AESTHETICS, CREATIVITY, AND MYSTICISM: AN INVESTIGATION OF THREE MODES OF CONSCIOUSNESS

by Michael Frishkopf 🗓

Abstract. This essay explores the universal nature of aesthetic, creative, and mystical experience, tracing some essential interrelations among the three. Enlarging upon the work of anthropologist Jacques Maquet, I speculate that "sensory fixedness" is both necessary and sufficient to achieve aesthetic experience, and that the unification of mind engendered by sensory fixedness is the essential source of aesthetic power. Therefore, the role of the aesthetic object (construed broadly) is either as an arbitrary sensory focusing mechanism, or as the physical embodiment of a gestalt facilitating fixedness; the first category is merely attractive, while the second contains all that is truly great in art (visual and auditory). I suggest further that as both creative inspiration and mystical experience result from fixedness, both are related to aesthetic experience. However, while aesthetic experience is rooted in sensation, mystical and creative experience, though often prepared by sensory fixedness, may transcend the sensory domain altogether toward more abstract forms of mental fixedness.

Keywords: aesthetics; creativity; mysticism

Prologue: Discursivity and Fixedness

This tripartite essay is an attempt to explicate some of the universal¹ features of aesthetic, mystical, and creative experience, and to demonstrate the essential interrelations among the three.²

To begin, I introduce two general mental conditions recognized by Buddhist psychology: discursivity and fixedness. Following recent thinking in artificial intelligence research (Minsky 1985), I presume that the mind comprises a virtual society of interconnected mental agents. I further presume that many of these agents (or groups of agents) are capable of a primitive state called attention, directed toward a particular set of objects

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of attention. Thus, at any moment in time, the society of mind is directed toward a certain set of objects of attention: the total attention-set. The attention-set of discursive mind changes, moving from one object (or group of objects) to another, as in logical reasoning, where the objects are propositions, and the moves are syllogisms.

Complementary to discursivity is fixedness, a condition in which the mind's attention-set is continuously fixed upon one or more objects, over the period of fixedness.³ An object of fixedness may reside within mind, or without. In the former case, the object may be emotion, concept, or percept (including the imaginative faculties so important in creativity, and discussed below); in the latter case the object is some portion of the sensory stream arriving through one or more sensory organs. Fixedness can be static or dynamic, depending on whether the objects of fixedness are still, or in motion. The condition of static fixedness, contemplation, is characteristic of many meditative states. In the dynamic case, movements of or within the objects of attention induce corresponding movements in the mind. In either case, mind attends fully to the objects of fixedness. The attention-set may be unitary, or multiple. The former case obtains whenever there is only one object of fixedness, or when multiple objects of attention can be grouped to form a stable unitary complex whole—a gestalt—at a higher level of organization.4

The fixed condition nevertheless allows objects besides the objects of fixedness to reside within a mental background. These background objects, continuously copresent with the objects of fixedness, color the fixed state by their presence. Thus, fixedness upon a statue may constitute a religious experience in a ritual context, becoming aesthetic under the more prosaic conditions of a museum, due to the difference in background. In particular, this mental background represents the spatiotemporal context of the practice of fixedness, its (often ideological) motivation and purpose; it is the factor by which different cultures interpret and sort the universal manifestations of fixedness (including a wide variety of named aesthetic, mystical, and creative states) in different ways. I will clarify these points later.

Any object or set of objects may potentially serve as the focus of fixedness. However, the choice of objects partly determines the mental effort required to construct and maintain the fixed state. From the standpoint of mental economy, a signifier ordinarily functions poorly as an object of fixedness, because a signifier ordinarily points away from itself. Thus, it is extraordinarily difficult for a person literate in English to fix attention upon an English word—the signifier itself (typographical or sonic)—without immediately invoking its meaning, and thus creating a mental movement disturbing the fixed state. Possibly one may fixate upon the signifier together with its meaning (as may occur with sound and meaning in poetic perception), as forming a stable combination. However, linguistic signifiers

tend to be transparent, polysemous, associative, and hence unstable: the signifier instantaneously yields to a plethora of signifieds; we see through such signifiers, as if looking through a clear window, to their meanings. Therefore, from the standpoint of mental economy, the ideal object of fixedness either does not strongly signify, or is a signifier which points to itself. Anything else will cause the mind to labor in order to avoid a mental shift determined by the object's semiotic properties. Similarly, a unitary attention-set facilitates fixedness. If each agent is occupied with a different set of objects of attention, such that the total attention-set does not form a unitary complex whole, then the attention of multiple agents will tend to conflict with one another, each agent's fixed attention tending to disrupt the others' in constructing its gestalt (whose effort of construction will itself depend on its unitary nature as an individual agent's attention-set). On the other hand, if each agent is occupied with the same object of attention, the same unitary complex whole, or even with different components of a unitary complex whole, then these multiple attentions coexist harmoniously in producing a single stable gestalt

Certain properties of the fixed mind may be deduced, at least speculatively. The fixed mind is disinterested, egoless, because the self is displaced by the object of fixedness; self-consciousness is eliminated in favor of object-consciousness.⁶ In the case of a unitary attention-set, the fixed mind is unified, because all of its constituent parts are absorbed by the same object or unitary complex whole. In this case, fixedness integrates the mind, reorganizing it about the attention-set, and promotes communication among its parts. In the forthcoming sections, I argue that aesthetic, creative (inspirational), and mystical experience each represent a particular universal manifestation of the fixed state. For this reason, these three categories of experience share many properties.

Propositions of Aesthetics

Aesthetics faces one paramount problem: why and how do certain sensory objects, but not others, induce aesthetic experiences? By answering this question, we may uncover universal principles underlying the seeming diversity among particular aesthetic systems constructed by different cultures throughout history.

Aesthetic Universals Are Located within Mind

The cultural and historical variability of aesthetic objects suggests that universal principles should be sought within mind, either as mental process, or as experience, but not in the objective properties of the objects themselves.

Philosopher Roger Scruton (1989) indicates the difficulties involved in constructing a philosophy of the aesthetic objects themselves if aesthetics is to be anything more than a philosophy of some culture-specific art

form, since "unless we restrict the domain of aesthetic objects it becomes extremely difficult to maintain that they have anything significant in common beyond the fact of inspiring similar interest."

But the idea that we can understand the aesthetic property of aesthetic objects independently of mental process and experience is illusory. The class of aesthetic objects is ultimately determined by the processes of perception and the nature of experience. Universal properties of aesthetic objects—if there are any—must be determined by processes and structures of the mind. But if those processes and structures are numerous, complex, and in flux, partially constructed or at least shaped by history and culture, the resultant class of aesthetic objects (considered cross-culturally, and trans-historically) may not display any obvious universal properties at all.⁷ Yet this fact need not imply that universal aesthetic properties do not exist as mental properties. The relative chaos of aesthetic objects, like that of the material universe itself, might be underlain by a few simple laws generating complexity through multiple application and superposition. Therefore, we must seek to understand aesthetic universals through an understanding of the process of perception, and the resulting aesthetic states of consciousness.

