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Alfonso Montuori and Ronald E. Purser Journal of Humanistic Psychology 1995; 35; 69 DOI: 10.1177/00221678950353005

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DECONSTRUCTING THE LONE GENIUS MYTH: TOWARD A CONTEXTUAL VIEW OF CREATIVITY



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and he coproduced *Evolution*, a recent recording by his wife, jazz singer Kitty Margolis. The recording was hailed by the *San Francisco Examiner* as the best vocal jazz album in years. In 1985 he spent a year in Changsha, Hunan Province, in the People's Republic of China, where he designed and taught the first graduate course in organizational development and management psychology at the South Central University of Technology. In 1991, he completed his Ph.D. at Saybrook Institute, where he worked with, among others, Stanley Krippner and Frank Barron. He has published numerous articles and books, including *Evolutionary Competence* (Gieben, Amsterdam, 1989), *From Power to Partnership: Creating the Future of Love, Work, and Community* (HarperCollins, 1993), and *Unusual Associates: A Festschrift for Frank Barron* (Hampton Press, 1995). A threevolume series on the social dimensions of creativity, coedited with Ronald Purser, will be published by Hampton Press in 1995-1996.



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Journal of Humanistic Psychology, Vol. 35 No. 3, Summer 1995 69-112 © 1995 Sage Publications, Inc.

communities. He is a coeditor (with Alfonso Montuori) of a three-volume series on social creativity to be published by Hampton Press, and a coauthor (with Merrelyn Emery and Bob Rehm) of a forthcoming book from Jossey-Bass entitled Search Conferences in Action: Learning and Planning Our Way to Desirable Futures. His research has been published in 15 journal articles, with topics including social creativity, organizational change and development, ecologically sustainable organizations, and sociotechnical systems design of knowledge work organizations.

Summary

This essay explores the social dimensions of creativity through a discussion of the "myth of the lone genius" and an outline of existing research. The authors argue that American individualism and methodological reductionism have prevented laypersons and researchers from fully exploring the implications of the larger sociohistorical context, both in terms of the research on the creative person/process and the actual discourse of creativity itself. Examples are used to demonstrate the social nature of the creative process using a systems/ecological perspective. The authors believe inquiry into the social dimensions of creativity provides an important entry point into a host of pressing methodological, philosophical, gender, and cultural issues which they hope will prompt much further interdisciplinary research.

It doesn't matter how many times we tell the familiar story of Bach writing each week for the honest burghers of Leipzig, or Mozart's relations with the courtly musical patrons of his day; audiences still prefer to think of the musical creator as a man closeted with his idea, unsullied by the rough and tumble of the world around him.

—Aaron Copland

Music and Imagination

INTRODUCTION

Our purpose in this paper is twofold. First of all, we want to highlight and outline a resurgence of research interest in creativity as a social as well as an individual and intrapsychic phenomenon. As Mockros and Csikszentmihalyi (in press) state:

Researchers who study creativity often concede that cultural norms and practices influence the development and expression of creativity. Nevertheless, the magnitude of the impact such forces have on

expression of ability and creativity is generally underestimated. For the most part, attention is focused on how cognitive factors, or other individual characteristics such as personality, values, problem-finding orientation, and motivation, contribute to the appearance of creativity and eminence. Such an orientation only peripherally addresses issues related to how historical, social, and cultural environments affect various life experiences and expressions of creativity.

We believe this represents an important trend that touches on many crucial issues in psychology, the social sciences, and philosophy. The study of creativity in its social and historical context addresses many existing conceptual polarizations between self and society, sociology and psychology, individualism and collectivism, isolation and community, reductionism and systemic approaches. Such study suggests the need for an approach that is more interdisciplinary, historical, ecological, systemic, and aware of cultural and gender differences (Barron, 1972b; Runco & Albert, 1990). We also want to address the popular myth of the lone genius, as an entree into the problematic nature of a hyper-individualistic understanding of creativity, which itself emerges out of a specific social and historical context.

HISTORICAL CONTEXT

Creative expression always occurs within a cultural and historical milieu. Any discussion of creativity inevitably needs to be situated within a historical, but also a sociopolitical, context. It is therefore not possible to speak of a "generic" or "universal" creativity: What is considered creative today in the United States may not have been considered creative in the same geographical area 500 years ago, and may also not be considered creative in China today. It is therefore important to develop an understanding of the "genealogy" of creativity and the contextual influences that lead us to consider works to be creative in our present period.

To begin this investigation, we turn to philosopher Richard Kearney (1988), who has periodized the history of imagination and creativity in the West into three stages: (a) the mimetic or theocentric/reproductive, (b) the productive or anthropocentric, and (c) the parodic or ex-centric. These different historical periods are marked by a radically different understanding of the nature and purpose of imagination and creativity, and also by different conceptions of self and world. Creativity is, among other things, the function of a

judgment made by people, and these judgments are influenced by trends, traditions, and the social, political, economic, and aesthetic perspectives of their time and place. During the premodern mimetic stage, creative expression is found, for example, in iconography. The works during this period are not signed or judged in terms of artistic skill or expression. Rather, as Kearney states, "they serve the purpose of worship, and in fact personality is avoided, so that God may be worshiped through a particular image" (p. 9).

In contrast, modern anthropocentric art is characterized by self-portraiture, figures like Prometheus and Faust, and the overriding humanist concern with the individual. With their focus on individual persons, biographies and self-portraits such as those of Rembrandt and Van Gogh, become emblematic, as do Leonardo's pioneering detailed studies of human anatomy. Here the author is not self-effacing in order to reproduce more effectively a "universal" sacred image but takes center stage and becomes analogous to God-the-creator. Eventually, the artist is worshiped (or despised) much like a Creator God. Finally, in postmodern parodic art, we find pastiche, "juxtaposed images clipped from reproductions of celebrated museum paintings" (Kearney, 1988, p. 11). In postmodern culture the author ceases to act as the sole originator for the creative product; instead, art becomes bricolage, playing around with fragments of meaning one has not created (p. 13). In this case, the autonomous, creating self has been replaced by a heterogeneous self without origins or awareness of, and belief in, unity and singularity, be it of the self or of historical epochs.

These different periods in the development of the arts and imagination reflect different understandings of self and world (Lukes, 1973; Wulf, 1989). First the self is subsumed and sacrificed to the greater whole or God. In fact, the mimetic period is closely associated with collectivistic societies (Westen, 1983): Examples of this kind of art can be found today in collectivistic, totalitarian states, where art serves as propaganda and the state takes the role of deity (Keen, 1986). Briggs (1988) cites the work of anthropologist Claude Levi-Strauss, suggesting that those "primitive" art forms so admired and imitated by modern artists like Picasso are not, in fact, examples of individual creative expression as we conceive of them today. Rather, the whole point of the mask for the maskmaker was to carry out the tradition of his tribe. Gardner (1988) emphasizes this point, noting that an artist trying to make something "new" could easily get killed in traditional societies. Thus, in

the mimetic period, imagination was used primarily as a means for maintaining historical continuity and as an evocative medium for glorifying tradition.

In contrast, creativity as *poiesis*—to make anew—is a recent Western cultural invention. It is during this productive period that the self emerges as an autonomous, creative individual, with the image of the individualistic creator pitted against the conforming masses. In addition, the notion of originality also emerges during this period, as artistic creation is idealized as the paradigm for the achievement of self-discovery, self-expression, and self-definition (Taylor, 1992). Creativity as poiesis is fundamentally ahistorical in its outlook, for the achievement of originality as conceived in modernity demands that the creative person break from tradition and, most importantly, stand in opposition to tradition and social conformity (Berman, 1990; Taylor, 1992).

For example, in contrast to the mimetic period, where medieval artists did not sign their work, the productive period signaled the end of the craft tradition. This turn toward self-expression can be traced, as Berman (1990, p. 324) notes, to Cennino Cennini's essay of 1400 (Il libro dell' arte), which declared the artist's intention to break from tradition. It is perhaps not coincidental that in 1425 Filippo Brunelleschi's invention of linear perspective emerged as a new artistic technique in Florence (Romanyshyn, 1989). Creative products in modern art and science not only bear the stamp of the individual creator but also share another commonality—in having originated out of a way of experiencing the world—a way, as Romanyshyn puts it, "in which we have practiced being a self" (p. 67). The creation of linear perspective in art constituted a new geometry of the mind, providing the self with a fixed viewpoint from which it could elevate itself above its environment in order to view objects from a distance (Romanyshyn, 1989). As linear perspective transformed the self into a spectator and the world into a spectacle, this visual convention eventually was shaped into the scientific method and, hence, has provided us with an ever-increasing ability to redefine the world through more and more sophisticated technologies of abstraction (e.g., maps, charts, blueprints).

