DISCUSSION

of the Symposium on:

DIVERGENT MOTIVATIONS FOR CREATIVITY IN ART AND SCIENCE

Presented at the International Congress of
Applied Psychology, Montreal, July 29, 1974.

Recently, while browsing through the literature on creativity, I came across a paper - published last year - that examined geographical differences in creative productivity across the various regions of the U.S. The author arrived at the conclusion that greater creative productivity distinguished the American North-East, West Coast and Midwest from the South East, South West and Western Mountain regions. Whether ethnic, climatic or other ecological factors were responsible for these differences - if, in fact, there were valid differences - or whether they were the result of different cultural factors, the author could not say.

What is the moving force behind all productivity? In the reductionist language of the experimental psychologist this force is the composite result of three forms of drive: according to Berlyne, $drive_1$ is unselective, diffuse and equals general arousal or activation. $Drive_2$ is more selective and produces specific behaviour in the presence of appropriate stimuli, e.g. hunger and food, sexual drive and erotic objects, painting and an artist studio, research and a laboratory. $Drive_3$ is a condition whose termination is rewarding - e.g. the finding of a solution to an intellectual problem, the achievement of self-expression in a painting or a poem.

Let me attempt here for a moment - since I am still engaged in the business of defining my area of discussion - to determine the difference between production and creation. All creation is a production, but not every production is a creation. Briefly, it seems to me that a mere production

is always either the result of random processess or greatly restricted by certain rules, i.e. somehow or other institutionalized, e.g. routine research carried out by the worker in the laboratory or posters produced by the commercial artist, while a creation is always some sort of a free enterprise, something ventured into by the scientist or artist on his own initiative and at his own risk.

Three phases are essential in the emergence of any creation: first, there has to be a clear, self-motivated intention in the creator to create something - call it a desire, a plan or a motive. Then, this plan, no matter how vaguely or intuitively conceived, must be executed. Finally, the author of the creation must examine his work critically.

The fingerpaintings of chimpanzees - even if they may win prizes in art exhibits - are not creative work, because it is very questionable whether there was ever a self-motivated desire in the chimpanzee to paint, or whether he was put up to it by conditioning or simply by letting him walk, with paint-smeared feet, over the paper to reach a banana. Moreover, it is certain that the execution of the painting by the primate was not followed by a soul-searching self-critique of his production. For the same reasons, we cannot say that the paintings of small children - no matter how fascinating they may look - are really creative. They lack the planning, its existential risk, and the final self-critique. God looked at his world and was pleased with it. Machines, animals and young children lack the divine pathos of the creator.

But aside from the processes involved in creation, what properties charactize a truly creative work? Gendlin and his co-workers have distinguished these four factors:

1. non-externalization;
2. non-intellectualization;
3. non-stimulus boundedness and
4. non-adherence to old concepts and traditional attitudes.

Where can anyone find those qualities? Only in the depths of the unconscious, in the churning whirlpool of our primary processes where there are many unused, not yet organized forms that are not subjected to spatial and temporal order, not restricted by the laws of reason and logic. Any discoverer, any creative artist must find his raw material in the lawless regions of the primary processess from where all dreams, all imaginations and all inspirations spring. But the order of the secondary processes is threatened by such material and, if it is not to be repressed for passive self-protection by the individual, it must be re-integrated into new, acceptable forms of consciousness - in the creative fusion of a tertiary process.

So far, everything I discussed goes for the scientist discoverer as well as for the creative artist. But, contrary to the thoughts expressed by several of the speakers today - I am convinced that there are also essential differences between the creative involvement of the scientitist and the artist.

The scientist proceeds through analytic, inductive channels - at least in the beginning. He may then go through a period of brainstorming and unconscientious incubation, but at the end his creative product, his theory or discovery, will be explainable, testable,and it must, in fact, be confirmed by the consensus of his peers.

The artist, however, proceeds on a synthetic, inspirational road, and his product must be interpretable - not testable; nor does it need to be confirmed by consensus of his peers. Instead, it must be understood and accepted by society.

If power, as Hobbes has claimed, is the basic motive of human behaviour, what kind of power is the motive behind those who are creative? Is it anonymous power to dominate - the kind of power that can be transduced into money - or individual power to be? Power to be, in the existential sense to which Goethe was referring when he said: "who would have the power to create something would have the power to be something". It is this kind of power, the power to be - to be unique and individual - that motivates creative artists and scientists alike.

But the specific motivating drive of the scientist again differs from that of the artist. The scientist is primarily motivated by gaps in his information, by conceptual conflicts, as Bartlett has called them. These information gaps or conceptual conflicts threaten to disorganize the scientist who, almost in self-protection, sets out to eliminate the anxiety-producing gaps and conflicts. True, Cattell has pointed out that the exploratory drive is related to unrealistic tender-mindedness,

something we would expect to find mainly in the artist, and that there is an affinity between epistemic behaviour, aesthetic behaviour and divertive exploratory behaviour - or simple curiosity, in less complicated language. Yet, the drive to explore, fired by curiosity, is the scientist's primary motivation.

It was Samuel Johnson who said: "Curiosity is, in great and generous minds, the first passion and the last". He spoke for a rational world, the world of the scientiest.

But Byron said: "I loathe that low vice, curiosity". He spoke for the romantic world, the world of the artist.

Artists, almost magically, reach out into the future. Artists, Ezra Pound said once,are the antenna of the race. Artists anticipate future scientific and intellectual experiences. Rollo May thinks that when, at the birth of the renaissance, Giotto for the first time painted rocks and trees in three-dimensional space, he created a new view of space that was basic for the new geographic exploration of oceans and continents by Magellan and Columbus and the astronomical discoveries of Galileo, Kepler and Copernicus. And when the world of Newtonian mechanics was ending, Cézanne created a new space in his paintings - a space important for the being of space, not for its measurement.

Psychoanalysis has proposed that motivation for many creative artists is a feeling of guilt for their aggressive and destructive drives. They must create in order to atone for what they have destroyed. But without involving such unconscious defences of an almost clinical nature, the existentialists declare that creativity is the result of a struggle between vitality and form, that the choosing of invidual values, imagination and intentionality are the qualities of human freedom and that only by acting - not by looking at oneself - can one reveal oneself.

To be creative, the action must be powered by the daimonic, and that, the daimonic, is any natural function which has the power to take over the whole person, be he artist or scientist. Eros is a daimon, Platon has told us in the Symposium.

To be creative - and there is no difference between the artist and the scientist here - one must have a special courage, one must accept the risk to let the daimons take over - all of them. Perhaps nobody has expressed this more poignantly than Rainer Maria Rilke when he wrote in a letter once - as he was withdrawing from psychotherapy: If my devils are to leave me, I am afraid my angels will take flight as well".