Sensory Fixedness Is Necessary for Aesthetic Experience

Although our minds are continually flooded with sensory data, aesthetic experiences are relatively rare. Most people would explain this fact by noting that only particular sorts of objects can produce the aesthetic experience.

But aesthetic objects are in themselves insufficient to generate aesthetic experience. In order for the power that characterizes aesthetic experience to develop, it is necessary that the mind maintain an attitude of sensory fixedness: total attention to some component of the sensory stream. Then the mind does not reflect on the meaning of the percept, does not consider associated percepts, concepts, or emotions. Any movement of the mind results from its fixedness upon similar motions of the external object(s) generating the stream. The mind holds only an image of sensory reality, as refracted through the sensory organs; this image does not signify anything other than itself.⁸

Many philosophers of aesthetics have remarked upon the necessity of a particular aesthetic attitude for producing aesthetic experience. For Kant, and many others since Kant, this attitude is "disinterestedness." Maquet (1986, 46) defines disinterest to be freedom from self-interest and ego-involvement. A disinterested aesthetic experience depends upon the object, as an end in itself, free from any of its implications, especially as they might affect the beholder. But the pure sensory form of an object is one aspect of the object in itself. Therefore, sensory fixedness, in which the mind is absorbed in the sensory only, is surely disinterested. The fixed state is egoless

and disinterested; self-interest is excluded because the self is displaced by the object of fixed attention. Thus, the fixed state satisfies one of the prime conditions for aesthetic experience.

Sensory Fixedness Is Sufficient for Aesthetic Experience

Why are certain objects, and not others, aesthetic? Why is the class of aesthetic objects so diverse?

Applying Occam's Razor, if sensory fixedness is the only element common to all aesthetic experience, perhaps sensory fixedness determines aesthetic experience. Upon reflection, this apparently radical hypothesis is perhaps not so hard to accept, because aesthetic power may be generated by the state of deep sensory absorption that the aesthetic experience requires, rather than by special properties of the sensed object. Thus, I hypothesize that aesthetic experience and the power of that experience is generated by the state of deep sensory absorption implicit in sensory fixedness. ¹⁰

Sensory fixedness, being both necessary and sufficient, is coextensive with aesthetic experience. "Why are certain objects aesthetic?" The question itself is incorrect. The aesthetic quality does not reside in objects; it resides in mind. The profusion of attributes of objects regarded as aesthetic (as examined across cultures or human history) results from the fact that any perceptible object can become aesthetic. It is partly a matter of historical happenstance, arbitrary cultural and individual variability, as to which objects are actually selected. Those that are selected become the focus of fixed attention, and consequently are perceived as aesthetic objects; the aesthetic quality is projected into the object, as if the object itself could be imbued with an aesthetic quality. But the ascription of aesthetic qualities to objects is an illusion, akin to the ascription of the musical quality "minor" to a sound wave. Such ascriptions are explanations of psychophysical phenomena in physical terms. However, where "minor-ness," for example, is closely related to particular configurations of fundamental frequencies of the corresponding sound wave, there is no physical correlate to the aesthetic experience.

But, if my conjecture be true, why are not all objects aesthetic? Why does not every pile of junk, every sentimental pop song, deliver a powerful aesthetic experience? They do—provided that one adopts the aesthetic attitude of sensory fixedness. The reason so few objects seem aesthetic, and that the aesthetic experience is so rare, is that we hardly ever adopt (or are able to adopt) the proper attitude. We perceive, but we do not attend to our perceptions. In Western culture at least, we rely upon "crutches" or "hooks" built into art objects to help draw and focus our attention to the point of sensory fixedness. I will discuss these crutches—attractiveness and framing—later on.

Those to whom this proposition appears extreme and improbable should consider how many aesthetic problems are solved with this position. For example:

- (1) Cultural diversity in aesthetic systems, throughout history.
- (2) Within a culture, the temporal variability of aesthetic taste, especially in the twentieth century, when styles change yearly, and anything, including ordinary household objects displayed in a museum setting, can become art (see Maquet 1986, 19).
- (3) The fact that a particular object may move in and out of the class of aesthetic objects, even within a particular moment in a particular culture. Maquet (1979, 9) contrasts "art by destination" and "art by metamorphosis." Robert Plant Armstrong (1981) writes of objects whose aesthetic presence lies dormant until "invoked" (e.g., the performances of traditional African societies). Leonard Meyer discusses the case of a forgery, whose aesthetic appeal evaporates once its spurious status has been uncovered (Meyer 1967, 54–67). If an object can move in and out of the aesthetic category, on what could aesthetic experience depend other than the mode of perception common to all such experience?
- Exclusive artistic canons, supposedly established purely on the basis (4)of aesthetic value, but which discriminate by race or gender in a manner clearly reflective of social power structures. Striking alignments of aesthetic value and power (e.g., that the Western art music canon consists mainly of compositions by white males) are never merely coincidence, but rather result from the fact that—among other roles social power structures serve to limit the set of objects toward which sensory fixedness can "legitimately" be directed (according to socially constructed standards of "art"), and to select objects which serve (by means of artistic content, authorship, or social location) to reproduce those structures, thus assuring their survival from one generation to the next. Exclusion and discrimination say much about the nature and interests of such power structures, while contributing nothing to—indeed, impeding—a scientific understanding of universals in aesthetic experience.

In each of these cases, individual, social, economic, and political forces cause people to attend fixedly to certain sensory inputs, and to neglect others. These forces, continually in flux, determine a similarly shifting and amorphous class of "aesthetic objects." However, if (as I suppose) aesthetic process and experience is a significant phenomenon deeply rooted in the mind, it cannot be these capricious forces themselves that generate the aesthetic experience. Rather, these forces merely promote sensory fixedness,

which is the singular immediate cause of aesthetic experience and aesthetic power. We do not attend to an object because it is aesthetic. Rather, it is aesthetic because we attend.

The Unification of Mind Resulting from Sensory Fixedness Is the Source of Aesthetic Power

When the sensory stream is unitary—graspable (by human mind) as a complex whole, or stable gestalt—then sensory fixedness is a means toward producing unification of mind. In such sensory fixedness, all the mind's attentive agents are engaged with a unitary sensory stream. The difficulty of intra-mind communication resulting from the diverse mental specializations of multiple agents are temporarily lifted, or at least mitigated. The result is a mind in which all parts reflect the whole, a moment during which communication is possible between any two parts because all are, as it were, speaking the same language.

