

SOME THOUGHTS ON THE CONCEPTS OF  
CREATIVITY AND INNOVATION

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## ABSTRACT

In this paper a number of questions are raised concerning the concepts of creativity and innovation. The quantum leaps of creativity as contrasted with the diminutive jumps of innovation provide a basis for anthropological understanding of both concrete and intellectual change, continuity, and discontinuity. Further queries establish two major phases inherent to the concept of creativity: the initial phase is marked by a flash of inspiration, intuitive recognition and a state of receptivity; the next is involved with the conscious recording, refinement, and application of the creative moment. Crucial to an understanding and acceptance of the 'rightness' of creativity is the concept of intuition reinforced by the role of the 'inner critic'. Conversely, the concept of innovation implies a sustained and steady effort over time.

## RÉSUMÉ

L'auteur adresse plusieurs questions concernant les concepts de la créativité et de l'innovation. Les bonds quantiques de la créativité, comparés aux petits sauts des innovations, fournissent une base d'analyse anthropologique pour les changements concrets et intellectuels, et la continuité et la discontinuité. Une recherche plus approfondie démarque deux phases principales qui caractérisent le concept de la créativité: la première comporte un éclat d'inspiration, de reconnaissance intuitive et un état réceptif; la seconde comporte la rédaction consciente, la précision et l'application concrète du moment créatif. Le concept de l'intuition, renforcé par le rôle de 'critique personnelle', est fondamental pour comprendre et accepter la créativité. Par contre, le concept de l'innovation implique un effort soutenu.

What is creativity? Philosophers, psychologists, anthropologists, aestheticians, and art critics have probed and discussed creativity at great length. Yet the definitive qualities of the concept remain elusive, tangled in a web of ideas, theories and terminology. Why have great minds from

fields of endeavour as disparate as arts and science been so fascinated with the creative process? Why can they not define creativity with exactitude? What have they managed to extricate from the web? And how was that managed? Where, too, does innovation fit into this scheme? Finally, are we able to apply the results to specific areas, concepts or queries? These concerns have ramifications for all aspects of Anthropology, whether or not they are applied to an understanding of the creative processes involved in, for example, the technological and concomitant intellectual development of early humans, or the creation and innovation intrinsic to language, or the means by which culture is transmitted. Most importantly, the concepts of creativity and innovation effect anthropological perceptions of cultural traditions in regards to continuity, discontinuity and the introduction of new traditions.

Lacking precise means for measuring creativity, it is necessary to turn to the biographical materials of creative individuals to undertake an introspective approach to these questions. (This, too, raises concerns as to who is creative, determined by whom?) This approach is broadened and supplemented by the views and research of both philosophers and social scientists. To mediate the extremes of introspective and scientific research, we incorporate the concept of the plastic activity of the cortex whereby the intellectual capability of the brain's cortex (learning centre) is continually molded and remolded, allowing for a seemingly limitless state of fluidity and learning potential. This concept also provides the underlying conceptual basis for the circularity of the ensuing discussion. Although certain processes can be discerned and are recognizable as distinctive aspects, the interconnectedness and fluidity of creativity precludes clearly delineated units for examination. The ultimate goal is to grasp some understanding of creativity and, by extension, its cousin innovation.

Present research has moved away from Freud's earlier views whereby the artist was "an incipient introvert who is not far from being a neurotic" (Freud 1920:326). According to Freud, the artist, apparently impelled by powerful instinctive needs to achieve honour, riches, fame and the love of women, but lacking the means to achieve them, turns away from reality. He finds his way back to reality through his "life of imagination" (*ibid*).

Likewise, the views of the behaviourists -- that group of psychologists whose interests focused on controlled laboratory experiments of human behaviour with conditioned-response techniques -- can be discounted. Close to the answer, but blinded by their scorn for any and all theories involving mental processes, they explain creativity as nothing more than the random shuffling of known bits and pieces until, by accident, the pieces fall into a new configuration. Somewhat similar in outlook is an unlabelled theory broached by E.W. Sinnott (1959:22) in

which the creative process, being primarily deductive, operates on the basis of direct frontal assault by "marshalling the widest possible array of facts and ideas and then carefully searching for heretofore unrecognized relationships between them." This implies that we finally have discovered a conscious process to 'physically' (or mentally) assess all possible combinations. Although both Edison and Einstein are purported to have used this method in their work, they must have possessed an impressive capacity for work or there must have been a strong element of luck [inspiration and/or intuition] in arriving at the 'right' solution; or perhaps they were merely innovators. This will become more relevant below.

