

Musical Counter-Environments: Media Ecology as Art Criticism

PHIL ROSE
York University, Canada

Beginning with an introduction of some of the basic tenets of an intellectual tradition called the media ecology perspective and a description of its general complexion, this article interrogates how the perspective—in tandem with Marshall McLuhan's notion of how the arts function as "counter-environments"—can be effectively used for art criticism. The discussion emphasizes particularly the cultural study of musical multimedia. I outline the little-known affect-script theory of personality theorist Silvan Tomkins, and suggest how his work not only contributes to the media ecology perspective but can be likewise helpful in decoding musical communication, especially toward the more accurate elucidation of the content of such expression.

Keywords: music, media ecology, art criticism, counter-environment, anti-environment, symbolic form, presentational symbolism, affect-script theory

Among the most fascinating of intellectual inheritances we have from the 16th century is the word *medium*, particularly because its various contemporary English language usages always retain an element of the original New Latin definition meaning "middle." North Americans, for instance, use its adjectival form when they order chicken wings and desire them to be neither hot nor mild, but rather the middle quality between these extremes. In its verbal form, we say that diplomats mediate conflict between two or more parties. When a noun, we designate the medium to be that person who is said to negotiate between the spirits of the dead and the living, or we often use it to refer to that form or material that writers, painters, or composers use when they re-present experience to their audiences.

Although we denote the means by which we communicate a medium, the word can also be construed as an agency via which we generally *do* things. Marshall McLuhan (1964/1994), one of the three primary nodes in the media ecology tradition, according to Lance Strate (2004),¹ uses the word in this last sense to describe what he calls "the extensions of man." In contrast to most animals, which evolve by *embodying* their technologies (as when they develop complex radar or sonar abilities, for

Phil Rose: dr.philrose@gmail.com

Date submitted: 2013-05-28

¹ Strate suggests that the three primary nodes of media ecology are Marshall McLuhan, Neil Postman, and Walter Ong, and that these nodes also encompass the cities of Toronto, New York, and St. Louis, respectively.

Copyright © 2014 (Phil Rose). Licensed under the Creative Commons Attribution Non-commercial No Derivatives (by-nc-nd). Available at <http://ijoc.org>.

instance), with the advent of innovation, the dynamics of human evolution began to be as much a phenomenon of culture as of biology. This is not an uncontroversial perspective, of course.² But, as McLuhan clarifies, a “medium”—the technological extension of some human organ or faculty—should not be conceived as a type of bridge between humanity and nature but as nature itself.³ His complex usage incorporates the biologist’s sense of the word, which is assigned to any intervening substance, through which impressions are conveyed to the senses—that which constitutes the living organism’s environmental conditions of growth, storage, or transport.⁴ This biological metaphor likewise guides the thinking of Strate’s second node of media ecology, Neil Postman (1970, 2006), the scholar who formally introduced the term in 1968, and whose students have been central in delineating the patterns of this intellectual tradition—as with Casey Man Kong Lum’s *Perspectives on Culture, Technology and Communication: The Media Ecology Tradition* (2006) and Strate’s own *Echoes and Reflections: On Media Ecology as a Field of Study* (2006). In seeking to make my own contribution to this portrait, first I will introduce media ecology as an intellectual tradition and perspective. Next, I will narrow my scope to a consideration of the application of media ecology to art criticism, and then to music as a subset of this wider field. Finally, I will introduce the affect-script theory of Silvan Tomkins and recommend its usefulness from a media ecology perspective as an addition to the existing body of work on art and music criticism.

Media Ecology

From its inception, a large component of the historical anthropologist’s paradigm has been the study of humans according to the evolvement of their tool usage. Media ecologists sustain this paradigm by taking into account the entire technological apparatus of a culture, along with its profound contributions to that culture’s evolution. Like general systems theory, media ecology holds that the key to understanding systemic organization and complexity is to be found in the study of the relationships among a system’s components, not simply in the analysis of constituent composition. In this regard, Postman (1992) outlines technological change as being neither additive nor subtractive but rather ecological, in the same sense as environmental scientists use the word. Even one significant change generates total change. As an example, he suggests that if we remove caterpillars from a given habitat, we are not left with the same environment minus caterpillars. Rather, we have a new environment and a reconstitution of the conditions of survival, just as in the instance where caterpillars are added to an environment that formerly had none. Postman points out that this is also how the ecology of media works.

Particularly concerned with the way that a culture’s inhabitants adapt to the transformed social and cultural environments that new technologies and practices create, Postman’s New York colleague

² Hear, for instance, the ideas of the evolutionary biologist and geneticist Richard Lewontin (Cayley, 2008).

³ “Darwin thought of man as inside an environment; it never occurred to Darwin that it would be possible to program the environment itself as evolutionary,” writes McLuhan. “Darwin is a literate, nineteenth-century man. He had no intimation of the electronic information circuit or total human environment of information” (McLuhan, 2003, p. 152).

⁴ For further discussion of the term *medium*, see Strate (2005, 2008).

Christine Nystrom (1973) defines media ecology as a field that inquires into the interactions of communications media, technology, technique, and processes with human feeling, thought, value, and behavior. And just as natural ecology emphasizes how the interactions among the elements of our natural milieu can lead to a balanced and healthful environment, media ecology addresses questions related to the maintenance of technological and symbolic equilibrium. On account of the breadth of its field of inquiry, Nystrom has pointed out that the traditional term *discipline* scarcely applies to the media ecology perspective at all. Instead, it is perhaps more appropriately designated a *metadiscipline*.

Media ecologists devote particular interest to technologies of communication because of the central role that their forms and inherent biases play in a culture's ongoing construction, perpetuation, and transformation of reality. Postman (1992) describes the dynamic nature of such development and offers a sense of the value of historical consideration:

[N]ew technologies compete with old ones—for time, for attention, for money, for prestige, but mostly for dominance of their world-view. This competition is implicit once we acknowledge that a medium contains an ideological bias. . . . It is not merely a matter of tool against tool—the alphabet attacking ideographic writing, the printing press attacking the illuminated manuscript, the photograph attacking the art of painting, television attacking the printed word. When media make war against each other, it is a case of world-views in collision. (p. 16)

Of course, this is what, in part, undergirds McLuhan's famous aphorism "the medium is the message." I say "in part," though, because, as Postman (1970) points out elsewhere, *any* environment is a complex message system that imposes on humans certain ways of thinking, feeling, and behaving.

Along with McLuhan and others, as part of the so-called Toronto School of Communication, the Canadian economic historian Harold Innis introduced the concept of "media biases" into modern communication studies, and it is media ecology's historical analysis of the biases of communication forms that constitutes its humanistic basis. Lum (2006) notes that consideration of the *form* of a communication medium requires attention to both its symbolic and physical form. The former combines the characteristics of the code in which the medium presents information (analogic vs. digital symbols) and the structures in which symbols are combined (presentational, propositional, or hybrid).⁵ A medium's physical form includes the characteristics of the technology that carries the code and the physical requirements it has for encoding, transmitting, storing, retrieving, decoding, and distributing information. Lum lists Nystrom's helpful generalizations about how the media ecology perspective construes media, communication, and culture:

- (a) Because of the different symbolic forms in which they encode information, different media have different intellectual and emotional biases.

⁵ I shall have more to say regarding the question of symbolic structure later.

- (b) Because of the different physical forms in which they encode, store, and transmit information, different media have different temporal, spatial, and sensory biases.
- (c) Because of the accessibility of the symbolic forms in which they encode information, different media have different political biases.
- (d) Because their physical form dictates differences in conditions of attendance, different media have different social biases.
- (e) Because of the ways in which they organize time and space, different media have different metaphysical biases.
- (f) Because of their differences in physical and symbolic form, different media have different content biases.
- (g) Because of their differences in physical and symbolic form, and the resulting differences in their intellectual, emotional, temporal, spatial, political, social, metaphysical, and content biases, different media have different epistemological biases.