This new cultural vision represented a heroic, vertical ascent of consciousness—a "Grail quest," as Berman would say. Creative persons were now defined as special individuals, whose work distinguished them as persons set apart from, or, better, above, the masses. This is the image of the lone genius, and of creativity, that

still prevails in the popular imagination today. But this view is problematic. What emerges from this perspective of modern creativity is a dialectical tension between the demands of originality on the one hand and the idea that the creative person "will have to struggle against some externally imposed rules" (Taylor, 1992, p. 63) on the other. This explains why convention, tradition, and morality came to be seen as enemies, pitting the would-be creative person against the vagaries and stifling forces of the environment.

The vital question, it seems to us, is not so much whether creative individuals seem to struggle with existing forms, traditions, constraints, and of course their own personal limitations in the creative process, but the *nature* of the relationship between innovation and tradition, between constraints and possibilities. In simple terms, this relationship can be viewed as a fight, a war, a revolution, or as an ongoing process of change and dialogue. As we shall show later, creative individuals tend to be keenly aware of the traditions and sources they operate in, even if they are perceived as revolutionaries (e.g., Stravinsky). It is the popular interpretation of the marketplace—quite often specifically for purposes of marketing—which brands these creative individuals as revolutionaries who have created the latest and greatest trend, which makes the "old" obsolete (Stigliano, in press). This creates a specific view of the past, of radical break with the past, of creativity and change, which conspires to reinforce the view of creation operating outside of, rather than within, the existing social and historical context.

Having adopted this modern conception of creativity, we can begin to understand why the popular image of the lone genius or solitary artist is romanticized. This modern view of creativity has venerated the artist or genius as a cultural hero, because he or she is someone who has forged something new and original by struggling against and rising above the limiting, stultifying forces of the conforming masses. To maintain such a stance, the creative person must in a sense disengage him- or herself from the environment. The resulting psychic isolation, along with what are perceived to be the "deviant" "schizoid" behaviors of the creative person, is romanticized or even seen as being synonymous with genius.

And yet Barron (1975) has argued on the basis of his research that "as a fact of human existence, solitariness and the need to establish meaning and community are primary motives in creativity" (p. 155). Creativity involves communication and as such re-

quires a social context to exist. The creative impulse may therefore be motivated by a desire for integration, connection, and communication with one's community and *others*. But it is interesting to note that in the interviews Barron (1972b) conducted with art students, most male artists described themselves using terms such as "married" to their work, and viewed it as a form of self-expression, a dialogue and exploration of, and with, *themselves*, without at any point discussing the motivational role of others—critics, public, and so forth. Yet the same artists said they would not continue their work if it did not receive recognition, which suggests that recognition plays a vital but not fully recognized role for them.

This seeming paradox may arise out of the (negative) polarization or opposition between the artist and "the masses" and out of an unwillingness to recognize the profound interrelationship that exists between self and others, framed as it is in a negative way. The relationship may be viewed as a dialectic of dependence/domination, with its correlate of failure/success, which at times prevents budding professional artists from fully grasping the relational aspect of their work, seeing it instead as a purely self-centered effort. This would support our argument that a reductionistic/individualistic modernist conception of creativity creates a virtual blind spot when it comes to the social dimensions of creativity.

In postmodernism the illusion of autonomy is shattered, and the presumption of originality destroyed, in the awareness that we do not know who we are or where our ideas come from. The ex nihilo creation of the romantic conception of the genius is jettisoned: instead we find the artist located in a network of signs, piecing them together with few criteria, picking up bits here and there (Jameson, 1983, 1984). Such notions as self and originality are severely questioned if not discarded altogether. Further, the diligent pursuit of technique and skill—so important in some earlier conceptions of art (the notion of the virtuoso, for instance)—is, in some circles, viewed as merely self-indulgent (Petherbridge, 1989). Despite the inroads of postmodernism in popular culture, it is the anthropocentric paradigm of the "creating ego" that concerns us here, because this is still the prevailing popular concept of creativity (Berman, 1990; Kearney, 1988). This is the concept that, over several hundred years, has developed into, as we shall see, a rather one-sided understanding of creativity.

Our critique of the anthropocentric view of creativity, with the image of the heroic, struggling genius, does not in any way attempt

to belittle the struggles or the brilliance of creative individuals. Creative individuals certainly face societal pressures and constraints, and their lives are at times indeed heroic. Our point is that a romanticized (and pathologized), reductionistic view of creative genius establishes a fundamentally negative relationship between creative individuals and community that actively perpetuates precisely the kind of stereotypical problems creative individuals have to suffer by establishing for them almost a priori a pathologized role in the context of society. This social role is also bought into and perpetuated by some creative (and not so creative) individuals themselves to greater or lesser extents. "It's the fate of the genius to be poor/misunderstood/weird/problem-ridden/antisocial, and so forth." Granted, creativity and creative individuals may at times be all of the above (as are numerous people who are not particularly creative at all), but not by necessity. Furthermore, this individualist struggle against the masses does not allow us to focus on the at times beneficial roles of social interaction and, most importantly, on the possibility of creating environments that actively foster creativity, because creativity is viewed strictly as an individual phenomenon.

THE CULT OF GENIUS

A clear connection has been shown to exist between the cult of the genius and the rise of individualism during the Renaissance (Flam, 1965; Kearney, 1988; Lukes, 1973; Tonelli, 1973; Wittkower, 1973). During this period an exaggerated fear of conformity and the collective, and, most of all, the peculiar, ambiguous relationship with the feminine developed in conjunction with the rise of individualism and the concept of genius. The genius in art, science, and, more obviously, politics succeeded in controlling his or her environment through his or her chosen medium, shaping it to his or her own design. In the caricatured picture of the popular perspective on creativity, society is forever in an antagonistic relationship with the lone creator, at first isolating him or her, mocking him or her, refusing to acknowledge him or her, or merely weighing him or her down with its norms, preventing the potential genius from flowering because of society's built-in conformism. Otherwise, society vampirically relies on the genius to feed its passive urge for creative products, as guitarist Robert Fripp puts it. This is also the image of the paradoxically god-like, ex nihilo creator, which Kearney (1988) describes in his discussion of the anthropocentric paradigm. Creativity is linked with the notion of mastery over self and environment, which postmodernism is now rejecting, although in favor of what, it is not exactly clear.

Despite the recent popularity of pop postmodernism in popular culture (viz., MTV's Postmodern Hour) and the evidence of creativity research, in the popular imagination the romantic myth of the lone genius still prevails. This may be due to the fact that the image of the creative genius is closely tied to hyper-individualism (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985; Sampson, 1988; Wittkower, 1973). It is here that the study of philosophy, psychology, and postmodernism meet: They all pertain to the crisis we are experiencing in our conception of self, and nowhere is this more evident than in our understanding of creativity.

It is significant that for many, creativity and individualism go hand in hand, and, in fact, creativity is inconceivable without an individualist conception of self. A popular misconception would hold that the creative genius is isolated and that originality means that creative persons do not consult preexisting models or operate within a tradition or context. There is a fear, for instance, that learning to play another musician's solos by heart, as the great innovator Charlie Parker did, along with just about every other jazz musician, might somehow weaken or contaminate one's creative "purity," with the possibility that one could turn into a carbon copy of the role model. This fear persists despite overwhelming evidence that creative individuals learn from others as a way of developing their own identity. This is perhaps more obvious in the sciences but applies equally to the arts.

This misconception surrounding the role of learning has strong historical roots. In 1711 Joseph Addison expressed this position of "Genius without Learning" in *The Spectator*, writing that the genius creates "by the mere Strength of natural Parts and without any Assistance of Arts or learning" (as quoted in Wittkower, 1973, p. 307). Wittkower goes on to write that by the midcentury this idea must have been current to such an extent that Dr. Johnson denounced as "the mental diseases of the present generation . . . impatience of study, contempt of the great Masters of antient [sic] Wisdom, and a disposition to rely wholly upon unassisted genius" (p. 307). Literary evidence of this concept abounds in the second half of the century; witness such remarks as the

following by George Colman (1761-1762): "The genius . . . needs neither diligence nor assiduity"; or these sentiments of Young (1759): "Many a genius, probably, there has been, which could neither write, nor read"; and "To the neglect of learning, genius sometimes owes its greatest glory" (Wittkower, p. 307).

Whereas these simplistic statements may be viewed somewhat generously as a call for the temporary suspension of judgment necessary in a stage of the creative process, or as part of the new individualists' reaction to the forces of religious and social constraints of what Kearney refers to as the onto-theological paradigm. they arise also out of an excessively intrapsychic understanding of creativity. Informed by the reductionism that lies at the root of methodological individualism, the lone genius view posits an irreconcilable dichotomy or "imaginary opposition" between self and environment, creativity and conformity (Wilden, 1980, 1987a, 1987b). The environment and its influences are in fact viewed as potentially dangerous for the creative individual. There is much evidence that points to the contrary in fact being true, as we will show later. More to the point, the creative individual is profoundly decontextualized, and, given this opposition between creativity and conformity, there is no effort made to make the context itself more conducive to creativity.