Prior to the consideration of the introspective biographical material, an expansion of L. L. Whyte's (1954) concept of the plastic cortex is appropriate at this point. In the frame of a biological and physiological concept, Whyte provides us with terms of reference useful to grasp the innate physical properties underlying human creativity. In order for the mechanics of creativity to proceed we must appreciate the plasticity of the cortex. Comprehension of this principle allows us to envisage metaphorically the manner in which creative imagination enters into consciousness by means of the "plastic capabilities" of the cortex. Whyte points out that this conception bridges the difficulties inherent in scientific studies which rely on analysis, precision, and permanence with the creative process which is conceived as a "combining, simplifying, and novelty-producing activity" (Whyte 1954:157). According to Whyte (*ibid*:160), all creative activities reflect the properties of the underlying plastic activity. Thus the existence of the creative imagination, marked by the fluidity of its nature, challenges the adequacy of exact science. As such it mediates, at some level, the evident extremes of scientific and introspective studies.

Several basic elements have been determined to be inherent in the process of creativity. For the most part the details delineating these elements have been derived from information gleaned from the biographical material written about or by people considered to be creative, be they musicians, poets, artists or scientists. Allowing for the different media used in expression, there are sufficient commonalities in their methods and philosophies to establish some basic understanding of the process. It is interesting to note that much of the introspective material of these creative individuals is in the form of letters to empathetic friends and family members or in diary-like notebooks (for example, Frost, Mozart, Rodin, Tchaikovsky, van Gogh, to name a few). I infer from this material a strong desire both to express themselves and to derive some understanding through self-introspection. The following discussion reduces the dynamics and the emotion of the inspirational moment into these few basic elements.

During the initial phase of creativity, the 'flash of inspiration', intuitive recognition, and the state of receptivity are of such emotional strengths and depths that they seem to occur virtually simultaneously, a Gestaltian whole. Only through analytical retrospection is the individual able to recognize and define the subtle differences between each element. In sharp contrast, the totally conscious aspects of recording (that is, concretizing the idea), refinement (that is, reworking the idea until it reaches a satisfactory state), and application (that is, applying the results to other ideas) follow logical sequences. In essence, these are the basic elements recorded or derived through introspection. The only minor difference appears to be the order of the sequence between the recording and the refinement.

As an example of the process of creativity, we can share Mozart's experiences as he so lyrically expressed them in a letter to a friend:

When I am, as it were, completely myself, entirely alone, and of good cheer ... it is on such occasions that my ideas flow best and most abundantly. *Whence* and *how* they come, I know not how; nor can I force them. All this fires my soul, my subject enlarges itself, becomes methodized and defined, and the whole, though it be long, stands almost complete and finished in my mind .... Nor do I hear in my imagination the parts *successively* but I hear them ... all at once ... When I proceed to write down my ideas, I take out of the bag of my memory ... what has been previously collected into it ... (ca. 1789).

The most compelling and emotionally intense feature of this process of creativity is the 'flash of inspiration' experienced by each individual during unexpected moments. Although these inspirational moments flash 'unexpectedly', there is an underlying pattern evident throughout. Creative ideas or solutions inevitably follow periods of intense conscious concentration. Then, during a liminal state of mind -- exhaustion, relaxation, somnolence, dreaming -- the idea or solution will cross the threshold from the unconscious into the conscious mind. A wonderful example of this is the experience of the mathematician, Henri Poincaré who relates that

For fifteen days I strove to prove that there could not be any functions like those I have since called Fuchsian functions. I was then very ignorant. Every day I seated myself at my work table, stayed an hour or two, tried a great number of combinations and reached no results. One evening, contrary to my custom, I drank

black coffee and could not sleep. Ideas rose in crowds; I felt them collide until pairs interlocked, so to speak, making a stable combination. By the next morning I had established the existence of a class of Fuchsian functions, ... I had only to write out the results, which took but a few hours (1924:87).