In relation to (a) and following Susanne Langer's (1942, 1953) original contrasts, the distinction is drawn between discursive symbolism, which is generally composed of digital symbols and comprised of propositional language and mathematics—the codes through which people conduct rational thought and reasoning, and presentational symbolic structure. The latter is primarily composed of analogic symbols and articulates complex analogues of sensory experience and feeling, as with most of our nonverbal cues and what we usually refer to as the arts (painting, photography, music, dance, sculpture, architecture, literature, drama, film, etc.). In relation to (b), one can refer to writing on stone, for example, which will tend to outlast any other medium on which people choose to write, but will not be very helpful in administering an empire across a large space because of its lack of portability. In terms of sensory biases, the visual bias of any type of writing can be contrasted to the audile bias of sound recording or the spoken word. In relation to (c), we could refer to the use of Latin through the Christian Middle Ages and the Renaissance and to the monopolies of knowledge that resulted therewith. Concerning (d), we could contrast the student experience of attending a lecture with that of completing course readings, and in relation to (e), one might refer to the phenomenon of how people become discarnate when they are on radio, or to Marcel Proust's observation that "Reading in its original essence is that fruitful miracle of a communication in the midst of solitude" (Wolf, 2007, p. 3). With regard to (f), one could contrast the silent and impersonal interchange of print with how radio and television also convey personal expressions that make public an entire range of information once limited to private interactions among people under each other's direct observation. Finally, regarding (g), we could point out how we generally expect university students to present their work through the medium of

expository writing rather than as a dance routine, a series of oil paintings, set to music and rhyme, or in the form of a television program.

As Lum points out, Nystrom's summary illustrates not only how media influence the symbolic and cognitive structure or environment within which a culture constructs the world it comes to know and understand but how they affect the broader cultural consequences of these environments as well. This view of cultural evolution is very much in contrast to that which perceives culture as developing merely from within as a "living, active process," and never as "imposed from without or above" (Fiske, 1989, p. 23).⁶ Such a perspective of cultural change tends to be generally attentive to the symbolic world of myth, ritual, religion, politics, and art, but it is considerably less aware of the dialectic that exists between these spheres of activity and the realm of technics. Marshall and Eric McLuhan (1988) explain this tendency through their application of the terms *figure* and *ground*, not merely to visual perception, as Gestalt theory had done at the beginning of the 20th century, but to all perceptual awareness. "All situations," they point out, "comprise an area of attention (figure) and a very much larger area of inattention (ground)" (p. 5). This ground is the environmental domain to which media ecology devotes its focus.

Media Ecology as Art Criticism

Having outlined media ecology as an intellectual tradition, I turn my attention toward illustrating how the perspective clearly has much to offer anyone who undertakes the study of artistic artifacts, practices, or performances within the context of their cultural environments. After all, every culture constitutes its own media environment, some less "developed" and others more so.

As the McLuhans exemplify, there has been a close connection between the arts and perception across the media ecology literature, conveying the field's recognition of the importance of biology, particularly as associated with the sense organs, how we technologically extend them, and the overall psychology of perception. Many scholars associated with the perspective have written to various degrees on matters directly pertaining to aesthetics. Among these are Lewis Mumford in *Art and Technics* (1952), E. H. Gombrich in *Art and Illusion* (1960), McLuhan with Harley Parker in *Through the Vanishing Point: Space in Poetry and Painting* (1968), and Walter Ong (1982), who, in *Orality and Literacy* (1982), discusses various perspectives in literary theory, including new criticism, formalism, structuralism, textualism, deconstructionism, speech-act and reader-response theory. Though normally associated with the Frankfurt School and European cultural studies, Walter Benjamin displays certain media ecology orientations in *Illuminations: Essays and Reflections* (1968), and this influence extends to Susan Sontag's *On Photography* (1977). Leonard Shlain's *Art and Physics: Parallel Visions in Space, Time and Light* (1991) is likewise significant, while Jay David Bolter and Richard Grusin's (1996) concept of remediation is

⁶ Early in the new millennium the introduction of mobile phones into Anglo-American-occupied Iraq illustrated this fact as much as did their disallowance under the former regime of Saddam Hussein.

similarly useful and discussed more fully in *Remediation* (1999) and *Windows and Mirrors* (2003) with Diane Gromala. Representing McLuhan's observation that the content of a medium is always another medium, the idea of remediation has relevance not only to interface design but to other elements of style and aesthetics as well. Other figures have combined aesthetics with extended discussion of particular artists and artifacts, including Siegfried Giedion in *Space, Time and Architecture* (1966), McLuhan in *The Interior Landscape: The Literary Criticism of Marshall McLuhan* (1969), Ong in *Hopkins, the Self and God* (1986), Camille Paglia in *Sexual Personae: Art and Decadence From Nefertiti to Emily Dickinson* (1990), and Eric McLuhan in *The Role of Thunder in Finnegans Wake* (1997).⁷

Clearly, much of this work is devoted to the literary and visual arts, but media ecology likewise places special emphasis on sound and hearing, as with Ong's (1982) attention to the distinctions between the visualism associated with literacy and the auralism of what he designates as primary and secondary orality. Whereas the former designates a culture having no real contact with writing, the latter concept describes a version of orality that characterizes the use of electronic communication forms. Both relate directly to the notion of "acoustic space" that McLuhan and Edmund Carpenter developed in *Explorations in Communication* (Carpenter & McLuhan, 1960). McLuhan's associate Tony Schwarz uses the idea of "resonance" to important effect in *The Responsive Chord* (1974), and the Canadian composer and McLuhan disciple Robert Murray Schafer founded the field of acoustic ecology, which receives its definitive expression in *The Soundscape: Our Sonic Environment and the Tuning of the World* (1994). Another significant and more phenomenological approach is represented in Don Ihde's *Listening and Voice: Phenomenologies of Sound* (2007), while Steve Jones, in *Rock Formations: Music, Technology, and Mass Communication* (1992), provides a media ecology approach rooted in James Carey and Harold Innis. Media ecology is effectively combined with ethnography in Lum's *In Search of a Voice: Karaoke and the Construction of Identity in Chinese America* (1996) and Robert Albrecht's *Mediating the Muse: A Communications Approach to Music, Media, and Culture Change* (2004). Although the latter provides also the best historical and cultural overview to music's evolution in human experience, another important and more recent work that accounts more fully for the revolution in digital technology is David Byrne's *How Music Works* (2012).⁸

To suggest some specific examples of how the media ecology perspective can be applied would be in ethnomusicological studies, which focus on a people characterized by conditions of primary orality—as with Steven Feld's study of the tribal people of Bosavi in *Sound and Sentiment: Birds, Weeping, Poetics and Song in Kaluli Expression* (1990) or Marina Roseman's study of the Temiars in *Healing Sounds from the Malaysian Rainforest: Temiar Music and Medicine* (1991)—the perspective offers insights into what Ong (1982) calls "the psychodynamics of orality," along with delineations of the plethora of cultural traits

⁷ To this tradition, I would also add my own "*Pragmatism Not Idealism*": *Radiohead and the Global Movement for Change* (2009) and *Roger Waters and Pink Floyd: The Concept Albums* (2014).

