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CREATIVITY:
A DESCRIPTION OF CREATIVE PEOPLE; THE CREATIVE PROCESS;
SELF-ACTUALIZATION AND CREATIVITY

A Thesis
Presented to the
Faculty of
California State
College, San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
with
A Special Major

by
Jerry C. Martin, Jr.


June 25, 1978

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Chairman

6/25/78
Date





ABSTRACT

This thesis addresses the following questions:
What is creativity? What constitutes the creative process?
What are creative people like? How is self-actualization
related to creativity?

In answering these questions, concepts were derived from the findings of empirical researchers and the observations of psychologists, philosophers, creative artists and creative scientists.

The thesis concludes that creativity is the bringing about of original work or ideas in any field. The thesis also concludes that the creative process most often occurs as the result of powerful encounters between creative people and objects in their environments. The thesis further concludes that creative people are independent, unconventional, highly perceptive, flexible, industrious and aesthetically oriented. Also, certain environmental factors may enhance creativity. Particularly important is an encouraging parent or adult.

The results of this study indicate that in order to foster creativity we must provide stimulating, supportive and diverse experiences for the individual. An accepting, non-threatening environment encourages both diversity and creativity. The thesis concluded that we must develop such environments if we are to foster creativity in the future.

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PART I

"CREATIVITY DEFINED"

Creativity can be generally defined as, "The ability to produce original work or ideas in any field."¹ This is a broad definition which encompasses both scientific and artistic creation. Using this definition we could include such diverse occurrences as a fifth grader writing a poem, Einstein discovering his theory of relativity, a housewife inventing a new recipe, Aristotle writing his Ethics, a farmer experimenting with new forms of crossbreeding or Beethoven writing his Fifth Symphony as examples of creativity. I believe that all these acts are acts of creation and I also believe that there are certain similarities in the creative processes that each of these people experience.

A number of humanistic psychologists have studied creativity and the creative process and have given definitions for one or the other. Rollo May defines creativity as the, "Encounter of the intensively conscious human being with his world."² Erich Fromm defines creativity as, "The ability to see (or to be aware) and to respond."³

1. Britannica World Language Dictionary, Funk and Wagnalls Standard Edition (Chicago: Encyclopaedia Britannica, Inc., 1964) p. 304.

2. Rollo May, "The Nature of Creativity," Creativity and Its Cultivation, ed. Harold Anderson (New York: Harper and Brothers, 1959) p. 68.

3. Erich Fromm, "The Creative Attitude," Creativity and Its Cultivation, p. 44.

Carl Rogers defines the creative process as the, "Emergence in action of a novel relational product, growing out of the one hand and the materials, events, people or circumstances of his life on the other."⁴

May and Fromm seem to equate creativity with a clear, undistorted perception. Rogers stresses the encounter of the individual (subject) with some object in his or her environment. The strength of the encounter would obviously be very much related to an individual's perception. The strength of this encounter would also be very much related to the strength of the stimuli encountered. According to this perspective, the greatest chance for creativity to occur would be when a highly perceptive individual encounters a highly stimulating object or experience in his or her environment.

One of the first social scientists to study creativity was Sigmund Freud. Freud showed ambivalent attitudes toward creative people. He very much admired great artists and writers such as Michaelangelo and Dostoevski. He said that you couldn't attempt to really understand great artists, but that you could only stand in awe of them.⁵ Once while visiting Rome, he studied Michaelangelo's statue of Moses every day for three straight weeks. He then anonymously published a forty page paper dealing with his interpretation of the meaning of this statue. Freud said that it was the artist's

4. Carl Rogers, "Toward a Theory of Creativity." Creativity and Its Cultivation, p. 71.

5. Sigmund Freud, "On Creativity and the Unconscious," Papers On the Psychology of Art, Literature, Love and Religion (New York: Harper and Brothers, 1958) p. 37.

intention that gripped people so powerfully. He felt that a person had to interpret the work to find the intention. Freud interpreted Michaelangelo's work by stating that his statue of Moses was "a concrete expression of the highest mental achievement that is possible in a man, that of struggling successfully against an inward passion for the sake of a cause to which he had devoted himself."⁶

Despite Freud's admiration for certain great creative artists, his view of creativity in general was quite negative. He saw creativity as a form of sublimation of unfulfilled needs and desires. He saw writers of popular fiction as having a combination of "productive ability, perversion and neurosis."⁷ Freud saw such people as individuals who couldn't find fulfillment of their desires on their own so they sublimated their wants by pouring their fantasies into their writings. Freud said that current encounters would trigger unconscious strivings for unfulfilled childhood desires. This would then lead to a wish for fulfillment of these desires in the future. This fantasy or daydream carried traces of both the encounter which engendered it and of some past memory. Freud said that creative writers were similar to children at play in that they created a world of fantasy which they took seriously while at the same time separating it from reality. He said that imaginative creation was like daydreaming in that it was a continuation and substitute for the play of childhood.

6. Freud, p. 37.

7. Sigmund Freud, Three Contributions To The Theory of Sex (New York: Nervous and Mental Disease Pub. Co., 1910) p. 117.

Many Freudian explanations concerning the unconscious, the preconscious and the conscious have contributed to a better understanding of creativity. Creative people seem to have more access to both their unconscious and their preconscious than do less creative people. E. Kris has spoken of "regression in service of the ego,"⁸ that is, during moments of creative inspiration, a person's ego suspends its control over the unconscious and preconscious parts of the mind (unconscious meaning the repressed or hidden instinctual part of the mind;⁹ preconscious meaning the part of the mind that allows primitive, unconscious events to be brought into consciousness).¹⁰ During moments of creativity, the creative person is able to experience "an unhibited expression of previously unconscious memories, fantasies and archaic impulses."¹¹

The access to the unconscious and preconscious is a critical factor in the creative experience. It provides the "going inward" part of the process. A person is first stimulated or challenged to create a product. This stimulation then interacts with the person's prior experiences. This encounter of subject (the person's inner life) and object (the stimulation) may then lead to a finished product of creation. A less inhibited, more

8. Ernst Kris, Psychoanalytic Explorations In Art (London: George Allen and Unwin, Ltd., 1953) Chap. 14.

9. Jaroslav Havelka, The Nature of the Creative Process In Art: A Psychological Study (The Hague: Martinus Nijhoff, 1968) p. 33.

10. E. Kris, "On Preconscious Mental Processes" Psychoanalytic Quarterly (1950) p. 342.

11. Morton Bloomberg, Creativity: Theory and Research (New Haven, Conn: College and University Press, 1973) p. 3.

flexible person has tremendous advantages when creating. Such people have greater access to their entire selves. Their flexibility and lack of inhibition makes it easier for them to combine apparently unrelated factors into novel combinations. Lawrence S. Kubie views the pre-conscious as the key to creativity. He believes that the degree of preconscious freedom determines one's latent, creative potential. He states that, "The critical psychological event is the recognition of new data and new relationships, their dissection into new bits, new combinations, giving rise to new facts and principles."¹² Thus, both the ability to regress and the ability to associate odd factors together in new combinations, are critical components of creativity.

Novelty and effective surprise play a significant part in artistic creativity. The combination of apparently unrelated elements into unexpected unities catches our attention and surprises us. An example of such a combination is found in one line of a poem called "The Monkey Puzzle" by Marianne Moore when she described, "the lion's ferocious chrysanthemum head."¹³ By comparing a lion's head to a chrysanthemum Ms. Moore is combining two apparently unrelated objects together as one.

On other occasions, creative artists combine ideas or experiences together in unconventional ways and come up with new ways of viewing reality. A good example of this is a poem that I recently read

12. Lawrence S. Kubie, "Unsolved Problems of Scientific Education," Creativity: Theory and Research, ed. Morton Bloomburg, p. 107.