In another instance, Poincaré (1924:88) tells of walking on a bluff one morning when "the idea came to me with just the same characteristics of brevity, suddenness and immediate certainty." As told to a friend, the poet Robert Frost related his experience of striding out of his house into the snowy darkness for a breath of air. At that moment the poem, *Stopping by the Woods on a Snowy Evening*, came into his mind in its entirety (see Sinnott 1970:109). For Stephen Spender (1970:75) it is during the state of half-walking/half-sleeping that a stream of words pass through his mind. The examples are inexhaustible.

One point of divergence becomes evident. The scientific mind, as represented above by Poincaré, tends towards a recognizable and demonstrable progressive sequence of steps whereas, the artistic mind *appears* more random. The resolution, dependent upon the equation of input equals output, differs only in the recognition and immediacy of the relationship between the aspects of the equation. Thus only the timing appears to be different. As both scientific and artistic types of minds have acquired at least a basic expertise in describing their respective areas, all experiential information becomes integrated accordingly. Furthermore, creative people stress the importance of continually working at the mechanics of one's chosen field -- the writer must write, the painter must paint, the musician must practice, and so on -- until the physical aspect has been so thoroughly integrated it becomes almost automatic. Then, and only then, will inspiration have relevance. A creative person is now in a state of readiness and receptivity.

It is recognized that being in a state of readiness and receptiveness is crucial to creativity. As Tchaikovsky expresses it (Lane 1906:274), "if the soil is ready -- that is to say, if the disposition for work is there -- it takes root with extraordinary force and rapidity, shoots up through the earth, puts forth branches, leaves, and, finally, blossoms." This readiness or receptivity for the moment of inspiration is recognized by most creative people as being critical and the result of days, weeks, or even years of focusing, working and striving towards the goal. It also carries the implication that creativity does not exist in a vacuum but, rather, builds on past experiences and models.

Having received that flash of insight, how do we now that it is 'right'? The answer is found in intuition -- that nebulous, ephemeral and

fleeting 'feeling' which is considered critical to creativity by those experiencing 'inspirational moments'. Described variously with euphemistic terms, inarticulate depths of feeling, and scientific detachment, 'intuition' is the term most fitting for these experiences. For Mozart, we must infer intuition from "those pleasures that please me" (1970:55) and "all this fires my soul" (ibid). Poincaré (1924:388,389) first recognizes the moment of inspiration as the "appearance of sudden illumination, a manifest sign of long unconscious prior work", and somewhat later as "this delicate feeling so difficult to define", and again, "immediate certainty". Or as Hunt (1983:283,284) expresses it: "the creative answer to a problem, it would seem, strikes home and makes us feel good; we recognize and like it".

By employing, and thus accepting, the Oxford English Dictionary definition of intuition as "the immediate apprehension of an object by the mind without the intervention of any reasoning process", we recognize but avoid discussion here of the philosophical relevance of the intuitionist theories of such men as Benedetto Croce, Henri Bergson, Maurice Halbwachs and others. Rather, we are influenced by the philosophy of Ernst Cassirer (1979:99) who, following Spinoza's lead that intuition is the highest form of cognition, designates intuition as the very source of metaphysics. (The immediate awareness of the individual occurs without any conscious judgment as to its metaphysical status!) Building upon his preliminary statement, Cassirer's student, Susanne Langer (1953:378) proffers a more comprehensive statement that "all cognition of form is intuitive; all relatedness -- distinctiveness, congruence, correspondence of forms, contrast, and synthesis in total *Gestalt* -- can be known only by direct insight, which is intuition.

From a mathematician's point of view, and stressing the requirement of memory in addition to intuition, Poincaré (1924:395) considers the intuition of mathematical order as that which makes us divine hidden form and relations. He cautions that this intuition cannot be possessed by everyone, for some will have neither this delicate feeling so difficult to define, nor a strength of memory and attention beyond the ordinary. Poincaré believes that this latter type represent the majority. Still others may have great memory and power of attention, and make what he calls 'applications', but they cannot create. Others will possess the special intuition referred to, and then not only can they understand mathematics even if their memory is nothing extraordinary, but they may also become creators and try to invent, with more or less success, according to the degree of development of their intuition.