It is not surprising that the popular myth of genius views creativity as somehow magically bestowed upon certain "gifted" individuals: the very term gifted, still in use today, suggests that creativity is, indeed, a gift, emerging fully formed and with no need for diligent study or the development of craft. A considerable amount of literature (e.g., Goertzel & Goertzel, 1962; Sternberg, 1988) has been devoted to uncovering the origins of this gift. The results of research indicate clearly that one has to learn to use this gift and that the environment contributes considerably to both the emergence and the nurturing of giftedness, and to its suppression. However, despite the considerable evidence that shows that socialization plays an overwhelming role in the development of creativity (e.g., Amabile, 1983; Arieti, 1976; Barron, 1968, 1969, 1990; Barron & Harrington, 1981; Csikszentmihalyi, 1988; Goertzel & Goertzel, 1962; Runco & Albert, 1990; Simonton, 1988), the popular understanding of creativity, familiar to anyone who has taught creativity courses or has discussed the subject in a bar, still seems to be that creativity cannot be learned—that one is either blessed with it or not—and that the social environment is, if anything, a hindrance to creative minds.

Creativity is then viewed as a "natural talent," a view which originated in the Renaissance. According to Leonardo, painting "cannot be taught to those not endowed by nature" (as quoted in Wittkower, 1973, p. 304). Or, as Tonelli (1973) puts it, in his discussion of the concept of genius, "A fundamental trait of genius is that it is an innate capability, operating with spontaneous facility, versus talents which may be taught and learned by diligence" (p. 293). What this popular view omits, of course, is the enormously important complementary role of craft and technique, of mastering the medium in which one is working. The necessity for technique and mastery of one's subject or instrument is another vitally important factor in embedding a creative person in a context that is socially constructed.

A look at some of the theories of creativity in the psychological literature shows that the role of the environment has been recognized far more than is popularly assumed, even though it has only recently begun to come into its own. Similarly, examination of several more recent perspectives on creativity indicates that the popular myth of genius creating ex nihilo is being vigorously questioned and that there is a considerable and growing interest in the role of social influences in shaping creative behavior.

Before we continue, we must again make it perfectly clear that it is not our intention in any way to downplay the importance of the individual or of isolation and solitude as important aspects of the creative process. Our intent is merely to point out the vital role of social forces in creativity and to balance individualist approaches by emphasizing the importance of context, history, and the role of methodology and disciplinary boundaries in isolating variables relevant to the study of creativity. It is also our hope that a renewed appreciation for contextual factors in creativity will orient us to creating environments in which creativity can flourish in individuals and in their interactions with others.

SOCIAL INFLUENCES AND CREATIVITY

The initial thrust of creativity research focused on identifying the personality traits and cognitive styles of creative people and on developing tools for stimulating creativity (Barron & Harrington, 1981; Woodman & Schoenfeldt, 1990). However, new perspectives and research voices in psychology and related disciplines are beginning to emerge that have direct relevance to effecting changes in our view of creativity. It should be pointed out that these efforts themselves do not appear ex nihilo and have illustrious antecedents in the earlier creativity literature; antecedents that do not always seem to be recognized. The 1963 volume Scientific Creativity, for example, edited by Taylor and Barron, contains extensive discussions of environments that foster creativity, with specific reference to scientific research and research and development laboratories. Stein's chapter, outlining a transactional approach to creativity, stands out in particular, recognizing the disciplinary split between psychologists and sociologists as a source for the apparent dichotomy between research on individual and social factors in creativity. Stein's (1975) classic work on group processes in creativity is a further example of an existing tradition and is particularly important because it is grounded in research conducted in the workplace.

In 1972 Barron published an essay entitled "Towards an Ecology of Consciousness," which attempted to lay out a program of ecological research into consciousness and creativity. Pointing to the complexity of the phenomenon of creativity, which he has always studied in a systemic manner (Montuori, 1995), Barron (1972b) writes that "the psychology of creativity has been in my own mind a forerunner of an ecological perspective on consciousness" (pp. 107-108). Discussing the ecology of consciousness, Barron states:

Ecology as a branch of biology deals with the interrelationships between plants and animals and their complete environments. Consciousness refers to the mysterious fact that this primarily material universe somehow evolved the capacity to be aware of itself, and even to be aware of its own awareness, the peculiarly human distinction. The ecology of consciousness, then, must deal with the complete environment that Man experiences and with the interrelationship between structure and process in it that condition consciousness. (1972b, p. 96)

He goes on to state that "the way in which both individual and collective consciousness relate to another and to the physical and biotic environment is the subject matter of the ecology of consciousness" (1972b, p. 97).

This essay is a precursor to the present interests in ecological and systemic perspectives on consciousness and creativity, and is expanded in Barron's (1979, 1988, 1995) more recent work. Arieti (1976), like Barron, Stein, and others, has also pioneered the research on systemic and contextual approaches to creativity. This renewed interest in the social dimensions of creativity and systemic approaches therefore follows in a long line of existing but, it seems, somewhat "submerged" research and needs, itself, to be placed in its proper historical context within the larger field of creativity research (Montuori & Purser, in press).

It is interesting to note, therefore, that despite the not insubstantial attention placed on social influences in the early literature, social influences do not seem, until recently, to have spawned a larger stream of ongoing substantive creativity research (Amabile, 1983; Barron, 1963; Loye, 1988; Mockros & Csikszentmihalyi, in press; Runco & Albert, 1990). The reason for this omission in psychology lies perhaps, as Stein (1963) has suggested, in the fact that psychologists generally study individual human beings: Most creativity researchers have been psychologists who have been more focused on the individual than on the social environment. Addressing the same issue 25 years later, Csikszentmihalvi (1988) was forced to defend his use of systems inquiry, with its inevitable sociological implications, from the charge that he was engaged in "a betraval of psychology in favor of historical or sociological approaches" (p. 336). He rightly justified his position by stating that creativity is a complex problem and that "we need to abandon the Ptolemaic view of creativity, in which the person is at the center of everything, for a more Copernican model in which the person is part of a system of mutual influences and information" (p. 336).

Another factor is reductionism, with its social correlate, individualism (Sampson, 1977, 1978, 1981, 1983). In explicit imitation of the scientific method, reductionism may have led to a focus on what was perceived to be the smallest identifiable variable, that is, the individual, at the exclusion of external factors such as the social environment. It is this "sanitized" understanding of the individual, purposely devoid of any context in an attempt to replicate the unsullied laboratory setting of the physical sciences, which we are critical of. In contrast, an ecological and systemic approach to understanding creativity recognizes the interconnectedness between the self and the environment and attempts to discover rela-

tions between them. An approach to studying creativity based on such a systemic understanding of self and environment will have markedly different implications than the hyper-individualist understanding of creativity, which views the individual as locked in a struggle for dominion over the environment or in an anti-social defense against the environment.

We therefore stress the importance of studying both individuals and the systems they create and inhabit. To those who believe that we are somehow diminishing or downplaying the individual, we would say this: It is only by studying humans as humans, within their historical, social, and environmental context, that we can begin to do justice to the human struggle. In our view, viewing humans as existing within a context does not diminish the individual but adds richness to the picture and makes experience not less unique but more human.

In recent research, David Harrington (1990) is attempting to develop a theory that links the creative process, person, and environment in an ecology of creativity. Harrington, like Barron, uses biological metaphors and focuses on social creativity as opposed to private creativity—acts that are novel and have value to or substantial impact on people far removed from those who initiate the acts. Describing the distributed nature of social creativity, Harrington emphasizes that "[creativity] does not 'reside' in any single cognitive or personality process, does not 'occur' at any single point in time, does not 'happen' at any particular place, and is not the product of a single individual" (p. 149).

This approach also addresses the major, but often hidden, role that relationships and valuing processes play in creative social systems. The ecological approach is an extremely promising one, for it elevates the importance of the habitat and conditions necessary for fostering the growth and maintenance of creative social systems.

Similarly, based on his theory of client-centered psychotherapy, Rogers (1954) in several unpublished papers defines the 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." Harrington's ecological view of creativity has much in common with Rogers's emphasis on the relational conditions necessary "for growing people." Moreover, Rogers maintains that the primary motivation for creativity is oriented toward

organismic growth, which results in an enhanced connectedness to the environment.

Anthropologist Donald Brenneis (1990) also asks why we focus so much on individual creativity, and he uses examples of musical creation from different cultures to illustrate some very different conceptions of music-making. His research gives us glimpses of the social and cultural dimensions of creativity, thus revealing how ethnocentric our conception of creativity is, both in space and time. Stating some basic findings of his work on creativity, Barron (1979) finds that creative products are the result of collaboration and interdependence: "A new idea is not a single underived act, but the product of a conjunction of social and psychological processes. The new gestalt is an emergent, a pattern which is something more than all that went into its making" (p. 332).