13. Marianne Moore, "The Monkey Puzzle," Collected Poems of Marianne Moore (New York: MacMillon Co., 1951)

which was written by a high school student named Rosemarie Barone from St. Mary's Academy in East Providence, Rhode Island called "Impressionable":

I was born impressionable
 So they put a crayon
 In my right hand
 To teach me things
 They said I should know
 And read me stories
 Of good little girls and boys
 Who lived in small red houses
 With straight green lawns
 And whitewashed fences
 Or bad little children
 Who had to sit in dark corners
 And cry to themselves.
 They put me behind hard, metal desks
 With a No. 2 pencil in my hand
 And told me I could make the world better
 Teaching me how to add and subtract
 Or the function of a noun
 Or how a lever worked
 But when I asked
 Why tears came when people were sad
 Or why things had to die
 Or why the birds went when the rain fell
 They laughed
 And taught me verbs.
 They locked me in cold, brick buildings
 With a pen that bled blue ink
 And told me what life was
 When they didn't know
 And told me who God was
 Saying they knew
 And explained the circulatory system
 And the life processes of a cell
 And how to cut up frogs
 With warm hearts still beating. ¹⁴

Another example of recombining experiences together to express an unconventional idea can be found in the fourth and ninth verses of Bob Dylan's powerful

14. Rosemarie Barone, "Impressionable,"
Scholastic Scope Magazine, Vol. 25, No. 24 (May, 1977)
 p. 16.

satirical song, "With God On Our Side":

4. Oh, the First World War boys,
It came and it went,
The reason for fighting
I never did get.
But I learned to accept it,
Accept it with pride,
For you don't count the dead
When God's on your side.

9. So as I'm leavin'
I'm weary as Hell,
The confusion I'm feelin'
Ain't no time can tell.
The words fill my head
And fall to the floor,
If God's on our side
He'll stop the next war.¹⁵

Ms. Barone's poem and Bob Dylan's song both give examples of novelty and effective surprise. One part of Ms. Barone's poem contains another rather obvious example of an associative recombining of words in a new way to meet new requirements. I'm speaking of the two lines that state: "They locked me in cold, brick buildings with a pen that bled blue ink." This line is a good example of how artistic creativity can be surprising and eye catching while at the same time symbolically representing an idea that the artist is attempting to convey.

Henry James once said that, "There are two emotions in literature, the emotion of recognition and the emotion of surprise."¹⁶ We are oftentimes most impressed with creativity, especially artistic creativity,

15. Bob Dylan, "With God On Our Side," Bob Dylan Songbook (New York: M. Witmark and Sons, 1963) pp. 40-41.

16. Robert Kirsch, "The Book Review," Los Angeles Times, April 16, 1978, p. 1.

when we can relate it directly to our own lives or when the novelty expressed by the artist grabs us and catches our attention in a new and different way.

In conclusion I would define creativity as the ability to produce novel or original products in any field of endeavor.

PART II

A DESCRIPTION OF CREATIVE PEOPLE

Numerous empirical investigations have focused on the study of creative people. These research projects have concentrated on the perception, intellectual functioning, personalities and family backgrounds of creative people.

A. J. Cropley has studied the intellectual and perceptual functioning of such people. One of his chief findings is that creative people make unusual cognitive coding. They censor less cognitive input than do most people. They are less afraid to combine apparently unrelated data together as if it were related. These unusual cognitive data combinations are an essential part of creative thinking. Creative people may suffer more cognitive strain though, since they are allowing more perceptual input and are taking more risks in their intellectual functioning. By taking more risks, they are opening themselves up to making more mistakes and facing more ostracism. Nonetheless, their intellectual functioning is described by Cropley as, "Adaptable, flexible and bold."¹⁷

J. P. Guilford, of the University of Southern California, and one of the most respected researchers in the field of cognitive psychology, has described the aptitude for creative thinking as being "The ability to see problems and a sensitivity to problems."¹⁸

¹⁷. A. J. Cropley, Creativity (Longmans, Green, 1967) pp. 34-43

¹⁸. J. P. Guilford, "Traits of Creativity" Creativity and Its Cultivation, ed. Harold Anderson (New York: Harper and Brothers, 1959) p. 146.

In his studies on creativity, J. P. Guilford has described two types of thinking: divergent and convergent thinking. Divergent thinking is related to creativity. It can be defined as a moving away from responses already known and expected. Convergent thinking is related to conformity and can be defined as moving toward responses that fit to the known and specified. One thing to emphasize at this point is that we need both divergent and convergent thinking abilities to function adequately intellectually. Convergent thinking abilities help us to develop a broad base of knowledge. Divergent thinking abilities help us to attack problems by putting seemingly ambiguous factors together so as to find workable solutions.

J. P. Guilford has reconceptualized intelligence through his "theory of the structure of the intellect." He has divided intellectual operations into cognition, memory, divergent thinking, convergent thinking and evaluation. He sees divergent thinking abilities as very important because they, "Emphasize searching activities with freedom to go in different directions, if not a necessity to do so to achieve an excellent performance."¹⁹

In certain studies there have been comparisons of students who score high on tests of creativity (divergent thinking) with those who score high on I.Q. tests (which stress convergent thinking). Getzels and Jackson compared two groups of students, one of which rated in the top twenty per cent on creativity tests but not in the top twenty per cent on I.Q. tests, the other which ranked in the top twenty per cent on I.Q. tests but not in the top twenty per cent on creativity tests. On one test Getzels and Jackson had these two

19. J. P. Guilford, op. cit., p. 161.

groups of students respond to a stimulus picture perceived most often as a man sitting in an airplane reclining seat returning from a business trip or professional conference. Examples from the high I.Q.-lower creativity group and the high creativity-lower I.Q. group include the following:

High I.Q. (Convergence) subject:

Mr. Smith is on his way home from a successful business trip. He is very happy and he is thinking about his wonderful family and how glad he will be to see them again. He can picture it, about an hour from now, his plane landing at the airport and Mrs. Smith and their three children all there welcoming him home again.

High Creative (Divergence) subject:

The man is flying back from Reno where he has just won a divorce from his wife. He couldn't stand to live with her anymore, he told the judge, because she wore so much cold cream on her face at night that her head would skid across the pillow and hit him in the head. He is now contemplating a new, skid-proof face cream.

Another picture, this most often perceived as a man working late (or very early) in an office, drew these responses:

High I.Q. (Convergence) Subject:

There's ambitious Bob, down at the office at 6:30 in the morning. Every morning it's the same. He's trying to show his boss how energetic he is. Now, thinks Bob, maybe the boss will give me a raise for all my extra work. The trouble is that Bob has been doing this for the last three years, and the boss still hasn't given him a raise. He'll come in at 9:00, not even noticing that Bob had been there so long, and poor Bob won't get his raise.

High Creative (Divergence) Subject:

The man has just broken into this office of a new cereal company. He is a private-eye employed by a competitor firm to find out the formula that makes the cereal bend, sag and sway. After a thorough search of the office he comes upon what he thinks is the current formula. He is now copying it. It turns out that it is the wrong formula and the competitor's factory blows up. Poetic justice!²⁰

Getzels and Jackson have pointed out that high creatives make greater use of stimulus-free themes, unexpected endings, humor, incongruities and playfulness.

D. W. Mackinnon and Frank Barrons' study of creative architects, scientists and writers at Berkeley in 1962 showed that there was no direct relationship between I.Q. and creativity. Most of their highly creative subjects scored above 120 on traditional I.Q. tests, but factors other than I.Q. played bigger roles in their later creative output. Academically, most of the architects had grade averages as undergraduates of around B and most of the research scientists had grade averages between B and C as undergraduates. Few were straight A students.

Michael Wallach and Nathan Kogan's study of 151 fifth grade children in 1965 divided children into four groups: High Creativity-High Intelligence, Low Creativity-High Intelligence, High Creativity-Low Intelligence, and Low Creativity-Low Intelligence. Wallach and Kogan found that the indices of creativity and the indices of intelligence tended to be independent of each other. They

20. J. W. Getzels and P. W. Jackson, "The Highly Intelligent and the Highly Creative Adolescent: A Summary of Some Research Findings." Scientific Creativity: Its Recognition and Development, ed. C. W. Taylor and F. Barron (Wiley, 1963) pp. 168-70.

discovered that the chances that a child of high intelligence would also display high creativity was no better than 50-50. They stated that creativity was a different type of cognitive excellence than was our traditional I.Q. Of the four groups studied, the High Creativity-High Intelligence group seemed to have been the most academically and socially advanced. They had a high attention span and high concentration upon academic work. They were the most socially healthy of the four groups. They had a strong inclination to be friends with others and others also had a strong inclination to be friends with them. They had strong self concepts, possessed the greatest amount of aesthetic sensitivity and exhibited moderate amounts of anxiety. They also exhibited various types of disruptive behavior in the classroom. Much of this was attention getting and was of an exuberant, rather than a hostile nature.

