly.

> S. It would be great if a bolt of lightning
> comes down, in some way I could be tested,
> and find out that I have a great talent
> for music (laughs) and then really just
> drop everything and go into that. But I'm
> sure it won't happen, or I'm almost sure.
> But it could just as well be anything as
> music.

And yet, one can be aware of the irresponsibility
of the principle that _any_ commitment is _better_ than
_no_ Commitments:

> S. I've seen this all along: withdraw into
> your shell; this is the easy way. I mean
> you could take a basic, just a fundamental
> commitment and be done with it.

> C. And be done with it. Yes. There you are.

> S. That's an easy way out. The other way is
> pretty frustrating.

Perhaps, though, it only seems as if it would be
easy, or _easier_. Some one all-encompassing "shell"
of a "commitment" would promise protection from all
the complexity, all the competing responsibilities
that threaten to overwhelm one's freedom with their
demands, or to leave one paralyzed, as a student put
it "like a donkey between forty bales of hay." How-
ever the sustained denial of one's realization is
known to require immense energy.

This energy is evident in the dogmatic moral intensity of that reactive entrenchment in Positions 2 or 3 which we termed <u>Retreat</u>. In Position 1, we noted, "prejudice" and intolerance were inherent structurally, but the enemy of "bad others" was far away. The main line of development has traced the growing person's assimilation of the diversity of others' views and the evolution of a rational basis for tolerance in the midst of Commitment in a relativistic world. In this tolerance one may fight for one's own beliefs but in full respect for the rights of others.

Under stress (of fear, anger, extreme moral arousal, or simple overburden of complexity) it is possible to take refuge in the all-or-none forms of early dualism. At this point reactive adherence to Authority (the "reactionary") requires violent repudiation of otherness and of complexity. Similarly, reactive opposition to Authority (the "dogmatic rebel") requires an equally absolutistic rejection of any "establishment." Threatened by a proximate challenge, this entrenchment can call forth in its defense hate, projection, and denial of all distinctions but one.

In this structure of extreme proprietary "rightness," others may be perceived as so wrong and bad as to have no "rights," and violence is justified against them.

Retreat is rare in our records and where it occurs it cannot be illustrated by concise excerpts. In recent years its structure is exemplified vividly in the forms of thought of the extreme "radical" left in student revolt. These forms may be examined in the statements of the "radical" as opposed to the "liberal"

students speaking in <u>Students and Society</u> (Center for the Study of Democratic Institutions, 1968). The forms are of course identical with those employed by persons and groups of the extreme radical right.

A Note on Resumption of Growth

Alienation in Escape or Retreat need not be permanent. It may be for some persons a vital experience in growth--part of the very temptation in the wilderness that gives meaning to subsequent Commitment. Emergence may start in any affirmation of responsibility.

Briefly put:

S. Just saying, "O.K., well, that's what I can do, and that's what I can't do," in a way, and to be satisfied with my potential and not dream about other things and to try to develop what I have found that I have and not to worry about the things I don't have.

Often recovery occurs as a kind of "lifting" of depression, or a resurgence of care:

S. Emotionally I think I was trying to find some sort of rationalization for my feeling that I wasn't going to achieve anything. These are certainly not the values I have now. They're not the goals I want now. I don't think I'm going to be happy unless I can feel I'm doing something in my work.

S. I was sort of worried when I came back, wondering if, "Well, shucks, am I just going to lie down on the job or am I going to do it because it has to be done?" I found out that I wasn't doing it because it <u>had</u> to be, but because things interested <u>me</u>. Some things didn't interest me so much, but I felt I couldn't let them slide and I took them as best I could, in what order I could.

Alienation cannot be prevented. And indeed it should not be. If it could be prevented, so could that detachment which is man's last recourse of freedom and dignity _in extremis_. The educator's problem is therefore certainly not to prevent alienation, or even to make the option less available. His problem is to provide as best he can for the sustenance of care. (See Conclusion)

CHAPTER I

THE RATING OF INTERVIEWS WITH COLLEGE

STUDENTS ON A DEVELOPMENTAL SCHEME

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INTRODUCTION

To test the validity of our developmental scheme we submitted the Chart of Development to six judges, together with a Judge's Manual. We then presented them with various students' reports, under conditions to be described below, and asked them to estimate the Position on the Chart most expressive of each report. The validity of the scheme, in respect to the data of the study, would rest upon 1) the reliability of over-all agreement among judges, and 2) the extent to which agreement was evident in all the reports rated.

The Judges

To perform the ratings, we enlisted as judges five graduate students and one housewife. Four of the graduate students were in the field of English, and one in the field of Comparative Literature. The housewife was a recent college graduate who had majored in Philosophy. None had any extensive formal training in Psychology.

Procedures

The judges first met with the investigators for two training sessions. In the first they listened to a general description of the nature of the study and received copies of the Judge's Manual, the Chart of Development and a sample of a student's report. In the second session they raised such questions as came

to them from their study of the materials.

The judges then undertook the first rating opera-
tions: the rating of a random sample (by number
table) of twenty students' complete four-year reports,
taking one student's set of reports at a time. Within
each set of four-year reports they rated each year
separately, with the full four-year sequence before
them. During this operation, the judges met on a
weekly basis to hand in their ratings of each student's
reports to discuss the problems encountered, and to
receive the next student's reports.

Subsequently the judges undertook three additional
tasks: the rating of single reports disguised as to
college year; the rating of short excerpts, and the
rating of condensed edited forms of four-year sequences
in comparison with the full unedited forms.

Manual and Rating Forms

The Judge's Manual contained a general statement
of the aims of the study and the following directions
for the task of rating interviews in relation to the
Chart of Development:

INSTRUCTIONS FOR JUDGING

The chart outlines and codes various posi-
tions along the scheme of development described
above. The game of judgment is to plot for
each interview the most appropriate position on
the developmental scheme.

The phrase "game of judgment" is used on
purpose. Persons are bigger than any one

position on any scale, and much more complicated.
Positions on a scale become compartments which
are given to the judge as "givens" and which he
is asked to fit persons "into." The intellectu-
al task is frustrating enough; the judge should
not have to wonder in addition whether he is
being asked to take a serious part in a sacrilege.*

No moral problem would exist if we could
remain clear in our minds that the person is the
"given" and the scale the variable. If such a
chart as this one could be thought of as a poorly
transparent grid to be moved about in front of
one until the person could be seen "least worst"
through it, any difficulties or distortions would
remain clearly the fault of the chart; and if it
were hard to see persons through it, the loss
would be the scalemaker's alone.

Such an abstract grid is just what the chart
is, of course, but in judging several students
(entities) against one chart (a system) the chart
slips into the background and leaves one feeling
that one is judging not the chart but the stu-
dents. Inevitably one asks, "Where does this
student stand on the chart?" After a few tries
at this form of sin, one is tempted to sin in
opposite ways.

The middle ground is to play seriously at a
game in which the limits and rules are clear to
scalemaker and judge in common.

Assumptions of the game:

1. No twenty charts together could begin to
account for the complexity of human development,
but every chart pretends to, all alone.

2. Persons grow by waves, spirals, leaps,
and organismic reorganizations, very rarely
linearly; charts assume they grow linearly.

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*In any scale of "growth" there are assumptions about
values. We shall discuss them in our next meeting.

3. Persons grow at different rates in different ways in different areas and functions in their lives. Chartmakers ask judges to place a person at one point on a scale, obviously a complex and dubious operation.

4. The purpose of the whole undertaking is to test for the existence, in the recorded interviews, of the kind of development we think we see in them. If judges tend to agree in their coding of interviews, the presumption is that they can see what we think we see.

We will want to measure the agreement of judges on three levels or judgments which we will call steps (even though in actual judgment a judge may make them in reverse order or all at once).

These are:

I. Number of position, 1-9, along linear scale on chart.

II. Certain coded qualities, tendencies and structures under each position, and

III. Pace or direction of movement.

Judges may develop different styles of handling the game, but the following is suggested:

Read all four interviews once, checking in the margin at significant passages and making some notes. Make a first guess at judgment (full code) at end of each interview and keep a record of it. Reread, make final judgment, and record reference to most significant passages used in judgment.

Special considerations:

The main rating form is set for the time of the interview (late spring of each year). If a student refers to an earlier time, or several stages of growth over a year (viz.: "When I came here this fall I guess I thought..." etc.), where these references give clues to path of

<u>development over the year</u>, use the section which is captioned "At a previous period..." etc. If necessary, use a second (and third) rating form and indicate time and position on each.

(End of excerpt from <u>Judge's Manual</u>)

A sample of the Rating Forms used by the judges for the four-year sequence appears on the following pages. The sample is taken from the file of completed ratings. The reverse of each rating sheet, on which the judge noted page and line references for the particular passages of the interview on which he most relied for judgment, is omitted. The judge's entries have been underlined.

Student No. _____   Judge _____

TO THE JUDGE

If you have difficulty making a first choice of
positions you are asked to list alternatives to it.
If your first choice seems so firm that alternatives
do not seem really plausible, simply repeat your first
choice where alternatives are asked for.

Where you do find alternatives plausible, they
may be so on different grounds in different instances,
viz.:

a) Most of the evidence may be ambiguous. That
   is, it is hard to decide whether the student,
   as a whole, is best seen at, say, Positions
   5 or 6.

b) Parts of the evidence may conflict. That is,
   in some statements, areas, or ways the stu-
   dent may appear pretty clearly at 5, in
   others pretty clearly in 6 or some other
   Position.

c) The wording of the chart and theory may be
   ambiguous; that is, placement may depend on
   the meanings ascribable to concepts in
   definitions of positions.

Be sure to specify in your comments.

Year: Fresh_x__   Soph____   Junior____   Senior____

At time of Interview:

1. I see the student best through
    this position . . . .   2 A-M
                                                _____

2. I see the student next best through
    this position . . . .   3 A(M)
    (If you see no "next best," enter   _____
    (1) again)

3. I had the most difficulty deciding
    between (2) above and . . . .   3 A(M)
    (If little difficulty, enter (2) again)   _____

At a previous period referred to in this
   interview
      (specify_____):

1. I see . . etc. . . . .   _____

2. As above . . . .   _____

3. "   "   . . . .   _____

Comments, general:

   Difficult interview. Student not interested

   in doing much talking.

Comments on nature or grounds of alternatives (refer
   if you wish to your references on next page):

   Only on page 6 does he indicate much recognition

   of M.

Year: Fresh____   Soph_x__   Junior____   Senior___

At time of Interview:

1. I see the student best through
    this position . . . .   3 A(M)
    _____

2. I see the student next best through
    this position . . . .   3 A(M)
    (If you see no "next best," enter   _____
    (1) again)

3. I had the most difficulty deciding
    between (2) above and . . . .   3 A(M)
    (If little difficulty, enter (2)   _____
    again)

At a previous period referred to in this interview
    (specify ____6, 19-21; 8, 21-22_____):
                                               1 Ad⟶ M
1. I see . . etc. . . . .   _____
                                               1 Ad⟶ M
2. As above . . . .   _____
                                               1 Ad⟶ M
3. "   "   . . . .   _____

Comments, general:

    More confidence than freshman year. Same general

    tone all the way through, as though student had

    known what to say from the beginning.

Comments on nature or grounds of alternatives (refer if
    you wish to your references on next page):

Year: Fresh____   Soph____   Junior__x_   Senior____

At time of Interview:

1. I see the student best through
    this position . . . .   5 A-R

2. I see the student next best through
    this position . . . .   5 A(R)
    (If you see no "next best," enter
    (1) again)

3. I had the most difficulty deciding
    between (2) above and . . . .   5 A(R)
    (If little difficulty, enter (2)
    again)

At a previous period referred to in
  this interview
      (specify_____):

1. I see . . . etc. . . . .   _____

2. As above   . . . .   _____

3.   "   "   . . . .   _____

Comments, general:

    Student recognizes relativism, but still feels

    confident to render "objective" judgments and

    accept "what seems to be true."

Comments on nature or grounds of alternatives (refer
  if you wish to your references on next page):

    I'm not sure the student ever recognizes the

    true implications of relativism.