⁸ To this list we could also add James Curtis's *Rock Eras: Interpretations of Music and Society, 1954–1984* (1987) and Thomas MacFarlane's *The Beatles and McLuhan: Understanding the Electric Age* (2013), though neither is of quite the same quality as those listed in the text.

typical to “low technology” and primary oral cultures.⁹ Among such characteristics Ong notes the profound involvement that tribal peoples have in one another’s lives, their generally strong communal sense, their concentration on the present moment, and their verbal formulaism (Ong, 1982). Where these traits diverge, as in the Temiar transition of living arrangements from the traditional communal household cluster to those of individual familial dwellings (Roseman, 1991), one can inquire into the reasons behind such transformations, which tend often to be the result of outside cultural contact, in this case being an edict of the Malaysian government.¹⁰

The media ecology perspective on culture would surely well serve the organologists, if not simply to bring perspective to the profundity of the shift from pre-electric humanity to our selves.¹¹ “The history of the piano and of the saxophone,” writes Laurence Libin (2001) in *The New Grove Dictionary of Music*’s entry on “Organology,” “exemplify instances where, so to speak, the medium anticipated the message. Observations such as this demonstrate the power of organology to shift perceptions of music history” (*New Grove Online*, para.). One need only consider in this regard, for example, the enormous cultural change that accompanied the production and development of American popular music styles over the continued evolution of electric forms. The development of radio (1920) and of electronic microphones and recording methods (1925) permitted the hitherto impossible bridging of geographical and cultural distances, allowing groups of people who were formerly excluded from the public forum created by print—dealing as they were with oral musical forms—to participate in the public arenas that resulted through electronic media. Concomitantly, however, the shift led to an increased orientation toward musical consumption to the detriment of production, a phenomenon driven in no small degree by the proliferation of jukeboxes in the 1930s, which was responsible for driving the bulk of record sales at the time.

⁹ Pristine or primary oral cultures appear to be quickly becoming a thing of the past. Roseman notes that, by the time of her stay, the Temiars possessed transistor radios, while 1998 saw the culmination of a project to put the Temiar language into written form (see Means, 1998). As Ong points out, oral cultures do not have dictionaries.

¹⁰ It is useful here to note that the media ecology tradition has had its critics. For one, Feld (1986) critiques the view associated with McLuhan, Ong, and his former teacher Edmund Carpenter that the consciousness or worldview associated with orality is of a fundamentally different sort to that of “high literacy.” For Feld, this position shows “indications of strong versions of the Whorfian hypothesis” (p. 18), or what was often designated linguistic determinism, but which, as Nystrom (2006) illustrates, is in fact much better understood as linguistic relativism. As Finnegan (1992) recounts, similar accusations are made in relation to technological determinism, but one need only consult the recent *Media and Formal Cause* (McLuhan & McLuhan, 2011) to develop an improved understanding of causality as it pertains to media ecology. For one of the most comprehensive and fairly recent defenses of the field against such charges, see Jay Alan Hodgson (2006).

¹¹ On the decisive existential shift that takes place in our experience of music upon the advent and diffusion of electromechanical technologies, see Albrecht (2004). This profound shift consists primarily in the fact that most of the music we presently experience is disembodied, whereas for millennia of human development prior to the electronic age, the process of musical communication had always required the co-presence of participants who would assume roles as musicians.

The development of television by the three major broadcast networks occurred following the Second World War, alongside the increased competition among radio stations, as the number of stations granted licenses in every market increased from three to around eight or nine. Radio stations began to leave the programming of expensive dramas and comedies to television to keep costs down, a measure that led to the rise of the disc jockey. Turning predominantly to the broadcasting of recorded music, radio stations realized their natural symbiosis with the recording industry, which in the same period saw the rise of independent record companies to contest the market share of the major labels. Since the majors had cornered the country and western, pop, and jazz markets, most of these "independents" introduced Black rhythm and blues music, the increasing popularity of which (alongside the need to find a niche demographic to deliver to advertisers) led to the first Black radio station in 1948, and to the enormous transculturation that was to ensue in the United States and elsewhere (Bowman, 2003).

Given the ample attention that media ecologists have paid to contemporary technologies, their perspective should be especially rewarding to students of the arts and art practices of "high-technology" cultures. This is especially true since it is such cultures that are driving the processes that have been remolding the world into a global village—Kaluli, organologists, and all. Moreover, given that consideration of the information environment at any moment is central to a historically contextualized sense of the development of artistic forms, it does not seem an exaggeration to suggest in this regard that all art history and criticism ought to be construed as branches of media ecology.

Counter-Environments

Before focusing on music in particular, I wish to dedicate some discussion to McLuhan's (1969) general conception of the cultural role of artistic activity as the "indictment of human insentience past and present" (p. xiii). McLuhan's construal of the arts could be interpreted as an example of "elitism of the high modernist tradition" (Hassan, 1993, p. 275), but I think this would be a mistake, despite McLuhan's well-known enthusiasm for James Joyce, and particularly *Ulysses* (1922), which he posits as a work that drew the attention of its audience to the emerging aural/oral ground of electronic culture. Many reviled McLuhan in his day, in fact, because he suggested that we ought to be devoting serious attention to forms of popular culture. Nevertheless, he did liken the artist to the "seer" in primitive societies, whose province it was, he says, to read the language of environments. The seer "related the languages which he discerned in the outer world to the inner world," suggests McLuhan, "keeping both as a divine secret committed to him. The secrets he discovered were great breakthroughs or epiphanies or showing forth of the divine through the environmental veils" (p. 59). These "invisible environments" McLuhan (1968) relates to the biologist Ludvig von Bertalanffy's discussion of symbolism, extending it to the realm of artifacts and practices and the environments that they serve to create. "Technologically-created environments," he suggests, "are as symbolic as any metaphor could ever be" (McLuhan & Fiore, 1968, pp. 59–60).

Drawing on Giovanni Battista Vico's principle of the sensory and perceptual change resulting from technical innovation throughout a culture's history, McLuhan (1999) suggests that every new technology alters the human sensory bias by creating new areas of perception (figure) and new areas of imperception

(ground), and this he says is as true of clothing as of the alphabet or radio. From this point of view, the ultimate significance and use of the arts in Western culture has always been their role in supplying "counter-environments" or "anti-environments"—artifacts or practices that make the *ground* of environments perceptible by converting them into *figure*. The study of ground "on its own terms" is practically impossible, because, for most of us, it is by definition environmental and subliminal. McLuhan effectively conveys this throughout the essays that comprise *Media and Formal Cause* (2011): "An environment is naturally of low intensity or low definition. That is why it escapes observation," he writes. "Anything that raises the environment to high intensity, whether it be a storm in nature or violent change resulting from a new technology, such high intensity turns the environment into an object of attention" (McLuhan & McLuhan, 2011, p. 17). To this he adds the observation that "an environment becomes an object of attention [when] it assumes the character of Anti-Environment or an art object" (p. 17). Thus, the construction of counter-environments remains the only possible strategy for such study, and, for this reason, McLuhan (McLuhan & McLuhan, 1988) follows Ezra Pound in suggesting that artists constitute the "antennae of the race" in so far as they tend to be the only people in the modern world who "make their whole business the 'retraining' and 'updating' of sensibility" (McLuhan & McLuhan, 1988, pp. 5–6).