The Low Creativity-High Intelligence group was like the high-high group in that they possessed strong capacities for concentration on academic work and a long attention span. In other ways they were quite dissimilar, however. This group was the least likely to engage in disruptive behavior. They seemed unwilling to take chances or be different. While other children were inclined to be friends with them, these children tended to be aloof and did not approach others much. They were conventional and lacked the inclination to be free wheeling. They seemed to be afraid to make mistakes. Because traditional schools encourage the conforming type of behavior that this group chose to pursue, the Low Creativity-High Intelligence group possessed a particularly high social standing. They also showed the lowest levels of anxiety of the four groups. This stands to reason, since they consistently chose to fit in and do what was considered appropriate.

The High Creativity-Low Intelligence group showed much disruptive behavior in the classroom. They were the least able to concentrate and maintain attention in class. They expressed the lowest self confidence and were the group most likely to express the conviction that they were no good. They were socially isolated. They avoided others and were shunned in return. Their high anxiety led them to function better in situations where there was less evaluational pressure placed on them.

The Low Creativity-Low Intelligence group showed the greatest cognitive deprivation of the four groups, but seemed to get along fairly well in a social sense. They scored particularly low on aesthetic sensibility and were not very expressive. They had a much easier time fitting into the traditional school pattern, though, than did the High Creative-Low Intelligence group.²¹

One factor that I discovered was that a student's popularity in school very much depends upon the type of school that the student is attending. In schools that value creative abilities, informal methods and creative learning, popularity seems to coincide with the degree of creativity that a student possess. In traditional schools that value formal approaches, popularity tends to coincide with a student's I.Q.²² A study by Hudson in 1968 of English girls schools supported this hypothesis. In this study it was found that students from a grammar

21. Michael A. Wallach and Nathan Kogan, Creativity and Intelligence in Children's Thinking. Creativity ed. Morton Bloomberg, pp. 252-57

22. Hugh Lytton, Creativity and Education (New York: Schocker Books, 1972) p. 95.

(public) school composed of lower and middle class girls nominated convergers as the more popular students. This school laid great stress on manners and deportment. An upper-middle class public (in England-private) school composed of girls from professional families showed just the opposite trend. This school showed less concern with manners, and divergers were consistently nominated as the more popular students.²³

Teachers in American schools tended to prefer high I.Q. students over high creatives.²⁴ The independence, originality and assertiveness of these highly creative students helped make them less popular with their teachers. Getzels and Jackson's study of highly creative and high I.Q. students was most profound when comparing the qualities that these students wanted for themselves to the qualities that they felt their teachers favored. Getzels and Jackson said that:

For the high I.Q. group, the rank-order correlation between the qualities they would like to have themselves and the qualities making for adult success was .81; for the highly creative group it was .10. For the high I.Q. group, the correlation between the qualities they would like to have themselves and the qualities they believe their teachers favor was .67; for the high creativity group it was (minus) -.25.²⁵

The unconventionality of the highly creative adolescent shows up to a great extent in this study. One thing must be pointed out at this juncture, however.

23. Ibid., p. 102.

24. J. W. Getzels and P. W. Jackson, "The Highly Intelligent and the Highly Creative Adolescent" Scientific Creativity, ed. C. W. Taylor and Frank Barron (Wiley, 1963) p. 167.

25. Ibid., p. 168.

Getzel and Jackson's study was different from Wallach and Kogan's in that they did not study high creative-high I.Q. students. I'm sure that the results for these students would have been somewhat different. They would have probably been more success oriented than the group studied by Getzels and Jackson, while at the same time maintaining a marked degree of independence.

Another point to consider is the relationship between a person's creativity and his personality characteristics as measured by different personality tests. Mackinnon and Barron's study, at the Institute of Personality Assessment at the University of California at Berkeley in 1962, of highly creative adults who had become valuable creative producers for society, took up just such research. This study focused on the personality structures and experience patterns of outstanding creative architects, scientists and writers. These people were interviewed, given various tests and their life histories and patterns of productivity were studied. Mackinnon selected architects to study because he felt that this group had to be creative in both an artistic and scientific manner. He began his research by asking five university professors of architecture to single out forty of the most creative architects in the United States. Eighty-six names were given to Mackinnon. These men were then rated according to the mean rating of their creativity and a summary of evaluations of their work. To get forty men to attend the week long assessment at Berkeley, sixty-four invitations had to be sent out. Two control groups were also selected. One was composed of architects who had worked with these highly creative men and the other group was composed of architects who had not worked with them. The architects in these two control groups were of similar age and from similar geographic locations as

the group chosen because of their creativity. These three groups of architects were then compared on values tests, personality tests and publishing productivity. The highly creative group differed from the other architects in that they scored higher on the values tests on aesthetic and theoretical values. Despite this group's entrepreneurial success, however, the value they scored lowest on and that they least prized was the economic value. The three groups of architects' personalities were compared by using the Myers-Briggs Type Indicator (1958), a test designed to place individuals in the scheme of personality types developed by Carl G. Jung. The theory behind this test is that whenever a person uses his mind for any purpose, he performs either an act of perception (he becomes aware of something) or an act of judgement (he comes to a conclusion about something). A habitual preference for a judging attitude may lead to some prejudging, and usually to a life that is controlled, carefully planned and orderly. A preference for the perceptive attitude results in a life that is more open to experience, both from within and without, and characterized by flexibility and spontaneity. The creative group tended to be composed mainly of perceptive types: 58% as compared to 44% for the architects that worked with them, and 17% for the other architects. When measured on the type of perception they employed, one hundred per cent of the creative architects were viewed as intuitive, as compared to sense perceivers. (only twenty-five per cent of the people in the U.S. are considered intuitive perceivers). Sense perceivers tend to become aware of things by way of their senses. They also center their attention on existing "facts". Intuitive perceivers look for and see deeper meanings and possibilities inherent in things and situations. They look for links or bridges between meanings and are habitually focusing on possibilities.

The three groups were also tested on the California Personality Inventory. The more creative group differed from the other groups in that they were more unconventional, less concerned with the impressions they made on others, more independent and autonomous, and more apt to admit self-views which were unusual and unconventional. The three groups were also tested on the Minnesota Multiphasic Personality Inventory. The creative group showed more openness to their own feelings and emotions, a sensitive intellect and sensitive self-awareness, and wide-ranging interests including many which the American culture would think of as feminine. They also scored high on dominance, unconventionality, independence and flexibility.²⁶ In comparing the three groups on their publishing productivity, the highly creative group had published one hundred thirty-one articles in architectural journals, as compared to twenty for the group of men who they had worked with and three for the other group.²⁷

The relationship between creativity and productivity has been further pointed out in another study which led to the establishment of the "Scientific Research Temperament Scale". The test compared a group of men who scored in the top ten per cent in research productivity with a group that scored in the bottom ten per cent out of a total of three hundred and ten research workers. The test was of a forced choice variety where each individual was compelled to select the one descriptive word, out of two words, which best described him (examples:

26. D. W. Mackinnon, "The Personality Correlates of Creativity: A Study of American Architects" Creativity, ed. P. E. Vernon (Middlesex, England: Penguin Books, 1970) pp. 289-310.

27. Ibid., p. 292.

impulsive/inhibited, reliable/curious, formal/easy going, practical/original). The author of the test attempted to use words that had equal social value, but were discriminated according to their correlation with creativity. The group that scored the highest on research productivity (227 articles published to 21 for the other group; 188 patents obtained as compared to 0 for the other group) also out did the lowest group on the S.R.T. Scale. They averaged 24.4 (out of a possible score of 42) as compared to an average score of 13.5 for the low productivity group. Of twelve other groups that took this test, only creative artists with a score of 25.9 topped the group of productive research workers.²⁸

Other descriptions that have been found to apply to creative people include that they are hard workers, rebellious, tolerant, skeptical, adventurous, playful, that they oftentimes reject traditional religion, and that they're attracted to the complex and receptive to new ideas. On many occasions they select a life occupation after participating in a college project of their own choosing. They value their independence highly and they frequently choose occupations that allow them a great deal of independence. Creative males score high on their openness to inner experience, while creative females score high on their openness to outer experience.²⁹ This is the opposite of the cultural expectations

28. Dr. William C. Kosinar, "The Scientific Research Scale," Creativity Manual (Chicago: Psychometric Affiliates, 1960) pp. 1-8.

29. F. Pine and R. R. Holt, "Creativity and Primary Process: A Study of Adaptive Regression," Journal of Abnormal and Social Psychology, No. 61 (1960) pp. 370-79.

for males and females. This expanded experience among creative people gives them more to draw from when engaged in creative production.