Year: Fresh____   Soph____   Junior____   Senior__x__

At time of Interview:

1. I see the student best through
    this position . . . .   <u>6 A(R)C</u>

2. I see the student next best through
    this position . . . .   <u>6 RC</u>
    (If you see no "next best," enter
    (1) again)

3. I had the most difficulty deciding
    between (2) above and . . . .   <u>6 RC</u>
    (If little difficulty, enter (2)
    again)

At a previous period referred to in this interview
    (specify_____):

1. I see . . etc. . . . .   _____

2. As above . . . .   _____

3.   "   "   . . . .   _____

Comments, general:

    <u>Student recognizes past mistakes, but tends still</u>

    <u>to think that someone in authority should have</u>

    <u>helped him. C, of course, has been pretty constant</u>

    <u>all along</u>.

Comments on nature or grounds of alternatives (refer
    if you wish to your references on next page):

    <u>At times he drops the reference to A.</u>

    (End of illustrative sample of Rating Forms)

In the course of the judges' discussions follow-
ing each unit of rating, they uncovered ambiguities in
the terminology of the Chart, and in the third meeting
formulated two alternative sub-structures in the stu-
dents' reports not provided for on the Chart. We
revised the Chart accordingly for future work, but
made no remedy of the disagreements which had already
resulted from these ambiguities and omissions. In
general, despite our expectation of a "learning period,"
the judges reached their high level of agreement at
the outset. Two judges did move slightly toward the
mean over the first five ratings, but the improvement
in overall reliability did not approach significance.

Ratings Analyzed

From the wealth of data provided by the Rating
Forms we selected for analysis only the fundamental:
1) First-choice rating of Position, by number only.
2) First-choice rating of special categories indicat-
ing deviations from growth: Temporizing, Escape and
Retreat.

This selection provided sufficient data for the
estimate of overall operational validity of the scheme.
It left untouched the data regarding specific sub-
structures and their normative sequences. That the
judges tended to agree about these sub-structures is
evident to the eye in the recorded ratings, but the
statistical analysis of this evidence was beyond the
scope of the study.

We are indebted to William W. Cooley for his advice regarding statistical procedures appropriate to assessing the judges' ratings. In computation we were assisted by William Young and David W. Panek.

RATING OF FOUR-YEAR SEQUENCES

Reliability of Average Ratings for Each of the Four Years

The judges first rated the four sequential interviews of twenty students. Ten of these students were drawn by random-number table from the First Sample (Class of '58) and ten from the Second Sample (five each from Classes of '62 and '63). The judges first rated the reports of five students from the First Sample, then of five from the Second Sample, then of five from the First Sample, and then five from the Second Sample.

To test the overall reliability of these ratings, we computed an analysis of variance of the rating from all judges for all students for each year. Since the judgments were derived from repeated observations of the same students over time the usual assumption for an analysis of variance procedure would not hold. We therefore modified the technique by subdividing the within-group sums of squares into two components (1) the sums of squares due to judges and (2) the sums of squares due to individual variation of each student. The ratio of the mean square for judges to the error mean square is distributed approximately as F.*

---

*The procedures for the statistical analyses presented in this section were derived from B. J. Winer, _Statistical Principles in Experimental Design_ (New York:

Table 1 presents the results of this procedure.

TABLE 1

ANALYSIS OF VARIANCE FOR EACH YEAR

(6 Judges, 20 Students, 9 Pt. Scale)

Source	SS	NDF	F Ratio
Year 1			
Between	175.6	19	--
Within	32.2	100	--
Judges	6.3	5	4.34 (not sig.)
Error	25.9	95	--
Year 2			
Between	116.5	19	--
Within	76.6	100	--
Judges	8.9	5	2.51 (not sig.)
Error	67.7	95	--
Year 3			
Between	142.7	19	--
Within	96.1	100	--
Judges	9.8	5	2.17 (not sig.)
Error	86.3	95	--
Year 4			
Between	201.1	19	--
Within	88.6	100	--
Judges	8.1	5	1.90 (not sig.)
Error	80.6	95	--

McGraw-Hill, 1962). Specific reference is made to single factor experiments with repeated observations, Chapter 4, pp. 105-139.

Since none of the F ratios for judges' effect is signi-
ficant, it can be concluded that the variation in
scoring due to the judges is not significant. In order
to illustrate the degree of agreement across the six
judges, we computed reliability coefficients for each
year in two ways. First we computed the estimated
reliability of the average rating of all six judges
for each year and then computed the estimated reliabil-
ity of a single rating for each year.

The average reliability for all six judges' scores
(e.g., the average of the rating by judges of any given
year for any student) was computed by using 1- (the
error sums of squares divided by the between sums of
squares). The results are presented in Table 2 (using
data from Table 1):

TABLE 2

ESTIMATED RELIABILITY

(Average rating over all six judges, NDF = 19,95)

	Between SS	Error SS	r
Year 1	175.63	25.96	+.966*
Year 2	116.50	67.70	+.875*
Year 3	142.75	86.29	+.872*
Year 4	201.0	80.60	+.916*

$$r = 1 - \frac{\frac{\text{Error Sum of Squares}}{\text{NDF}}}{\frac{\text{Between Sum of Squares}}{\text{NDF}}}$$

*Significant at .0005 level. (See H. M. Walker and J.
Lev, Statistical Inference [New York: Holt, 1953],
p. 470.)

The estimated reliability of a single judge in each year was also computed in a similar manner. In this case the procedure involved: The (Mean Sum of Squares Between Groups minus the Error Mean Square) divided by (the Mean Sum of Squares Between Groups plus (the Error Mean Square) (k - 1)) where k = the number of judges. The estimated reliabilities for a single rating were: yr. 1 = +.82, yr. 2 = +.54, yr. 3 = +.53, yr. 4 = +.65.

Since the judges had rated the protocols separately by year, we have reported the reliability co-efficients accordingly, both for the reliability of the average rating of all six judges and the reliability for a single rating.

In Table 3 we present the Average Judged Position for all 20 students over the four-year period.

The standard error for each position for each year was computed to illustrate the stability of a given score. The standard error in this case would be the square root of the product of the Error Mean Square and a term involving the estimated reliability, i.e.

$$SE = \sqrt{(MSE)(1 - r_{xx \text{ (est.)}})}$$

Thus:

Year		1	2	3	4
MSE	=	0.273	0.714	0.908	0.849
SE	=	0.0963	0.291	0.341	0.267

For illustrative purposes, the average rating for Student No. 1 in the first year would lie between 2.23 and 2.43 68% of the time, while in the fourth year his average position would fall between 5.56 and 6.10. These

TABLE 3

AVERAGE JUDGED POSITION

(N = 6 Judges, 9 Pt. Scale)

Student	Year 1	Year 2	Year 3	Year 4
1	2.33	4.17	5.67	5.83
2	3.00	5.33	7.33	8.33
3	1.83	2.83	2.50	2.33
4	5.0	5.50	5.17	6.83
5	3.33	4.67	5.50	6.00
6	3.67	5.33	7.33	8.33
7	3.33	4.67	5.67	6.67
8	3.50	4.67	5.17	7.17
9	2.17	3.50	5.33	6.50
10	5.0	6.17	6.83	8.0
11	5.0	6.0	6.83	7.33
12	2.5	4.0	5.67	6.67
13	5.33	6.17	7.00	7.83
14	3.0	3.67	5.17	6.17
15	5.0	5.83	6.50	7.17
16	4.5	5.33	6.00	7.33
17	5.17	6.17	7.00	8.17
18	5.0	5.67	6.33	7.67
19	5.33	6.00	6.67	7.67
20	5.67	6.00	6.83	7.67

figures state in an alternate form the stability of
the agreement among the judges in their rating of each
of the four years, the strongest agreement obtaining
to the reports from the freshman and senior years.

Using the more usual procedures for inter-judge
correlation, the same relationship of substantial
agreement is again illustrated. Table 4 represents
the inter-correlation matrix for all six judges. Of
itself, such a procedure might be suspect. However
since the modified analysis has already shown the
judges to agree in the use of the scheme, the matrix
can be viewed as further confirmation of the findings.

TABLE 4

INTER-CORRELATION MATRIX

(6 Judges, 20 Students, 4 Yrs.)

Judge	1	2	3	4	5	6
1	1.00	.74	.78	.70	.70	.78
2		1.00	.70	.79	.77	.88
3			1.00	.64	.84	.80
4				1.00	.68	.81
5					1.00	.83
6						1.00

Range of Reliability of Rating, by Students

We were concerned to know whether the validity
of our scheme suggested by the reliability of aver-
aged ratings was limited to the reports of certain
students and irrelevant to others. We therefore
examined the range of the reliability of the ratings
of different students' four-year protocols. The
range was from .978, for the student about whose
reports the judges most agreed, to .815 for the stu-
dent about whose reports they agreed the least. This
range is sufficiently narrow, centering closely upon
the highly significant overall reliability noted
above, to warrant the reading that the processes of
development described by the scheme were reliably
evident for the judges in the report of every stu-
dent in the sample rated.

Trend Analysis

Examination of the mean judged position for each
student over the four years, as indicated in Table 3,
suggested that the development measured was monotonic
and possibly linear. Therefore we decided to test
the degree to which the apparent trend was linear or
quadratic or cubic. An analysis of variance was
computed to see if the variation due to year was
significant. Table 5 presents these results. The F
Ratio for year, 622.3 with 3 and 97 degrees of freedom,
is of course highly significant.

TABLE 5

ANALYSIS OF VARIANCE

(Students and Year in College)

Source	SS	NDF	MS	F Ratio
Between Students	58.61	19	--	--
Within	958.62	100	--	--
Year in College	911.19	3	303.70	622.3
Error	47.43	97	--	--

The variation due to year in college was then divided into three possible components, (1) a linear component, (2) a quadratic component, and (3) a cubic. The resultant F Ratios were (1) linear = 197.7 $(P < .0001)$, (2) quadratic = 0.101, (3) cubic = 0.03. This indicates a strong linear trend in the judged positions throughout the four-year period in college.*

If we go back and examine the judged position in Table 3, we will note that only two of the twenty students were judged in a manner which revealed non-continuous growth, as defined by the scale, throughout the four years. Further, the trend analysis would indicate that the continuity of a student's growth is independent of the point at which the student is rated in his freshman year.

*The trend analysis procedures can be found in Winer, B. J. (1962), Chapter 3, p. 70.

Differences in Year of Entrance

Since the rated sample was selected from three different entering classes, '58, '62, and '63, we undertook to test the impression of the interviewers to the effect that, compared with students of the First Sample, students of the Second Sample had seemed more advanced in their freshman year. A three group F test was first computed to examine the variation across the three classes ('58, '62, '63) on judged position for all four years. The resultant F with 2 and 73 degrees of freedom was 9.076 $(P < .01)$. Since the F Ratio was significant, indicating an overall difference in the classes, we then sought out the source of variation by examining the judged position across each class for the four years. These results are presented in Table 6.

TABLE 6

AVERAGE JUDGED POSITION FOR EACH CLASS

('58, '62, '63)

Year	Class '58 (N=10)	'62 (N=5)	'63 (N=5)
Fresh.	3.31**	4.16	5.13**
Soph.	4.68	5.13	5.83
Jr.	5.65	6.23	6.56
Sr.	6.59	7.03	7.70

**Significant paired difference

The results indicated that the only significant paired difference was between the freshman years of the Classes of 1958 and 1963.* The analysis used the mean square error as the estimate of the pooled variance for an unbiased test of mean differences.

In addition, Table 6 indicates a trend or "march," which, although not reaching significance between each step, indicates that each class was rated at a point further along on the scheme in each of the four years, the major difference being in freshman year.

This finding corroborated the impressions of the interviewers who, after listening to freshmen of the Second Sample, remarked, "there are no freshmen anymore."

The interpretation of the finding, however, is hazardous. Speculation should consider a range of possibilities. The difference may arise purely from variations in sampling (see pp. 90 ff). The First Sample was selected on the basis of CLEV score, its average SAT was somewhat lower than the average of its class, and it contained a disproportionate number of commuters. However, when the small sub-samples actually rated are compared against the classes from which they were derived, no significant differences from class averages in CLEV score, SAT, proportion of commuters, or academic performance, appear.

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*This test is comparable to the Scheffé test for the significance of paired differences.

A second possibility is that the difference reflects the increasing selectivity of admissions to the college over these years. The major evidence lies in the rise of average SAT for the classes as a whole (see p. 97). However the Admissions Committee may also have selected students of greater maturity from an array of applicants both larger and more highly pre-selected.