As McLuhan conjectures in *Understanding Media*:

The percussed victims of the new technology have invariably muttered clichés about the impracticality of artists and their fanciful preferences. But in the past century it has come to be generally acknowledged that, in the words of Wyndham Lewis, "The artist is always engaged in writing a detailed history of the future because he is the only person aware of the nature of the present." Knowledge of this simple fact is now needed for human survival. The ability of the artist to sidestep the bully blow of new technology of any age, and to parry such violence with full awareness, is age-old. Equally age-old is the inability of the percussed victims, who cannot sidestep the new violence, to recognize their need of the artist. To reward and to make celebrities of artists can, also, be a way of ignoring their prophetic work, and preventing its timely use for survival. The artist is the man [*sic*] in any field, scientific or humanistic, who grasps the implications of his actions and of new knowledge in his own time. He is the man of integral awareness. (McLuhan, 1964, pp. 65–66)

McLuhan, who himself became a celebrity, indicates that the arts and sciences as navigational aids have become increasingly crucial as a result of the transformed life world of humankind. In our own time, change has itself become "the very matrix and foundation of society" (McLuhan, 1960, p. 6), a consequence of the acceleration of widespread technical innovation. Since the beginning of the industrial age, significant new technologies have appeared once every generation or two, allowing us time to accommodate ourselves and our societies in conforming to the demands of the changing environment. At present, however, "innovations of incredible transforming power appear not every generation but every three or four years" (E. McLuhan, 1998, p. 186), leaving us inadequate time for adjustment to the new conditions.

Because some artists discern the forms of technological change in their full cultural dimensions before the technicians actually take over, they possess “the means of anticipating and avoiding the consequences of technological trauma” (McLuhan, 1960, p. ii). They thus provide advance knowledge of how to cope socially and psychically with new technologies by illustrating how to rearrange one’s psyche to anticipate their effects (McLuhan, 1964/1994). Among the artists who McLuhan suggests especially fulfilled this role in his own time were the modernists, including, in addition to Joyce, Ezra Pound, T. S. Eliot, and Wyndham Lewis. Other media ecologists share this conception of artists as navigational guides, as does, for instance, Ellul (1964), who suggests that the artist is a “seismograph” that detects and records “the fluctuations of man and society” (p. 404). And though not known for making specific claims on behalf of the arts in general, Postman, in *Amusing Ourselves to Death*, outlines, too, the importance of “the Huxleyan warning” in *Brave New World* (1932). Elsewhere, Postman (1999) suggests that the tract “A Defence of Poetry” (1821) by the English Romantic poet Percy Bysshe Shelley “was to intellectual life what the Declaration of Independence was to political life” (pp. 31–32), with its famous conclusion that “poets are the unacknowledged legislators of the world.”

McLuhan (1999) describes the process of how art first begins working its effects on consciousness:

The meaning of a work of art, as the artists of past centuries can tell us, has nothing to do with what you think about it. It has to do with its action upon you. It is a form: it acts upon you. It invades your senses. It re-structures your outlook. It completely changes your attitudes, your wave-lengths . . . our sensibilities, are completely altered by new forms. (p. 38)

Related to these effects is the potential that art may have for more general edification. The artist’s task “is not to make people moved or indignant at metaphorical situations,” says McLuhan, “but to make them reflect (and, if you like, to be moved and indignant, too) on what they and others are doing” (McLuhan, 1999, pp. 166–167). Frequently this reflection pertains in significant part to the vast influential ground of our emotional lives, much of which typically evades our awareness; and this domain is one in which the arts—and especially music—tend to specialize. For, as Huxley reminds us: “After silence, that which comes nearest to expressing the inexpressible is music” (Huxley, 1949, p. 19). But how does one critically reflect upon the inexpressible?

Presentational Symbolic Form and the Case of Music

Mumford (1995) and Giedion (1976) acknowledge, too, the relationship that art has to cultivation of the inner life, and its importance for the discovering of harmonies between our inner states and our surroundings, an activity germane to psychic survival. Giedion likewise reminds us of the immensity of effect that feelings and emotions have upon people’s thoughts and actions. Susanne Langer, in this regard, is one of the giants of media ecology to not only address the interiority of feeling and the arts in general but devote considerable space to the discussion of music. And she does so primarily in *Philosophy*

in a New Key: A Study in the Symbolism of Reason, Rite and Art (1942) and *Feeling and Form* (1953). Langer (1942) describes music's particular edifying qualities:

Moritz Hauptmann and . . . Moritz Carrière . . . [*sic*] saw in music what most aestheticians failed to see—its intellectual value, its close relation to concepts, not by reason of its difficult academic “laws,” but in virtue of its *revelations*. If it reveals the rationale of feelings, the rhythm and pattern of their rise and decline and intertwining, to our minds, then it is a force in our mental life, our awareness and understanding, and not only our affective experience. (pp. 238–239)

Langer's comments with regard to music's awareness-enhancing capabilities illustrate the difficulties involved with making sense of the “ecology” of interiority. That she conceives of it as ecology, however, is demonstrated by her terminology, which speaks of “complexes of feelings” and the rich intertwining “fabric of our subjective existence.” As Langer suggests, in this domain of experience that tends toward ineffability we make discoveries in the same way that we make them in the outer world—that is, “by the agency of adequate symbols.” We learn the character and range of subjective experience through art, and the artistic “projection” of vicariousness is an example of what she calls the “symbolic transformation of experiences,” that basic process in the human brain of which speech for most people is the readiest active termination (Langer, 1953, p. 146).

Langer (1953) outlines the character of music's analogical symbolic form:

The tonal structures we call “music” bear a close logical similarity to the forms of human feeling—forms of growth and of attenuation, flowing and stowing, conflict and resolution, speed, arrest, terrific excitement, calm, or subtle activation and dreamy lapses—not joy and sorrow perhaps, but the poignancy of either and both—the greatness and brevity and eternal passing of everything vitally felt. Such is the pattern, or logical form, of sentience; and the pattern of music is that same form worked out in pure, measured sound and silence. Music is a tonal analogue of emotive life. . . . Such formal analogy, or congruence of logical structures, is the prime requisite for the relation between a symbol and whatever it is to mean. The symbol and the object symbolized must have some common logical form. (p. 27)

Clearly, Langer is concerned with the realm of musical semantics or hermeneutics, yet her language is not so much that associated with the semiotician. Rather, she makes the distinction between *signals* and *symbols*, suggesting that an example of the former constitutes a stimulus that evokes action appropriate to the presence of its object—that is, it is a means of commanding action. Such intellection, she suggests, is of the nature of that which humans share with other animals. Symbols, on the other hand, are vehicles for the *conception* of objects. They allow a person to think about something apart from its immediate presence. A symbol is an instrument of thought by which something can be remembered, mentioned, or conceived—a device whereby we are enabled to make an abstraction.

Langer (1942) differentiates between two different modes of symbolic structure. Discursive symbolism is the vehicle of propositional or discursive thinking, where truth and falsehood are born, the universe made possible by language and numbers. This she contrasts to presentational or nondiscursive symbolisms, those characteristic to ritual, myth, and art:

It appears, then, that although the different media of nonverbal representation are often referred to as distinct "languages," this is really a loose terminology. Language in the strict sense is essentially discursive; it has permanent units of meaning which are combinable into larger units; it has fixed equivalences that make definition and translation possible; its connotations are general, so that it requires non-verbal acts, like pointing, looking, or emphatic voice-inflections, to assign specific denotations to its terms. In all these salient characters it differs from wordless symbolism, which is non-discursive and untranslatable, does not allow of definitions within its own system, and cannot directly convey generalities. The meanings given through language are successively understood, and gathered into a whole by the process called discourse; the meanings of all other symbolic elements that compose a larger, articulate symbol are understood only through the meaning of the whole, through their relations within the total structure. Their very functioning as symbols depends on the fact that they are involved in a simultaneous, integral presentation. This kind of semantic may be called presentational symbolism, to characterize its essential distinction from discursive symbolism, or "language" proper. (pp. 96-97)

The contrast between wordless symbolism and "language proper" nearly parallels that which Postman (1979) makes between analogic and digital symbols, where the latter are entirely abstract, have no natural correspondence to nature, and are the kinds of symbols we predominantly employ in the act of discursive thinking. Analogic symbols, on the other hand, do have a direct correspondence to the structure of nature, as Langer notes with respect to music and the character of human sentience.

