

A DESCRIPTIVE STUDY OF THE LIFE STYLES  
OF A GROUP OF CREATIVE ADOLESCENTS

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## ABSTRACT

### A DESCRIPTIVE STUDY OF THE LIFE STYLES OF A GROUP OF CREATIVE ADOLESCENTS

By Robert Lewis Trezise

In this study a group of 27 creative, adolescent boys and girls were described in terms of their life styles, their childhood experiences, their values, ethical concerns, and creative commitment. These descriptions were presented by means of a content analysis of interviews conducted with these youngsters, through a presentation of quotations extracted from the interviews, and through eight profiles of a representative group of the boys and girls. The content analysis and selection of quotations were based on categories derived from studies on creativity at the Institute of Personality Assessment and Research (IPAR).

The creatives described in this study were chosen from a larger group of 40 selected by Dr. Elizabeth Drews for study; and this group of 40 had, in turn, been selected by her from a group of 127 9th graders, who had been selected on the basis of superior reading comprehension scores to take part in an experimental social studies course. The 14 boys and 13 girls described in this dissertation were chosen on the basis of high scores on five scales of the Omnibus Personality Inventory which measure personality factors



research has found to be associated with creativity.

The methodology was to conduct a content analysis of transcripts of two-hour interviews that were held during the summer of 1963 with the 27 creatives. As a basis for the content analysis, a 39-item rating sheet was devised, which was derived from the IPAR studies. The items relate to childhood and family, cognitive and life styles.

Besides the data obtained from this analysis, quotations extracted from the 1963 interviews and interviews held again in 1964 were presented. These quotations comprise a major portion of this dissertation; and, in effect, are self-descriptions of the youngsters. The eight profiles were based upon the interview data, as well as other data available on these youngsters through Dr. Drews' studies.

An examination of the data suggests the following as salient characteristics of the creative group:

1. These creative youngsters were found to have ideas on a wide range of subjects; and they seemed to want more opportunity to share ideas. Almost all expressed interest in seminar-type classes.

2. They were highly sensitive to intellectual dishonesty, especially in their teachers, and were critical of drill, repetition, and recitation-type classroom procedures. They asked for more independent study opportunities and said they liked to discuss the broader implications of their subjects, the relationships between areas of knowledge, and to focus on principles.

3. They were critical of many things and sometimes even cynical, and they seemed to be searching for positive values. They tended to be more critical of society at large

than teen-age society. Although they wanted to be autonomous and were somewhat rebellious intellectually, for the most part they did not report rebelling overtly against rules and laws.

4. Even though they expressed strong criticisms of society, over all they seemed to be optimistic about man and his future. Almost all of these youngsters had high aspirations and hoped to make worthwhile and significant social contributions.

5. Almost all of the girls and over half of the boys seemed to be interested in self-understanding and introspection and in understanding others. Similar proportions seemed to be socially introverted and indicated that they perceived themselves as "different" from other young people.

6. Almost all had at least one adult in their families with whom they identified.

7. Almost all said they would like a kind of intellectual course that stressed philosophical and ethical issues.

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## CHAPTER I

### INTRODUCTION

#### Philosophical Orientation

Until the last decade, psychologists have tended to dwell more on the negative aspects of human behavior than the positive, even though a standard definition of psychology\* does not at all connote that it must dwell on the darker--the neurotic and psychotic--side of human behavior than the brighter--the self-fulfilling. There is, in other words, nothing in the definition of psychology that demands that it focus on mentally unhealthy human beings rather than healthy ones. But as Drews has said:

... psychology ... has chosen to work on the dark side of the moon. The mentally healthy, supernormal, and all that can be called self-actualizing have been neglected. Psychology has been passive, if not inert about studying healthy growth and self-actualizing tendencies and suggesting forms of cultural intervention that would foster such development.<sup>1</sup>

In the present dissertation the stress will be on the positive nature of man, and the creative person will be looked upon as one who exemplifies positive growth and

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\*"Psychology is a branch of science which deals with the mind, the self, the person and with the acts, behavior, and the mental processes." Horace B. English and Ava C. English, A Comprehensive Dictionary of Psychological and Psychoanalytical Terms (New York: Longmans, Green and Company, 1958).



who is moving toward self-fulfillment.

Although psychologists have generally neglected this positive aspect of development, in the last decade a group of humanistically oriented psychologists, dissatisfied with the negative emphasis in psychology, began to coalesce into what has been called a "third force"; and such people as Gordon Allport, Erich Fromm, Rollo May, Abraham Maslow, H.S. Sullivan, Carl Rogers, and others began to stress the need for finding patterns of optimum human development which would not only help individuals to find purpose and meaning in their personal lives, but to help them discover meaningful roles in their world as well. The new trend in psychology began to focus on what man can be and, also, what he can become, which, to these third-force psychologists, are complementary concepts. In fact, the concepts of being and becoming are central to their psychology. Both understandings must occur simultaneously and must be seen as a dynamic way of experiencing existence, which, as May has said, refers to " ... coming into being, becoming."<sup>2</sup> The group's concern with being and becoming is apparent even through the titles of some of their works: Allport's Becoming, Maslow's Toward a Psychology of Being, Roger's On Becoming a Person.

It might be expected that these growth-motivation psychologists, concerned with being and becoming, humanistic in orientation, attracted more by positive human behavior than negative--would be vitally interested in

the concept of creativity, since the creative process may be taken as an act in which individual human potential approaches being most fully realized, and in which the person approaches most fully realizing his idiosyncratic humanness. To these third-force psychologists, the creative person is a "being" and "becoming" person; and Drews, also a humanistically oriented psychologist and educator, has, in fact, entitled one of her studies of the creative adolescent Being and Becoming.<sup>3</sup> It is this work, which has shown the relationships that exist between concepts set forth by the growth psychologists and the development of creative adolescents, that has provided the basic data for the study presented in this paper; and the philosophical orientation of the Being and Becoming studies are inherent here.

Among the psychologists who have been concerned with growth motivation is Maslow--a humanistically oriented third-force psychologist who has been vitally concerned with the concept of creativity and who has shed a good deal of insight into this human phenomenon. He has used the term "self-actualization" somewhat synonymously with the concept of creativity. To him, the self-actualizing person is one who is approaching the realization of his human potential; that is, he is moving toward fulfillment of his idiosyncratic potential, is finding means of expressing self, and is growing in his own style and at his own pace.<sup>4</sup> But Maslow's self-

actualizer is one who is moving in a direction that means more than simply enhancement of self--he is one whose direction of growth tends to relate to general social change and the spiritualization of mankind.<sup>5</sup> Further he is concerned with his moral and ethical development as well as with the development of his abilities, skills, and talents; and ideally, the self-actualized person is represented by those whom Sorokin calls the most influential men in history--men who have founded great religions, discovered eternal moral principles, and have been living incarnations of sublime, unselfish love.<sup>6</sup> In this sense, then, Maslow's creative person is more than a person who simply develops a skill to a high level; he is a person with a certain moral and ethical commitment as well. And the creative process is more than the functioning of highly trained and disciplined abilities; it is a whole style of life.

The philosophical orientation of this dissertation will stress, then, the positive growth approach taken by the third-force psychologists. Further, the writer will describe the creative person as a whole human being, rather than atomistically. Yamamoto has pointed out that among the workers in the area of creativity there is a certain lack of rapprochement; and among the groups that take quite different approaches to creativity are the elementarians and the holists.<sup>7</sup> The holistic group believes, he says, that creative acts should be grasped

through more subjective and empathetic understandings of the experience and interpreted in purposive terms. The various groups that Yamamoto describes--the positivistic holists, the non-positivistic holists, the non-positivistic elementarians, and the positivistic elementarians--have, he says, different points of departure in the definition of creativity, have differences in assumptions and presuppositions, and have differences in research strategies. Further, each group has its own language, its peculiar way of speaking about the problem which is not readily understood by the other groups of workers.<sup>8</sup>

Hence, to workers in the area of creativity whose approaches are more elementarian, the present dissertation may seem to be imprecise and unscientific. However, while this writer is aware of the other approaches, he is in agreement with Rogers, who, speaking of the scientific approach, says, "This tunnel vision of behavior is not adequate to the whole range of human behavior."<sup>9</sup> And he is in agreement, too, with Maslow, who has argued that to assume that orthodox science is the path to knowledge--or even the only reliable path--is philosophically, historically, psychologically, and sociologically naive; and, he says further, to place scientific approaches before a more general-human view of life is an ethnocentric philosophical doctrine more Western than universal.<sup>10</sup>

### Statement of the Problem

The problem of this dissertation will be to present descriptions of a group of students who have been judged to be creative on the basis of scores on a personality inventory designed to measure some of the positive attitudes believed to be associated with creativity. These youngsters will be described in terms of their reported life experiences, their life styles, and their values, ethical concerns, and creative commitments. This description will be given by means of a content analysis of interviews conducted with them, through a presentation of the youngsters' own words in these interviews, and through descriptive profiles of a representative group of these youngsters. Thus, an attempt will be made to describe the young people in holistic terms, and these descriptions will be based upon their statements about themselves. This investigation is somewhat atypical in that it does not include experimental treatment of a group of subjects, does not test hypotheses, and does not attempt to present any comparative data. Models for the type of study described in this dissertation will be described in the following section.

### Models for Present Research

The methodology followed in this dissertation will be similar to those whose approaches stress descriptions of the individual. Among the psychologists who stress the importance of the individual is Allport. He suggests an

explanation for the psychologist's preoccupation with generalizations about human behavior:

Since positivism seeks nomothetic generalizations about behavior it is likely to regard curiosity about the internal order of mind-in-particular as subjective and "unscientific." It somehow seems more scientific to send a platoon of white rats through a maze than to occupy oneself with the complex organization of a concrete personality.<sup>11</sup>

That the stress should be placed on individuals in a paper on creativity seems to be entirely appropriate, for the creative person is nothing if not an individualist.

Murray's approach, particularly as shown in A Study of Lives,<sup>12</sup> has served as a guide for the approach taken here. Murray's emphasis is on the individual--the whole individual, including his total environment, since Murray believes that individual behavior can be understood only in terms of its environmental context. Further, Murray's work has been concerned primarily with "normal" individuals. Thus, in this descriptive study an attempt has been made to describe the total individual. Data was available from work being done by Dr. Drews for her third study on The Creative Intellectual Style in Gifted Adolescents.<sup>13</sup> Two in-depth interviews were conducted with each youngster, and the interviewers made an attempt to look into the interviewee's past experiences, his present style of life, and his dreams for the future. Further, the researcher had access to other data gathered on these people by Dr. Drews, since he worked with her both informally and for one year as a research assistant. He has observed these youngsters in their classrooms and

in informal gatherings as well as in the interviews. Even since the completion of the second interviews, the present writer has continued to meet many of these youngsters and has, indeed, come to know them very well. The present writer, then, in a modest way has attempted something in the style of Murray: his approach has been to describe these creative youngsters as total individuals, and an attempt has been made to describe them in their environmental context.

The writer has drawn heavily, too, on the approach used to study creative persons at the Institute for Personality Assessment and Research at Berkeley (IPAR). Two of the workers at IPAR upon whose work the present writer has drawn heavily are MacKinnon and Barron, and references will be made to articles and books by these men throughout this work. The method used to investigate creative persons at IPAR has been to bring creative men and women to the Institute for extended weekends of interviews, group activities, and testing; and from these meetings with creative persons from many different professional areas much has been learned about the creative process and creative persons. But most important, MacKinnon's and Barron's work during the past decade have provided a new basis for the study of creativity. Unlike other workers, who have studied the creative process more in terms of specific skills, they have attempted to describe creative persons as total human beings--their values, their style

of life, their philosophies, their ethical commitment, and their commitment to creative enterprises. And like Murray, they have concentrated on individuals, a not too surprising fact, since MacKinnon was a student of Murray. In this paper, not only has this basic approach been followed--that is, creativity has been looked upon as a total style of life, but also many of the findings of MacKinnon and Barron have been used as guidelines. What they have found to be true of the creative men and women studied at IPAR has, in many cases, been found to be true of the creative boys and girls described herein.

Another model for the present study is David Mallery's High School Students Speak Out.<sup>14</sup> Although Mallery is not describing a specific group of adolescents, his work is relevant to this study because he has his young people speak in their own words. In this paper too the students speak for themselves. Perhaps too infrequently students are asked by educators what they feel and think; and more often than not, even if their thoughts and feelings have been sought out, they are then reduced to attenuated brevities for the sake of statistical analyses. In such statistical reports we read tables and figures rather than the students' words. This is not to say that statistical presentations are not valuable. But descriptive studies in which the students speak for themselves and, hence, describe themselves, are at least as valuable.



The individual approach used in this paper has been used too in sociological and anthropological areas. Oscar Lewis, for example, has given us great insights into the poor of Mexico through his descriptions of individuals in Children of Sanchez<sup>15</sup> and Pedro Martinez.<sup>16</sup> Although the present study does not pretend to be as "in-depth" as the Lewis books (Lewis tape recorded hours upon hours of interviews), the idea used by Lewis of interviewing and presenting data in the interviewee's own words is similar to the approach used here; and as one understands the Mexican peasant better after reading Pedro Martinez, so (in a modest way) does the present researcher hope that after reading the actual words of the twenty-seven creative young people included in this study the reader will better understand the creative adolescent.

Having stated, then, the philosophical basis and described briefly some of the models for this paper, it may now be well to describe more completely the relevance of the concept of creativity to society and to the individual.

Creativity: Its Historical Development  
and Importance

Historical Development of Creativity: In 1950 Guilford, perhaps sensing a dissatisfaction among psychologists--particularly humanistically inclined psychologists--

with typical psychological experimentations, gave an address before the American Psychological Association in which he stated his intentions to conduct research in an area that had heretofore been almost completely ignored by psychologists in general--creativity.<sup>17</sup> Guilford said that creative ability should be considered apart from intelligence; and he discussed the abilities which he, at that point, considered to be the component factors of creativity: sensitivity to problems, fluency, ability to produce novel ideas, flexibility of mind, ability to synthesize and analyze, ability to re-organize and redefine, ability to handle complexity, and ability to evaluate.<sup>18</sup> As can be seen, these are positive qualities; and as president of the American Psychological Association and a psychologist of eminence, Guilford's speech and the research that he then pursued, were highly influential. And though his work was essentially correlational and, thus, in a fundamental way, different from the third-force psychologists' holistic approach, it did serve to make psychologists aware of the possibilities of research in this area. As a result, many began to turn their attention away from the negative and toward the more positive growth areas.

About the same time influential humanistic psychologists began to receive more attention. In 1954 Maslow published Motivation and Personality,<sup>19</sup> and at about the same time MacKinnon began a series of assessment

studies of creative and productive adults at the Institute for Personality Assessment and Research at Berkeley.<sup>20</sup>

And in 1958 Anderson edited Creativity and Its Cultivation, a symposium on creativity which included the thinking of some of the most outstanding psychologists in the field, such as Rogers, Maslow, and May.<sup>21</sup>

In 1962, capitalizing on the great increase of interest in creativity, Getzels and Jackson published a highly influential book, Creativity and Intelligence,<sup>22</sup> which, though the research techniques in it have been criticized,<sup>23</sup> created great interest and was widely read and quoted, particularly by educators. The idea the Getzels and Jackson research presented was that creativity and intelligence are quite different abilities, and even further, there seemed to be almost an antagonism between the two. At least, that interpretation came to be widely attached to the book; and the authors, if they did not mean this interpretation to be made of their work, did little to correct it. However, whatever the merits of the book itself, it did serve to turn educators' attention to creativity.

Importance of the Concept of Creativity: Why the concern among educators today for creativity? For one reason, the creative person is becoming ever more essential to our society. We live in a highly complex, rapidly changing society--a society of far-reaching social and technological developments; and as Gardner has said in

Excellence, just to sustain this society is going to require the use of the most highly trained and creative talent available.<sup>24</sup> In fact, he says, the search for this kind of talent is going to be one of the most significant phenomena of our times. Eleanor Roosevelt, too, in her survey of the world scene in her last book, said that in a world of rapid change and change which takes us in unforeseen directions, only the creative mind will be able to cope:

Undoubtedly, one of the most vital elements in preparing the young to meet and cope with questions that cannot now be foreseen is this: unless people are willing to face the unfamiliar they cannot be creative in any sense, for creativity always means the doing of the unfamiliar, the breaking of new ground. It is from this creative element, which we should be stimulating now, that all the new ideas of the future will come.<sup>25</sup>

Bruner has also pointed out that our chance of survival as a democracy depends upon creative thinkers.<sup>26</sup> Passow, speaking of the critical manpower shortages in our times, says that it is not competence that our society lacks, but imagination:

Perhaps our most frightening shortages are not in the general supply of scientists but in those rare persons with imagination, creativity, motivation, competence, and education who can contribute something fresh and basic to our understanding of man's relations with man.<sup>27</sup>

And when Rogers ponders the question, "Why isn't conformity as a style of life as acceptable as creativity as a style of life?" he answers himself:

In my estimation such a choice would be entirely reasonable were it not for one great shadow that hangs

over all of us. In a time when knowledge, constructive and destructive, is advancing by the most incredible leaps and bounds into a fantastic atomic age, genuinely creative adaptation seems to represent the only possibility that man can keep abreast of the kaleidoscopic change in the world.<sup>28</sup>

Our modern-day society, then--complex, ever and rapidly changing, filled with problems concerning the human condition, on the verge, even, of self-destruction--must have more than competent minds available to deal with its ills (and challenges); it needs creative minds as well. But as Zilboorg has said, creativity thrives on imperfection ("A civilization that is very happy about itself and its accomplishments is a civilization which is working against the creativity of men.");<sup>29</sup> and so, while the survival of our society depends upon its creative contributors, at the same time these very imperfections may very well inspire the greatest renaissance of creativity the world has ever known, for the greater the need for creative men and women--and the need is great--the greater and more awesome may be the response.

But creativity has become of vital concern to educators and social commentators for another reason. As a counter-force to the growth of mass-culture in our society, the threat of an impending 1984, and the "silent conquest"<sup>30</sup> of cybernation, there is an increased concern for the individual. Since there is always a tendency to value most highly what we believe may be in jeopardy, in mid-20th century, we place an increasing value on the

individual because we see him threatened. But from another standpoint, we might view this increasing concern for the individual man and his potentialities as an indication of the maturation of our society's democratic philosophy.

In short, even though conditions of modern society seem to present a threat to the individual, there also seems to be a widespread concern for him; and the current interest in creativity is another manifestation of this social trend--for the creative man is, above all, an individual.

This emphasis on the individual can be noted also in third-force psychology literature. Here we see not just the theme of the basic rights of man, but the presentation of an ideal kind of human development. As we have seen, Maslow speaks of the creative person as the self-actualizing person, that is, a person who is realizing his highest potential and becoming what he can be;<sup>31</sup> and Rogers speaks of the creative person as the fully-functioning self<sup>32</sup>--the person who is realizing the greatest potentialities of his self-hood. And, as has been noted, Drews has entitled her work with creative students the "Being and Becoming" study; that is, the creative young person is not only in the fullest and most vital state of being in the here and now, but he is also always becoming, that is, he is moving toward an idealized, almost platonic self. All of these humanistic psychologists are vitally concerned with creativity, because creativity is an expression of self--of man's individuality. Buber says of the creativity

of man:

Every person born into this world represents something new, something that never existed before, something original and unique. It is the duty of every person to know ... that there has never been anyone like him in the world, for if there had been someone like him, there would have been no need for him to be in the world. Every single man is a new thing in the world and is called upon to fulfill his particularity in this world.<sup>33</sup>

As was noted previously, the third-force psychologists' emphasis on creativity is in many ways also an emphasis on positive mental health. Rather than emphasizing the negative aspects of psychology--a trend established by Freud's preoccupation with neurosis, these psychologists have emphasized the study of adjustment; and to them the creative person who has found means of self-expression is a person who has found a fulfilling way of life. Anderson, in summarizing the symposium on creativity held at Michigan State, which was later compiled into a volume, Creativity and Its Cultivation, said of the essays in this book:

The consensus of these authors is that creativity is an expression of a mentally or psychologically healthy person; that creativity is associated with wholeness, unity, honesty, integrity, personal involvement, enthusiasm, high motivation, action ....<sup>34</sup>

Maslow's self-actualizing person is not merely a person who has established a synergic relationship with society, nor has he simply realized his individuality--he has achieved the most positive kind of mental health.<sup>35</sup> Creative persons often fall short of the creative ideal described by the third-force theoreticians. However,

creative men and women are sometimes in better mental health than their contemporaries may think, and what may seem to be poor mental health to their contemporaries may be a kind of superior adjustment. Drevdahl and Cattell, for example, have made this point:

The creative individual does not seem to be the sort of person that one might describe as well-adjusted in its more inclusive sense, rather, he appears to possess what Mathew Arnold and other great writers have described as "the divine discontent."<sup>36</sup>

It has been seen, then, that creativity has become a much-discussed concept in the past decade for several reasons: first, because of its social value; and, second, because of its emphasis on the development of the individual. Considering the importance of creativity to both society and the individual, the significance of studies of the creative person becomes apparent.

#### Purpose of Study

The purpose of this study is to make a contribution to an area where little research has been done. Although a good deal of study has been done in the area of creativity, relatively little has been done with young people. Eliot Eisner said in 1961 that up to that time, less than three-tenths of one per cent of the entries in Psychological Abstracts were related to creativity; and those studies which were reported were concerned with the creative adult--usually the creative scientist, chemist, or mathematician.<sup>37</sup> Of all of the research projects reported in



the University of Utah Conference publications on creativity, only one used children as subjects. And writing in 1965, Drews said that "the psychology of human creativity is only beginning to be written in terms of adults and is still vastly neglected for the young person."<sup>38</sup> Harvey Lehman pointed out in Age and Achievement that many of our greatest contributors have made their major contributions in their late teens and early twenties,<sup>39</sup> thus, it seems particularly unfortunate that the adolescent years have been neglected by students of creativity.

Further, there is a need for teachers to understand these creative young people. Getzels and Jackson found that the highly intelligent, relatively uncreative students were more popular with their teachers than the high creatives.<sup>40</sup> Torrance has found too that creative youngsters are not popular with teachers,<sup>41</sup> and Drews has shown in her studies of able youth that both the studious and social-leader adolescents are more favored by their teachers than the creative intellectuals.<sup>42</sup>

The purpose of this dissertation, then, is to contribute to the general literature on creativity by describing a group of creative young people. Through the descriptions presented, the reader will, perhaps, better understand this type of youngster.

## Footnotes

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2. Rollo May, "The Origins and Significance of the Existential Movement in Psychology," Existence: A New Dimension in Psychiatry and Psychology, eds. Rollo May et al. (New York: Basic Books, Inc., 1958), p. 12.

3. Drews, Report II, op. cit.

Other reports in the series are:

Elizabeth Monroe Drews, The Creative Intellectual Style in Gifted Adolescents; Motivation to Learn: Attitudes, Interests, and Values, Report I in a series of three: Final Report of the Cooperative Research Program, E-2, U.S. Office of Education, "A Study of Non-Intellectual Factors in Superior, (Average, and Slow) High School Students" (East Lansing: College of Education, Michigan State University, 1964).

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## CHAPTER II

### METHODOLOGY

#### Problems of Identifying Creative Subjects

Studies of creativity present many problems. One of the difficulties is the term "creativity" itself. It is an elusive term that can be defined in many different ways and from many different referent points. As Anderson and many others have said, creativity may, on the one hand, be looked upon from the point of view of product, while on the other it may be looked upon as a process.<sup>1</sup> Another approach is to study the creative individual, and it is this alternative which has been chosen as the focus for the research to be reported.

Barron and MacKinnon at the Institute of Personality Assessment and Research have stressed the personality attributes of the creative person; and rather than investigating the skills of the creative person, they have attempted to describe his characteristics.<sup>2</sup> Maslow, Rogers, Allport, May, and other humanistically oriented psychologists take a somewhat broader view and not only describe a creative individual who is highly motivated to make original contributions but add the dimension of a well-developed humanitarian-altruistic concern.<sup>3</sup> These psychologists feel the

development and use of talent does not lead to self-fulfillment unless these talents are put to use for the social good and contribute to the betterment of the world order. Drews, combining the philosophy of the third-force psychologists and some of the methodological approach of the IPAR workers in her studies of "creative-intellectual" adolescents, emphasized, in particular, their total life style, including altruistic inclinations. In her reports she notes that these youngsters have a drive to deal with intellectual matters, to be contemplative and independent, and to be oriented toward the theoretical, the aesthetic, and complex and original approaches.<sup>4</sup> Further, she finds that many of them have a well-developed social conscience and a desire to find a way to exercise this.

In the identification of creative people operational definitions must be made, and groups of creative persons identified by using these definitions. But even when an operational definition of the word has been made and a particular type of creativity defined, the task of identifying subjects for study who meet the criteria is still an onerous one.

In choosing creative adults to study, a frequent procedure is for the researcher to ask members within a particular professional group to choose those among their peers who are considered outstandingly creative.<sup>5</sup> This was the procedure followed by Donald MacKinnon in his study of architects, and it is the procedure customarily used



at IPAR. It was also the approach used by Anne Roe in The Making of a Scientist.<sup>6</sup> Other approaches are also used, particularly when the study is to deal with people no longer living. Certain researchers choose their creative subjects on the basis of the space devoted to a description of their lives and work in reference books, such as encyclopedias and various editions of Who's Who.<sup>7</sup> For their study of eminent creative contributors, Victor and Mildred Goertzel chose those 20th century persons about whom at least two full-length biographies had been written and which were in the collection of the Montclair, New Jersey, Public Library.<sup>8</sup> Also used as a criterion in the selection of creative subjects in such studies are the numbers of articles which they have had published in professional journals. In many of these approaches to a selection of a group of creative adults, the creative product--agreed to be outstanding by either the profession or the larger society--is used as the criterion. In other words, the creative persons are chosen ad hoc--after they have demonstrated themselves to be creative through the production of an outstanding work.

In the selection of a group of creative young people, however, these approaches are not open to the researcher. Few youngsters, except in the case of an extremely precocious child, such as a Mozart, or, more recently a Carolyn Glyn,<sup>9</sup> produce creative works that receive widespread recognition. In selecting creative children and youth, the

researcher cannot rely on a universally acclaimed painting, opera, mathematical contribution, scientific innovation, or a seminal book or article as a criterion, nor will there be biographical data available.

Fortunately, the adults who have been studied provide guidelines for the study of younger creative subjects. The studies of adult creatives have revealed that when certain attitude, interest, and value measures are employed, these people often have similar response patterns. The researcher may assume, therefore, that if these same measures are used with younger persons, those whose response patterns are similar to those of the adults may be judged to have a creative potential.

#### Method of Identifying Creative Subjects for the Present Study

The present study uses the information collected by Drews in her research on the creative-intellectual style. She identified a group of young people in her third study<sup>10</sup> by using instruments developed at the Center for the Study of Higher Education and also measures developed in her previous research. Her work and this study have been heavily influenced by the third-force psychologists. This group has, to a large extent, discussed and portrayed an ideal or prototype of the creative person. In contrast, CSHE and IPAR have found, by direct assessment of selected creative people, that certain characteristic personality

and character factors can be ascribed to this group. In her research, Drews hypothesized that if it is true that certain attributes are found to be associated with adult creatives, then these same attributes, if found among adolescents, might indicate potential for creative life styles and perhaps eventual productivity. This approach has been used in the present study. The youngsters described herein have been selected on the basis of attitudes, interests, and values which are comparable to those shown by the creative adults in the CSHE and IPAR studies.

Having made this general statement concerning the method of selecting youngsters for this study, it will now be well to explain in detail how the selection was made.

During the 1960-61 school year, Dr. Drews made a study of 400 able adolescents to determine differences among them in terms of creative attitudes, interests, and values.<sup>11</sup> She found that self-descriptions and test data were remarkably consistent and that the more creative adolescents, called creative-intellectuals, could be distinguished from the less creative in much the same terms that MacKinnon distinguished more creative from less creative architects. Following this research, she received another grant to investigate whether a specially designed educational program would foster creative attitudes and behaviors. To determine this, a new course for ninth grade social studies was devised. This was tested in the Lansing Public Schools.<sup>12</sup> The social studies class involved in the experiment was a

semester course in which Dr. Drews and her staff used ten films, the "Being and Becoming Series," which they produced, and an experimental, open-ended "Four Worlds Textbook," which they developed, as well as innovative classroom techniques. These innovations and the efforts of able teachers transformed a traditional careers course to an horizon-widening, value- and attitude-centered one.<sup>13</sup> The four Lansing junior high schools were involved in the study, with experimental and control classes in each school. All ninth graders who were reading at least two grades above the ninth grade reading level were included in either the experimental or control group.<sup>14</sup>

The experimental and control groups were pre- and post-tested on a number of measures, most of which assessed interests, values, and attitudes; and the results of this study are reported in Being and Becoming: A Cosmic Approach to Curriculum.<sup>15</sup> However, Dr. Drews continued her interest in the characteristics of the students themselves as well as in school program adaptations. Through the use of a personality inventory, the Omnibus Personality Inventory (OPI), the Student Interest Survey observations of the youngsters in the classroom, and other devices described in detail in Reports I, II, and III of The Creative and Intellectual Style in Gifted Adolescents, she identified about 40 youngsters who seemed to be particularly creative and whom she wished to study further. All were interviewed and many of the details of this under-

taking are to be found in Report III. It was from this group that the youngsters described in this present study were chosen. Since one of the instruments used by Dr. Drews to select her creative intellectuals was the OPI, and since it was used further in the selection of the youngsters for this study, it will be described below in considerable detail.

The OPI was developed at the Center for the Study of Higher Education.<sup>16</sup> Although the instrument is not generally available, Dr. Drews received permission from Dr. Heist to use it for her studies of the creative-intellectual style in adolescents. Specifically the developers of the instrument were Paul Heist and Phoebe Williams, who produced their first version of the inventory in 1957. The test was designed to measure such personality factors as openness to psychological growth and a strong motivation to learn--qualities associated with the creative process. The scales were drawn from other inventories and from research by other agencies. The format of the 300-item Inventory is similar to the format of the Minnesota Multiphasic Personality Inventory, from which about half of the original OPI items came. However, while the purpose of the MMPI is to measure psychopathology, the purpose of the OPI is to measure more positive personality factors. More mature, highly educated persons attain higher scores on the scales within the Inventory than those with less education.<sup>17</sup>

Dr. Drews used five scales of the OPI as criteria

in order to select her group of 40 creative youngsters out of the experimental population of 127: Originality (O), Complexity (Co), Aestheticism (Aes), Theoretical Orientation (To), and Thinking Introversion (T). personal communication with Dr. Heist and other research<sup>18</sup> indicated that creative adults and college students possess to a high degree the qualities measured by these five scales; hence, an assumption in the present study is that students who receive high scores on these scales are also likely to be persons with a greater potential for creative thought and activity.

Further explanations of these scales follow:

The Originality scale "measures a tendency toward highly organized but individual ways of reacting to the environment. Characteristics of high scorers are independence of judgment, freedom of expression, rebelliousness, rejection of suppression, and novelty of insight."<sup>19</sup> The scale was adapted from research by Barron and Gough at the University of California Institute for Personality Assessment and Research.

The Complexity scale was also adopted from the work of Barron and is designed to distinguish between people who "perceive and react to complex aspects of their environment and those who react to more simple stimulus patterns."<sup>20</sup> High scorers are more independent, liberal, critical, unconventional, and they are "potentially more original and creative; they welcome the new and the different in their experiences."<sup>21</sup> Low scorers tend to be compliant, conservative, accepting of authority and tradition, and simpler in their organizations of perceptions.

The Aesthetic scale is a measure of interests in this area and was an outgrowth of the fact that analysis of the Allport-Vernon-Lindzey Study of Values showed a correlation between aesthetic values and intellectual commitment.<sup>22</sup> The high scorers in this area seem not only to have an affinity for beauty in the realm of the arts, but with them ideas and theory become things of beauty as well. It would seem that with highly purposeful, creative workers Beauty and Truth are synonymous.

The Theoretical Orientation scale was also derived from the Study of Values. In a study of National Merit Scholars, it has been demonstrated that students with high-order scholastic talent score high both in Aesthetic and Theoretical values. The scale "measures an interest in science and in scientific activities, which includes a preference for using the scientific method in thinking."<sup>23</sup> Persons who score high are generally logical, rational, and critical in their approach to problems.

The Thinking Introversion scale of Evans and McConnell was incorporated into the OPI unchanged with respect to content, although the response form was changed from a Likert-type response to a true-false form. "Persons scoring high on this measure are characterized by a liking for reflective thought, particularly of an abstract nature."<sup>24</sup> High scores in this area suggest an interest in a variety of areas, especially literature, art, and philosophy. While low scorers on the scale tend to be extroverted types who have a preference for overt action and who evaluate ideas on the basis of their practical, immediate appreciation, high scorers tend to be less dominated by objective conditions and generally accepted ideas.

A picture that emerges from the pattern, then, suggests that those who attain high scores on these scales are generally rational, critical, and logical in their thinking patterns and that they have an affinity for the abstract and aesthetics; indeed, their chosen work is likely to be seen by them as a matter of Beauty as well as Truth. They also have a liking for the complex, the "too-difficult." And their thinking tends to be fresh and original.

With this instrument, then, Dr. Drews selected her group of creative students. The present study, however, was to be a descriptive study of a smaller group of creative youngsters, and the writer decided to make further selections from Drews' group choosing again on the basis of the five scales of the OPI. Specifically, youngsters were chosen

for study who scored at least one standard deviation or more above the mean of the 127 experimental students in the Drews' study on three out of five of the OPI scales. The scores were obtained from the post-experimental testings.

To recapitulate: The population of creative adolescents for this research was chosen by making use of guidelines established in several studies of adult creatives (MacKinnon, Roe, Heist). Drews had employed these in three studies of the Creative Intellectual Style in Adolescents. The present report draws from the population which she experimented with and described in her second and third studies. In the second study, 127 experimental students (who were chosen as being superior in reading comprehension) were assessed by tests, observations, and work samples. From this group, 40 of the most creative were chosen for further study and became the focus of her third report. From this group, 27 youngsters were chosen for the present study. The 27 scored at least a standard deviation or more above the mean of the total experimental group on three out of five of the OPI scales, and it is these youngsters who will be described.

The names\* of the 27 boys and girls and their OPI scores are to be found in Tables 1 and 2. Since the students in the original experimental study were a select group--

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\*The names used in this study are fictitious.



that is, youngsters of above-average reading ability, it is probable that the mean scores for this group are higher than they would be for an unselected group.

TABLE 1. - Mean scores for boys on the Originality, Complexity, Aesthetic, Theoretical Orientation, and Thinking Introversion scales of the Omnibus Personality Inventory

	<u>O</u>	<u>Co</u>	<u>Aes</u>	<u>To</u>	<u>Ti</u>
<u>Mean Scores</u>	47.60	55.05	40.02	50.78	46.62
<u>Students</u>					
Jeff	64*	75	59	60	62
Eldon	<u>57</u>	<u>71</u>	<u>51</u>	<u>57</u>	<u>57</u>
Joe	<u>53</u>	<u>51</u>	<u>27</u>	<u>62</u>	<u>55</u>
George	<u>57</u>	<u>67</u>	<u>47</u>	<u>60</u>	<u>59</u>
Nathan	<u>57</u>	<u>64</u>	<u>45</u>	<u>52</u>	<u>59</u>
Mark	<u>54</u>	<u>60</u>	<u>49</u>	<u>62</u>	<u>63</u>
Rex	<u>61</u>	<u>67</u>	<u>37</u>	<u>65</u>	<u>53</u>
Morris	<u>49</u>	<u>36</u>	<u>51</u>	<u>60</u>	<u>58</u>
Keith	<u>54</u>	<u>53</u>	<u>31</u>	<u>65</u>	<u>59</u>
Curtis	<u>62</u>	<u>56</u>	<u>39</u>	<u>66</u>	<u>59</u>
Franklin	<u>60</u>	<u>67</u>	<u>47</u>	<u>55</u>	<u>64</u>
Robert	<u>62</u>	<u>73</u>	<u>37</u>	<u>60</u>	<u>57</u>

\*Underline scores indicate those at least one standard deviation above the mean score for boys in the total group. Scores were attained in the spring of 1963.

TABLE 2. - Mean scores for girls on the Originality, Complexity, Aesthetic, Theoretical Orientation, and Thinking Introversion scales of the Omnibus Personality Inventory

	<u>O</u>	<u>Co</u>	<u>Aes</u>	<u>To</u>	<u>Ti</u>
<u>Mean Scores</u>	49.25	54.56	50.63	46.97	49.98
<u>Students*</u>					
Georgia	56**	64	61	66	54
Edith	<u>60</u>	69	<u>51</u>	<u>58</u>	55
Muriel	<u>60</u>	47	54	<u>72</u>	<u>61</u>
Lisa	<u>68</u>	58	<u>69</u>	<u>58</u>	<u>72</u>
Julie	<u>60</u>	69	<u>54</u>	<u>55</u>	<u>60</u>
Carol	<u>60</u>	<u>71</u>	47	<u>58</u>	<u>58</u>
Mildred	<u>54</u>	<u>67</u>	54	<u>57</u>	<u>69</u>
Hilma	70	<u>71</u>	69	<u>60</u>	<u>64</u>
Debbie	<u>56</u>	<u>62</u>	<u>64</u>	48	<u>72</u>
Sarah	<u>56</u>	62	<u>56</u>	66	<u>70</u>
Nancy	<u>62</u>	51	61	<u>39</u>	<u>62</u>
Beatrice	<u>56</u>	62	<u>45</u>	62	<u>57</u>
Jenny	<u>62</u>	<u>78</u>	<u>58</u>	<u>66</u>	<u>58</u>

\*Five girls who met the criterion were unable to take part in the study.