A final conjecture is of broader interest. Small as the differences are (and in a small sample), they may be expressive of certain developments in the culture. Most suggestive is the increasing introduction of relativistic thinking in the schools in general, and in particular for college-bound students through the Advanced Placement Program. In addition, the years of the study cover the general diffusion of exposure to cultural diversity through television.

Analysis of Special Categories

To account for non-continuous growth, the rating chart contained special categories: (1) Temporizing, (2) Escape, and (3) Retreat.

The first analysis of the judges' agreement in the use of these categories was made by combining the categories to see if the judges could agree with each other when classifying the interview protocols as evidencing non-continuous growth. Since the data is nominal and dichotomous the Chi Square test for dichotomous data was used.* A separate analysis was

---

*The Chi Square test for dichotomous data can be found in Winer (1962), pp. 138-9.

made for each year, again using all 20 students and
the ratings of the six judges. The Chi Squares were
as follows:

Year	1	2	3	4
Chi Square	7.0	13.29	2.59	10.5

(Chi Square = 15.1, $P < .05$ with 2, 99 NDF)

The Chi Square in this case represents a ratio
of the consistency of the judges to the variability of
the students. Since none of the computed Chi Squares
was significant, the result indicates that the judges
are consistent in rating the protocols as evidencing
non-continuous growth. The degree of this consistency
was not computed, but is assessable in the data for
the first two years in college presented below.
Table 7 indicates that virtually all of the judges
agreed that none of the twenty students could be
classed as in non-continuous growth in freshman year.
The non-significant Chi Square, then, for this year
indicates that the judges were consistent. Table 8,
for the sophomore year, indicates that for twelve
students there was virtual agreement (five of six or
all six judges in accord) that these students were in
continuous growth. Two students (#4 and #2) were
rated by four or more judges in categories indicating
non-continuous growth. The remaining six students
were judged inconsistently. Since the observed Chi
Square for the sophomore year was again not significant,
the judges could be considered in the main consistent
in their use of this classification scheme. We have

TABLE 7

JUDGES' USE OF SPECIAL CATEGORIES: FRESHMAN YEAR

(Students classed as Temporizing, Escape,
or Retreat or not: 1=No, 0=Yes)

			Judge				
	1	2	3	4	5	6	
Student							Total
1	1	1	0	1	1	1	5
2	1	1	1	1	1	1	6
3	1	1	1	1	1	1	6
4	1	1	1	0	1	1	5
5	1	1	1	1	1	1	6
6	1	1	1	1	1	1	6
7	1	1	1	1	1	1	6
8	1	1	1	1	1	1	6
9	1	1	1	1	1	1	6
10	1	1	1	0	1	1	5
11	1	1	1	1	1	1	6
12	1	1	1	1	1	1	6
13	1	1	1	1	1	1	6
14	1	1	1	1	1	1	6
15	1	1	1	1	1	1	6
16	1	1	1	1	1	1	6
17	1	1	1	1	1	1	6
18	1	1	1	1	1	1	6
19	1	1	1	1	1	1	6
20	1	1	1	1	1	1	6
Total	20	20	19	18	20	20	

Observed x^2 = 7.0 (not significant) (NDF 2.99)

TABLE 8

JUDGES' USE OF SPECIAL CATEGORIES: SOPHOMORE YEAR

(Students classed as Temporizing, Escape,
or Retreat or not: 1=No, 0=Yes)

			Judge				
	1	2	3	4	5	6	
Student							Total
1	1	1	1	1	1	1	6
2	1	1	1	1	1	1	6
3	1	1	1	1	1	1	6
4	0	0	0	0	0	1	1
5	1	1	1	1	1	1	6
6	1	1	1	1	1	1	6
7	1	0	1	1	1	1	5
8	1	1	0	1	0	1	4
9	1	1	1	1	1	1	6
10	1	1	0	1	1	1	5
11	0	1	0	0	1	1	3
12	1	1	1	1	1	1	6
13	1	0	1	0	1	1	4
14	1	1	1	0	1	1	5
15	1	0	0	0	1	1	3
16	1	1	1	1	1	1	6
17	1	1	1	1	1	1	6
18	1	1	0	0	0	1	3
19	0	1	1	0	1	1	4
20	0	1	0	0	0	1	2
Total	16	16	13	12	16	20	

Observed x^2 = 13.29 (not significant)   (NDF 2.99)

not included the raw data tables for the junior or
senior years since they would be redundant.

Since there was consistency in the use of the
Temporizing, Escape, and Retreat categories taken as
a whole, a separate analysis was made of each. None
of the Chi Squares was significant. Thus, the judges
can again be considered significantly consistent in
their use of these three sub-categories both when the
categories are combined into a general category of non-
continuous growth and when the categories are con-
sidered separately.

RATING OF SINGLE INTERVIEWS WITHOUT
KNOWLEDGE OF YEAR IN COLLEGE

In rating the four-year sequences considered
above, the judges rated the interviews from any one
college year at a wide range of points on the scale
(see Table 3, p. 70). This in itself would seem to
obviate any possibility that the judges' knowledge of
a student's year in college might account for much of
their agreement. Nonetheless we decided to put the
questions to a sharper test. Eight student protocols
were therefore selected at random from the sophomore,
junior or senior years of other students and all
identifying data as to year was removed. (It did not
seem feasible to disguise cues for freshman year.) We
first asked the judges to guess the college year repre-
sented by each interview. Their accuracy was 32%, i.e.,

chance. We then asked the judges to rate these single protocols on the scheme. Five judges performed this operation. The correlation matrix is presented in Table 9.

TABLE 9

INTER-CORRELATION MATRIX

(N=5 Judges, 8 Protocols, Year Masked, 9 Pt. Scale)

Judges	1	2	3	4	5
1	1.00	0.00	.75	.79	.72
2		1.00	.31	.14	.24
3			1.00	.62	.70
4				1.00	.63
5					1.00

This table indicates that four of the five judges were able to place the interviews on the scheme with reliability comparable to that obtained when the year was known. The rating by one judge, judge number 2, did not correlate significantly with those of any of the other four judges. The lack of agreement of judge number 2 with the others may indicate that he was simply unable to place the students without knowledge of the year or without the context of the full four-year report. However, the tape-recording of the judges' discussion as they handed in their rating is suggestive. In reading off his first rating, judge

number 2 announced, "I gave myself a vacation this week," and explained that he had rated in haste and indulged in being "arbitrary." During the remainder of the session the group teased this judge by predicting, with impressive accuracy, the deviant rating judge number 2 had assigned to each interview. The predictions seemed to derive from an estimate of the judge's personal prejudices and the mood he presently avowed.

Even with this judge's ratings included, Table 9 indicates that the judges were able to place the interviews on the scheme with overall reliability, without knowledge of the year in college. However, the evidence of the judges' discussion seemed valid reason for excluding the ratings of judge No. 2 from more detailed analyses. Using only the ratings of the other four judges, we considered judges' consistency in using the special categories, Temporizing, Escape. and Retreat (T, E, and Ret). These estimates of direction we felt would be difficult to make in single interviews out of their sequential context, and we predicted that the judges would be both chary of using the categories and unreliable in their use.

An examination of these categories revealed that none of the judges used the categories Escape and Retreat, and that two judges used the category Temporizing while two did not. The "consistency" implied by their rating no interviews at all in Escape or Retreat should hardly be read as reliability. However, the failure of reliable use of these special categories of

direction of movement would seem attributable less to the judges' ignorance of the college year involved than to their lack of a sequential context of other interviews in which such an assessment could be made. In discussion, furthermore, the judges reported their emotional reluctance to assign a student without strong contextual evidence, to categories other than those of growth.

RATING OF EXCERPTS

In a further exploration of the effects of context we asked the judges to rate forty excerpts (ranging from three lines to a page) selected from protocols other than those which they had already rated. These were not random selections, but items selected to be representative of a range of those passages which the judges had noted on their rating forms as providing the salient evidence upon which they relied in rating entire interviews. A major purpose in this test was to assess the integrity of communication about our scheme through the use of illustrative excerpts (as in INTRODUCTION of this report).

The judges attempted to place each of these excerpts on the Chart of Development as they had previously rated entire interviews. An analysis of variance was computed to examine the between-judge differences (using the modification previously noted). The F ratio for the judges was 0.31 (with 4 and 156 NDF) and was not significant.

The overall reliability was therefore computed in the same manner described earlier with a resultant $r = .821$. The estimated reliability of a single judgment (again using the modified procedures described earlier) was also derived; the $r = .57$.

Finally the correlation matrix was also computed to compare each judge with all other judges. Table 10 presents the results and indicates, once again, that the agreement among the ratings by judges was positive, consistent and significant.

TABLE 10

EXCERPT TEST

CORRELATION MATRIX

(N = 6 Judges, 40 Excerpts, 9 point scale)

Judges	1	2	3	4	5	6
1	1.00	.49	.45	.38	.44	.57
2		1.00	.63	.36	.64	.44
3			1.00	.47	.58	.56
4				1.00	.48	.56
5					1.00	.45
6						1.00

A further analysis indicated that the judges used the special categories of Temporize, Escape and Retreat somewhat more freely, and reliably, than in their rating of single interviews. Fifteen excerpts received such a special-category rating from one or more judges.

Of these, seven were so rated by only one judge, three
by two judges, three by three judges, one by four
judges, and one by five judges.

Except for the last two instances, the consensus
is not impressive, but against the background of forty
items the degree of consistency is sufficient to raise
a paradox, in view of the fact that the amount of con-
text was even more reduced than in the case of single
interviews.

The reasons seemed to be two. 1) In rating entire
interviews the judges tended to feel they were rating
the student whereas in rating an excerpt they felt
they were rating a statement. They were therefore
more free to make negative value judgments. 2) In
being pre-selected, and isolated, the excerpts were
stronger as "types."

In their ratings of entire interviews the several
judges had frequently referred, on their rating forms,
to identical passages. In addition, this particular
test revealed their consensus in the rating of such
passages taken out of context. These findings
suggested that the explication of the scheme could be
illustrated by short excerpts and that a reader could
be asked to place confidence in such an exposition
without the burdensome context of the complete proto-
cols.

RATING OF CONDENSED REPORTS

For illustration of the development described by the scheme, a compromise between short excerpts and full-length verbatim reports would take the form of reports edited for condensation and readability. If such condensed reports could be produced in such a way as to represent a valid paraphrase of the original, they might prove dramatic and useful educational documents.

We therefore undertook to compare the judges' ratings of condensed versions of four-year reports against their ratings of the full-length originals. Four students' four-year reports were prepared for rating. A modified Latin square design was used through which each of the six judges alternately was given a long form (a complete typescript of a student's four-year report) and a short form (four-year report edited for readability and condensed to between 30 to 60% of original). The results are presented in Table 11.

Only in the freshman year were the average rated Positions of short and long forms significantly different. Judges using the long form rated freshmen at a higher point on the scheme than did the judges using the short form. There were no significant differences for the sophomore, junior or senior year between the average Positions.

TABLE 11

LONG FORM:SHORT FORM

AVERAGE JUDGED POSITION

(N = 4 Students, 6 Judges, Alternate LF:SF)

Year		Long Form	Short Form	t	F
1	$\bar{x}$	4.25	3.75	1.86 (<.05)	
	s^2	.39	.47		n.s.
2	$\bar{x}$	5.33	4.99	n.s.	
	s^2	.42	1.35		3.19 (<.01)
3	$\bar{x}$	6.16	6.33	n.s.	
	s^2	.06	.78		12.91 (<.001)
4	$\bar{x}$	7.17	7.41	n.s.	
	s^2	.88	.81		n.s.

However, if we examine the analysis of variance ratio data on the same table, we find that the judgments were significantly more heterogeneous for the short form in two of the four years tested. In the sophomore and junior years there was significantly more spread using the short form; that is, the between-group variance of the short vs. the long form was greater than the within-group variance. This tendency, possibly the result of the judges' having to rely on less data, did not appear in the rating of freshman and senior year. This event may be connected

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with the evidence in Table 1 to the effect that the
sophomore and junior years are more difficult to judge,
and therefore the effect of shortening the form may
be more evident.

If we combine the judgments made on the long form
and the short form for the same four students over the
four college years, we again illustrate the high gen-
eral inter-judge reliability observed in the previous
instances. Table 12 indicates the inter-judge reli-
ability combining the long and the short form ratings.