As the conscious mind must be receptive to creativity, so must it recognize intuition. Having broached the idea that it is intuition that

provides this sense of 'rightness', we are left pondering *how* intuition can recognize from all the possible answers which one *is* the 'right' one. There is a consensus of agreement that it is the unconscious that is instrumental for determining this. Certainly, if we possessed no other information than that gleaned from the introspective studies, the inference for unconscious interplay would stand firm. The very fact that the flash of creativity comes unbidden during periods of relaxation and leisure that follow arduous stints of working suggests that it is a manifestation of the unconscious. That this is indeed so is confirmed by many sources (see, for instance, Bateson 1972:141-143; Hunt 1983:274; Lord 1964:24; and others).

As Hunt (*ibid*) so aptly states

this is not to say that creative ideas or solutions to problems arrive gratis, without the cost of hard work; on the contrary, it is most often after intense but unsuccessful efforts to generate a fresh artistic idea or to find a new solution to a problem ....

The assumption is that during these intense work and/or practice sessions, the overload from the conscious becomes buried deeply within the unconscious and it is in this plastic cortex that integration takes place. It is presumed that the unconscious tries out combinations of disparate elements until the right one is flashed into the conscious. This assumes that intuition and, particularly, that part of intuition concerned with selection, is based on prior knowledge of possibilities. According to Whyte (1954:156), it also assumes that the essence of creative activity does not rest in the mere selection of material from already given elements, but in a simplifying process which automatically involves "not only selection and rearrangement of the available material, but its modification in process of developing a simpler form." Hence, a work of art need not be simple in any absolute sense, but it is always simpler than a random collection of similar material. Thus, at the instance of creativity, the unconscious flashes only correct, or *almost* correct, elegant combinations. Seldom, if ever, does a sterile combination become conscious under these circumstances. In the case of the *almost* correct idea or solution, sufficient information is present to allow the recipient to act as critic, eventually reworking the material to satisfaction.

Having acknowledged above that some divergence in the input-output equation is resolved by accepting a temporal factor, it is again applicable to this simplification function of the unconscious. For once again the scientific mind reveals patterns of demonstrable concrete syllogisms directly related to the specific field. Whereas all that the artist has experienced, including, for example, emotions, interpersonal



relationships, vicarious experiences (books, other art ...), establishes a much broader field over a greater time depth; and yet, there is no hesitation by artists to recognize "that the creative instinct acts at the bidding of the unconscious" (Lord 1964:24). W.I. Thomas (1927:176) referred to the unconscious as the *force creatrice*. He recognized that poems, for example, were not created by the unconscious out of nothing but rather that the poet worked and the unconscious worked too (ibid).

It would appear that Ben Shahn does not seem to appreciate the full implications of the unconscious as it relates to artistic creativity. He accepts that the unconscious may shape one's art but he rejects any idea that it creates it. As he says (1957:50), "the very act of making a painting is an 'intending one'; thus to intend and, at the same time, relinquish attention is a hopeless contradiction." As Shahn does not mention experiencing flashes of inspiration in his book, *The Shape of Content*, we are unable to fully assess his concerns. But had he experienced this flash of creativity, he would realize (perhaps) that the physical aspect of painting is merely the actualization of a vision and does not necessarily create a paradox or constitute a compromise. As well, by positing that the artist was in fact two people, both the producer and the art critic, Shahn has revealed that "intending" is not all conscious.

Having arrived at the stage of total consciousness, our 'flash of inspiration' must now be recorded before it is forgotten. The range of variations evident in the introspective material suggests that the recording, although an important element common to all, under the conscious control of the individual becomes idiosyncratic. One major source of dismay for many creative people during this recording stage is interruption. Interruption inevitably leads to such loss of flow as that experienced by Samuel Coleridge who, eager to record his opium-inspired poem, *Kubla Khan*, was interrupted when only partially finished. The remainder disappeared irretrievably and the poem remains incomplete (Thomas 1927). Tchaikovsky (1906:275) also expressed distress at interruptions for, "sometimes they break the thread of inspiration for a considerable time, so that I have to seek it again - often in vain". On the other hand, the mathematician, Poincaré, acknowledges his ability to put creativity aside while he continues whatever else he might be doing, such as, for example, a full travel itinerary. Although one example is inconclusive, Poincaré's ability intimates another discernible difference between the logical sequence inherent in science and the more ephemeral qualities of artistic creativity.