This extraordinary moment of unification is the only essential attribute of aesthetic experience, and hence must be the source of its special power. Further support to this hypothesis is given by the many mystical traditions that encourage unity of mind (often via the mediation of an aesthetic state) as a means to inner power. As we shall see, the mystical experience is similar to the aesthetic in its use of fixedness. Since mystical experience relies on fixedness to achieve unity of mind, and hence, power, it seems reasonable to assume that aesthetic experience works the same way.

The Object of Fixedness Acquires Aesthetic Significance by Expediting the Fixed State

My analysis thus far has skirted a most critical issue: the significance of the object of fixedness. The preceding propositions seem to imply an aesthetic theory wholly independent of the aesthetic object. Although I do believe that the aesthetic experience is essentially a perceptual mode of fixedness, the object may act to expedite the development of that mode in two ways: first, by focusing the attention, and blocking discursivity; second, by facilitating the completion and stability of a gestalt by providing a unitary structure, which perception can quickly and unambiguously organize into a unitary percept.

Objects may foster sensory fixedness through attractiveness and framing. There are three characteristics of objects which facilitate the focusing of attention upon them: opacity, framing, and attractiveness. An opaque object is seen for itself, rather than for what it represents, unlike the transparent signifiers I mentioned earlier, which divert mental attention away from themselves, by pointing to a signified.

Framing separates the object from its context in a striking way, inviting the senses to fixate on the object to the exclusion of everything else within sensory view: the picture frame, the stage, the silence surrounding a musical piece. Thus, Marcello Nizzoli's 1949 Olivetti typewriter appears in the New York Museum of Modern Art, a utilitarian object framed so as to encourage fixedness rather than use (Maquet 1986, 19). 11

Attractiveness is that property of an object that induces the individual to concentratedly perceive it, by a promise of pleasure due to its referential properties. Music may stir pleasing memories. I see a painting and become blissfully lost in the world it depicts. Often attractiveness is "athletic," to use Bruno Nettl's (1983, 320) metaphor. We thrill to the bravura of an accomplished pianist, the virtuosity of a sitar player. As in a circus sideshow, we attend eagerly to freakish extremities: the soprano's high C, photographic realism, enormous sculptures, gut-wrenching volume, minimalism, the 8-year-old master violinist. We are likewise drawn to the famous, the ancient, the "authentic." That is, the attractiveness of an object depends upon its relation to something outside itself: something signified, or something to which we compare it. 12

But however tightly framing and attractiveness may be entwined with the aesthetic process, they are independent of universal aesthetic experience. Framing and attractiveness are only the hooks that draw and focus our attention. Indeed, taken to an extreme, attractiveness limits fixedness by directing attention from the object in itself to the object in relation to another, or to that which it signifies, thus preventing full development of fixed attention on the object itself.

Evidently, the efficacy of particular devices of opacity, framing, and attractiveness are to a great extent culturally and historically constructed, and therefore account for some of the corresponding diversity of aesthetic objects, without, however, necessarily implying a corresponding diversity in the essential aesthetic experience, or in the ultimate source of its power.

Aesthetic experience forms a gestalt. Perception is intrinsically creative. The mind has a propensity to organize the sensory stream: to construct gestalten, according to principles including the well-known classic ones (proximity, similarity, uniform destiny, closure, and so on¹³). Thus, I perceive a circle of dots as a circle; the slow decrease in the frequency of a sine wave through the audible range results in the perception of a sonic object in motion. The physical organization of the object, in conjunction with mental processes and schemas, imposes certain limits on the sorts of gestalten that can be formed, and the rapidity with which they can be completed.

But this process of perceptual organization, the struggle to form a gestalt, is itself a disturbance to fixedness. Therefore, full sensory fixedness depends upon either the blocking of that process, or upon its unambiguous

completion. Furthermore, the concentration prerequisite to fixedness tends to accelerate and deepen the mind's natural search for a gestalt.

Therefore, fixedness will normally produce a more highly ordered gestalt than ordinary perception. On the other hand, objects resistant to the construction of a gestalt may tend to block fixedness, and hence the aesthetic experience as well. Some percepts require considerable time to form, as in hidden-figure optical puzzles. Possibly, with great mental development, one may learn to fix attention without first ordering the stream.

Objects may foster sensory fixedness by facilitating the construction of a gestalt. However, generally the construction of gestalten is a natural propensity of the perceptual system. Hence, objects may foster sensory fixedness by facilitating rapid completion of the gestalt-construction process.

The object constrains the set of constructible gestalten, and the ease by which they may be constructed. Let us say that the function G yields the difficulty a particular subject encounters in constructing a good gestalt out of the sensory stream generated by an object. We might then say that "low G," while not necessary, facilitates aesthetic experience. Low G means the object helps the subject to construct a gestalt. But what aspects of G are objective, or even human-universal? G depends both upon the object, and the individual perceptual system, including both learned and innate perceptual processes. Although certain aspects of G would seem to be objective (a densely packed circle of dots logically represents a circle, independent of perception), these aspects cannot be clearly distinguished from subjective-universal factors, or from cultural and individual idiosyncrasies. From this fact arises a certain degree of historical and cultural aesthetic diversity.

Objects which extend over time, such as music, must be continually organized, as long as prediction is not possible. Therefore, predictable music—music with low information content, in the technical sense of communication theory (Cherry 1957, 40-51)—is most suitable for fixedness. Such music is either well known in advance or contains symmetries (mathematically conceptualized as invariances) that allow for prediction. This hypothesis is supported by the fact that music supporting mystical states of ritual, which are inherently fixed, often employs repetitive forms, which partly negate linear time through periodic symmetry (invariance under time shifts that are multiples of a minimal period T). Similarly, the mystical music of Olivier Messiaen seeks a kind of musical stasis through symmetries; his musical language includes the "mode of limited transposition" (a set of pitch classes 14 invariant under transposition by an interval other than the octave), and the "nonretrogradable rhythm" (palindromic rhythm, invariant under the operation of temporal retrograde, or reflection) (Messiaen 1956). Although no music is completely predictable, these devices do serve to mitigate the continual burden of temporal

organization. The hypothesis is also borne out by our intuitive feeling that it is the music we know best that carries the greatest aesthetic power. Without some degree of predictability, the listener's attention cannot be fixed.

The meaning and emotion of aesthetic experience is the gestalt itself. In his well-known work on music, meaning, and emotion, Leonard Meyer posits a positive correlation between information content (entropy) of the musical sound, and musical emotion (Meyer 1956, 1967). My position is that low information expedites (but is not sufficient to engender) the aesthetic state. The two positions are not contradictory, because I do not claim that "Meyerian" musical emotion is at all equivalent to the power of the aesthetic state as I have defined it. There is no surprise in the fact that there may be more than one source of musical meaning (indeed, there may also be extramusical meaning).