\*\*Underlined scores indicate those at least one standard deviation above the mean score for girls in the total group. Scores were attained in the spring of 1963.

When one is selecting a group of persons to study, desirable subjects sometimes elude the criterion established for the selection of the group. In the present study, this was true in the case of two boys. Through observations of these boys in class discussions, their interviews, and investigation of other available data, the researcher believed that they seemed to be highly creative persons. However, their OPI scores did not meet the criteria. (See Table 3) In spite of this, the boys were included in the

study. Two factors must be made clear in defense of their inclusion. First, the OPI scores these boys attained were considerably above the mean. Only Arthur's complexity score fell below the mean. Second, the scores these boys attained on the OPI in other testing sessions (in the fall of 1962 and again the year following the 1963 testing) were high. It would seem, then, that the scores these boys attained in the spring of 1963 perhaps represent them on "an off day" or "in a slump."

TABLE 3. - Mean scores for boys on the Originality, Complexity, Aesthetic, Theoretical Orientation, and Thinking Introversion scales of the Omnibus Personality Inventory

	<u>O</u>	<u>Co</u>	<u>Aes</u>	<u>To</u>	<u>Ti</u>
<u>Mean Scores</u>	47.60	55.05	40.02	50.78	46.62
<u>Students</u>					
Waino	<u>53</u> *	58	47	55	<u>54</u>
Arthur	<u>52</u>	53	45	55	<u>50</u>

\*Underlined scores indicate those at least one standard deviation above the mean scores for boys in the total group.

The final group to be included in the present study, then is as follows:

<u>Boys</u> (N 14)		<u>Girls</u> (N 13)	
Curtis	Morris	Sarah	Lisa
Waino	Keith	Mildred	Edith
Joe	Jeff	Hilma	Julie
Mark	George	Nancy	Carol
Arthur	Eldon	Muriel	Debbie
Rex	Robert	Georgia	Beatrice
Franklin	Nathan	Jenny	

These boys and girls, then, were the total group included in the study. After the group had been selected, other available data was checked; and the teachers who took part in the Drews' experiment, as well as the research assistants who sat in at least ten class discussions in each of the junior high schools, were shown the list, and general agreement was reached that the youngsters on the list were, indeed, young people whose attitudes, interests, and values could be described as creative.

### Procedures

In the summer of 1963, approximately a half a year after the experimental social studies course, the group of youngsters chosen by Dr. Drews were interviewed by Miss Arlis Thornblade, a young woman who had assisted Dr. Drews in the research which was reported in the second study. The interview schedule that Miss Thornblade used was devised by Dr. Drews and her associates and was an adaptation of a schedule developed by MacKinnon. It was designed to elicit information about the interviewees' early childhood, family, and elementary school experiences; their adolescence and junior high school experiences; and their interests, opinions, and attitudes. (See Appendix A) Each interview took two hours or more to complete. The interviews were tape recorded and transcriptions were made of the tapes. As has been noted, only 27 of these interviews have been used as a basis for

this study.

In the summer and fall of 1964, the youngsters were interviewed again. Again the interviews were at least two-hour sessions, and they were again tape recorded. The interview schedule for this series of interviews related less to the youngsters' past experiences and more to their present thinking and style of life. The sections of the interview schedule included self-awareness and awareness of others, aesthetic and cultural interests, thinking style, social concern, and views on education. (See Appendix B) Half of the interviews this time were conducted by the present writer, and the others were conducted by another of Dr. Drews' assistants, David Kanouse, a recent graduate of Reed College who was that summer preparing to enter Yale Law School. Although complete transcripts were not made of the tapes of these second interviews, the writer's task was to transcribe those sections which touched directly on those questions posed in the first interview. It can be seen, then, that the present writer had the advantage of being able to draw upon two sets of interviews conducted about a year apart.

Several months after the second series of interviews was completed, the writer began his analysis of the accumulated data. A rating sheet, also based on MacKinnon's work, was devised by him and Dr. Drews. (See Appendix C) This rating sheet was designed for the purpose of conducting a content analysis of the transcriptions of the first inter-



views. The rating sheet was comprised of 39 items, each of some relevance to the creative process; and these items have become the basis of the central chapter of this dissertation, Chapter III.

Using this 39-item rating sheet, the present writer and Miss Joan Lenon, who was also on Dr. Drews' staff, as well as being a staff member (with an M.A. degree) in the Lansing schools, then analyzed the interview transcripts of the 27 boys and girls who had been selected. They gave each interviewee a plus, minus, or zero on each of the items on the sheet. A plus was given if the interviewee showed the quality mentioned in the item, a minus was given if the interviewee did not exhibit this quality, and a zero was given if the interviewee did not seem to reveal any feelings concerning the item. For example, one of the items was "Concern for individuality." If the interviewee seemed to show this concern in the interview, he was given a plus; if he did not show this concern, he was given a minus; and if in the course of the interview the subject of individuality was not brought up, or if it was alluded to but the interviewee was noncommittal on the subject, he was given a zero. For each of the 39 items, then, each of the 27 interviewees received one of these ratings. Then percentages were compiled for each item; that is, a percentage was found for the number of boys and the number of girls who reacted positively to a particular item, another percentage for the number of boys and the number of girls who reacted negatively, and a

percentage for the number who did not react to this item. An additional percentage was determined for the number of boys and the number of girls about whom the two raters disagreed about the interviewee's reactions. Thus, for each item, four percentage figures were found for the boys, four for the girls. (See Appendix D)

Miss Lenon and the present writer discussed the possible range of responses to the items at some length before they began their ratings, and they also discussed the wording of each item carefully so that they were certain their interpretations of the item would be the same. Further, immediately after they had rated a youngster's interview, they compared their ratings; and in cases of disagreement, if one could show the other evidence in the interview transcript which had possibly been overlooked when he made his judgment, he would change his rating for that item. These precautions perhaps account for the fact that the raters agreed in a high percentage of the cases. With the boys, the average agreement between the judges was 93 per cent, with the girls, 96 per cent. These figures mean that in the case of the boys, for example, the raters agreed 93 per cent of the time when they rated the interviewees either plus, minus, or zero.

In Chapter III the results of this procedure are presented. Each of the 39 items is stated, a rationale is presented to suggest the item's relevance to creativity, and the percentage figures relating to the item are given.



Thus, for example, the reader may find the percentage of boys who seemed to be concerned for their individuality, the percentage who do not seem to be, the percentage who did not refer to this quality, and the percentage of times the raters disagreed in rating them on this item. The same figures may be found for the girls.

A part of the plan of this dissertation was to present descriptions of the boys and girls in their own words. Therefore, after the ratings had been completed, the researcher read the transcripts of the first interviews again and extracted from them virtually all of the statements and comments that related to the 39 items of the rating sheet. In other words, anything that the students said that related to any of the items was extracted, and all of the statements that related to the same item were placed together. Further, the writer took the students' words from the partial transcriptions he had made of the second interview series, and these too he placed in one of the appropriate 39 categories. However, since the rating sheet was designed to relate specifically to the first interviews, it would be expected that most of the statements came from that series of interviews. At this point the writer had extracted hundreds of quotations from the interviews, and each one had been placed in its appropriate category. Many of the comments could be interpreted to relate to several of the items, but these were placed with the item to which they seemed most germane. Since it would not be feasible to present all the comments

in this study, representative quotations were selected. But since a purpose of this dissertation was to describe these youngsters in their own words, representative samples selected remain sizeable. The quotations appear in Chapter III, with the percentage figures. It is the hope that by reading these comments, the reader will come to understand how creative boys and girls feel on a number of topics which relate to creativity.

Chapter IV contains excerpted comments made on the subject of education, primarily in response to one of the items in the first interview. Since this dissertation will be read mainly by people in education--and, indeed, it is largely for the sake of educators that such a study is made--a separate chapter has been devoted to this topic.

Immediately following the task of extracting the quotations from the interviews, the writer began compiling the data for the eight profiles that appear in Chapter V. The four boys and four girls who were chosen for the profiles seemed to be representative of the various creative styles encountered in this study. The researcher relied upon many different sources of information in writing these descriptions: the interviews, Dr. Drews' files, their teachers, their friends, and incidental social encounters. Although the writer is aware that the impressions presented in the profiles are not strictly in the scientific mold, still they are based upon quite extensive encounters with the young people--both "indirect encounters" through the available

data and direct encounters. Further, the profiles have been read by others who know the youngsters, including some of their teachers, and they have concurred with the over-all "pictures" presented.\*

The final section, Chapter VI, summarizes the study and also includes implications for educators.

\*Some of the details of the youngsters' lives have been somewhat altered in the profiles to preserve their anonymity.

## Footnotes

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8. Victor and Mildred Goertzel, Cradles of Eminence (Boston: Little, Brown and Company, 1962), pp. vii-x.
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10. Drews, Report III, op. cit.
11. Drews, Report I, op. cit.
12. The grant was made through the Media Branch, Title VII, of the National Defense Act, Contract No. 7-32-0410-140, U.S. Office of Education.
13. For a complete description of the experimental course see Drews, Report II, op. cit.
14. Ibid., p. 165. The California Reading Test, Advanced Form (the comprehension section) was the test used to measure reading level. The mean reading level of the experimental group was 12.32, and the mean I.Q. was 123.38. (California Mental Maturity Test)
15. Ibid., pp. 184-196.

16. Paul A. Heist and Phoebe A. Williams, The Omnibus Personality Inventory (Berkeley, California: Center for the Study of Higher Education, University of California, 1957).

17. Unlike the well-known Allport-Vernon-Lindzey Study of Values, the scale titles of which are similar to the OPI scales, the OPI allows the testee to score high on all of the scales. On the Study of Values the testee must make a choice between two possibilities on each item; hence, a high score on one of the six scales demands a low score on one of the other scales.

18. Paul Heist and Harold Webster, "Differential Characteristics of Student Bodies: Implications for Selection and Study of Undergraduates," Selection and Educational Differentiation (Berkeley, California: Center for the Study of Higher Education, University of California, 1959).

Jonathon R. Warren and Paul A. Heist, "Personality Attributes of Gifted College Students," (Berkeley, California: Center for the Study of Higher Education, University of California). Mimeographed paper.

19. Warren and Heist, op. cit., p. 7.

20. Ibid.

21. Ibid.

22. Gordon W. Allport, Philip E. Vernon, and Gardner Lindzey, Study of Values: A Scale for Measuring the Dominant Interests in Personality, (Boston: Houghton-Mifflin Company, 1960), p. 10.

23. Heist and Williams, Omnibus Personality Inventory Manual, op. cit., p. 4.

24. Ibid.

25. Kahn and Cannell have said that the presence of recording equipment is not likely to be a deterrent in an interview. Robert L. Kahn and Charles F. Cannell, The Dynamics of Interviewing: Theory, Technique, and Cases (New York: John Wiley and Sons, 1962), p. 240.

### CHAPTER III

#### CONTENT ANALYSIS OF DATA

There are two aspects of this chapter: First, percentage figures indicating how the 27 youngsters responded to each of the 39 items on the rating sheet will be given (these percentages are listed in Appendix D as well); and, second, representative quotations from the interviews which relate to each item will be presented. Further, a brief discussion suggesting the relevance of each of the items to creativity will be included.

#### Early Childhood and Family

The literature on creativity suggests that as youngsters, creative persons often had an adult, usually within the family, with whom they closely identified and from whom they received support and guidance. Harold McCurdy has suggested that in the childhoods of the creative adults he studied, there inevitably was at least one adult, usually within the child's family, with whom he closely identified and received early training and inspiration.<sup>1</sup>

In the present study, the first item read: "Interviewee identifies with one parent or with close relative."

The percentages for the boys are:

Positive.....	79%
Negative.....	7%
Insufficient evidence.....	7%
Raters disagreed.....	7%

For the girls:

Positive.....	92%
Negative.....	8%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Waino may be taken as an example of a boy who identifies with his father, who apparently received a fine education in his native Estonia:

I can talk to him about anything under the sun, and he has something to say about it. Most of the time it is something concrete.

Rex was one of the few persons in the study who expressed a strong antagonism toward a parent--in this case his mother:

My mother never listens to a word I say. All I ever get from her is that school isn't as good as it used to be. She's thoroughly convinced that kids in school now are idiots. She will never listen to me. Before she didn't want to, and now there isn't anything in common. I know my mother better than she knows me. She doesn't know me hardly at all.

But he says of his stepfather:

I like my stepfather a lot more than my mother because he's one person who, all the time, will listen to me.

Franklin expresses a respectful attitude toward his father:

My father's a chemical engineer now. He just got a little raise recently. He's been head figure down at the Oldsmobile lab for a while. He's very successful as far as I'm concerned. He's nice--a nice person, and a very intelligent person--very active.

And Jeff reveals similar feelings:

My father traveled a lot. But when he was home, I en-

joyed a lot of the same things he did. I enjoyed working with him; and when he was home, I spent as much time as I could with him. My mother was around a lot, and I think she was the one I told most of my problems to.

Arthur, whose father does not live in the home, refers to his mother throughout the interview. His feelings are revealed in the succinct:

I like to talk to my mother. She is old and knows a few things.

And Robert, whose father is dead, says similarly:

Interviewer: What sorts of things are you apt to discuss with your mother?

Oh, anything under the sun. Anything that bothers me, or if there's something I just want to say. I know she's been a real mother and father to me, and that's not too easy.

Franklin says of his mother:

My mom's very encouraging. She's not over-bearing or that type of person, but she's been very encouraging. She's tried her darnedest to be a good mother, and she succeeds very well too. Believe me, I need encouragement to get me to do anything.

Morris speaks well of his father in his interview, but he also talks of his grandfather's influence:

My grandfather was a real whiz with figures. He was an accountant. He used to try and show me a little--brain busters you might say. This was about when I was ten.

And in the case of Nathan there is an admiration for one older brother who represents a rebel type, and antagonism toward another older brother who represents conformity.

When asked whom he admires, he answers:

My oldest brother, well, he's married and successfully teaching, and, well, this is society's criteria for success. But my own personal criteria view would be



my youngest brother because he's more or less what I'd like to be like--a rebel.

In the case of Curtis--the only boy whom both raters indicated a negative--there seemed to be little feeling toward either parent. The father is away most of the week on business; and when he comes home on weekends, he sleeps mostly. The mother reads quite a bit, but Curtis expressed little feeling about her. However, Curtis was a taciturn type, and there was more a lack of feeling expressed concerning any member of his family than any definite antagonism. Jenny discussed in considerable detail her relationship with both her father and mother; and she says of her relationship to them:

It's always been kind of a mother-son, father-daughter relationship in our family. My mother always says in her fits of anger, "You like your father better than you do me," and things like that.

Interviewer: Is it true?

Yeah. But my father's good for one thing, my mother for another. You need her for sympathy and stuff like that, and you need him to have a good time and laugh about life and not let it get too serious.

And she continues:

Nobody could touch me--up until about the eight grade. I was really my father's pet, and nobody could ever say anything bad about me or do anything to hurt me. Buddy (brother) couldn't tease me within my father's earshot without getting really reprimanded.

Lisa says:

Both of my parents have something to offer me, intellectually as well as giving me love and such. But I guess I'm more like my mother in ideas because in thinking of ideas I'm more complicated. I'm always questioning, and I think I'm more like her in that way.

And although Edith says of her father that he provides "an essential power" in her family, and she has a "strong tendency toward him" it is her mother with whom she feels the closest ties.

I just hope I can be like her when I grow up. We moved into a nicer neighborhood, and she started in with bridge and stuff like that. And some of the ladies are kind of small; and she just got tired of it. She'd get home and she'd just feel kind of sick inside, and so she started in volunteer work. Now she's playing with blind children, and she worked in the nurseries there and the escort service and everything. But she still felt kind of bored because we kids are growing up, and she started going to school and studying psychology.

Edith, who says that she saw God in her bedroom one night, says she gets into some difficulty with her father over her "mystic powers." But her mother seems to understand:

I feel we have a really close friendship. I don't know of anyone who has one as close as ours. My mother is going to school now studying psychology, and I read all of her books.

And Mildred comments:

Every once in a while we sit down and talk. We do it more now because I'm older. We have more of the same interests now that I'm older.

Julie speaks of an aunt:

That's how I'm mostly like her, independent in thinking. I like to do things that are different. I don't like to do ordinary things.

Sarah:

I could always get along with my dad. There are times when I can't get along with my mother; but if I go to my dad, I usually get my way. I can usually talk to him.

Throughout her interview Debbie talked about her father, and she revealed an obvious admiration for him. The father

is a 4-H worker, and Debbie spends a great deal of time helping him with speeches he is called upon to make and in taking part in that organization herself. When asked whether she considered herself to be more like her father or her mother, she says:

I would like to think it would be my father, rather outgoing, but at times I think I take more after her.

Dad and I got together and talked about it (4-H speech), and he brought me a lot of things home to read. We discovered we had so much in common about our feelings toward other people. Like, if we're watching a movie on the late show, and the hero is killed. Dad and I just sit there and cry away and later we talk about it. We also feel the same about handling people.

It seems apparent that it is her social, outgoing father whom she most admires, even though she sees her own shyness as being more like her mother's. Beatrice, whose parents were divorced, had the good fortune to be raised largely by grandparents who provided her with a stimulating environment, particularly the gregarious, book-loving grandfather:

I got on this kick of wanting to go out and talk to people, when every Saturday I'd go out with my grandfather to bars, etc; and we'd sit and talk to everyone. My grandmother worked during the day. It was my job to see to it that he got back in time to pick up my grandmother in time. My grandfather could have gone far in business if he hadn't had such a soft heart. He is real good at meeting people. My grandfather is against labor unions--he thinks they've gone too far.

My grandfather couldn't stay home for two minutes, always has to be on the go. He reads all the time--magazines and all kinds of books. He sends me books that he thinks are good, and I give him books I think are good.

I like to go out and talk to people and find out what they're talking about. I'm trying to develop a knack

of talking to anybody. I still go out with my grandfather sometimes on Saturday.

When I went with my grandfather on Saturday, we used to talk about things which were happening. I don't mean little things. I mean we used to talk about things like the U-2 spy and things like that, that were big news, and interesting things to me and to him that weren't in your own world.

And Georgia, who went on at length about her hatred for her father, says that her mother tries to protect her from the father's tantrums:

He said he was going to kill himself, so my mom called the police. He's sort of different since then, I think, because he's a little more calm. He doesn't yell as much. It's sort of nerve-wracking on us, and him, and everybody in the household. But my mother sort of makes up for it. I guess he gets jealous because my mother pays more attention to me.

And with Hilma, whose parents were Estonian emigrants, it was her brother who provided most of the companionship in a somewhat lonely childhood:

At first we lived right by the park, and we spent all our days at the park. And I remember that Waino and I were always happy. We never had any big fights or anything like that, but we were never really close until we moved to Lansing. Because we had moved and it was new, we didn't have too many other friends. Waino has only had one or two real friends and it is the same with me. I think we are rather close.

But whether the girls identified with mother, father, or some other member of the family, in all of these cases--with the one exception--home was a place where companionship could be found. Even in the case of Muriel, the one girl whom the raters felt did not reveal a close feeling to a member of the immediate family in the interview, there were no particularly antagonistic feelings expressed--

simply an unresponsiveness to the questions directed in this area. In this respect she was like Curtis.

Decidedly, then, the over-all impression one receives from the young people in this study is a feeling of close relation with, if not both parents, at least one parent or a parent substitute. There are cases in which the child expresses a definite antagonism toward one parent, as is true in the case of Rex's feelings towards his mother and Georgia's feelings towards her father; but in these cases close feelings toward another member of the family seem to somewhat compensate.

On the whole, the homes of these young people can be called "favorable," which, says Johnson, has been found to be the most usual condition of homes of eminent, creative men and women.<sup>2</sup>

Perhaps it is true that a creative youngster, who may not follow the teen-age paths in school or elsewhere and who is very much the individual, needs at least one place as a refuge, a haven of safety; and this may be his home or at least one parent. At least in the case of these youngsters, many of whom are considered if not eccentrics, at least loners by their peers, an adult in the home provides this source of security and support.

It has been shown that most of the boys and girls in the study had at least one adult in their lives--usually a mother or father--with whom they were able to identify.



But beyond the parents, did the youngsters' families as a whole unit seem to represent to them a similar refuge?

In their study of eminent creative persons, Victor and Mildred Goertzel found that families of the creative were not necessarily cohesive.<sup>3</sup> In many of the cases they investigated, the homes were troubled and turbulent. At the Institute of Personality Assessment and Research it has been found too that highly creative persons often come from unhappy homes. But MacKinnon points out:

Although they may often describe their early family life as less harmonious and happy than that of their peers, one cannot know for certain what the true state of affairs was. In reality the situation in their homes may not have been appreciably different from that of their peers. The differences may reside mainly in their perceptions and memories of childhood experiences ....<sup>4</sup>

The item related to this read: "Family autonomous as a unit, forms a close-knit, functional unit with which interviewee identifies as a whole."

The percentages for the boys are:

Positive.....	43%
Negative.....	29%
Insufficient evidence.....	21%
Raters disagreed.....	7%

For the girls:

Positive.....	69%
Negative.....	31%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Jeff, a boy who seems to be remarkably close to all members of his family, even his junior-high-school-age sister, summed up his family by saying:

We do just about everything together.

And in many different ways, Jeff's comment was repeated again and again. Keith said when asked if his family operated as a unit:

I think we operate more as a unit. Like when we travel, we travel through Michigan all over and out of state in this area. I think we work as a unit.

Mark says:

You get free board for 20 years, which is worth about \$20,000, so you have to do something. Oh, I get fun out of it, but it's just that sometimes I don't like to. I don't like to play tennis and stuff like that. But, then, of course, there's a little turning about here because they have to do things that I like to do too.

Sarah describes her family's activities:

We used to go a lot of places. We still do a lot of things today. The whole family is together. We visit points of interest. Like just recently we went to the air show in Kalamazoo. Dad likes to take us different places. He's been a great help to me throughout the years. Both he and my mother have helped me, inspired me; and we have a lot of fun. There are times when we don't get along, but we usually have a lot of fun.

And Debbie talks about her family studying together:

I think our whole family--my mother, father, and I--are all going to take French together sometime. We're going to find some course where we can all take it together.

Mildred:

Almost all the things we do, we do together.

Julie:

I know that each of us likes different things, and yet, we like many of the same things. We enjoy being together.

Edith:

In our family, we can all criticize each other, but we



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don't take it very seriously. There's no offense. And if one person gets down, we all pitch in and help him get through things. It's very, very close.

Hilma stresses the communication in her family:

We take vacations together and we do most of our things together. Our parents have always kept close track of us and what we were doing. I think it is a good idea. At least they care about me. They want to know what I am doing. Of course, I don't always tell them everything, but I tell them enough so we can communicate and they know what is going on.

And she continues:

I think I'm close to my family. I love and respect my parents. Of course, this is in varying degrees according to my mood. But, I think I do need them. It would be foolish to say I didn't at this stage of the game. I can always go back to them. I know that I can always have somebody that will love me regardless of what I've done. I'm still their child. I think you need parents. Often you realize that you're actually nothing, but to them you're something.

In the present study, then, although slightly less than half in the case of the boys and slightly more than half in the case of the girls came from homes in which the families did seem to function smoothly as a unit, many of the homes were disunified--at least, this is the way the youngsters apparently perceived them. The reasons for the disunification varied: in several cases the parents had separated; in other cases, although both parents were present in the family, the family as a whole simply didn't seem to find mutual enjoyments or did not communicate. In still other cases there was open friction. However, since the majority of the youngsters were able to establish a successful relationship with at least one member of the family, the lack of a strong family cohesiveness did not



seem to matter. Perhaps it is not so important that the child be able to identify with the family as a unit as it is for him to be able to relate to at least one member within it.

While the families of some of the creative youngsters might be unified and cohesive groups; still, a family that over-stressed "togetherness," and that blurred individuality in the interests of the family whole, might work against the creativity of any of its individual members. In other words, it was felt that within a closely-knit family the mother could be actively engaged in particular interests of her own, the father would have interests of his own, but that both would respect, and to some extent share, the other's interest. While it is difficult to determine this factor without interviewing the mothers and fathers themselves, an attempt was made to find in the data indications of this factor. The item read: "Mother and father autonomous; each respects other as a person in his own right."

The percentages for the boys are:

Positive.....	36%
Negative.....	21%
Insufficient evidence.....	29%
Raters disagreed.....	14%

For the girls:

Positive.....	62%
Negative.....	8%
Insufficient evidence.....	23%
Raters disagreed.....	8%

Mildred says of her parents:

My father reads and he likes books, but my mother likes them more. She's the kind that sits up all night reading. My father's more the outgoing type. He likes the outdoors. He doesn't like to sit still.

Hilma, whose parents received their professional training in their native Estonia, discussed the fact that her father had his master's degree in chemistry and was interested in things scientific, while her mother's interests were more human-centered--and for this reason she continued to pursue her profession of nursing. Muriel's parents differ in a similar way:

Father is a draftsman at Oldsmobile, and was a chemist in Scotland. Mother is artistic. She attended art school and likes to work on character sketches.

And speaking on this point, Jenny says:

We're worlds apart--my brother, my mother, and I. But you can be worlds apart and still love each other.

Edith says similarly:

We're all individuals in our family. Mother and Dad have never lost that. We're each a person, and we each have ideas and goals. We never lose sight of this. You know, we're not any package plan.

Julie says of her parents:

My father enjoys his activities very much, but he enjoys family life too. He's very successful in what he does. And then my mother is very successful in her business world. Before she was married she always had a good job. I'd say they were both successful in their own ways.

Lisa points out that different interests pursued during the day can be mutually complementary in the evening:

When my mom comes home from college, she'll start talking to my father. A year later he'll remember it and look it up in her books.

In the case of Debbie, too, her parents' vocations mean

complementary interests. In her family, the mother teaches school, and the father is involved 4-H work, and says Debbie:

They read a lot of the same books. Their professions demand that they read, and they read together.

In this area, the girls' parents seem to have more individual autonomy than the boys'. However, this may be more a difference in perception than actuality. The girls, creative and ambitious themselves, may see in their mothers a desire for autonomy, while the boys, somewhat uninterested in this stage of life in whether or not their mothers lead a somewhat independent life or perhaps considering their mothers' activities as being of little interest to them, may denigrate this factor in their interviews. Or perhaps, creative girls need mothers who function with greater autonomy than creative boys. Indeed, such a mother may set the example for a young, creative girl to follow. In the case of boys, the father's example may be sufficient; in the case of the girls, perhaps not.

In Cradles of Eminence, about 350 of the 400 eminent creative persons discussed came from homes that the Goertzels considered to be unusual.<sup>5</sup> Since creative persons are those who do not conform to the usual pattern, who do things differently, it is not surprising that these researchers found them often times to come from homes that were "different."

In the present investigation, it was felt that perhaps a high percentage of the creative youngsters also might come from homes that were "different." The item read: "Family is different (from other families interviewee is likely to have come in contact with)."

The percentages for the boys are:

Positive.....	64%
Negative.....	21%
Insufficient evidence.....	7%
Raters disagreed.....	7%

For the girls:

Positive.....	54%
Negative.....	38%
Insufficient evidence.....	8%
Raters disagreed.....	0%

In what way were these homes different? Arthur, for example, is the youngest in his family, and he has four sisters and two brothers. His parents separated when Arthur was two, and at that time his mother came to Lansing from Oklahoma. A family of strong convictions and individualism, Arthur admires them even though they are "kookie." One sister is a nun, another is in and out of a state mental institution. The mother works. Arthur is given a great deal of freedom, but he enjoys his home--"It's a funny place," he says. In the case of Nathan, the parents come from Syria and Nathan is the youngest of a large family. The family runs a small retail store that stays open many hours, and so family life revolves around the store. Nathan works in the store too, but he resents being the "baby" of

the family. Robert's father was a minister, but several years ago, when Robert was eight, the father died. Robert and his mother are very close, but still she seems to maintain a firm hold on her son and attempts to guide him into Christian activities--and eventually the ministry. Robert says:

It seems that now I'm sort of growing apart from my mother a little bit, because as I get older, I do things that--like youth groups at church, and goof around with kids at school--things like that. But I still think she's got a good hold on me, and I've got a good hold on her.

Waino, the boy from Estonia, comes from a family that has, in a sense, descended the social ladder. Both parents seemed to have received a fine education in their native country, particularly the father; but when the family immigrated to the United States, the classical education did not mean as much, and the father now works as a laborer. However, the father's interest in learning continues, even though his education has advanced him little in his present life. And having received a classical education himself, the father is critical of the American schools, which to him seem to lack discipline and standards. Perhaps Waino's cynicism derives from his father's disappointments in life.

With the girls, Hilma like her twin brother, has a "different" home, although it had a somewhat different effect on her than on her brother. Beatrice comes from a broken home, which for her meant spending much of her



life with grandparents and, later, almost raising her younger brothers and sisters. Although she looks upon the incident with a good deal of humor, several years ago she and her grandmother read in the paper about her mother's forth-coming marriage. And this was the first either of them knew of it. Jenny's family is equally "different." The father, an individualist to the point of being eccentric, an intellectual who has refused to conform to any of the usual vocational patterns; the mother, less of an intellectual, but more of a humanitarian. Georgia's home life is pure misery. A father with paranoid tendencies makes her life a hell; and her mother, apparently as intimidated by the father as the children, attempts to shelter Georgia from the rages.

However, it is sometimes true that people who are "different" do not see themselves as such. Thus, another item on the rating scale read: "Subject perceives family as different (says so in interview)."

The percentages for the boys are:

Positive.....	29%
Negative.....	43%
Insufficient evidence.....	14%
Raters disagreed.....	14%

For the girls:

Positive.....	54%
Negative.....	23%
Insufficient evidence.....	8%
Raters disagreed.....	15%

Mark was asked by the interviewer if his family

had exceptionally strong beliefs--stronger than most adults, and he answered:

Yes, definitely.

Interviewer: Do you feel that their beliefs are stronger than the average family's,

Much more so.

Do these cover all areas, or do they concentrate on one area,

All areas.

Rex comments sardonically:

On the whole, I've had a pretty successful family. Mother's been married three times and all that.

And commenting on his family, Arthur says:

Recently my sister had what is popularly known as a nervous breakdown and spent some time in a West Coast State Hospital. She is unmarried. I have four sisters. We have an interesting line-up. One is a nun; another is insane; the other is--she likes to think, but she's so orientated toward politics that she can't think. That's the trouble with our family--we go off--zealots. Everyone's out for themselves in our family. There's nothing to really hold it together.

And Jenny's family life would provide material for a Gothic novel. Asked what her grandmother was like, she answered:

I stayed away from my grandmother. She was diagnosed as a schizophrenic. Any minute this woman could come at me with a big knife, so I didn't bother her.

The grandmother was suffering from grief from the loss of her husband, and was later institutionalized. And speaking of her father, Jenny says:

Oh, he is a nut. That's the only way to describe my dad--he's a nut. His appearance is nutty. He shaves his head. And he never wears any shoes or a shirt.

And he cut the hair on his stomach one time down in a strip. And he has a big pot belly. He doesn't give a damn. To other people he is very unsocial, except to people he likes. He is very, very, intelligent. He has a big superiority complex, too, I'm afraid. He hates bosses. He goes into tantrums and calls them whatever name he can think of. And he always makes them a little less intelligent than he.

But on the more positive side, she comments:

I think our family thinks more about things than most families.

And Debbie says of her childhood:

I feel I'm quite a bit different from kids who were raised with other children. I was raised almost entirely with adults.

And Georgia describes her home life:

Well, I hate to talk about this, but my father and I don't get along. We never have. He's the outdoor type. I sometimes wonder if there isn't something wrong. It must be something that happened to him during the war because he doesn't trust anybody. He can never trust me, and he never trusts my mother. He doesn't even trust the people he works with. And when something happens, he always keeps harping on it. He's sometimes nice and considerate, but most of the time he gets upset over everything. He thinks everyone's against him. I don't care what happens to him. I despise him because he never lets me do what I want to do. If you only knew what it is like. The only time we ever have any fun is when my mother and I are home alone. My mom she understands and helps a lot.

Hilma, whose mother--a nurse--works nights, says of her home life:

I think we have sort of a different relationship with my father than a lot of other people because my mother worked at night. My father sort of became a mother too--fixed our dinner and put us to bed. He has been doing this ever since my mother started to work. She has always worked so my father has always been home in the evening. We have been with him a lot of the time.

And she continues:

Frankly, I think Waino and I have been left alone to a certain extent to do things in our own way. Like father has always stressed to do well at school. But I don't recall my parents ever making me do something that I didn't want to do. I've been left on my own and have been very independent. I think my parents haven't tried to encourage me either way.

In the Goertzels' study, about half the eminent creative persons studied came from homes in which one parent or both were strongly opinionated.<sup>6</sup> The Goertzels speculated that the children in these homes "caught" the convictions of their parents and had carried them on. In the present study, an attempt was made to determine if the parents had strong convictions. The item read: "Parents have strong convictions."

The percentages for the boys are:

Positive.....	50%
Negative.....	36%
Insufficient evidence.....	14%
Raters disagreed.....	0%

For the girls:

Positive.....	69%
Negative.....	31%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Keith describes his father:

My dad works at Reo. Actually he never got a formal education. He just went to night school and took a lot of night courses. But he's always talking to me and telling me about these values. He always used to sit down with me and talk about what I'd like to be. He'd give me some of the values that he thought were important in life.

And his father is the type who will go to the trouble to

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take a stand:

We're having some trouble right now. They're building a small factory right behind our house, and they make a lot of noise. And my dad is real perturbed. We wanted to find out what it was so that we could fight it. So we go down to the zoning board. We ran all over, and nobody knew about it. And he doesn't like the way everybody says that the individual should give way to the majority. He sort of agrees with this, but he doesn't like the way they do it. How can they take over your land by condemning it? He doesn't agree with quite a few things in government. Democracy!

Asked what his mother has stressed in raising him, Robert says:

Obedience from my mother and from other people like elders. But one thing that's really been stressed is church going.

George:

They have always stressed learning. They think you should learn as much as you can in life.

Waino's father is somewhat cynical about Americans:

He is a normal person. Usually he is quiet, especially when he is with Americans. I heard him say that when he first came to America he thought he should try harder and really become Americanized. But, now he really doesn't care. He is happy and is satisfied with what he is. Even if he does make a few mistakes, they can go to Hell. That is his attitude.

Sarah's statement about civil rights:

One thing they haven't stressed is that you're better than anyone else. They have brought us up that all men are created equal like Lincoln said, and that we have no right to treat Negroes the way people down South are treating them. Since we have been brought up this way, we feel that this is wrong. They've brought us up with the feeling that we should be kind to others around us.

Mildred says of her family:

I think we're all for the human race. We like to see the underdog get ahead. That's the general feeling in our whole family. The major topic that we've been talking about when the whole family gets talking, is

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the race issue. Everyone thinks it's absolutely ridiculous. They don't understand why those people do it. My mother said she'd die if one of us girls married a Negro. Well, right there, that's the whole thing. She believes in integration in schools and restaurants, but she wouldn't prefer to have them live in the neighborhood. Well, I wouldn't mind.

Jenny's father has strong opinions about many things, among them, intellectuals:

My father thinks that most intellectuals are fakes. They go around trying to impress people with their wordiness and how much they have read. This disgusts him.

And on religion:

Religion is one of the things stressed most. The understanding of religion rather than to accept it just because it's written. And, be a good Christian, but don't be a narrow-minded Christian.

And in Julie's family:

My parents feel that it's necessary to get to really know your own family before you get to know and understand other people.

There has been considerable evidence that outstanding performers are first borns more than sheer chance would allow. In his studies, Terman found that a high percentage of his outstanding children were the eldest in their families;<sup>7</sup> and as far back as 1904, when Ellis published his study of 1030 men of genius, he found that one of the factors favorable to the development of genius seemed to be being the oldest in the family.<sup>8</sup> And Anne Roe found in her study of eminent psychologists and anthropologists that there was a high incidence of first borns.<sup>9</sup> Roe speculated on why first borns are likely to



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be outstanding. First, they are generally found to be more intelligent; but perhaps even more important: first borns are likely to be over-protected and, then, seek to compensate by being more independent. Further, she says, first borns are likely to be given more responsibility, which, she feels, gives the child more the kind of self-discipline he will need in order for him to develop his creative potentialities in constructive ways.

In the present study, 43 per cent of the boys and 54 per cent of the girls were first borns. In this group too, then, about half of the groups were the eldest in the family.

The raters also read the interview transcripts in order to discover the extent to which the parents of these creative young people seemed to exert career pressure on their children. The item read: "Lack of strong career channeling pressures on child."

The percentages for the boys are:

Positive.....	43%
Negative.....	21%
Insufficient evidence.....	36%
Raters disagreed.....	0%

For the girls:

Positive.....	46%
Negative.....	23%
Insufficient evidence.....	31%
Raters disagreed.....	0%

It must be said, however, that these figures are somewhat misleading. The 21 per cent of the boys and 23 per cent of the girls who indicated some parental pressure

in the area of careers indicated that the pressure was very slight. Parents of some of the young people expressed some hope that their children might go into some professional area; but the image of a "stage-mother type," pushing her child, attempting to realize her own thwarted desire for success through the success of her child, did not emerge in a single case. Only in the case of Robert, whose mother hoped he would enter the ministry, and Georgia, whose mother hoped she would enter a profession so she would never have to be dependent on the whims of a tyrannical husband (as she was), were there any signs of any pressure. This is not to say, that the parents of these children were indifferent to the future of their children; they were interested in them doing well--but in the area of their choice.

A common response when asked what their parents wanted them to do was: "They want me to do what I want to do." Jeff said:

My parents aren't going to say, you have to go to college. They just say, if you go to college, you're going to have to get good grades.