Mozart is renowned for his talent for transcribing his musical compositions in a single original draft. In contrast to the remarkable and dazzling genius of Mozart, Tchaikovsky and many others seldom find the



product of creativity as immediately transferable to paper or canvas in finished form. Rather, they feel the need to critically examine, improve, and expand upon the original inspiration until it is a finished product. It is at this stage that the artist and scientist can assume the role of 'inner critic'. This is particularly relevant in those instances when the vision was not clear or fully developed. As Ben Shahn remarked,

An artist at work upon a painting must be two people, not one ... On the one hand, the artist is the imaginer and the producer. But he is also the critic, ... of inexorable standards. When a painting is merely in the visionary stage, the inner critic has already begun stamping on it (1957:39).

Furthermore, "the critic within the artist is prompted by taste, highly personal, experienced and exacting. He will not tolerate within a painting any element which strays far from that task" (Shahn 1957:40). This inner critic is of course cognizant of all that the creator has experienced and integrated within the unconscious and is able to intuit what constitutes 'right'. Whether or not the creative product is immediately transferable or requires reworking, may be of little import relative to the final product itself.

The final element in the conscious realm is the application of creativity. In the scientific world, the application of formulas, designs, or concepts take on a pragmatic and often rule-bound realization. The application in the world of the arts reflects the emotional and catholic traits demonstrated throughout this work as well as an idiosyncratic manner of mastering technique in the service of a vision. Art is as concrete as the completed painting or as ephemeral as the haunting melody.

Up to this point we have considered creativity mainly as an ability and a form of mentalistic activity. But, throughout the history of its study, a recurrent theme has been the underlying personality characteristics and emotional drive of the creative individual.

Somewhat surreptitiously, the terms genius and intellect assert themselves into the discussion of creativity and beg to be addressed. Certainly the process of creativity with its need for lucidity intimates that a higher intellect would be appropriate. How does one determine accurately, 'intellect', 'genius' and 'creativity' when many of the contrived testing methods are (to put it charitably) not without drawbacks. The most satisfactory route suggests an interdisciplinary multivariate testing. Psychological and psychometric tests and personality and creativity studies have been used to compile data applicable to our query.

In an empirical psychological study designed to develop a hypothetical biography of a genius, L.M. Terman defines a genius "as one who is endowed with superior intellectual ability to acquire and manipulate concepts" (1970:25). To arrive at this, two separate studies were conducted to examine biographical information, with the intent of extracting relevant features that suggested certain patterns. The first study was retrospective in nature, projecting backwards from the present. The population studied was comprised of people with recognized achievements, their I.Q.'s estimated from the biographical information covering each individual. The results established a notable tendency for childhood interests and achievements to be indicative of future achievement. However, more conclusive results are coloured by history (and, no doubt, by culture). Nevertheless, one fact was clear: the idea that geniuses were expert in only one area was discounted, as the study demonstrated that in fact the superior intellect usually correlated with several fields of achievement, dependent on personal interests and drives. The exceptions were music and the visual arts, which require specialized abilities. Analysis of this versatility revealed clusterings that associated particular abilities. Predictably science, mathematics, invention and handwork grouped together. Similarly poetry, novels and drama became a group, while another consisted of philosophy, theory, history and languages; religious leadership displayed achievement in areas of politics and administration; musicians stood pretty much alone; finally, the unlikely combination of arts and science clustered together (the epitome of this pairing would be recognized in the genius of Leonardo da Vinci).

The second study was a long-term one involving 1450 gifted elementary and high school students. A full range of tests was conducted, repeated and evaluated at intervals. These data were supplemented with ratings by parents and teachers. It was shown that not only was the gifted child physically superior as well, but also that childhood achievements foreshadowed those of adulthood, confirming the earlier biographical approach. The ultimate conclusion derived from these and other studies was the strong correlation between high intellect (genius) and the capacity for creativity. Even this correlation has been qualified somewhat by more recent studies which indicate that not all highly intelligent people are creative nor are all creative people necessarily highly intelligent. Nevertheless, generally the earlier implications are still relevant.