It is interesting to study the families that creative people usually come from. I say "usually" because in my study of creative artists and scientists, I found creative people who came from quite diverse backgrounds. Still, certain patterns tended to emerge regarding the family lives of creative people. I will begin by referring to George Domino's 1969 study of mothers of creative sons. He found that creative people tend to come from families that exhibit a low level of control over their lives and a high level of tolerance. Their parents showed greater expressiveness and less dominance than usual. There was no rigid hierarchy in these families, so risk taking was viewed as a part of life. The families exhibited somewhat distant interactions, little clinging for support and laid little stress on conformity to parental values. The parents of creative children were somewhat indifferent toward their children's regressive tendencies. The father oftentimes was viewed as an authority figure while the mother was somewhat ambivalent in this role. The father's occupational autonomy did relate to the child's divergence, but the mother's role in the child's later creative functioning appeared more profound. The mothers exhibited many of the same values that creative people have shown to exhibit. They were independent and had much initiative. There were contrasting dynamic forces at work in their personalities. While they had much social poise, they felt little need to belong to various clubs or participate in community activities. They were more concerned with their own everyday lives than with community concerns.

They felt little need to conform through belonging. These mothers were less concerned with failings in their children than most mothers are.³⁰

One of the best examples of the role mothers have played in nourishing creativity in their children was one given by photographer, Edward Steichen. He described his mother as a real source of inspiration and encouragement and then gave the following illustration:

For instance when I first had a camera, that was before the automatic and daylight loading, there was a roll of film that had fifty exposures of which you had to shoot the fifty before you saw what you had. When the fifty went to Rochester, it came back with only one photograph printed.

My father said that was a pretty poor investment, to get one picture out of fifty. My mother comforted me by saying, "Such a wonderful picture! It's worth fifty misses!" So that's a very good idea of how my family background worked.³¹

Another example of such a mother was provided by fashion designer, Bonnie Cashin. She said:

My mother was a really great dressmaker. I was her apprentice. She taught me everything by doing it. Actually she could do anything with her hands and much of this rubbed off on me. I remember her building a brick wall beautifully. I remember her upholstering a wild, pink-striped chair, and most vividly I remember her miracle hands in the garden. I grew up with living color. My mother encouraged me in doing all the things I was interested in. At the age

30. George Domino, "Maternal Personality Correlates of Son's Creativity," Journal of Consulting and Clinical Psychology, No. 33 (American Psychological Association, 1969) pp. 180-83.

31. Edward Steichen, "Photography," The Creative Experience, ed. Stanley Rosner and Lawrence Abt (New York: Grossman Publishers, 1970) p. 313.

of sixteen when I was working in the theater, much of it at night, she'd drive me back and forth. She was the one who cleared the way for me to grow creatively. My father considered any of the arts impractical and urged me to take up typing, a thing I've never learned to do to this day!³²

According to George Domino, mothers of highly creative youngsters oftentimes let the pleasure principle rule over the reality principle. An example of this was expressed by philosopher, Sidney Hook:

My mother wasn't the Jewish-mother type one reads about; she was much more likeable. She would forget the whole world, engrossed in her novels, while the meat and everything else would get overdone.³³

Playwright Neal Simon's experience differed very much from these other people's. He said that:

I think I'm naturally a product of my environment, of my life with my mother and father, which was pretty hectic and quite terrible at times. And I think that has been instrumental in building my character in a negative way.³⁴

Simon went on to describe his parents' relationship as terrible and stormy. He said that he suffered terribly from this. Simon reveals himself to be something of an introvert. This is often true of creative people. He considers himself as more of an observer of life than a participant in it. He describes himself as a shy person.

32. Bonnie Cashin, "Fashion Design," The Creative Experience, ed. S. Rosner and L. Abt, p. 249.

33. Sidney Hook, "Philosophy," The Creative Experience, p. 310.

34. Neil Simon, "Theater," The Creative Experience, p. 369.

He says that he finds it easier to relate to life on paper than in reality. Like many other creative people, Simon considers himself a rebel. He said that he has always been in opposition to pomposity and society. He says that he has never been able to conform and that he has never belonged to a club in his life, or for that matter any kind of group.

Sydney Hook expressed a similar feeling of rebelliousness when he said:

I used to get beaten up at school for criticizing, mildly, American war policies (W.W.I) and for refusing to sell liberty bonds. I'd get up in class during the discussion period and advocate a capital-gains tax and get a zero, despite my logic and eloquence.³⁵

After examining the previously mentioned examples and empirical studies it becomes rather obvious that, despite many individual differences, certain patterns tend to emerge as to what creative individuals are like. They tend to be more independent and less enculturated than most people. They have perceptual openness and a childlike ability to juggle facts, ideas, words, musical notes or data in new and different ways so as to discover novel creations. Their family backgrounds, values and outlooks on life are all somewhat different than less creative people.

35. Sidney Hook, "Philosophy," The Creative Experience, p. 306.

PART III

"THE CREATIVE PROCESS"

As stated earlier, Carl Rogers defines creative process as the, "Emergence in action of a novel relational product, growing out of the uniqueness of the individual on the one hand and the materials, events, people or circumstances of his life on the other."³⁶

Creativity often follows intense emotional encounters between a person and something he has met in his environment. Fashion designer, Bonnie Cashin has said that "Intense emotional happenings have had the effect of intensifying creative action."³⁷ Numerous variables determine the intensity of these encounters and the creations which result from them. The chief variable is related to the experiential life of the creator. If people's experiences have been rich and varied, it is more likely that their perception will be keener and more open to intense emotional involvement. Their attraction to the object will also be determined by numerous variables. The object's beauty, uniqueness, clarity, color, size, shape, smell, touch, feelings and taste can be just a few of these factors. The object may be anything, a person, a mountain, a tree, the sky, stars, a song, a drug, an idea, food, a flower, a thought, a book, a poem, a car, an animal, a placeanything. It may come about as the result of an experience, a dream, a fantasy or a combination of all of these.

36. Carl Rogers, "Toward a Theory of Creativity," Creativity and Its Cultivation, p. 71.

37. Bonnie Cashin, p. 249

If the creators have not been hindered by crippling inhibitions or deadening experiences, their perceptual worlds will be literally limitless. They will be open to a universe of people, places and things. They will be able to see the beauty and shortcomings in all those things that they desire to. Since no one can do everything, these people will then choose to encounter those objects that most interest and excite them. They can also choose to bypass those objects that they are not attracted to. Empirical studies have shown that highly creative people perceive, and are later better able to use, apparently irrelevant stimulation which they have encountered. They seem to reflect a "wider deployment of attention and less screening out of irrelevant past experiences."³⁸ They are less likely to filter out incoming stimulation such as "unimportant" facts, ideas and experiences. Later they are better able to bring these apparently irrelevant or unrelated ideas together as associations.

The creative process begins when the creative person encounters a highly stimulating object. The person then reacts to this object and it may or may not choose, or be able to, react back to him or her. From this encounter, numerous unconscious and conscious remembrances are brought into play. Past experiences are then combined with present realities. If the encounter has been quite powerful and the creator feels a tremendous amount of passion for the object of attention, he or she can become literally absorbed in this object. This absorption occupies creative people's whole persona: their feelings, their intellect and their bodies. How they next respond depends on many

38. G. A. Mendelsohn and B. B. Griswold, "Differential Use of Incidental Stimuli in Problem Solving As A Function of Creativity," Journal of Abnormal and Social Psychology, No. 68, (1964) pp. 431-36.

factors. Looking at this from the viewpoint of the finished product of creation, one factor that is very important is the talent that the creator possesses. If two painters simultaneously fall in love with two girls and then decide to paint them, both the strength of their passions and the painting talent they possess, will contribute to the finished products. If one painter is a master and the other a novice, the master will probably paint the more aesthetically pleasing picture. This doesn't always occur, however. If the novice has much the more powerful feelings toward his girl, he may paint with such daring and with such a bold use of colors that his painting may turn out much better.

Once an encounter has taken place, the next step in the creative process is the recombining of diverse elements from this experience with all of the person's other experience to form a new product. This is the beginning of the stage of actual work. This is the time which follows the encounter's "moment of inspiration." This portion of the creative process is something like a period of play. A poet plays with words and feelings, a painter with colors and insights and a composer with melodies and harmonies. Even creative men of physical science play. Einstein discovered his theory of relativity by toying with basic principles of physics. He looked at whole phenomena rather than solely at specific actions. Most of the major breakthroughs in science have come when scientists have looked at things in new ways: Wholes rather than parts, function rather than structure and at behavior in natural rather than artificial environments.³⁹

39. Robert B. Macleod, "Newtonians, Darwinians and Gestalt Psychologists," Contemporary Approaches To Creative Thinking, (New York: Atherton Press, 1962) p. 208.