In the literature on creativity, the word "freedom" appears with regularity. The creative mind thrives on an environment which allows it to range widely, to go where it will, to explore multiple and uncharted areas. Some writers have seen the creative, unfettered,



and free mind as the highest form of aliveness; and as N.J. Berrill puts it, the free mind is almost the divine in mind.<sup>10</sup> The Goertzels found in their study of the childhoods of outstandingly creative persons that a greater degree of freedom was often permitted:

As children they had more freedom to travel, to engage in self-initiated projects than did many other more conventionally reared children in their own times.<sup>11</sup>

Anne Roe found too that the scientists studied had considerable freedom when they were young.<sup>12</sup> In fact, she says, many of the men first became dedicated to science when they were given the freedom to explore on their own in laboratories. When they found they could discover things on their own, they became addicted to the field of science; and she says in another place that among the young creatives, it is vital that a sense of freedom and independence be encouraged, not frustrated.<sup>13</sup>

Thus, it can be seen that freedom plays a large part in the development of creative abilities. But, even more, creative youngsters not only thrive on freedom, they seem to demand it. Several years ago, in the summer of 1963, the present researcher interviewed about a dozen mothers of gifted, creative high school people; and without exception all the mothers mentioned the fact that their children had always had--even from infancy--an unusually strong desire to be on their own, to be independent, to be free agents. These mothers sometimes said that it could even be something of a hurt, from a mother's

standpoint, to feel her child pushing away, seeming to say, "I don't want you. I want to be on my own."

It was with this factor in mind, then, that this item was included in the rating sheet. It read: "Desire to roam and explore and freedom to do this (when young)." The emphasis here, it should be pointed out, was on freedom to roam and explore the physical world. It was felt freedom of movement may be a concomitant to freedom of the mind, and the child who has the freedom to roam and explore may also have freedom of the mind as well.

The percentages for the boys are:

Positive.....	43%
Negative.....	50%
Insufficient evidence.....	7%
Raters disagreed.....	0%

For the girls:

Positive.....	38%
Negative.....	38%
Insufficient evidence.....	8%
Raters disagreed.....	15%

Robert says:

Up until I was in the fifth grade, I wasn't ever allowed to go out after dark at all. My parents have been very protective because of kidnapping and disease and things like that. When the polio epidemic broke out, they wouldn't let me out.

Arthur resented the restrictions placed on him when he was a child:

When you're young you can't do anything because you have to lead a scheduled life.

Jeff says on this matter:

My parents never worried about me and never said you are to stay in the block until you are so old. They

let me go where I wanted to. As long as I can remember, as long as I asked, I could go where I wanted to.

Rex comments:

There were no restrictions, but always a time to be back. I traveled around more than most people though. I rode my bike until it fell apart.

Mildred's remark is a rather typical one:

There were certain places I could go and certain places I couldn't go. They didn't keep us right in the yard or anything. They just told us we could play in a certain area in the neighborhood and with certain kids.

Interviewer: Did you ever feel rebellious?

Yes, I think I always did. But I respected my parents, so I just did what they said.

On this matter, Jenny remarks:

I had to tell my mom where I was going every time; and when I was little, I'd have to report home about every half hour. That was just when I was eight or nine. Since I've been older, my mom lets me out all day--just as long as she knows where I am.

Lisa reveals throughout her interview that her mother was a rather fearful type:

When we moved here, my mother was really frightened when we went around the block to the store. All the other people's children who had been used to living in the city, would go further. My brother wanted to be with his friends, so he ignored the boundaries and went on expeditions.

Beatrice was given considerable freedom too. She disapproves of restrictions:

Children should have a chance to explore--find out right and wrong on their own.

One of the most common findings in studies of the childhoods of geniuses is loneliness--or an affinity for

being alone. Anne Roe found in her studies that the scientists she interviewed said that as children they spent a great deal of time alone,<sup>14</sup> and in Yoder's study of fifty great men's childhoods, he found that solitary play was repeatedly described. Yoder said:

Instead of joining in the usual childish games Newton preferred to play with his machines, Darwin with his collections, Shelley to read, Stevenson to make clay engines, and Edison to mix chemicals. Of Byron, it was written: "The love of solitude and meditation is already traceable in the child."<sup>15</sup>

Yoder's conclusion is that solitude seems to have played a rather striking role in the lives of the great men he studied. Either by nature or by opportunity, they stayed a great deal alone. Phyllis Greenacre, from a psycho-analytic viewpoint, says:

The child of potential genius is inevitably a lonely child, no matter how many people surround him. For he is a child who senses his own difference, feels isolated and inferior thereby: or, if he becomes aware of his gift, is still isolated, finding the greater sustenance in fantasy until his ability begins to be realized in some definite expression.<sup>16</sup>

John Stuart Mill tells that his father kept him completely isolated from other boys, so that he grew up in a world of brilliant adults and never realized that he was superior to any other child.<sup>17</sup> Harold McCurdy studied twenty men who were estimated by Cox to have IQ's of over 160 and about whom sufficient biographical information was available.<sup>18</sup> When he attempted to find similar childhood patterns among these people, he was able to identify three common factors; and among these factors was isolation from other children,



especially children outside the family. As a result of this isolation, says McCurdy, a rich efflorescence of fantasy developed. Being alone, these children built elaborate fantasy worlds, and apparently their ability to exercise their imaginations, accompanied by high level ability, carried them to high creative heights as adults.

It would seem, then, that loneliness--either enforced loneliness or self-imposed loneliness--is indeed a common factor in the development of creative abilities. A child who is alone develops his imaginative powers to a higher degree than a child who is much with his fellows. In fact, the world of actual playmates is likely to be inhibiting to a child with a rich imagination; his mind leaps ahead of the inventions of his friends; he does not enjoy being held back by their more mundane games.

The item relating to this factor read: "Much evidence of being alone when young."

The percentages for the boys are:

Positive.....	64%
Negative.....	29%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	62%
Negative.....	38%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Curtis, explains why he likes to be alone, both out of school and in school:

I really would rather work by myself than with other

people. I like to do things my way and try it out and see if I can do it my way ... and just think by myself, sort of. It's easier for me to work by myself than with other people. I like the freedom so that I can do what I want.

When asked if he takes part in class discussions, he says:

I don't too much. I just pretty much keep to myself in classes, too.

On this matter, Waino says:

I spent lots of time--I usually did everything alone. I would spend my time alone.

Interviewer: Would you ever choose to spend time alone when you didn't have to?

Yes, I would choose to spend time alone.

When Joe was asked if he remembered spending most of his time with adults or with children his own age, he answered:

Mostly alone. I just had games I made up with myself, and I just played them.

And when Mark was asked if he spent more time with adults or other children when he was younger, he said:

Adults.

Interviewer: Spend much time alone?

I don't think that's a very good way to phrase that. You should have said did you spend much time not alone, because I was always alone.

When George was asked what experiences about his development stand out in his mind, he said:

I think when I am by myself I can do whatever I want. That way I can learn what I want because I don't have so many interruptions when I'm reading a book. I'm real interested in different things. Mother wants me to help get supper or my brother or sister wants me, and I can't get anything out of the book. So, I wait until I'm by myself, and I can do a lot better.

Rex:

I mean you can be in the middle of Yankee Stadium and be alone. That's sort of like the way I was.

Jeff describes his affinity for being alone:

When I was younger I wasn't very interested in sports. I had to be forced to play. So usually I spent most of my time alone. I would enjoy working alone, and I would spend most of my time working downstairs alone--with wood, electronics, and I had just as much fun alone as I did with people around me. If they didn't like what I was doing, I didn't pay any attention to them. So I didn't have many friends. But I've changed in that now--at least I hope I have. I try to be more outgoing. You can't expect everyone to like what you like all the time. I think I'm a different person now because of that. I can enjoy being by myself even now more than most people.

Keith says:

I like to get alone more than a lot of other people I know. There are a lot of people who, if they're alone, will call up someone, but I'll just find something to do by myself.

Robert:

I was an only child so I had to spend quite a bit of time alone.

Nathan comments:

I don't join any group especially. Actually, I like to be by myself. I'd just as soon be by myself than go to a party. In fact, I don't like to go to any parties. I just don't like being around people. When everybody is in bed, I often get up and walk around; or go up in some apartment building they're building and just sit down or prowl around.

Hilma describes how she likes to be with her parents:

Some people don't like being with their parents, but I like being with mine. I feel sudden urges to just be by myself. I don't think I've ever had a bosom friend or anything like that. I don't think I've missed anything really.

Mildred comments:

Once in a while, I used to like to go in a corner and just think. I mean I wasn't really thinking then, but

I just liked to sit by myself once in a while.

Nancy says:

I was alone a lot. I didn't mind being alone. I liked to read, and I spent some time with friends my own age too. I think I spent a lot more time alone than some kids did.

Muriel:

I was mostly with myself. I knew what I liked and people didn't. The kids were doing things that weren't interesting to me at the time.

Jenny, the star in an underprivileged school, recalls:

I went to a school which was in a poor district. I was on the top, which I didn't even bother to think about. But other people do. I never got mixed up with my peers at all. They thought I wasn't their peer. They kind of looked up to me. Betty was in grade school with me, and I spent a lot of time with her. But then she moved away, and I was left completely alone. And with all those people looking up to me.

She continues:

When you want to be alone, people are always there. You can never get anything done.

There are shades of Thoreau in Edith's comment:

I liked to be alone when I was young. We'd spend the summer at the lake, and we were about the only cottage for quite a ways. I used to go back in the woods and spend hours there--just walking. I discovered a lot of things. I've never had any fear of being alone. And even now I like to be alone. If I'm around too many people for too long a time, I just feel cramped. And this is when I like to get alone and think.

Lisa says:

I felt just as if I were alone, and everyone else were pretending and plotting against me.

Carol:

I liked to be alone with a couple of people. I don't like crowds very much.

Beatrice says she was brought up in an adult world:

I lived with adults. I didn't spend much time with kids my own age because there weren't any kids. I was the only child, and I was alone all the time.

Her mother worried about her:

My folks used to think that I had too much independence, because I didn't want to be around with them. My mother was separated, and I was alone all day long. I did whatever I wanted to and they felt that I had too much independence. But I don't think it ever hurt me.

And she concludes:

I think I'd throw children out on their own a little bit. That's what was done with me. I got into trouble sometimes but it was all right. I had to keep myself entertained and do work. Being alone helps you to learn to think on your own. It's important to be alone. I enjoyed having my summers to myself. I even liked the times when I had to sit around and wonder what to do. It gives you a chance to think.

### Cognitive Style

A part of the interview conducted with the creative-intellectual young people had to do with their cognitive style and their attitudes towards intellectual matters and the scholarly dimension. As Drews has suggested, among the creative young people she has studied, there is a strong affinity for philosophical-intellectual pursuits. She says of them that they have:

... a drive to deal with intellectual matters; to be contemplative and independent. (They are) oriented toward theoretical, aesthetic, complex, and original approaches.<sup>19</sup>

In the studies of creative persons conducted at Berkeley, it was found that when the subjects were administered personality inventories, they often obtained the highest scores on what Heist has called the Thinking Introversion

scale. High scales on this scale

indicate a preference for reflective thought, particularly of an abstract nature. High scorers are interested in ideas and concepts, and they tend to be less influenced by external conditions and commonly professed ideas than are low scorers.<sup>20</sup>

Allport, Vernon, and Lindzey, in their Study of Values, included what they called the Theoretical scale. The theoretical man, they say, pursues truth:

In the pursuit of this goal he characteristically takes a "cognitive" attitude, one that looks for identities and differences; one that divests itself of judgments regarding the beauty or utility of objects, and seeks only to observe and to reason. Since the interests of the theoretical man are empirical, critical, and rational, he is necessarily an intellectualist, frequently a scientist or philosopher. His chief aim in life is to order and systematize his knowledge.<sup>21</sup>

Evidence suggests that creative persons score high on this Study of Values scale.<sup>22</sup>

In the present study, an attempt was made to determine the degree to which a philosophical orientation seemed to be important to this group of creative youngsters. The item read: "Thinking introversion (philosophical orientation)."

The percentages for the boys are:

Positive.....	57%
Negative.....	29%
Insufficient evidence.....	0%
Raters disagreed.....	14%

For the girls:

Positive.....	77%
Negative.....	15%
Insufficient evidence.....	0%
Raters disagreed.....	8%

When the interviewer asked Eldon what he thought

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was wrong with most people, his response was "A loss of a sense of values." And he continues to show throughout his interview his interest in ideas:

I often think about an idea and write it down in a little notebook I keep. Like the conflict of interest discussion we had in social studies class. I wrote some more ideas I had down in the notebook. In the eighth grade I got into the habit of writing down any idea that came to me that I thought was important.

And Lisa says:

I like to dream about abstract things that you really can't give an answer to. You could have one yourself and someone else may have an entirely different view.

Muriel:

Sometimes I wonder if society is worth helping. Sometimes you want to close the door and keep it out. Sometimes you feel like you have to go on a crusade and change society, but it doesn't really work. Society is a kind of all-conquering-they. Even if I had it in my power to change things, I wouldn't know what to do. I don't know whether I could change things for the better. Maybe they're better as they are.

Mildred:

I like to be by myself a lot and then, too, I like to be with the kids. But after I get done playing, I always like to get by myself. There are times when I like to be quiet and just think.

And Julie:

I think mainly about things around me like why is that tree out in the front lawn so big when the one down the street is so little. Then if I thought about it, I usually come through. I mean, I liked things I could think about and maybe find a solution. And the things I couldn't find a solution to bothered me.

Related to philosophical orientation is the item which reads: "Concern for and questioning of religious issues (versus non-questioning acceptance)."





Percentages for the boys are:

Positive.....	64%
Negative.....	29%
Insufficient evidence.....	7%
Raters disagreed.....	0%

For the girls:

Positive.....	62%
Negative.....	15%
Insufficient evidence.....	15%
Raters disagreed.....	8%

Rex, a boy with a scientific bent, says he must turn to religion for the ultimate answers:

It means a lot to me. I question almost anything and try to find the logic behind it. My mother is not too enthused at all. I don't have too much chance to go to church because they never do. Next year I'll be driving and I'll probably be going to church on my own. I was born a scientist. After all this study, I can't just see all that stuff falling together.

Waino, on the other hand, says:

That's why I don't like Christian religion too much. It has too many unacceptable contradictions to it.

Robert:

If you don't believe in one thing, you can pretty well destroy everything else you believe in. Belief is complete trust--no doubts. Going to church and Sunday School is important. If after I've given my children the background, they choose not to go; that will be all right. But, I'd do everything to keep them in. They'd go to church regularly as long as I had control over them, because I believe it's the true way.

Morris expresses skepticism:

To my parents, religion is very important. To my sisters--well, they like to look at all parts of it. They've read a lot on religion, and I don't think they believe in God. But they lead a Christian life. We used to go to a Catholic Church, but to me it was almost like idol worship. I couldn't see it.

And Mark:

Interviewer: Do you find yourself thinking about religion at all?

I didn't until I went to church this year, and then I quit going.

You still think about religion?

Naturally. It's a problem to ponder.

And again Waino:

Religion? God? What place has religion in this world anyway? Well, religion has no place in the business world or in any job unless your manager or your close associates are fanatics.

Eldon comments:

I would raise children with independent minds. They should believe in something. Brotherhood of man. God. But believe in something. My parents did this for me. If you don't have anything to look to in life, there isn't any reason for living. Looking toward a higher being gives meaning and purpose to life. If you run into rough parts of life, you might turn to some higher power and find faith.

Arthur says:

I once belonged to the Catholic Church. I went for reasons unknown, but mostly because of family commitments. I began to read things, see, and I began to see the picture a little better. I read something by Thomas Aquinas--something that's as biased as it can be--on the belief in God, and I read a lot of other things. I read things by Bertrand Russell, and I began to see that you should respect truth above everything else. I'm not an atheist. I'm more Unitarian than anything else. I don't go along with these guys who shout that they don't believe in God. People believe in God because it answers a lot of unanswerable questions for them.

And he continues:

I don't believe in God anymore. I think I used to, but I think the majority of people are stupid. Therefore the majority of people are religious.

If you don't believe and it turns out that there is a God, you will go to Hell. If you do believe, and it turned out that there is a God, you will go to Heaven,



if you are a good believer. You can't falsely believe because if there were a God, He would know. He would know if you didn't believe in Him. So, if you don't, you don't.

I believe that God was something that people made up when they were too tired or too confused to find out what really happened. Darwin was a worker. He would go back, find, trace, and work to find out if he could get a logical basis for belief. But these people just, well, believe.

And again Eldon comments:

The Bible is all I've had time to read every night or so.

Interviewer: Have you taken on reading the Bible this summer as a personal project?

Yes. I'm trying to figure out what it is all about. I want to try and connect in my own mind the old Testament with the New.

Nathan is confused:

When you get in high school, you start learning about everything. Then you look at the Bible. It tells you that Adam was created from a bit of dust and that Eve came out of his bone. This is such a contradiction between what you learn in school and what you learn in the Bible. I just have a hard time making up my mind which I am supposed to believe.

George:

I try to figure out how Adam and Eve were made. This friend of mine, who is quite strong on the Bible, doesn't believe in evolution. All this scientific data that they have over in Europe on these different people and how they evolved--I was trying to figure it out how these two fit together. Evidence points to the Neanderthal man and the Bible says Adam and Eve. I was thinking what's the connection between the two.

Sarah:

There are times when something the pastor has said doesn't set right, and then I wonder. Which way is right? There are points that make you wonder if your way's right. There's no way of knowing just which way is right except to live what you believe and believe what you live. I guess that's what we do.



Georgia:

I question religion more than it gives me strength. I've never gotten much strength from being religious. I **a**lways wonder what happens after you die. I guess everyone does--it's nothing new. But, I have my own ideas. I wonder what God really is? Is there a God?

Carol:

I believe in certain things, and I haven't found a church yet that believes exactly as I do.

Interviewer: Have you thought a bit about religion?

Oh, I've thought about it. I have a lot of questions about it.

When you have a question, to whom would you be apt to turn?

I usually turn to the Bible and use myself to reason it out.

Nancy is bothered by her own doubts:

I wonder about it a lot. I worry about it when sometimes I don't believe like I should. I'm more doubtful than I should be about it. But I think it's a strength too. It's awfully complicated. It's a strength but I worry about it. I don't know what to do.

Debbie:

It strengthens me. It's a feeling you have to have, yourself. It doesn't torment me. I have a lot of questions about my religion, but yet I know. I just have that burning fire inside of me. Sounds kind of weird, but that's what it is.

And Beatrice talks about religion at length:

My poor catechism teacher. I had her so confused she couldn't even remember if there was a God or not. She tried to make us believe that the Catholic Church is the one true church. Most people who study seem not to believe in any one particular religion. Even Lincoln said he believed in God, but not in an orthodox religion.

I go to church every Sunday because it helps me not to forget. You need someone to look up to. People need a God. Before you believe in something, you have to see why it is necessary.

There are a lot of things against the Catholic Church with all their money and power. Religion is more or less a business and like all businesses, you have to have the people pay the way.

I think it's unique how people try to make it different when it is really basically the same.

I feel that people have always needed a God. They're an animal, and even animals look up to something.

I have trouble accepting all the dogma of the Catholic Church. I'm in favor of birth control which the Church is against.

Also of concern to the raters was the youngsters' valuing of intellectual and cognitive matters. The item read: "Values intellectual and cognitive."

The percentages for the boys are:

Positive.....	79%
Negative.....	14%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	69%
Negative.....	15%
Insufficient evidence.....	0%
Raters disagreed.....	15%

Rex says:

I like to collect things in my mind, rather than to actually collect objects.

Arthur:

I've taken on a new interest in critical analysis. I've been reading people like E.E. Cummings, Edna St. Vincent Millay, Carl Sandburg, Hilda Doolittle, and all the tribe.

Mark says when asked why he likes to experiment:

Why do I want to do them? Because they're interesting. Some day you might find something that's new and



surprisingly a way to come about ideas.

And he continues:

I like technical books--no waste--no plot. I can't tolerate novels. Anything that is read for just reading, rather than for learning, I can't stand. Text-books have too much redundancy. You couldn't write a literature book that would be worth writing because literature isn't worth learning. If you want cheap entertainment like Perry Mason, watch it on TV. Don't read it. I can't even watch an hour of TV. I get bored. I don't want to learn to enjoy it because I would take too much time away from things I already like to do. There is already too much to learn. I am absolutely mad about scientific things.

And again, Arthur:

I read Plato, Sophocles, Aristophanes, and Aristotle. I usually read in about a series of four things. This time I read the Origin of Species, the Communist Manifesto, Utilitarianism, and something else. That was tricky.

Answers to questions are first found by asking them.

I like to read about people in sports who have a lot of class. We have a lot of books in the house. I read a Bertrand Russell book, but I was knocked out because someone stole it. That man really speaks his mind. Libraries don't appeal to me very much. I hear about books from people. I have an Oxford Book of American Verse that I really like to read.

Rex:

Poetry isn't too bad. A lot of people are afraid of it. Some people are afraid of brains. A lot of people are afraid of money, good looks, or you know. If something's perfect, they're afraid of it. A lot of people are afraid of somebody intelligent. Anything superior, I think, they shun.

Franklin likes the intellectual game more than physical games:

I suppose it takes a certain amount of competition and skill to play a game of football, but it takes a lot more mental agility to play a game of chess. Some people say they feel better when they're physically fit. That's just a state of mind.



Eldon:

I like math because if I'm wrong, I can reason out why I'm wrong. This is true in science too. But in social studies and English, this isn't true. There's no great unity, and there are exceptions to all the rules.

And he continues:

I like my mind best, and some of the attitudes my parents have given me. And the shape my body is in. I like that. I didn't like the shape it was in before.

Sometimes I wish I could say to heck with grades and just concentrate on learning something.

Jeff's values:

I think I value most just learning things. As far as society values--maybe it's money. I don't value money except as a way of acquiring.

Nathan says:

You might say I lean toward the intellectual type. My interests include almost all areas of knowledge and avant garde material in these areas.

I'm concerned about a racial issue or a test ban treaty, but a lot of people just aren't concerned about things like this. It's not popular to be intelligent. I mean, just like we should let grownups think about this sort of stuff.

I like to read and learn new things. I like to learn, but I don't like this kind of work where you've got to write things down--memory work.

Sarah says she prefers the academic subjects to the others:

Rather than singing or being in a gym class, I'd rather be in a math class, or English or social studies.

And Hilma talks about her intellectual interests:

I like to discuss about anything. I like to discuss books we have read or ideas. Something that we can really communicate and I can feel the idea that we are communicating. You don't really get this sense by talking about clothes or what you have.

I always like to read, and I've always been curious since I was about nine. I started taking books out

of the adult section. They weren't supposed to let you do it, but I did. I don't see why they don't.

I've been reading Hemingway, Steinbeck, and Faulkner, I like Faulkner a lot. And Ayn Rand--I like that a lot because it is extreme individualism. I've been reading a lot of books on architecture by architects. I've been reading some books on anthropology. Once in a while I'll pick up a novel and skip through that.

Mildred:

My girlfriend called me up the other day, and we talked about Vietnam for about an hour. I like being able to talk on an adult level.

I think a lot. Before, I don't think I really had any solid opinions. You don't know much about a subject until you study it. I know I have a lot of definite opinions on subjects.

I never started reading until this year. Really reading a book for what it means and not what it appears to be.

Muriel:

I have a panel of debaters in my mind, and when I don't have anything to do, they have a debate. Some times they come to blows.

Some ideas simply can't be made simple. They are very complex and can't be wrapped up in neat little parcels.

Knowledge as a whole is so insignificant. Sometimes I wonder if the knowledge that we do know is important. Is it really true? There may be something entirely wrong with our whole base of knowledge. I like to study other cultures to find out what other people think. What has civilization done for the world? It has taken people away from nature and made us very callous. Is civilization important? It has created a way of wiping everything out.

Beatrice, the girl with an intellectual grandfather whom she talks about a great deal, says:

No one reads in my family except my grandfather and I. I try to read a different book every week if I can.

Before, I was looking at things on a more local level,

now I'm looking at things more broadly. I guess I've matured. I'm more interested in what's going on beyond the bounds of my little life.

I feel you should know more about what's going on around you because how are you going to be able to think about it objectively, if you know not what really is? That's a problem.

And Lisa:

I don't read with a passion anymore but I still love to read.

An important part of the creative process may be dissatisfaction with the present, the status quo. Mathew Arnold once called creative persons "divine mal-contents." Before the artist--or any other creative person--can create the new, he sometimes must "destroy," in a sense, the old--or at least be skeptical of it, question it, see its faults. Drews has said that the creative youth she has studied are likely to be skeptical. Describing them as a group, she has said:

This is a skeptical group. However, they combine skepticism with a deep-seated idealism and a tendency to probe basic issues. They frequently see the discrepancy between people's expressed beliefs and their actions. And this discrepancy disturbs them.<sup>23</sup>

A creative person, then, is likely to be one who questions--even the truisms that are almost universally accepted. He does not accept cant; he does not accept without questions what others may accept as unquestionable. The item read: "Skeptical of ideas, critical, not easily impressed (especially with traditional ideas or slogans)."

The percentages for the boys are:

Positive.....	57%
Negative.....	21%
Insufficient evidence.....	0%
Raters disagreed.....	21%

For the girls:

Positive.....	46%
Negative.....	23%
Insufficient evidence.....	23%
Raters disagreed.....	8%

Mark comments when asked if he considers himself a cynic:

In a way. The thing is that there are so many things to be cynical about. And you could invest a couple of life-times at it and still not come up to do enough.

He is also skeptical of humanitarian and welfare programs:

They grow up and turn into "wine-noses" and lushes and murderers, and they get on your tax and welfare rolls. They vote for all the wrong guys. Like with the Negroes-- you try to give them an equal chance, and it goes to their heads. There's such a tremendous amount of people who don't want to help themselves.

Nathan saw through some of the sham of schools:

I think I had most of the teachers fooled. In the little notes that they wrote home on the report card, they usually said, "David is a trustworthy boy and a good citizen," and all this.

Arthur is skeptical about ideas from the adult world:

When I get to be President, I'm going down to high schools. That's where I'm going to get ideas. Young people are a lot more creative, and they think a lot more than those old factory workers. That's what I'll do.

Rex has a healthy skepticism of tests:

I don't go with these tests. You're being pigeon-holed for the rest of your life because of the results of one little test. I don't like what they put in these I.Q. tests. An I.Q. test is put out by society to see how well you fit the way society wants you.

Mark is also critical of novelists:

I don't read novels. When you take into account who wrote them, you usually find out he's a nothing. When you buy their books you're promoting this type of condition. They're slobs. They constantly rebel against society whether there's a reason or not.

And Rex is critical of his mother:

I don't ask questions too much any more. After all, people don't listen. My mother never listens to a word I say. All I ever get from her is that school isn't as good as it used to be. She's thoroughly convinced that kids now in school are idiots.

Mildred is critical of people who will not recognize facts:

I was arguing about capital punishment with this local lawyer. He believed in it, and I didn't. I went to encyclopedias, magazines, and books and I wrote up this editorial. I gave him all these facts. He just said you've got a lot of good points, but I still haven't changed my mind. He said I could oppose him with facts, but he wouldn't agree with me because he had one fact that he really believed in. I couldn't understand that.

Lisa:

It's sort of comical--people rushing so fast today, expressways going to get to places sooner. In the meantime, they're spoiling all they want to see.

And again Mildred, when asked if she disagrees with the authors of the books she reads:

Oh, yes I disagree with authors. Teachers stress too much that the people you read are authorities and can't be disagreed with.

Muriel:

I sometimes wonder if we aren't some kind of self-important ant?

Beatrice:

Of course, the Catholic religion is against this. They feel that when women get married, it's to raise a family. I don't agree with our church in a lot of things, but this is ridiculous.





Jenny:

I can see myself working for people that are getting screwed. They are the have-nots and the underdogs. I can see myself raising their standards because this goes along with my values. They are people who really deserve--or at least they ought to have a chance. I can see myself doing this.

And her critical mind again and again turns her to iconoclasm:

Brotherly love is good for people who can take it. I can't. I don't think my brothers are worthy of love.

I never saw the use of history too much. I never agreed with the people who said, "If you don't pay attention to history, it will repeat itself."

Fluency has been seen as one of the qualities of the creative mind.<sup>24</sup> The creative person seems to have the ability to think of simply more responses--he can go on at a greater length. His talk is likely to follow a process that cyberneticists call "positive feedback," in that each idea sets off a whole string of related ideas in something like geometric progression. This fecundity of mind is clearly seen in the Calvin Tomkins interview of Buckminster Fuller in which Tomkins says of this genius:

... Fuller seems never to have forgotten anything he ever knew, and his command of statistical detail is awe-inspiring. Perhaps the most amazing aspect of these monologues is that, no matter how long and labyrinthine the digressions that crop up along the way, he invariably returns sooner or later to the primary subject of his discourse, and everything turns out to have been relevant.<sup>25</sup>

The item on the scale relating to this read: "Has lots of ideas."

The percentages for the boys are:

Positive.....	71%
Negative.....	21%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	77%
Negative.....	23%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Arthur's ideas may be somewhat bizarre:

This is my plan for birth control, or, rather for death control. Legalize suicide and make a survey of every person that exists. Ask him if he wants to live, what he does, and if he's contributing to the life he leads. These people that are just taking up little plots and really serve no useful purpose, are out of the question.

And:

A lot of people who are classified as insane and retarded have a great capacity for feeling.

His feelings on the race issue are not unlike James Baldwin's:

There are obvious wrongs being done to minority groups. People don't have a right to kill people or to make jokes of other people. I don't even want to talk about it. It's not a question of minority groups. It is a matter of wrongs being done to people.

Waino's ideas are sometimes misanthropic:

There will always be racial discrimination. There always has been. There is a difference between the races. Northern Europe supplies the brains for Europe, and not just for Europe but for the whole world. There has always been a superior race to my way of thinking--the Teutonic.

Franklin, on the other hand, is more humanitarian:

I don't want to be a scientist. I'm strongly interested in human welfare. The well-being of the entire family of man. I hate anything that destroys man's dignity. I'm not a tough-minded realist.

He continues:

I never read any technical material. I don't think I have one book in my whole library that has anything to do with anything other than imagination and things in history. I'm not the least technically inclined. I don't even read newspapers.

On physical education:

I'm sort of a lazy person, and I'd hate to have an ambitious wife. I hate anything active. That's why I think the gymnasium should be turned into all kinds of things--cinders, mostly.

Rex sounds Jungian:

I think it would be pretty good if they would let boys cry once in a while. That's why it's something like over 50 per cent of the people in the houses for the mentally ill are men. You can't expect too much if they're never going to have a chance to let off steam. Girls are usually more well-balanced. A rather large percentage of the girls seem like somewhat of a tom-boy. I mean they've had a chance to get both sides of life.

One might disagree with his ideas:

People have to take care of themselves. Hitler, himself, didn't do anything. If I tell you to shoot somebody, I'm not the one who is doing anything. If, because of the conversation, you went out to shoot somebody, that's your trouble. Hitler, as far as I know, never killed anybody.

On unions:

Unions work for better working conditions because working conditions aren't taxed. Pay is.

Franklin, the anti-physical education young man:

The whole destiny of the race is to get less and less physical, and our ultimate evolution is going to be a brain made up purely of one large brain. Our entire system of mobility will be one little moving organ someplace that can push things for us and build everything we need. In the future it will seem as silly to them to lift an ashtray as it does to expect men to lift car bodies. Our brains will grow larger and larger. Our destiny lies in our mental and not our physical. Why people care to keep the physical being alive is more than I can understand.

And:

The Civil War was the last of gentleman's war, and it was the first of the mechanized wars. It's a terrible thing, but it's a lot of fun to read about. There's a little war in all of us, I think.

Mark's enjoyment of baseball is rather unique:

There was this one advertisement for a baseball book. It told about how players were rated and everything. So I sent in and got all these pamphlets, and from there I worked up my own game. I went through and rated all these players and everything.

He is sometimes epigrammatic:

What I hope to get out of college is getting out of college.

And:

I get close-minded very fast. I find if you don't get close-minded fast, things can begin to create in-roads. Before long, you're not yourself.

He is a rugged individualist:

Society was designed just to protect itself. Ever since the beginning of the earth, societies have come and gone. They've started out bad and ended up worse. And some other societies have come and taken over, and continued oppression. A society has never really helped anything. It's always been an individual.

When asked if he could have anything he desired, he will not be tricked into a faulty answer:

I've always thought about that question. I figured it would take about six years to completely write out an answer that would be explicit enough. Some people would wish for the golden touch, or for unlimited wealth, and they would find out that nobody likes them. The only way that you could make the answer properly is to just wish for contentment.

Nathan admires the man who thinks for himself:

An artist, a scientist, or a writer, I am sure, have their own ideas and do their own thinking. They aren't so easily led by other people. Also I think they care about other people. They don't just step all over them. They'd rather step around them.

Jeff on social changes:

Things are happening so fast, but no one is thinking about the effects of this advancement. Then they find themselves with problems that result from the changes and they worry about them. And all the time they are creating new problems.

Work has become so specialized that people can't see the results of their work, and thus they don't see the value of work because they can't see the whole.

He discusses the problems of the haves and have-nots:

Society is going to fall into the hands of an intellectual elite. They are the people who have ideas and make the changes. But who are these changes benefitting? They benefit the people who make the changes--the elite. And the poor guy--the ordinary worker--isn't benefitted by these changes. They're on the outside. They don't make the changes, they don't benefit by them. Like automation, what are you going to do with these people? Give them doles? That isn't good because people have to have some purpose. They can't go through life doing nothing.

Sarah ruminates:

When I think of being in a city--to see just bricks, concrete, and no nature anywhere, and people hurrying here and there--I sometimes wonder how man can live in this kind of world. It's just a world of dead things. It reminds me of a program I saw on television. The girl was a mermaid in the sea. And she was so surprised that there were so many dead things around us. Everything in this room is dead except you and me. Yet, actually they aren't dead. Books hold precious thoughts, and through them we get ideas of other people; and through them, we expand our own. But man--sometimes I don't see how he can stand to live in a world that's so rush, rush and all concrete and steel.

Hilma speaks of war:

I think the nuclear bomb is horrible. I don't want to die that way. I feel this horrible sense of helplessness. I want to erect these beautiful buildings, and then all of a sudden, they're all gone. Your idea, your ideal, human life, and beauty is gone.

And on being objective:

If you were to be strictly objective, some people would

call this wishy-washy. They want to see both sides of the story so much that they really hold to nothing. I think people respect more a person who will stand up regardless of what people say and regardless of the holes in his theory.

Mildred on prejudice:

Adolescents aren't as prejudiced as adults. Adults develop this mental block, and they have a harder time looking at things. Teen-agers still haven't settled in their opinions, and they are more open to new ideas as a result.

On the coming society:

People are thinking more these days and are becoming more non-conformist. We're going to have Greenwich Villages all over the U.S. Society binds too much, but people are breaking away.

And she burbles:

I've got so many ideas in my head that I just don't know which one to turn to first.

Jenny says:

I don't think that it's what I'm going to do for society. I don't know what I'm going to do. If I were a poet, let's face it, it's not going to be for other people. There is no need in me to reach out to these people.

But she continues:

There is a governing body in the United States that's working for the have-nots and I praise the Lord for the Kennedy administration.

Carol observes:

People on one city block collectively are like people on another city block; but individually they're different.

Julie on critics:

So many people say a critic is bad because they say bad things. But generally a critic will tell you the truth the way he sees it, and that's important.

Debbie on education:

Education means just about everything in life. You

learn always. Today you're smarter than yesterday. You walk down the street and see a bird fly; and you're different. You see some picture that strikes you. This is education. You learn to appreciate. Education is not just school.

Beatrice brought Dreiser's The Tycoon to the interview with her:

I was walking past The Tycoon and I happened to notice it, so I pulled it out. I also read Hawaii this summer. I believe in the philosophy of that book. All men are created equal and what all men do, reflects on everyone else. I liked the beginning. It was poetic.

Having almost raised her younger siblings, she can speak with some authority on children:

Responsibility is one of the big things to build up in a child. Some kids don't know what to do if mother isn't there to tell him. A child should be allowed to develop in his own way.

And:

Most adults are informed about what they have to be informed about.

And:

The more you talk with people the more you realize by the reaction you get from them where you are, what group you belong to, and at what station you are in life.

Very closely related to the preceding is the ability to grasp others' ideas and expand upon them. A creative person is likely to have the ability to carry an idea beyond its original condition. The item that related to this read: "Grasps others' ideas and expands upon them."

The percentages for the boys are:

Positive.....	79%
Negative.....	14%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	85%
Negative.....	8%
Insufficient evidence.....	0%
Raters disagreed.....	8%

Quotations from the interviews that illustrate this ability have already appeared. But to take another example, the interviewer said to Mark:

In other words, the classroom should be competitive?

That's right. But, I didn't necessarily say that the classroom should be competitive, but just the people. Having the classroom competitive is that you put a big scoreboard up on the wall with neon lights going, taking or picking you up on the spot--just where you are. That's having a competitive classroom. Having the people competitive is completely different.

And when Sarah was asked if at any time a person would necessarily develop a need for other people, she answered:

Well, I have two different opinions here. You see, being part of a group is going along with what they feel is right rather than what you feel is right. But to be needed is something that everyone needs--to love and to be loved--that's one of the great needs of everyone. But yet that's different than being part of the group to me.

Students of the creative process have noted that creative persons are likely to have a certain psychological orientation; that is, they are likely to be introspective, self-critical, and critical of others. They are interested in their own psychological make-up, are honest in their views of themselves, and are equally as perceptive in understanding the psychological make-up of other persons. Frank Barron, for example, has said that the creative persons from many different professional areas have shown an excep-



tional self-awareness.<sup>26</sup> And Donald MacKinnon has said that the creative persons studied at IPAR have been found to be persons who can look inward with considerable objectivity and honesty. Creative persons do not avoid introspection; they do not repress. MacKinnon writes:

... one of the most striking things to be noted about creative persons is their unwillingness to deny or repress things which are unpleasant or troubling .... They reveal clearly ... that (their) personal soundness is not an absence of problems but a way of reacting to them.<sup>27</sup>

The creative person, then, is one who has an openness about himself: he is not afraid to look inward, he sees himself and his works with honesty, and therefore, he has a considerable capacity for self-criticism.