For Meyer, musical meaning arises out of the clash of expectation with reality ("high entropy"). In my theory, the meaning of music in the aesthetic experience is not a clash, but a harmonious total permeation, a possession, of the mind by the sound stimulus and resulting gestalt: mind (and, often, body as well) is given over wholly to sonic gestalt. Among the Ewe people of West Africa, for instance, some 90 percent of traditional music is polyphonic drumming in a 12/8 meter supported by a single ostinato bell rhythm. This rhythm is completely predictable, and hence carries no new information. Yet it is meaningful simply as a percept that is internalized, deeply felt, and expressed through dance. Furthermore, it supports drummed variations and improvisations that do supply musical meaning of a more Meyerian sort.

One often finds that in contexts designed to foster development of concentration (as in mysticism, or dance clubs), the aesthetic state of sensory fixedness tends to dominate, because this state (and not the high entropy "clash") creates the greatest degree of unity ("groove") between body and object; in mystical-aesthetic concentration, the latter may subsume and even absorb the former. But even in the most detached, secular contexts for music listening (e.g., a concert hall), a balance between the unexpected and the expected is required; alone, the former is too jarring, and the latter too boring. It is a limitation of Meyer's theory that most concertgoers find most moving that which they have already heard, in which there is nothing really unexpected, but rather the thrill of fixedness even along the tortuous twists and turns of the musical piece.

More generally, the aesthetic experience (whether aural or visual) is meaningful simply as a percept, as a gestalt; not as a signifier that points beyond itself, but in itself.

Great art is transcendent: conceived in an attitude of fixedness. Once fixedness is possible, it is the intensity of the subject's fixed engagement

with the object that governs the intensity of the aesthetic experience. Such engagement is limited by both subject and object: the subject must fixate; the object must allow for a full involvement, a near communion that transcends the ordinary subject-object relation; the subject must "get into the groove" of the object.

A more specific condition on objects that allows for such engagement is what I term "transcendence." A transcendent object is conceived in a state of fixedness, and so encodes, to some degree, the fixed state of its creator. Transcendent objects thus possess a double aesthetic power: as an arbitrary object of fixedness, and, vicariously, as the very objectification of aesthetic experience itself. Within cultural limits, such objects transcend their object status to become virtual subjects, what phenomenologist Mikel Dufrenne calls "quasi-subjects," representing their creators (Dufrenne 1973, 196). Therefore, a subject can engage a transcendent object on nearly human terms.

Can any object be universally perceived as transcendent? The evidence from ethnomusicology seems to suggest that in some cases, but not always, artistic greatness is appreciated cross-culturally upon intensive engagement with the music object in itself, without additional cultural experience or information. However, we must remain circumspect on this point.

Of All the Arts, Predictable Music Is the Most Conducive to Fixedness

Products of static visual arts are conducive to contemplative fixedness. However, such objects do not absorb our time sense, so that attention is left to wander freely as a function of time. Furthermore, most visual art objects are signifiers, pointing away from themselves. Peter Kivy argues, convincingly I think, that because human vision has such survival value, visual images tend toward signification; vision has evolved to place representational interpretations on all visual perceptions (thus clouds become dinosaurs) (Kivy 1990, 4–5). But as I have argued earlier, signifiers are not conducive to fixedness. For these reasons, the visual aesthetic experience requires greater effort: to concentrate fixedly on form, rather than what form signifies.

Music, on the other hand, absorbs our consciousness in time. And, to continue Kivy's argument, as human hearing plays less of a survival role than sight, audition has not evolved to place a definite interpretation on perception, except for language, which occupies a relatively narrow domain of sound. When sound falls outside that domain, we cannot interpret it as language; we need not interpret it as representational at all. Music can be left as an abstract percept. Thus, "music alone," and the auditory aesthetic experience, become possible. On the other hand, musical information, our inability to predict the musical future, remains a constant threat to fixedness. Therefore, the objects in themselves most conducive to sensory

fixedness are sonic objects that are well known, or that negate linear time, through circularity, and other symmetries.

Propositions of Creativity

Creativity Is Completion of the Incomplete

Creativity is the process of problem solving, in which gaps are completed to make a whole, or gestalt. We often recognize two distinct types of creativity: the problem-solving characteristic of mathematics, science, engineering, and commerce; and artistic creation. The former is often associated with reason, and the latter with inspiration. However, the distinction is illusory. Both sorts of creativity are strategies for the solution of problems, and both may, or may not, involve discursive thought.

Of course, my definition of a "problem" is more general than the usual one: a problem is a structure that is incomplete. To solve a problem is to complete the structure, or at least to make it more complete than it was formerly. A structure is a set of entities that are related subject to particular constraints. Thus, to complete a structure is to add new entities such that the relation between new entities and preexisting ones conforms to the constraints. ¹⁵

For example, a problem in mathematics may be to prove theorem X. A proof is a logical connection from axioms, which are assumed true, to the theorem to be proved. Without a proof, the theorem and axioms are disconnected. The proof is a new entity, which is related to three entities: theorem, axioms, and rules of deduction. These relations are constrained: the proof must connect axioms to theorem while respecting the rules of deduction. An automotive engineer may need to design an engine providing particular horsepower and fuel efficiency, within a limited physical space. These entities are incomplete until a solution is found that stands in the desired relation to all three. A bebop trumpeter must improvise a solo line over a series of harmonies (outlined by the bass player and pianist) within a particular rhythmic framework (outlined by the percussionist). The solution to this "problem" (the line) is constrained by the implicit style of bebop in its relation to the preexisting entities.

These examples show the common characteristics of problems in three different fields. If there is a difference between scientific and artistic problem solving, it is only that in the former case the constraints tend to be universally standardized and explicit, and violations well defined. Most mathematicians agree upon the rules of mathematics, which are relatively unambiguous. In the arts, there is a profusion of rules and standards, and many gradations of acceptability, even within a single standard.

Problems can be solved in two fundamentally different ways: through inspiration, or through procedure. Inspiration results from fixed attention

on a structure, resulting in the instantaneous recognition of what is necessary to complete it. Procedure is discursive creativity, in which solutions are found by a linear sequence of mental steps, each focusing on some part of the problem. Procedural creativity works in the dark; it is a partly blind search without a full comprehension of that which one seeks.

Both scientific and artistic creativity partake of both inspiration and procedure. Edgar Allan Poe emphasized the purely rational basis for creativity in his creation of "The Raven" (Rothenberg and Hausman 1976, 57). Similarly, many scientific accomplishments arise out of what Walter Bradford Cannon calls the "hunch," which emerges out of extraconscious processes (Rothenberg and Hausman 1976, 63).

Most problem solving in arts and sciences requires a combination of inspiration and procedure. Procedure, working by step, attains genuinely original perspectives only with difficulty, or by accident. Inspiration, working holistically, achieves a broad perspective that facilitates new insights. However, the product of inspiration is highly concentrated, poorly articulated, and incommunicable. Therefore, the primary task of procedure is to unfold the solution that inspiration has provided, to give it coherence, to work out its consequences and implications, to amend it where necessary, and in the case of scientific or mathematical insights, to verify it. This idea appears throughout the theoretical literature, as well as in the introspective accounts of the creators themselves.

