

## CHAPTER I

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## INTRODUCTION

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WHY TO STUDY CREATIVITY

Man has all along created something new in all fields of life. His achievements, however, during the last few decades have been incredible. The fact that he creates, strikes him as something unique and in the course of his growth he has often asked what is this ability in man which enables him to create? Again, the fact that not all men can create a new poem, a new painting, a new instrument has prompted him to ask why everybody cannot create and why only some can.

The science which is most closely connected with this aspect of human behaviour is psychology and most appropriately this phenomena has caught the attention of psychologists particularly during the last few decades when human creativity on the one hand has been at its apex and on the other hand when the development in psychology has reached a point where subtle differences can be drawn between human abilities

like intelligence, creativity etc. In due course an array of distinguished psychologists devoted themselves to answer these questions. The result has been that to-day we have a number of studies and investigations which discuss various aspects of creativity.

Apart from these generalized observations, there are people who seriously observe: Creativity and the creative have always been there, they have grown and flourished though no studies were conducted to see why or how they created. And surely, they argue, they will continue to be born in the years to come. There are others who argue that the creative are there because the time need them. There are still others who differ and say: "Creative men are not a response to the needs of their times. Creative impulse or creative drive compels its agents..... not because it wishes but because it must, like play. The creative process stems from a psycho-physiological state in which there is surplus energy".

Whether a creative person creates because the time demands it or whether he creates because he must, due to his surplus energy, the truth remains that they emerge and restructure our universe of understanding whether we study

them or not. Why then, should we study them? What purpose will it serve? Two answers have been suggested. The first arises from man's thirst for scientific enquiry. Man is interested in exploring nature. He would like to understand what creativity is just for the sake of understanding it. The second arises from man's urge to identify such persons and see that they are not wasted and that their talents and potentialities are put to suitable use for the betterment of the society. They help in clarifying views and lead to further views in the subject. They also help in finding new approaches to the topic.

It is generally believed that all people are to some extent potentially creative including persons of all ages, all cultures and all fields of human endeavour. It is also believed that individuals differ in their degree of creativity and in the modes of expression of their creativeness.

Already, man has reached a very high pinnacle of growth in all spheres of life. He has successfully limited disease, overcome superstition, lessened human drudgery. He has secured more leisure, become more rational and enjoys greater freedom. He has made deep dents in the mysterious nature, and in fact conquered w much of it; he has set his

foot on the moon and is on the look out to pry into the secrets of other celestial bodies. This and much more has been done by individuals singly or in co-operation with others. Society needs to recognize that this incredible growth has been made possible by the creativity in man. Identification and nurture of creativity is, therefore, a primary need if humanity is to grow to fuller heights. Society must do all it can to do this. It is, therefore, important to identify ~~these~~ creative. It is equally important to develop those who have the creative potential. No less important is the fact that society needs to be made aware of the progressive role of the creative in all fields of life. Researches have indeed been carried out in this regard; though of a priliminary nature, they are yet very significant.

Apart from the importance that the identification of the creative holds for the society, there is another and by far a very important, aspect of the problem. It is the question of providing opportunities to each individual to reach his highest fulfilment. Growth of the individual is a basic tenet of democracy. Democracy cannot find its fulfilment unless it assures this to each individual.

Individual growth is, therefore, an equally important argument for its identification and nurture.

#### NEED FOR STUDY OF CREATIVITY IN INDIA

The need to identify and nurture the creative has a unique importance for the whole world, but much more so for the developing countries including India. These countries have to make up the loss of time and enforce a greater speed of progress. Fortunately we are now free. We have taken long strides towards progress. The country is being industrialized fast, a net work of Science Laboratories has been set up all over the country; the teaching of science is being given special attention, the process of agriculture has been almost revolutionized. We, in fact, have a number of universities teaching sciences, humanities, agriculture, medicine, etc. Much of this, however, has been done with the assistance of foreign experts and foreign know-how. This has perhaps been a necessary step. But it is strongly felt in all quarters that dependence on foreign ideas and experts must end as early as possible.<sup>1</sup> This indeed means

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1 "They (the developing countries) have now become aware that these models (often obsolete, even for the people by and for whom they were devised) are adapted neither to their needs nor to their problems."  
'Learning To Be', UNESCO, P.XX.

that we need to emphasize creativity and help the creative to develop in our own country. And if we ever intend to achieve it, we must develop instruments and ways and methods of identifying our creative boys and girls and nurture them. In this we can hardly afford to lose any time.

It is, however, not sufficient to carry out research for developing instruments for identifying the creative; it is equally important that the instruments are such as are most relevant and most fruitful in the Indian context. In this as in any other field, we need to develop an original and a creative approach. The occasion for such an effort is ripe. We, therefore have to make a deliberate attempt to identify such persons at a very young age and help them grow to the full. We need not wait and argue that the creative have always been there whether we carried out researches or not and that they will bloom of their own. That involves risk of their being born and dead without getting the opportunity to do the best they can, to grow and benefit the society and mankind. Fortunately we are a democracy and democracy provides for the growth of each individual.

### NEED FOR MEASUREMENT OF CREATIVITY

What is essential, therefore, is to identify each creative child and provide for his growth.