In the present study, the item relating to this factor read: "Psychological in orientation, given to self-analysis and analysis of others, self-critical."

The percentages for the boys are:

Positive.....	64%
Negative.....	29%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	92%
Negative.....	8%
Insufficient evidence.....	0%
Raters disagreed.....	0%

The boys in the group who did not seem to be psychological in orientation were those who were more scientifically oriented and more "thing-centered" than "people-centered."

Mark, however, is interested in science and tech-

nology, but still he is interested in people. When asked if his analysis of people amounts to a kind of study, he responds:

When you can, it's more fun if you can see through people. You can find out what their backgrounds are and run across a few things when they drop something here and there in their speech. And you can put your puzzle together and find out what a person's like inside. It's hard to do this; but after many years of practicing at it, you can find out what people are actually thinking.

And on the subject of his identity:

I don't truly feel that I have an identity of myself. I feel nebulous. I can't accept the fact that I am something. I feel that I am nothing. No identity for myself. I don't feel like a people. And I don't know that I'd like to find out. Perhaps I am a robot. I feel that other people know they are people when they walk down the street, but I don't. I feel just weird when they say "hi" to me. Do I look like them when they're saying "hi" to me? Do I convey the same expressions? If someone were to ask me who I am, I don't feel as if I could answer. I know you're you, but I don't know who I am. I know you're a people, but I can't see that I am.

Curtis, scientifically oriented, likes to think about people too:

I like to think about why people behave the way they do. Like psychology and things like that--I like to think about why people do things.

Arthur on the subject of himself:

What I mean is, I'm insane.

He identifies with Holden Caulfield in Catcher in the Rye:

He reminds me a lot of me. Last page--that's what does it. That's cool. That's really a great ending that really smashed me.

And on "significant others:"

People who influence you tend to do so by wanting to make you do the things they have done, or not do the

things they haven't done.

Franklin worries:

I like to have people around me. I'd never be a hermit or introvert, but certainly not the extrovert. I always like to walk out feeling I've made an impression. I get nervous about what kind of an impression I'm going to make. I'm not as worried about making a good impression as not making a bad impression.

When asked whom he feels most like and most unlike in his family, Rex says:

Let's say, I'm quite a bit different. I tend more towards my mother who's rather intelligent. Otherwise, I'm quite a bit different than she is. In fact, I think she rather despises my intelligence .... I know what she's like, and she's always downing my stepfather for being ignorant. Usually I know better because I know both of them. In fact, I know her better than she knows me. She doesn't know me much at all.

And:

Most people are afraid to let themselves go. I think that's why more men are maniacs. I mean, be quiet, keep to yourself, don't cry, don't do anything. Keep your emotions, except anger, behind you. No wonder they go nuts. It would do a lot of good if once in a while they could get out there and cry in public, but that's shameful.

Jeff analyses his own natural affinity for liking to be alone:

I like to be alone, but I guess I do more things than I used to. I found out that if I was always going to be by myself, eventually I wouldn't be happy. There's always times you want to be with other people--and if you don't try and push yourself--I don't mean push yourself, but try and interest yourself in things that other people are interested in, then they're not going to be interested in you.

Keith discusses a case of hero worship:

My cousin had an important influence on me. I used to idolize him and everything he did. He was a big guy and athletic, but he was thick-headed. He wants to be a race driver right now. And he kind of woke me

up. He wasn't doing anything, and I could be doing something. I couldn't let him influence me.

Nathan stops in the middle of his interview and looks at himself:

I try to be spontaneous, but I feel myself straining to be spontaneous. I can see my mind wandering. I don't know what I feel deep inside. And I keep wondering if what I say gives an impression of what I am to the person who listens to this tape. Who am I? Am I what the person who listens to the tape thinks I am?

And:

Everyone is always straining to put on facades. They strain to be funny and strain to be serious. They're never their own simple selves in this complex world.

On the subject of moods:

Mother says I'm terribly moody, and I have to agree with her. I go through changes every day. I go from depression to feeling very good. I have a million fronts that I can put on. I can always feel myself putting on fronts. Maybe this is because I don't feel at ease with people. I feel that I can't really talk to people.

Mildred analyzes others:

I feel critical of people all the time. But I never say anything that I feel about people. I look at someone and try to figure him out, but I never say anything.

Nancy discusses why she doesn't show her emotions:

I think too much about what other people are going to think of me. Sometimes I don't do things that I would have done, otherwise. That's one reason why I don't show my emotions too much. I'm afraid of what people might think. My mother says you have to be yourself to be at ease. And that is one thing I have an awful lot of trouble with. I get nervous when I get around people that I want to impress. And it hinders me, but I can't help it.

She continues:

Your real self is the person you would like to be. The life of the party is actually a very different person when he gets off by himself. He just puts on

a front when he's at a party.

On the subject of her moodiness:

One of my main problems is that I'm so moody. I'm terribly moody sometimes for no reason. Sometimes I don't feel like a person at all--neither sad nor happy--just blah. I get sad over things that I worry about. When I have done something that I think is worthwhile, I begin to feel happy.

Lisa talks about herself:

I can never find out what kind of person I am.

And:

I can't seem to make myself one kind of person.

And other comments:

Outwardly, I appear to be on an even keel, but I do feel moods.

You can't really tell what people are like on the inside by observing them from the outside.

I like best that I can really see things about myself and other people.

Muriel tells about how her teachers used to see her:

When I was down in the grades, the teachers used to write on my report card that I was shy and introverted. Well, that never did me much good. I would read those reports and say, "Well, that's too bad, isn't it?" But I wasn't going to do anything about it. I don't think it helped me to have people tell me about it. My teacher once saw me in a group of kids, laughing and talking. She wondered if that were really me. I was no shrinking violet then.

She too is moody:

I'm very happy or very depressed. Sometimes I'm jumping around and feeling wonderful. These moods happen very often. Sometimes I think it's just wonderful in the morning, and something terrible happens and I'm depressed.

And:

People are kind of artificial. I've some friends like

that. They don't even know their real selves.

Jenny discusses the subject of egotism:

I think you can take criticism a lot easier if you're not egotistical. I think there is a dividing line between conceit and egotism. And I think mine maybe is more conceit.

She analyzes her parents:

My mother has an inferiority complex. She feels she is less intelligent than my father. She says she feels inadequate when we talk about theories. She is practical and I think nursing has made her that way. She is concerned with how other people feel. My father and I aren't.

Jenny:

The thing I like most about myself is intelligence. And, oh God, I have so many things I don't like, it's hard to pick.

And:

I'm kind of cynical, I'm afraid. They say cynics are never happy, but I'm happy. I've got a deep-seated pessimism about me.

Carol says:

I think about what I do more than I ever did. That's natural. And I'm inclined to do it.

Georgia discusses her father at length, and concludes:

I know he's smart, even though he only went to the eighth grade. He's really quite brilliant, but just kind of wild. He never grew up. That's probably what the matter is.

And Debbie says about herself:

I like to shut myself up in my bedroom and do some self-analysis.

And Beatrice:

I'm highly sensitive. I'm fatalistic. Pessimistic. I think I'm hypersensitive. Sometimes emotionally I feel sad. Fight at home. I try to hide my feelings because I'm a little sensitive. I remember quarrels

used to be major catastrophes, but I've gotten over that. I don't let things bother me so much.

My philosophy doesn't change so much--it just expands. When I look back over the years, I see pretty much the same kind of person.

In the quotations included in the preceding section, it can be seen that many of the young creatives in the present study have not only a psychological orientation, that is, an interest in self-analysis and the analysis of others; but further, these quotations show a willingness to disclose self to the interviewer. In these quotations, and in others in this paper, an openness about self is apparent. This openness, again is a trait associated with creative persons. As Donald MacKinnon has said:

It is the creative person's openness to experience and relative lack of self-defensiveness that makes it possible for him to speak frankly and critically ... about himself and his problems ....<sup>28</sup>

The item relating to this quality read: "Willingness to disclose self in interview; when interviewer questions or probes, responds as to a challenge, cooperates in attempting to form explanations, does not become defensive or treat matter as unimportant."

The percentages for the boys are:

Positive.....	43%
Negative.....	50%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	100%
Negative.....	0%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Arthur says:

I am no humanitarian, I know that. I don't know, maybe I'll kill all the people or something. I'm not going to be a Tom Dooley who will save you from the wretched diseases. Because, I really don't care. I'll probably just end up being a Greenwich Village philosopher or something like that. I am depressed. I don't know where to go because I don't want to help people. I'm just indifferent about the whole thing.

Mark:

When I talk I feel that I am something. When I don't I feel nebulous. When I talk I think of the power; after all, I'm keeping up half of what's going on. The responsibility--I'm keeping up half of something. I'm inventing the parts that are going into something. I have the control.

He reveals his fears:

Most people have some awesome experience happen to them by the time they are 30 that dries up their spirit. Catastrophic inevitabilities. This tones down the idealists and the optimistic. It mows them down completely. There are two or three that can stand it, but most people get mowed down. Boy, has this happened to me! I can't stand it! I'm clinging desperately to hope. These experiences scare me. They keep me awake nights. They worry me.

Robert tells what he doesn't like about himself:

I like the least that I'm large. I like the height, but I could do without some of the width; and I don't like my birthmark. I don't like the fact that once in a while I tell a lie.

And:

There are a lot of things that I've learned now that I didn't know then. It seems sort of foolish that I thought I was a brain. How there are so many things that I realize that I've read and learned, that I didn't have the slightest inkling of. It seems that I was sort of stupid then, when I think of myself.



And Nathan tells about the trials of being the youngest child:

How would I raise my children? I would give them \$500 and tell them to go off and do their best on their own. I'd like to go off by myself and make it on my own without being coddled by my parents. I'm the baby of the family. They are over-protective and ignorant of the fact that I have some intelligence of my own. They dominate my life. I'm not trusted and treated like a child. It's hard for them to accept that I've grown up.

And his problems meeting people:

I can't stand small talk. I don't talk to talk. I like to be saying something. But when I meet people for the first time, I'm bashful. Since I can't talk small talk, I am just rude to people.

He continues:

I would never want to get married. I couldn't stand being with the same person. I wouldn't take the responsibility seriously. But if I were a parent, I wouldn't be so protective. I would certainly learn from the mistakes made with me. I lead two different lives--I'm an angel at home and a rebel at school. It seems easier to tell a teacher off than a parent. I sometimes feel like throwing a brick through the glass in the door of the classrooms.

I'd like to get away. I just can't stand it anymore. When you come from a big family, have loads of relatives, and have been coddled all your life, you think how embarrassing it would be to run away and be brought back.

Hilma speaks again of her fear of a mass society:

I don't like being in a crowd or big city because I feel lost there. I can't be me. I want to be recognized and to recognize other people, and really feel that I'm a part of something. It frightens me when I drive past in a car and see all of these people that I am never going to know, or understand, or know what their feelings are about things. You just see them. They're part of your experiences but you don't know anything about them. It bothers me.

Jenny on the subject of her emotions:

I've never gotten too emotional about anything. I don't cry when I'm hurt. I have to be horribly mad to cry.

Muriel:

I'm afraid of being laughed at, so I'm leery about putting things on paper. When you put them down, they look like they are less than they are. I am the only one who understands. Putting it on paper is important to me, but others wouldn't understand. If I put something really important down on paper, it sort of destroys it. I don't want to do that.

Georgia says:

I don't like to get into other people's problems. I've got enough of my own.

When Debbie moved, she ceased to be the "star" of her class:

I might say that back in Mount Pleasant I was rated one of the top students. When I got into seventh grade in Lansing, I would have just loved to have been at the top, but there were kids who were better than I was. I couldn't get used to this fact.

Beatrice could be crafty:

When I was a little kid, and mother did something wrong, I used to say that I was going home to Daddy. All kids do that. They pull on whoever they're living with. It was kind of a way of getting back at them. I always used to say that--I want to go home to Daddy.

She described her usual cheerfulness:

I saw that my mother was going to get married when I read it in the marriage license section of the paper. Grandmother got all excited, but I remained calm. I don't sink into moods. I think of myself as a happy person most of the time. I try to be happy. My moments of sadness are just momentary.

Barron and MacKinnon have found in their investigations of highly creative adults at IPAR that their subjects have an openness to early life experiences. MacKinnon has written:

It is quite apparent that creative persons have an unusual ability to record and retain and have readily

available the experiences of their life history.<sup>29</sup>

In the present study the item relating to this read:

"Open to early life experiences, seems to seek to view them in the light of their contribution to the self at present."

The percentages for the boys are:

Positive.....	29%
Negative.....	64%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	92%
Negative.....	8%
Insufficient evidence.....	0%
Raters disagreed.....	0%

It can be seen in the areas that relate strongly to revealing self, there is a tendency for girls to be more open than boys. The boys are as willing as the girls to talk about ideas and things, but apparently less willing to discuss themselves with as much openness.

This is not, of course, always true; Waino recalls a childhood experience that seems consistent with his later development:

I remember in kindergarten when recess came kids would hide or stay behind the piano so the teacher couldn't see them. This is what I usually did instead of playing "Ring Around the Rosy" or throwing balls to persons in a ring. I would sneak out and walk around. That was the first time when I started thinking about how vast the world was. That's about the first time I ever started thinking about eternity and how vast things are.

Rex tells about his childhood:

After I was about five years old, I never saw too much

of my mother. She was rather sick, and I had to stay with my aunt all the time. That's why we were rather impersonal toward each other. We're almost in two different worlds.

And further:

I was a very submissive little kid. I was a perfect sissy. I was scrawny and not too bright. If anybody said, "boo," I went home crying. That's all changed now. I never really started growing up until I was in the eighth grade. I think a lot of it had to do with my size. I don't come from a very tall family. My sister used to boss me around--she was so much taller than me. It's just reversed now. I got so I wasn't afraid to say what I thought. I can finally fight back for a change.

Robert talks about his early interest in chemistry:

When I was little my mom always used to let me get into the kitchen cupboard. This got me interested in chemistry because she let me have all the salt, pepper, and cinnamon. I mixed in a big bowl. After that I got real interested in chemistry. Then my father died when I was seven or eight, so that sort of put a big hole in things. When I was eleven, I started collecting chemicals.

He speaks of his father's death:

I understood. I realized that he had cancer; I realized the whole thing when he was sick. I wasn't around when he died, but I realized it. I had full comprehension of what was going on.

And Nathan always comes back to a constant irritation:

I am the baby of the family, and I think probably that's had an effect on me in growing older. I'm probably a spoiled brat. My mother just over-coddles me. I realize this has been. I have had a hard time convincing her that this is bad. I just don't have a chance to grow up. I mean I just can't think for myself.

Hilma began to wonder about universal matters early in life:

I remember when I was about four or five years old, we had an apartment; and on one side was the park, and on the other side a busy street. I used to sit at the window and think about the universe, and life, and what I was really. I used to have horrible nightmares about what I was. I thought, "Well, this is the universe."

I had my idea--not a theory, and I know it wasn't right but I thought it was rather cute. I was about four years old and thought that all the stars were merely holes that were punched by something, and at night they punched out the holes so that the rays of light could come in and they would look down at us to see what we were doing. This was the idea of God, you know. He was watching down on us. This was my idea of the stars, and I was trying to explain it to myself.

Jenny's childhood was turbulent:

I remember when my grandfather died. I remember sitting on the swing set with my brother, and saying that it was better that he had died. He had been sick for three or four years in bed so we were all expecting it then.

Interviewer: Did it make you cry?

No, not at all. I was kind of worried maybe, but it didn't. I never did. The only emotion I thought was that it was good for him to be dead. The one thing that bothered me, though, was that my father just about broke up at the funeral, and I had never seen my father break up about anything. He just hates funerals. He gets green at funerals. He won't go.

And she continues:

After my grandfather died, my grandmother moved in. And, oh, my God, my grandmother was a typical mother-in-law. No, she's not even typical--she's worse than typical. At first we tolerated her because her husband died and all this, but later, those horrible fights we used to have. That bothered me. Later on my grandmother flipped and was committed. I guess this left quite an imprint.

She recalls her grade school years:

I think what teachers in grade school liked about me was my energy and enthusiasm. I sort of bubbled. I gave it to them and they gave it to me.

And when she found out she was highly intelligent:

I had a friend--my teacher. I still remember. I found out from him my I.Q. was 158 and I knew this was pretty high. It made me feel superior. This was in the third grade.

Nancy talks about her first experience with death:

There was this man across the street from us and he died very suddenly. That was the first person very close to me. That was terrible on me. It really was. I stayed home from school that day. I kind of wish it would have happened before so I would have been prepared for it. I've never been to a funeral in my life, and I'm afraid it's going to be kind of hard.

Muriel, a strong believer in civil rights:

When I was in elementary school, in fourth grade I was the only white girl in the class. I loved every one of those kids. It doesn't make any difference to me. I feel very strongly about this. So many people feel they're inferior. Well, gee, what kind of a way of thinking is that? It isn't fair. I get furious at anyone who starts talking about Negroes in a condescending way.

Lisa remembers how she felt when she was younger:

I had the funny feeling one time when I was small that everyone was against me. The world seemed like make-believe, and things were against me.

Childhood mysteries:

I remember when we moved, there was a huge tree in front of our house; and I used to talk to my brother about moving it because we wanted to have a tree in the city. I used to picture going into the city with this tree in a truck. I wondered how come they wouldn't move it for me.

She remembers her early sensitivity:

I remember one little girl who was sort of pretty. This one boy teased her and that really hurt her, and she'd come in crying. Whenever somebody said anything to me, I was really hurt. I didn't take it as teasing but just as a comment; and I always remember it.

And Debbie, a little girl who always wanted to please remembers her guilt feelings:

I remember sitting up in my bedroom upstairs and really wondering why did I do this and having guilty feelings.

Another of the items on the rating sheet that relates



to the general area of openness read: "Willingness to offer ideas and disclose self without being asked."

The percentages for the boys are:

Positive.....	29%
Negative.....	50%
Insufficient evidence.....	7%
Raters disagreed.....	14%

For the girls:

Positive.....	85%
Negative.....	15%
Insufficient evidence.....	0%
Raters disagreed.....	0%

This finding, then, somewhat confirms the results in the other items that relate to openness: the boys seem to be more reluctant to be open about themselves than the girls, who seem to be remarkably willing to reveal themselves.

Some boys, as the percentages indicate, were remarkably open too. Rex, for example, initiates a question:

Why do people have to be at each other's throats? I can't stand to see people fight. That's why I don't watch TV very much. I don't like conflict.

Waino quite willingly reveals a sadistic streak; in fact, he seems to revel in telling the following:

I have a very nicely, highly developed, intricate, sadistic view toward things. I love seeing those things go on. I remember watching this cool old cat and this baby bird that just cracked out of the shell and fell out of its nest. This cat was playing with it. It would reach out its paw and smash the bird and then go around and leap on it. I sat there and watched for fifteen minutes. I could have taken the cat away and put the bird in its nest.

Any number of examples of Arthur's willingness to reveal himself could be found. His suicidal tendencies, for example, are revealed by him several times in his interview. The



following quotation has an air of bravado about it, but still it is rather frightening:

I'm always reading something, and I can never do anything. It might take me a half hour to read a little magazine article because I read a couple of lines and they drive me crazy. I can't stand it. I'll probably commit suicide. Here's what I want to do. I break into an armory, and I steal six grenades. Then, I stand on this ledge and wait for all these people to come around. Then I'll throw my grenades down and just dive on the pile.

Many examples of Jenny's openness could be found. For example, when the interviewer simply asked her if she liked her friend, Betty, she answered:

Yes, I like Betty. We're both out of the same bolt of cloth. She is a little more radical, maybe. We both have that urge to get away from people. We both--and Phil too--would love to be sitting on top of a mountain without anybody else and no one else would bother you. I'd much rather go to Canada and sit out on a lagoon in Lake Superior all alone than go to Minneapolis, Detroit, or New York.

Does the creative person have many and varied interests? In the present study an attempt was made to discover this. The item relating to this read: "Has wide ranging interests."

The percentages for the boys are:

Positive.....	79%
Negative.....	21%
Insufficient evidence.....	0%
Raters disagreed.....	0%

For the girls:

Positive.....	77%
Negative.....	23%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Apparently even among these creative young people, interests do not necessarily range widely. However, with those who do not seem to have wide-ranging interests, their interests seemed to be somewhat intense in a more limited area. In the case of several of the boys in particular, their interests seemed to be exclusively centered on scientific pursuits and technology. Jeff, for example, was asked what was the last book he had read; and he replied, The Radio Amateur's Handbook, a formidable volume of graphs, figures, and tables. Such a strong focus on technology suggests C.P. Snow's concern with the limitations of the technologists,<sup>30</sup> and even Rickover's.<sup>31</sup> However, about three-quarters of the group did seem to be people of wide-ranging interests. They had been great readers as children, and most continued to be as junior high school students. As Drews found in her analysis, however, many creative students expressed a desire to expand their interests, perhaps into the area of the arts, but felt a lack of opportunity to explore such fields.<sup>32</sup>

The boys in particular were great hobbyists. Robert said he liked math puzzles, science fiction, chemistry, the trombone, church work, writing, electronics, and cartooning. Mark describes his reading habits:

Right now I've got two accounting books and a geometry book. And, last week I had computer books and the week before that I had metallurgy. I've read space books, aeronautics books, car books, and the late history books about our great financiers--Rockefeller and all those nice people. So, that's mainly what I read.

Rex:

I never know what I'm going to do next. I think if I

had my choice, I'd spend all my life going to college. I like chemistry, physics, and I like human nature quite a bit. I'd like to be a psychologist.

Arthur:

Is there anything you really want to do with your life? No. It's a mixture of umteen desires. I would like to write; I would like to be a folk singer; I would like to be a literature teacher; I would like to be a psychologist; I would like to be a psychoanalyst; I would like to be a wrestling coach; I would like to be a farmer; I would like to be a fisherman; I would like to be a postman. No, I don't want to do everything. I don't want to work in a factory.

Jeff, whose interests center on technological subjects, says:

I decided you can't just be interested in one thing. People aren't made to be like that. You should be interested in a lot of things.

His uncle had something to do with this:

Until I met my uncle, I never considered it important to be interested in everything. My uncle was. I considered it important to become good in electronics, but I didn't consider it important to become interested in everything else. But my uncle knew something about everything. He wasn't an expert in all fields, but he knew something about all fields and could enjoy just about everything. Meeting him was one of the most outstanding experiences of my life.

When asked what his interests are, Franklin replies: the Civil War, space travel, photography, tropical fish, rail-roading, paleontology, and ancient history. Morris wishes he could live longer so he could learn more about everything he's interested in, which is everything extant:

Sometimes I wish that if there were only more time. They say that future people are going to live a lot longer. Well, I wish they would because then you could learn everything. I'd like to learn everything but now there just isn't time. And, I'd like to try every job there is. If I had one wish, I'd like to be able to live longer and learn all I want to, read all I want to, and try all the jobs I want to.

And he continues:

If I had a lot of time, I'd just go right to it. I'd start reading all the things I'm interested in--like everything.

Mildred has the same trouble deciding among interests that Arthur mentioned:

A thousand, maybe a million interests, and I can't decide which one to pursue. I tell my mother it's possible to go through college and still not know what I want to do. She can't understand that.

Muriel's interests are mainly anthropology, animals, and her native country, Scotland; while Karen likes puzzles, science fiction, horses, reading, and painting.

The creative person is more than alive to the things of the physical world--he is aware of "the secret fountains that speak loud only in the night,"<sup>33</sup> as well, to use Theodore Reik's phraseology to describe the world of fantasy. The creative person knows a great deal about his universe, but he is equally attuned to the world of his imagination. Reference has already been made in this paper to Harold McCurdy's article on creativity. It has been seen that the eminent creative persons whose childhoods he studied all spent a great deal of time alone when they were children; but the important point is, while these creative persons as children were alone, they developed an exceptionally rich fantasy life, or, as McCurdy puts it, "a rich efflorescence of fantasy (was a reaction to) the preceding conditions."<sup>34</sup> The dreams and imaginative creations of their childhood

became the stuff of their later accomplishments. It is almost axiomatic, one might say, to say that creative persons must be dreamers.

The item in this area read: "Awareness of fantasy; shows fancifulness and whimsy."

The percentages for the boys are:

Positive.....	86%
Negative.....	7%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	77%
Negative.....	0%
Insufficient evidence.....	15%
Raters disagreed.....	8%

It can be seen, then, that the young people in this study showed a considerable affinity for the world of fantasy. However, the dreams of youth in the mid-60's are different from the dreams of their fathers. These youngsters live in a scientific age, an age of space travel; and it is natural that their fantasies revolve around the fantasies of science, space, and para-science. For this reason, the raters looked for another characteristic--interest in science fiction, the occult, extra-sensory perception.

This item read: "Awareness of and interest in the occult, ESP, reads science fiction:

The percentages for the boys are:

Positive.....	86%
Negative.....	7%
Insufficient evidence.....	7%
Raters disagreed.....	0%

For the girls:

Positive.....	85%
Negative.....	8%
Insufficient evidence.....	5%
Raters disagreed.....	0%

Franklin, on science fiction:

Science fiction offers the most chance for imagination. Science fiction certainly offers a great deal of area for imagination, but it's easy to read. It usually involves more interesting topics than other types of fiction.

And telepathy:

Telepathy. That's tremendous. There's no end to it. As far as I'm concerned, we'll be telepathic by 1980.

And space:

I'm tremendously interested in technology and space and all the things that go into these new frontiers. These are fields that stretch the human mind to the limit and require both imagination and exact knowledge. It seems to me that getting ahead in space travel is our most important national problem. I agree that we should spend billions on this venture. We have to. This is the way tough-minded materialists look at things. In the future when machines take over, we may have to change our values. After all, cybernation is here to stay.

Robert is interested in extra-sensory perception:

I did an experiment with extra-sensory perception once with my mom. We were each in a different room, and I drew a picture on a piece of paper. I don't know if this is just because she was so much like me, but I drew a picture of a house next to a river with a tree. And she was in the other room and she drew a picture of a house next to a road which looked very much like a river with a tree. I was interested in that, and I've read a bit about it.

And on science fiction:

There's so much I like--science fiction. There are so many things science fiction writers think up. I wish so much that I had thought of it before, because some of them are really great ideas for science fiction stories.

Nathan says that his favorite authors in science fiction are H.G. Wells and Jules Verne. Margie thinks about space:

Things set me to thinking. There must be people out there in all that vast area of many, many planets. Why should we be the only ones there? That's why I'm very much interested in flying saucers and things they sight overhead. I just feel that there are other people out there.

Sarah says:

All I do is sit and think. Like coming home from camp--it had been a wonderful week and I was just riding in the car. As trees went by, I'd notice how much a tree was like a person. They're straight and tall. A tree will grow up and become, well, like an individual person. Then, you see a group of trees that are part of a group. Time is going so fast.

Hilma:

Sometimes I'll go in the backyard and read and day-dream. It gives me a magical feeling. I like to day-dream.

Jenny:

My favorite book? I think a thing called Three Hearts and Three Lines. It's a fantasy. It's complete escape, but it has so many things that are applicable to our times that it is really wonderful.

And:

Science fiction is interesting to me more than anything else. I like the ridiculous type of thing. I am taken by vampire stories. .

Muriel describes at great length the fantasy in The Lost Tribe, and says:

It's kind of impossible but a nice thought.

She continues:

I read all the science fiction that was in our school library.

Fantasia--the best movie I ever saw.

Julie:

ESP--there's actually no end to what the mind can do.

Carol has fantasies about space:

I like to think about possibilities in the future--like science fiction. Like having a tunnel through the stars and things like that.

She writes her dreams down:

Sometimes I write those dreams down to write up into stories. I've got a collection of them.

She continues:

I play with the girl next door. I end up being her husband, and we have a lot of fun. Carolyn's the little kid and over comes the whole bunch from next door. Her older sister automatically becomes the baby sitter. Her brother becomes the other kid.

Edith, interested in religion, is something of a mystic, and several interviewees mentioned that she "has ESP," and apparently she has told a number of her friends that she has visions.

Barron and MacKinnon have found that among their creative subjects there was a marked affinity for matters aesthetic. MacKinnon has written that among a group of values (the theoretical, the economic, the aesthetic, the social, the political, and the religious),

... there are two values most emphasized by all the creative groups. They are the theoretical and the aesthetic .... The aesthetic permeates all of a creative person's work. He seeks not only truth but also beauty.<sup>35</sup>

Warren and Heist have found in their study of the personality attributes of gifted college students this same



affinity for the aesthetic values,<sup>36</sup> and Drews has also noted in her work with gifted adolescents that the creative-intellectual gifted youngsters are more interested in aesthetics than the less creative social leader and studious types.<sup>37</sup> Barron too has found that his creative subjects have an affinity for aesthetics.<sup>38</sup> He has said further that the creative person is also likely to be a "complex person," and one of the four qualities he discusses which he finds to be a frequent characteristic of complex persons is that they are artistic.<sup>39</sup>

The item relating to the area of the aesthetics read: "Aesthetic sensitivity; receptivity to beauty."

The percentages for the boys are:

Positive.....	43%
Negative.....	43%
Insufficient evidence.....	7%
Raters disagreed.....	7%

For the girls:

Positive.....	77%
Negative.....	8%
Insufficient evidence.....	8%
Raters disagreed.....	8%

Mark, on the subject of beauty:

What do I think is beautiful: Buildings. I have seen buildings that I absolutely fell in love with. They are like paintings. They way they're arranged, the colors in them, the visual impression, the meaning behind them. And buildings have a use; they are not phony and fake. Seeing beauty is like taking opium. You have dilations of certain muscles, and you feel the tingle and tangle. You feel very light-headed like you're just going. The blood pressure rises--it's excitement, excitement, and you feel good.

I also love cars--the motion--they are the personification of function. There is beauty in motion.

Undulations of the wheels on the road, yes, yes, the lights blinking, turning corners. I sometimes just sit on a corner and watch the cars go around. It's just beautiful. Like the Beetles--when I hear rhythms. I see pistons flying up and down and I feel I'm moving. The feeling of motion, the feeling of beauty. And I hear music when I see cars going down the road. It's all of a piece. Beauty is usually exhilarating rather than peaceful.

I love weird things.

I get such a feeling of power when I look at buildings. It makes you feel bigger than you are. Good grief, when I go out and see buildings, cars going around, jets going overhead, and Gershwin's playing American in Paris, all of a sudden I have to go out and do something. It's exciting. Lands, I have to go out and make things more exciting. I feel awake. Things are going around. I wish this would happen oftener. I wish it would happen constantly. It makes me feel so ambitious.

And Arthur talks about natural beauty:

Anything that is natural is beautiful and anything that is unnatural is ugly. This doesn't exclude man-made things; if things were made with some kind of idea in mind, they can be natural. The thing that really knocks me out are things that have stayed the same for years and years, like rock formations. The Grand Canyon would knock me out if it weren't cluttered with beer cans. Just one beer can would spoil it all.

And:

People respond to beauty nowadays a lot more because they have to contend with so much ugliness like war, politics, strikes, riots, like that. They freshen when they see something that isn't ugly. But then they go back to their homes and factories and forget all the beauty they've seen. That's the way people are.

Eldon, who plans to be an architect, talks about buildings and girls:

In architecture I like things that are uncluttered. I prefer simplicity. I don't like this garbage they put on buildings for decoration. The same thing applies to girls. I don't like it when girls clutter themselves up with artificial make-up.

And further:

If you're in a building that is all function, there is nothing to look at. It's boring, and the job you have to do in that building may become a chore.

Nathan on poetry:

I don't read poetry, but I write it. I like to write it.

Jeff, on skin diving:

Skin diving is a way to see beautiful scenery, because it's a way to see a whole different world.

But on modern art:

I don't like modern art because it's not recognizable. I have to be able to identify with something in order to say it's beautiful. I prefer things that are natural. It can be a great spectacular scene, or a single flower.

Sarah:

Beethoven is my favorite classical music composer. His music that has been inspired by nature is one of the points I like. Nature inspired him to write. I suppose rock and roll players are inspired in a way but I don't particularly care for the way they've been inspired. It's like something's in a rut, or going around with the rest of the crowd.

And:

Music is just like everything else with me. I enjoy it a lot more when I'm by myself. Maybe it will hinder me if I want to go someplace with it. I'm afraid I can't change my ways, but I like it real well when I'm just doing it for my own enjoyment. I don't have to worry about the mistakes I make.

Mildred on beauty:

Beauty erases everything else from your mind. It absorbs your whole soul, and you're there in it. You can actually feel the beauty there inside you.

On poetry:

Poets don't write for a group. They write only for individuals. I love to read poetry over and over.

And on Northern Michigan:

It's beautiful up there. People are fun, but I like the scenery more.

Muriel:

There's something beautiful about every person. If you look, you can see something beautiful in everyone.

And:

Animals are beautiful. Trees too. I like natural things. Animals have their own grace. Each has its own kind of grace. They are very individualistic. Sometimes I like animals better than people.

Lisa likes to write:

I love to write descriptions, and I never get tired of it. I can always describe a place, even if I haven't been there.

Lisa has had a great deal of formal training in music, and she has spent several summers at Interlochen. Several times she has been the recipient of musical awards. On modern music:

Some people would say off-beat, all the modernistic music. It's like abstract painting. I really love it. I guess you have to learn to like it, but I liked it right away. First, I just liked it, but then I saw it has pattern just as classical music has.

Lisa sees beauty everywhere:

Different things are beautiful in different ways--like a flower or a skyline. I was standing on the Canadian side near Detroit and looking across the water at Detroit. It was a gray day, and the sight was beautiful. Looking at beauty is an open feeling. It fills you with a feeling of awe. To me, a leaf or a flower can be as beautiful as something that's large and awesome.

Jenny has her strong likes and dislikes in music, as usual:

I like lots of Schumann and things he wrote. I like Beethoven but I don't like Bach. I like Rimsky-Korsokov to listen to, but I don't like to play things like that. Have you ever played Debussy's Reverie? That's the kind

of thing I like.

Georgia:

When I feel sad, I play the piano. But I play the piano anyway. It seems like you can console yourself.

Julie says:

I always get an A in art class. The teacher says I have a real sense of design. He doesn't know how I do it. But then I bring it home to my mother, and she says, "What's that?"

And Debbie:

Things that appeal to me very much are different types of originality in architecture and maybe floral arrangements. I have a cup and saucer collection, and I don't collect them just as a hobby. I like to see beauty in something different. I mean you're in a poor neighborhood and the houses are older. But, you can make things beautiful if you really try.

Going to an art gallery or going to a concert gives you inspiration. Seeing what others have done gives you a standard to work up to. When I go to a concert, I get this feeling in my stomach.

We went to Washington and saw the National Gallery. My sister and I spent all our vacation money buying reprints of the pictures in the galleries.

Guilford has theorized that one of the factors of creative ability must be flexibility.<sup>40</sup> The raters attempted to discern while analyzing the interviews if the interviewee seemed to be a flexible thinker. The item read: "Flexibility, openness to change; can modify ideas and opinions; attempts to understand other's opinions by putting self in their shoes; awareness of 'points of view.'"

The percentages for the boys are:

Positive.....	64%
Negative.....	14%
Insufficient evidence.....	7%
Raters disagreed.....	14%

For the girls:

Positive.....	77%
Negative.....	15%
Insufficient evidence.....	0%
Raters disagreed.....	8%

Rex says:

I'll give in--that's my trouble. I see so many sides to a thing. I can gain something from anything. Even a rap in the mouth--I always seem to pull something useful.

Waino:

It depends on whether a person can give me a better argument than I can give him. Then I change my views; otherwise I can't. I think a person ought to be able to change his views and values.

Arthur says:

I think I'm pretty open-minded, relatively speaking, but not as open-minded as I potentially could be. When I have something that I really believe in, and I read something or hear something contrary, I do like to say something. I can't just let it pass.

Eldon says:

You can visualize some of the ideas that the other kids have because sometimes I feel that I'm always right. Then I look at somebody else's point of view, I think about it, and then I say, "Well, maybe they're right." Then, I like to talk about it and get their opinions. At first, I feel I'm strongly right; but if they've got a pretty good story, I realize that maybe I'm not right.

Franklin:

I hear all kinds of viewpoints that I didn't realize existed. I enjoy hearing them.

Jeff:

I can argue both ways because I don't think I've ever

made up my mind. I can't say that I hope machines take over the world, or that I hope that someday there won't be any machines. I haven't really made up my mind. I think I enjoy arguing against Jim just to see what he thinks. It doesn't necessarily mean that I disagree with him. It's just a way of learning.

And:

Usually during the discussion I don't change my mind. Sometimes maybe by the next discussion I have a new viewpoint, but not during the discussion. I don't back down.

He doesn't like rigid people:

I like people who are friendly and talk to you about things you are interested in. I dislike people who think they are smart, who think they know all the answers. I often times find myself in the wrong. I change quite a bit, and I don't like people who don't.

Julie comments:

I dislike people who won't stick up for their rights. I'm willing to listen; and if they have a point that really is better than my point of view, I think I would generally subside to that type of thinking rather than just stay on my grounds whether I'm right or wrong.

Mildred:

I don't like to agree. That's one thing, because I like a discussion that brings out some good points on both sides.

Carol thinks that closed-mindedness is as bad as being dead:

I think the greatest good would be tolerance. I mean not be so quick to judge, but more ready to see the different, and be ready to receive a new idea. I would rather be dead than close my mind and live in a set way. I wouldn't like being opposed to ideas.

Muriel:

Adults are very dogmatic. Adolescents change their minds. Sometimes I think my father's opinions are terrible and dogmatic, but he won't change his mind. I hope adolescents won't become dogmatic like adults.