TABLE 12

COMBINED LONG FORM:SHORT FORM

OVERALL RELIABILITY

(N = 4 Students, 4 Yrs., 6 Judges)

Judges	1	2	3	4	5	6
1	1.00	.97	.92	.90	.86	.83
2		1.00	.93	.89	.83	.83
3			1.00	.92	.77	.90
4				1.00	.74	.83
5					1.00	.74
6						1.00

These findings suggest that condensed, edited
versions of the reports can provide veridical portrayals
of the students' developments along the scheme. The

tendency of editing to oversimplify the impressions of
the freshman year in this set of protocols could pre-
sumably be counteracted in any editing of reports for
publication.

This sub-sample contained the reports of two
Radcliffe students, the only point in the judges'
experiments in which women's reports appeared. Though
such a sample is obviously too small for generaliza-
tion, it is of some interest that the agreement of the
judges about the Radcliffe protocols showed no signi-
ficant variation from that of their rating of male
students. Post-judgment discussion did generate among
the male and female judges a heated debate about sex
differences in the experience of Commitment but there
was an agreement that these differences were encom-
passed by the general definitions of the scheme.

CHAPTER II

CHARACTER OF THE SAMPLES

CHARACTER OF THE SAMPLES

When we undertook the study, our intent was to explore and portray differences in the ways students responded to the diversity and relativistic thinking confronting them in college. Since we saw our task as a kind of preliminary scouting of the most prominent aspects of the terrain, we selected our first informants with an emphasis on those students who we supposed would give us the most dramatically different accounts. These, we felt, might be on the one hand those who entered college with the most pronounced aversion to, or ignorance of, relativistic thinking, and on the other hand those who brought with them a predisposition toward, or familiarity with, such thinking. It was for this reason that we developed the Checklist of Educational Views (CLEV) and emphasized extreme scores in our call for volunteers as will be described below.

In selecting the Second Sample (Classes of '62 and '63), however, our purposes were different. We had detected throughout the varied reports of our first informants that underlying sequence of developmental steps which is the offering of this study. We had put aside our concern with contrasting personality traits, preferences and temperaments in order to focus on the developmental aspects of the students' reports.

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Our question now was whether the sequence of developmental challenges we had detected would be evident, one way or another, in the reports of students generally. In our second call for volunteers, we therefore neglected CLEV scores and sent out invitations at random.

In neither case did we construct a set of academic, sociological and psychological dimensions and attempt to procure a sample that would be representative of the population in terms of that construction. However, the samples turned out, with two exceptions to be considered below, to be both similar to each other and representative of their populations on conventional criteria. For the purposes of this study, of course, there was no requirement that a sample should contain a _proportional_ representation of its population on every point on every demographic dimension. What was required was _some_ representation. Exhaustive statistical analysis therefore seemed beside the point. The most cursory examination of the sample on such matters as occupation of father, level of family income, educational background, religious affiliation, etc. convinced us that every general grouping or level was amply represented. The only characteristic absent was, of course, that orientation involved in not volunteering. On ordinary criteria those who did not volunteer were as varied as those who did. About the meaning(s) of non-volunteering we can only speculate; for the purposes of this study, however, the possibilities

that the non-volunteers were somehow completely immune to the issues of development traced in our scheme seems frankly inconceivable.

The following describes the procurement and major characteristics of each sample.

THE FIRST SAMPLE (Class of 1958)

In October of 1954 and May of 1955 we administered CLEV to approximately one-third of the freshman classes of Harvard and Radcliffe in section meetings of the required course in freshman composition. In this course, one-fifth of the class had been qualified for honors sections and no other criterion used in subsequent sectioning except convenience of schedule. We selected sections, four regular to one honor, for all hours scheduled. This procedure resulted in 313 students with scores for both Fall and Spring. On the basis of these scores we invited 43 Harvard students and 12 Radcliffe students for interviews (see letter in Appendix). Of these, 27 Harvard students and 4 Radcliffe students responded. The following analyses are limited to the Harvard students.

TABLE 13

FIRST SAMPLE AND ADHERENCE SCORE, HARVARD STUDENTS

Adherence Score	Invited	Responded	Completed 4 years
High extremes (both scores)	3	2	1
Mean (both scores)	3	2	1
Low extreme (both scores)	11	7	4
Change extreme (increase)	13	8	5
Change extreme (decrease)	14	8	4
Total	44	27	15

Compared with their class as a whole, the repre-
sented percentiles of SAT, MAT, and weighted perfor-
mance in secondary school and Predicted GPA are
revealed by Table 14.

TABLE 14

FIRST SAMPLE RESPONDENTS AGAINST CLASS PERCENTILES
FOR SECONDARY SCHOOL PERFORMANCE* AND PREDICTED
RANK LIST**, HARVARD STUDENTS

Percentile	SAT	MAT	SSP	PRL
99-90	1	2	1	3
89-70	8	5	4	1
69-50	2	5	7	6
49-30	4	4	6	6
29-10	5	7	4	9
9-0	7	4	5	2

*As weighted for each school by Admissions Committee.

**Equivalent, for these purposes, to predicted Grade
Point Average

The percentage of the sample from private and pub-
lic schools was not significantly different from that
of the class as a whole, though it favored public
school. However the sample did contain a larger per-
centage of commuting students, 21% as against 11% for
the class as a whole. This latter difference con-
tributed to a difference in geographical origins, 48%
of the sample deriving from Massachusetts as compared
to 29% of the class as a whole. In listed occupation
of father the sample revealed no significant bias
compared to its population. The same held true for

intended field of concentration, except for a preponderance intending social sciences, 33% as against 19%, at the expense, equally, of the natural sciences (except biology) and engineering.

The most relevant bias of the sample, then, would seem to be that of academic ability. The extremes were over-represented, a consequence of the emphasis on extreme CLEV scores (correlation of CLEV with SAT, .470), a condition in keeping with our emphasis on extreme range in student experience. That the lower extreme was over-represented, however, qualifies the significance of the judges' finding to the effect that the Second Sample, which did not suffer this bias, entered college at a Position more advanced on our scheme.

THE SECOND SAMPLE (Classes of 1962 and 1963)

Since our purpose in enrolling the Second Sample was to discover whether the developmental sequence suggested by the reports of the First Sample had relevance in the experience of students generally, we ignored CLEV scores as a criterion of selection. However, the students' CLEV scores were still of interest to us, and we therefore sent out invitations, at serial random, within samples of 308 students of '62 and 317 students of '63 who had completed CLEV in September and in May. The manner of administering CLEV in May paralleled that for the First Sample.

Invitations were sent to 50 of these freshmen from the Class of '62 and 104 from the Class of '63. A total of 109, or 71%, responded. We found no way to

determine the reasons for the increase over the 56%
response to our invitation in the First Sample. Vari-
ous changes in student climate may have contributed,
but the impression conveyed by the students in both
the testing situation and in interview left us with
the feeling that a major cause was the more favorable
interest aroused in them by the revised format of CLEV
(see pp. 106 ff.).

Of the 109, 85 were from Harvard (126 invited)
and 24 from Radcliffe (28 invited). Interviewing in
late May and early June of each year, resulting in 366
interviews and 67 complete four-year reports. Of the
complete reports, 54 were those of Harvard students
and 13 of Radcliffe students. The following analysis
of the sample considers only the Harvard students.

As a whole, the Harvard Classes of '62 and '63
did not seem to differ in ways significant to our pur-
poses, except perhaps for SAT in which the mean rose
from 659 to 676. This difference, however, was small
compared to that between either Class and the Class
of '58 in which the mean SAT was 615. We therefore
pooled the two Classes and in Table 15 have compared
our sample against the normative data for the Class
of '63.

TABLE 15

SECOND SAMPLE RESPONDENTS AGAINST CLASS OF '63
PERCENTILES FOR SAT, MAT, SECONDARY SCHOOL
PERFORMANCE* AND PREDICTED RANK
LIST**, HARVARD STUDENTS

Percentile	SAT	MAT	SSP	PRL
99-90	10	4	9	8
89-70	16	15	21	15
69-50	16	27	22	18
49-30	15	17	19	19
29-10	21	13	9	14
9-0	7	9	10	9

*Weighted for school by Admissions Committee

**Equivalent, for these purposes, to Predicted Grade
Point Average

Inspection of the sample on the usual criteria of
sociological status, educational background, etc. pro-
vided no suggestion that any major segment of the
population sampled was unrepresented.

CHAPTER III

NOTES ON

THE CHECKLIST OF EDUCATIONAL VIEWS

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NOTES ON THE CHECKLIST OF EDUCATIONAL VIEWS

The contract covered by this report as a whole
included provision for the statistical analysis of the
performance of CLEV which had been administered in
revised form to freshmen of the Classes of 1962 and 1963.
Since this analysis failed to reveal significant rela-
tions between these students' scores on CLEV and their
academic aptitudes, choices or performance, it would
suffice to report these negative findings alone.

Earlier forms of the Checklist, however, had shown
significant and steady covariance with the aptitudes,
choices and performance of students in two previous
Classes, those of 1957 and 1958. It therefore is not
clear that the negative findings with the Class of '63
express a simple failure of cross-validation. There is
a real possibility that the marked rise and compression
of scholastic aptitude in the Class of '63 produced a
population in which the variable measured by CLEV was
no longer a determinant of academic performance and
choice. Details of the analysis make this possibility
seem probable.

The Checklist may therefore be of interest to
researchers addressing less compressed populations, and
we shall include here some notes on its nature and
earlier performance. Most particularly, we shall point
to our alterations of the Checklist's conventional
forced-choice format. As we shall point out (pp. 107-
115), we first undertook those changes in response to
what we look upon as the legitimate protests in the

academic community. In the end we found in these
changes a solution to a problem internal to the
measure. We shall therefore proffer our revised format
on two grounds: 1) as an example of the adjustment of
a forced-choice questionnaire to the values of an edu-
cational setting and 2) as a way of resolving a major
technical problem inherent in all "agree-disagree"
scales in which the items are characterized by some
degree of ambiguity.

Nature and Performance of CLEV, Early Forms

We undertook the construction of CLEV in 1953 for
the purpose of selecting those students who in inter-
view might report the most varied response to the
diversity, complexity and relativism of a college edu-
cation. The most important variable, we felt, might be
the degree of their preference for black-white, right-
wrong, thinking in an authority-oriented outlook as
against their preference for contingent, relativistic
thinking in an outlook of greater individual judgment.

Drawing upon the research of the day (esp. Adorno
et al., 1950; Stern, 1953) we designed a Likert-type
scale of 90 items focusing on attitudes toward educa-
tion, teachers, parents, students and books. In it we
presented, as quotations, statements about teachers,
courses, and so forth and asked students to indicate
how much they agreed or disagreed, for example:

"There is nothing more annoying than a question
that may have two answers."

Strongly agree	Agree	Agree more than disagree	Disagree more than agree	Disagree	Strongly disagree

"The best teacher is one who stays with what the
book really says instead of reading a whole lot of
things between the lines."

Strongly agree	Agree	Agree more than disagree	Disagree more than agree	Disagree	Strongly disagree

We felt that students who agreed with such statements more than other students would be expressing relatively more wish for clear explicit and externally sanctioned structures of rightness, a wish expressive of the tendency we called Adherence.

Similar quotations expressive of Adherence focused on the expectation of authoritative guidance:

"A good teacher's job is to keep his students from wandering from the right track."

"Discussion groups are all very well, but they are a sheer waste of time as far as learning anything is concerned."

Others on the morals of work and reward:

"If a student has completed his assignment he should receive at least a passing grade."

Some items were of reverse direction (see below). The major score to be derived concerned a preference for dualistic, authority-oriented thought which we termed Adherence.

In the first trial in 1953 we administered the 90-item scale in October to 219 freshmen of the Class of '57 and made an intensive study in May of a few students who had scored at each extreme in Adherence--5 who scored extremely high, 8 who scored extremely low. We interviewed these student about their experience in the manner we intended to use in our general study, without knowledge of their CLEV score. The students then took the Rorschach, Thematic Apperception Test, and the Draw-a-Person Test. Then, in a series of conferences, a staff of six psychologists reviewed the data from interviews and clinical tests and came to consensus in

predicting which extreme of CLEV score the student
represented. That these predictions were accurate in
every case suggested that the Checklist would be useful
for our study.