Creative Inspiration Is Creativity Arising out of Holistic Fixedness on a Problem

In a condition of creative fixedness, a portion of mind (often within the "extraconscious") contemplates a problem holistically, through intensive concentration. All problem entities, and the relations between entities, are grasped simultaneously by each fixed part of mind, no doubt enabling massive parallel searches. As in sensory fixedness, all fixed parts of mind are similarly engaged with the problem; usual specializations are temporarily suspended to form a mind in which communication is possible between any two parts. In creative problem solving, this communication enables rapid recombination of problem elements.

Through such holistic thinking, the mind constructs a gestalt; the newly constructed elements constitute the solutions to the problem. The sudden "flash of insight" does not signal the solving of a problem, but rather the passive reception into consciousness of a solution that has already been developed as the completion of a gestalt through fixedness.

In substantiation of this theory of creative inspiration as fixedness, I will examine some first-hand accounts of creative inspiration by well-known artists and scientists. Note the prevalence of fixedness, and passive holistic creativity, in these descriptions:

- Mathematician Henri Poincaré speculated that his creative flashes were the bursting into consciousness of work initiated by concentrated conscious attention to a problem, and completed by the unconscious. His introspective account of inspiration in seeking to disprove the existence of Fuchsian functions supports the idea of holistic parallel processing; he writes: "Ideas rose in crowds; I felt them collide until pairs interlocked, so to speak, making a stable combination" (Ghiselin 1952, 36).
- Samuel Taylor Coleridge was inspired to create "Kubla Khan" from an image he read shortly before falling into an opium-induced sleep, in which he dreamed the whole poem. "On awaking [the author] appeared to himself to have a distinct recollection of the whole" (Ghiselin 1952, 85).
- Composer Harold Shapero attests to fixedness as a source for musical inspiration, stating that if an experienced composer "focuses his attention on a definite key and beats mentally in a chosen meter, musical images will be set in motion in his mind, and the entire musical texture generated in this way" (Ghiselin 1952, 52).
- Poet Stephen Spender stresses the importance of concentration in creativity, and furthermore suggests that sensory stimuli may induce and sustain this state. He writes, "The problem of creative writing is essentially one of concentration, and the supposed eccentricities of poets are usually due to mechanical habits or rituals developed in order to concentrate. Concentration is a focusing of the attention in a special way, so that the poet is aware of all the implications and possible developments of his idea." Spender notes that Friedrich Schiller used to keep rotting apples in his desk to foster creative concentration, as a kind of olfactory mantra (Ghiselin 1952, 113).

Creative Inspiration Is Essentially Related to Aesthetic Experience

The connection between creative inspiration and aesthetic experience is due to the common element of fixedness, which is essential to both. When an artist creates art through sensory fixedness of the imagination, as a means of solving sensory problems, creative inspiration and aesthetic experience are nearly the same. If the sensory fixedness is real, then aesthetic experience and creative inspiration overlap. Creation out of sensory fixedness is precisely the source of transcendent art, which encodes the aesthetic experience in material terms. Even the apparently uncreative "passive" aesthetic experience of the art-perceiver is in fact creative because the perceiver always creates a gestalt out of the sensory stream.

Musical improvisation is a good example of creative inspiration arising out of fixedness. The musician, concentrating on the sound environment, solves musical problems by completing a gestalt, and immediately realizes that gestalt in sound. One example of this phenomenon, particularly noteworthy because it is explicitly named, is the Arabic phenomenon of *salṭanah*. The word *salṭanah*, deriving from the Arabic verb *salṭana* meaning "to establish as ruler," is widely used by Arab musicians to refer to the domination of a specific melodic mode, or *maqām* over the mind. Thus, *salṭanah* is an aesthetic state of modal absorption, a kind of musical trance.

According to ethnomusicologist A. J. Racy, it is the interaction between audience and performers that creates and sustains *salṭanah*. The performers must possess an expert understanding of *maqām*, especially the technique of rendering *qaflah*-s (cadences) in order for *salṭanah* to take root, while the audience signals approval with particular facial expressions, body and head movements, and exclamatory expressions following each musical phrase These verbal responses enhance the performer's concentration and thus the effectiveness of the musical performance (Racy 1982, 392; 1983, 399–400). Racy states that "once put in this mood [of *salṭanah*] you lose sense of time, and become infinitely creative" (personal communication, Los Angeles, CA, 1990). *Salṭanah* is thus an aesthetic-creative state of mind, constructed and maintained both through skillful musicianship and proper audience–performer interactions.

Justine Night Gun-Croff, a Native American song composer from Montana, recounts an episode of inspiration as follows: "I stared at my beadwork, and the design on it, I guess, it just, it looked like a song to me, and I just kind of more or less followed that, and then I just kept seeing it just over and over again, and I got a blank tape and recorded it. My inspiration more or less is designs" (Gun-Croff 1989). Gun-Croff uses visual aesthetic experience to stimulate sonic creative inspiration: a creative synesthesia.

Another connection between aesthetic and creative inspirational experience is the use of unrelated aesthetic experience as a means to foster the absorption inspiration requires. In this case, we may speculate that aesthetic experience serves to produce the requisite fixedness, even though seemingly unrelated to the problem at hand. Schiller's rotten apples may have served him in this way. For both Gun-Croff and Schiller, transcendent art may arise out of aesthetic experience generated by another sensory mode.

Conversely, psychologist Rollo May relates that in an instant of creative insight he had an aesthetic experience. He writes: "Everything around me became suddenly vivid. The moment the insight broke through, there was a special translucence that enveloped the world, and my vision was given a special clarity. I am convinced that this is the usual accompaniment of the breakthrough of unconscious experience into consciousness" (May 1975, 64). Perhaps, this aesthetic vision was fostered by the same fixedness that formed the creative insight. Many persons report extraordinarily vivid perception following meditation, perhaps because meditation also induces fixedness. This issue will be further discussed in the third part of this essay.

PROPOSITIONS OF MYSTICISM

The Mystical Experience Is Ultimately a Direct Intuition into the Nature and Unity of the Self and the Cosmos

For exegetical purposes, it is convenient to define the special class of Large Objects, including the self, the cosmos, and all manifestations of metaphysical powers. Then, mysticism is a mode of inquiry in which insight is attained through direct intuitive understanding and immediate experience of these Large Objects, without the intervention of reason, or the need for empirical justifications.