One thing that's wrong with our society is that it's

a case of them and us; and the two groups don't communicate. People don't understand what you're talking about if you are on the wrong side.

Sarah on open-mindedness:

People don't look at both sides. It's the same with the democratic and communistic camps. I think there are a lot of good and bad points about both. If people would look at both sides, they would get a better view.

Jenny tries to be open-minded when friends criticize:

When you like a person, it's constructive criticism and you can take it. Maybe you're hurt because you didn't think you were like that. But you will try to improve.

Beatrice:

The more I read, the more I understand and change my opinions.

And on the two political parties:

I looked at the two carefully; I'm not liberal enough to be a really good liberal Democrat, nor conservative enough to be Republican. I'm still not sure about liberal and conservative. There are things that I'm liberal on and things that I'm conservative on.

One of the items on the rating sheet read: "Memory and importance of reading before school years."

The percentages for the boys are:

Positive.....	57%
Negative.....	36%
Insufficient evidence.....	7%
Raters disagreed.....	0%

For the girls:

Positive.....	31%
Negative.....	62%
Insufficient evidence.....	8%
Raters disagreed.....	0%

Mark said, when asked when he learned to read:

About three a little bit. My mother taught me and



then my sister.

Waino recalls:

The first thing I remember reading was when I was about four or five; it was before I was going to school, I know that. One of the funniest dealings I ever had was when Maw had her old shop, and she bought me a comic book. I started reading it and found out that I could make out the words.

Arthur:

Interviewer: Were you reading before you went to school?

Yes, I was reading. I wasn't reading Plato, but I was reading Prayer Books and things.

Keith remembers his father helping him:

I started to learn a little bit before, but then maybe that helped me catch on later. My dad always used to help me, especially after I started. Maybe that was where I got a little bit ahead.

Eldon:

I might have read a little bit before I started school, but not an awful lot. I used to go down to the library and look at a lot of books.

And Robert:

I could read my name and stuff like that and real simple things in kindergarten.

Hilma:

I learned to read by reading comics. My mother would read comic books to me. I would be reading advanced material, or advanced novels, and at the same time, put it aside and go and get a comic book. This went on until I was about ten.

Edith recalls:

I listened to what my mother or father would read, and I'd try to read the pictures. And when we first started the dental floride thing they'd have comics on the table, and I could understand some of the words.

## Style of Life

Beyond the early life experience, home environment, and the cognitive style of these creative young people, the present investigation was designed to discover and describe their total style of life. That is, what are their interests? how could one describe their social adjustment? what impression do they convey to others as personalities? what are their goals? And what could be said about their general outlook on life?

It has already been seen that like many creative persons, many of the creative youngsters in this study seem to have experienced a good deal of loneliness or express a desire to be alone. But further, research has indicated that creative persons tend to be socially introverted. Drevdahl, for instance, found that in a study of a group of University of Nebraska students, the creative persons in the group appeared to be considerably more withdrawn and quiescent than the non-creative persons.<sup>41</sup> Anne Roe found too in her study of scientists that as a group, they tended to be introverted.<sup>42</sup> Eysenck and Furneaux found that high academic achievement was related positively with high scores on an introversion scale.<sup>43</sup> Drews also found that among her gifted group, some--the social leader type--were very outgoing socially, while the creative intellectuals were much less socially inclined.<sup>44</sup>

The item in the present study relating to this read:

"Social Introversion."

The percentages for the boys are:

Positive.....	57%
Negative.....	43%
Insufficient evidence.....	0%
Raters disagreed.....	0%

For the girls:

Positive.....	77%
Negative.....	23%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Arthur, for example, says:

If there were anywhere I would like to go, I'd like to go up to Canada and live. Get myself a cabin back in nowheres way out in the empties.

And Rex comments somewhat disenchantedly:

I like to get away from people; they're a pretty foul breed. They're the only animal with a conscience, and they don't use it. It's pathetic.

I just love nature--it's so complicated and it doesn't bark back like people do. It's quiet, mostly peace. I think I could go for days and days in the woods. I get so I hate people, and I hate houses after a while. So, I go out camping.

Keith says:

I like to read, listen to the radio, read the newspaper, and read books. Before I always used to have to be with somebody, but now I like to do my homework alone where nobody bothers me.

Eldon says of his mother:

My mother is more outgoing than I am. She gets along with people very easily and makes friends easily. She knows a lot of people.

He continues:

One of my problems is talking to people the first time. I'm not an expert conversationalist. I end up asking them what school they go to, and what they take, etc. Weather, sports, and then I'm finished.

And Nathan:

I don't like to talk to people. I don't like to meet new people. It's not that I'm timid, it's just that I find it hard to talk. I find it hard to find things to talk about.

Sarah says she prefers being alone:

I'm sort of off by myself. I like to be alone more than with groups. I would rather be in a little world of my own where the things that I really like and enjoy are around me. There's a poem I like. I don't know who wrote it but it was telling about the things I need in life. That's just God and sky and green, and then I'd be happy. But most people wouldn't be happy unless they're part of a group, but I'd just rather be by myself than to be in a group.

Jenny's desire to be alone amounts to misanthropy:

I'd like to stress just how much the people around me don't matter to me. They don't matter; they are so unimportant that maybe I'm preoccupied with it, I would just love to live in a world all my own. I read a short story about life after an atomic bomb. There were just two people left and this would seem very dismal. I found myself envying them. This really was appealing to me. They could walk around the street without anything on. They could do exactly whatever they wanted to. And they could create their own morals. There weren't any morals. Their ethics were their own. They didn't have to live up to society's anything. There was no more society. This was Utopia to me. I hope to find it some day, maybe on an asteroid.

Mildred:

I'm still shy. I talk myself into not being what I am now. I would just talk myself into being a little more loud because that's what I have to do. And I just think there's a person just like me. They're probably just as afraid of me as I am of them so I just kind of shrug it off and be myself.

Carol:

I don't make friends very much. I'll be nice to everybody. I try to keep it like that. But I will choose one person at a time.

And the wistful Lisa:

It's natural for me to just look on. But then, I get into the act because I have to, to prove something to myself. But it's very natural for me to look on.

Debbie:

Not even with my own best friends, am I an extrovert. Say, about three of them I don't mind talking to right in the old crowd. Everyone's moods change. Sometimes I just want to sit at home and not have anything to do with anyone.

Beatrice:

I never extend myself to people unless they're someone I really want to know. There are very few people that I consider friends.

I like to spend my time reading and watching television. I don't like crowds. I have friends but most of them are younger and I've always been around with adults a lot.

The raters also looked for evidence of dating in the interview transcripts. The item read: "No dating in adolescence, or if any, unusual patterns."

The percentages for the boys are:

Positive.....	71%
Negative.....	7%
Insufficient evidence.....	21%
Raters agreed.....	0%

For the girls:

Positive.....	62%
Negative.....	23%
Insufficient evidence.....	15%
Raters disagreed.....	0%

Perhaps these figures are somewhat higher than they would be among an unselected group of teen-agers of the same age. Drews has found in her work with highly creative young people that there is a lesser interest in

dating.<sup>45</sup>

Nathan, for example, gives a typical response to the interviewer's question about dating:

I like girls and that, but I don't date. You know, we joke around with them and everything in school, but I haven't gone with anyone yet. I don't want to be involved a lot.

Franklin, a rather obese boy who perhaps would not appeal to a teen-age girl, says when asked who most of his friends are:

They're all male, as far as I'm concerned. I don't have any friendships with girls. I have very little in common with them.

And Robert:

Since I'm a Baptist and Baptists don't really relish their kids going to dances, I don't go in much for that. That's one of the main places the guys can get with the girls and I just haven't had that much to do anything with them.

Nathan still has trouble with shyness:

I'm pretty shy around girls. I mean, I don't date girls and very seldom go to any parties and anytime I'm around people, I become more or less a shell.

When Beatrice was asked how she was different from others in her class, she replied:

They're more interested in the opposite sex.

And Sarah, who said in her interview that she was saving herself for just the right boy, says:

Rather than going on a date, I'd rather sit home and do homework. My sister would rather go on a date and be with people, but I don't. I don't particularly care for this. I'd rather be by myself.

Jenny, on the other hand, is very much the exception in this group of youngsters. Not only has she dated consider-

ably, but she believes that she has found the man she will marry:

It's kind of hard to say something like this because I'm so used to being laughed at. People laugh, but in seven years I'll get married. When I'm 21 I'll get married to Phil. To hell with other people if they don't think I will, is all I say. Lots of people say, "Oh, ridiculous, you never went out with anybody else." But that's not true. I went steady with one boy. I didn't even like him at the time. I've dated lots of boys and I think I'm in love with Phil. I know I'm in love with Phil. People that don't understand laugh at me. They think, "Oh, Jenny, you're just a kid," until they want me to do something. Then I'm an adult.

We have already seen that a considerable number of the youngsters in the present study came from homes that could be considered "different." But, further, do the youngsters see themselves as being "different"? In the present study the item relating to this read: "Awareness of self as different from other young people by early adolescence."

The percentages for the boys are:

Positive.....	57%
Negative.....	14%
Insufficient evidence.....	0%
Raters disagreed.....	29%

For the girls:

Positive.....	77%
Negative.....	15%
Insufficient evidence.....	8%
Raters disagreed.....	0%

Nathan aspires to become an intellectual:

During the past year I've been changing quite a bit. I've been doing a lot of thinking. My opinions of people and my attitude toward life have changed.

I've come to the startling realization that I'm kind of a weirdo. I'm more of a loner than I used to be. I've come to hate hanging around people. I don't think they can do me any good. This is all something I've been formulating in my mind. I'm just not interested in a lot of the things other people are. I don't like to hang around in a crowd. I don't like people. Put me on a desert island. People bore me. I don't like small talk. I don't like the average things that people do; things that average people do don't excite me. They are shallow, boring, ignorant, ridiculous. There are a couple of exceptions. There are a few people who seem to share the same basic beliefs that I do. I tend to stick with these people as much as I stick with other people. I guess I'm selfish. I like to be with people I like. I don't like to be with people who bore me. I suppose I bore them too.

Mark says when asked if getting along with people is a problem:

It just all depends on who you call people. In general, it seems like after about three seconds, fifty or sixty per cent of the people can get to hate me very easily.

Eldon:

I got good grades in grade school and never had any troubles in that way. I liked sports, but I wasn't very good in them. I was too heavy and couldn't run. I was slow and it used to bother me, because I was beaten by some of the girls.

Franklin never liked to do what the other boys were doing:

A lot of the kids like to play ball, and whenever I wanted to do something else, I used to feel different. If I wanted to read, or listen to the radio or television and they wanted me to do something else.... So I didn't want to play baseball; if I didn't want to play baseball I wasn't going to. I like to do what I want to do.

Jeff:

I always felt that the other kids thought I was smarter. I liked to go down and work on things that they didn't understand a lot of times. I think that was part of the reason I was alone. I tried to do things that most of them didn't understand.



When asked how he got along with children when he was younger Rex said:

I don't know. After a while I sort of tended not to care much because they seemed to be rather juvenile.

Waino senses that he is a loner:

I don't get close to people. Most people can't stand me after a while. I don't have very many friends. I have acquaintances.

Morris, a boy who does not reveal his thoughts easily, said to the interviewer:

I seemed to be more sensitive. And this is something that's hard. Like something would happen that would hurt me, not physically, but mentally.

Robert is diffident about sports because he feels other boys did not think he was a good player:

I don't like sports so much. Football is about my favorite spectator sport. Other sports, I like to goof around with when there's nobody to look at me. I don't like sports when there's a pile of kids around always telling me I'm doing stuff wrong.

Sarah feels uncomfortable with youngsters her own age:

I got along with most of the kids, but just the way they acted made me want to be an individual rather than one of the group. I didn't particularly care to be one of the kids. I liked to be by myself, and I guess I became a little independent.

Those are the kind of people I can get along with--adults. I can get along with kids my own age, but they just don't seem on my level. I just don't seem to get along with kids my own age as well as I do with kids that are older or adults.

Hilma:

She thought that because I was Estonian that I would be different. Personally I like being different, and being Estonian helps a little.

Jenny says:

To be honest, I've always had a superiority complex. I felt above most people, which isn't good I know.

Beatrice:

I think I'm more interested in what's going on than who's going with whom or who's going to get the car. Lots of kids don't even know what's going on around them.

Every person is different once you get to know him. In some ways I feel different. I find that I'm more interested in politics and know more about it than most kids. I've had more responsibility than most kids. For a while I was taking care of the house all by myself and was alone all day when my mother worked.

Lisa feels that her classmates always saw her as a superior student:

I was shy. Everyone always thought of me as the girl who got good grades; they always thought of me in that respect mostly.

And Georgia:

I always felt different, because I could always understand what I read and I was always at the top of my class in grade school.

The teen-age culture is, to many adults, a society wherein group mores and folkways dictate behavior; and there are certain prescribed fads, tastes, and styles of behaving that, if ignored, set the adolescent apart as a "square" or an "odd ball." The very term "teen-ager," as opposed say, to the term "young person," seems to suggest a well-defined type rather than an individual. An adolescent is not simply a young person, but a "Teen-ager"; and that subtly sets him rather apart from the rest of the human race.

What, then, do creative young persons, who are apt

to be "different," non-conformists, individualistic, think about the teen-age culture they find themselves a part of? The item read: "Critical of teen-age culture."

The percentages for the boys are:

Positive.....	43%
Negative.....	29%
Insufficient evidence.....	29%
Raters disagreed.....	0%

For the girls:

Positive.....	31%
Negative.....	23%
Insufficient evidence.....	38%
Raters disagreed.....	8%

Arthur cannot accept the sameness among teen-agers:

I never had that gang spirit. Most people, they just get so nauseating. There's nothing complex about it. It's all the same--no difference between any of them.

Rex comments on the class system among teen-agers:

I'll accept precedence in anything, but I hate the upper crust at school, because the upper crust is really down grade--nothing. All these kids are popular; but if the teachers knew the popular kids as well as some of the students do, they wouldn't be popular at all. Most of these popular kids drive their dads' cars and steal things all the time. A lot of the kids in the upper set are always driving their fathers' cars. One of them got his ribs broken by his dad because he got caught.

Eldon on grades:

So many kids want the grades so badly and sometimes it's just a matter of prestige. They will even cheat to get good grades.

And he continues:

Groups tend to form according to values. Some fellows are those who are interested in prestige, some are interested in athletics, etc. The honor students sometimes form a group of their own. It's hardest to become a member of the prestige group. The other group really doesn't care what other people think of them. Anyone

can come in who wants to. The prestige group makes the most noise; they have the highest opinion of themselves, so they make themselves the most known. Too many students are like fleas following a dog. Maybe they'll follow the best dog.

Robert:

I think they're dating way too young. Twelve-year-olds walking around arm in arm. I think this is stupid.

Nathan is one of the most critical youngsters in the group:

Life is terribly complex, and no one seems to face up to this fact. They make it so simple. This is one reason why kids bore me so. They don't see how complex life is. They think only about weekends and the week's dance.

Everyone says that I'm too young to be thinking of intellectual matters. In fact, it's the same at school. It's just not popular to be intellectual.

I think most people that I come in contact with would be students who aren't as interested and aren't as capable of carrying on an intelligent conversation.

Statistics are always putting people into categories, and the trouble is, the average adolescent is always conforming to these categories.

Hilma talks about hypocrisy among teen-agers:

I know I am not completely honest toward other people and I don't think other people are like that either. To a certain extent, friendship is a matter of convenience. I have always thought it is kind of strange like the popular girls, the cheerleaders, etc., will stick together; but when they're by themselves they will say, "I can't stand her," I know this happens. I don't necessarily want to be a part of it.

Like Nathan, Jenny is very critical:

The average girl goes steady with one guy one week, the next guy another week, and so on. I think it's ridiculous because they really don't like the guy. They're just looking for a companion, and I think that's the way most dating is for kids my age. Everybody is going steady--for a week. It's just utterly ridiculous. It doesn't mean anything. They demoralize the relationship. I'm no Margaret Mead, but this is my own little viewpoint of why lots of kids get into

trouble. They don't have anything else to do. I mean if you have exhausted the thrill of kissing a guy or holding hands with him, what else is there to do?

If you let yourself take up the other people's social values--if I took up the values of the common, average student at school--it's not intelligence. It's popularity and good looks.

People of my age don't think about anything worthwhile. They just worry about dances and things like that.

The biggest fault I find with kids is that they are so hypocritical. They will say, "Jenny, I'm so glad to see you," and then turn around and knife you in the back. I mean, not to me personally because I don't associate with them that closely, but I have seen this done to so many people.

Carol comments on the status seekers:

The coldness between the kids; the popular, the not quite so popular, the less popular, and the kids that just don't have it--personality and looks--Negroes, Mexicans, and hoods. It brings back the Status Seekers because it fits in with our school.

On the whole, though, one does not get an impression from this group of youngsters of strong antagonism toward teen-age culture. Several are strongly critical; others find elements of teen-age culture to criticize; but for the most part, these youngsters accept their teen-age society for what it is and are not particularly acidulous in their comments.

Creativity is, in a sense, an expression of man's individuality. The greatest of creative men, such as Michelangelo, Leonardo, and Beethoven, are, as N.J. Berrill points out in Man's Emerging Mind, our great symbols of the creative individuality of human beings; and, continues

Berrill, the greatest creative acts, even in modern times of great group efforts, will continue to result from the human mind working alone.<sup>46</sup> He says:

The great creations and the great comprehensions, where the monumentally obvious is seen for the first time, are always products or experiences of individuals operating alone, free from intrusions and distractions of other human voices.<sup>47</sup>

And Paul Torrance, speaking about creative children, says that one of the reasons highly creative children often have special problems is that they must search for their uniqueness, which may cause teachers and counselors, who sometimes find non-conformity in their students trying, to resent them. Creative children, says Torrance, reject the demands of society to surrender their individuality.<sup>48</sup> Robert Wilson has also noted the close ties between creativity and individualism.<sup>49</sup> He points out that as early as 1898, Josiah Royce, who reported one of the first research studies of creative thinking, concluded that an examination of the history of ideas and invention revealed that the conditions which favor invention are those which favor the social tendencies often called the general name, individualism. Wilson continues:

In other words, the individual varies more in the long run when the society in which he belongs expects him to vary more, when variation is encouraged, and when independence is favored by the social environment.<sup>50</sup>

Anderson too has discussed individualism in connection with creativity. He has said:

Creativity will become even more important and meaningful as respect for the individual becomes more wide-

spread and meaningful.<sup>51</sup>

It seems evident, then, that a group of creative youngsters would express in their interviews a concern for their own individuality; and, in fact, place a high regard on the matter of individualism in general. The item read: "Concern for individuality."

The percentages for the boys are:

Positive.....	64%
Negative.....	7%
Insufficient evidence.....	0%
Raters disagreed.....	29%

For the girls:

Positive.....	62%
Negative.....	8%
Insufficient evidence.....	15%
Raters disagreed.....	15%

Mark, like a number of other youngsters in the group, was a strongly conservative Republican; and like the others, he responded to the "rugged individualism" appeal of such conservatives as Goldwater. On the other hand, the Democratic Party, which they identify with a strong central government which works against individualism, they saw as an anathema. When asked in what areas he felt the Federal Government was most infringing upon personal and individual freedom, he answered:

Name one that isn't. That's a challenge. Just look in the future at the things that you might not be able to do. Eventually they're going to license thinking. In order to carry people around in your own car, you have to have a chauffeur's license. There are ways that you could be sued tremendously for not having a chauffeur's license. And everybody's got to have a house, right? Why they have to put a tax on them to make permits in order to build them.

And he adds:

I don't care for group activities at all. The individual is the only thing.

And he continues to discuss the individual in relation to mass society:

I don't care what society does as long as it doesn't bother me.

Interviewer: Why do you want society to leave you alone?

It's none of their business, is it? Trying to make people conform. Society was designed just to protect itself. It gets more social activities so that it's a perpetual deal. It just keeps congratulating itself. It's not out to do any good, if you ask me. Ever since the beginning of the earth, societies have come and gone. They've started out as bad and ended up worse. Other societies have taken over and continued oppression. That's the way it happens. A society has never really helped anything; it's always been an individual.

Arthur is strongly individualistic too:

The great tragedy of our time is that people don't get to do what they want to do.

And:

Everybody says that what I do contributes to the world and to the cultural scene. I don't think that's necessary. It's important to do what you want to do. One person can't change the world, and no one group of people can change the world. The thing to do is to change your own environment to your specifications. It really doesn't make a hell of a lot of difference.

And:

That's what people usually do; they say, "Why should I do it because nobody else is going to?" Or, "If I do, I'll be the only one that does so it won't have any effect anyhow." Well, they sure can't feel very strongly about the thing or they would fight it tooth and nail and get everybody else to fight it too.

Rex dislikes IBM systems that classify people:

It's a little impersonal. There's got to be someplace when you can teach on the basis of a student. That's



why I don't like a big college because pretty soon you're a number on an IBM card and that's all it is. And I hate this.

And he dislikes people who do not act on the basis of their own individuality:

You talk to these ninth graders, and everybody is doing something because it's the thing. Nobody knows who started it and nobody likes it. They put up with it though. People keep doing things, and they don't know why they're doing them.

And he concludes:

I guess largely, I'm myself and not somebody else. Too many people strive to be what society calls a person. I'm going to be me all the way.

Jeff:

Personally, I think I try to be myself. I don't want to be like this person or that person. I think each person has his own quality.

Eldon:

I disliked writing papers in English this year because we had to write papers from books, and I dislike writing when you can't give your own views. You just had to write what you read in the book. I don't like that.

Somewhat wistfully, he seems to hang on to the freedom of youth--a time when he can still be free:

I'm my own man yet.

But adulthood, with its pressures, is coming. And he says:

There's no such thing as an insignificant individual unless a person feels he is insignificant.

Nathan aspires to individuality. It is a mainspring of his character:

Everyone has the potential to be individual, and statisticians tell us not to be.

On conformity:

Conformity is boring; individualism is exciting. But what scares me is that I don't know what I want to be like. I don't know what to make of me. I suppose eventually I'll fall under and conform. There are family pressures to go to school and grow up to be a decent guy. There are pressures from all sides. Some day I feel I'm going to run out into the street stark naked.

He continues:

I was quite uncomfortable to know that I'm awfully unimportant compared to all the vast and many things that happen to large numbers of people. Actually, I found out that I am a nobody. But I know there must be something I could do. Actually, I just considered myself an individual and I didn't think or care about anyone else. But as you find out how unimportant you are, you have to think of other things and other people.

Sarah:

What have I learned in the last two years? To stand aside from the group; I don't like the group pressure. If you don't do what the group does then you're not in the group. If you develop this thing that you need to be in the group, then you feel like you've failed.

I'm more or less alone because I have my own ideas on how I should be and so instead of following the same pattern that everyone else follows, I make my own.

Hilma must be herself:

My brother is a great expert on these things--how I should change so that I could get along with other people. But whether I get along with people depends on the other person in the first place. If they can take me as I am, fine, but I'm not going to change just for them.

And:

I've always wanted to be myself, and I didn't want to be incorporated into a larger group or become a part of something else. I was just me. Of course, people have always left me alone to a certain extent to do what I wanted.

And again:

Even if I do the wrong thing, I thought it was the right thing at the time. It just matters what I think, not particularly what anyone else thinks.

Mildred seems to have recently discovered individualism:

The individual can do anything if he starts early enough. If I know what I've really wanted to do, then my conscience will be free. But if I did something only because society wanted me to, then I wouldn't feel right about it.

And on girls:

The girl I admire the most is the most non-conforming person I know. She has really broken away from our little society and I really admire that. The way she dresses, acts, and talks. She will stand up and say, "No" to the crowd.

And again:

I like to approach something on my own rather than have someone tell me how to do something. I get a lot of satisfaction out of thinking how to do something by myself instead of someone telling me.

Muriel finds some individuality in being Scottish:

My mother says I'm full of false loyalty to Scotland. I don't want to be an American citizen. I want to keep my Scottish citizenship.

Jenny says:

I'm a strong believer in individualism and not letting your surroundings influence you. I think that a person is an individual and can be what he wants to be.

And Carol:

I don't deal in groups. I don't like them. I'm an individual.

And with good sense, Lisa comments:

On little things that don't matter, I will follow the crowd, but on the big things, the basic things, I wouldn't follow the crowd for anything.

Previously it has been pointed out in this paper that the creative individuals often must first be a critic of the status quo, or even a destroyer of it--a rebel, in

fact. To the existentialist, as George Kneller has shown, rebellion is a way of being one's own authentic self;<sup>52</sup> and being one's own authentic self is an aspect of being a creative person. DeHaan and Havighurst have said that for a person to be creative, it is necessary for him to challenge the customary way of doing something; and since this is tampering with the status quo, the creative individual tampers with his social unit's common frame of reference and threatens to isolate himself:

The creative individual implicitly denies the validity of the whole or some part of the group's frame of reference and thereby attacks its system of values and security. This is the threat of the creative person to the group.<sup>53</sup>

Frank Barron has noted the tendency toward radicalism among the creative persons he studied,<sup>54</sup> and Bernice Eiduson has similarly found among her creative research scientists a quality of "marked intellectual rebellion."<sup>55</sup>

If rebellion seems to be an important phase of creativity, what signs of it do we have in the present group? The item read: "Rebellion (questioning authority, skepticism) by early adolescence."

The percentages for the boys are:

Positive.....	50%
Negative.....	50%
Insufficient evidence.....	0%
Raters disagreed.....	0%

For the girls:

Positive.....	23%
Negative.....	77%
Insufficient evidence.....	0%
Raters disagreed.....	0%

Arthur is, perhaps, the most rebellious of the boys:

I was never cooperative. I had no father to restrain me. I'm a criminal .... That which is illegal, I usually do, if I have a chance to and I think I can get away with it.

And Rex comments when asked if he contradicted teachers:

Quite a bit. That's the same thing that bothers me now. They figured I was a kid and wouldn't listen. Some teachers do pretty stupid things.

Franklin's rebellion against his parents seems somewhat mild:

Sometimes I think some of the things my folks tell me just don't seem right. I'll say, "What's wrong with this?" Then I'll go ahead and do it anyway.

And Jeff:

When you have a lot of regulations, people begin not taking them seriously. Thing gets to be that you can break the regulation but you shouldn't get caught.

Muriel remembers a similar type incident:

In the first grade the teacher gave us some questions to look up in the encyclopedia. I thought I'll put down what I think about it. She didn't like my going and writing down what I thought of it. She thought I should look up and write down what somebody else thought.

Lisa:

Inwardly I was rebellious, but outwardly I was quiet and calm:

Carol says:

I got into trouble a little bit. I didn't like keeping still. I didn't like listening to the teacher always. I did good work but I always got low marks on being quiet and obedient.

And Julie recalls:

I remember this sixth grade teacher. He didn't approve of young girls wearing lipstick and I figured there was nothing wrong with a pale, pale, pink. There was a square dance for the sixth graders and I wore that pale lipstick on purpose, because he didn't want us to. This bothered me. I just hate to be told something positively

just because the other person doesn't like it.

It can be seen from these quotations that for the most part, whatever rebellion is expressed is somewhat moderate. Jenny, however, is highly rebellious, perhaps even more so than Arthur. Recalling her earlier years in school:

I refused completely to memorize dates. I said I wouldn't and I didn't. I don't even know the date the Declaration of Independence was signed. I refuse to do things like that.

She resents adult restrictions:

When you're at my age you're expected to grow up to responsibilities of any adult by some people. They expect you to be an adult, but they won't let you be an adult. They give you the responsibilities but not the pleasures.

She reacts against her mother's preachments:

My mother gets on me and says I shouldn't think the way I do about people and says, "You should think the way I do." This kind of stuff. Well, Mother, I mean I'm not you. I'm not just a little miniature of you.

In the 5th grade, she and the teacher were in complete discord:

I had her first semester of fifth grade and I think there wasn't a day in which we didn't have a verbal battle and one time I hit her. I was never the quiet, whimpering, afraid-of-the-teacher type, and she demanded this. She wanted complete respect and fear and I wouldn't give either of them to her.

Apparently, her earnest rebellion started early in junior high school:

I used to be a sweet little thing sitting around and saying thank you and not getting my clothes dirty. This was through the 7th grade. And then my mother started to say, "Oh, what happened to you? You used to be such a nice little girl."

Phil is the boy she loves and plans to marry in seven years:

Phil was going to stay home with me and watch TV while my folks were out. I asked my folks about this and they said, "No." This shocked me. They kept saying, "What will the neighbors say?" It about floored me when my father said no before I could even tell him anything. And then he goes into this big, "I trust you, and I trust Phil, but we have certain social values we must live up to." We had this big fight and I said, "You take your social values and live with them. I'm going with Phil to the South Seas."

Jenny's rebellion is very marked, and Mark, Arthur, Waino, and Nathan are also strongly rebellious. But most of these youngsters are rebellious intellectually and not socially; and, further, except for Jenny and to some extent Nathan, the rebellion is not directed against their families. And with Nathan, his rebellion is more verbal than actual. Their families seem to be supportive rather than frustrating. One has the feeling that these youngsters' rebellion will, for the most part, contribute to their creative lives, not cause them to end up in prison or as social outcasts.

Students of creativity have described the creative person as one who has the ability to become totally immersed in his work. One needs only to think of the great geniuses' complete dedication to their work to realize that perhaps a large share of their success derives from their tremendous ability to lose themselves in their work. Bruner, in describing the creative process, has said that the creative person must feel free to be completely dominated by his work:

Once into a creative act, the creation takes over. As the object takes over and demands to be completed on

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its own terms, there is a new opportunity to express a style and individuality. If the object doesn't take you over and you are foolish enough to go on, what you will end up with is something contrived and alien.<sup>56</sup>

Rollo May discussed the vital nature of the encounter in the creative act, and, he says, no creative act--no truly creative act--can lack a genuinely intense encounter.<sup>57</sup>

Words May uses to describe this encounter are absorption, being caught up in, and wholly involved with. May says that whatever one calls it, genuine creativity is characterized by an intensity of awareness, a heightened consciousness. And in Human Potentialities, Gardner Murphy has noted that the first phase of the creative process is:

... the long immersion of the sensitive mind in some specific medium which gives delight and fulfillment, whether it be the world of color, tone, movement, space, time, the world of force and organization, the world of images, of social relationships, or the world of contemplation and mystery.<sup>58</sup>

In the present study, the item read: "Ability to become immersed in work or projects (task-orientation, ability to "lose himself" in subject at hand)."

The percentages for the boys are:

Positive.....	71%
Negative.....	14%
Insufficient evidence.....	7%
Raters disagreed.....	7%

For the girls:

Positive.....	92%
Negative.....	0%
Insufficient evidence.....	8%
Raters disagreed.....	0%

Mark's story perhaps illustrates this ability:

I opened up a book, and I saw a picture of a blast

furnace that showed you how you could make it. So I built it, and two weeks later I took it to school and got an A on it. Now I figure I've got all the equipment so I thought I ought to be able to make something with it. So I built a wrench and I've built blobs, and I've built a nut. Eventually, I'll be able to build something a little bit more complicated.

And Nathan says that his projects always get bigger as he works on them:

A lot of times it will be a lot bigger than I thought it would be. Lots of times I would choose a topic because it seems like it would be hard and challenging. As you get into it, you find that it was more than you bargained for. It usually started with a vast idea that gets vaster. I usually find myself wanting to write something three pages long, and I end up doing something with twenty pages.

Franklin comments:

I read everything I can get my hands on when I'm involved in a hobby. I come out of there a real expert on whatever I'm doing.

Joe's projects grow as he works on them too:

Usually I end up having more in a project or wanting to put more in it than I thought I was going to do.

And Curtis:

Usually I try to stick with a problem and see if I can work it out. If I can't work it out right then I'll put it down for a while and see if I can work on something else, and then I'll come back to it. A lot of times a project grows and gets out of hand, but I try to make every end meet and get it back into shape.

Mildred puts it nicely:

Everything I study always turns a lot bigger than I imagined.

Muriel mentions her involvement:

It makes you feel better to see something beautiful. I like to stay up until the middle of the night and dash away at the typewriter on some project.

And Julie:

I guess I'm more apt to think big than to think small.  
I think if something is worth while doing, it ought  
to be done in a big way rather than in a small way.

Unless the creative person has the energy with which he can make good his dreams and plans, he remains only a dreamer. It would be difficult to imagine an indolent creative genius. One only need to read biographies of outstanding creative men to feel the energy they exhibited in their lives. In the present study, then, one of the characteristics of creative persons that the raters looked for in the interviews was energy level. The item read: "Has high energy level."

The percentages for the boys are:

Positive.....	64%
Negative.....	14%
Insufficient evidence.....	21%
Raters disagreed.....	0%

For the girls:

Positive.....	54%
Negative.....	8%
Insufficient evidence.....	31%
Raters disagreed.....	8%

With the youngsters who seemed to have a high level of energy, they spoke a great deal about the many projects they had going at the same time, and their lives seemed filled with many and varied activities. Mark, for example, tells what happened to him when he became involved in projects:

They always became larger. It hurts--just going along

like I am right now, it hurts sometimes. When you stay up all night and all morning and all night and all morning, and you keep going like that. You think so hard, your mind starts burning up. It's hard.

And on the subject of keeping busy:

When I'm not doing anything, I feel like I'm going to sleep. I have to be doing something to be alive. Flying through the clouds--truly great moments are rare. You must realize that I live in a state of mediocrity, and that's great compared to most people. Every once in a while I feel really, truly great, and I can't do anything wrong. Boy, it's such a strong feeling. Generally, I'm more involved, more alive than most people. I do more than most people; I work myself into these states by working myself into them. My former accomplishments create a new mood for accomplishments. Activity is the key.

Curtis would like everyone to be more industrious:

I don't think that people really try to do as much or do as well as they could if they really wanted to. If every man did work up to his potential, we could have a much better world.

And Robert:

I usually start out with something I read in a magazine and I elaborate on it something fierce.

Jeff, who has projects going in his basement all the time:

I do have a lot of energy, but sometimes I don't like to spend it.

Jenny resents sleep:

I don't really like to sleep. That's a waste of time. I would pursue things that I don't have time to do now. I'd play the piano five hours a day, and I'd read things that were good and I'd get away and have fun. Most of all, get away.

Carol:

I like piling wood. It doesn't sound very good. But my grandparents have a wood furnace, and I like piling wood. I like working in the barn with bales of hay.

I like doing puzzles because I like talking to myself while I'm doing them. A puzzle is something that can

occupy my eyes and hands; therefore, it leaves my mind and my mouth free to do whatever they want to do. So I can do two things at once.

Edith's active life is a demonstration of her stated philosophy:

My philosophy of life is to do as much as you can for people around you and for yourself and for your country. You can't waste time; life is too short to waste time.

When Bernice Eiduson interviewed 40 research scientists who were known to be highly contributive members of their profession, she found that they saw themselves as compulsive, hard-working individuals who seemed to focus around extensive investment of ego in work.<sup>59</sup> The picture that emerged from her study was of a group whose lives were completely dedicated to the perfection of their work, even to the extent that this drive to reach the greatest achievements might interfere with their family lives. Creative persons seem to have a high-level ability to devote themselves fully to the work at hand and to perfect their own work rigorously. The item in this area read: "Has high, internalized, individual standards; is a perfectionist."

The percentages for the boys are:

Positive.....	50%
Negative.....	43%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	77%
Negative.....	15%
Insufficient evidence.....	0%
Raters disagreed.....	8%

On his ideas of perfection, David says:

I want to be a perfectionist in my everyday life. If I were President and I had to make decisions, I'd want to be a perfectionist--decisions where people were involved--but if I had to make a decision of whether a sentence had a verb or not, I don't think that I'd want to be that much of a perfectionist.

Robert seems to have the drive to keep at things when the going is tough:

I haven't dropped out of any school subjects yet. I like to keep at it no matter how tough it gets. Even in advanced math--that was really tough and I didn't get too great grades in it either. I sort of messed things up but I kept to it and I didn't drop out into regular math.

Franklin likes things that are hard to understand:

I like challenges. I like books that are hard to read or to understand because I can go through slow enough so I can picture every word. Even though it takes me three or four times as long as an older person to read the book and understand it, I still get it. This is a challenge.

And when asked what he likes best and least about himself, George says:

Best, I think that I do as good as I can to get good marks. I think that helps me to do even better. Lots of times I get mad at myself because I can't do any better.

Mark:

When I get done with something, I feel that it's the best that could have been done. There are a few things that I've done that haven't been good, I must admit. On the overall objectives, I try to feel that I have done the best. After analyzing them and breaking down all the alternatives, I am able to say that I have done the best. I could only admire someone who has done something the same way I would have.

When asked if he considered himself a perfectionist, Joe answers:

Yes, I like to get it just about as right as I can; I don't want to do it half right.

Arthur:

In education, you should compete with yourself. You should say, I'm going to know 18,000 more things about this subject at the end of the course than I do now, and compete with yourself.

Hilma strives to do her best:

Sometimes I have projects in language or something and I'll become involved in it, so I do a much more complete project than I would have done ordinarily. I just want to do my very best. I always try to do my very best so I spend more time with it than I would like to, but I feel I should.

Jenny says:

I like myself least when I don't do things as well as I think I should. That's maddening. I think I have a certain responsibility to myself. I'm not working up to my potential at school but you know there isn't any place to go. You can let it ride and get B's and C's. I've never let it ride.

Mildred:

I guess I've been kind of shown that I have the ability to do almost anything I want if I study for it. I get guilty very easily, and, so if I have this feeling that I can do something, then I feel compelled to do it. If I have the ability and all this, I just feel that I must. I couldn't live with my conscience for the rest of my life if I didn't.

And again:

If you don't feel strongly about what you're doing, there's no sense in doing it. So of course, I feel strongly usually about anything I do. If I do it, I really have a reason for doing it.

Muriel:

If I do something, I like to do it well.