Music, according to Langer (1942), is the most highly developed type of purely connotational semantic,¹² and musical duration, she suggests, is an image of what she terms "lived" or "experienced" time, the passage of life that we feel as expectations become "now," and "now" turns into unalterable fact. Here she describes the complexity of the form taken by the lived experience of sensibility:

The phenomena that fill time are *tensions*—physical, emotional, or intellectual. Time exists for us because we undergo tensions and their resolutions. Their peculiar building-up, and their ways of breaking or diminishing or merging into longer and greater tensions, make for a vast variety of temporal forms. If we could experience only single, successive organic strains, perhaps subjective time would be one-dimensional like the time ticked off by clocks. But life is always a dense fabric of concurrent tensions, and as

¹² As Langer (1942) observes, music lacks the cardinal virtue that language possesses—denotation—though I would maintain that this is not the case in an absolute sense.

each of them is a measure of time, the measurements themselves do not coincide. This causes our temporal experience to fall apart into incommensurate elements which cannot be all perceived together as clear forms. When one is taken as parameter, others become "irrational," out of logical focus, ineffable. Some tensions, therefore, always sink into the background; some drive and some drag, but for perception they give *quality* rather than form to the passage of time, which unfolds in the pattern of the dominant and distinct strains whereby we are measuring it. (Langer, 1953, pp. 112–113)

Langer's description of our subjective existence parallels the ideas of figure and ground, central to the language of perceptual awareness that the McLuhans employ, and this suggests that a large component of the active creation of artistic counter-environments consists in the goal of making perceptible not only the media environment but, as Langer describes above, the less distinct and more subliminal strains within the matrix of tensions and temporality that comprise our emotional lived experience. This is something that artists accomplish in part by means of "an intensification of our sensory life" (McLuhan, 1969, p. iv), and the process ultimately assists us in generating awareness not only of how our emotions are at any time influencing our thoughts and actions but in relation to the fundamental task of discovering harmonies between our inner states and our surroundings.

Musical Semantic Environments

This is not the whole story, however; nor can Langer provide us with it. Referring to what she dubs the "principle of assimilation," Langer (1953) maintains that whether we are talking about the words of a poem, the biblical allusions in a cantata, or the comic and tragic characters in a music drama, all become musical elements when combined with music:

If the composition is music at all, it is pure music, and not a hybrid of two or more arts. The *Gesamtkunstwerk* is an impossibility, because a work can exist in only one primary illusion, which every element must serve to create, support, and develop. That is what happened to Wagner's operas in spite of himself: they are music, and what is left of his non-musical importations that did not undergo a complete change into music, is *dröck*. (Langer, 1953, p. 164)

With her insistence that the Wagnerian conception of the "total art work" is not only a flop but an impossibility, clearly one must question Langer's apparently absolutist conception of how music interacts with other symbolic forms. It is as though for Langer the seductions of music eclipse everything else within a multimedia text. Or perhaps it is her overprivileging of the morphology of feeling to the general exclusion of other modes of musical signification¹³—which for Langer either depletes the symbolic value from any other medium with which music is combined or reduces the overall product to something other than music. This issue presents itself also in her either-or conception of forms of symbolic structure, which fails to consider the continuum of hybridity that exists within modern media between the absolute

¹³ I have in mind things such as instrumental or genre references, among other forms of social meaning.

categories of presentational (nondiscursive) and propositional (discursive) forms. Following Langer, then, such specimens I elect to refer to as “hybrids.”

With the waning of notation-centric criticism in our time—what McLuhan refers to as “typographic bias”—music is less frequently considered as autonomous entity. Those who undertake its analysis are sure to encounter it coming into play with other symbolic forms, be they moving imagery, the Kaluli healing ritual, or the cover package images and words of an artifact like the rock concept album; and as these examples illustrate, musical awareness must be cultivated in aesthetic and utilitarian realms alike. If the medium is the message, then we ought to attend to the specific character of any variety of articulated symbol systems we might at present encounter, and particularly to the intricacies with which they commingle. That is, of course, should we wish to attain a proper appreciation of their messages.¹⁴

The communication of feeling, nevertheless, as I have suggested above, is a central concern; and so we should note, as does the cognitive neuroscientist Daniel Levitin (2006), that scientists are not in agreement as to what exactly the “emotions” are. He points out, however, that some use the word *affect* in their discussions, and this is a practice I shall follow here. Attributed to the American personality theorist Silvan Tomkins (1911–1991), affect theory—and more specifically Tomkins’ *affect-script* theory—has widespread implications for students of several trajectories of inquiry, including the psychological sciences, the social sciences, the arts, and students of communication and culture more broadly.¹⁵ As with many media ecologists, general systems theory informs his work, and he elucidates how the human has evolved as a “multimechanism system,” where each mechanism by itself is incomplete but germane to the system’s functioning as a whole. Tomkins (1995a) identifies affect as the biological basis of emotion, a mechanism “distinct from the sensory, motor, memory, cognitive, pain and drive mechanisms” (p. 49).¹⁶

¹⁴ For an updated and more appropriate guide on how to think about musical multimedia, see Cook (1994).

¹⁵ Tomkins takes his initial cue from Charles Darwin’s *The Expression of the Emotions in Man and Animals* (1872), a tradition that postulates a “discrete” basis to “emotional expressions.” This perspective contrasts that which conceptualizes emotions as “dimensional” or merely dimensions of consciousness, a thought tradition that Izard and Ackerman (2004) trace back to Herbert Spencer’s *Principles of Psychology* (1890). In advancing the latter perspective, Russell, Bachorowski, and Fernández-Dols (2003) offer excellent critiques of the early research methods that governed the study of emotional expressions; but, in contrast to these scholars, a number of emotion researchers construe the discrete-emotions and dimensional approaches as not contradictory but complementary (Izard & Ackerman, 2004, p. 255). Indeed, Russell and colleagues appear to have received their reading of Tomkins less by way of extensive contact with his work than through the truncated reception of his scholarship as transmitted through the work of Ekman, whose research does not incorporate and employ script theory, and therefore does not convey the full gamut of Tomkins’ extensive framework, which comes much closer to the scope of media ecology. Another scholar to note the value of Tomkins’ work is David Huron in his book *Sweet Anticipation: Music and the Psychology of Expectation* (2006).

¹⁶ Tomkins points out how these, of course, are all distinct from the heart, circulatory, respiratory, liver, and other parts of the homeostatic system.

The affects, in his words, are “sets of muscle and glandular responses located in the face and also widely distributed through the body, which generate sensory feedback which is either inherently “acceptable” or “unacceptable” (in Lucas, 2007, p. 49).¹⁷

Whereas psychoanalysis has postulated the drives (i.e., hunger, thirst, oxygen, sex, mimetic) as the primary motivators, Tomkins submits that it is the affects that actually fulfill this function. As he suggests, you cannot become aroused sexually without also being excited, whereas you can be excited without experiencing sexual arousal. As Tomkins explains, affect’s primary modus operandi is to manifest “urgency via analogic and profile amplification to make one care by feeling” (Lucas, 2007, p. 54). The affect system is the primary motivational system, “because without its amplification, nothing else matters—and with its amplification, anything else *can* matter.” Combining *urgency* and *generality*, then, affect “lends its power to memory, to perception, to thought, and to action no less than to the drives” (Lucas, 2007, p. 87). It is in this way that affect provides the qualitative ground for much of our experience and provides insight for the media ecologist into how we *value* things.