Fixedness Is a Necessary Condition for Mystical Experience

Mysticism has two aspects: as a path to insight, or to self-conditioning. Ultimately, mysticism is a means to insight into Large Objects. In this aspect, mysticism is a form of nondiscursive problem solving similar to creative inspiration, in which an understanding of relationships within the whole is brought about through intensive holistic conceptualization: fixedness on Large Objects, and their interrelationships. Preliminary to this ultimate goal, mysticism is a means to self-conditioning: development of the self by the promotion of mental unity through fixedness, and development of fixedness as a mental ability. In this second aspect, it is the fixed attitude itself that is critical; the object of fixedness is somewhat arbitrary. However, even here one or more Large Objects are continuously copresent in the background, representing the context or ultimate purpose of the concentration exercise.

In either case, mystical experience must be fixed. Any procedural movement of the mind would disrupt the intimacy and immediacy that is key to all mystical experience. The difference between ordinary fixedness, and the fixedness developed during mystical experience, is the presence in the latter of a Large Object, either as an object of fixedness, or as a background copresence.

Mystical Experience Is Essentially Related to Aesthetic Experience

As in the relation between creative inspiration and aesthetic experience, the fixed state provides a common link between mystical and aesthetic experience. Mystical fixedness is more general than aesthetic fixedness, which arises out of perception. The sensory realm comprises but a small portion of the possible subjects for mystical fixedness. However, mystical experience, because it requires the presence of a Large Object, is not a superset of aesthetic experience. The two classes of experience overlap in the case of self-conditioning mysticism in which the object of fixedness is a portion of the sensory stream. In mystical traditions the motivation to fix attention stems from ideology (religious orientation), whereas in the

arts this motivation often must be generated by the object itself, through properties of framing and attractiveness. Because sensory is preliminary to nonsensory mystical fixedness along many paths of mystical development, aesthetic experience often appears in the preparatory phases of mystical experience.

One such example occurs in Buddhist meditation. Theravada Buddhism aims toward the cessation of suffering through a practical, experiential regimen of meditation, through which truth can be personally realized.

There are two systems of meditation in Buddhism. *Samathabhavana*, tranquility meditation, is the development of serenity, or concentration, aiming toward a calm, concentrated, unified state of consciousness. *Vipassanabhavana*, insight meditation, is the development of wisdom, aiming toward a direct understanding of the true nature of reality. These two systems, corresponding to what I have called the self-conditioning and the insight aspects of mysticism, respectively, work together to make the mind fit for enlightenment.

Central to both practices is a progression of four attainments, called *rupa jhanas*. The *jhanas* contribute to the purification and liberation of mind that is the goal of the Buddhist discipline, through a form of concentration quite similar to the contemplative form of aesthetic fixedness, and with similar results. One Buddhist theorist writes: "The *jhanas* themselves are states of deep mental unification characterized by a total immersion of the mind in its object. They result from the centering of the mind upon a single object with such a degree of attention that the discursive activity of thought is slowed down and eventually stopped" (Gunaratana 1985, 3–4).

Each successive *jhana* is more refined, less dependent on ordinary modes of consciousness and perception. Beyond the four material *rupa jhanas* lie the four immaterial states, or *arupa jhanas*, which deepen the element of serenity even further. The *arupa jhanas* transcend ordinary perception, and hence aesthetic experience as well.

The four material and four immaterial *jhanas* depend upon *samadhi*, often translated as "concentration" or "one-pointedness of mind." *Samadhi* occurs in three levels: preparatory, access, and fixed concentration. Buddhism also draws a distinction between perceptual and reflective concentration.

Lower level perceptual concentration in the material jhanas is virtually a form of aesthetic experience, though here combined with a metaphysical and ideological background representing a higher purpose and motivation than mere development of aesthetic power. Buddhist commentators note that perceptual concentration is nondiscursive, disinterested perception of an object, leading to "unification of the mind" (one-pointedness). At the first level of concentration, the mind is focused on the object. After concentration has reached a certain degree of intensity, the image of the

meditation object in the meditator's consciousness becomes continuous, even if perception is momentarily blocked.

The third level, fixed concentration, is accompanied by the so-called "counterpart sign," what one scholar calls the "luminous mental replica of the meditation object" (Gunaratana 1985, 10). At this stage, the mind concentrates on the perception process itself; in a recursive move, what was formerly a percept now becomes an object of perception and ultimately gains complete autonomy from outer reality. Here, we perhaps have the analog of nonperceptual creative aesthetic experience, in which a composer (for example) creates what is heard only by the "inner" ear.

I draw a second example from Sufism, the mystical aspect of Islam. Like the Buddhists, Sufis distinguish sensory-mediated concentration, in the ceremony called *dhikr*, from reflective concentration, or *fikr. Dhikr*, literally meaning "remembrance," is a ritual of rhythmic breathing, chant, and movement, often accompanied by music and singing, designed to immerse participants in the presence of God. Thus, where the Buddhist's exercises are instances of static fixedness, the Sufi's are dynamic. Although the chanted formula is a meaningful unit (referring to God), the respiratory manner of recitation tends to obliterate the semantic aspect; the formula becomes primarily breath.

According to one scholar of Sufism, there are three main stages of experience. In the first stage, *dhikr* of the tongue, the subject is conscious of his experience, and the sounds of his environment. At the second stage, *dhikr* of the heart (*qalb*), the subject forms a connection between his beating heart and the rhythms of the *dhikr*. Consciousness dissolves into passivity; intermittent colored lights, auditory, and other sensory hallucinations may appear. In the last stage, *dhikr* of the inmost being, *fana*, or self-annihilation (absorption into God) is achieved. Here, the luminous phenomena become constant (Gardet 1960). Another scholar notes seven stages of the *dhikr*, reaching *fana* at the fifth stage, and pure being at the seventh. The first six of these seven stages are distinguished by the appearance of a different colored light; the final stage of pure Being is colorless (Trimingham 1971, 153).

As in the Buddhist case, we note a progression from actual sensation (either before the mystical ritual begins, or in its initial stages), to a hallucination that is no longer aesthetic. The aesthetic thus appears as a stepping stone on the way to "higher" forms of experience. Eventually, the self is annihilated as the subject passes into Nirvana, or to God.

As a third example, I offer my own fieldwork experiences among the Ewe people of southeastern Ghana, where I had many opportunities to witness possession trance during rituals incorporating drumming, singing, and dancing. Prior to trance, initiates would dance to the music intensively, following the rhythmic timings precisely. This stage would seem to constitute an aesthetic-mystical experience: fixedness on the

music, with the background presence of a ritual context, and knowledge of possible imminent possession. But once possessed by the spirit, their bodies went rigid, convulsed, rolled about on the ground. In short, they no longer displayed any behavioral relation to the ongoing music; I do not believe they were any longer concentrating on it.