Lisa takes everything she does seriously:

I feel myself a lot more serious than some people are. When I do something I do it seriously. And even in school, when I think of my studies, I do it seriously.

Debbie:

I never live up to what I think I can do. And I worry more about it than anything else.

Edith started to strive early in life:

It was second grade before I started getting good grades in school. I just decided I was going to become one of the best kids in the class. That's very easy if you make up your mind to do it.

Drews has shown in her work with creative adolescents their high aspirations.<sup>60</sup> These youngsters do not simply hope to have jobs that will offer them security and comfort; they aspire to enter fields where their potential may be fully realized and which will, further, afford them opportunities to make outstanding contributions. They want not only to make the most of themselves, but their aspirations are often infused with humanitarian-altruistic motives as well. This is in line with Maslow's concept of the creative self-actualizer; he says that the creative person is also one who is altruistic, dedicated, self-transcending, and social.<sup>61</sup> There is a Chinese proverb which says, "Be careful what you desire--you may get it." The point is, if a person aspires toward high achievement, excellence, and perhaps, significant social contributions, he is more likely to attain great heights than one who does not aspire to high achievement. Persons who are not creative are



perhaps more likely to settle for the more commonplace accomplishments in life; creative persons are likely to aim high--and, further, their goals are likely to be socially worthy ones.

The item relating to this read: "Has high aspirations."

The percentages for the boys are:

Positive.....	93%
Negative.....	0%
Insufficient evidence.....	7%
Raters disagreed.....	0%

For the girls:

Positive.....	85%
Negative.....	8%
Insufficient evidence.....	8%
Raters disagreed.....	0%

Waino says about his hopes for the future:

If it comes to me, I guess I would rather be the researcher; then you might make a great discovery. Not actually research, but something to go deeper into something--the future, for instance.

Keith says:

I'd probably become a doctor. Everybody is always thinking about how much money engineers make, and how important they are, but all they're hearing is the space race. But a lawyer or doctor--they're working for the society directly and not indirectly, as a scientist does. An architect, an artist, a writer--all these people work directly with a society.

Morris gives his philosophy of life:

Learn as much as you can and try to do as much as you can for mankind. And leave your mark.

Mark's goals are, of course, prolix:

My goals are hard to explain. There are fifteen different types of goals to work on. All have different tapes that they have to be measured by, and so far they have

meant certain things--all of the ones that I had planned to meet. In the future I hope to do the same.

They are sometimes rather lighthearted:

I would like to do a lot of things. I would like an all-expense trip to Alaska to make films and compile a book. I want to climb Mt. McKinley, go into international investments, go to Europe on a tramp steamer, write a book, psychoanalyze everyone in the world and categorize them.

What would make life worth living? One huge laboratory to fool around in and do anything I wanted to do. I would want to do research properly. Research on solar energy--it has a good base to it and could be very profitable. But I would be willing to do anything that had a purpose. The pleasure of creating something new--it creates a kind of immortality. It has great impact on me. Creating my immortality--that would be very pleasurable.

Franklin wants to be an editorial writer:

I think that being a writer will be playing a big role. People are going to read you and if you write effectively, then people are going to believe you. You can change beliefs. It may sound like some pretty odd ambition to want to change people's beliefs; but I feel that if I'm right, I'm going to do everything possible to make other people believe it.

Jeff says:

Not just going to work and raising a family, not going to work all your life and never really accomplishing anything, but to be myself and to really accomplish something to better the world.

And:

Everybody has to try and do something to make the world a better place to live. Everybody has to try and make somebody else think about something. Try and present your points of view because maybe there's quite a few people that agree with you.

Eldon expresses a similar idealism:

I like to feel that someone will be better off because of something I have done. Maybe it will be one person, or a thousand, or a million, just so it's someone. I want to feel I've done some good for somebody.

Nathan hopes to be able to change the way life is:

I'm not sure whether I would like to be in politics or whether I'd like to start out as a lawyer and work up maybe to Chief Justice or Attorney General. It's a world where you can do so much to change the way things are right now. A politician can do so much to change the way life is.

Robert:

It's completely impossible for me to become the president because I was born in Canada. Now that I can't change. But if I were born in the United States and wanted to, I just might be able to.

Rex:

People limit themselves too much. They put two targets two feet away where they know they can get it. You haven't gained anything. When you aimed a mile off and you miss, you're a lot further ahead.

I'd like to help change society, but who should choose the goals?

Beatrice wants to be a politician:

I've changed my occupation; I want to go into politics. I want to become elected to an office. I've always been interested, but I never thought about going into it for a field.

She would also like to be in the Peace Corps:

I got interested in going into the Peace Corps. I think it would be interesting because I have the feeling that they touch much of the lives of other people, and yet, the other people touch them.

Debbie wants to gain the respect of her fellows:

I like to picture myself as the honored, respected person that people look up to and like a lot and noticed by the more important people up high.

Nancy and Lisa talked about hoping to become concert artists.

Lisa daydreams on the subject:

Sometimes I see myself playing the violin before a great huge audience. You know, everyone clapping.

Hilma's ambitions are, perhaps, to be an architect:

I have to know physics because I think I would like to be an architect. I don't like science too much, but I study it because in order to be an architect you have to have a broad background in science.

Sarah wants to be a missionary:

If you only get to talk to only one person in a village, then later that person would become a minister too, in a way, and they would go and talk to other people, and these others would be won for Christ. And all because of that one little candle that I lit. That's why I feel it is so important.

Georgia is sure she will be a doctor:

People will say to me, "You'll meet somebody and get married. You wait and see, you'll never become a doctor." And I'll say, "That's what you think. I'll make a bet with you."

Mildred:

I know that I've got to do something to help the world.

Carol uses the word "destiny":

I think I will know when the chance will present itself. I do a lot in destiny and chance. In fact, in one of my stories, I wrote about destiny; if I can use it, I will.

Julie:

You can do anything you want to do as long as you have the will to do it. I think anybody can do just about anything if they think about it strongly enough.

And Jenny:

I'm sure that I can make the future what I want it to be. Let's put it this way--I think I can. The past hasn't been so bad, only certain things. But I'm sure it will be whatever I want it to be.

One of the items the raters used in rating the interview transcripts read, "Drive to achieve in an independent fashion; long-term goals, sense of unique contribution."

Drive, of course, has long been seen as an important factor in achievement--perhaps as important as intelligence and skill. Terman found in his studies that his gifted subjects with drive and ambition succeeded all along the line to a greater degree than gifted students who did not have this ability.<sup>62</sup> He said that in drive to achieve and in all-round social adjustment the differences between the "success" group of gifted youngsters and the less successful group of the gifted were outstanding. Catherine Cox Miles has said similarly, in Talent and Education, that historical geniuses were notable in their childhoods for their persistence, effort, and self-confidence.<sup>63</sup>

The item read: "Drive to achieve in independent fashion; long-term goals; sense of destiny, of unique contribution."

The percentages for the boys are:

Positive.....	71%
Negative.....	7%
Insufficient evidence.....	7%
Raters disagreed.....	14%

For the girls:

Positive.....	77%
Negative.....	15%
Insufficient evidence.....	0%
Raters disagreed.....	8%

The quotations in the preceding section can be taken to illustrate this quality.

In the preceding quotations, it is evident that among a good many of these creative youngsters, there is

a mood of optimism and even idealism. They are people who are willing to strive for a better tomorrow for mankind; and they see the possibility of a future in which man may realize his highest potential. There is skepticism among this group too, and a realistic view of mankind; but still, among a good many of them, a mood of optimism comes through. One might say, in fact, that there is a group of young people in this study who could very well be called "tender-minded," to use William James' term.<sup>64</sup> As opposed to the "tough-minded" type, who tend to be empiricists, sensation-alists, materialistic, irreligious, fatalistic, and pessimistic, these "tender-minded" types tend to be rational-istic--that is, they tend to go by principle rather than merely fact; intellectualistic--they tend to place their faith in man's reasoning abilities; idealistic--they tend to be persons of high and noble principles; religious--they are sensitive to the spiritual and mystical elements of life; free-willists--they tend to place great faith in man's ability to control his own destiny; and optimistic--they have high hopes for the future of mankind and for themselves. In her description of the creative-intellectual type, Drews has, in fact, shown us the contemporary teenage prototype of James' tender-minded persons. Earl Kelley,<sup>65</sup> speaking of the fully-functioning self--a term which has been associated with creative persons by Rogers--has also discussed optimism. He has said that the fully-functioning person is one who sees the world in movement--toward be-

coming, and optimism is the natural result. This person sees the importance of people, and he develops and holds human values and is concerned with human welfare.

The item relating to this area read: "Optimistic about man's future and his potential."

The percentages for the boys are:

Positive.....	57%
Negative.....	43%
Insufficient evidence.....	0%
Raters disagreed.....	0%

For the girls:

Positive.....	85%
Negative.....	15%
Insufficient evidence.....	0%
Raters disagreed.....	0%

In contrast to the idealism and optimism already illustrated, there are the Wainoes and Marks. Mark, for example, says:

It's impossible there will ever be world peace. As long as there are people there will be no peace.

And Waino:

There will never be peace.

But in contrast to this tough-mindedness, there are the Eldons. He says:

Having done one thing for one person, no matter how small; and having cared for someone and having someone care for you--that alone makes life worth living.

Beatrice, a tender-minded girl, says:

We've got atomic weapons now, but this is not going to be the end of the world.

And again:

You can always find something good in everybody. I

admire honesty in people. I like people who stand up for what they believe. Right, wrong, or indifferent, you should stand up for what you believe.

Muriel doesn't like the pessimism of 1984.

I can't stand 1984--it is morbid and depressing. I will never read that book. Books should make you feel better. If books are going to be terribly sad, I read the ending so I'll be prepared for it. I often erase sad endings from books and put my own on. I don't like sad endings to be there.

Muriel's statement brings to mind J. Donald Adams' article in the Saturday Review.<sup>66</sup> He says that the average contemporary "serious" novelist "only looks down, never up." He says that he can count on one hand those novelists who show human good as well as human evil. Muriel and the tender-minded would agree. They seem to prefer to look up, not down.



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## CHAPTER IV

### CONTENT ANALYSIS OF DATA ON EDUCATION

One of the items on the rating sheet read: "Critical of teachers"; and perhaps because school is a subject of immediate concern and interest to these students, they talked at greater length on this subject on the whole than any other. They responded positively to the opportunity to talk to an adult outside of the school about their teachers; and in many cases they moved away from negative criticisms evoked by the item and spoke extensively about education in general, their attitudes toward school, and about their remembrances of teachers and classes, past and present. That adolescents often reveal considerable insight into their own educational situations, and that these insights are of value to the educator, beliefs that the present researcher has had considerably reinforced through his contact with these young people, have been found to be true also by David Mallery, whose book, High School Students Speak Out,<sup>1</sup> has been something of a model for this work. He has said:

It would be foolish, certainly to let student opinions and desires form the limits of our nation's educational objectives. It would be equally foolish to ignore what students are saying about their high school experiences and what they are becoming through it. Student motivation and convictions must have a place in our educational planning.<sup>2</sup>

Since these creative youngsters had so much to say on the subject of education, and since this study is directed primarily to educators, it was decided to devote an entire chapter to this area.

The literature on creativity reveals with some consistency that schools present a problem to the creative student. The school he must go to is, says Coleman, often one that looks more like an athletic club than an educational institution; and it is, says Coleman further, dominated not by an intellectual climate created by teachers, but by a non-intellectual climate established by the teen-agers themselves.<sup>3</sup> Perhaps Coleman overdraws his picture of the non-intellectual teen-age society; but still, there seems to be little doubt that in most schools today, the teen-age climate is not particularly conducive to the encouragement of creative students.

But even discounting the dominance of non-creative-intellectual teen-age values in schools, school curricula and methodology have seldom been praised by eminent creative persons. The Goertzels, for example, found that three out of five of their 400 had serious school problems and were critical of schools.<sup>4</sup> They comment:

The strongest critic of schools is the child who finds his own home intellectually stimulating. Such children prefer to stay home and read books and often do just that. They like to study with their parents and enjoy meeting stimulating adults.<sup>5</sup>

The Goertzels' study, of course, included men and women who went to school several generations ago; one would

hope that conditions have improved and that creatives of today look back more kindly on their schooling. Anne Roe<sup>6</sup> and Paul Brandwein,<sup>7</sup> as a matter of fact, have found that their successful scientists do often recall teachers who stimulated their creativity in science.

On the other hand, James Conant seemed less optimistic about the highly creative three per cent of the school population:

Sometimes at both the school and the college or university level, the problem is not so much that of developing the creative powers of gifted youth and children as it is of preventing our regular machinery of education from blocking the development of those creative powers which children themselves want to manifest in one way or another.<sup>8</sup>

And Harold Anderson, in his discussion of the Open and Closed systems, says that Open systems favor creativity, but schools emphasize Closed systems.<sup>9</sup> And Drews believes that existing curricula do so little to stimulate creativity, that whole new curriculum patterns must be established if we are to begin to really develop the creative potentialities of our able youth.<sup>10</sup> Edith Weisskopf is pessimistic about present systems too.<sup>11</sup> She says that despite considerable information now available regarding conditions that enhance creativity, "the mental attitude during intellectual work encouraged by our schools is in many respects diametrically opposed to the mental attitude which is thought to stimulate creativity."<sup>12</sup>

It is not our purpose here to discuss at length the school conditions which favor creativity. We can, however,

agree with Wilson's general statement:

Writers on the subject are in pretty general agreement that the environmental conditions which foster creativity are those which encourage independent thought and which are permissive of new ideas. They seem to be in agreement that conditions which produce fear of criticism are likely to inhibit the individual's expression of his creative ideas.<sup>13</sup>

And perhaps Bruner's idea that school must be more than a matter of relaying culture may be appropriately included here:

But education must also seek to develop the processes of intelligence so that the individual is capable of going beyond the cultural ways of his social world, able to innovate in however modest a way so that he can create an interior culture of his own.<sup>14</sup>

The percentages for the boys on the item which read "Critical of teachers" are:

Positive.....	64%
Negative.....	29%
Insufficient evidence.....	0%
Raters disagreed.....	7%

For the girls:

Positive.....	54%
Negative.....	38%
Insufficient evidence.....	8%
Raters disagreed.....	0%

Curtis talks about a typical problem:

All through grade school, we had to sit there and copy stuff off the board, and I couldn't stand to do that and do any arithmetic problems. The teacher would always give us fourteen rows of them to do, and I couldn't see any sense of doing it. So I did only--maybe a couple of rows, and it didn't make any difference whether I did all of them or not.

His enthusiasm for school quickly waned:

I was pretty excited when I started school when I was young. I would go around and do things when school would start each year.



Interviewer: Did that last very long?

About two days.

Joe says:

I've liked all the teachers I've had so far.

Mark comments:

Grade school was just a play period--supervised torture.

He continues when asked his feelings about grade school:

I was glad to get out of it.

Interviewer: Did you dislike going?

Oh, boy, I had a little bit of trouble back there but I had some fun getting in trouble, or should I say curing troubles. I don't like to use that phrase.

Was it just school in general or the sort of people?

Teachers, little-big shots.

And I suppose they didn't like you.

Oh, I wouldn't say that. I didn't like them.

Did they make things difficult for you?

No. I made things more difficult for them than they made for me.

And he says:

Basic inquisitiveness is lost in early grades. Why? The system is very restrictive. You are told you can do this and can't do that. The ceiling falls down on you. You just get to feeling like a blob. There's someone standing around all the time trying to mold you. And once you get molded, it's hard to get unmolded, and that's how it happens. It's a slow process; it takes place throughout a person's life. If we started out early, we would end up with people who could really think. Of course, this country could be a mess, if everyone could really think. If people could really think, governments would be abolished, and there would be no war. But a collapse of civilization would allow those people who could really think to be really free to think.

Mark seems to be able to empathize with failing students:

Schools can be destructive because the people that are very, very low down start feeling depressed, and they say, "Ah, all these eggheads that can go around and do all the work, and we're just going to loaf."

He goes on:

Studying my textbooks in school assignments often leaves me cold. Sometimes school work seems pointless, but you've always got to do it. And to put it bluntly, I hate to memorize a list of facts, unimaginative directions, cookbook style.

Interviewer: You said you hate memorizing facts, but that you have to do it. Why do you have to do it?

You have to put yourself in a psychological state of mind, so you like to do it. I think that's the hardest part of going to school. You get so you like things that you don't like.

Rex:

Kids can learn more by taking an alarm clock apart than a full semester of home repair.

He has learned that the best way to learn is to teach:

Teachers really don't know as much as the pupils do. That's why I wish they'd give the kids a chance to be a teacher. I quite often help people with homework because usually I've got a selfish motive. Usually I learn more by teaching than they do by being taught. Hardly any of the teachers know what they're talking about. They're sort of a Scout Master. They hold the group together but somebody else teaches them.

And on homework:

I like to study but I don't really like school work. Too much of it is plain pointless.

His memories of grade school:

I disliked it. It seems like I spent six years of nothing. They don't seem to teach you anything, except finger painting and all that. They don't put enough value on the right things. I've taught myself more in the last year than I have ever learned in sixth grade.

Arthur is bothered by the lack of relatedness in school:

All parts of education should complement each other. Textbooks should be written well to go along with literature. Literature should go along with history, social science should be concerned with chemistry. Everything should go together. Most texts are so stupidly written.

He is critical of teachers:

You got to have a new crop of teachers. You have to have people who vibrate knowledge. They should be so damned interested in what they are teaching that it catches on. But you can't be phony about it.

Further:

People aren't good educators just because they are post-graduates from Columbia--the ones who think they're god. I don't dig them. There's a quality in man, and I guess that quality is humility, and not enough teachers have it.

Teachers should try to talk to kids in such a manner that the kid'll feel free to communicate. The most stupid thing is when teachers say, "If you don't understand something, come up and ask me." You don't tell someone to feel free. They either are or they aren't.

On grades:

A lot of things are wrong with education--I'm going to blast you education people. You don't learn as much as you could by the present system. I'm so anti-grading system that I can hardly talk about it. It classifies students--it doesn't make them feel as equal learners. It makes them feel as equal achievers to the stupid standards which don't indicate high levels of learning, only teacher satisfaction.

A lot of people are being hurt by grades. They don't desire to please the teacher.

He suggests:

What about casting away all standards and saying, "Here's a group of people--teach them."

And finally:

The most meaningful thing I've heard is that education may occur least often in the classroom.

Franklin blames the system, not the teachers:

Education as it is now is restrictive. And I'm critical of textbooks because they have to be no nonsense, to the point. After you've read a text, you've just memorized things, and you really haven't learned much. We need more specialized educators, and students should be allowed to work on what they want to work on. I'm against courses that you have to take. Schools are places where the books are merely containers of facts and the way things were back in the colonial times. Teachers do as well as they can within the present system. It's the system that is at fault rather than teachers.

He approved of an experimental social studies course, however, because it did not emphasize facts:

I thought it was a fascinating class, and I probably learned more from that class than I did from any two of my others, even though it didn't teach a subject. Like I started reading and taking an interest in all sorts of varied things.

**Morris on English:**

The English teachers I've had--well they just have you read stories, and then there's the spelling test every week which counts almost nothing.

Jeff discusses his idea of a good teacher:

I like teachers that make you work. Some let you get away with things. You can get away with doing very little, but it eventually catches up with you and you wish they had made you do it. And I like a teacher who makes you think about things. They don't just tell you, "Well, this is the way, and don't worry about why it is this way."

He describes a math teacher:

I had the same algebra teacher for three years in junior high school. She was interested in everybody--in all of her pupils and in getting them to do their work. She knew what she could expect from everybody and didn't expect the same thing from everybody because we weren't all capable of the same thing in that class. She knew just what she could get out of each of us, and if she didn't get it, she wanted to know why.

He talks about repetition in school:

I like science courses, but they are boring most of

the time. The third time through something begins to get pretty boring. Every year in elementary school it seemed that they taught us to add again. We got it over and over again.

When asked if he were learning more in high school than he did in junior high:

I don't know about learning more. I may memorize more facts. I don't know if I'll learn a lot more.

On teachers:

Teachers always said junior high is going to be a lot different. You will get up there and people won't care. But you get there, and they do care. The same thing happens with high school. Changes are gradual--you never have these great changes that teachers are always warning us about.

Eldon:

I have trouble remembering things that are crammed down my throat.

He continues:

Teachers seem to be more interested in needless details this year. They seem to be teaching courses as though they had gone through it many years before and were teaching it in the same way. We could have gone through courses in two weeks rather than a full year. A lot of the courses are repetitious, stuff I've had before.

He remembers fondly one grade school teacher:

I had one sixth grade teacher that did an awful lot for me. She let some of us go ahead. Reading used to be the most boring class I had in the first five grades. There would be three groups, and I'd be in the top group, but it was still boring if you read faster than that **group**. And so this teacher set it up so there were questions for every story in about six or seven books that she had accumulated through the year. And so we had our own speed, and at the end she would question us. I remember a friend of mine and I finished up all the books she had by three-quarters of the year. She brought us library books and had us write reports on them which helped a lot. That was the most interesting year I ever had. I enjoyed it the most.

Robert on his grade school teachers:

I thought teachers were really, you know, ugh. They did the very same thing every year. Like one teacher I had, had a puppet show every year. And every year, she took the kids out to the airport. She had the very same program every year.

And he, like Curtis, dislikes doing problems after he understands the principle:

One thing I positively loathe is busy work. Like in algebra, why do you have to do all that work when you already know what's going on? And in geometry, you have to prove all those theorems, when just a few would do. Maybe it makes you remember them better, but I remember without all that stuff.

Robert likes enriched classes:

Especially with reading--I could read everything right off. Like the teacher gave each of us a paragraph out of a reading book. I'd read mine off in two or three seconds, and the other kids would struggle with it. Seemed sort of a waste of time for me to listen when I was doing so much better, but I still had to. That sort of brought me up against that system. That's why I loved the advanced classes in school because then you're with kids your own mentality and you get a better chance to do things.

And finally:

An awful lot of times I just doodled around on paper while the teacher was lecturing on what I already knew.

Nathan on high school:

High school is a bore. It's far too simple. I could get through high school without even trying. I can get A's and B's without cracking a book or without studying except just before tests.

On textbooks:

I would burn all the textbooks. I've never had a good one. They're adolescent, they are ten, fifteen years old. They exclude controversial subjects, and they don't deal with current problems. Texts always give pictures of what the world used to be like rather than what the world is like today. And if a text does deal with the modern world, the year ends before you get to it.

He gets tired of being given the "you're-a-leader" lecture:

Usually you get the same old pep talk about being the leader of the class and how that they don't expect this sort of thing from an intelligent student like you.

I think mostly the teachers more or less think of me as the leader, so they tell me, whenever I do something wrong, that I'm the one that others look up to. I tell them it is all blah, but I have a hard time convincing them of this.

Sarah is rather suspicious of teachers:

This is always the trouble with the teacher. You can't be too close or open with them because she's still the teacher. And, sometimes they really forget what they stand for and they will use it against you. I sometimes argue with teachers, but I do it half-jokingly; I never did it too seriously. And, if I did they might have taken it out on me.

Mildred says:

I was real excited about going to school. I always liked school. And I was real interested in school a lot, and it was easy for me then. I didn't get much out of it because it was mostly, two and two and this stuff that you just memorize. I never had any teachers that made us think.

She continues:

I think they were all the old-fashioned teachers who taught two and two and this or that right from the books. They made you do something because the book told you to do it. That was the kind of teacher I had all through school up to the ninth grade.

Mildred likes self-directed study:

I don't like school work because it's so conventional. You study right from the book, and you do this and this and you don't ever get to go outside because you've got so much homework and other stuff. I like it better if you could go to the library and pick out a book on each subject and read it and get to understand it. That way, instead of getting it fact for fact out of a textbook and having a test over it, I think you get a lot more out of it.

And further:

Mother told me once that I couldn't read a book, because I was too little, and so I decided to read it. And that got me started on reading more difficult books. That was a major turning point in my life. We could have learned so many things when we were younger, and how we're wasting time on this stuff, when we could have been working on our own and learning more. I hate to apply myself to a subject full-time, when I don't like it. It's a waste of time. In fact, school is a waste of time. I think school used to have me brain washed. I was told to learn something and I learned it without question. I was studying as an automatic reaction.

Mildred:

In geometry, I read all the time in class. I think I could have learned geometry long ago. In grades one through eight, it was the same old thing over and over again. Most intelligent kids are bored to death in grade school. If kids could be separated according to ability more, we would have been better off. In grade schools, teachers don't realize that you're capable of so much more--just because you're a little kid.

I don't think I ever had a teacher in the grades who encouraged outside reading. The books in the grade school library, my God. I could go through in a half an hour or so, and no one ever encouraged me to read further.

Muriel on the subject of Latin contests:

I didn't like Latin--not so much because of the language itself, but because of the teacher--she was a little screwy. She also had little contests--if you won, you got a tootsie roll--and I got a little sick of tootsie rolls.

Teacher-chatter irritates her:

If I like a subject, I will work on it on my own and learn a lot more. Teachers sometimes chatter all the time--they give you this assignment, and then they spend a half hour helping you--chattering little suggestions, and I think, Oh good Lord, why doesn't she shut up?

And her miscellaneous thoughts on education:

The perfect education would be ungraded. You would not go to the same class every day, and you would have longer times in some classes. There would be better



library facilities, a longer school year and a longer school day. I have so many things I like to do, but I don't have time. I would like to go along more at my own speed. I'd like to have a chance to do more research too. I don't like studying grammar and I don't like reading things like Evangeline and Miles Standish. I would like to be able to read more novels in school--not chapter by chapter, but reading whole books and then discussing them. I'd like to have more field trips in almost every kind of class. In English you could go to plays and movies. Last year in English we went to see A Man for All Seasons, and I enjoyed it a lot. There's so much more to education than just textbooks and lectures.

Julie is critical of her teachers:

One thing that's bothered me a lot is teachers. They think that the student should follow exactly what they say and follow only their way of thinking; that they shouldn't really have a mind of their own.

Jenny's dislike of English is intense:

I found two things that I like to study and that was SMSG and biology. That is the only two things I like to study. English I never studied. I've never had to study English. I deplore English. I think of English as grammar, but then the small, infinitesimal literature that I have had has been taught in such a way that I ended up hating it.

Carol got into difficulty with her teachers:

I wanted to get out of going to fourth grade. I talked the teacher into seeing if I could skip that grade and we almost did but not quite. I didn't prove mature enough. I needed a year's growth in friendliness. I could do it academically. Fifth grade was a lot easier, I suppose. I told the teacher off in that class. She got mad; she made me stay after school once because I was talking. I said, "When are you going to teach us something interesting?" I mean, I didn't like it. I was bored.

## Footnotes

1. Mallery, op. cit.
2. Ibid., p. xiv.
3. James S. Coleman, Adolescents and the Schools (New York: Basic Books, 1965), p. 35.
4. Goertzel, Cradles of Eminence, op. cit., pp. 241-270.
5. Ibid., p. 60.
6. Roe, "Crucial Life Experiences in the Development of Talent," op. cit., p. 77.
7. Paul Brandwein, The Gifted Student as a Future Scientist (Chicago: Harcourt, Brace and Company, 1955), pp. 63-64.
8. James B. Conant, "The Highly Creative Three Per cent of the Population," Creativity of Gifted and Talented Children, American Association for Gifted Children (Columbia University: Teachers College, Bureau of Publications, 1959), p. 17.
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10. Drows, Report II, op. cit.
11. Edith Weisskopf, "Some Comments Concerning the Role of Education in the 'Creation of Creation,'" Journal of Educational Psychology, XLII (1951), pp. 185-189.
12. Ibid., p. 185.
13. Robert C. Wilson, "Creativity," Education for the Gifted, Fifty-seventh Yearbook of the National Society for the Study of Education, op. cit., p. 117.
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## CHAPTER V

### PROFILES OF EIGHT CREATIVE ADOLESCENTS

#### Jenny

Jenny probably would not be considered pretty by usual teen-age standards. Her light hair and rather florid, slightly blotchy complexion do not seem very well cared for, she tends to be overweight; and although she is not really unkempt, neither is she meticulously groomed. In her personal relations, she affects a somewhat sneering, cynical manner; but when she is pleased, she breaks into a warm, happy smile. Conversation with Jenny is an interesting experience--there is no question about it, her intelligence, knowledgeability, wit, and original thinking are remarkable; but it is sad too, because she is a girl with extraordinary ability who has seemingly deliberately become cynical, misanthropic, and indifferent. Yet as is true of so many cynics, beneath the sneers lie a sense of idealism and deep respect for fellow creatures.

Without doubt, the most apparent quality of Jenny's personality is her rebelliousness. "If you don't see me breaking moral laws, it's because it isn't possible. I would if I could," she says. Her main disillusionment is that she has found out that all people are frauds, especially adults,

who never really mean what they say. It is not clear what has made Jenny aware of the phoniness of the human race, but this idea has become her code. Her ambition is to get completely away from people, perhaps on a South Sea island or an asteroid. She relates the plot of a book which she had read which concerned the demolition of society by an atomic war which left only two people on earth. They were completely free from the legal and moral laws of civilization; and although this was intended to be a horrifying account, Jenny saw it as Utopia.

Further, she is as scornful of her peers as she is of adults. In their way, she feels that adolescents are equally hypocritical in their relationships with each other. In her opinion, teen-agers find it impossible to have true friendships. The whole structure of the adolescent world is phony, according to Jenny. She has attended only one teen-age dance and was completely disgusted with it. The dating practices also come in for much criticism--going steady means nothing as these relationships only last a short time and are established on a superficial attraction.

Jenny shuns the world of teen-agers, with the exception of three people--two girlfriends and a boyfriend (her "soul-mate," as she calls him). The two girls share her disdain for people and are, like Jenny, intellectually inclined. Her boyfriend, Phil, is more social than Jenny, but seems to agree with most of her theories. Jenny states that her love for Phil, unlike most teen-ager's love, is real; and she is

positive they will marry in seven years when she is twenty-one. "Phil justifies my life," she says, and goes on to say that she couldn't live without him. He is the one person that she could tolerate on her South Sea island. Apparently Jenny began to date early in her adolescence, as she reported going steady with several other boys, none of whom she could stand. When asked if she is happy with herself and her life, she replied, "I'm happy because I'm in love."

During Jenny's early years, the family moved frequently; and the first homes in her memory were in very poor neighborhoods--"Not in socially-accepted places," she explains. When she was four, she says she contracted a communicable disease from a little Mexican boy with whom she played. Because of this, she was confined to bed for many months. When she was in the third grade, Jenny was told by her teacher that her I.Q. score was 158. After this, she began to develop a superiority complex; and her fellow students always looked upon her as being far above them. It seems that she was the star of the school, and she reacted to this attention by sometimes being difficult to handle. For the most part, though, she was the teachers' favorite; and she played the role of the bright child with the same skill and hypocrisy Sartre describes in his autobiography.

As a little girl around home, Jenny had an angelic disposition. Her father spoiled her, took her part continually in any controversy, and generally adored her. As she began to rebel and become difficult, her mother wondered

what had happened to her perfect little girl. She relates the story of her transformation from a "good little girl" to a rebellious adolescent with a certain relish, as if proud of the transformation.

Writing and playing the viola are two escapes which Jenny uses when she is feeling unhappy and depressed. She has written poetry for many years; and when she was in the third grade, one of her poems was published in a teacher's publication. She is familiar with most of the classic composers and enjoys playing them. She enjoys these two activities because they produce peace and quiet away from people. She doesn't like to sleep; "It's a waste of time."

Although Jenny says "people don't matter," the ironic thing is she is something of a humanitarian in her thinking about people en masse, especially the underdog and the have-nots. She sympathizes with people who live in foreign countries and with Negroes in the slums and in the South, but she is unable to recognize problems of people with whom she associates. The idea of brotherly love is phony to her, as most people are not worthy of her love. However, she is concerned about world peace and says that the present situation "grieves her."

Jenny's father seems to be the most important adult in her life. She describes him as very, very intelligent and a non-conformist, who has undoubtedly inspired many of her unorthodox attitudes. He has moved from job to job (he is usually a laboratory technician), always doing well,

but unable to conform to company rules. Usually there are stormy confrontations with bosses, and then he will quit. When asked about her father, Jenny replied, "He is a nut," and she described some of his bizarre idiosyncrasies. Like Jenny, he is anti-people and has no friends or acquaintances. He is an omnivorous reader and, says Jenny, in his own way, a deeply religious man. But her disillusionment with her father is apparent, especially since he recently upbraided her with "There are certain social values we must live up to."

In contrast Jenny's mother is sober, nervous, and a chronic worrier. She works in a welfare office and is apt to bring her problems home with her. She has an inferiority complex about her intelligence, and feels inadequate when Jenny and her father are conversing about philosophical and theoretical matters. She often accuses Jenny of liking her father better than her, which Jenny admits is probably true. Although she quarrels violently with her mother and resents her attempts at supervision, she concedes that her mother supplies the sympathy and support when she needs it, while her father provides her with "good times."

Jenny has one brother who is several years older than she. When they were younger, there were many disagreements between them, provoked by the father's obvious partiality for Jenny. Now, however, they are very close, and she admires him. They often double date. He is a happy-go-lucky, athletic type who has been a popular high school

sports hero.

Another rather bizarre character in her life was her grandmother, who lived with them for several years until she was finally sent to a mental institution. She moved into the home after her husband died, and gradually her grief turned to a permanent melancholy, and then to extreme cantankerousness. Always criticizing everything, she quarreled violently with the family; and Jenny feared she might come after her with a knife.

Jenny's intelligence carries her far in her studies without any great effort. But she is very critical of poor teachers. Although she reads a great deal and likes to write poetry, she "abhors English. I think of English as grammar. But then the small, infinitesimal literature I've had has been taught in such a way that I end up hating it." But she says she has had good teachers too.

More than anything else, Jenny has a horror of cant. She will not say anything that is the usual. She will say nothing rather than say the obvious. Asked what her interests are, she will say: "I don't know. I don't know what interests me. Poetry--something theoretical. I don't know what interests me." This is not the statement of a dullard, but is, rather, a positive statement by a person with "a deep-seated pessimism," to use the term she applies to herself. In the style of "the beat," she seems to see vacuity, saying nothing, or even saying things that are obviously meaningless, to hollow speech and empty words that are worse than nothing



to the person who is searching for the highest meanings. As grim as Jenny's comments often are, there is a tremendous nobility about her--here is a very young girl already in a tortuous and rather existential struggle to find meaning in life. She is very much lost and disillusioned, but she is fiercely honest and will not tolerate a shred of mendacity. Jenny horrifies the listener, but she inspires great admiration too. One senses a potential greatness in her; and if she doesn't bog down in the slough of bitterness, one can imagine her formidable talents being put to a great use.

## Mark

Mark is a tall, slender boy with fair hair and rather small, near-sighted blue eyes--a fairly good-looking boy. But it is his bearing rather than his physical appearance that one finds most arresting; for Mark is a youth of exceptional intensity. High strung, tense, nervous, seldom relaxed, he seems to have difficulty keeping his vast resources of energy under control; and one cannot talk to him without being aware that some very strong inner force must drive him. One does not really converse with this dynamo, one listens--listens to an outpouring of ideas on nearly every subject, strong opinions, fantasies, zany stories, plots and plans, and above all, expressions of egotism--for almost continually Mark is saying, "I am great. I can do anything."

What may lie beneath the surface of this creative boy is difficult to know--for all of his talk, Mark keeps his most inner self private. But it is clear that he sees himself as a genius, and perhaps he is. If drive, unquenchable energy, and fecundity of mind are qualities of genius, Mark, possibly more than anyone else in this study, might come closest to being one. His egotism is not entirely unjustified. A devourer of books (always non-fiction) and magazines, he knows something about a wide range of subjects; and in the area of science, which is his great love, he seems to be quite an expert. His hobbies are metallurgy, photography, geology, astronomy, and mathematics; yet he perhaps has more to say about aesthetics than anyone in the group.

Novels, he spurns, unless required, and novelists he sees as "nothings"--people who are warped and mal-adjusted; he declines to support them by reading their sick words.

Mark's strongest suit is his ability to talk well--indeed, brilliantly on almost any subject. By sheer brute force, he uses his verbal pyrotechnics so skillfully that he is able to present even half-baked facts, prejudices, and wild opinions and make them sound convincing. He has all the attributes of a successful debater. He overwhelms the opposition. Often speaking in a mocking tone with an open display of good-natured arrogance, he seldom says anything completely seriously.

Mark appears to have an almost limitless fountain of energy. He continually has a number of projects going and he works on these activities until he's ready to drop. In fact, he says he sometimes concentrates to the very end of his energy reserve, and he physically collapses. He does his homework at this same feverish, frenzied pace--he read The Tale of Two Cities and wrote a twelve page essay on it in one night. Above all, he abhors laziness and passivity in others. He admires Frank Lloyd Wright and Charles Kettering because they were men who used their time well. In his own life, he has fifteen carefully defined goals which he hopes to accomplish, and he has worked out a schedule to accomplish these which he must keep to at all costs. He tries to plan even very minor actions so that nothing will interfere in the larger scheme of his schedule. Although

he is egotistical about his ability, he is humbled and awed by the learning that he must do within the huge areas of human knowledge which he hopes to conquer.

People en masse are unimportant to Mark, but he is extremely concerned about the important of individuals. Only they can really accomplish things or change the course of history. Society as a structure, he says, is bad, because it tends to destroy individual freedom. He is concerned with encroachment of government on personal lives, using licensing as an example. As for himself, he wants society to leave him alone.

Mark doesn't get along overly well with many people. As he says, people come to hate him very quickly. He does have a very close friend who is bright and creative like himself. Most of the time, however, he prefers to be alone. It is almost impossible to imagine Mark fitting in with a teen-age group; one could as easily imagine an Einstein enjoying the social whirl of suburbia.