Further, Barron (1963, 1988) and MacKinnon (1976) point out that the creative person has a constellation of relevant personality characteristics. These include complexity of outlook, independence of judgment, ego strength, tolerance for ambiguity, risk taking, openness to experience, and androgyny. It is important to note that one of the most important findings of this research is that for creative individuals, the environment is a source of inspiration, regardless of whether it is "good," that is, the poet's lover, or "bad," that is, an oppressive social system such as the one described by Dickens. Creative individuals seek to understand their environment and are willing to put their own beliefs and assumptions into question in order to do so to a far greater degree than are persons who were not judged as being particularly creative. Creative persons are therefore constantly engaged in a process of self-renewal that draws on environmental factors for the destabilization of existing concepts, values, self-images, and so forth (Barron, 1968, 1988: Montuori, 1992).

Moreover, Barron explicitly states that creative individuals not only have greater complexity of outlook, and are actually attracted to complexity, but also have greater tolerance for ambiguity and openness to experience. In other words, they are more open to their environment and find that the environment provides them with the context for creativity, contradicting the "isolationist" myth.

Throughout his work on creativity, Barron has stressed that the creative individual is engaged in a creative relationship with the environment. The environment is, in fact, a source of information that creates periods of disequilibrium in the creative person, peri-

ods in which what is taken for granted is questioned (Montuori, 1992). The romantic individualist at times seems to assume that he or she will be "swamped" by the environment. In fact, rather than maintaining a passive relationship to the environment, the creative person moves toward the environment, actively seeking to understand it. This creative relationship is dialogical in nature. This does not mean that the relationship is always positive, nurturing, or supportive, of course. Merely that it exists, and as such provides the context for creativity.

Barron (1963) extrapolates from the findings about creative individuals what Arieti (1976) calls a creativogenic environment, stating that

the psychological conditions which make a society or an epoch consistently creative have been little studied, but it seems that social conditions analogous to those seen in individual creativity are important. Freedom of expression and movement, lack of fear of dissent and contradiction, a willingness to break with custom, a spirit of play as well as of dedication to work, purpose on a grand scale, these are some of the attributes which a creative entity, whether vast or tiny, can be expected to have. (Barron, 1963, p. 152)

Arieti (1976) devoted a considerable part of his study of creativity to social and cultural factors affecting creativity and drew on the work of the anthropologists A. Kroeber and C. E. Gray, and the sociologist L. A. White, on historical periods that seemed particularly creative, such as the Renaissance. Interestingly, he found that there is a paradoxical or ambiguous premise in Kroeber's and Gray's work. Although they seem to consider great men as the makers of clusters of high civilization, they see these men as having been shaped exclusively by economic, social, and political factors. But Arieti asks, can we really see people only as "inevitable mechanisms or measures of cultural expression" (p. 299)?

This paradoxical premise of the two anthropologists is rooted in the same problem that led psychologists to focus mainly on the self: disciplinary fragmentation. Anthropologists study cultures, psychologists study individuals, and their method and scope of inquiry reflect their disciplinary background. And, as Arieti (1976) points out, "The issue of whether it is the culture that makes great men, or whether it is great men that make culture grow, was debated long before Kroeber and Gray" (p. 299).

The first researcher to study genius systematically, Francis Galton, was severely criticized by Charles Horton Cooley, William

James, and the philosopher John Robertson, all of whom felt that Galton was not taking the environment into consideration (Robertson, 1937). For them, genius does not appear regardless of circumstance, as Galton stated. Robertson stressed that "genius is conditioned economically, morally, and socially" (p. 654), and went on to write that the individualistic society of the past, so often credited with creating conditions favoring "the survival of the fittest," in the intellectual as well as in the physical life, is seen rather to have fixed conditions that theoretically are perhaps the least favorable to a maximum development of potential mental faculties (p. 652).

Robertson pointed out that a predominant number of creative individuals arose either from the leisure classes or were in some other way economically privileged, and an enormous waste of creative talent in the lower classes was being perpetuated by the belief that genius would emerge no matter what the conditions. The political implications of this issue are, of course, considerable. If one assumes that genius emerges no matter what, little if any attention has to be paid to creating a supportive environment, and education or social welfare really makes no difference. The argument that poor people are not as creative or successful because of "character deficiencies," for example, laziness, stupidity, genetic "inferiority," and so forth, follows rather too easily from the position that creativity is a god-given or genetic talent, which emerges no matter what the social conditions. It also justifies providing superior educational experiences for the rich because they are "fit" to benefit from them, and inferior ones to the poor because presumably they are determined to stay poor anyway, and if perchance they are really brilliant, they will surmount all obstacles.

Arieti (1976) has proposed a systems model of the interaction between culture and individual whereby (a) "the individual offers or exposes his biological potentialities to the culture," and (b) there follows "the acquisition, on the part of the individual, of things already present in culture" (p. 305). This acquisition is mediated by interpersonal relationships, and Arieti cites such precursors of social constructionism as George Herbert Mead, Dewey, Fromm, and Sullivan, whose work has emphasized the importance of socialization. A dynamic, circular process between culture and individual follows, as the cultural influences are absorbed by the individual and transmitted again after interpretation.

Arieti (1976) attempts, therefore, through the use of a systems model, to reconcile culture and individual in terms of a mutually causal process (Macy, 1991; Maruyama, 1963, 1976). Arieti has stressed the importance of the environment for creativity. He has listed nine sociocultural factors which foster creativity, namely, availability of cultural means; openness to cultural stimuli; stress on becoming and not just on being; free access to cultural media for all citizens, without discrimination; freedom, or even the retention of moderate discrimination, after severe oppression or absolute exclusion; exposure to different and even contrasting cultural stimuli; tolerance for diverging views; interaction of significant persons; promotion of incentives and awards. Arieti's is one of the most systematic contributions to the delineation of factors that allow for creative development thus far.

The study by Goertzel and Goertzel (1962) of "cradles of eminence," a historical study of the youth of eminent people, provides us with some rather baffling findings: "Among explorers and adventurers, there is almost always a history of accident-proneness" (p. 273), and "among the children of twenty-three alcoholic fathers, there are fourteen who are humorous writers, actors or actresses, or singers" (p. 273). The study also points out that "in almost all the homes [of eminent individuals] there is a love for learning in one or both parents, often accompanied by a physical exuberance and a persistent drive towards goals" (p. 272). Despite the sometimes perplexing nature of some of their data, the authors clearly show the enormous influence of early social and environmental factors on the development of creativity.

Since 1963, in an important study of the creative environment, Parmerter and Garber (1971) asked creative scientists to rate creativity factors. The results seem to confirm Barron's early speculations: The most important environmental factors were (a) freedom to work on areas of greatest interest, (b) recognition and appreciation, (c) broad contacts with stimulating colleagues, (d) encouragement to take risks, (e) and toleration of nonconformity. Gruber (1988) also stresses the importance of "rich and complex interactions with external milieu," citing the influence of Malthus on Darwin.

Amabile's (1983) extensive study of the social psychology of creativity contradicts Arieti's assertion that promotion of incentives and awards fosters creativity. Hennessey and Amabile (1989) define the intrinsic motivation principle of creativity as follows:

"People will be most creative when they feel motivated primarily by interest, enjoyment, satisfaction, and challenge of the work itself—not by external pressures" (p. 11). Most importantly, Hennessey and Amabile emphasize the need to follow two lines of inquiry, namely, (a) the already considerable work on personality characteristics of creative people and (b) an examination of social and environmental factors. They assert that "what we must now develop are research paradigms acknowledging that neither class of factors, by itself, can carry the day" (Hennessey & Amabile, 1989, p. 34).

Like Arieti, Csikszentmihalyi (1988) has used a systems approach to study creativity. The nature of this approach has led him to study the creative explosion in Florence in the 15th century. Some of his findings seem to contradict Amabile's discussion of intrinsic motivation and raise questions regarding the role of "fit" between intrinsic motivation and market demands and rewards, which deserve further study.

[In] the art of the early Renaissance . . . the starting point of production is to be found mostly not in the creative urge, the subjective self expression and spontaneous inspiration of the artist, but in the task set by the customer. (Hauser, as quoted in Csikszentmihalyi, 1988, p. 336)

According to Csikszentmihalyi, creativity cannot be studied by isolating individuals and their practices from their social and historical milieu; creativity is instead the product of these three shaping forces: the individual, the social system, and the domain. He finds that little if any attention has been paid to the social system, and his own work is particularly important in showing how social influences shaped and fostered the development of a creative social period in Florence. As Mockros and Csikszentmihalyi (in press) state:

According to systems theory, creativity should be viewed as a part of a complex dynamic system of feedback in which novel ideas and acts may result in creativity only in the context of an interaction with a symbolic system inherited from previous generations, and with a social system qualified to evaluate and accept novelty.

Csikszentmihalyi's (1990) essay summarizes two points of his systemic approach to creativity.