One of my Ghanaian informants, Mr. Godwin Agbeli, told me that the mark of true possession is senseless behavior, such as rolling in the mud in one's beautiful new cloth. The possessed initiate loses contact with the sensory world, because a spirit has seized hold of her body, and displaced her identity. Such fixedness thus transcends the aesthetic state. Afterward, the initiate will have no recollection of the ordeal. Gilbert Rouget, in his survey of music and trance, notes that ceremonial musicians do not become possessed, because possession would preclude good musicianship (Rouget 1985). Again, aesthetic experience appears on the threshold of the deeply mystical, a necessary "stepping stone" allowing passage from ordinary consciousness to mystical consciousness.

Music is often used to stimulate mystical feeling. In such cases, fixedness is enhanced by temporal symmetries, such as cyclicity, whereas when music is used for aesthetic pleasure (especially in secular contexts), pure symmetry of this type may be considered boring, and a more developmental scheme less suitable for fixedness is additionally required. In central Java, Judith and Alton Becker note that an older stratum of sacred meditative gamelan music, simpler and consisting entirely of colotomic bronze metallophones playing cycles of various sizes, was later overlaid by a more linear, complex melodic conception, and was secularized in the process (Becker and Becker 1981, 203–215).

Drawing on several medieval sources, Rouget discusses both sacred Sufi trance (wajd), and profane emotional trance, or tarab (Rouget 1985, 255ff). Wajd may be engendered by hearing the Qur'an, poetry, or music, manifesting itself in cries, tears, tearing of garments, fainting, and even death. Tarab, on the other hand, is a profane emotional trance, also induced by music and singing, but without any connection to the sacred. However, all the external manifestations of tarab, from fainting and cries, to death, are similar to wajd. Therefore, it seems likely that both the mystical and the "purely aesthetic" musical experiences share a common foundation. ¹⁷

Finally, it is commonly noted that mystical experience is often accompanied, or followed, by sensory richness. In the words of William Blake, and Aldous Huxley, mystical experience cleanses the doors of perception. Experiments on meditation conducted by Arthur Deikman indicated that meditating subjects' perceptions of a blue vase became unusually vivid and luminous (Deikman 1973).

Mystical Experience Is Essentially Related to Creative Inspiration

The creative-inspirational frame of mind is devoted to solving problems. When these problems acquire cosmic proportions, inquiring into the nature of the self, cosmos, and God (Large Objects), and the connections among them, then creativity becomes insight mysticism. Creative inspiration and insight mysticism thus overlap, not only by virtue of certain common goals, but in sharing the technique of mental fixedness as a means toward knowledge.

Because creative inspiration arises out of the extraconscious, which is regarded as "other," many philosophical traditions have regarded creativity as emanating from supernatural forces. Plato maintained that poetic inspiration is divinely given through the Muses, and that creation takes place in an altered state: "when once [the poets] launch into harmony and rhythm, they are seized with Bacchic transport, and are possessed" (Rothenberg and Hausman 1976, 32). Among the Ewe of Ghana, song composers are said to be inspired and possessed by *Akaya*, the spirit of singing (Frishkopf 1989). In many cultures, such as the Temiar of peninsular Malaysia, shamans receive songs from spirit guides (Roseman 1988, 811–818).

Although aesthetic experience is closely connected to the lower reaches of what I have called self-conditioning mysticism, including *Samatha* meditation, creative inspiration has more in common with insight mysticism, such as *Vipassana*. *Samatha* meditation ultimately aims toward meditative tranquility. Here, the meditation object is but a stepping stone toward the ultimate goal, which is itself an altered state of consciousness. *Vipassana* meditation is not an end but a means: to understand the true nature of reality. Thus, as in creative inspiration, the object is important in insight meditation, because wisdom is achieved of the object, through concentration on the object. As the Buddha taught: "Develop concentration: for one who has concentration understands things as they really are."

POSTSCRIPT

In conclusion, I want to call attention to one of anthropologist Gregory Bateson's many thought-provoking essays, entitled "Style, Grace, and Information in Primitive Art," in which he suggests, after Aldous Huxley, that the central problem for humanity is the quest for grace. In Huxley's conception, grace is the naïveté and simplicity characteristic of both God and animal behavior, which human beings have lost, through deceitful artifice, purposive rationality, and self-consciousness. Bateson states that "the problem of grace is fundamentally a problem of integration and that what is to be integrated is the diverse parts of the mind." Such integration may be induced through the perception of art, which demonstrates the essential systemic unity of mind through its physical patterning (Bateson 1972, 129).

Perhaps Bateson's noble sentiment can be generalized. For fixedness, whether aesthetic, creative, or mystical, has the power to integrate the mind, restoring us to unselfconscious wholeness and providing a direct experiential understanding of reality. Fixedness is an antidote to the modern fragmentation of mind, society, and world.

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Dedication: In fond memory of Jacques Maquet (1919–2013): mentor, thinker, friend.

Notes

- 1. By "universal," I mean characteristic of the human species as a whole, rather than characteristic of particular cultures, historical periods, or individuals.
- 2. It is also an extension of the seminal thinking of anthropologist Jacques Maquet (1919–2013) in aesthetic anthropology, as reflected in his lectures and books and applied principally to the visual arts (e.g., 1979, 1986). I am deeply grateful for Dr. Maquet's teaching and guidance in helping me to formulate the ideas presented in this article.
- 3. In a condition of *partial* fixedness, some *part* of mind is fixed, that is, a certain set of agents are fixed. Such conditions are important in the case of creative inspiration, considered below.
- 4. For a summary of principles of gestalt perception as understood and applied in this article, see Koffka (1922).
- 5. Similarly, *gestalt* psychologists such as Christian von Ehrenfels emphasized the effort required to formulate the *gestalt* (Arnheim 1969, 30). Insofar as the fixed state is supported by a unitary object (gestalt), these insights are linked.
 - 6. Unless the object of attention is the self.
 - 7. The aesthetic flux is most salient in the case of fashion.
- 8. My concept of "sensory fixedness" generalizes Jacques Maquet's "aesthetic vision," which is static: contemplative in the Buddhist sense. However, Maquet's model is inappropriate for the dynamic arts, such as music and dance, in which sensory stimuli may have an activating effect on the beholder. The concept of sensory fixedness incorporates both poles: the static, contemplative fixedness of aesthetic vision, and the dynamic fixedness of arts such as dance and music. This dichotomy finds a parallel mystical experience, as we shall see later on.
- 9. Such a notion jibes well with the Greek etymology of "aesthetics," $\alpha i\sigma\theta \eta\tau\iota\kappa \delta\varsigma$, meaning "of sense perception."
- 10. Philosophy, in attempting to construct clear definitions for the words of ordinary language, always faces a stubborn problem: the denotation of a word or phrase (such as "aesthetic experience") is often a patchwork of various meanings that can be enumerated, but cannot be accounted for according to some higher principle. In such cases, philosophy must attempt to clarify the essential nature of the concept in question. The reader should keep this point continually in mind, lest he or she fret over imagined exceptions to the "rule" defining aesthetic (or mystical, or creative-inspirational) experience that I endeavor to develop. But my definitions of terms are emphatically intended as clarifications of preexisting meanings and realities, rather than tautological; I am not defining terms anew arbitrarily, but rather defining terms according to what I feel constitutes an essential core of their current usage, even if I may exclude portions of their denotations in the process.
- 11. The aesthetic intention here rests with the artist (and, for some viewers, only the artist!); it may also rest only with the observer. As an example of the latter, consider a "hack" (prank) performed by MIT students in 1984. A gray luncheon tray, upon which two spoons, a plate, a bowl, a glass, and a fork had been placed, was surreptitiously inserted into a contemporary art exhibit at MIT's List Visual Arts Center in the Weisner Building, along with a placard reading: "No Knife: A study in mixed media earth tones, number three." The "bogus" insertion was

not detected by viewers for many days. Although viewers not detecting the hoax may not have adopted the aesthetic attitude, they did not realize that none was intended.