In a further examination of thirty-seven students
from each of the extremes, we found a marked difference
in the groups on other variables. The low A's (Adher-
ence score) showed a verbal aptitude (SAT) higher than
their mathematical (MAT) with the inverse true for the
high A's. The low A's characteristically derived from
a middle European background, attended public school,
planned a professional career, and made honor grades
their freshman year. The high A's characteristically
derived from a northern European background, planned a
"trade" career rather than a professional one, had
verbal aptitudes below the mean for their class, and
did not obtain honor grades in their freshman year.*

After making an item analysis of this trial run of
90 items, we made a Checklist of 46 items, using the
same format, and in the Fall of 1954 administered this
shortened edition to 547 entering freshmen of the Class
of 1958. Factor analysis revealed three factors
accounting for 33% of the trace. One major factor con-
tained almost all of the items on the scale (33 of the
46 statements). Table 16 presents a summary of the
most significant items in this factor.

The reliability of the test was checked both for
concurrent (split-half) and reliability over time
(test-retest). A sample of 313 students re-took the
CLEV in the Spring of their freshman year. The reliabil-
ity coefficients were significant for both internal
consistency, $r(\text{Fall}) = +.658$, $r(\text{Spring}) = +.731$; and
for consistency over time, $r(\text{Fall to Spring}) = +.797$.

*Findings by Dr. Charles C. McArthur.

TABLE 16

CLEV (1954 edition)

Factor Loadings and Items

		Factor I
Loading	Item Number	Item
.70	(21)	If professors would stick more to the facts and do less theorizing one could get more out of college.
.59	(10)	College professors should remember more often that men of action are more important in a society than intellectuals and artists.
.58	(42)	Educators should know by now which is the best method, lectures or small discussion groups.
.57	(26)	Students sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down.
.57	(29)	Putting a non-conformist in a position where he can influence students is no good.
.57	(6)	There is nothing more annoying than a question that may have two answers.
.56	(24)	It's a waste of time to work on problems which have no possibility of coming out with a clear-cut and unambiguous answer.
.54	(43)	It is a pretty callous student who feels anything but love and gratitude towards his parents.
.51	(41)	There is no point in having visiting European professors if they won't learn to speak English well.
.47	(17)	The best thing about science courses is that most problems have only one right answer.
.45	(9)	The most immoral thing about the lazy student is that he is letting his parents down.

TABLE 16--Continued

Factor I		
Loading		**Item**
.45	(14)	It is annoying to listen to a lecturer who cannot seem to make up his mind as to what he really believes.
.43	(15)	It helps the child in the long run if he is made to conform to his parents ideas.
.43	(20)	Any student who needs psychological counseling should not come to college.
.38	(3)	It is only right to think of one's own college as better than any other.

The reliability of Factor I was also examined by rank ordering the statements by factor loading from the Fall and correlating this ranking with a similar rank ordering of factor loadings from the Spring test. The rank order correlation was +.927 specifically indicating the stability of the major factor throughout the freshman year.*

Having determined the Checklist's reliability and the stability of the major factor of Adherence, we explored the relation of Adherence score to academic variables by examining the choices and performance of students' scoring above and below the mean. The high Adherent group tended to concentrate in natural sciences with the low Adherent group concentrating in humanities (X^2 = 27.33, $p < .01$). The high Adherent group tended not to achieve academically at as high a level as the low Adherent group (X^2 = 52.97, $p < .01$). The

*The computational analysis was performed by Paul Lohnes and Arthur Couch.

high Adherent group also tended to select military
science courses significantly more frequently than
the low group (x^2 = 13.20, p < .05). The high group
also contained a greater proportion of students who
were forced to withdraw from college because of aca-
demic difficulty (x^2 = 14.39, p < .02). From these
results a pattern emerged of relationships between
A-score, choice and performance in college consistent
with the earlier findings.

At the same time we noted the substantial corre-
lation between A-score and SAT score of -.47. Analysis
of multiple correlations revealed that A-score, when
combined with SAT in the prediction of performance,
contributed the small increment of .147 usual to such
a measure. In keeping with the covariance of SAT and
A-score we found in addition a significant relationship
between A-score and reading ability (x^2 = 17.60, p < .01).

A breakdown of the sample into three levels of SAT
score (low = 550 and below, middle = 551 to 640, high =
641 and above) revealed that the significant relation
of A-score and choice was limited to the middle group.
Most significant for the relevance of CLEV to future
classes of high and compressed SAT score was the dis-
covery that the overall contribution of A-score to the
prediction of performance (r = .147) by SAT combined
with A-score was attributable almost entirely to its
function in the lowest quartile of SAT (r = .274), dis-
appearing almost entirely in the upper quartile
(r = .032).

Revision of Format

In the setting of our study as a whole we felt that
CLEV had assisted us in our effort to explore extremes
of experience in our interviewing of the First Sample
(Class of 1958). Furthermore the student's consideration

of his CLEV responses at the end of his freshman inter-
view had proved very productive. For this latter
reason alone, we decided to administer CLEV to the
Classes of '62 and '63 from which our Second Sample
would be drawn, even though we were to invite a random
sample rather than one emphasizing extremes or radical
change of A-score.

Since we required no comparability of CLEV scores
between the two samples, we endeavored to improve the
Checklist and its scoring through the usual statistical
procedures and through study of the considerable
current literature pertaining to such measures. Since
many of the methods we used have themselves been further
refined by other researchers since that time, we need
not detail them here. What we consider to be of relev-
ance to the design of such measures even now are the
radical modifications we made in format.

The need for revision was brought to our attention
by our friends on the faculty and administration in the
college. In view of present controversy in regard to
the form and content of tests used in research, especi-
ally in educational settings, we feel that the special
nature of the objections brought against CLEV may be of
interest to other researchers.

The objection came from members of the faculty and
administration responsible for our operations and
supportive of our general undertaking in this study.
They pointed out that most of the statements on CLEV, to
which we asked students to agree or disagree, were
highly ambiguous, and they properly supposed that this
ambiguity was intentional. They supposed, for example,
that such a statement as "A good adviser's job is to
keep the student on the right track" was designed to
elicit a response to overall emotional tone, a tone

which we wished to suggest rather than make baldly explicit. As it stands, then, without a context or qualification of the meaning of "job," "keep" or "right track" the statement is denotatively vague or even vacuous. This is just the kind of proposition, our faculty colleagues pointed out, that they were engaged in teaching students not to make themselves and furthermore to recognize, when made by others, as providing an inadequate base for rational commitment, for or against. Disclaiming any expertise in the making of psychological tests, our critics conceded with care, though not without irony, that if we were perceived by the students strictly as "independent social scientists," this kind of questionnaire might be less objectionable educationally. They felt, however, that since the students properly perceived us as responsible representatives of the college, we were in an awkward position from which to ask students to participate seriously in an intellectual activity so contrary to the values of a liberal educationthe very values which we professed to be studying.

We felt the point to be well taken. That the measure seemed to "work" did not justify a confusion of means and ends. As often happens to the makers of tests of personality we were measuring the negative, and that after having asked our subjects to subscribe to the frame of mind most generative of it. That is, however worthwhile measuring negatives in personality may be, the form of the majority of items on our Checklist provided for no truly positive transcendent response.

For example, to the ambiguous statement about the "good adviser" quoted above, the form of the scale allows two classes of response: agreement and

disagreemen . If the respondent "agrees," he does so
presumably in response to the tone suggesting the
desirability of clear firm guidance by authority and is
presumed to find the statement meaningful. If he dis-
agrees, he is presumed to do so in response to the same
tonally implied message, and is again presumed to
accept the statement as meaningful. In the case of dis-
agreement, of course, it is not clear whether the res-
pondent may be expressing a positive personality trait
(e.g. reasonable degree of independence) or a negative
(e.g. a compulsive antagonism to authority), but for
some purposes this confusion might not be serious.

There is, however, a third class of response for
which the form of the scale makes no provision. This is
of the kind "The statement is ambiguous" or "What do you
mean?" or "It depends on the circumstances and on what
is meant by 'keep' and 'right track.'" This response
could be the most unequivocal and congruent expression
of positive, transcendent personal function, and quite
a different matter from an evasive checking of "no
opinion" which forced-choice questionnaires preclude in
order to preclude equivocation.

Supposing that a respondent wishes to express him-
self in this positive way to such an item which is set
in the conventional forced-choice form, his only
recourse is to check "disagree." This is not what he
means, and furthermore it demands that he appear to
accept as meaningful that which he does not so accept.
We need not enlarge on the ethical implications; they
are too obvious and too extensive.

Within the purely technical purposes of our own
study (as we suppose in many other studies) the conse-
quence of this limitation of response was to confound
most of those distinctions most important to us. While

we could hardly ask of such an instrument that it make
the more elaborate distinctions among the forms of our
students' thought which we were examining in the inter-
views, we were asking it to distinguish the students'
tendencies toward a dualistic outlook and toward a con-
tingent, relativistic outlook. Even this it was fail-
ing to do with real power. An "agree" response to a
dualistic, authority-dependent item might be confusing
enough to interpret in view of such variables as
response set, tendency toward yea-saying, etc., but
these seemed to us expressions of the same outlook.
It was the "disagree" response which failed to dis-
tinguish dualistic Opposition from genuine contingent
thinking.*

In the light of these considerations, the faculty's
objections could hardly be dismissed as "resistance" to
educational research. The fact that the measure worked
at all appeared astonishing, and even a little sad.
Perhaps the most alarming aspect of the experience was
the docility of the students. We wondered if constant
testing, combined with the presumption of respectability
that halos anything called "research," had jaded their
capacity for indignation. We came to admire the
Radcliffe freshman, alone among six hundred "volunteers,"
who had risen from her seat--at what personal cost we
can only guess--to throw her test in the wastebasket and
walk from the hall.

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*We had included some dualistic absolute statements
 anti-authority, hoping these would identify the
 Oppositional student, but they did not pull well, and
 did not relieve the dilemma of the contingent thinker.
 We could find only one or two statements of positive,
 contingent thinking which would discriminate (see
 below).

We supposed there might have been many students, too, who admired her, in secret and perhaps in shame, and it seemed possible that most of the students who later failed to respond to our invitation for interviews might have been among them. The cumulative losses seemed beyond tolerance. We were ready to pay a high price in the labor of scoring could we find a solution to both the ethical and technical problems. The alternative was to abandon the Checklist.

The solution we found for the ethical problem was a simple if radical change in format. First we emphasized in the directions the character of the items as "statements people have made about education," and reminded the students of this context throughout the Checklist by prefacing each item with the word State- ment, with the statement in quotes. More importantly, we abandoned the forced-choice form by inserting a "can't say" position in the center of the agree- disagree scale. And most importantly, as it turned out, we followed each item with four blank lines on which we invited the students to write comments. Taken together, these provisions satisfied us and our faculty colleagues on ethical grounds, and the last one, in particular, appeared to lift the students' reaction to the test from passive docility to zestful interest.

It was only when we surveyed the students' comments that we realized how much they might provide a solution to the technical problem as well. Their rich- ness revealed how many distinctions--and outright reversals of meaning--the simple agree-disagree scale had obscured.

Comments on an item which factor-analysis had identified as one of the strongest will serve as illus- tration. The item read: "There's nothing more annoying

than a question that may have two answers." The follow-
ing are comments by students who had checked "strongly
disagree," and suggest the range of style of comment
congruent with the check:

(a) "How about one with three answers?"

(b) "Yang and Yin are still fighting this one
out."

(c) "Only if the teacher thinks one of them is
right."

(d) "It depends on what the question is about."

(e) "It depends on what is meant by 'answer'."

(f) "No! This question is much more annoying.
It's senseless."

Quite aside from the strong portrayal of individual
styles conveyed by students whose comments were con-
sistently of any one of these types, some students'
comments signaled the error which would be involved in
scoring by the check in the agree-disagree scale alone.
For example, the following incongruous comment was
made by a student who also checked "strongly disagree"
to the above item: "Exactly, that's why I like
physics - one answer." The majority of this student's
other responses and comments suggested that he might
have meant to check "strongly agree"; however, he had
made two other "errors" of this kind in twenty items.
He remarked later, in interview, that his feelings were
indeed mixed. "Yeah, I do like to have things clear
and definite, and I wish everything <u>was</u> that way, but
somehow I guess I think that's kind of immature, some-
how."