First, that it is impossible to define creativity independently of a judgment based on criteria that change from domain to domain

across time. And, secondly, that creativity is not an attribute of individuals but of social systems making judgments about individuals. (p. 198)

As an example, he writes:

Rembrandt's creativity was constructed after his death by art historians who placed his work in the full context of the development of European painting and who pointed out novelties and differences between his work and that of his predecessors . . . without the comparative evaluation of art historians, Rembrandt's creativity would not exist. (p. 199)

Csikszentmihalyi then discusses the fundamental implications of his approach:

The difference between a person-centered and a systemic view of creativity is not simply a matter of semantics or metaphysics. The two views suggest quite different testable predictions. If the personcentered perspective is closer to the truth, then it should be possible to identify a set of individual characteristics associated with creative performance across domains, social contexts, and historical periods, and these characteristics should be both necessary and sufficient for an attribution of creativity to be made. The systems perspective admits that individual traits may be necessary for a person to be recognized as creative, but it postulates that these cannot be predicted a priori. It holds, instead, that one must also consider the characteristics of domains and fields before one can predict what a creative person will be like. The specific individual traits associated with creativity will depend on characteristics of the two other subsystems (the field one is in, the social system which defines an area of interest, and the domain, being the area of interest itself). (p. 205)

Csikszentmihalyi goes on to point out that a painter with certain types of characteristics will be judged creative in certain historical periods if those characteristics reflect the reigning style, for example, emotional, imaginative, and antisocial in the case of abstract expressionism, and cool, precise, and relatively conformist in the case of photo-realism. Barron's (1972a) Artists in the Making devotes an entire chapter to a discussion of this issue. This points to the fact that person-centered approaches can in fact also be systemic in nature, thus breaking down the imaginary opposition of person/system.

Using an interactionist perspective, Woodman and Schoenfeldt (1990) also maintain that social and contextual influences must also be accounted for in any explanations of creative behavior. Simonton (1984, 1988) has in fact shown that such social factors

as war intensity, social reinforcements, competition, and internal disturbances (e.g., revolutions, riots) have influenced the lives of eminent artists. He views creativity as a form of leadership, inasmuch as the creative person influences others, highlighting the interpersonal nature of creativity.

CONTEXTUAL ASPECTS OF CREATIVITY

One of the most important contributions a systemic and ecological perspective offers us is a contextual understanding of creativity. This manifests itself in a concern for history, social learning, and, more generally, the cultural, social, political, and natural environment from which the self emerges (Barron, 1972a, 1972b; Hales, 1986; Spretnak, 1982; Stigliano, 1986).

In order to further dispel the myth that a creative person necessarily stands in an adversarial relationship with the environment, we will next present some examples of the ways in which creativity can be said to emerge from an interaction with the environment. We will focus mainly on examples drawn from the arts and sciences

Relationship to the Sociohistorical Context

Ulin (1984), drawing on the works of the German philosopher Hans-Georg Gadamer, discusses the antinomy in anthropology between reason and tradition, and finds that "the continuity with a viable and effective past is rejected for the novelty of the rationalized growth of knowledge" (p. 94). For Gadamer (1982), the Enlightenment and the ensuing Romantic period created a distortion. Tradition became associated with authority and blind obedience to the Church's authority, which had been recently challenged by "reason" and the scientific method. Gadamer justly points out that tradition in fact constitutes all knowledge, and reframes tradition, not from the perspective of authority, but as the ground of our knowledge.

Thus, in the world of music, for a creative musician to even exist, there must be a musical discourse for the musician to participate in. No matter how revolutionary a particular musician may be (e.g., a Bach, Stravinsky, Parker, Coltrane, Davis), the fact is that the musician is participating in an ongoing musical dialogue, which

emerges out of a preexisting musical tradition. The importance of context is again crucial in shaping the innovators' innovations. As we have already stated, the need to master one's craft, as instrumentalists and/or composers, embeds one in an existing tradition (Weisberg, 1988).

The fact that a Bach or a Coltrane is seen as creative, or even as a revolutionary genius, is precisely due to his relationship to the tradition with which he is breaking, his relationship to what came before. Stravinsky (1970) himself went to great lengths to point out he was not a revolutionary and was steeped in tradition. He wrote, "A real tradition is not the relic of a past that is irretrievably gone; it is a living force that animates and informs the present" (p. 57). He went on to say that "tradition thus assures the continuity of creation" (p. 57). Stravinsky, like Copland, was well aware of the popular misunderstandings concerning the relationship between freedom, creativity, tradition, and context.

And yet which of us has ever heard talk of art as other than a realm of freedom? This sort of heresy is uniformly widespread because it is imagined that art is outside the bounds of ordinary activity. Well, in art as in everything else, one can build only upon a resisting foundation: whatever constantly gives way to pressure, constantly renders movement impossible. (1970, p. 65)

Even if a musician makes deprecatory noises about his predecessors (e.g., Stravinsky's comments about Beethoven), it is not unlikely that these are often made for shock value and public consumption. This can be seen as part of a process of rupture or forced distancing from the past in an effort to create a new tradition, a new movement. The fact remains that participation in the discourse of music itself embeds the creative individual in the musical domain that was created by those very predecessors. The willingness to participate in the discourse is a sign of the inherent value placed on it by the musician. The desire to break with existing standards must not be seen as a total rejection of the past, but rather as a contribution to it. Such creative historical periods as the Renaissance, for instance, may well have arisen out of a dissatisfaction with the present, but they drew much of their inspiration from a return to Greek thought.

A creative musician is participating in a discourse that has been socially and historically "constructed" and which presumably was inspiring enough to warrant a contribution. It seems highly un-

likely that we should find a musician who actually does not like any music that already exists. Most musicians are inspired by the past and yet want to make some contribution to the domain: They hear more and want to explore the possible (John-Steiner, 1985).

Significance of Mentors and Role Models

A revolutionary like jazz saxophonist Charlie Parker spent hours listening to, and learning to play, the solos of the tenor player Lester Young, and in the same way, the iconoclastic trumpeter Miles Davis later apprenticed with Parker. Parker's music initially outraged many of his contemporaries, as did Davis's later on. And yet both Parker and Davis spoke with great reverence of their predecessors, who had inspired them to want to play and who had acted as catalysts for their future development.

Musicians, like artists and scientists, learn from past masters. The past masters imbue in them a love for music, often at an early age, and young musicians serve apprenticeships with older musicians (John-Steiner, 1985). The fact that they then may go on to produce radically new kinds of music is a function of a process of learning, growth, and integration of what has gone before. Even if they radically break with the past, the break could not have occurred if there had not been a past to break with.

The Role of Collaboration and Dialogue

The influence of collaborations, discussions, and movements of various kinds must not be underestimated either: The Bebop school of jazz, which included Charlie Parker, trumpeter Dizzy Gillespie, pianist Bud Powell, drummer Max Roach, and others, created an entirely new kind of jazz through a collaborative effort. The art world is rife with movements and corresponding manifestos that herald the emergence of a new order. This emergence takes the form of an ongoing dialogue, often in regular meeting places, such as cafes, or Minton's Playhouse jazz club, in the case of Bebop (Wolfe, 1975). Here we can find examples of the social construction of activity in face-to-face dialogue. For example, the collaborations of arranger Gil Evans and trumpeter Miles Davis, or pianist Thelonious Monk and John Coltrane, have produced some of the most important music in jazz history.

The role of interaction in fostering creativity is nowhere more apparent than in the workings of an improvising jazz group. An extremely important area of research can be opened through inquiry into the way musicians are influenced and stimulated (or not) by each other's contributions to the whole performance of the group (Montuori, 1991). Miles Davis in particular was extremely adept at allowing new musical forms to emerge out of the interaction of the band members he carefully selected. This is apparent on classic recordings such as *Birth of the Cool*, *Kind of Blue*, and the work of the legendary quintet of the early 1960s with Wayne Shorter, Herbie Hancock, Ron Carter, and Tony Williams.

A popular image of the artist involves heated discussions in cafes with other colleagues (preferably in Paris, of course, or San Francisco's North Beach in the case of the Beat movement). Scientists are also exposed to such gatherings, often in the more formal setting of a conference room. Ideas and information are exchanged, and particularly in the world of science, it would be hard to imagine a scientist without the benefit of journals, conferences, and collaborations with colleagues present and distant, both in space and time. Latour (1987) goes so far as to say that the production of a scientific fact heavily depends upon whether it is cited favorably in subsequent generations of published articles.

Summarizing their research, Mockros and Csikszentmihalyi (in press) write:

Social support systems and interactions are critical throughout the life span for the emergence of creativity. Interactions with others often determine the provision of relevant academic and professional opportunities. The value of social support received depends on the particular needs of the individual. For some, emotional support is crucial while for others professional connections or intellectual affirmation may be vital for advancement in the field.