To identify a creative child, we must have an instrument which is reliable and valid. This could be a test which can measure this very complex aspect of mind. Many psychologists have attempted this.<sup>1</sup> Each new worker has tried to study an aspect of creativity not being attempted earlier. The problem, however, is very complex and inspite of the fact that many methods of measurement have been developed and applied, the concept is still not very clear. Different definitions have been offered. The definitions have something in common, but there still are aspects which are new to each definition. The result is that we are not yet clear about its dimensions. This complex nature of creativity can be compared to electricity which exists, is utilized every day, but stands undefined. It is, therefore, a very difficult problem indeed. That the definition of the concept is not clear, that its

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<sup>1</sup> The investigator has given an overview of most of these attempts in Chapter II.

dimensions have not been worked out, that its aspects are yet to be crystalized, that its need or importance is ~~usually~~ recognized, is constantly proving a challenge to workers in the field. The challenge, indeed is too attractive to be ignored. Let us first examine what creativity refers to.

#### SOME ATTEMPTS TO DEFINE CREATIVITY

The definitions of creativity seem to fall into four categories. ① Creativity may be considered from the stand point of the person who creates, that is, in terms of physiology and temperament including personal attitudes, habits and values. According to Guilford, "Creative potential is the personal disposition of an individual that is desirable in terms of a collection of an relatively enduring qualities that we possess and that prepares him for creative thinking. Creative thinking culminates in novel ideas which may or may not emerge in the form of tangible products."

Creativity may also be explained by way of the mental processes - motivation, perception, learning, thinking and communicating - that the act of creating call into play.



Torrance defines creativity "as the process of becoming sensitive to problems, deficiencies, gaps in knowledge missing elements, disharmonies and so on, identifying the difficulty, searching for solutions, making guesses, or formulating hypothesis about the deficiencies, testing and retesting these hypotheses and possibly modifying and retesting them and finally communicating the results."<sup>1</sup>

A third kind of definition focuses on environment<sup>2</sup> and cultural influences. Stein insists that creativity must be defined in terms of the culture in which it appears. To him, "novelty" or "newness" means that the creative product did not exist previously in the same form. It may involve a reintegration of existing materials or knowledge, but it must contain new elements. Stein also believes that to be creative the novel work must be accepted as tenable or useful or satisfying by a group in time. He hypothesized that the study of a creative person may reveal a sensitivity to the gaps that exist in his own culture and that his

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1 Torrance, P.E.: Rewarding Creative Behaviour: Experiments in Classroom Creativity, Princtice Hall Inc., Englewood, N.J., 1965, P.8.

2 Stein, M.I.: A Transactional Approach to Creativity, Scientific Creativity, Its Recognition and Development, Edited by Taylor, C.W. and Barron, F. John Willey & Sons, Inc., N.Y., 1963.

creativity may manifest in calling attention to these gaps.

In addition to sensitivity, Stein notes, as characteristics of the creative person, tolerance of ambiguity and ability to maintain direction as hypothesis are tested and refined.

Finally, creativity may be understood in terms of its products such as theories, inventions, paintings, carvings and poems.

For the most part it is this last conception that has traditionally guided the study of creativity. Indeed this is the most obvious approach to the subject, since products being public and readily available can be more easily assessed rather than personalities. More recently, however, research has tended to concentrate on creativity as a mental and emotional process, an approach that is all the more demanding and subtle because much of its subject matter<sup>1</sup> lies in the inner states of the creative person.

Different schools have also given a thought to creativity. We have Gestaltists saying, "Creative thinking

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<sup>1</sup> Kneller, G.F.: The Art and Science of Creativity, Holt Rinehart and Winston Inc., N.Y., 1966, P.3.

usually begins with a problematic situation which is incomplete in some way. The thinker grasps this problem as a whole. Then the dynamics of the problem itself, the forces and tensions within it, set up similar lines of stress within his mind. By following these lines of stress the thinker arrives at a solution which restores the harmony of the whole. Throughout this process he satisfies an inborn urge to grasp a whole pattern and restore it to order. In the words of the Gestalt theorist Max Wertheimer, the entire process is one consistent line of thinking. It is not a sum of aggregated, piecemeal operations.<sup>1</sup>

In the Freudian view, a person creates just as he eats and sleeps in order to alley certain drives. He explores, solves certain problems and thinks creativity in order to return to the state of equilibrium which the drive has disturbed. Creativity, therefore, is a means of reducing tension. According to C.R. Rogers, creativity is self realization and the motive for it is the urge to fulfill oneself. "It is the tendency to express and activate all the capacities of the organism, to the extent that such

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1 Ibid, P.27.

activation enhances the organism or the self."<sup>2</sup>

These various definitions covering different aspects of creativity go to prove that there is no single definition that could be accepted as covering all the aspects of this complex problem and that a clear view of creativity is yet to be found.