An extreme of error is exemplified by the instance
of another student who checked "disagree" on the same
item and commented: "No question has two answers."
During his freshman interview he discussed his reasons
for changing his response to "agree" during the spring

administration of the CLEV:

I. [reading] "There's nothing more annoying
    than a question that may have two answers."
    And in the fall here you disagreed with
    that and in the spring you agreed. You
    tend to agree a bit more.

S. Well, at first in the fall I disagreed
    because, uh, I absolutely couldn't see why
    there should, why there should be something
    with two answers. But as I went along I
    found out that that's just the way it was.
    That-ah, I mean it, it made for more, uh,
    more interesting topics, in other words, to
    have-uh, two different sides to the story--

I. I see. So that-uh...

S. I mean at first I says, "Well, why should
    there, why should there be anything with two
    answers?" Now I...

I. So you just disagreed with this statement
    /Yeah/ because there wasn't probably anything
    that did have two answers...?

S. Right. Then I found out that there were
    things that had two answers (I. laughs) and,
    and it wasn't so bad after all. It was very
    interesting. But at first it <u>was</u> annoying!
    It was annoying like just a month ago--I
    guess that's why I checked "agree" here in
    the spring.

In this instance, conventional scoring would have
reversed his meaning in the fall and the direction of
his movement from fall to spring. In the fall, his
"disagree" reflected not a contingent outlook but an
extreme of dualistic absolutism, so naive that it lay
outside the range presumed by the scale. We found two
students for whom the <u>Checklist</u> was in this identical
error, and many more for whom the general error of
reverse-scoring appeared in other items.

One item (one of the two deliberately "reverse-
direction" items on the measure) was intended to tap
a preference for contingent, relativistic thinking.

It had "pulled," but only fairly well, in the Check-
list's original form. It read, rather floridly, "The
meaningful and dramatic experience in education lies
not so much in contrasting right and wrong or black and
white, but in discovering the colorful and vital differ-
ences in what previously seemed mere shades of grey."
In the Checklist's new format, the comments revealed
where the item had been losing its strength and again
provided a means for correction. The following
comments, for example, are all made by students who
had checked the right-hand side of the scale, from
"can't say" to "disagree." Contrary to the scoring of
the check marks alone, they identify the contingent
thinker at work:

> "A pretty figure of speech. Does it mean
> anything?"

> "Why 'mere' shades of grey?"

> "What are we talking about, education or sin?"

> "I like shades of grey."

> "I've never seen black nor have I seen pure
> white. Sounds like some moral heart-bleeding
> liberal."

> [and most succinctly] "Huh?"

In independent scoring, five scorers sorting each
item in a sample of 50 questionnaires agreed in plac-
ing 85% of the items (agree-disagree scale and comments
taken together) into one of four categories: Dualistic
Adherence, Dualistic Opposition, Contingent thinking,
Rejection. We derived the impression that the result-
ing scores would prove far more reliable than those of
the agree-disagree scale alone. A small sample item
and factor analysis supported this impression by indi-
cating higher split-half and test-retest reliability

and a more concentrated loading of the Adherence factor. We decided, however, against an extended endeavor to document our impression. The task exceeded the function now served by CLEV in the study as a whole, and the data given below, based on the scoring of the agree-disagree scale alone, suggested that the question would have to be investigated in a population less compressed in academic ability.

Performance of CLEV, Revised Form, Sample of 1963

From the 312 students of the Class of '63 who had filled out the revised form of CLEV in the fall and spring of their freshman year (1959), we selected a sample of 60 (every 20th name) and considered their fall scores alone (agree-disagree scale only). We submitted these scores to a principal components factor analysis procedure using the largest row element in the diagonals.* One major factor emerged from the analysis accounting for 34.5% of the trace. An examination of the factor loadings revealed that seven of the twenty items formed the most significant cluster. Table 17 presents the loadings on the major factor for these items. The content of the questions suggests that the concept of "Adherence" as used in the study remains a major dimension. A comparison with the earlier versions of CLEV also indicates that the single major factor from the most recent analysis accounted for more of the trace than all three factors in the earlier study. Also an examination of mean scores for each item loaded for this factor indicates that on the average the students in this sample tend

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*The procedures for the factor analysis are outlined in Cooley and Lohnes, 1962. The MSA techniques developed by Jones, 1964, were used for the actual programming.
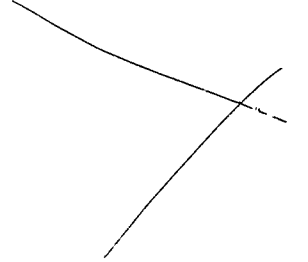
TABLE 17

CHECKLIST OF EDUCATIONAL VIEWS 1959

FACTOR LOADINGS BY QUESTION

Item Number	Factor I Loading	Item
16	+.609	"In the final analysis the student who skips reading is throwing away his parents' money."
18	+.598	"The inspiring teacher puts across to his students things as they really are."
17	+.489	"We all have a tendency to make judgments which are too simple and final: we hope to learn through education to make judgments more complex and tentative." (reverse score)
15	+.473	"Students must first master what is already known before they are told to exercise their own judgment."
12	+.464	"A good teacher's job is to keep his students from wandering from the right track."
11	+.349	"For most questions there is only one right answer once a person is able to get all the facts."
14	+.325	"There is nothing more annoying than a question which may have two answers."

to disagree with Adherent concepts. For example, the
students tended to check "disagree" on the item stat-
ing that a student who skips assigned reading is throw-
ing his parents' money away. On the "comment" to this

item the students tended to remark that it was their
own future which was the predominant concern. On
item 12--"A good teacher's job is to keep his students
from wandering from the right track"--the students also
tended to check "disagree" consistently and to make
such comments as: "It's the student's job" and "Whose
right track?" Similarly, most students tended to
check the "disagree" side of the scale for all items
that make up the factor, with the exception of item
17--"We all have a tendency to make judgments which
are too simple and final: we can hope to learn through
education to make our judgments more complex and tenta-
tive." On this item the majority of students checked
the "agree" side of the scale, adding such comments as
"Yes, but you still have to make them, tentative or
not." These discriminations by the majority suggested
that "response set" had not significantly affected
their answers.

We then compared the Adherence scores of this
sample of 60 freshmen of the Class of '63 to other
academic variables. A factor score was computed for
each student.. This score represented a method of
combining all responses by a student weighted in
accord with the factor loadings for each question.
The distribution of factor scores was then normalized
for the sixty students in the sample. The relationship
of A-score to other variables such as SAT score, Pre-
dicted Rank List, Grade Point Average was then examined.
The correlations in general were not significant (SAT
-.077, PRL -.268, GPA [Fall] -.156, GPA [Spring] -.053).
Since A-score no longer showed a significant overall
relation to these variables, we examined the relation-
ships in the upper and lower quartiles of A-score in
the sample. Here the previous trends did appear to at

least a significant degree in the average SAT, pre-
dicted grades and attained grades of the two groups.
There was no difference between the upper and lower
quartiles of A-score in public vs. private school
preparation.

The meagerness of the findings was in keeping
with the expectations we derived from the analysis of
the function of CLEV in the sample of the Class of '58.
The covariance of A-score with academic choice and per-
formance had then been limited to the lower levels of
SAT (see above, p. 106). Meanwhile the average SAT of
entering freshmen had risen from 615 to 676 and the
lower quartile from 547 to 610. In admitting students
in the lower quartile of SAT, moreover, the Committee
on Admissions had put increasing weight on assessing
the probable source of a student's academic and extra-
curricular achievements. Most particularly the
Committee had searched for evidence that might suggest,
in however rough a way, whether the achievements of
these students were the product of an imaginative
determination or a compulsive desperation (personal
communication). To judge from our clinical work, the
Committee's success had been considerable.

We presumed, then, that the level of intellectual
function of the Class of '63 enabled students high in
Adherence to transcend the negative effects of the
tendency. An accidental finding, however, suggested a
more radical interpretation: that these students, in
the development traced in our scheme, transformed the
function of Adherence into a stylistic quality of their
commitments where it might function as a positive
strength.

The finding on which we stumbled was as follows.
To obtain for us a sample of CLEV scores from seniors

in the Class of '63, Dr. Stanley King included the
measure in a battery of tests scheduled in a larger
research project, under his charge: The Harvard
Student Study. In this larger project the sample
consisted of 250 students who had volunteered as
freshmen for an extensive testing in each of their
four years. Sixty of these overlapped with the sample
to which we had administered CLEV in the fall and
spring of their freshman year. Pressed for time, we
took the CLEV scores of the first twenty of these
seniors to appear for retesting in Dr. King's study.
The salient finding was that these students had scored,
on the average, significantly above the mean in Adher-
ence in their freshman year. Their grades were indis-
tinguishable from seniors comparable on all other
criteria. What did distinguish them was that they
represented those students in Dr. King's sample who
responded most promptly to his invitation for their
final work in his study and who also kept their
appointments.

CONCLUSION

CONCLUSION

The judges' experiments validate our develop-
mental scheme in that they certify its existence as
a reliably discernable theme common to the students'
reports sampled. This is not to say that other
themes would not be discernable in the reports nor
that the particular scheme which we abstracted might
not be improved in its articulation. It leaves open,
too, the question as to whether the scheme would be
consistently discernable in the reports of students
in other colleges or in other times. Within these
strict limits the study makes two contributions, one
a demonstration of feasibility and one a verification
of substance.

Feasibility: The findings demonstrate the
feasibility of assessing developments in the epis-
temological and axiological outlook of intelligent
persons in late adolescence.

Substance: The findings validate one particular
scheme of such development as a common theme in the
sample of student reports from which it was
abstracted. This scheme, as outlined in the Summary,
extends into stages of personal Commitment as an
activity of orientation in a relativistic world.

Within the confines of research itself these
findings of feasibility and substance contribute to
the articulation of a relatively unexplored span of
human development.

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To go beyond these statements and to consider
the relevance of our particular scheme to the con-
duct of education is to make presumptions about the
scheme's general validity which are not yet demon-
strated by experiment. If such presumptions are
granted, even tentatively, the substance of the
scheme would seem to bear relevantly on broad
aspects of education such as selection, guidance,
curriculum and instruction. Speculation about these
relevancies is properly beyond the scope of this
report (see Perry, op. cit.) but we wish to remark
on one pervasive consideration.

The scheme reveals that each step of development
confronts the student with challenge. Two of these
steps may be reasonably called points of crisis. The
first occurs in the transition from dualistic to
relativistic assumptions at Positions 4 and 5, the
second in the undertaking of Commitments between
Positions 5 and 7. While the first of these might
seem to be primarily an intellectual matter, and the
second primarily volitional, they share in common the
demand they make upon the student's courage. The
first demands that the student relinquish old assump-
tions about truth, about certainty and about the
guidelines of moral conduct in exchange for new and
problematical assumptions based on self-limited con-
textual and procedural criteria. The second requires
the student to embrace major personal responsibili-
ties and risks in this newly perceived world.

In each instance the student has the option of
that entrenchment in reaction which we have termed
Retreat or of that drifting into denial of responsi-
bility which we have termed Escape (as distinct from

responsible dissent). The educator cannot determine
the student's choice; his problem must be to provide
the context in which the probability of a favorable
decision receives maximal support.

We have therefore searched our records for those
conditions from which the students seemed to draw the
nourishment of their courage. The inference we
derive is that the students drew this nourishment
most productively from a sense of community of a kind
which included not only their peers but their instruc-
tors as well.

The provision of this sense of community would
seem to require modes of instruction and forms of
teacher-student relations quite different from those
which were appropriate sixty years ago. At the turn
of the century the epistemological assumptions of the
university were themselves more in keeping with the
right-wrong assumptions characterizing Positions 1-4
in our scheme (see Perry, op. cit.). Community could
then be found with peers in action and reaction to an
Authority whose primary function was expository and
evaluative. Today authority itself requires the stu-
dent to go beyond such a defined world to confront
the loneliness of affirming his own meanings and deci-
sions in a world devoid of certainty. It is not
really paradoxical to say that at this advanced point
in his development the student may need not less
support but more.

The sense of community from which the students
seemed to draw support seems to involve more than
their vision of certain members of the faculty as
models for emulation. It involved the experience of
being seen by such models as being "in the same boat"

with them. It was this social confirmation which
made the very loneliness involved in Commitment a
shared bond of community and a rite of membership
among mature men.