Being an operator, a con-man, having the right connections--these are the ways to get what you want, theorizes Mark. His cynicism permeates his thinking. He wants to make lots of money and fast, so that he can do all the things he would like to do. His plans are zany. He would like to write books, make films, climb Mt. McKinley, and psychoanalyze everyone in the world and categorize them. "Certain types would emerge--I know, I've started it." All of this is said in mock seriousness. He says, "Do I have

a favorite joke? My favorite joke is me." With his intensity is mixed a strong element of bufoonery.

Mark describes himself as a weirdo, a crackpot. He describes walking down the street and seeing people as people but not believing that he, himself is one. Perhaps, he says, he is a robot. Unless he is talking, he says he feels "nebulous." Adults, he says, are "dried up. One person out of 1000 is still idealistic and a weirdo." And on teen-agers: "If adolescents are good ones, they're better than adults; if they're bad, they're worse. The good ones are still idealistic--they think everything is possible." What he dreads the most are "catastrophic inevitabilities," which keep him awake at night, and worry him all the time.

There is a wildness about Mark that manifests itself in his feeling for beauty. It isn't pictures or music that inspire him, rather it is buildings, because they have use, they're real, not fake and phony. "I've seen buildings I've absolutely fallen in love with. Seeing them is like taking opium. You have certain muscle dilations and you feel the tingle and tangle." He also sees beauty in motion, and he tells of the exhilaration that he experiences as he watches the undulations of wheels on the road.

He is highly competitive and thrives on it. He does good work in school because he can't stand to see others pass him by. He is all for casting out the "dumbbells" into purely technical training, while he and others like him can reach high standards through their natural competition

with each other. He thinks that the desire to compete must come from within, as a teacher-imposed competitive situation hurts those who are inferior.

The underdog has none of Mark's sympathy. He is a firm believer in rugged individualism. He feels that giving a chance to Negroes will cause them to become only more difficult and will accomplish nothing. He is contemptuous of his underprivileged classmates, as they will become future leeches which he and other taxpayers will have to support. "What is being a human being?" he asks. "Not tromping on other human beings."

Mark is completely scornful of school. It is merely a place where you have to learn to like things that you really aren't interested in. In fact, the hardest part of school is to "get interested." This, you must do by yourself, he says, as teachers can't inspire interest in anything. He was reading before kindergarten; in fact, he says he was reading when he was three. "Grade school was just a play period--supervised torture." Apparently, he rebelled often and had many severe confrontations with teachers. He likes junior high school better, but most of his courses bore him. His chief complaint about schools is that they try to mold people, and they kill children's inquisitiveness. He has no love for teachers and describes them as "little big shots." He knows more about the courses than the teachers do.

Mark lives in a modest little home and the family consists of one older sister, in addition to his parents.

He flatly states that he doesn't like her and has no desire to know her better. It is difficult to learn very much about his family life, not because of perversity but more, due to a strong sense of privacy. This attitude comes directly from his parents, who also oppose any invasion of privacy. One feels, however, in spite of his flippancy when asked about his home, that it is a warm and supportive one, and that he is happy with the situation. But one learns little about it.

Mark is enigmatical. His high ability, his tremendous drive and energy, and his ambition are mixed with zaniness and bufoonery. One has the feeling that he is "pulling your leg" much of the time, and yet many of his ideas are quite brilliant. He is wild and crazy, yet genius-like too. He does, perhaps, have the stuff of greatness.

## Beatrice

Beatrice, a girl with twinkling eyes and a sparkling personality, probably would not conform to the teen-age ideal of beauty, but she is, nevertheless, a rather pretty girl. Somewhat above average height, she appears even taller by virtue of the fact that she wears her brown hair in a loosely put-together bun on top of her head. However, as she talks with her usual animation and liveliness, the bun bobs about and keeps sliding somewhat to the side, adding to the general effect she gives of dishevelment. She has a well-scrubbed, if slightly blotchy, complexion, which is wholesomely free of any make-up. The overall impression she conveys is of an uninhibited, somewhat rambunctious, and merry tomboy who has just recently arrived in adolescence, but has not bothered to celebrate the advent by taking on the customary early teen-age affectations of a cool, detached manner, poorly applied eye make-up, and air of boredom with adult society and affairs.

Beatrice came into the interview carrying a pile of books, the top one of which was Drieser's Tycoon, which she happened to hear about and wanted to read. At the very start, then, she and the interviewer talked books (she was also reading Michener's Hawaii). Then she became interested in the tape recorder, and with equal zest and enthusiasm, she discussed recorders. This was typical of her. She knows many things, reads many magazines and books, and she loves to



talk about them. These are, perhaps, her two outstanding characteristics--her liveliness and her breadth of knowledge. She talks intelligently about world peace, drop-outs, politics, Lincoln as a President compared to Kennedy, the Catholic Church, birth control, her family (she described them all), and welfare programs. She is filled with opinions and editorial comment on all of these and she speaks with verve, wit, and good humor. Beatrice is well-informed, indeed, about the events of her world; and her world is not a small one--it is a very wide and exciting one.

However, even though she has definite ideas and takes stands on issues, she is not dogmatic or inflexible. In fact, she prides herself on being able to understand the other fellow's point of view, and so she is very much interested in listening to others' ideas. She says she would like to develop the ability to talk to anyone on nearly any subject because she likes people--and she also thinks this would be a handy skill for a politician which she hopes to be.

Even though Beatrice is a great talker (after a two-hour period, the interview schedule was still only half way completed), she does not reveal a great deal about her inner self. She is interested in world events, particularly those of political significance. She does like to talk about her rather disjointed family, and she does readily describe her plans for the future, her activities, and her opinions on matters; but she does not seem to be troubled with personal doubts or fears or anxieties. But perhaps inner conflicts

have been resolved (she does say she has overcome moodiness and unpleasant temperamental streaks), and she can, with a remarkably clean bill of mental health, turn her considerable energies to the world without rather than dwelling on the girl within.

Beatrice has had a rather hectic home life. Her mother and father were divorced when she was five. She and her mother then came to live with her grandparents. When Beatrice was fourteen, her mother re-married, and they moved from the grandparents' home, although Beatrice continues to see them a great deal. She obviously adores and tries to emulate her grandfather. An intellectual man, a great reader, something of a sage, a "born salesman," her grandfather liked to spend afternoons sitting in bars and other public places with his cronies; and he would take Beatrice along. She loved it, and she has learned to respect her grandfather's ability to enjoy all kinds of people, his understanding of the world, his good humor and joie de'vivre. Grandmother, more a conventional type, disapproves of Grandfather's indomitable gregariousness, and there is friction between them--but one has the feeling that the friction does not run deep, that there is much affection and warmth there too. Her grandmother, Beatrice says, is sensible, practical, and sedentary; her grandfather is always on the move, impractical, and "very, very tender-hearted." Beatrice says, "He sold real estate until he just couldn't stand selling people what they couldn't afford anymore. He has a real heart."

She and her grandfather exchange books and articles, and they always argue politics, since she is a Democrat and he is a Republican.

Beatrice, with the hilarity of a Patrick Dennis, tells the story of how she found out about her mother's re-marriage. Grandmother, a newspaper proofreader, first read about the upcoming marriage in the "Licences" section that she happened to be proofreading. Beatrice describes all of these family upsets with a real sense of comedy. If they upset her, she doesn't reveal it. Even her grandparents' constant clash of temperments she sees as very amusing.

In spite of her gregariousness, Beatrice has spent a good deal of her life alone. When she was a youngster, her grandmother and grandfather were working, and the mother was working too; so she was on her own in the summer, especially, day after day, with the neighbors kind of looking in. She thinks this was fine. She enjoyed being alone, and she says she was never lonely. Later she was in charge of two younger step-sisters--in fact, she almost became their mother. "I've already had my family," she laughs. "I was often taken for the 'lady of the house' by door to door salesmen." She feels she has as fully a developed sense of responsibility as an adult and is glad she had the chance to develop in this way. She says that when she has children, she wants them to have independence just as she was given independence. She isn't going to feel concerned if they are loners.

Beatrice's religious background is nearly as confused

as her family. Her grandfather, who was a Methodist, turned Catholic to marry her grandmother, but has never attended church. Her mother was forced to marry outside of the Church because of her divorce. Beatrice was given a free choice of religion by her mother; and she chose to be a Catholic, although she questions many of their social and theological stands. She is vehemently against the Church's stand on birth control. In her catechism class, she asked many questions which have never been answered to her satisfaction. She denies the Church's claim to be the only true church and draws upon her knowledge of other religions to prove her point. She says that all religions are good if they are practiced in the right way. Her grandfather admonishes her to believe in God but not to be narrow-minded.

She has time to read a book or two a week because she doesn't have to bother about homework. She gets her homework done easily, partly because it is easy for her and partly because she has learned the trick of studying principles and generalizations rather than memorizing details. She uses her time well. She has such a wide range of interests and she wants to learn about many things; and in order to do this, she has to plan her day carefully. On the other hand, she says, "I don't plan it so carefully that I exclude the unexpected. I want to enjoy the unexpected and the unplanned for too."

Beatrice is an optimist. When talking about the chances for world peace, she expressed belief that there

was good reason for hope, even with the atomic threat.

"After all, there has always been an ultimate weapon, starting with dynamite." She is also positive in her attitudes toward her own personal life. "There's always a good side to everything. My moments of sadness are just momentary."

She makes good her concern for people by working every week in a retraining center for underpaid workers who want to further their education. She says, "These people are really quite intelligent and only need a chance." She says that everyone can be used and should look for ways of helping and sums up her feelings by saying, "My philosophy of life is to do as much as you can for the people around you."

Beatrice has always spent most of her time with adults and still prefers to talk to them rather than to her peers. She has few close friends of her own age. However, she is not disdainful of teen-agers, but, rather, she views them philosophically: "I get along fine when I'm with a group of teen-agers. I don't feel that they are lower than me; you just have to remember to adjust to a different kind of talk. It's just like when you're with children--you have to adjust." And on boys: "In a boyfriend, there's nothing I hate more than to go out and talk about hot rods all evening. It's kind of a problem in school. I want a boyfriend to be as intelligent or more intelligent than I. I like someone who has read a little bit and who can talk about things."

Beatrice's ambition is to enter the field of politics.

"I want to be a favorite daughter." She has joined the Democratic Party--"I didn't have enough money to be a conservative Republican." She has a keen desire to serve her fellow man and politics will be her medium. She wants to attend a college that is demanding, academically, and is exploring new areas of knowledge.

Beatrice is a girl with great spirit, drive, and knowledgeability--and a real desire to serve her fellow man. Her rather curious home situation might have damaged her, but instead it has given her a maturity and even a wisdom that is unusual.

## Jeff

Jeff is a rather ordinary looking boy, if one should judge only by his physical appearance--he is slight, wears glasses, and has a somewhat pallid complexion; but his liveliness and animation light up his face and make him an extremely interesting boy to watch and listen to. He is articulate, sensitive, and enthusiastic; and he enjoys good conversation. He is not only an engaging talker, but he listens well to what is being said to him, and laughs appreciatively at good humor. He is the kind of conversationalist who could go on for hours, and one would find him enjoyable.

Jeff has always lived in Lansing, although the family moved once from the center of the city to a suburb. Even though he seems to be a pleasantly social youth, as a little boy, he was very much alone, primarily because he so much enjoyed his own activities that he didn't feel any need for companionship. Also, he never liked sports because he was always small; and so in his early childhood he ignored the other boys who were engaged in games, and immersed himself in projects at his workbench. Furthermore, the other boys never shared his interest in his technical projects, so he simply went his own way. He was quite content with this situation and cultivated the attitude that if others wished to play with him, they would have to share his interests. As time went on, his parents began to stress the

advantages of developing wider interests and in involving himself with other children. He now considers himself a much more outgoing creature than he was, but many times he still prefers his own company. He likes people, but he likes being alone too.

Electronics and its many facets dominate Jeff's leisure time. He always has many projects in various stages in the family basement, where he sometimes works for several hours steadily. His reading also consists almost exclusively of scientific and technological content. When asked by the interviewer what book he had read recently, he said, "The Radio Amateur's Handbook." He also reads many technical magazines, such as Popular Mechanics and various electronic publications. Just lately, he built a small hi-fi set which worked perfectly at its first trial. His projects generally begin as small ideas; but as he develops them, they become larger and larger until sometimes they become so big that he becomes discouraged and discards them. When he is not immediately involved in one of his projects, he is dreaming of what the next one will be. A practical boy, though, if the material involved in the project is expensive, he does see to it that it is used eventually, if not in the present project, at least in another.

Jeff has an affinity for complexity which is revealed not only in his electronic projects but also in his conversation and thinking. (Drews found him to score extremely high on a complexity scale she administered). In class dis-



cussions, he recoiled from over-simplicity and often pointed out various ramifications of the issue at hand. He told the interviewer, "Things that are simple don't have any challenge to me." He readily admits that he doesn't know all the answers and violently dislikes those who pretend they do. Inflexibility is one of his least favorite qualities in people.

When Jeff was younger, he visited an uncle in California who is a physicist in charge of important experimentation at Berkeley. Jeff says that this experience had a tremendous influence on him and perhaps changed the course of his life. This uncle, besides being a brilliant scientist, had a great variety of interests and knows something about many areas of knowledge. Up until this time Jeff had been totally immersed in the technological field, but his admiration for his uncle led him to a determination to learn and experience as much as possible about everything. He now has a tremendous drive to cultivate new interests; and he is aided in this by a great reservoir of energy--"I don't like sitting."

Although it will be surprising if the world of technology does not claim Jeff, he is more humanistic than many of the students in the study. He, himself, would rather work with machines, but he is concerned about people. "People are important," he says. He is concerned about the problems of automation and how it will affect people. He is convinced that each individual has a responsibility in society to improve human conditions in the world and that

one must operate within the framework of society--"It's not good to be an oddball." Rather than viewing technology as an end in itself, he states, "Technology should be used to serve people."

One of Jeff's most appealing and obvious characteristics is his sense of humor. He is very fond of the subtlety of the British films. When the interviewer related several incidents from films which he had seen, Jeff laughed with great enjoyment. His favorite television programs also involve humor, and he admires Red Skelton above all other TV performers. His own original jokes and quips are dry, almost of the Will Rogers variety, and are devoid of cynicism or sarcasm.

Jeff has two close friends: one who shares his deep interest in electronics, and the other who philosophizes with him, canoes with him, and sings with him. He sees friendship as a relationship of acceptance. Aside from these very good relationships, he is very content to be alone. Girls have not yet discovered Jeff, but one has the feeling that when they do discover this boy with a rather zany sense of fun, yet of wide-ranging interests, he will be a popular date.

The world of nature has more appeal for him than the world of art and literature. He likes beauty in its natural form, whether it is a mountain or one single flower; and skin diving is of interest to him essentially because of the beautiful, underwater scenery. He takes many canoe

trips in the north woods with his friend and revels in the wilderness beauty which they pass through. He seems to have reverence for nature and expresses a genuine concern for conservation.

Next to electronics and, perhaps, his love of being in the woods, Jeff's most engrossing interest is music. The family has an organ which he plays a little, a hi-fi set on which he enjoys playing every kind of record, and he has had several years of guitar lessons. It is with the latter instrument that he spends most of his time. He has been a member of a small neighborhood combo in which he played typical teen-age rock and roll and has performed with a friend, who also plays guitar and sings. Folk singing is his favorite type of music, and he has learned a repertoire of folk songs by listening to records. He and his friend are proficient enough to have earned an occasional semi-professional performance.

Jeff's family includes his father, mother, and two younger sisters; and they live in a pleasant suburban area in a gracious home surrounded by a large yard filled with trees and shrubs planted by his father. It is a close-knit family. Jeff states that they "do almost everything together." There have been many family trips and camping expeditions in the summer. Jeff's philosophy of what parents should be probably reflects his own family experience--"Parents should be people who share their kids' joy." During Jeff's early childhood, the father traveled extensively in his work, so

Jeff turned to his mother with his problems. However, he is very close to his father, especially since they share an interest in working with wood, electronics, and other building projects. He has a strong affection for his sisters, particularly the older one whom he talks to with more freedom than to either of his parents. The entire family seems to be lively and interested, and Jeff feels there is probably much more discussion in his home than in others he has visited. His parents are supportive while allowing him freedom to choose his own way. When he was a little boy, he recalls that he was allowed complete freedom to roam around and explore. Although his father wanted him to participate in athletics, when it became obvious that Jeff was neither interested or talented in this area, his father withdrew any pressure in that direction. They encourage him in his school work and appreciate his good grades but do not stress them out of proportion to their importance. All in all, it seems that his family have given him a maximum amount of love and support while allowing him the freedom to discover his own identity.

Jeff's experiences in school have been relatively happy except for the repetitiveness, which he hates. He found this particularly true in elementary school where "they taught us to add every year." Because of his talent in science, many of these courses have been much too basic for him; so although it is his favorite subject, it is rather sad that he often finds it quite boring. English

is more difficult for Jeff, as he doesn't enjoy writing, and reading novels and poetry is unappealing to him. He likes classes that have lively discussions where he can take different sides of issues. He sees this as a way of learning. He is uncritical of most of his teachers and asks only that they be demanding, challenging, and require hard work. He is a great question-asker and has annoyed teachers who misunderstand his curiosity and occasional mischievousness for trouble-making.

Although only a ninth grader, Jeff had already known for some time that he would become an electronic engineer. As for his personal goals, he wants only to be himself. As he puts it, "I want to be myself, really accomplish something, and better the world." He would like money, not for its own sake, but only as a means of acquiring the things he enjoys. He is optimistic about his future and, indeed, his optimism is probably justified. With his alert and keen mind, his lively personality, and his record of accomplishment, he will probably do well in his high school career, possibly achieve high grades on National Merit tests, and go on to a successful career in a technological field, yet maintain his humanistic concerns.

## Lisa

Lisa is a tall, slender girl with blonde hair and unusually large brown eyes which have been described as "doe-like." They give her both a sensitive and, perhaps, a slightly frightened look and a delicate, wistful beauty. Her clothing, though neat and clean, seems to be just a bit worn and not quite in style. It may be homemade, and it presents a slightly old-fashioned appearance. However, in spite of her quiet, gentle manner, she communicates well; in fact, her verbal skills are exceptionally well developed. This delicate, sensitive girl has definite ideas and considerable ability; and one finds her to be an interesting and stimulating conversationalist.

When Lisa was a young girl, her family lived in the country, where she felt--and, indeed, where she was, very much alone. There were no playmates nearby, and her brothers were too young to offer much companionship. During these early years, Lisa developed the feeling that people disliked her and were "against her;" and when she started school, she was behind in reading, which added to her feeling of insecurity. Although she was terribly alone in the country, she came to love the things of nature. She tells how, when the family finally moved to the city, she wanted so very much to take her favorite big, old tree with her.

The family moved to Lansing when Lisa was in the second grade because she was suffering from allergies.

Although there were many children near their new home, she still had trouble fitting in. "I never did things like to play hopscotch or jump rope." Her mother, apparently a very fearful type, was extremely aware of the dangers of a big city and refused to allow her to roam and explore any distance away from home. Lisa resented these restrictions: "Inwardly I was rebellious, but outwardly I was quiet and calm." Those first years in Lansing were lonely ones, and she remembers only being known as "the kid who gets good grades." She was extremely sensitive and recalls how much childish teasing hurt her feelings. One of her most vivid childhood memories is watching a little girl being teased and tormented, and she remembers her almost painful empathy with this unfortunate girl.

Today, even though she is a sensitive and introspective girl, she has acquired a good deal of inner security--she says possibly because she understands herself so much better now. She says, "I feel myself a lot more serious than some people are," and she sees herself as often playing the role of spectator rather than participator. But this doesn't seem to be a problem. "It's more natural for me to look on." But she has a thoughtful and curious mind: "I just keep thinking and bringing up more questions," she says. When asked if she feels more sensitive to the emotions and feelings of others, she said yes. She expresses her abhorrence for gossip--or anything that may hurt people.

Lisa has a strong aesthetic sense. Her family

travels every year to the Upper Peninsula; and she talks about the beauty of the lakes and countryside and the picturesque quality of the old mining towns. She often speaks about her fondness for old things--antiques and little towns that seemed to have missed out on progress. She has great concern for man's destruction of nature. She dislikes expressways--she says, "It's sort of comical, people moving so fast today, expressways getting people places sooner. And in the meantime they're spoiling all people want to see." Perhaps it is indicative of Lisa's character that she prefers the quiet by-ways and old-fashioned villages to the tempo of modern cities.

But Lisa's greatest aesthetic love is music. She has taken violin lessons for seven years and has won awards for her accomplishments in this area. Her music teacher has had a great influence on her in several ways, not only in giving her excellent training, but also in helping her develop self-confidence and poise. Penny's favorite composer is Bach, and she sometimes plays him by the hour. She also enjoys every other type of music, except jazz. She performs in recitals often and is finding that gradually she is able to lose herself in the music in public performances. This was not true when she first performed, as her shyness and insecurity caused her to be terribly aware of herself, and this self-consciousness took precedence over her performance. Lisa says that she can express herself best through music, then through writing, and least of all in talking.



Although she hopes to win a music scholarship, perhaps to Interlochen, she feels she probably will never be a concert violinist. But her favorite daydream places her in a concert hall with an audience applauding for her performance. She sometimes plays several hours in a day and completely loses herself in her music.

Lisa also enjoys writing as a means of self-expression. She is especially fond of writing descriptions of places and people, and she likes to write poetry. As a child, she "read with a passion" and consumed at least one book a day. She became so involved with the characters that she often wept with them. Next to the violin, her favorite pastime is still reading.

When Lisa was asked what she likes least about herself, she replied that her mind tends to wander when she has an assigned task; and she feels that her school work suffers because of this. She is a great daydreamer and likes thinking more than doing--"I guess naturally I'm a thinker."

Lisa is a timid girl, and yet she has a strong sense of individualism. She says about herself, "I think I'm the kind of person who is kind of split. I've never been able to make myself one kind of person." Sometimes she is a social creature: "I like dancing and parties and like that too, but not so much as other people." She does enjoy boys, and she says she can see both being alone and being in a group. Because of her shyness, one might think that Lisa is weak, but actually she seems to be strong and quite

positive in her attitudes toward herself and life. She has strong opinions, which she expresses quietly but with strength; and one feels that she would not be easily intimidated.

She has two brothers, thirteen and eight. She strongly identifies with her mother, whom she admires very much. The mother returned to college and earned her bachelor's degree when the youngest child entered kindergarten, and she is presently working on her master's degree. She is an elementary school art instructor. Lisa states that her mother has a great love for children and is extremely fond of her work. She has involved Lisa in her education and also her work, and Lisa is very happy that her mother is working. Because of this happy experience, Lisa is a strong advocate of combining a career and marriage.

Lisa thinks of her father as the practical one. He thinks in concrete terms, while her mother is more involved with ideas. She thinks that she has combined their characteristics and is able, on the one hand, to be practical, and on the other, to be idealistic. One of her brothers is very social and energetic; and the other is a dreamer and a serious student.

All the members of the family have many activities and are sometimes frustrated by the many demands which prevent them from doing things together. They have many lively discussions at home, and Lisa feels more free to express her ideas there than in school. Her parents often discuss their dislike for the "barbarous" aspects of modern life,

such as funerals. The father is very interested in politics, and Lisa enjoys her discussions with him on this subject. This seems to be a harmonious family of distinct individuals.

Although her first years in school were not happy ones, she states that she has always liked school. When she entered junior high school, her shyness diminished somewhat. It was then that she developed a sense of humor, and she says that she finally learned to take a joke. She conforms to the rules of school; and although she thinks of contradicting teachers, she does not. She dislikes learning things by rote but otherwise is quite satisfied with the education process.

In her fantasies, Lisa would like to become a concert violinist, but she thinks that this is quite improbable. She plans to become a teacher of music. She hopes to teach other values along with music, as her own music teacher has done. She also wants marriage and a family and is certain that she can successfully combine a career and marriage. She is strongly motivated to become an accomplished woman and seems to have the ability and drive to do so.

## Nathan

Nathan, a tall, well-built boy who is very dark and strikingly handsome, does not present the appearance of a typical American boy, but rather, reveals through his coloring and features a Syrian background. He has an open, genial smile and greets people with an air of somewhat off-hand friendliness. Nathan is a well-coordinated boy whom one might guess would do very well in athletics; but in spite of his mesomorphy and his obvious physical qualifications for success in this all-important teen-age activity, it is not athletic prowess that Nathan admires and hopes to achieve, but rather, individuality and intellectualism.

Apparently, it was largely through the 9th grade social studies class--the Drews' "Being and Becoming" experimental class--that Nathan discovered what it is like to be an "intellectual" and an "individual." Whether it was the materials themselves, the other very gifted members of the class, or the dynamic teacher--that inspired him, it is difficult to say; but Nathan himself says, "I wonder if Dr. Drews knows how that course shook me up. This whole problem started from that course, when they encouraged creative thinking and individualism--and it all sort of mushroomed. It sort of created a monster--a Frankenstein monster. That course changed my outlook on things."

Nathan, then, wants to be an intellectual and an individual, which means he is in revolt against the conformity,

the phoniness and the anti-intellectualism of teen-age (and adult) society; against the tedium of his regular school classes; and against his family, where he is "the baby." But Nathan is a "nice boy" and lacks the courage of a real rebel; his rebellion is more inner--or at most, verbal--than overt.

This young boy might best be described as a searcher. A multitude of questions which he is trying to answer have been raised in his mind. He sees his present life as a quest for identity and meaning; and he wants to discover and develop his own code to live by. His searching among religious teachings and "cold hard facts" has only produced confusion. He wonders who he is. "I have a million fronts I can put on. I can feel myself putting them on." He is further disturbed by the knowledge that even though he may find his code for living, there will still be many restrictions which will prevent him from following this code. He is confused; and he says he would like to run away--but he thinks how foolish he might look if his escape fails--as he knows it probably would--and he would have to return red-faced.

He is a shy person--"I'm more of a loner than I used to be--I've come to hate hanging around with people." As he gets older, he feels that he is becoming more and more anti-social, although he does admire Arthur and Jenny, who like him, are aware of complexities. He dislikes intensely being in a crowd and having to make small talk. Teen-agers bore

him, with their "straining to put on facades" and their inability to see how "complex life really is." They think only about the weekend and the next dance. He is especially wary of conversations with girls and never dates and seldom attends parties. Because he is so bashful, he says he sometimes compensates by making rude remarks to people. But as one talks to him in an interview (and meets him in the small bakery store where he works for his father), and one observes his geniality, one wonders if Nathan may not seem more rude to himself than he does to others.

Nathan says he is an extremely practical fellow. He shuns aesthetics because he is unsure what beauty is and who sets the standards. He argued at great length with the interviewer about emotions and the need to abolish them from people's thinking and actions. He would like to think that he can train himself to be completely objective.

Anti-feminism is a favorite theory of David's. Apparently in his home, his mother and sisters are somewhat subservient, and this attitude has had a decided effect on his thinking. He expressed an inclination not to marry; but if he does, he states that his wife must not question him in any way and that she must accept his superior intelligence and knowledge. He is also against women working away from the home and would not allow his wife to do so. When questioned about wanting an intelligent wife, he conceded that she should be knowledgeable about the things in which he is interested but not in an equal degree to his own know-

ledge.

Nathan knows about intellectualism and non-conformity and, ideally, he would like to operate in these styles. He admires the process of being an intellectual and thinks he is one of the few intellectuals in his class; but when questioned about literature or ideas in depth, his answers are rather vague. His reading is quite superficial, and the number of books he reads in a year would be small. "Up until the ninth grade," he says, "I bet I didn't read more than five books." Now, his reading seems to be part of this process of playing the intellectual roll. As for non-conformity, Nathan sees individuality as a desirable and admirable quality, but he admits he "falls under to conformity." One of his reasons for failing is, "It's not popular to be an individual." He is very honest about this dilemma and states quite frankly that what he wants to be and what he is are two different things.

Nathan is pessimistic about people and the future of the world. He feels there is no hope for world peace. He is critical too of the idea that American policies are all good and the Communists all bad. He is cynical about people and their hypocrisy: "They're always putting on a front, are never themselves." Although this cynicism and pessimism dominate his thinking, when asked about his philosophy of life, he said that Christ's philosophy is the ideal one.

The family is Roman Catholic, but the parents seldom

attend church. Nathan's sister is a nun, and apparently the other brothers and sisters attend church regularly. He is skeptical of the church dogma and has often questioned the priest in his catechism classes. He doesn't hope to find his identity or the answers to his questions through religion, but he seems to be satisfied with the process of church-going.

Although Nathan expressed an antipathy toward art and music, he does have a strong inclination toward writing. He has always wanted to be a writer and used to picture himself as another Hemingway. Since studying American literature in school, his ambitions are more realistic; but he still enjoys writing, especially poetry.

Nathan's family consists of five children, three boys and two girls. He is "the baby" of the family--the other four children are in their twenties. The father immigrated from Syria to the United States when he was sixteen years of age, returned to his country briefly, then came back and became a baker. He now owns a small neighborhood bakery shop. This business is a family affair, and Nathan spends most of his afternoons after school working in the store. He says that his father has never had time for traveling or other activities with the family because of the store. However, Nathan seems to accept the fact that the business is a vital part of their lives in which they all have a share of responsibility.

When questioned about his sisters, he dismissed the subject as completely uninteresting. He doesn't seem to



know his sisters very well and has no desire to. As stated previously, he is anti-woman and finds them generally unworthy of his attention. His mother is a home-body who works hard, helps occasionally at the store and has few interests that aren't family-centered. His two brothers are very different types: one is a serious student and conscientious young man who is presently teaching at a school for handicapped children, and the other is a rebel and somewhat of a playboy. Nathan likes the teacher the best, but he feels he is most like the rebel. He identifies with both brothers much more than with his father.

Because he is the baby of the family, he finds himself being coddled and over-protected. He resents this position and threatens to run away. He thinks his opinions are scorned by other members of the family because of his youth; but even though he is rebellious at being so treated, he seems to conform to family discipline, at least outwardly. He says, "I'm an angel at home, a rebel at school."

Neither of his parents graduated from high school, and he feels that this is the reason for their lack of interest in his school activities, except for his grades. He is antagonistic toward their pride in his A's without really knowing what they represent. They "pat me on the head and call me their little genius," he says, which angers him because he recognizes the "meaninglessness of grades."

Nathan displays much skepticism about the educational process. He looked forward to beginning school; but when

asked when this excitement began to wane, he replied, "the first day." He always felt in elementary school that he had the teachers fooled; and when they gave him good citizenship grades, he laughed because his exemplary behavior was "just a front." Teachers admonished him to set a good example because of his leadership qualities, which he related to the interviewer with a good deal of amusement. He has always strived for good grades, but only to please his teachers and parents. He views his high grades as a measurement of how well he was able to deceive the teachers. He is critical of textbooks and says he has never had a good one. "Texts always give a picture of what the world used to be like rather than what the world is like today." In general, school to Nathan seems to be a place in which there is little challenge and much sheer stupidity. "School is a bore," he says.

When he described the qualities that he would like in a best friend, he stated that he would want a friend that will depend upon him and gain strength from him. Tired of being the "baby" he wants to be the powerful friend, the superior intellectual, the dominating husband.

Nathan reveals in his interviews a somewhat self-conscious search for self and, perhaps, something of an intellectual affectation. Yet his search leads him to view himself with honesty; and his goal--to become a distinct individual--is a noble one. His life is inwardly at least in rather a turmoil at this point in his life, but it is

the kind of turmoil that, perhaps, many introspective and philosophical young persons must experience. Nathan's quest, however, seems to have occurred somewhat early in life. One is more likely to find the soul-searching Nathans on the college campus than in the teen-age world of the junior high school.

## Sarah

Sarah is a plain, very sensible-looking girl. In fact, her appearance is more in the style of a conservative matron than a teen-ager. Her hair is flat on top and curled tightly at the ends, far from the "poofy" type that most adolescent girls wear. She has rather thick glasses, which tend to make her eyes look small. There is a lack of color about Sarah, and even her clothes are in drab shades of browns and are quite tailored. Her shoes are the kind that are fine for miles of walking but do not appeal to one's aesthetic sensibilities. However, she has a pleasant smile, which somewhat relieves this rather colorless appearance. In general, though, she does lack the sparkle which one would like to find in a young girl.

It is difficult to discover the real Sarah. She seems to be almost obsessed with the idea of not wanting to be part of the group. Yet, there are indications that her adamant rejection of the group may be very closely tied to the group's rejection of her. She seems to have few friends in school, if any. In her interview she emphasized over and over again that she wished "to be an individual" and did not want "to follow the crowd," but she never seems to consider for a moment the possibility that one can be an individual and still associate with others. She appears to feel that her attitude toward other teen-agers is extremely praiseworthy, which gives her something of a smug and self-

righteous attitude. She feels superior to teen-agers; and she seems to expect that adults will applaud her for this. If she does have any feelings of having been rejected by her contemporaries, particularly any feelings of sadness, resentment, or anger, she disguises them well. She says she likes to think of herself as a stoic. It is rather ironic that although she seems to like to talk about herself more than any other topic, there is never any real, critical self-analysis. If she has insight into herself, she hides it behind self-praise.

Sarah's attitude toward her peers is one of disdain--she feels that they are simply not on "her level." Whether this means intellectual, moral, social, or what, she doesn't specify. She dislikes everything about the teen-age world, even its rock and roll music, which, she says, makes her nervous. She sees teen-agers as followers, conformists, and cowards who are afraid to be individuals.

On the other hand, Sarah likes and feels comfortable with adults. She completely accepts their standards instead of reacting against them, as many adolescents do. Since being a young child, she has preferred to sit and talk with adults, rather than socializing with her own age group. Apparently she feels sheltered and safe in the adult world, where she is more likely to find approval.

There is a great positive force in Sarah's life--religion. Most of what she says, thinks, and does is done within the framework of her religious belief. And even

though she says she sometimes questions things her pastor says on Sunday morning, her doubts are not pervasive. She states that we must believe, even though we don't always know for sure what is right and wrong. She seems to believe without question simply because she must, rather than as the result of any intellectual or spiritual searching for answers. She is generally intolerant of the sins of her contemporaries.

As Sarah has been unsuccessful in her relationships with the young people around her, she daydreams about a perfect relationship which will occur someday in her future. She wants to love and be loved. She says she likes to think that she is saving herself for the one man in her life. She is critical of her sister who goes out with many different boys. In fact, she ridicules the whole idea of dating. She talks about the man that she will eventually meet, fall in love with, and marry. Their love will surmount all obstacles and "will last throughout eternity." It would probably be safe to guess that Sarah spends many hours dreaming of the boy who will love and understand her.

When she was a young child, seven or eight, she was very ill for two or three summers with various allergies. This was an extremely serious sickness, which resulted in a temporary loss of hair and permanently impaired her vision. The nature of this illness called for inactivity and quiet.

Even though Sarah finds it almost impossible to empathize with individuals with whom she has daily contact,

she has a great deal of sympathy for minority groups that are victims of prejudice and discrimination. She abhors "man's inhumanity to man." She has traveled in the South and observed the living conditions of the Negroes. She talks about the need for people to be kind to one another, and she wishes to do something concrete to help the underprivileged. As she talks, one cannot help but be convinced of her sincerity. Perhaps because of her own rejection, she may feel a special affinity for those who are treated unkindly. At any rate, her major desire seems to be to do good works.

Sarah lives with her father, mother, older sister, and younger brother. The older sister is pretty, vivacious, and very social. Sarah disapproves of her sister's capriciousness and her frivolous ways. The sister is in college but lives at home with the family. The brother is more like the sister and also is a social person. The mother works in a department store part-time. She is gregarious, which, of course, makes her quite different from Sarah. The mother seldom reads and isn't particularly interested in things outside her own world. Apparently Sarah disagrees with her mother often and feels very little identity with her. On the other hand, she admires and respects her father. He is a sales clerk who spends his leisure time working in his workshop or reading. He does not read weighty publications (mostly Reader's Digest and Life); but he does discuss what he reads with the family, especially Sarah. She says she can talk easily with her father, and she often quotes their

conversations.

The family has traveled extensively in the United States, and the father seems to be the leader on these expeditions. He chooses where they are to go and what they are to see. They apparently have very good times on these trips. Sarah obviously feels loved and accepted by her family, even though she seems to be quite different from everyone except her father. She says she would raise her children as she has been raised--with love and respect. The parents have stressed the importance of kindness to other people and the equality of races. Sarah says they have emphasized more than anything else the Golden Rule. Although there are minor disagreements with the sister and mother, it appears that she is living in a warm and loving home.

School, for Sarah, is a place of complete joy. She loves it. This is somewhat surprising, as she has few friends there; but she enjoys her classes and teachers. She gets along well with her teachers and likes them all, although she says in grade school she would sometimes get in trouble because she would always finish her work before everyone else. She thinks the other students are often mean to teachers, and she deeply disapproves of this. She says she would rather do homework than anything else. Her favorite subjects are math and history. She dislikes gym because of the group activities. It would seem that Sarah enjoys the process of school--going to classes, getting assignments,



contact with her teachers and homework. She is able to detach herself from the student body and go her own way, somewhat happily, in the routine of school.

Sarah's future holds no uncertainties for her. She has all her plans carefully made. After graduation from high school, she intends to enroll in a small church college in Ohio. Here she thinks she will find people who have similar interests and values. She wants to become a nurse, which in turn will ready her for a life as a missionary, preferably in South America. She says she wants this with all her heart and feels she has been "called." She talks about the idea of lighting one little candle and thinks she can do this for people by presenting Christianity to them. She feels that her religion is not necessarily the only one whereby people can find salvation; but it has brought her happiness, and she wishes to help others discover this same contentment. Because of her sympathy and kind feelings toward the poor and downtrodden, she may do well in this vocation.