Extensive research at Bell Labs (Kelley & Caplan, 1993) shows that networking is one of the essential features that actually distinguishes the more innovative scientists from the merely competent ones. Nat Wyeth, the brother of artist Andrew Wyeth and himself a leading scientist at DuPont and inventor of, among many other things, the plastic soda pop bottle, has discussed the importance both of contacts with colleagues and isolation. He emphasizes that at different stages in the process of invention, he chooses either to work alone or to meet colleagues who can help him get

out of a rut and provide him with different perspectives on the problem he is working on. They can also help by saying, "It'll never work," the kind of challenge that gets Wyeth fired up (Brown, 1988). Many creative individuals therefore seem to alternate periods of isolation with periods of discussion and broader social contacts. As Parmerter and Garber's (1963) research shows, broad contacts with stimulating colleagues do seem to encourage creativity.

Above and beyond personal contacts, there are other social and environmental forces that influence and inspire individuals. Society is not monolithic: The self therefore becomes the "vessel" for a variety of influences. This can be seen in Bartok's interest in folk music, Stravinsky's and Milhaud's interest in the polyrhythms of jazz, Miles Davis's integration into his work of psychedelic music in the late 1960s, the effect of technology—recording equipment, electric and electronic instruments—and a variety of other examples. A musician's work occurs with the existing technologies and instruments of the times, which to some extent define compositional and performance possibilities (e.g., the development of the piano, which largely replaced the harpsichord; improvements on woodwind instruments, which improved facility and intonation: the emergence of the electric guitar, etc.). This attests to the constant dialogue going on between the individual and society, in which the creative individual can be said to integrate the societal influences and shape or combine them into new forms. It is important to remember that both the individual (and particularly the creative individual) and society must not be viewed as static, but as in a constant process of change.

Although the self is created within the social context, two factors come into play that contribute to creativity. The first, as we have already mentioned, is that society is not monolithic: Exposure to different, and perhaps contradictory, influences leads to a certain instability, an opening up to possibility, difference, and a different way of doing things that can be resolved creatively. Jazz musicians have incorporated elements of classical music (e.g., The Modern Jazz Quartet, the Dave Brubeck Quartet, the L A 4, Miles Davis, Bill Evans), and classical composers have done the same with jazz (e.g., George Gershwin, Stravinsky, Debussy). So-called worldbeat music is a contemporary example. The success of Paul Simon's Graceland recording was due mostly to the new context provided by African and Zydeco music for Simon's lyrics, and the

group Talking Heads has also incorporated elements of African music.

Philosophical Considerations of the Future of Self and Creativity

Individuals have the capacity to question their own assumptions, and this is a second key factor in creativity. This capacity for critical self-reflection is of course dependent on several factors, which are, paradoxically, related to the nature and conditions of the social system in which they are embedded. Diversity of beliefs, cultural values, and interactive heterogeneity (Maruyama, 1992) in social systems can promote and foster more openness to exploring possibilities. The enormous influence of the media and communications on our society makes exposure to different beliefs and practices almost inevitable.

Secondly, it might be argued that Americans live in a society in which the self is socially constructed to believe it is not socially constructed. This interesting paradox illuminates further the way our history and social environment construct the self (Berger & Luckmann, 1966). Two positions have arisen that address this issue. According to Jameson (1984):

The first one is content to say: yes, once upon a time, in the classic age of competitive capitalism, in the heyday of the nuclear family and the emergence of the bourgeoisie as the hegemonic social class, there was such a thing as individualism, as individual subjects. But today, in the age of corporate capitalism, of the so-called organization man, of bureaucracies in business as well as in the state, of demographic explosion—today, the older bourgeois individual subject no longer exists. Then there is a second position, the more radical of the two, what one might call the poststructuralist position. It adds: not only is the bourgeois individual subject a thing of the past, it is also a myth; it never really existed in the first place; there have never been autonomous subjects of that type. Rather, this construct is merely a philosophical and cultural mystification which sought to persuade a people that they "had" individual subjects and possessed this unique personal identity. (p. 115)

The social constructionist position (e.g., Gergen, 1991) is closer to the poststructuralist perspective, where individualism is seen as a likely story constructed out of the web of discourses and practices of Renaissance humanism, the marketplace, Hobbesian methodological individualism and culminating in the cultural

myth of "rugged individualism" that Bellah, Madsen, Sullivan, Swidler, and Tipton (1985, 1991) have recently discussed. In a similar vein, Stigliano (1988) summarizes the position of Michel Foucault:

The self was now at the start of the twentieth century, a unit of a population, disciplined, measured, interpreted, educated and constrained by police, psychiatrist, and bureaucracy. Under his (Foucault's) analysis, the self is not only a social construct, it is a political one as well. Thus, the nineteenth century invented a discourse in which the self had two parts: (a) a body (an object to be measured and constrained), and (b) a consciousness (a subject to be interpreted and reconstructed). As an object, the body became a domain of distinctions represented by technical language, operationalized, and refined for use by the medical profession, the police, etc. The body became an instrument for production, but needing rational surveil-lance because of its unpredictable "urges." (p. 23)

The conception of self is inextricably bound to its sociohistorical and political context. It is a social construct, convinced of its own independence but enmeshed in a formidable web of social forces engaged, on the one hand, in maintaining the illusion of autonomy, and on the other, in confining that construct within the appropriate channels. In popular culture this kind of paradoxical individualism is glorified in perhaps the most bizarre way by a television advertisement where the soundtrack states that one is a true individual because one drinks a particular kind of best-selling beer.

Social constructionism (e.g., Epstein, 1974; Gergen, 1985, 1991; Hales, 1986), poststructuralist philosophy (e.g., Barthes, 1977; Foucault, 1984), feminism (e.g., Hare-Mustin & Marecek, 1988; Wood-Sherif, 1979), cross-cultural research (e.g., Marsella, DeVos, & Hsu, 1985), and systems theory (e.g., Laszlo, 1969; Macy, 1991) have all challenged the universality of the prevailing Western, male-centered conception of self, which is intimately tied to our conception of creativity. If this construct is so severely challenged as to have become obsolete in a postindustrial, postmodern society, according to some (Sampson, 1989), where do we go from here? What becomes of our conception of creativity?

Kearney takes a historically constructive approach to the issue of the future of creativity, which has been brought into question by the deconstruction of the "subject," the creating self. "The kind of imagination required to meet the challenge of postmodernism is fundamentally historical," writes Kearney (1988, p. 392). We must

be able to envision what comes after postmodernism, as well as what things were like before it. The emerging imagination, he writes, can learn from our history:

From the mimetic paradigm of onto-theology it learns that imagination is always a response to the demands of an other existing beyond the self. From the productive paradigm of humanism it learns that it must never abdicate a personal responsibility for invention, decision, and action. And from the parodic paradigm of its own postmodern age, it learns that we are living in a common Civilization of Images—a civilization which can bring each one of us into contact with each other even as it can threaten to obliterate the very "realities" its images ostensibly "depict." (p. 390)

Kearney (1988) suggests that we need to develop an "ethical imagination." According to him, a more fitting response to the postmodern dilemma is to radically reinterpret the role of imagination as a relationship between the self and the other.

We may thus take stock of what deconstruction has to offer: a dual dismantling of imagination as i) a humanist cult of the transcendental self (individualism) and ii) an onto-theological imitation of an imperialist other (collectivism). Having thus demystified the excesses of the premodern and the modern paradigms of imagination, we may be in a position to discover another kind of relation between self and other—one more human than humanism and more faithful to otherness than onto-theology. (Kearney, 1988, p. 390)

A new understanding of creativity, and of the self, can emerge through a reinterpretation of the relationship between self and other, writes Kearney, and this is precisely what social constructionism, systems theory, and other interpretive methodologies such as hermeneutics (Palmer, 1969; Ulin, 1984) may have to offer.