The arts of communicating this confirmation are
perhaps intuitive in the humane teacher. Educational
forms and daily customs, however, seem to us not to
have changed as rapidly as the epistemology of the
curriculum. The expositional and evaluative functions
of instructors now require balance by extension and
emphasis of those functions which recognize and con-
firm the student's endeavors to make meaning and his
courage in committing himself in the midst of many
possible meanings.

The very nature of our scheme itself makes clear
(if there was ever any doubt about the matter) that
this social confirmation of the student is not some-
thing merely additive to, or vaguely related to, his
intellectual function. It is not something like
building character (or dealing with personal or emo-
tional problems) somehow "tacked on" to the instruc-
tor's central responsibility of providing substantive
intellectual training. In the modern epistemology
the learner is inextricably entwined in his learning,
the knower in his knowledge. "Knowing" something now
involves in itself an act of personal commitment
(Polanyi, 1958). From its own particular conceptual
frame, the scheme we present articulates the evolu-
tion of this intertwining of the learner and the
learned.

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REFERENCES

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report. An extensive bibliography of works
relevant to the study from which the devel-
opmental scheme emerged is included in W. G.
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APPENDIX

APPENDIX

The invitation asking students to volunteer ran
as follows for the First Sample:

Dear Mr. _____

You will remember having helped us by
filling out our "Checklist of Educational
Views"* in September and again in May. We
are much in need of your help again and
hope that out of an interest in education
here you will feel it worthwhile to assist.

Now that the year is almost over, we
would like to talk with a number of students
about their experience at college. We feel
that students with different views about edu-
cation may experience their years in college
in very different ways and that it is vital
to know about the different paths of this
experience. We are writing to you because
we feel that you can contribute to this
understanding. Would you come to the Bureau
to talk with us?

(There followed a paragraph about making an
appointment.)

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*The Second Sample has filled out CLEV as simply one
part of a quite unconventional test of reading skill
(Harvard University Reading Test, Bureau of Study
Counsel, unpublished) taken by all freshmen in
September. The invitations to the Second Sample read
accordingly.

GLOSSARY

The following glossary is reproduced from the _Judge's Manual_. It provides a reference
for certain terms appearing in the text, and on the chart, to which a particular meaning is assigned.

Absolute

The established Order; The Truth, conceived
to be the creation and possession of the Deity, or
simply to exist, as in a Platonic world of its own;
The Ultimate Criterion, in respect to which all
propositions and acts are either right or wrong.

Accommodation

The modification or reorganization of a
structure in response to incongruities produced
by assimilations.

Adherence   Chart code: A (contrast Opposition)

1.) Alignment of self with Authority in a
    Dualistic structuring of the world; or

2.) In parentheses: (A), a "conservative" pref-
    erence in a relativistic structuring of the
    world.

Assimilation   Chart code: parentheses ( )

The connection of a new percept to an extant
structure. This may require various degrees of
subordination of the implications of the new
percept to the demands of an extant structure, and/
or various degrees of accommodation of the structure.

On the chart, the quantity within the
parentheses is to be read as assimilated to
the structure preceding the parenthesis; for
example, 4A(M) reads "Multiplicity assimilated
to Adherence in structure of position 4."

Authority   (upper-case A)

The possessors of the right answers in the
Absolute, or the mediators of same (as viewed in
Adherence); or the false or unfair pretenders to
the right answers in the Absolute (as viewed in
Opposition).

authority   (lower-case a)

An aspect of social organization and inter-
action in a relative world, with many differentia-
tions (e.g., power, expertise, etc.).

Commitment   Chart code: C

An affirmation of personal values or choice
in Relativism. A conscious act or realization of
identity and responsibility. A process of orienta-
tion of self in a relative world.

The word Commitment (capital C) is reserved
for this integrative, affirmative function, as
distinct from 1) commitment to an unquestioned or
unexamined belief, plan, or value, or 2) commitment
to negativistic alienation or dissociation.

defensive   (adjective descriptive of Adherence or
                        Opposition)   Chart code: Ad or Od

Adherence or Opposition functioning in internal
structures of emotional control so as to produce
high resistance to qualification, ambiguity or change.

Dualism or Duality   (upper-case D)

A bifurcated structuring of the world between
Good and Bad, Right and Wrong, We and Others.

Complex Dualism - a Dualism in which one element
is itself dualistically structured.

dualism or duality   (lower-case d)

Any binary function in a relative world, e.g.,
the right/wrong quality of a proposition in a
specified context.

Escape

The denial of the implications for growth
in Positions 4 and 5 by Dissociation or
Encapsulation in the structure of these Positions.

Dissociation   Chart code: D

Sustained opportunistic denial of
responsibilities implied for the self in
Multiplicity or Relativism.

Encapsulation   Chart code: E

Consolidated assimilation of Multiplicity
or Relativism to a Dualistic structure, projecting
responsibility on Authority.

Growth

Progression from one structure to a higher
structure as defined in the scheme.

Multiplicity   Chart code: M

A plurality of "answers", points of view,
or evaluations, with reference to similar topics
or problems. This plurality is perceived as
an aggregate of discretes without internal
structure or external relation, in the sense,
"Anyone has a right to his own opinion," with the
implication that no judgments among opinions
can be made. (compare Relativism)

Opposition   Chart code: O (contrast Adherence)

1.) Alignment vs. Authority in a Dualistic
    structuring of the world; or

2.) In parentheses: (O), a preference for change
    and experimentation, as opposed to conserv-
    atism, in a relativistic structuring of the
    world.

Position   (1 to 9 etc. on the chart)

That structure representing the mode, or central
tendency, among the forms through which an individual
construes the world of knowledge and values at a given
time in his life.

Relativism   Chart code: R

A plurality of points of view, interpretations,
frames of reference, value systems and contingencies
in which the structural properties of contexts and
forms allow of various sorts of analysis, comparison
and evaluation in Multiplicity.

Retreat

An active rejection of the implications for
Growth by entrenchment in a defensive variant
of Position 2 or 3.

Structure

The relational properties of a world view,
with special reference to the forms in which the
nature of knowledge and value are construed.

Temporizing

A suspension of Growth (for a year) without
recourse to the structurings of Escape.

GROWTH

RELATIVISM ▶ ▶

COMPLEX DUALISM ▶ ▶
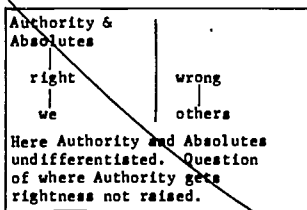
SIMPLE DUALISM

POSITION 1

BASIC DUALITY

Assumption of dualistic struc-
ture of world taken for granted,
unexamined. Right vs. wrong,
we vs. other, good vs. bad,
what They want vs. what They
don't want. All problems
soluble by Adherence: obedi-
ence, conformity to the right
and what They want. Will
power and work should bring
congruence of action and re-
ward. Multiplicity not per-
ceived. Self defined primarily
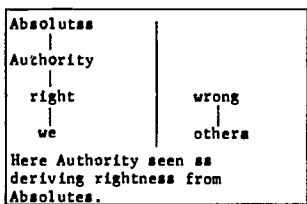by membership in the right and
traditional.

(margin letters: E M B E D D E D N E S S)

Form 1:

```
Authority &
Absolutes
  right          wrong
  we             others
```

Here Authority and Absolutes
undifferentiated. Question
of where Authority gets
rightness not raised.

Codes:

1 A$_1$

1 Ad$_1$

Form 2:

```
Absolutes
Authority
  right          wrong
  we             others
```

Here Authority seen as
deriving rightness from
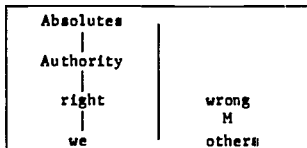Absolutes.

Codes:

1 A$_2$

1 Ad$_2$

POSITION 2

MULTIPLICITY PRE-LEGITIMATE

Multiplicity perceived, but only
as alien or unreal. As alien it
assimilates easily to error and
otherness: "Others are wrong
and confused (M)." Assimilated
to Authority, it leads to Opposi-
tion: "I am right; They (Author-
ity) are needlessly confused (M)."

As unreal, M is a mere appearance,
e.g.: "They want us to work on
these things (M) to learn how to
find the answer." Here Opposition
sees Authority not as wrong but
simply as failing in its media-
tional role.

In either case M is perceived but
not as a signal of legitimate,
epistemological uncertainty.

Alien
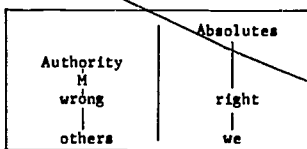
In A:

```
Absolutes
Authority
  right          wrong
                  M
  we             others
```

Codes:

2 A ⟶ M

2 Ad ⟶ M

In O:

```
                      Absolutes
Authority
   M
  wrong           right
  others          we
```

Codes:

2 O ⟶ M

2 Od ⟶ M

Unreal

```
Absolutes
Authority
  right          wrong
        M
  we             others
```

Here Authority knows real
answer behind M.
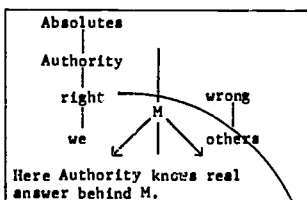
Codes:
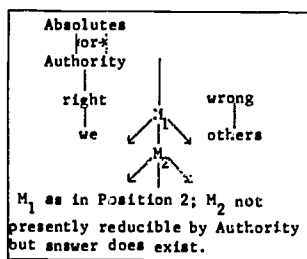
2 A(M)   2 O(M)

2 Ad(M)   2 Od(M)

POSITION 3

MULTIPLICITY SUBORDINATE

Multiplicity perceived with some
of its implications. Authority
may not have the answers yet on
some of it, perhaps because the
relevant Absolutes are not yet in
view. But trust in Authority, at
least in the ideal, is not threat-
ened. Exercises in M may be
enjoyed (A) or disliked (Ad);
Authority is presumed to evaluate
them on skill of presentation (not
on structural properties). Ad may
fear they are judged on glibness,
influence, or pull.
Opposition here: "They judge all
wrong." Self defined over against
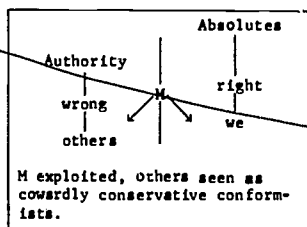Authority and in similar struc-
tural terms.

In A:

```
Absolutes
or
Authority
   right        wrong
   we    M₁     others
         M₂
```

M$_1$ as in Position 2; M$_2$ not
presently reducible by Authority
but answer does exist.

Codes:

3 A(M)

3 Ad(M)

In O:

```
                    Absolutes
Authority
           M
  wrong          right
  others         we
```

M exploited, others seen as
cowardly conservative conform-
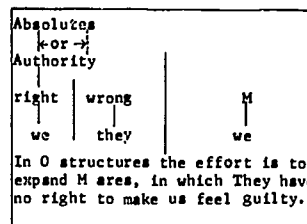ists.

Codes:

3 O(M)

3 Od(M)

POSITION 4

MULTIPLICITY CORRELATE; OR RELATIVISM SUBORDINATE

Duality restructured in complex
terms: right-wrong vs. M. Ab-
solutes may be doubted in M area
or considered so inaccessible
as to be impossible to bring to
bear on human affairs in any
reasonably foreseeable future.
In M, therefore, "anyone has a
right to his own opinions." M is
acknowledged as relevant to self,
by being confusing, liberating,
intriguing etc.

or

Relativism perceived in M and
assimilated to Authority: A(R).
That is: Authority can make
judgments in M on discernible
relations of propositions to each
other (coherence) or to data (con-
gruence). However this is still
"how they want us to think,"
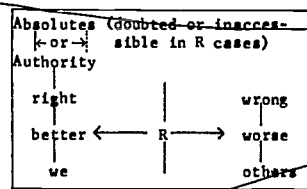rather than a consequence of the
nature of all knowledge.

Multiplicity Correlate:

```
Absolutes
or
Authority
  right    wrong         M
  we       they          we
```

In O structures the effort is to
expand M area, in which They have
no right to make us feel guilty.