Following his recounting of a momentous coming together with Francis Crick (the cofounder of the double helix model for describing DNA), Levitin, too, notes this association between the emotions and motivation:

Crick reminded me that emotions for our ancient hominid ancestors were a neurochemical state that served to motivate us to act, generally for survival purposes. We see a lion and that instantly generates fear, an internal state—an emotion—that results when a particular cocktail of neurotransmitters and firing rates is achieved. This state we call “fear” motivates us to stop what we’re doing and—without thinking about it—run. We eat a piece of bad food and we feel the emotion of disgust; immediately certain physiological reflexes kick in, such as a scrunching up of the nose (to avoid letting in a possible toxic odor) and a sticking out of the tongue (to eject the offending food); we also constrict our throat to limit the amount of food that gets into our stomach. We see a body of water after we’ve been wandering for hours, and we’re elated—we drink and the satiety fills us with a sense of well-being and contentment, emotions that cause us to remember where that watering hole is for next time. (Levitin, 2006, pp. 182–183)

Levitin does not refer to affect very much beyond this, either as related to musical experience or otherwise, but he does point out that what the word *affect* specifically refers to is the *valence* of our internal states—that is, whether they possess a positive or negative character. In Tomkins’ words, “affect either makes good things better or bad things worse”; and he recommends, while illuminating the

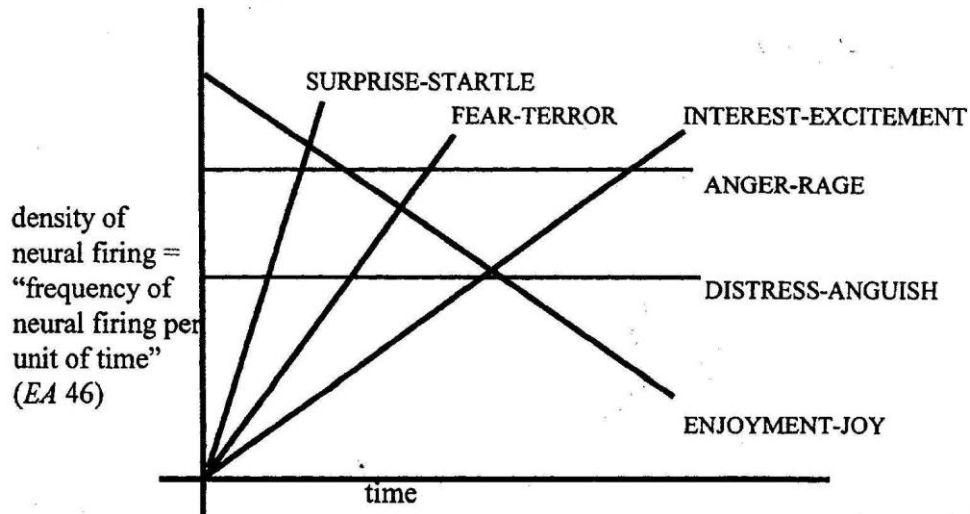
¹⁷ Tomkins’ work locating the face as the primary seat of affective expression inspired Paul Ekman’s cross-cultural work illustrating the universality of facial expression. Ekman was particularly attentive to the comparison of oral and literate cultures, and the work of both men is fundamental to students of nonverbal communication.

transmission processes involved at the neurological level, that it accomplishes this "by conjointly simulating its activator in its profile of neural firing and by adding a special analogic quality that is intensely rewarding or punishing" (1995a, p. 53).

With respect to this configuration of neural firing, Tomkins (1995a) explains the contours of the different analogic structures as they relate to the various affects:

I believe it is possible to account for the major phenomena with a few relatively simple assumptions about the general characteristics of the neural events that innately activate affect and that these same assumptions can account for the later-learned control of affect, whether that is via cognitive or motoric or perceptual mediation; I would account for the differences in affect activation by three variants of a single principle—the density of neural firing. By density I mean the frequency of neural firing per unit of time. My theory posits three discrete classes of activators of affect, each of which further amplifies the sources which activate them. These are stimulation increase, stimulation level, and stimulation decrease. (p. 46)

As portrayed in Figure 1, Tomkins provides the patterns for what he calls "the primary affects," explaining, for instance, that the response of *startle* is innately activated by any stimulus that has a relatively sudden onset and a steep increase in the rate of neural firing. In other cases, *fear* is activated if the rate of neural firing increases less rapidly, while *interest* is aroused if it increases still less quickly. In contrast to this, any sustained increase in the *level* of neural firing, as in the case of a continuing loud noise, "would innately activate the cry of distress" (Tomkins, 1995a, p. 46). And were it sustained and louder yet, writes Tomkins, "it would innately activate the anger response" (*ibid.*). Concerning any sudden stimulatory decrease and concomitant reduction in the rate of neural firing, as in the instance of a sudden reduction of excessive noise, Tomkins points out that this "would innately activate the rewarding smile of enjoyment" (*ibid.*, p. 47).

Affect Relations Graph**Figure 1. Affect relations graph.**

Source: Tomkin, 1995a, p. 46.

It is worth noting the parallel comments that Levitin makes in relation to musical expression:

Some sounds are intrinsically soothing while others are frightening. Although there is a great deal of interpersonal variation, we are born with a predisposition toward interpreting sounds in particular ways. Abrupt, short, loud sounds tend to be interpreted by many animals as an alert sound; we see this when comparing the alert calls of birds, rodents, and apes. Slow onset, long, and quieter sounds tend to be interpreted as calming, or at least neutral. Think of the sharp sound of a dog's bark, versus the soft purring of a cat who sits peacefully on your lap. Composers know this, of course, and use hundreds of subtle shadings of timbre and note length to convey the many different emotional shadings of human experience. (Levitin, 2006, p. 92)

Such shadings have profound effects on the musical communication of emotion and usually operate, as Levitin notes, in conjunction with other musical modalities enacting similar mediations. Among such modalities we could include those of tempo, meter, rhythm, timbre, texture, harmony, tonality, melody, and pitch. Given music's temporal character, each of these parameters, as they undergo alteration over time, can be considered in relation to Tomkins' basic framework of the underlying neural pattern of affective arousal. With regard to the specific shapes taken by these valences, Tomkins provides the following generalizations:

- Positive and negative affects are activated by stimulation *increase*.
- Only negative affects are activated by continuing unrelieved *level* of nonoptimal stimulation.
- Only positive affect is activated by stimulation *decrease* (Tomkins, 1995a, p. 47).

Thus, we could summarize Tomkins' diagram (Figure 1) accordingly: Interest-excitement, fear-terror, and surprise-startle¹⁸ all amplify by simulating increasing gradients of neural stimulation; distress-anguish and anger-rage amplify by simulating maintained level of stimulation; and enjoyment-joy is the sole affect that amplifies by simulating decreasing gradients of neural stimulation.