Sampson's (1989) discussion of the need for a new theory of the person in the emerging postindustrial, postmodern world proposes a constitutive view of the person, "in which persons are constituted by their social locations. There are no subjects who can be defined apart from the world; persons are constituted in and through their attachments, connections, and relationships" (p. 918). In agreement with the feminist, social constructionist, systemic, and hermeneutic approaches, which focus on the importance of relationship, social and historical contexts, Sampson draws our attention to the notion of ownership within a constitutive understanding of the person. His comments are relevant for a new understanding of creativity:

If a person's attributes are held to be at least partly determined by the community that has constituted the person, attributes we currently consider to be private possessions are recast into attributes for use on behalf of the common good. Persons become the guardians of particular assets, not their owners. (p. 919)

If, instead of seeing creativity as the spark that arises ex nihilo from a creative genius, it is viewed as the product of at least a considerable amount of social influence (i.e., teachers, role models, peers, parents, the sociopolitical context, etc.), an entirely different relationship between person and community emerges, and a considerable responsibility for one's creative acts follows. Sampson (1989) goes on to make a statement that is remarkably analogous to a position found in the psychology of women and in ecofeminism, which advocate an "ethic of caring" (Gilligan, 1982):

The constitutive view transforms the entire person-community relationship. The point is not simply that the community has a stake in what happens to the individual members and must intervene in their lives, but equally, because individuals are constituted by their communities (i.e., they are not self-contained individuals with lives apart from others) community involvement is not experienced as an improper intrusion in their personal affairs. (p. 919)

Sampson's statement is not completely unproblematic. How exactly is a constitutive view of the person different from a preindividualistic, collectivist view of the person (Westen, 1983), or from the kind of improper intrusion on individuals practiced in collectivist and/or totalitarian countries (e.g., the People's Republic of China)? Sampson is proposing a "synthetic" view of the person, one in which the individual is not submerged by society, and society is not torn apart by selfish individuals. In sum, a constituted self is, ideally, neither the collectivistic self of the onto-theological paradigm of creativity nor the individualistic one of the anthropocentric paradigm. It is a synthesis of both, in which a fundamentally new relationship between self and other exists (Westen, 1983), Following Kearney's call for imagining what comes after postmodernism. we propose a conceptualization of creativity that is based on a contextual criterion that offers a positive alternative to the more pessimistic "death of the subject" and imagination implied in postmodernist interpretations (Barthes, 1977). An eco-systemic, contextual conception of creativity is neither only integrative (onto-theological) or self-assertive (anthropocentric), but both, allowing the individual self-expression within the social context, but with the responsibility to creatively fertilize the social soil that made the creative act possible in the first place, along with the need, at times, to react against it and oppose it.

DISCUSSION

Numerous developments in the social sciences point to new ways of approaching creativity. The emerging research on the psychology and sociology of women (Eisler, 1987; Gilligan, 1982; Merchant, 1980; Salner, 1985, 1986a, 1986b; Spretnak, 1982), and on ecopsychology (Roszak, 1992) can provide a much needed corrective to our present anthropocentric and androcentric popular conceptualization of creativity and can enrich the knowledge base of creativity research. Helson's (1990) ongoing work on the creativity of women provides an alternative and much needed perspective that has only recently begun to make inroads into the research. In an essay that summarizes much of her pioneering research of creativity in women, she concludes with the following statement, which suggests that an understanding of women's creativity requires precisely the kind of contextual approach we have been suggesting:

We think the understanding of creativity in women requires attention to the social world, to individual differences in motivation and early object relations, and to changes in society and the individual over time. In fact, we believe that the study of creativity in general needs all of these directions of attention. (p. 57)

Until recently, published accounts of genius have largely been studies of white, Anglo-Saxon males. For example, of the 38 autobiographical descriptions of the creative process of genius at work in Ghiselin (1952), only 3 of the accounts are from women. Mockros and Csikszentmihalyi's (in press) important study of the social construction of creative lives extensively documents the influence of social forces, from parents to peers to college instructors, on creative women. Germaine Greer's (1979) The Obstacle Race chronicles the until recently unfortunate fate of women painters and stands as an excellent case for the social construction of creativity—both what is creative and who may be considered creative.

Products that are evaluated as creative within our present system, for instance, tend to be abstract. By abstract we mean that which can be abstracted from its context. Museums, for example, house priceless works of art in splendid isolation from the urban decay in which most city dwellers live: They are oases of creativity. Conversely, urban issues are not normally considered domains where creative efforts are particularly rewarded or even encouraged. Our conception of creativity, and the domains to which its application is rewarded and valued, has therefore also tended to distract our attention from putting creativity to work in the development of creative contexts such as communities, organizations, and social groups (Montuori & Purser, in press).

There is a strong suggestion that societal contextual issues such as health care, urban problems, and pollution have historically been considered less important as policy issues, perhaps because they are viewed as the public policy equivalent of issues that in the private sphere of the home are taken care of by women (Eisler. 1987; Montuori & Conti. 1993). It is interesting to note, therefore. as McClelland's (1975) research has shown, that abstracting things out of context is predominantly a male characteristic. In contrast, Barron (1972a) (who was a pioneer in studies on creative women) conducted comparative research on male and female artists and found that women have a far more contextual view of their craft. Further, Barron's findings revealed that women artists were more concerned with the impression of others, with their families and friends, and with the role of art in establishing relationships. Most importantly, Barron's findings suggested that women artists were less concerned with acquiring personal recognition or success from the environment than they were with the contextual value of communicating; that is, with feeding the environment, rather than being fed by its acclaim. In short, their art expressed more of an integrative rather than self-assertive orientation toward the environment. Whereas a discussion on how women's creativity has been suppressed and omitted from mainstream society is beyond the scope of this paper, we believe that there exists a "feminine" aspect to creativity that is far more contextual and systemic in scope than our present version, which emphasizes unrestrained self-assertion and domination of the natural and social environment (Montuori & Conti. 1993).

Our very understanding of the "social environment" must change, according to Bohm and Edwards (1991), who point out:

The very word environment is an abstraction, one that is wrong in this context. It abstracts the environment from the person and the person from the environment. It treats the two as different. But the so-called environment is the very source of being of the person. (p. 41)

Indeed, the environment is also made up of persons, who in turn comprise a part of each other's environment. We are the environment, to some extent. Systems philosopher and evolutionary theorist Ervin Laszlo (1969) argues that our understanding of the environment reflects a larger epistemological and methodological tendency in Western thinking. He argues:

We must do away with the subject-object distinction in analyzing experience. This does not mean that we reject the concepts of organism and environment, as handed down to us by natural science. It only means that we conceive of experience as linking organism and environment in a continuous chain of events, from which we cannot, without arbitrariness, abstract an entity called "organism" and another called "environment." The organism is continuous with its environment, and its experience refers to a series of transactions constituting the organism-environment continuum. (p. 21)

This perspective on selfhood and autonomy is of great interest because it views growth not as a separation or abstraction from the environment but as a greater awareness of systemic embeddedness and openness to process, paradoxically coupled with greater differentiation (Macy, 1991). A systems perspective presents an alternative view to the relationship of self and society, one which is particularly congruent with recent findings on the contextual nature of women's ways of knowing (Salner, 1985, 1986a, 1986b; Wood-Sherif, 1979).

Because the received view of the social environment is arguably a denatured and defeminized one (Roszak, 1992), this should lead us to seriously examine and question our underlying assumptions that inform the criteria for judging creativity in the collective. We are suggesting that creativity cannot be separated, that is, abstracted, from the whole process and context from which it comes about. In short, the products and actions a culture deems as creative are intimately connected with its cosmology and vision of the universe.

It follows, then, that a highly urban and radically anthropocentric criterion for evaluating creativity is the product of a powerful collective abstraction—a worldview—that posits a fictitious division between the self, the social world, and the natural environ-

ment. The conduct of scientific research, for instance, has depended upon a dominant cognitive style that is adept at generating and using abstract thought. Emotional detachment, suppression of impulse, distrust of immediate sense perceptions, these constitute the cognitive enterprise of the scientific attitude (Barron, 1990; Mitroff & Kilmann, 1978). In contrast, high personal responsiveness that is characterized by warmth, sensuality, and sensitivity-stereotypically feminine characteristics-are looked upon with disfavor in the scientific establishment (Barron, 1990, p. 50). We contend that a basic mistrust of the environment and a polarization of stereotypically male and female characteristics is at the root of these cognitive pathologies, which can be traced historically to the origins of science as a way to develop power with which to control the environment. According to some feminist scholars (e.g., Eisler, 1987), these pathologies have their historical roots in the emergence of the domination of men over women several thousand years ago, prompted by the ascendance of Indo-Europeans fleeing harsh climatic changes.

The reductionistic method of science—which is informed by a paradigm that isolates and abstracts things from their environment—has developed in such a way that it requires not only a suppression of sensuality and emotional life but also involves a distinct affective attitude toward what is considered to be *not-self*, the other, or the environment, and, in a male-dominated society, women and those values and characteristics considered to be feminine. Women, as Wilden (1987a, 1987b) argues, have come to be viewed as part of a generic environment, a not-self in a male-dominated society. From this perspective, the division between the environment and the person is fictitious, and to mistrust the environment is ultimately to mistrust the self (Erickson, 1965; Guidano, 1987).