Codes:

4 A - M

4 A ⟶ M   4 O - M

4 Ad ⟶ M   4 Od - M

Relativism Subordinated:

```
Absolutes (doubted or inacces-
or        sible in R cases)
Authority
   right              wrong
   better ⟵ R ⟶ worse
   we                 others
```

Codes:

4 A(R)   4 O(R)

4 Ad(R)   4 Od(R)

POSITION 5

RELATIVISM CORRELATE, COMPETING, OR DIFFUS[E]

Relativism perceived as wa[y of]
perceiving, analyzing and [evalu-]
ating, not because "They w[ant]
to think this way," but in[trin-]
sically. Authority percei[ved as]
authority in R. In R Corr[elate]
world divided into those a[reas]
where Authority has the an[swers]
(e.g. physics or morals) a[nd]
those in which R must be u[sed]
(e.g. English papers). In [Com-]
peting, R perceived as app[lying]
to whole world (with binar[y]
answers a sub-class), but th[e]
view alternates with a pre[ferred]
one. In R Diffuse, the mo[re]
developed of these structu[res]
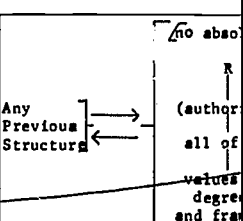is accepted generally but [its]
implications for commitmen[t ...]
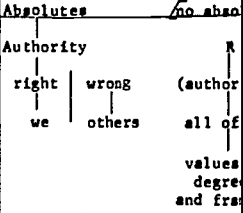
R Correlate:

```
Absolutes        no abso...
Authority                R
   right   wrong   (author...)
   we      others  all of...
                   values...
                   degre...
                   and fra...
```

Codes:

5 A - R   5 O...

5 Ad ⟶ R   5 Od...

R Competing:

```
                   no abso...
                          R
Any                (author...)
Previous           all of...
Structure          values...
                   degre...
                   and fra...
```

Codes:

/Previous/ ⇄ R

R Diffuse:

```
     no absolutes/
            R
      (authority)
       all of us
   values in degrees and fr...
```

Codes:

5 R(A), 5 R(O), 5 R...

/A and O become conservativ[e and]
progressive styles in R fr[ame]

TEMPORIZING
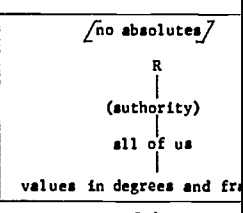
A prolonged pause (full year) within any of the above Positions, without evidence of entrenchment through structures of Escape. Code by add[ing ...]

RETREAT

Active Denial of Potential of Legitimacy in Otherness

2 Ad(A)$_1$ "Reaction" High anxiety, complaint, resentment vs. M.

2 Ad(A)$_2$ "Dedicated Reactionary" Rightness, hate of Otherness,
               no overt anxiety. Has all answers for M.

2 Od(A)$_1$ "Negativism" Passive resistance vs. Authority, but no
               "cause" of one's own.

2 Od(A)$_2$ "Dogmatic Rebel" Identity in "cause" without contingent
               judgment. "Cause" determined by whatever Authority
               does to be against.

ESCAPE

A settling for positions 4, 5, or 6 by denying or rejecting [...]

Multiplicity

Encapsulation of M (Identity limited):

Ad(M)E   Loose "tolerance" of M for Others
         so long as it serves A purposes or
         doesn't upset own A structures.

         (Dependent) = Identity in carrying out assignments of external [...]
         (Outer directed) = Identity in carrying out assignments of external [...]
         (Inner directed) = Identity in autocracy. Moral problem all settle[d ...]

Od(M)E   (loose cynicism) uses M to defeat
         all value statements (except affirma-
         tion of self as nihilist).

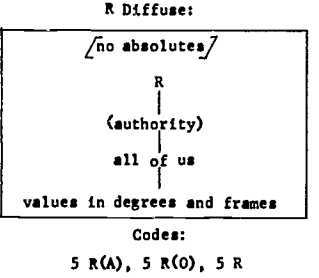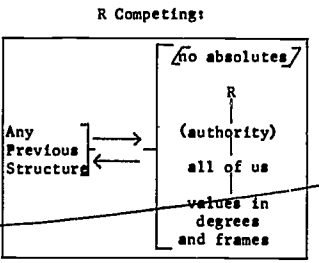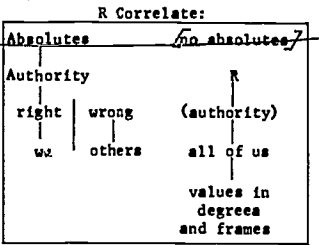Dissociation in M (Identity dissolved):

MD   Uses M to wash out self, no intellec-
     tual exercise in process. Anything goes.

Note: Both E and D imply an opportunism. In D this is evident but no[t ...]
       opportunism" is denied. However, where a man says, "I am an opp[ortunist]
       and the choice lies between forms of E, possibly Ad(M or R)E (ou[ter ...]
       (cynic).

POSITION 5

RELATIVISM CORRELATE, COMPETING, OR DIFFUSE

Relativism perceived as way of perceiving, analyzing and evaluating, not because "They want us to think this way," but intrinsically. Authority perceived as authority in R. In R Correlate, world divided into those areas where Authority has the answers (e.g. physics or morals) and those in which R must be used (e.g. English papers). In R Competing, R perceived as applying to whole world (with binary answers a sub-class), but this world view alternates with a previous one. In R Diffuse, the most fully developed of these structures, R is accepted generally but without implications for commitment.

R Correlate:

```
Absolutes          /no absolutes/
Authority                  R
 right | wrong       (authority)
  vs.  | others       all of us
                        |
                     values in
                     degrees
                     and frames
```

Codes:

5 A - R   5 O - R
5 Ad → R   5 Od - R

R Competing:

```
              /no absolutes/
                     |
                     R
Any              (authority)
Previous →         |
Structure ←      all of us
                     |
                  values in
                  degrees
                  and frames
```

Codes:

/Previous/ ⇌ R

R Diffuse:

```
/no absolutes/
     |
     R
(authority)
     |
 all of us
     |
values in degrees and frames
```

Codes:

5 R(A), 5 R(O), 5 R

/A and O become conservative or progressive styles in R frame./

POSITION 6

COMMITMENT FORESEEN

R accepted for all secular purposes including binary judgment and action. Commitment may be perceived as a logical necessity for action in an R world and/or "felt" as needed (with or without explicit statement of a logical necessity). The realization may bring various reactions: eagerness, ambivalence, dismay, sturdiness, turmoil, simple acceptance.

Commitment Foreseen:

```
   R world
 (authority)
   all of us
     |
values in degrees and frames
     /C/
```
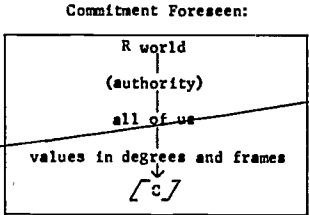
Codes:

6 R   6 R(C)
6 R(A)   6 R(A)(C)
6 R(O)   6 R(O)(C)

(C) added when a commitment sensed as near.

POSITION 7

INITIAL COMMITMENT

First commitment(s) or affirmation(s). Acceptance of their origins in self's experience and choices, some incitations of implications.

Initial Commitment(s):

```
     R world
   (authority)
    all of us
        |
values in degrees and frames
        |
     C initial
```

Codes:

7 RC
7 R(A)C
7 R(O)C

Note on religion: In Commitment involving a religious faith in' an absolute, the same distinctions re Commitment apply (cf. theological distinction between belief and faith). The structural solutions for relating an absolute and relativism are varied and not outlined here. In all of them the crucial criterion for the integrity of the R orientation is the attitude toward people with other absolutes.

POSITION 8

ORIENTATION IN IMPLICATIONS OF COMMITMENT

Some implications of commitment realized: tensions between feelings of tentativeness and finality, expansion and narrowing, freedom and constraint, action and reflection. Prospect of (or even experience of) membership with authority in areas of commitment (values, address to others, occupation, etc.). Identity sensed in both content of commitment and in personal style of address to commitment.

Implications Experienced:

```
        R world
authority and all of us
values in degrees and frames
         C 1, 2,...
Identity in Commitments and
style of address to them
```

Codes:

8 RC
8 R(A)C
8 R(O)C

Note: (D) may be added to any forms of 7, 8, (or conceivably even 9), if while advancing in most aspects of his life the student has kept some aspects(s) dissociated from the general advance without appearing to have invalidated his central growth.

POSITION 9

DEVELOPING COMMITMENT(S)

Commitments expanded or remade in new terms as growth. Balances are developing in the tensions of qualitative polarities of style, especially alternation of reflection and action. Acceptance of changes of mood and outlook within continuity of identity. Sense of being "in" one's life.

```
        R world
authority and all of us
values in degrees and frames
         C 1, 2, 3, ... n
Developing balance of style
```

Codes:

9 RC
9 R(A)C
9 R(O)C

A
C
T
U
A
L
I
Z
A
T
I
O
N

TEMPORIZING

...ctures of Escape. Code by adding T. Where evidence suggests exploration within the Position, code as (T) to indicate growth continues through expansion.

ESCAPE

..., or 6 by denying or rejecting their implications for growth.

Relativism

Encapsulation of R (Identity limited):

Ad(R)E Relativism in M exploited for A purposes but never turned on A structure.

...ing out assignments of external authority by obedience.
...ing out assignments of external authority (or peers) by performance.
...racy. Moral problem all settled. May also find identity in performance.

Od(R)E (rationalistic cynicism) uses R to defeat all value statements (except affirmation of self as nihilist).
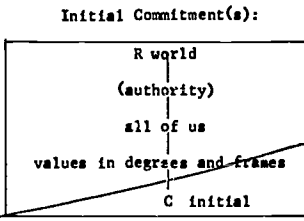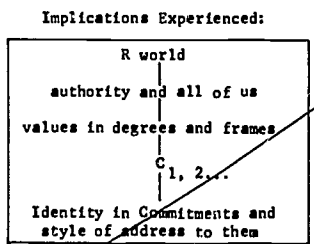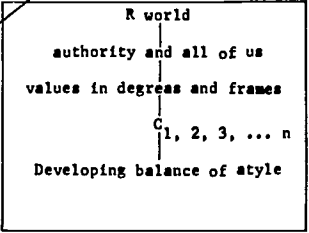
Dissociation in R (Identity dissolved):

RD Uses R to wash out self. The intellectual game, commitment avoided.

... In D this is evident but not acknowledged, since even "commitment to ..., where a man says, "I am an opportunist," he is describing an identity, ... of E, possibly Ad(M or R)E (outer directed) but more often Od(M or R)E

CHART OF DEVELOPMENT

NOTE: CHART IC RENDERED AS USED IN JUDGES' EXPERIMENTS. ITS MAIN OUTLINES WILL PROVIDE THE READER WITH THE SHAPE OF THE SCHEME. ITS MORE CONDENSED DETAIL, DISCUSSED ORALLY WITH THE JUDGES, CAN BE MOST READILY APPROACHED VIA THE TEXT OF CHAPTER V.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

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102   Final Report
103

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RETRIEVAL TERMS

600
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IDENTIFIERS

607

ABSTRACT The investigators had abstracted a developmental scheme from
800   students' reports of their experience given in interviews at the end
801   of each of their four years in a liberal arts college. The scheme
802   traces an evolution in the forms in which the students construe the
803   world, with special reference to their assumptions about the nature
804   and origin of knowledge and values. On the nine "positions" in the
805   scheme's main line of development, the first three represent a simple
806   dualistic right-wrong structure and its accommodations to the impact
807   of diversity; the middle three positions trace the subordination of
808   dualistic structures to a generalized relativistic structuring in
809   which the students then face the issue of identity through personal
810   commitment in a relative world; the last three positions represent
811   stages in the evolution of commitment. Included in the scheme are
812   three conditions of delay or of alienation expressive of deflections
813   from the main line of development. In tests of the validity of the
814   scheme, reported here, judges rated interviews against the scheme
815   under various conditions: a) rating students' four annual reports
816   in sets, b) rating single reports without knowledge of the student's
817   year in college, c) rating selected brief excerpts, d) rating short-
818   ened versions of four-year sets in comparison with full transcripts.
819   Estimated reliabilities of average ratings clustered around .910 for
820   all reports in the random sample rated. The scheme is proffered as a
821   contribution to the understanding of intellectual and moral develop-
822   ment in late adolescence in a pluralistic society.