An example of such play in the field of fashion design is provided by Bonnie Cashin. She likes to get ideas for new fashion concepts by taking all her clothes out of her drawers, throwing them in a big pile on the floor and trying on strange combinations of clothes. She tries things on upside down, wrong side out, etc., and usually discovers wierd combinations that just seem to fit together. She also likes to look at clothes that people wore in ancient times to come up with new ideas.⁴⁰ This combination play of artists and scientists has greatly contributed to new creations. It makes people want to jump into their work and it dissolves the typical work-play dichotomy. It has helped make work fun and exciting.

The final stage in the creative process is the polishing up stage: a scientist carries out his experiments; a composer transcribes his work into musical notation and a poet checks and rechecks his poem. This can be a long, drawn out, difficult process, but it is something that must be done if one is to get the best possible finished product. Abraham Maslow has stated that we often "Deify the one side of the creative process, the enthusiastic, the great insight, the illumination, the good idea, the moment in the middle of the night when you get the great inspiration, and underplay the two years of hard and sweaty labor that then are necessary to make anything useful out of the bright idea."⁴¹ Maslow goes on to say that people who create are people who work hard. This only stands to reason since creativity is an active process. Creative people are people who are

40. Bonnie Cashin, pp. 244-46.

41. Abraham Maslow, "Creativeness." The Farther Reaches of Human Nature, (New York: The Viking Press, 1971) p. 80.

encountering and being stimulated by their environments. Even though this stimulation may lead to creative insights, there may still be a tremendous amount of work to be done before these insights can be transformed into finished products. For great acts of creation to take place, creative people must oftentimes work, struggle and encounter much frustration before they can complete their tasks. When we think of people such as Beethoven, Dostoyevsky and Pasteur, we think of people who have worked long and hard on projects before they were completed.

Another point to consider when analyzing the creative process is the concept of "breaking free". Many creators, especially in the field of art, have suffered from crippling inhibitions until they reached a certain point in their lives at which they decided to assert their individuality. A good example is Gauguin. When he left France to sail for Tahiti, he broke with his family and his society. It wasn't until he went to Tahiti, however, that his art really blossomed. The assertion of his own individuality preceded the assertion of his art.

Another example of a creative person who encountered a "breaking free" experience is provided by Henry Miller. Miller, the author of The Tropic of Cancer, described his experience in the following way:

I began assiduously examining the style and technique of those whom I once admired and worshipped: Nietzsche, Dostoevski, Hamsun, even Thomas Mann, who today I discard as being a skillful fabricator, a brick maker, an inspired jackass or draught-horse. I imitated every style in the hope of finding the clue to the gnawing secret of how to write. Finally I came to a dead end, to a despair and desperation which few men have known, because there was no divorce between myself as a writer and myself as a man: to fail as a writer meant to fail as a man. And I failed. I realized that I was nothing - a minus quality. It was at this point,

in the midst of the dead Sargosso Sea, so to speak, that I really began to write. I began from scratch, throwing everything overboard, even those whom I most loved. Immediately I heard my own voice. I was enchanted: the fact that it was a separate, distinct, unique voice sustained me. It didn't matter to me if what I wrote should be considered bad. Good and bad dropped out of my vocabulary. I jumped with two feet into the realm of aesthetics, the non-moral, not-ethical, non-utilitarian realm of art. My life itself became a work of art.- I had found a voice. I was whole again. The experience was very much like what we read of in connection with the lives of Zen initiates. My huge failure was like the recapitulation of the experience of the race: I had to grow foul with knowledge, realize the futility of everything, smash everything, grow desperate, then humble, then sponge myself off the slate, as it were, in order to recover my authenticity. I had to arrive at the brink and then take a leap into the dark.⁴²

The point that stands out to me in this article is that, after trying to copy everyone else and write for everyone else, Miller finally asserted himself and then wrote for "himself". When he finally asserted his own individuality and threw out his former valuing process, his writing became his own. He found his "voice" and he then became a great author.

Most great artistic creations have resulted from actual experiences people have had. Writer Arthur Koestler has said that all good novels must be autobiographical in some sense.⁴³ Neil Simon has said that his

42. Henry Miller, "Reflections On Writing," The Creative Process - A Symposium, (Berkeley and Los Angeles: University of California, 1952) p. 185.

43. Arthur Koestler, "Social Sciences," The Creative Experience, p. 138.

worst play ("Star Spangled Girl") was also the one that he wrote entirely out of his head. His other plays were all based on the experiences of himself, his family or his friends.⁴⁴ I believe that Neil Simon's experience gives credence to the point that the creative process best comes about from an interaction of an individual and his environment. It stands to reason that the strength of an encounter greatly determines the quality of the finished product. The creative process begins with these initial "moments of inspiration." Creative people then combine these experiences with all the other experiences that they have encountered in order to come up with a new product. These people frequently have to work extremely hard to bring about a finished product of creation.

44. Neil Simon, "Theater," The Creative Experience, p. 369.

PART IV

"CASE STUDIES IN CREATIVITY"

Much information and understanding can come from the systematic study of empirical research dealing with creativity, the creative process and creative people. The Freudian, humanistic and behavioristic schools of psychology have all devised theories and explanations for creativity. Another approach to studying this subject is to study case histories of scores of creators. From among all the creative artists and scientists that I studied, three individuals have stood out in my mind as typifying productive creators. The significance of each of these person's fame, contributions to mankind and life's work varied greatly. Nonetheless, I chose these three people because they all impressed me with their imaginations, their understanding of the creative process and their creative spirit. These three individuals are physicist Albert Einstein, actor, director, teacher Constantin Stanislavski and fashion designer Bonnie Cashin. Einstein's recognition as a creative genius has been worldwide. Stanislavski's importance to the theater and to acting parallels Einstein's contributions to science. Bonnie Cashin is not as well known or as recognized in her field as either of these two men. The reason I chose Ms. Cashin as a subject was because her experiences, thinking and outlook on life coincided so much with those same qualities in many of the creative people that I encountered when reading case histories and empirical studies.

I have already discussed Bonnie Cashin's relationship with her mother and the types of creative play she

employs. I would like to now take some of her statements and show how closely they correlate with the descriptions of creative people found in the empirical studies I have discussed, and in the descriptions provided by Maslow, Fromm, May and Rogers. Here are her perceptions regarding:

Fashion Design: "A means of personal expression"

Work: "Actually my work, I guess, is always on my mind. Where does one draw the line between working and living."

Clothes: "Clothes are an emotional and sexual stimulus. I think we dress to attract the opposite sex."

Encounter: "Whatever captures the interest of the creative person is likely to completely involve him, and he will usually add something uniquely his own to it."

Stimulation: "Travel to all and every kind of community cannot help but be stimulating and inspiring."

Idea Production: "Ideas just pop into my head, out of the blue seemingly. I'm a dreamer. I get a lot of ideas out of reading.

My ideas seem to flow more smoothly when I'm away from my own industry and the usual fashion environment."

Fantasy: "Sometimes I pretend that I've never been here before. Then I'll try to see things with the newest eyes I can."

Introversion: "I have a difficult time communicating my feelings and thoughts in the spoken word.

I'm a kind of solo person, and when I'm going well I get deeply involved in my work and am very happy about it."

Diversity: "I seem to function best when I'm working on several things at once."

Openness: "An antennae-out person by nature is sensitive to all sorts of things which produce moods.

"The layered concept of modern dressing in such vogue now has become a generic term in the fashion industry and grew from my first studies and interest in China."

Associativeness: "A good designer is a comprehensive designer. His eyes and ears and heart must be opened to this great, changing and challenging world. He must be exposed to all kinds of generative thought on all kinds of subjects. He must see things in relationships."

Design Schools: "Design schools are not doing a very good or inspirational job. This is partly due to the unavailability of stimulating teachers, but I think it's more than that. For one thing, there's too much specialization."

Fashion Industry: "The emphasis is so strong on commercial values and so little on the creative attitude that, in my opinion, our industry is in for a bad time."

Materialism: "I've consciously tried to simplify life as much as possible. Possessions begin to possess you. People and society begin to possess you. When I sold the Briarcliff studio, I made the decision to get rid of as much stuff as possible to free my wings, so to speak."⁴⁵

Ms. Cashin's quotations coincide very much with the statements made by numerous creative artists, scientists and educators, that I have read about or met.