It is perhaps to affect that Robert Albrecht is inadvertently drawing our attention when he makes his important addendum to Langer's explanation of the symbolic process in music: "Although music also functions as a system of symbolization that is more indirect and characteristically culture-specific," he writes, "we should not fail to observe that it communicates in a more fundamental manner without symbols and across cultures as the direct transfer of energy," adding that "[s]ound quite literally vibrates not only upon the eardrum but upon the skin and throughout the entire body" (Albrecht, 2004, p. 8). Alluding to Langer's best-known book, Albrecht expands these ideas, illustrating Langer's oversight:

By "communication in a new key," I mean to propose that communication be considered not only as a process involving the organization and exchange of symbols but as the exchange of energy as well. Just as symbols structure thought and feeling, energy electrically charges the character and the intensity of thought, feeling, and the communication environment. When Suzanne [*sic*] Langer argues that music is communication of feeling in symbolic form, she uncovers only a part of the appeal, power, and function of music. She is aware, of course, of the power of music to energize and emote but seems to dismiss, or at least to downplay, its energizing or psychophysiological aspect as somehow inferior or unevolved. (Albrecht, 2004, p. 18)

It may, in fact, be that Langer, in contrast to someone like her contemporary Alfred Korzybski, was simply not conversant with the psychological view which was to become prevalent in our time, a perspective which, as Levitin (2006) writes, entails that "the sum total of your thoughts, beliefs, and experiences is represented in patterns of firings—electrochemical activity—in the brain" (p. 84).

¹⁸ "The general function of the startle response we take to be that of a circuit breaker, or interrupter mechanism, which resets the central assembly," writes Tomkins.

It is ancillary to every other affect because it orients the individual to turn his attention from one thing to another. Whether, having been interrupted the individual will respond with interest, fear, joy, distress, disgust, shame, or anger . . . will depend on the nature of the interrupting stimulus and on the interpretation given to it. (Tomkins, 1995b, p. 69)

In relation to Langer's ideas, however, it is worth outlining the distinctions that Donald Nathanson elucidates between affect, feeling, and emotion.¹⁹ Following Tomkins' affect theory, Nathanson explains that *feeling* translates into an organism's level of awareness that an affect has been triggered (in Lucas, 2007, p. 49). As Lucas goes on to explain, this represents the movement from biology to psychology or, alternatively, that from body to mind. Noting Nathanson's emphasis that biopsychological responses are culturally contextual, Lucas observes that *emotion* is the meaning derived from external reference or socialization in combination with memory—in short, biography. Axiomatically, as Lucas (2007) puts it: "affects are meaningless; feelings are meaning potential; and emotions are meaningful and referential" (p. 53). Such precision in identification of these phenomena can only sharpen the media ecologist's understanding of this domain.

Lucas (2007) illuminates how the affects "instill life with value and meaning" (p. 46), and ultimately must be construed as among the primary components of the "biopsychosocial matrices" of human experience. It is in this relation that Levitin oversimplifies when he suggests that it was pitch which had the medieval church in a dither, or that it was timbre which earned Bob Dylan the reproach of the Newport Folk Festival audience in 1965, or that latent African rhythms in early rock music frightened White suburban parents. Rather, one cannot ignore the social meanings that accrued to each of these musical elements in their specific sociohistorical contexts. In returning to the social environment, thus, we return—in conjunction with our affective experience—to broader, media ecological considerations.

Affect-Script Theory, the Social Environment, and Musical Analysis

Just as one cannot ignore the social meanings of musical gestures, neither can one ignore those of the affects themselves—an area of concern that Tomkins addresses in his affect-script theory. This framework assumes that, for an understanding of the person—as distinguished from humans more generally—the basic media ecological unit of analysis is the *scene* and "the relationships between scenes" (1995c, p. 313), particularly as these are ordered by sets of rules we develop to which Tomkins gives the name "scripts." Among various others, Tomkins speaks of enjoyment scenes, surprise scenes, exciting scenes, terrifying scenes, distressing scenes, enraging scenes, and disgusting scenes; and all are events with perceived beginnings and ends:

Scenes are affect-laden episodes, intrapsychic experiences as well as objectively observable events; scripts are developed by co-assembling a "family" of related scenes, a process of "psychological magnification" that depends on our capacities for differentiation and generalization. Scenes, of course, precede script formation; scripts come to dictate future scenes as we develop idiosyncratic rules for interpreting experience. (Carlson, 1995, p. 296)

¹⁹ In symbolic interactionism, H. D. Duncan is similarly cited for his distinction between feelings and emotions, as in *Communication and Social Order* (1968) and *Symbols in Society* (1972). Another notable source for people considering this domain is the work of Antonio Damasio—for example, *Descartes' Error* (1995) and *The Feeling of What Happens* (1999).

With regard to what Tomkins (1995c) describes as the process of psychological magnification, it is through memory, thought, and imagination that "scenes experienced before can be co-assembled with scenes presently experienced, together with scenes which are anticipated in the future" (p. 318). Scripts are the linking of affect and cognition in structures of meaning, and, as Tomkins points out, they govern the way we predict, interpret, respond to, and control any set of scenes that has undergone magnification.

If we maintain an optimal balance of positive over negative affect and, thus, of rewarding over punishing scenes, we are, in Tomkins' terms, living lives of psychological affluence as opposed to ones of impoverishment. Like scenes, a vast number of theoretical scripts exist, but Tomkins draws our attention to five basic ones, because at their basis are the primary affects. Lucas (2007) provides a helpful diagram outlining these five scripts, the primary aspect(s) of the affect system upon which they are based, and the manner in which Tomkins employs "a metaphorical heaven-hell scale to describe the interrelated evaluative phenomena in human emotional life experiences as related to good versus bad" (p. 76):

Script	Affect base	
Affluent	excitement and enjoyment	HEAVEN
damage-reparation	shame-humiliation	↓
limitation-remediation	distress-anguish	
Contamination	Disgust	
Toxic	fear-terror, anger-rage, dissmell	HELL

Clearly, one can deduce that psychic affluence predominantly characterizes a life if it is also composed primarily of positive affect scenes. Generally, and as noted, Tomkins groups the components of the affect system in such a way as to illustrate that, with the exception of dissmell,²⁰ each represents a continuum of affective intensity (though Lucas's diagram does not fully indicate this).

Affluent scripts are concerned with plotting a life of "interest-excitement" and "enjoyment-joy," and people living affluent lives experience a high relative density and ratio of positive to negative affect. As fundamentally happy people, Tomkins observes, affluents possess "the capacity to understand and absorb negative affect when it *is* encountered" (1995c, p. 346). *Damage-repair scripts* are based on a predominance of shame, which, as Elspeth Probyn (2005) points out, represents a positive rather than negative affect in human experience; unless, that is, it more so approaches humiliation. Perceived damage

²⁰ "Dissmell and disgust are innate defensive responses, which are auxiliary to the hunger, thirst, and oxygen drives," writes Tomkins, echoing Levitin's earlier comments.

If dissmell and disgust were limited to these functions, we should not define them as affects but rather as auxiliary drive mechanisms. However, their status is somewhat unique in that dissmell, disgust, and nausea also function as signals and motives to others, as well as to the self, of feelings of rejection. (1995e, p. 399)

is capable of being repaired, and the ensuing shame exists only where one desires the maintenance of a positive social affiliation. Shame, according to Tomkins (1995), is not in fact an affect proper, but “an innate affect auxiliary response and a specific inhibitor of continuing interest and enjoyment” (p. 84). It operates, thus, only following the activation of either of these—inhibiting one, the other, or both following their incomplete reduction. Tomkins suggests that shame corresponds to the formulation “I want . . . but,” and this type of inhibited desire, writes Rae Carlson (1995), “is probably the core of the psychic burdens that most of us carry” (p. 300).

Limitation-remediation scripts come in many varieties and govern negative affect scenes while attempting to turn them into positive ones. “Millions of people over thousands of years have faced lives less than perfect, to which they had to adapt in some way or another,” writes Tomkins. “This kind of script got at that large class of human concerns” (1995d, p. 391). *(De)contamination scripts*, as Lucas elucidates, are intensely biased in favor of the negative, are based on disgust, and “are ambivalent, plurivalent, resistant to decontamination” (2007, p. 79). As Tomkins points out, circumstances are “recognized by the individual as not a permanent limitation, but an impurity, a contamination” (1995d, p. 391), and one that frequently demands some type of purgation.