The implications and consequences of such compartmentalization and suppression of large areas of affective experience are far-reaching. Rogers (1954) observed that creativity manifests in either constructive or destructive forms of expression, depending on the degree to which a person is open and trusting of their organismic experience. According to Rogers, creative behavior and expression are more likely to be of a constructive nature when the creator is "open to all aspects of his experience, and has available to his awareness all the varied sensings and perceivings which are going on within his organism" (p. 7). It is fairly clear that appreciation and trust of one's organismic experience is the underlying

basis of psychological health and self-esteem (Barron, 1968; Becker, 1968; Rogers, 1961). Given these connections, Guidano (1987) has suggested that self-esteem is related to our "theory of emotions," which

defines the range of emotions that one can recognize as one's own, the way one labels and controls them, and the circumstances and ways in which one can express them. Consequently, only feelings belonging to the selected emotional range will be properly decoded and experienced as emotions, while unrecognizable feelings are likely to be experienced as externally caused, "strange" phenomena. (p. 87)

This implies that in a society where males are systematically taught to suppress large areas of affective experience, we will not trust our self, our experience, and our environment, and the following strategy of domination may emerge: Self and environment are perceived as hostile, and in order to feel safe and secure, we will want to control both (Eisler, 1987). Conversely, discussing creative individuals, for whom research shows stereotypical gender differences do not apply, Barron (1963) writes:

When the distinction between subject (self) and object is most secure, this distinction can with most security be allowed to disappear for a time (mysticism, love). This is based on true sympathy with the not-self, or with the opposite of the things which comprise defensive self-definition. (p. 159)

Broadening the opportunities for individuals to develop this nondefensive "sympathy," as Barron calls it, will be an important task of a socially creative society, if, as Kearney writes, our task now is to find our creativity in the relationship between self and other. It also changes our understanding of the environment and what constitutes self and other.

Further inquiry and scholarly attention must be devoted to the question of what the determinants and criteria are for a creative society. Can we be certain, for instance, that the quest for self-actualization in the population will automatically lead to a creative society? Focusing primarily on the individual, Maslow (1971) considered creativity as a systemic "or Gestalt-quality of the whole person" (p. 66) and theorized "that the concept of creativeness and the concept of the healthy, self-actualizing, fully human person . . . may perhaps turn out to be the same thing" (p. 55). Roszak (1992) argued that Maslow's concept of self-actualization is also

based on a highly anthropocentric view, where the self-actualized individual is one that is capable of heroically "transcending the environment." Similarly, humanistic psychology has used the biological metaphor of "growth" to describe the movement toward self-actualization, but, as Barron (1995) has pointed out, psychological growth often resembles "a cancerous kind of ego expansion" that self-deceptively posits that there are "no bounds to individuality."

Self-actualization within this framework may appear more as an incessant striving toward successive images of a socially conditioned ego ideal. A product of Western culture, self-actualization is at times a modernist version of the Promethean hero myth, a heroic quest that is predicated on overcoming the natural processes of decay and rising above the forces of Nature. Hence, in its pathological and trivialized manifestations, psychological growth can be equated to a sophisticated form of psychic consumerism—similar to the "spiritual egotism" that Trungpa (1973) observed in the New Age marketplace—that is driven by an insatiable desire for accumulating "newer and improved" images. This "unlimited growth" perspective views the self to be at the center and foreground of experience, in which case, the web of relationships and ecosystem that ultimately provide the conditions necessary for its organismic survival are severed and relegated to the background. Elaborating on the shortcomings of modern psychology, Roszak (1992) goes on to state:

What [Freud's] successors could not appreciate was the dynamism of an urban culture that would at some point impinge upon the planetary environment. When it did, questions would arise about the relationship between the human and natural worlds that could no longer be avoided. It would then be essential to provide family and society with an ecological context. Sick souls may indeed be the fruit of sick families and sick societies; but what, in turn, is the measure of sickness for a society as a whole? While many criteria might be nominated, there is surely one that ranks above all the others: the species that destroys its own habitat in pursuit of false values, in willful ignorance of what it does, is "mad" if the word means anything. (p. 68)

The notion that creativity is linked or even equivalent to psychological health can be revised by embedding it within a wider ecological context (Barron, 1969, 1972b, 1988, 1995). Shifting the locus of creativity from the autonomous individual to an ecological context reorients the cultural project from that of dominating the

environment to that of nurturing and engendering creative relationships with the environment, so that sympathy with the not-self, with other, is actively encouraged.

What might a creative society look like, and on what kinds of projects would it embark? With a contextual focus, we might see a powerful emergence of those concerns that have stereotypically been labeled as "women's work," efforts toward creating a viable human habitat and context for us to live in, actively nurturing creativity and honoring it in others. Issues such as pollution, quality of life, and urban renewal would be revalued and placed at the forefront of our creative endeavors. They might indeed be viewed as potential avenues for great creative expression, domains where creativity may be applied and where creative solutions are encouraged and recognized. This requires also a shift in values, a shift in what we consider important and worthy of attention and rewards (Montuori & Conti, 1993).

Our evolution toward a sustainable society requires us to recognize that our current conceptions of creativity as purely a form of self-expression that originates from an autonomous, self-contained individual has largely become one-sided and destructive (Barron. 1988; Berman, 1990; Taylor, 1991). An ecological criterion of creativity amounts to a fundamental shift in perceptual scope, or to a wider viewing angle that shifts the center of gravity away from the extreme focus on the self-contained individual as the sole agent. This means that the locus of creativity is redistributed, or better, rediscovered to be radically distributed within the ecosystem. between the extreme poles of the unlimited possibilities envisioned by the individual actor and the necessary constraints and inescapable horizons of the socioecological environment. Thus, within this new normative structure, creativity must not be viewed as purely self-assertive and self-expressive, but it must, in fact, also fertilize the soil of creation for others, rather than being a cancerous ego expansion. It must do this by opening up possibilities, empowering others, and making them aware of their own creativity, in short, by providing the context for it. As the title of Barron's (1995) work. drawn from W. B. Yeats, points out, creativity is "no rootless flower." This, we believe, is where the potential for a social, contextual understanding of creativity lies. The creation of a context for creativity does not rely merely upon the creation of a narrative style within which one may find a voice. Rather it creates the ground from which a plurality of narratives can emerge.

CONCLUSION

In approaching creativity from a more contextual perspective, we have outlined two basic approaches to the issue. One is to show how even relatively isolated creative persons, such as Einstein, for instance, who worked in a patent office clearly outside of the established scientific community, operate within a historical context and a domain that establishes which are the burning disciplinary issues that need to be addressed, how they can be addressed, and so forth. This sociohistorical context broadens the nature of inquiry into the creative act and can counteract popular misconceptions of creativity arising ex nihilo from a "genius without learning." We therefore propose an inclusive, systemic approach, which addresses both intrapsychic and person-centered concerns and social, historical, and environmental factors.

Our second approach is to suggest that creativity also takes place in groups, organizations, and societies—traditionally the field of social psychology and sociology—and that creativity can be sparked by interactions. With the present individualistic focus on creativity, all too often interactions are viewed only as negative factors in the creative process. We believe an important avenue for creativity research will be the study of creative groups where creativity is an emergent property of the collective, such as jazz ensembles, the theater, moviemaking, creative teams in organizations, R&D labs, community projects, and so forth (Montuori & Purser, in press). Again, we believe this does not diminish the role of the individual in the least, but rather addresses more fully the concern of individuals and the contexts in which they have to operate—contexts that are, after all, also composed to a large extent of other individuals.

Moving from theory and research to practice, this shift to a more contextual and eco-systemic perspective might also encourage the possibility of viewing group efforts as potentially very creative, something that in an individualistic culture is by no means always the case. Learning to see creativity as a contextual process may act as a corrective to perceptions regarding the nature and potentials of collaboration: One has only to think of such legendary collaborations as the songwriting team of Lennon and McCartney, or the classic bands put together by Miles Davis in the late 1950s and early 1960s, as examples of collaborations where the whole was more than the sum of its parts, so to speak. Developing an under-

standing of the dynamics of these creative processes may provide us with an extremely fruitful research area and also with models and tools similar to those presently existing to stimulate individual creativity. A truly humanistic perspective on creativity must include a discussion of human relationships.

A contextual approach to creativity will almost by necessity be interdisciplinary, historical, ecological, systemic, and aware of cultural and gender differences, while at the same time continuing to address personality issues. At a more philosophical level, it will force us seriously to address a number of issues, including the relationship between the individual and community, and therefore our theories of the self; the nature of women's creativity in light of "feminist" developments in psychology, sociology, and the sciences in general; the methodological insights of numerous approaches, including social constructionism, systems and ecological approaches, hermeneutics, and the numerous methodological questions raised by the "postmodern condition": the moral dimensions of creativity, including such issues as what products can be considered creative, the relationship between creativity and destruction. the tendency toward nonconformism and rebellion in creative individuals, and the responsibility both of creative individuals toward society and society toward creative individuals.

This by no means exhaustive list points to some important areas for future research that can be addressed with a variety of methodological approaches and toward the need for a broadening of scope for creativity research. As we have argued, creativity research is beginning to grapple with these issues, as Runco and Albert's (1990) edited volume shows, including as it does chapters by anthropologists, social psychologists, systemists, and others. One can only hope that this newfound momentum of creativity research will not fall prey to a tendency to dismiss earlier creativity research and reinvent the proverbial wheel. Creativity research itself should "walk its talk" and be aware of its historical roots and the context in which today's researchers are working.

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