The other person that I would like to discuss at length, Constantin Stanislavski, is much in agreement with Ms. Cashin. Stanislavski's main goal was to give some reality to acting. He wanted to have actors give performances that would make people feel that they had just witnessed reality. The artificail, cliché' ridden

45. Bonnie Cashin, pp. 239-49.

acting present in most theaters bored him. The Stanislavski method, which he devised, has as its chief purpose, the goal of giving life to an actor's part. It is as much a technique for drawing creativity out of a person as it is a technique for teaching someone to act.

Stanislavski perfected his method when he worked as an actor and director at the Moscow Art Theater (which he helped establish in 1898). People came from all over the world to visit him and learn of his method. The American school of method acting has had as its chief spokesman and teacher, Lee Strasberg. A partial list of method actors and actresses includes Marlon Brando, Paul Newman, Jack Nicholson, Shirley Maclaine, Warren Beatty, James Dean and Faye Dunaway. This list of names, alone, gives some credence to the value of "the method".

I first became interested in the Stanislavski method when I heard a former Cal State student, who is now an actress in Hollywood, describe her acting technique to a group of Cal State Upward Bound students. This girl, Debra Embry, spoke of the creative process with a real depth of understanding. I was quite surprised to learn that creativity could play such a big part in acting. I had never realized how much creativity a good actor puts into his role. After hearing Ms. Embry's talk, I read some books on the Stanislavski method, but by writers other than Stanislavski. I was not too impressed with these books. Many of them seemed to be critical of method acting as practiced by the most famous method actors in America. I was disappointed with this "purist" mentality. I then read books by Stanislavski, himself, and found

them to be totally different. It was as if this first generation of disciples that followed him had perverted much of his teaching. This seems to be a typical occurrence in any field.

I found Stanislavski to be a creative genius, par excellence. At times I was shocked at his clear, concise perceptions. He had no knowledge of empirical studies dealing with creativity, but he seemed to be quite aware of their findings. His understanding of the creative process and its application to creativity was astounding. I have read few books by other authors that have so impressed me as did Stanislavski's book on Creating A Role. This was surprising to me, since my knowledge of acting in minimal at best.

This ability to create a role is just what Stanislavski attempts to teach. He stresses the analysis of the play, the role of imagination, the relationship of the conscious to the unconscious, and the importance of understanding the part played by desires and drives in people's lives. He told his actors and actresses that, when they read a play, the first impressions were most important. If they misunderstood or became bored with the play on this occasion, they might later always have trouble with this particular play. His analysis of a play involved the understanding of the whole play through a study of its parts. Each scene had a certain objective or tried to get a certain point across. The actors must discover what the playwright was attempting to accomplish with each scene. Besides objectives, each play had a super-objective which the actor must find. This is that thing which inspired the writer to write the play and which must inspire the actor to act in it. The process of analysis also involves a search by the actor for creative stimuli in the play. He reads the play and attempts to

relate the action of the play to events that have occurred in his own life. In any play there are gaps present. The playwright doesn't describe everything totally. Part of the process of creation in acting is involved with the filling in of these gaps. Here the actors can draw on their own personal experiences and their own imaginations. Stanislavski stressed the understanding of the external events in the play. He always wanted his actors to first thoroughly understand the external action. Once this was accomplished, they could then attempt to understand their characters' internal, psychic lives. He told his actors that people in real life are driven by desires. These desires greatly affect their thinking and their actions. When a person has a strong desire he sets up certain objectives which will lead to the fulfillment of this desire. There are usually many objectives which have to be met to fulfill a desire. This is true in both real life and acting. Stanislavski wanted his actors to be aware of all the desires which drove the characters they played and all the objectives that the characters had to accomplish. Stanislavski believed that if an actor consciously understood his character, the character's desires and objectives, that the actor could then draw from his unconscious in creating a role. "From the conscious to the unconscious" was one of Stanislavski's favorite sayings. Stimulating an actor was most important to him. He felt that the only good objectives were those that excited an actor and impelled him to creative action. To get this strong, emotional feeling, one had to understand the skeleton of the play. You could find the skeleton of a play by asking, "Without what things would there be no play?"

Stanislavski told his students that they must be open to the world. He felt that they should experience as much of the world as they could. He told them to observe people and things and to remember the impressions that they drew from these observations. He told them to read, study, travel and to keep in touch with current social, religious, political and scientific life, as well as other forms of life. He told them to wait patiently for creative inspiration. He said that if they didn't, they'd be like, "a stupid child who planted a seed in the ground and then dug it up every half hour to see if it was putting down roots." He also believed that habit played a big part in the making of an actor. He said that habit makes what is difficult habitual, what is habitual easy and what is easy beautiful. He felt that if an actor did not understand people, what drove them and their psychic lives, that the actor could not create true characters. Stanislavski's desire for realism in the theater caused him to believe that without creative objectives and feelings, actors would be tempted to resort to actor's clichés and conventionality, two things that he despised.⁴⁶

The last creative genius that I would like to describe is Albert Einstein. Einstein's position as one of mankind's greatest creative scientists has been secure for over sixty years. He was much more than this, however. He was an unpretentious, humble, humane person who appreciated the beauty of life and was very concerned about the future of mankind. His unconventional attitudes toward science, war, social niceties and education alienated him from his teachers, his colleagues and his countrymen. Still, he was respected as few men have ever

46. Constantin Stanislavski, Creating A Role, (New York: Theater Arts Books, 1961) pp. 1-209.

been. Like many creative geniuses, Einstein's personality contained many dichotomous elements. He could be described as a socially conscious loner; the father of atomic power, as well as a critic of the arms race; a man who saw his work as play; and as a man who despised the education given him, but who spent his life absorbed in the most rigorous of intellectual disciplines. He defended academic and personal freedom, but he had many socialistic leanings. He was a nuclear physicist, but also a poet and a musician. He rejected religion at an early age, but frequently spoke of God.

Einstein's perceptions regarding the creative process were the perceptions of both a creative scientist and a creative artist. They could very well be applied to both types of men. Who could better describe this process than such a well-rounded genius as Einstein? He said:

I believe with Schoepenhauer that one of the strongest motives that leads men to art and science is escape from everyday life with its painful crudity and hopeless dreariness, from the fetters of one's own ever-shifting desires. A finely tempered nature longs to escape from personal life into the world of objective perception and thought; this desire may be compared with the townsman's irresistible longing to escape from his noisy, cramped surroundings into the high mountains, where the eye ranges freely through the still, pure air and fondly traces out the restful contours apparently built for eternity.

With this negative motive there goes a positive one. Man tries to make for himself in the fashion that suits him best a simplified and intelligible picture of the world: he then tries to some extent to substitute this cosmos for the world of experience, and thus to overcome it. This is what the painter, the poet, the speculative philosopher, and the natural scientist do, each in his own fashion. Each makes this cosmos and its construction the

pivot of his emotional life in order to find in this way the peace and security that he cannot find within the all-too-narrow realm of swirling personal experience---47

Einstein seemed to view creative work as a form of therapy. We can also see that Einstein looks on it as a productive form of escape. This stands to reason since Einstein's speech was written near the end of World War I. This was a time of extreme alienation and unhappiness, which came about as the result of the horrors of this cruel war.

The three creative people that I have described have much in common. They all very much enjoyed their work. They were all flexible, aesthetically oriented and industrious. I feel that all three of these people reflect the productive, creative side of humanity. They show us what people can be like if they develop their creative powers.

47. Albert Einstein (speaking at the sixtieth birthday celebration of Max Planck in 1918) Albert Einstein Creator and Rebel, ed. Banesh Hoffman and Helen Dukas (New York: The Viking Press, 1972) pp. 221-22.