- 12. Particularly in fashion, that most fickle of aesthetic domains, attractiveness also often depends on the history of itself; what is attractive today is precisely what was not attractive yesterday, or what (whether by atavistic leaps of "retro," "pastiche," or ironic "camp") was attractive a while ago. The fact that conditions for attractiveness are often manipulated or even created by capitalism's desire to create and control markets, and that one's mastery of attributes of attractiveness is an important source of cultural capital (Bourdieu 1987) is supremely important for the general sociological study of aesthetics, though not in the present context, whose focus is the aesthetic mode of consciousness itself.
 - 13. See Werthheimer (1923).
- 14. A pitch together with all of its transposition by any number of octaves constitutes a pitch class.
- 15. The philosopher Brand Blanshard considers the "leap of invention" as a collision between an order in the mind and a fragment that ought to be included within it, but which remains outside; see Rothenberg and Hausman (1976, 98).
- 16. As in the case of aesthetic experience, some objects are more conducive to the mystical experience (relative to context) than others.
- 17. The word tarab itself derives from the Arabic root t-r-b, connoting movement or agitation. (Thus, there is a near perfect etymological correspondence with the English word emotion, which derives from Latin "ex" + "movere" [to move away, or disturb].) On the other hand, wajd comes from the root w-j-d, connoting "finding," "feeling," and "experiencing," related also to wujud (Absolute Reality, in Islamic theosophy). The word tarab emphasizes the movement of a dynamic fixedness or even Meyerian "shock," whereas wajd suggests mystical insight into fixed Realities.

REFERENCES

- Armstrong, Robert Plant. 1981. *The Powers of Presence*. Philadelphia: University of Pennsylvania Press.
- Arnheim, Rudolf. 1969. Visual Thinking. Berkeley: University of California Press.
- Bateson, Gregory. 1972. "Style, Grace, and Information in Primitive Art." In Bateson, *Steps to an Ecology of Mind*, 128–52. New York, NY: Ballantine Books.
- Becker, Judith, and Alton Becker. 1981. "A Musical Icon: Power and Meaning in Javanese Gamelan Music." In *The Sign in Music and Literature*, edited by Wendy Steiner, 203–15. Austin: University of Texas Press.
- Bourdieu, Pierre. 1987. Distinction: A Social Critique of the Judgement of Taste. Cambridge, MA: Harvard University Press.
- Cherry, Colin. 1957. On Human Communication: A Review, A Survey, and a Criticism. Cambridge, MA: The Technology Press of MIT.
- Deikman, Arthur J. 1973. "Deautomatization and the Mystic Experience." In *The Nature of Human Consciousness*, edited by Robert Ornstein, 216–233. New York, NY: The Viking Press
- Dufrenne, Mikel. 1973. *The Phenomenology of Aesthetic Experience*. Translated by Edward S. Casev. Evanston, IL: Northwestern University Press.
- Frishkopf, Michael. 1989. *The Character of Ewe Performance*. MA thesis, Tufts University, Medford, MA.
- Gardet, L. 1960. "Dhikr." In *Encyclopaedia of Islam*, 2nd edition, edited by P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, and W.P. Heinrichs. Consulted online on October 3, 2019.
- Ghiselin, Brewster. 1952. The Creative Process. Berkeley: University of California Press.
- Gunaratana, Henepola. 1985. The Path of Serenity and Insight. Delhi, India: Motilal Banarsidass.
- Gun-Croff, Justine Night. 1989. "Remarks during Panel Discussion: 'Direction in Contemporary Native American Music and Dance: Composition, Continuity and Change'." Charlotte Heth, Moderator; Native American Music and Dance Symposium, Mesquakie Tribal Center
- Kivy, Peter. 1990. Music Alone. Ithaca, NY: Cornell University Press.

Koffka, Kurt. 1922. "Perception: An Introduction to the Gestalt-Theorie." Psychological Bulletin 19:531–85.

Maquet, Jacques. 1979. *Introduction to Aesthetic Anthropology*. Malibu, CA: Undena Publications. ———. 1986. *The Aesthetic Experience*. New Haven, CT: Yale University Press.

May, Rollo. 1975. The Courage to Create. New York, NY: Bantam Books.

Messiaen, Olivier. 1956. *The Technique of My Musical Language*. Translated by John Satterfield. Paris, France: Alphonse Leduc.

Meyer, Leonard B. 1956. *Emotion and Meaning in Music*. Chicago, IL: University of Chicago Press.

. 1967. Music, the Arts, and Ideas. Chicago, IL: University of Chicago Press.

Minsky, Marvin. 1985. The Society of Mind. New York, NY: Simon & Schuster.

Nettl, Bruno. 1983. The Study of Ethnomusicology. Urbana: University of Illinois Press.

Racy, A. Jihad. 1982. "Musical Aesthetics in Present-Day Cairo." Ethnomusicology 26:391–406.
———. 1983. "The Waslah: A Compound-Form Principle in Egyptian Music." Arab Studies Quarterly 5:396–403.

Roseman, Marina. 1988. "The Pragmatics of Aesthetics: The Performance of Healing among Senoi Temiar." Social Science and Medicine 27:811–18.

Rothenberg, A., and Carl R. Hausman. 1976. *The Creativity Question*. Durham, NC: Duke University Press.

Rouget, Gilbert. 1985. Music and Trance: A Theory of the Relations between Music and Possession. Chicago, IL: University of Chicago Press.

Scruton, Roger. 1989. "Aesthetics." *Britannica Academic*, s.v. "Aesthetics," accessed October 3, 2019.

Trimingham, J. Spencer. 1971. The Suft Orders in Islam. Oxford, UK: Clarendon Press.

Wertheimer, Max. 1923. "Laws of Organization in Perceptual Forms." First published as "Untersuchungen zur Lehre von der gestalt II," in *Psycologische Forschung* 4: 301–50. Translation published in W. Ellis, *A Source Book of Gestalt Psychology* (London, UK: Routledge & Kegan Paul, 1938), 71–88.