#### THE PRESENT ATTEMPT

As stated above, many eminent psychologists have done work of considerable importance to understand the concept of creativity. This work, however, has been mostly done outside India. In India also some work, as we shall see in the next chapter, has been done. But the nature of the work done in India, is secondary in the sense that most of the work, known to the investigator, is one of the adoption or adaptation of the tools constructed in culture patterns other than that of India. For instance, the tests adopted have been those constructed by Guilford and Torrance, both of them belonging to America, a very advanced country with a very different culture pattern from a point of view. The

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2 Ibid, P.37.

use of adaptation of these tests can certainly be helpful and useful. The investigator, however, thought it necessary to attempt to construct a test which could emerge from the needs of Indian culture pattern and satisfy the needs. The investigator's view in this regard was strengthened by the fact that no test constructed so far claims to be culture-free. There is consequently a risk that a test meant for one culture may or may not predict correctly the behaviour of persons of a different culture. To use an American or any other test prepared for American children is not meant for Indian children and any attempt to do so involves the risk of faulty or even wrong prediction. Adaptation may make it somewhat more reliable, but it cannot remove the suspicion of its being inadequate. The investigator has, therefore, decided to construct a test on creativity which is based on Indian conditions. The investigator is keenly aware of the fact that an Indian child is born and brought up in a particular way, the atmosphere in which he grows is peculiar to him, the objects he sees, the imagery he construes or the everyday things or articles of play he sees, in fact most of things he comes across are different from those of a child outside India.

Another and a very important consideration is that the language he uses is different from that of students in the west. All western tests available in India are written in English. An Indian cannot be, in fact he is not, as proficient in English as an American girl or boy of a similar age can be. The tests, therefore cannot be used as they are and have to be translated into an Indian language, in my case Hindi, the sample being Hindi speaking. And translation can never be identical. India has many languages. It is perhaps necessary to say a word ~~as to~~ why the investigator chose to construct the test in Hindi and not any other Indian language.

The most important reason is that there is a general attempt to encourage Indian languages and replace English by any one of them depending upon the region. In North India, including Delhi, Hindi is slowly but steadily replacing English. This deliberate attempt to bring in local language in the place of <sup>a</sup> foreign language has been done primarily to facilitate the teaching-learning process. English takes away most of the time of the student, and even then he cannot get proficiency in it. Consequently it takes more than necessary time to the student to learn what otherwise could be learnt in a shorter period of time much more

effectively. And those children who can think and produce new things are handicapped by the foreign language. These initial assumptions of the investigator proved true when the test was administered. A test in English has obvious handicaps. Some observations in this regard are given in Chapter VI. Secondly, a test in Hindi would be easier for the students to understand and to react. Besides, it would remove the fright that English language usually creates in the children. And this is essential for any test regarding creativity. If this is done, students can feel easy while working out their thought processes. Naturally, therefore, the test in Hindi would be easier for the students than in English. The thought will not suffer because of language. Thirdly, children who have not been able to read English at school can also be creative. It is important to locate creativity amongst them also. There are more chances to locate them if the test is in Hindi the language they understand. Finally, Hindi being understood by majority of people in India, has been now assuming the status of a national language. It is the most welcome effort to construct a test in Hindi.

The test has been constructed in the Verbal Form.

The reasons for this are :

(1) Majority of the population learn through verbal means. This is the easiest available tool with us for expressing ourselves. Some of us have a very limited ability ~~to~~ of figural expression. This is because much attention has not for various reasons been paid for quite a long period, to develop figural form of expression. Therefore, the present investigator considered verbal form of expression as more responsive form for most of the students.

(2) The investigator herself is not very proficient in the figural or other forms of expression. And this would have proved a handicap in conducting the study.

(3) A possibility could have been to use both the forms- figural as well as verbal. Granting that the investigator would understand some of the figural representations, the total time the test would require would be approximately two hours. Students of 14, 15, and 16 years have little patience with a test of two hours at a stretch. It was found by the investigator at different occasions during the preliminary work that students in general were not able to concentrate on a test for more



than 45 minutes at a time. No incentive seemed to motivate them to work for more time at a stretch. This difficulty could be solved by administering the test on two occasions. This too had its handicaps. To construct the norms of the school-going 14-16 years population, the test would have to be administered to at least 1000 students. Contacting each student twice would have taken enormous amount of time because all the students would have needed 3 or 4 visits before the test could be administered again. This would be impossible for a single investigator, though it could be possible for a team of workers. Keeping all these conditions in mind the investigator decided to construct only the verbal form of test.

The test, as stated, has been constructed in Hindi. It can be useful only in India, more precisely in those parts of India where Hindi is the medium of instruction. This has been necessary because the test is primarily meant for Hindi speaking students. The efforts of the investigator may hopefully prove instrumental in encouraging people of other languages to prepare tests in other languages. The test has been standardized on 14-16 years of population. This restriction was essential because it could be difficult to construct a test to suit the whole

range of school-going population and administering the test single-handed. A consideration which helped the investigator to select this age range is the view put forward by psychologists who have been working on development and growth of children that the climax of the mental maturity comes out approximately at this age. The potentiality of creativity, of course, is present at all the stages, but full expression is believed to come at about this age.

Before the actual attempt by the author to construct and standardize the test is described, it is fair now to review the attempts done by others, which would help the author to proceed on right lines gaining experience of others. The next Chapter is devoted to such review.

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