PART V

"SELF-ACTUALIZATION AND CREATIVITY"

The relationship between self-actualization and creativity has been studied by many psychologists, most notably, Abraham Maslow. Maslow pointed out that one of his former students, Richard Craig, had compared a list of personality characteristics of creative people developed by E. P. Torrance in Guiding Creative Talent⁴⁸ with the characteristics that Maslow had used to describe self-actualized people in Motivation and Personality.⁴⁹ Of the thirty or forty characteristics used by Maslow to describe psychologically healthy (self-actualized) people all but two or three were also used by Torrance to describe creative people.⁵⁰

Maslow studied creativity from a holistic approach. He believed that the problem of creativeness was the problem of creative people, rather than creative products or behaviors. He believed that creative people were special human beings rather than ordinary human beings with some special skill. Maslow stated that, "if you think of the person, the creative person, as being the essence of the problem, then what you are confronted with is the whole problem of transformation of human nature,

48. E. P. Torrance, Guiding Creative Talent, (New York: Prentice Hall, 1962).

49. Abraham Maslow, Motivation and Personality (New York: Harper and Brothers, 1954).

50. Abraham Maslow, The Farther Reaches of Human Nature, p. 73.

the transformation of the character, the full development of the whole person."⁵¹ Maslow believed that by striving to develop a healthier, more fully human individual we would automatically be developing a person who was more creative in all departments of life. Maslow said:

General creativeness, holistically conceived, emanates from the whole system, generally improved. Furthermore, any factors that would produce a more creative person would also make a man a better father, or better teacher, or better citizen, or a better dancer, or a better anything, at least to the extent that the "general" creative factor was increased.⁵²

Maslow has described self-actualized people as perceptive, spontaneous, flexible, open, self-accepting, self-assured and warm. He said that they were less enculturated than most people.⁵³ Maslow said that these people showed a fusion of behaviors that we usually view as dichotomies. They enjoyed being with people and they enjoyed being alone. They fused work and play together as one. They could be both selfish and unselfish, cognitive and conative, and the people with the strongest egos could also be the most easily ego-less, self-transcending and problem centered.⁵⁴ I believe that such behaviors are essential to both psychological health and creativity. To be productive an artist must be able to easily go from a rational to an emotional level. The

51. Ibid., p. 74.

52. Ibid., p. 76.

53. Abraham Maslow, "Creativity in Self-Actualized People," Creativity and Its Cultivation, p. 88.

54. Abraham Maslow, Toward A Psychology of Being (New York: D. Van Nostrand Co., 1968) p. 139.

initial stage of the creative process is usually charged with emotion. The final stages involve a high degree of reasoning ability. An artist must be able to move back and forth from cognition to emotion, and from the conscious level to the unconscious and preconscious levels of the mind.

Maslow described creative people in much the same way that he described self-actualized people. He said that they resisted enculturation and that a prerequisite for creativeness was the creators ability to become timeless, selfless, outside of space, of society and of history. He stated that this is related to the mystical experiences described by Huxley. Maslow said that, "In various cultures and in various eras, this phenomenon takes on somewhat different coloration - yet its essence is always recognizable - it is the same."⁵⁵

Maslow said that creative people had an ability to get totally "lost in the present". They could give up the past and the future and totally concentrate on the matter at hand. He said that they were able to fuse themselves with the world. They seemed to possess an ability to melt themselves into the subject of their attention. They were accepting of themselves and others, receptive to people and things and had an amazing amount of trust. He described these people further by saying that they were spontaneous, expressive and had few inhibitions. They perceived things in an aesthetic manner and had a Taoistic receptivity towards the world.⁵⁶

55. Abraham Maslow, The Farther Reaches of Human Nature, p. 62.

56. Ibid., pp. 61-71.

Maslow pointed out that not all creativity was constructive. Much of art is imitation, aimed at the market place and more concerned with technique and style than artistic expression. Maslow said that, "To the extent that creativeness is constructive, synthesizing, unifying, and integrative, to that extent does it depend in part on the inner integration of the person."⁵⁷

Maslow has spoken of primary and secondary creativeness. Primary creativeness is that, "which comes out of the unconscious, which is the source of new discovery - of real novelty - of ideas which depart from what exists at this point."⁵⁸ This is the initial, inspirational stage of the creative process. Secondary creativeness is related to the finishing up, work stage of the creative process. Maslow defines much of science as, "A technique whereby uncreative people can create and discover, by working along with a lot of other people, by standing upon the shoulders of people who have come before them, by being cautious and careful and so on."⁵⁹

Maslow believes that we have neglected primary creativeness and that we should strive to nurture this true source of creativity. He feels uninhibited children exhibit a tremendous amount of primary creativeness. He feels that repression has caused adults to lose much of their potential to experience this initial stage of creativity. He believes that there exists deep within

57. Abraham Maslow, Toward a Psychology of Being, p. 140.

58. Abraham Maslow, The Farther Reaches of Human Nature, p. 82.

59. Ibid., p. 83.

the unconscious of every human being a vast amount of latent, primary creativeness. An example of this can be seen in the dreams of people. In our dreams we usually seem sharper, more humorous, braver, less inhibited and more original. Part of the reason for this is that in our dreams we don't experience the blockage and repression that we do in a waking state. If we can uncover the source of these controls and defenses, we can learn to be more complete and more creative human beings. We will then be more in touch with our unconscious and more original ideas will then be free to flow to our conscious mind. Most highly creative people possess this ability to go from a conscious to an unconscious level and then back again quite easily. They seem to have the ability to turn primary creativeness on and off at will.

Certain techniques have been employed to teach a person how to nurture primary creativeness. "Brainstorming" is one of these techniques. Brainstorming teaches people to delay any judgement of creative products during the initial stages of creativity. It has been found that one of the chief inhibitors of creativity is a too early judgement of the products of creation. The "brainstorming" or "deferred judgement" technique was originally developed by advertising agencies to stimulate the production of creative ideas among their employees. In the early stages of creativity the employees were encouraged to produce the wildest, most novel ideas that they could imagine. They were encouraged to let their thoughts float freely from their unconscious minds. Because they were not being judged they experienced less blockage and more primary process creativity. They did not throw out the ideas they got but saved all of them until much later in the creative process. Teaching people the theory behind

the associative theory of creativity has also led to an increase in divergent thinking and creative production.

The nonjudgemental acceptance of creative ideas can be compared to Carl Roger's belief that the creation of psychologically healthy people comes about once people have been unconditional accepted by others. Rogers believes that once people have been given unconditional positive regard by others they can learn to accept themselves. They will then see themselves in a positive, favorable light. This contrasts with the "conditional acceptance" that we now most often practice. We have learned to judge rather than accept people. We place conditions upon the granting of our love and acceptance. If a person is "good", successful, wealthy or famous, we will honor him. If a child makes good grades, if a professor publishes many articles or if a person conforms to societal norms, he will be accepted. If a child is a mediocre student, if a professor is more interested in teaching than research or if a person is unconventional, the person may be rejected. The rejection of a person early in life is similar to the rejection of ideas early in the creative process. In both cases the end product will be stunted. Psychologically healthy people have experienced enough acceptance in life that when a situation which calls for creative action confronts them, they can freely and confidently deal with the problem in order to find an appropriate solution. They are not thwarted by the fears of rejection or disapproval that less healthy people experience.

Frank Barron has noted that altered states of consciousness also have a tendency to strengthen a person's receptivity to creative production. These altered states of consciousness oftentimes come about

through the use of breathing exercises, fasting, the use of strobe lamps, mountain climbing, bodily mortification, prolonged rhythmic singing or dancing, or through the use of drugs. Certain similar physiological changes occur when experiencing any of these activities. Barron said that after being engaged in these above mentioned experiences, there tends to be an increase in aesthetic sensibility, intuition with others, unusual associative patterns, higher philosophical motivation and mystical experiences of absolute freedom,⁶⁰

The humanistic psychologists have emphasized the development of the entire person as a key to the nurturance of creativity. Maslow believed that if people found their true, real selves and acted to please themselves instead of others, they would be happier and more creative. People would then not have a need to hide the unconscious part of their minds from their conscious mind and they would be free to dip into their unconscious, the part of them that truly unites them with all other human beings.

60. Frank Barron, Creative Person and Creative Process (New York: Holt, Rinehart and Winston, Inc., 1969) pp. 148-53.

PART VI

CONCLUSION

In my study of creativity I noticed many similarities between artistic and scientific creativity, artistic and scientific creators and the processes that they experience in order to develop novel products. I believe that there are certain similarities between creative people, whether they are musicians, biologists, housewives or truck drivers. I also believe that the creative processes that these people experience are similar in many ways. Maslow has spoken of a "G" or general factor and an "S" or specific factor when discussing creativity.⁶¹ He believed that if you worked to improve a general creative factor in people that the specific factors would also improve. Maslow believed that if you improved people by explaining the associative theory of creativity to them, or by having them experience the deferred judgement technique of brainstorming or if you helped them gain insight to their deeper selves through psychotherapy, that the person would improve in many ways that you had not even counted on. It is almost as if people who are more creative let off sparks that touch all aspects of life around them.