The creativity that we have been discussing conjures up visions of leaping from mountain top to mountain top, from the 'spire' of one inspiration to another. Reality declares that there is more to the picture than this. Reality, of course, introduces creativity's less dramatic cousin, innovation. Innovation, as defined in the Oxford English Dictionary, is "the act of innovating (that is, to change a thing into something new); the

introduction of novelties; or the alteration of what is established by the introduction of new elements and form". We must recognize that the majority of 'creative' acts and products are in fact 'innovative' acts and products.

Innovation in the sciences, being well-documented elsewhere, will not be dealt with here. Rather our attention will be focused on art. The history of art has been treated as a continuing tension between the stability of the style and the fight against it. The artist caught in this tension struggles to win a 'freshness of vision'. Such attitudes negate the essence of creativity relegating all art to mere innovation. In actuality we find that creativity is radically different from the skilled re-use of existing forms and devices. And certainly this skilled re-usage embodied in innovation is not only present and viable, it also reinforces and enhances that special spark of creativity. Only when it becomes hackneyed does innovation fail in this function.

While the products of creativity have been likened to quantum leaps, the products of innovation manifest a steady pace and diminutive leaps. The outline manifested by innovation represents several stages in its duration. Initially, the innovator stands alone. As the style or innovation is recognized by others as being intuitively 'right', it gains a following and the image broadens out. Through time the style diminishes as its relevance fades or is supplanted by another innovation and the image tapers off (see Figure I). Some units (concretized as ideas, melodies, images, objects, or traditions), which may be conceptualized as being longer or broader or both in comparison to others, reflect the organization of experience for both the individual and the culture. While highly creative people are often elevated by and isolated from their cultural group, the innovator is more often found working in the same medium as his followers.

Although the delineating characteristics of creativity and innovation establish two distinct entities, when these are applied to the world around us the boundaries begin to blur. Consider the genius of Beethoven. As a gifted composer and musician in close contact with others of comparable talent, he was adept in the art of improvisation, particularly when excited. And yet we are told that the full-fledged and creative compositions were the result of continuous effort involving innumerable revisions and reworkings. Furthermore, he exhibited no strengths in areas outside his given field (cf. Marek 1969; Mellers 1983). Is Beethoven's work creativity or innovation?

Another example of these blurred boundaries involves a rather lengthy quote, but as it illustrates this problematic decision so well, it is included in its entirety from Mary Douglas' book, *In the Active Voice*:

In 1832 when Constable exhibited his *Opening of Waterloo Bridge*, it was placed in the school of painting -- one of the small rooms at Somerset House. A sea-piece, by Turner, was next to it -- a grey picture, beautiful and true, but with no positive colour in any part of it. Constable's *Waterloo* seemed as if painted with liquid gold and silver, and Turner came several times into the room while he was heightening with vermilion and lake (sic) the decorations and flags of city barges. Turner stood behind him, looking from the *Waterloo* to his own picture, and at last brought his palette from the great room where he was touching another picture, and putting a round daub of red lead, somewhat bigger than a shilling, on his grey sea, went away without saying a word. The intensity of the red lead, made more vivid by the coolness of his picture, caused even the vermilion and lake of Constable to look weak. I came into the room just as Turner left it. 'He has been here', said Constable, 'and fired a gun'. On the opposite wall was a picture, by Jones, of Shadrach, Meschach, Abednego in the furnace. 'A coal', said Cooper, 'has bounded across the room from Jones's picture, and set fire to Turner's sea.' The great man did not come again into the room for a day and a half; and then, in the last moments that were allowed for painting, he glazed the scarlet seal he had put on his picture, and shaped it into a buoy (1982:240,241).

Based on the points raised above, do we define Turner's responses as creativity or innovation? According to our working definition of innovation, we can interpret Turner's action as "changing a thing into something new" -- a 'new' image; "the introduction of novelty" -- an ill-defined amorphous red daub on the grey seascape; or "the alteration of what is established by the introduction of new elements and form" - obvious. But, the impact of his action sparkles with creativity for intuitively he added that red spot so 'right' in colour, intensity, shape, size and position to create a Gestaltian whole. Defining the red daub into a buoy was the influence of the inner critic refining the inspiration until it was satisfactory.