During one of her interviews, Sarah talked about the past and how she would have enjoyed living during the pioneer days. She mentioned a novel, A Lantern in Her Hand, that depicted the kind of life that she would like to lead. The heroine of this story lives with her family on the lonely prairie, works hard, raises her family, and lives a very simple life. She and her husband have a strong and lasting love for each other. The only complications in their lives

are external ones that can be overcome by courage and fortitude. Sarah would like to be like this heroine--loved, loving, and unbothered by the need to be a social creature.

In a sense, she doesn't belong in the social world of teen-agers. She is different, and she knows it; she just doesn't belong, and she has accepted (or at least rationalized) it. Unlike so many plain girls who suffer their lack of popularity and make either an aggressively asocial type of adjustment or else no real adjustment at all, Sarah has made a positive, constructive adjustment: she has become a respected and even creative student--she has learned to devote her life to her work and high principles. Perhaps as an adult she may make the same kind of adjustment, and we may hope that society may benefit from this adjustment. One can envision this plain but ambitious, intelligent, sensitive, and dedicated girl devoting herself to humanistic service and contributing a large measure to society.

## Arthur

Arthur, an attractive, tall, blonde, light-complexioned boy with an affable and somewhat studied casualness about him, appears to be older than his actual years. His manner is impressive; but it is the range of his mind and the fluency--and even beauty-- of his speech that makes him most remarkable. Whether the topic is books, music, ideas, education, or himself, he responds to questions with originality and feeling; he tends to dazzle the listener.

When he is asked what he would like in a teacher, from the top of his head comes, "What we need is teacher philosophers. People who believe things. Capital E - Empathy; Capital T - Truth; Capital L - Love. The teacher should believe in something and vibrate this." Above all one carries away from an interview with Arthur the impression that here is a boy with genuine and intense feelings of compassion and love for people; yet he is disillusioned because he sees so well in his young, idealistic way, that though man is good, so much of the world he has created is filled with cant and hypocrisy.

In the interview, Arthur is a constantly changing, developing character. His mind darts around an idea; and even as he talks, he sees new facets of the issue. What he thought yesterday about religion, he will not think today.' One of his problems in school is, in fact, that he can't stop thinking. When he tries to study and digest

something quickly, he is usually stymied by various ideas that his reading brings to his mind. When he makes a point in conversation, he often seems to be contradicting himself, because of his ability to see all sides of an issue simultaneously. He is able to present reasonable arguments for any side. His mind is busy; and although this maddens him, he wouldn't change or be anyone else.

Arthur denies being a humanitarian because humanitarianism smacks of the mass approach and above all he cherishes individualism. Yet his regard for people as individuals is in the tradition of the best of humanitarianism. He states that every person he has ever met is different, and he doesn't just see people as blobs or masses of sheep. When talking about minority groups, he says that it isn't a question of the group, but that people just can't be treated this way:

There are obvious wrongs being done to minority groups. People don't have a right to kill people--people don't have a right to make jokes out of other people. I don't even want to talk about it. It's not a question of minority groups--it's a matter of wrongs being done to people.

There is a streak of cynicism in Arthur which causes him to make sarcastic and disdainful remarks about "people" in the abstract; but there is always a basic kindness and sympathy about him that softens his cynicism.

As one would expect of such an individualist and of one with the breadth and maturity of mind as Arthur, being part of a gang "nauseates" him, as he puts it. Most

people of his own age are of no interest to him, and he feels no need to adopt their standards. "I used to like to be in, now I like to be out," he comments.

Books of all kinds attract him and he is tremendously knowledgeable about authors and their works. His mind is restless, though, and he doesn't stick to one book at a time--he has five or six going simultaneously. At the time of his interview he was reading Bertrand Russell and finding his philosophy fascinating. Among the writers he talks about are Steinbeck, Dorothy Parker, Freud, Keats, Norman Cousins, Plato, Aristotle, Aristophanes, Darwin, Marx, St. Thomas, Michael Harrington, and many others. He is especially fond of poetry and says that he can find truth in this form. He seems to read in frantic gulps as though trying to satisfy an insatiable appetite. When asked about hobbies, Arthur laughed and stated that hobbies are silly. He once collected coins but gave that up as too materialistic.

But with all his knowledgeability and sophistication, there is an instability and a note of hysteria about Arthur. He is, like all poets must be, slightly mad; and indeed there are times when he feels as though he is going insane. He sometimes seems to be mentally holding his head in despair at his various personalities. He can't seem to find his own identity and yet, is unwilling to adopt other people as models. To admire and look up to someone, he feels, is humbling and a denial of one's own superior worth. He feels lost in a world he knows a great deal about. He has read

Catcher in the Rye and says, "This is my life. Holden Caulfield is me." He has, one might say, the Holden Caulfield syndrome--he is high order intelligence and sensitivity at sea in a world that is "phony"; and the existence he manages to work out for himself is a bizarre and disjointed one. When he is feeling particularly depressed, he considers suicide and has even thought out an elaborate method of committing the act. One has the feeling that Arthur might be the type who could take his own life. He can experience intense joy on the one hand, but real despair on the other.

Charles' sensitivity and feeling are evident when he talks about beauty. He abhors the ugliness which people must contend with every day and talks about their turning to beauty as a relief. But they must go back to the ugliness, and they soon forget the beauty they've seen. Arthur talks about this lack of beauty in people's lives with tenderness. He says nothing as cant.

Arthur was born in Oklahoma but moved to Lansing with his family when he was two. At this time, his parents were divorced, leaving the mother alone with four girls and two boys. Arthur is the youngest in the family. After moving to Lansing, the family moved many times within the city, which caused him to change schools frequently. He was a bright little boy and was reading before he entered kindergarten; and by first grade, he realized that he was quicker to learn than others in his class. During those years, he attended both parochial and public schools. Al-

though Arthur says he "used to be a Catholic," he does not seem to be really anti-religion, as young, sophomoric intellectuals sometimes are.

Arthur describes his family as bizarre and, indeed, the family does seem to be so, almost as the Glass family was. The four sisters and two brothers range in age from 17 to 30. None ~~has~~ married. One sister was confined for a time in a West Coast mental hospital, another, according to Arthur, is "considered to be insane." Another sister is a nun and the fourth is, Arthur says, "fanatically interested in politics." The mother, he says, is a "character." She is highly intelligent, interested in art, and apparently is a supportive person but one who is almost emotionless. Arthur thinks that nothing can really affect her, even family deaths.

Arthur is extremely critical of schools. One of his objections is the grading system. He resents having to achieve standards that are stupid and set up by teachers for their own ego-satisfaction. He says, "Not everyone wants to please the teacher." His image of a good teacher is one who is bursting with enthusiasm for what he's teaching and does so without phoniness. He feels that too often teachers act as little gods and lack the humility which Arthur thinks is so necessary in a good teacher.

Grade school was a complete waste of time for him. In fact, he contends that he could have taught any class which he has ever taken. Classes are seldom challenging

enough for him and he scorns the easy grade. He talks about the biology class in which he played cards every day and was given an A. It is evident that the schools have little to offer a boy like Arthur. Schools always have--and continue to--fail him.

Occasionally he admits that he operates outside the law--minor shoplifting, "moving automobiles," and other delinquent offenses. He doesn't worry about the acts or the morality of them, but he is concerned about getting caught.

Arthur is a boy whose life seems to hang in a rather precarious balance. One could imagine a mental breakdown for him, he could, perhaps, turn to crime, or he may fulfill his potential of high intelligence and creativity. Given the chance, he could become outstanding, perhaps as a writer or a poet. He seems to be on the brink of either high achievement--he seems certainly to have the ability and flair--or complete failure. Like others who are outstandingly gifted and creative, his life is at a crossroad; but the school, which perhaps could represent for him a positive force in his life, seems to be failing. Possibly he will become a bohemian intellectual tramp; possibly he will find the area which will provide him a chance to use his potential; or possibly he will settle into a dull vocation and drift through life with his high ability unrealized. Somehow, in spite of his ability, the outlook does not look bright for Arthur. He suggests a boy who once had his foot on the high road, but now seems to be stumbling toward the low.



## CHAPTER VI

### SUMMARY AND CONCLUSIONS

This dissertation is a description of a group of 27 creative adolescent boys and girls who were chosen for study on the basis of attained scores on five scales of the Omnibus Personality Inventory that measures personality attributes found in creative persons. The youngsters were among a larger group interviewed in 1963 and again in 1964 as a part of studies conducted by Elizabeth Drews under U.S. Office of Education grants, and data obtained from the 27 interviews were used as a basis for these descriptions. The present study included three aspects: (1) a content analysis of the 1963 interview transcripts; (2) a presentation of quotations from both the 1963 and 1964 interviews; and (3) profiles of eight of the 27 youngsters, based on the interviews and other available data. The content analysis and selection of quotations were based on categories derived from studies on creativity at the Institute of Personality Assessment and Research.

To summarize some of the findings made through the content analysis of the transcripts of the interviews, in the area of early childhood and family it was found that only one boy and one girl did not seem to have an adult with whom they could identify. In a large majority of the cases, the boys and girls did have an adult figure in the

family with whom they identified; and in the case of 69 per cent of the girls and 43 per cent of the boys, the families as a whole were closely knit and seemed to function as a unit. In approximately half of the cases, the youngsters came from homes that seemed to be unusual or "different," although the girls seemed less likely than the boys to perceive their homes in this way. About half of the boys and girls had parents who apparently have strong convictions.

Of the girls, 54 per cent were the eldest in the family; of the boys, 43 per cent. On the whole, there was an absence of strong career pressures put on these youngsters by their parents. Even the parents who did exert some pressure in this area seemed to do so in a mild way. For the most part, these parents simply encouraged their children to do well in the areas of their choice. Approximately 60 per cent of the girls and boys mentioned that they had spent a great deal of time alone when they were young, while about a third said that they had not. Almost all said that they like to be alone, however.

In the area of cognitive style, it was found that about half of the boys and three-fourths of the girls seemed to be philosophically oriented, while approximately 60 per cent of the youngsters indicated a concern for and a questioning of religious issues. Approximately three-fourths of the girls and boys indicated that they were oriented toward intellectual and cognitive values; and half were skeptical, tended to be critical and were unimpressed

with traditional slogans. About three-fourths of these young people had "lots of ideas," and approximately 80 per cent seemed to have the ability to grasp others' ideas and expand upon them.

On the whole, the girls in the study seemed to be more interested than the boys in introspection and in other people. Of the girls, 92 per cent seemed to be self-analytical and analytical of others, while 64 per cent of the boys seemed to be psychologically analytical. When rated on their openness to early life experiences, 92 per cent of the girls seemed to have this characteristic, while only 29 per cent of the boys did. All of the girls and 47 per cent of the boys indicated "a willingness to disclose self in interview." Perhaps an artifact in the figures relating to psychological orientation, openness to early life experiences, and willingness to disclose self may be found in the fact that the interviewer in the 1963 series was a young woman; and undoubtedly in this more personal area the girls felt more free than the boys. Perhaps these figures suggest too that while adolescent girls are interested in things, ideas, and people, boys are more likely to be interested in things and ideas. However, 64 per cent of the boys did seem to be psychologically oriented, which, possibly, is a higher figure than one would attain with an unselected group of boys this age. Approximately 80 per cent of the boys and girls had wide-ranging interests, while 86 per cent of the boys and 77 per cent of the girls were

interested in fantasy. Approximately 85 per cent of the youngsters were interested in science fiction, extra-sensory perception, and the occult. Of the girls, 77 per cent seemed to possess an aesthetic sensitivity, while this was evident in 43 per cent of the boys. Among the boys, 64 per cent seemed to be flexible and open to change, and this was apparent in 77 per cent of the girls.

The third section dealt with total life style. The creative girls in this study tended to be socially introverted (77 per cent), while 57 per cent of the boys seemed to be social introverts. The girls seemed to be more aware than the boys of being "different:" 77 per cent of the girls felt that they were "different," while 57 per cent of the boys felt this way. Perhaps creative girls are less likely to feel a part of the group than creative boys. Of the girls, 62 per cent did not date, while 71 per cent of the boys seldom if ever dated. While the youngsters were sometimes extremely critical of teen-age culture, on the whole they were perhaps more critical of society at large than teen-agers. A little more than half of the girls and boys expressed a concern for their own individuality. Half of the boys and a quarter of the girls seemed to be rebellious. For the most part their rebellion was more intellectual and philosophical than it was overt social rebellion. All the students in this study received good grades in school, and on the whole they abided by rules and laws, even if they questioned and sometimes resented them.



Almost all of the girls seemed to have the ability to become immersed in their work, while a quarter of the boys seemed to have this ability. The girls as a group set higher standards for themselves than the boys: approximately three-fourths of the girls were perfectionists in their work and projects, while half of the boys were. Almost all of the girls and boys had high aspirations, while approximately a quarter of the youngsters had a strong drive to achieve in an independent fashion and hoped to make a unique and worthwhile contribution. While the youngsters were often very critical of their fellow human beings and society, still, 85 per cent of the girls and 57 per cent of the boys seemed on the whole to be optimistic about man and his future.

### Implications

It must be said at the outset of this concluding section that any educator who may be interested in better understanding the creative adolescent and in better providing for his needs in schools, would do well to read through the many quotations presented in this dissertation, for the youngsters perhaps speak more effectively in their own behalf than the researcher could for them. The boys and girls have described themselves; and the teacher, or counselor, or administrator who reads their words may begin to see for himself where their education may be made more appropriate.

However, some implications that the writer feels are of importance will be suggested as follows:

(1) The youngsters in this study have made it clear that they are interested in ideas and, further, that they like the process of sharing ideas. In the interviews one receives the distinct impression that the boys and girls completely enjoyed having the opportunity to talk to a responsive listener about their ideas on many diverse subjects. This suggests to teachers that they encourage open-ended discussions in which creative students can present ideas. Such idea-sharing sessions would not only be more appropriate for these youngsters than drill, lectures, or more formal recitation-type classroom procedures, but, further, young creatives need a favorable environment for "trying out" and clarifying their own incipient and sometimes inchoate ideas.

(2) These creative boys and girls are strongly independent and often suggest that they are, at least to some extent, capable of directing their own education, of learning "on their own," and of doing independent study. Teachers and counselors might do more to arrange for independent study activities for such students, and these activities should be supported by administrators. Perhaps for some students, teachers are necessary for motivation; but the young people in this study seem to be interested in learning and are remarkably self-motivated. They are probably more ready and able to learn without continual teacher direction than their present educational environment allows them.

(3) The young people in this study were critical and skeptical of much of what they observed in society, and in many cases they have become cynics and even misanthropes. Rather than helping these students find positive values, the schools tended to further contribute to their cynicism and belief that much in life is sham. In working with these creative boys and girls, teachers and counselors must listen sympathetically to their protests against social injustice, hypocrisy, and the inroads mass society makes against the individual; but they must also help these youngsters discover positive values--and do so without resorting to cliches and homilies.

(4) The creative boys and girls in this study seem to have the ability to enter high-level professions, and yet they appear to receive relatively little career guidance. Their parents, in the non-professional occupations for the most part, can only give them general encouragement to enter the field of their own choosing. Counselors with broad humanistic training should not only help these youngsters discover less obvious career areas but also help them make vocational choices commensurate with their life patterns.

(5) These youngsters are often critical of their teachers. Perhaps their main objection to teachers is that they are often hypocritical, "phony," and intellectually dishonest. Teachers working with these youngsters must, therefore, be particularly careful to avoid dealing in over-



simplifications, using cliches, and in any way "talking down to" and patronizing them. Teachers should always be intellectually honest, of course; but such honesty is especially important in dealing effectively with these sensitive and knowledgeable young people. Further, since the youngsters in this study often mention what they see as incompetency in their teachers, it would seem of particular importance that teachers who work with very creative boys and girls be not only specialists in their field, but generalists as well. These youngsters seem to demand that they be taught by scholars, by experts, by teachers who "vibrate knowledge."

(6) This study of creative adolescents suggests too that simply because a student seems to be doing well in his classes--that is, getting good grades, this does not necessarily mean that he is not in need of some special counseling services. As has been mentioned, some of these youngsters are very much in need of assistance in finding positive values; and perhaps rather than concentrating mainly on students with problems of social adjustment, counselors might also become involved in a more intellectual, "value-concerned," and "life-goals" type of counseling with creative youngsters. Further, since these youngsters have so many ideas they like to talk about and, indeed, should talk about if they are to continue to develop them--the counselor might become not only their listener, but their mentor and critic as well. Often these youngsters are in classes where their ideas are not well received; other students less interested



in ideas may not be sympathetic listeners. A creative boy or girl who is not in a class where ideas are welcomed and freely discussed may come to rely on his counselor as a listener and intelligent respondent.

(7) In the present study the most positive comments about education that the youngsters had to make were in the areas of science and math; the most negative area was English. In fact, not a student had a single good word to say about their English classes, in spite of the fact that almost every youngster in this study liked to read and many expressed an interest in writing. What they disliked about English were the stories in the textbook and the emphasis on drill in grammar. Considering that these youngsters are reading on a high level outside of school (e.g. Sartre, Hemingway, Bertrand Russell, Salinger), English teachers might very well reconsider the somewhat innocuous selections they assign these students in their classes. Furthermore, teachers might encourage more creative-writing assignments and de-emphasize the mechanical, grammatical emphasis. In all subject areas, these youngsters like to consider general principles rather than memorization of facts, and they want to discuss the broad implications of what they learn.

(8) Many of the youngsters in this study expressed an interest in the arts and cultural activities. However, even though most of them came from middle class homes, still, their parents seem to give them little opportunity to take advantage of the cultural offerings of the city. While

educators hear a great deal about enriching the lives of the culturally deprived, little is done to enrich the lives of youngsters who have the desire to attend an opera, go to a symphony, visit an art gallery, but who don't have the opportunity to do so. Schools might initiate programs which would enable youngsters who are vitally interested in extending their horizons to do so by making field trips and "cultural visitations" available.

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## APPENDICES

## APPENDIX A

The interview schedule presented in this appendix was prepared by Elizabeth Drews and her assistant, Miss Arlis Thornblade; and it was developed by Donald W. MacKinnon of the Institute of Personality Assessment and Research at Berkeley, California. This schedule was followed in the 1963 interviews, which were conducted by Miss Thornblade. The interviews were tape recorded, and transcriptions were made of the tapes. The rating sheet to be found in Appendix C was used as a basis for the analysis of the interview transcriptions.

The interviewer did not attempt to follow the exact wording, or even necessarily the order, of this schedule, but questions were presented informally; so that while a perusal of this schedule may suggest a rigid question and answer interview pattern, in actuality the transcripts reveal more of an informal, conversational exchange between the interviewer and the interviewee. Sometimes not all items on the schedule were covered, and often times other matters arose during the course of the interview that the interviewer encouraged the interviewee to pursue, if these matters were considered to be of interest to the general purposes of the study.

PERSONAL INTERVIEW. PREPARED BY ELIZABETH  
DREWS AND ARLIS THORNBLADE FROM FIELD  
INTERVIEW DEVELOPED BY  
DONALD W. MACKINNON  
September, 1963

When interview began, the interviewer generally asked for comments on the experimental class they had just completed--which part of the class they liked best (textbook, films, discussion), whether the class was different from others they have had and in what respects, whether any new ideas were introduced or if they had a chance to more fully explore older interests, what idea stood out most in their minds, and if they had changed their minds, altered any previous opinions.

I. EARLY CHILDHOOD, FAMILY, ELEMENTARY SCHOOL

1. What people, situations, things were most important to you in childhood?
2. Can you tell me something (more) about your family and early home life? (This question usually not asked).
3. Did you spend a lot of time with adults? (or) Do you remember spending most of your time with children your own age, with adults, or alone? What did you do?
4. What was (is) your father like? (or) What interests does your father have outside of his work? Would you describe him as outgoing and social person or a more quiet and reserved person? Do you think he's any more or less strict than most fathers?
5. What sort of relationship did you have with your father? Did you spend much time with him? What did you do with him?
6. What was (is) your mother like? (or) What interests does your mother have? Would you describe her as an outgoing and social person or a more quiet and reserved person? Do you think she's any more or less strict than most mothers?
7. What sort of relationship did (do) you have with your mother? What kinds of things do you remember doing with her?
8. Do you think that you are more like your mother or more

like your father? In what respects?

9. Do your parents ever tell you stories about yourself as you were as a child? What kind of stories? What pictures do you have of yourself then? (social, healthy, energetic, shy, cautious, foolhardy, obedient, independent, stubborn)
10. What are your brothers and/or sisters like?
11. How did (do) you get along with them?
12. Did you get along with most people? (obedient, cooperative, rebellious, argumentative)
13. Did you like to be by yourself? Was there a place? A room of your own?
14. Did other relatives--grandparents, uncles, aunts--live with you or have an important influence upon you?
15. Who in your family, including relatives, is the most successful (using both personal and/or societal criteria)?
16. Who encouraged you the most?
17. Are there differences in the way your brothers/sisters and you have been raised?
18. Were you allowed to roam the neighborhood for large amounts of time without an adult? Specify age.
19. Did your family move much when you were a child? Did you travel much, have new experiences? Where?
20. Does (did) your family do things together? (or) Does your family function as a unit or as independent individuals? In what ways? How do you feel about this?
21. What have your parents stressed most in your upbringing? Does your family have any other strong beliefs, opinions?
22. How important is religion in your family? How important is it for your life? ... If important: Is it something that gives you comfort and strength or does it raise uncomfortable questions? Would you be a different person without it?
23. Is your family different from other families? Think differently? Do things differently?
24. How did you feel about elementary school? What did you think school was for?



25. How did you get along in elementary school? Was it difficult or easy? Did you get the impression that it was easier for you to learn than it was for the other students? When? How? What are your main memories of this time?
26. Did you have a teacher that was better or worse than the others? Specify. What qualities did you like in a teacher? What qualities did you dislike? Which teacher influenced you the most?
27. Did you ever contradict a teacher in grade school?
28. When you push your memory back as far as it can go, what is the first direct memory you have of yourself?
29. Did you suffer from any serious illnesses as a child? Do you remember any (other) particularly difficult or unusual experiences?
30. Can you remember when you learned to read? When was this? Did your parents read to you before you went to school? Can you remember any of the books and stories? Did you read much in elementary school? What kind of books?

## II. ADOLESCENCE, JUNIOR HIGH SCHOOL, INTERESTS, OPINIONS, AND ATTITUDES

1. How would you describe yourself now? Do you think that you have changed very much in the last two or three years? When? For what reasons?
2. Do you think of yourself as different from other people your age? In what ways?
3. Do you consider yourself a rebel in any respects? (Breaking away from the family, an intellectual rebel, etc.)
4. What bothers you more than anything else, makes you feel unhappy or frustrated? How do you react? (Did you cry much when you were younger?) (From here an attempt was made to get at receptivity, sensitivity, awareness, aesthetic perceptions.)
5. Do you like to study? (Distinction often had to be made between schoolwork and personal pursuits.) Are you a perfectionist? Are you persistent? (If you are working on a project or problem and run into difficulty, would you abandon it if the opportunity were offered or would you work through it?)

6. Do you do projects? (Distinction between school and personal.) Do they usually turn out as you had planned them or are they finally larger or smaller than you had originally anticipated? Do you start with a vast idea and have to whittle it into manageable proportions or do you start with a smaller idea that seems to grow and become more complex?
7. Have you ever felt that you could learn or do almost anything if you channelled all your abilities and energies in the desired direction? If answer is yes: Then how do you think you will choose your area of work or emphasis?
8. When you have a history lesson or vocabulary list to learn, how do you handle it? Do you have a system or do you seem to learn it by osmosis?
9. Do you get angry (not just frustrated, but really mad)? What situation will most likely prompt such a response? How do you handle it? What makes you very happy?
10. If I could grant you any wish, what would it be? Why?
11. Do you dream? Often? In color? Can you remember your dreams? Do they usually make sense or are they a hopeless jumble? Have you ever had a recurrent dream? What is it?
12. Do you daydream? When? In what direction do your daydreams usually take you?
13. Do you have any other hobbies or interests? (Puzzles, solving problems, solitary activities: Hobbies, art, music, science, writing, sports.)
14. Do ideas, the unknown appeal to you? The future? Mental telepathy, extra-sensory perception? Do you think about them, read about them, talk about them?
15. Do you read much? What kind of books? What have you read lately? Which did you enjoy most? (Encyclopedias, science, science fiction, history, art, novels, poetry.) When and where do you read?
16. Are you more involved with people or with your own studies and interests?
17. Who are your best friends? Do they seem to have anything in common? What do you like about them? What do you like to do with them?
18. What kind of conversation (and with whom) gives you

- the most pleasure? Do you like nonsense, to be silly?
19. Do you watch television? Go to movies? What kind of program (show) is your favorite? Any favorite performers?
  20. How did you get along in junior high school? What do you expect of senior high school? What do you expect of yourself in senior high school?
  21. What school subject did you like most? What least? In which subjects do you get your best marks? Your worst marks?
  22. Do you participate frequently in classroom discussions? Why or why not? What kind of comments do you usually make? What do you think of classroom discussions? (If quiet: Would you be more apt to take part in smaller group discussions? Why?)
  23. What do you think about dating? Do you do much dating? Single, couple, or group?
  24. How would you define creativity? Who is the most creative person you have known? In what respects do you consider yourself creative?
  25. In the last two or three years have you come into contact with any adults who have been especially important to you? Who has influenced you the most?
  26. What does the phrase "philosophy of life" mean to you? or How would you define the phrase "philosophy of life?" Do you have one? How would you express it? or Are there any principles or values that you use to guide your life? (idealism, cynicism; optimistic, pessimistic)
  27. Have you ever been impressed by or particularly admired a person in the public eye--intellectual, political, religious, sports, etc.? If you could trade places with anyone living today for one week, who would it be? Why?
  28. If somehow I could produce an average man (average American man) and would ask you to describe him, what kind of person do you think you would be describing? A scientist, an artist? Do you think there would be any differences between them? Who do you think you would be most like?
  29. What do you criticize most in society?
  30. What do you think are the prospects for world peace? What do you think is the main obstacle to realizing

peace or harmonious relationships between people? Do you think the world is getting better, worse, or staying just about the same? What is your view of the recent test ban treaty?

31. Similar questions on integration and over-population.
32. What do you think is the difference between a generalist and a specialist? Which would you like to be?
33. What do you want to be and do? Why? What sort of role do you feel that your work will play in society? From your point of view, what constitutes success in life? (College, plans for marriage, wish to make a contribution, etc. usually comes in here).
34. Any additional comments.

## APPENDIX B

In the summer of 1964, the students who had been previously interviewed were interviewed again. This time an interview schedule prepared by Elizabeth Drews and her research assistants, David Kanouse and Robert Trezise, was used as a basis for the interview. The schedule was based upon interview schedules used at the Institute for Personality Assessment and Research at Berkeley, California, and upon the researchers' reading in the area of creativity. The interviews were conducted by Mr. Kanouse and Mr. Trezise, and they were tape recorded. Some of the quotations used in this paper were taken from these interviews and Mr. Trezise based the Profiles (Chapter V) upon impressions gained mainly through these interviews.

INTERVIEW SCHEDULE PREPARED BY  
ELIZABETH DREWS, ROBERT TREZISE,  
AND DAVID KANOUSE  
Summer, 1964

I. SELF AWARENESS AND AWARENESS OF OTHERS

1. Do you feel that you have changed much in the last year? How? How have you changed in general over the years? What do you think about yourself is new or different from what it was at some earlier time?
2. Do your moods change much, or are you pretty much on an even keel most of the time? What causes these shifts, do you think?
3. How do you think an adolescent is different from an adult--in some fundamental or important way?
4. Do you think most people differ much from one another, or are they pretty much the same? Have you ever felt yourself to be much different from other people?
5. What do you feel is the most important quality or group of characteristics in an individual--the kind of trait that decides whether you will like and admire someone or not?
6. What qualities would you want or admire in a best friend? A boyfriend or girlfriend (of opposite sex)? In a marriage?
7. If you were going to raise children, do you have any ideas from the way you've been raised of what you'd like to give your kids that your parents gave you? Anything in addition, or different?
8. What is your favorite joke or one of your favorites?
9. What kind of college do you want to go to? On what basis will you probably make your decision?
10. Have you ever thought about where you might like to live eventually? In Lansing or Michigan or another state or country?
11. When you meet someone for the first time what would you prefer to talk about?
12. Is there anything you would like to do in your life? Dedicate yourself to?

## II. AESTHETIC AND CULTURAL

### Family Milieu

1. Do your parents read magazines? Which ones? Do they subscribe? Are their interests different?
2. Which magazines do you read? Are your tastes the same as your parents'?
3. Do your parents read books? What kind? Where do they get them? Do they recommend any to you? Do you pick up books they have? Do you frequent libraries? Borrow from friends? How many books do you own? Which ones?
4. Does your family enjoy music? Listen to it? Radio? Phonograph or stereo? How many records do they have? What kind? Are your tastes the same as theirs or different? How much do you listen?
5. Other pursuits: Television, etc.
6. What hobbies do you have or have you had? (Stamps, coins, model trains, jigsaw puzzles, rock collections. etc.)
7. Is there much conversation in your home? What about? Is it hard for you to find someone to talk to?

### Friends, Community

1. What kinds of things did you do with your friends, or with brothers and sisters? Did you ever carry out a project individually or with someone else (produce a neighborhood play, set up a lemonade stand, etc.)?
2. Have you ever done any of the following, or been interested in doing them: visiting art galleries, attending concerts, visiting a zoo, hearing an outstanding lecture, listening to a jazz or folk recital, seeing an opera or ballet, visiting a museum, etc. How did you become interested? Did your parents ever encourage you to do any of these things?

### Individual Activity

1. Have you ever kept a diary? How long? Have you ever tried writing for your own pleasure (not required for

school)? Poetry? Fiction? Have you ever tried drawing for fun? Painting? Collecting poems, stories, art prints, etc. for a scrapbook? Dancing, theatre, figure skating, etc.?

2. What kinds of things strike you as beautiful or aesthetically appealing? For example, which do you enjoy most: geometric precision, natural beauty, beauty of emotion, grace and beauty in action and movement, etc.? Do you find yourself awed more by the vast and the panoramic or the small and the exquisite or both? Do you like symmetry or chaotic, asymmetrical designs?

### III. THINKING STYLE

1. How do you read a book? From start to finish? Do you sample? Do you feel you ought to finish something you have started reading? Do you mark pages and write in margins? Do you find yourself arguing with the author, disagreeing or re-reading parts?
2. How is knowledge related? How would you say it's divided or what would be the best way to categorize it? Do you find yourself trying to understand things in terms of what you already know? What sorts of things are you good at remembering? What do you find hard to remember?
3. Do you like metaphors and analogies? Paradox? Irony? Why?
4. Do you like situations and facts to be organized, neat and structured or looser and sloppier? What about complexity?
5. Do you feel a concern for or interest in the way words are used not only what they mean in the dictionary but their connotations and the way they combine?
6. Do you like new things - travel, food, experience?
7. How do you use time? Think ahead and plan to use every minute? Organize by using lists? Sit around and let things happen?

### IV. SOCIAL CONCERN

1. Do you feel the individual has an opportunity to make



a worthwhile contribution to society? Would you like to make one?

2. Have your parents ever discussed careers with you? Do you feel they have any expectations along this line?
3. Do you want to do something significant or outstanding? Achieve?
4. Do you belong or have you ever belonged to any organizations--scouts, YM or YW, clubs, church groups, etc.
5. Do you feel concern for or identification with any particular cause or minority group? (Negroes, women, aged, mentally ill, etc.) Would you like to do or would you be willing to do something about it?
6. Are you interested in national issues (conservation, anti-poverty, education, etc.)?
7. Are you interested in international issues (Peace, etc.)?
8. Would you be willing to do something about these?
9. Do you feel there is anything which is worthwhile to which people could profitably dedicate their lives? What kinds of things? Is there anything you would want to dedicate your life to?

#### V. EDUCATION

1. What does the word "education" mean to you?
2. In looking at your experience in education and with teachers, which do you feel have been the most valuable kinds of experiences you have had in school? The least valuable?
3. If you could dictate your own formal education, how would you do it? Assume only that this is within a formal framework and that the education is public--for everybody. Would you make changes in curriculum? In the order in which certain subjects are introduced? In teaching methods? What changes?

## APPENDIX C

The raters analyzed the 1963 interviews on the basis of the rating sheet items listed below. The rating sheet was devised by Elizabeth Drews and her staff of research assistants and was based upon the studies in creativity at the Institute for Personality Assessment and Research and upon their readings in creativity--particularly creativity as studied by the "third force," humanistic psychologists, such as Carl Rogers and Abraham Maslow.

The two raters read the transcripts and then rated them on each of the thirty-nine items. On each item the raters gave the interviewee a plus (indicating the presence of the traits or quality mentioned in the item), a minus (indicating that the interviewee responded negatively to the trait or quality), or a zero (indicating that in the course of the interview, the absence or presence of the trait or quality was not revealed).

## INTERVIEW RATING

Prepared by Elizabeth Drews, Robert Trezise, and the Research Staff and based upon Institute for Personality Assessment and Research findings.

1. Interviewee identifies with one parent or with a close relative
2. Family autonomous as a unit, forms a close-knit, functional unit with which interviewee identifies as a whole
3. Mother and father autonomous; each respects other as a person in his own right
4. Family is different (from other families interviewee is likely to have come in contact with)
5. Subject perceives family as different (says so in interview)
6. Parents have strong convictions
7. Interviewee oldest child
8. Lack of strong career channelling pressures on child
9. Desire to roam and explore and freedom to do this (when young)
10. Much evidence of being alone when young
11. Social introversion
12. No dating in adolescence, or if any, unusual patterns
13. Awareness of self as different from other young people by early adolescence
14. Critical of teen-age culture
15. Concern for individuality
16. Thinking introversion (philosophical orientation)
17. Values intellectual and cognitive
18. Skeptical of ideas, critical, not easily impressed (especially with traditional ideas or slogans)

19. Has lot of ideas
20. Concern for and questioning of religious issues (vs. non-questioning acceptance)
21. Memory and importance of reading before school years
22. Rebellion (questioning authority, skepticism) by early adolescence
23. Critical of teachers
24. Grasps others' ideas and expands upon them
25. Ability to become immersed in work or projects (task-orientation, ability to "lose himself" in subject at hand.
26. Psychological in orientation, given to self-analysis and analysis of others, self-critical
27. Willingness to disclose self in interview; when interviewer questions or probes, responds as to a challenge, cooperates in attempting to form explanations, does not become defensive or treat matter as unimportant
28. Open to early life experiences, seems to seek to view them in light of their contribution to the self at present
29. Has wide-ranging interests
30. Awareness of fantasy; shows fancifulness and whimsy
31. Awareness of and interest in the occult, ESP, reads science fiction
32. Aesthetic sensitivity; receptivity to beauty
33. Willing to offer ideas and disclose self without being asked
34. Flexibility, openness to change; can modify ideas and opinions; attempts to understand other's opinions by putting self in their shoes; awareness of "points of view"
35. Has high energy level
36. Has high, internalized, individual standards; is a perfectionist
37. Has high aspirations

38. Drive to achieve in independent fashion; long-term goals; sense of destiny, of unique contribution
39. Optimistic about man's future and his potential

## APPENDIX D

Percentages\* of Positive, Negative, Zero,  
and Disagreement Ratings on a 39-Item  
Interview Rating Sheet, when Two  
Judges Rated a Group of Crea-  
tive Boys (N 14 and Girls (N 13)

<u>Item No.</u>	<u>Positive</u>		<u>Negative</u>		<u>Zero</u>		<u>Disagree</u>	
	<u>Boys</u>	<u>Girls</u>	<u>Boys</u>	<u>Girls</u>	<u>Boys</u>	<u>Girls</u>	<u>Boys</u>	<u>Girls</u>
1.	79%	92%	7%	8%	7%	0%	7%	0%
2.	43	69	29	31	21	0	7	0
3.	36	62	21	8	29	23	14	8
4.	64	54	21	38	7	8	7	0
5.	29	54	43	23	14	8	14	15
6.	50	69	36	31	14	0	0	0
7.	43	54	57	46	0	0	0	0
8.	43	46	21	23	36	31	0	0
9.	43	38	50	38	7	8	0	15
10	64	62	29	38	0	0	7	0
11	57	77	43	23	0	0	0	0
12	71	62	7	23	21	15	0	0
13	57	77	14	15	0	8	29	0
14	43	31	29	23	29	38	0	8
15	64	62	7	8	0	15	29	15
16	57	77	29	15	0	0	14	8
17	79	69	14	15	0	0	7	15
18	57	46	21	23	0	23	21	8
19	71	77	21	23	0	0	7	0
20	64	62	29	15	7	15	0	8
21	57	31	36	62	7	8	0	0
22	50	23	50	77	0	0	0	0
23	64	54	29	38	0	8	7	0
24	79	85	14	8	0	0	7	8
25	71	92	14	0	7	8	7	0
26	64	92	29	8	0	0	7	0
27	43	100	50	0	0	0	7	0
28	29	92	64	8	0	0	7	0
29	79	77	21	23	0	0	0	0
30	86	77	7	0	0	15	7	8
31	86	85	7	8	7	8	0	0
32	43	77	43	8	7	8	7	8
33	29	85	50	15	7	0	14	0
34	64	77	14	15	7	0	14	8
35	64	54	14	8	21	31	0	8
36	50	77	43	15	0	0	7	8

## APPENDIX D--CONTINUED

<u>Item</u> <u>No.</u>	<u>Positive</u>		<u>Negative</u>		<u>Zero</u>		<u>Disagree</u>	
	<u>Boys</u>	<u>Girls</u>	<u>Boys</u>	<u>Girls</u>	<u>Boys</u>	<u>Girls</u>	<u>Boys</u>	<u>Girls</u>
37	93	85	0	8	7	8	0	0
38	71	77	7	15	7	0	14	8
39	57	85	43	15	0	0	0	0

\*Percentage figures have been rounded off to the nearest whole number.