I believe that most primary process creativity is very much related to the associative recombining of apparently dissimilar ideas, words, musical notes, etc. When songwriters such as Jim Croce talk about losing a girl to "my best old ex-friend Ray" or when Bob Dylan says, "but I was so much older then, I'm younger than

61. Abraham Maslow, The Farther Reaches of Human Nature, p. 73.

that now" we see words and thoughts twisted around in new ways. When Einstein discovered his theory of relativity and when Poincare' made his discoveries in mathematics, they combined ideas in new and different ways to come up with novel discoveries. In all of these examples we find creative people letting themselves go in something of a playful manner in order to create new products.

Secondary process creativity is also similar in both art and science in that it involves work. Song-writers must discover the right lyrics, melodies, introductions, bridges and endings for songs. Scientists must work to prove the insights or hunches that they experienced. The amount of work, the number of people involved and the time it takes to complete a project may vary greatly, but secondary process creativity always is related to rolling up one's sleeves and working.

Brainstorming techniques have shown us that an encouraging, non-judgemental environment is very important in stimulating primary process creativity whether we are dealing with corporate officers, students, teachers, people in advertising or scientists. I believe that this is very much related to Carl Rogers' finding that you best create people by raising them (or giving them therapy) in a warm, accepting, non-judgemental environment. Rogers believes that once you develop a sense of trust and worth in people that you can then work to change their behaviors and attitudes. This is similar to secondary process creativity in that once you experience the inspiration, you must then work to complete the project.

The holistic approach to creativity is related to the belief that almost everyone has the potential to be creative if the person is given the proper

environmental advantages. Rather than viewing creativity as a gift granted to lucky individuals or creative people as random freaks of nature, the emphasis is placed on developing all people in positive directions so as to enhance the creative potential stored within them. The development of the whole person (of a person's mind, body and emotions) is given top priority. A goal is set to develop the best human beings possible and the best society. This philosophy is something that has been neglected in Western society for quite some time.

The development of a person's psyche involves creating a person with a clear, undistorted perception. People must gain insight into the individual and societal repression that they experience and the neurotic behaviors that hold them back from living life to its fullest. Maslow has said that, "The greatest cause of our alienation from our real selves is our neurotic involvements with other people, the historical hangovers from childhood, the irrational transferences, in which past and present are confused, and in which the adult acts like a child."⁶² Once people learn to assert their independence and do what they want to do rather than what others want them to do, they are on the path to psychological health and a more creative lifestyle.

A most important factor in the creative process is for the creator to have a clear, undistorted perception. If the creative person experiences overwhelming guilt or anxiety when encountering an object, the ability to perceive will be thwarted and the encounter will not be strong enough to generate the enthusiasm necessary to stimulate creativity. A sculptor who experiences crippling guilt everytime he/she sees a nude person will

62. Ibid., p. 65.

have difficulty appreciating the beauty of the human body and transferring the aesthetic appreciation into a completed sculpture. People who strongly repress much of their experiences will have similar problems. They will have difficulty in drawing on their unconscious and preconscious minds, something which is a most important part of the associative recombining of diverse elements portion of the creative process. People who have been strongly attracted to the beauty of nature, but who convince themselves that such attraction is a dangerous waste of time, will probably repress and distort many of the encounters they have had in the natural world. Later, they won't have much to draw from when they hear a poem, song or story which describes the beauty of the outdoors.

This type of repression is very much related to the societal repression described by Carl Jung and Erich Fromm. Fromm has noted how we learn to see through a "societal filter" at a very early age. Fromm said:

Every society, by its own practice of living and by the mode of relatedness, of feeling, and perceiving, develops a system of categories which determines the forms of awareness. This system works, as it were, like a "socially conditioned filter"; experience cannot enter awareness unless it can penetrate this filter.

All sensations which are relevant to individual or group survival (pain, sexual desire, hunger, etc.) have easy access to awareness. But when it comes to a more subtle or complex experience, like seeing a rosebud in the early morning, a drop of dew on it, while the air is still chilly, the sun coming up, a bird singing - this is an experience which in some cultures easily lends itself to awareness (for instance, in Japan) while in modern Western culture this same experience will not usually come into awareness because it is not sufficiently "important" or "eventful" to be noticed. Whether or not

subtle affective experiences can arrive at awareness depends on the degree to which such experiences are cultivated in a given culture.⁶³

In America we are conditioned at home, at school and through the mass media to be materialistic, individualistic and competitive. In many ways we are also conditioned to be superficial, passive, hero worshippers. The great majority of the "news" that we see on T.V., in the newspapers and in magazines is of a superficial quality. We are fed a daily diet of instant analysis, sensational crimes and the bizarre (Examples: Patty Hearst, Hillside Strangler, Evil Kneivel, Jaws, Star Wars, Charlie's Angels, The Hulk). In many ways we're also conditioned to be passive spectators of life rather than active participants. An example of this would be to compare the number of adult males who spend Saturdays, Sundays and Monday nights every fall watching football games on television to the number who play touch football. We are also given a goodly number of heroes to identify with. We can choose between O. J. Simpson, Woody Hayes, Muhammad Ali, Paul McCartney, Peter Frampton, Jimmy Carter, Ronald Reagan, Farrah Fawcett or Burt Reynolds. Hero worship has been vigorously attacked by many psychologists in the past few years. Dr. Wayne Dyer has stated that when we worship others we are allowing them to determine our values. An example of this is the child who says, "If Bruce Jenner eats Wheaties to get strong, so should I!" Dyer says, "Hero worship is a form of self-repudiation. It makes others more important than you, and relates your own fulfillment to something outside yourself. If you make others your heroes and elevate them to positions

63. Erich Fromm and D. T. Suzuki, Zen Buddhism and Psychoanalysis (London: George Allen and Unwin, Ltd., 1960) pp. 99-100.

above yourself, then you are giving others the responsibility for your own good (or bad) feelings."⁶⁴ To feel absolutely horrible because the Rams or Dodgers lost a ball game is an example of self-repudiating hero worship. Such behavior is in many ways promoted in our society. From a holistic viewpoint such behavior is not in the best interest of the individual. As such it would not be in the best interest of the person's creative potential. If we spend our time being passively entertained, educated or informed, we will deny ourselves many opportunities for powerful encounters with other individuals, with other objects in our environments or with more rewarding, deeper knowledge. These encounters are the fuel for creative action. They are also very much related to enhancing our personal growth.

It is no coincidence that most creators resist enculturation. They must if they are to develop themselves as individuals or if they are to develop their creative potential. Maslow has stated that, "Primary creative people are those who usually make trouble in an organization. They are oftentimes unconventional and their colleagues oftentimes call them undisciplined, childish or unscientific."⁶⁵ Even though these traits are considered inappropriate in schools and other organizations, they are important in the initial stages of creativity. The ability to play, to dream and to be loose to juggle facts are all important parts of primary creativeness. If we are to encourage creativity in our society we must find a place for these

64. Wayne W. Dyer, Your Erroneous Zones, (New York: Avon Books, 1976) pp. 152-53.

65. Abraham Maslow, The Farther Reaches of Human Nature, p. 93.

unconventional, highly creative individuals. We must also find ways to encourage primary creativeness in all people.

I believe that the only way that organizations will begin to stimulate creativity in individuals will be after our society and our government takes a serious look at devising a philosophy towards humanity. We must define what good individuals are like and we must set some goals toward developing these types of individuals. We must also define what a good society is like and make plans to implement the establishment of such a society. There is no question that individual freedom and individual expression are important considerations when we consider the development of good people or a good society. Other factors must also be considered if we are to implement a program that stresses the holistic development of the individual. We must find ways for every person to not only read and write, but to have feelings of self-worth, security and independence. This would only come about after we had a societal, cradle to grave, commitment toward all human beings. This would mean guaranteeing not only "adequate" but "good" child care, health care, education, employment and welfare programs to all individuals in our society. I could say that we could encourage creativity by including the associative theory of creativity in teacher training programs or by having elementary school students experience brainstorming techniques, but I see such programs as superficial, band aide compromises to a much greater problem. I believe that the question of the development of creativity is very much, if not totally, tied in with the question of the complete development of the individual. If we are to see great strides in creativity, we must see great strides in the development

of human beings. This is very much related to the progress of our society and the whole human race. After more than one and one half years of studying creativity, I am convinced that we must take a holistic approach if we are to understand creativity or if we are to make significant improvement in the creative output of human beings.

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