Consider, too, the jazz musician. Historically, most composers have been revered for their creativity. For this reason the jazz musician stands in an anomalous position for he is unable to wait for a 'flash' of inspiration. Instead he actively improvises as he plays and must, therefore, be considered an innovator. Through implication, the works of creativity have a sense of permanence while those of innovation expand and contract in response to their audiences. Certainly the improvisations

of this musician are fleeting in duration. If these improvisations were to be recorded and withstood the test of time, would this composition be considered the work of creativity?

These kinds of questions provoked Susanne Langer into asking, "What is "created" in a work of art?" (1953:46). Aestheticians had labelled such things as, for example, pleasing combinations of sensory elements, and interpretations of objects, people, and events, as 're-creations'. But, as Langer claims, an object that already exists cannot be re-created. Being neither a person nor a vase of flowers, a picture is an image created for the first time out of real materials. The true power of the image lies in the fact that it is a symbol. And as symbols, works of art become the starting point for the analysis of the unconscious (Vygotsky 1925:72). Hence, by looking backwards from art objects, poetry, and musical compositions as the birth of consciousness, we can communicate with the unconscious (cf Bateson 1972:137; Mellers 1983:22).

Although creativity springs forth from within the unconscious of an individual, the art produced reflects the totality of the individual's experience, past and present. An artist works within his culture, using and interpreting the signs and symbols of his social environment, creating a wealth of imagery deemed 'right' by the intuition of his inner critic (cf Geertz 1983:109). During the simplifying and combining processes of creativity, the unconscious makes selections that could belong only to that individual's culture. One aspect of the inherent 'rightness' of intuition is that the output is reflexive of the input -- no !Kung bushman will create images of icebergs, just as no Inuit will paint images of skyscrapers; nor did the Neanderthal shaman experience visions of computers. If these artists were to produce such imagery, the negative reaction of their culturally defined audience would nullify their creativity. As the first artist to be recognized for his intellect was the shaman responsible for the Upper Palaeolithic cave drawings (Lommel 1967:10), it is interesting to speculate how his group accepted the images created from visionary experiences; acceptance implies a strong sanction for his shamanic power.

In summary: in an attempt to answer the question, "What is creativity?", I have discussed what I consider to be the important elements evident in the process of creativity; uncovered minor differences between the scientific creative mind and that of the artist; considered some personality traits of the creative person; pointed out the role of the unconscious; compared innovation with creativity; and recognized man's innate need to create. Rather than resolving the initial question with any completeness, the question has deepened.

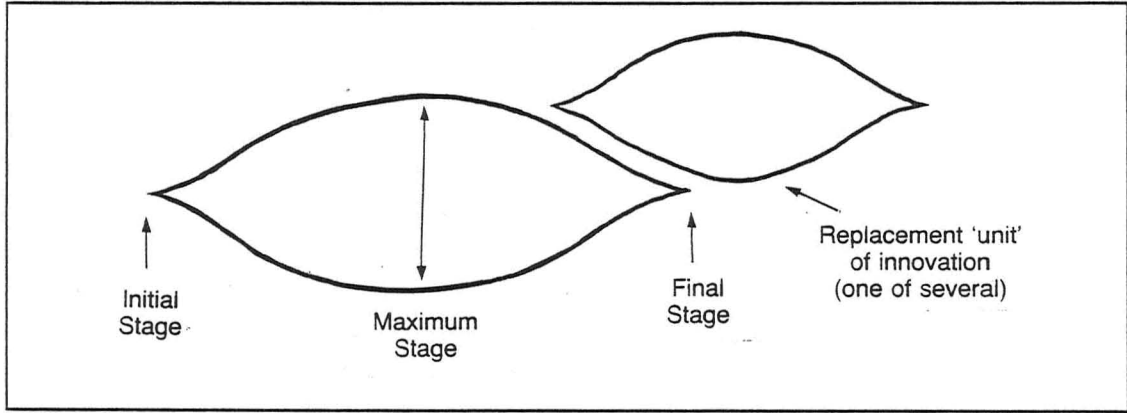


Figure I

'Image of Innovation'

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