Finally, *anti-toxic scripts* are invoked when things have gone from bad to worse. They consist of “scenes of intolerable punishment, which must be either eliminated, attenuated, escaped, or avoided—somehow destroyed” (Tomkins, 1995d, p. 392). With limited success, they govern purely negative affect scripts, and, in Carlson’s words, are “designed to avoid and to prevent at all costs the recurrence of extreme states of anger, fear, and dissmell” (Carlson, 1995, p. 300). As Tomkins notes, life is generally full of toxicity, and in their symbolic transformations of experience we can say that some contemporary artists portray a great deal of it. And much of this angst, as per McLuhan, generally pertains to the character of the media environment.

In applying Tomkins’ thought to musical expression, often it is possible to identify various sections of a piece with transitions to different scenes, and this can be said in relation to both instrumental music as well as forms of musical multimedia. One can identify the primary affects conveyed musically within each scene, and in making sense of a piece’s referentiality and meaning, one could likewise invoke Tomkins’ scripts, particularly in contexts where one is clearly engaging with a musical protagonist.

Conclusion

Although it is beyond the spatial constraints of this article to effectively demonstrate a media ecological analysis of a particular musical artifact, practice, or performance that incorporates Tomkins’ nuanced ideas regarding affect and how it colors our experience, I would direct readers to my “*Pragmatism Not Idealism*”: *Radiohead, Technopoly, and the Global Movement for Change* (Rose, 2009) should they wish to see just such an application in action. I have also fleshed out more broadly some of the value that Tomkins’ work generally has to media ecology elsewhere (see Rose, 2013) and so will not do so here, except merely to emphasize how Tomkins’ taxonomies inform our understandings of how we think, feel, value, and behave—the human side of the media ecology equation. In addition to being

attendant to the social meaning of affect, as it manifests itself in the various scenes that comprise our experiences in the world and in the scripts or mental techniques for negotiating our way through the affective environments we encounter, analysts must remain attentive also to the social meanings of music, along with the complex layers of temporality and tensions encoded in the music itself, for which Langer provides an appropriate guide.

Given what has been said here about the cultural significance of the arts, one can conclude that the study of artistic counter-environments ought not to be a principal part of the activity only of the media ecologist but of everybody. Because music is rarely studied as an isolated phenomenon, those who undertake its inquiry are sure to encounter other symbolic forms with which music is interacting, be it that of the Kaluli healing ritual, Wagnerian music drama, or its rock opera equivalent. If the medium is the message, then we must be attentive to not only the character of these various symbol systems and the intricacies with which they intermingle but also, as Albrecht suggests, how they transfer energy—an energy that I have suggested consists essentially of affective content. To refine the language that we employ to describe the varieties of emotional experience symbolized in the forms we confront, I have recommended the affect-script theory of Silvan Tomkins, whose work can be especially useful for analyzing and elucidating the scenes portrayed within various artworks and practices, along with the scripts that their artistic subjects employ in the service of their management of affect.

Being able to articulate these phenomena will be a key element in demonstrating the counter-environmental importance of artistic works, particularly as we begin confronting our technological future. Understanding that all the new technologies exercise their power and influence globally, and that all cultures are now becoming global ones, Eric McLuhan has suggested that, in the global village, all arts also must go global and that the “merely regional artist, the single-culture specialist artist is irrelevant to today’s needs” (E. McLuhan, 1998, p. 186). There is certainly something to this if one surmises, as did the elder McLuhan, that human survival will require education to be reconceived primarily in terms of civil defense against media fallout.

References

- Albrecht, R. (2004). *Mediating the muse*. Cresskill, NJ: Hampton Press.
- Bolter, J. D., & Grusin, R. (1996). Remediation. *Configurations*, 4(3), 311–358.
- Bowman, R. (2003, December 1). *Music and society* (Lecture). York University, Toronto, Ontario.
- Carlson, R. (1995). Silvan Tomkins' legacy: A grand theory of personality. In V. Demos (Ed.), *Exploring affect* (pp. 295–300). New York, NY: The Press Syndicate at the University of Cambridge.
- Carpenter, E., & McLuhan, M. (1960). *Explorations in communication*. Boston, MA: Beacon Press.
- Cook, N. (1994). Music and meaning in the commercials. *Popular Music*, 13(1), 27–40. Reprinted as the first chapter in Cook, N. (2000). *Analysing musical multimedia*. New York, NY: Oxford University Press.
- D. Cayley. (2008). How to think about science—Richard Lewontin (Part 18). IDEAS. Toronto: CBC Radio. Retrieved from <http://www.cbc.ca/podcasting/pastpodcasts.html?45#ref45>
- Ellul, J. (1964). *The technological society*. New York, NY: Vintage.
- Feld, S. (1986). Orality and consciousness. In Y. Tokumaru & O. Yamaguti (Eds.), *The oral and the literate in music* (pp. 18–28). Tokyo, Japan: Academia Music.
- Finnegan, R. (1992). *Oral traditions and the verbal arts*. London, UK: Routledge.
- Fiske, J. (1989). *Understanding popular culture*. Boston, MA: Unwin Hyman.
- Giedion, S. (1976). *Time, space and architecture*. Cambridge, MA: Harvard University Press.
- Hassan, I. (1993). Toward a concept of postmodernism. In J. Natoli & L. Lutcheon (Eds.), *A postmodern reader* (pp. 273–286). New York, NY: State University of New York Press.
- Hodgson, J. A. (2006). *Navigating the network of recording practice: Towards an ecology of the record medium* (Unpublished doctoral dissertation). University of Alberta, Edmonton, Alberta.
- Huxley, A. (1949). *Music at night*. London, UK: Chatto and Windus.

- Izard, C., & Ackerman, B. (2004). Motivational, organizational, and regulatory functions of discrete emotions. In M. Lewis & J. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 253–264). New York, NY: Guilford Press.
- Langer, S. (1942). *Philosophy in a new key: A study in the symbolism of reason, rite, and art*. Cambridge, MA: Harvard University Press.
- Langer, S. (1953). *Feeling and form: A theory of art*. New York, NY: Charles Scribner's Sons.
- Levitin, D. (2006). *This is your brain on music*. New York, NY: Penguin Group.
- Libin, L. (2001). Organology. In S. Sadie (Ed.), *The New Grove Dictionary of Music, 2nd edition (New Grove Online)*. New York, NY: Grove's Dictionaries.
- Lucas, D. (2007). *Dreams we learn: Affect theory, genre, and the example of tragedy* (Unpublished doctoral dissertation). McMaster University, Hamilton, Ontario.
- Lum, C. M. K. (2006). Notes toward an intellectual history of media ecology. In C. M. K. Lum (Ed.), *Perspectives on culture, technology and communication: The media ecology tradition* (pp.1–60). Cresskill, NJ: Hampton Press.
- McLuhan, E. (1998). *Electric language: Understanding the present*. Toronto, Canada: Stoddart.
- McLuhan, M. (1960). *Report on project in understanding new media*. Washington DC.: National Association of Educational Broadcasters/U.S. Department of Health, Welfare & Education, Office of Education.
- McLuhan, M. (1964/1994). *Understanding media: The extensions of man*. Cambridge MA: MIT Press.
- McLuhan, M. (1969). *The interior landscape: The literary criticism of Marshall McLuhan*. New York, NY: McGraw-Hill.
- McLuhan, M. (1999). *The Medium and the light: Reflections on religion*. Toronto, Canada: Stoddart.
- McLuhan, M. (2003). Open mind surgery. In S. McLuhan & D. Haines, (Eds.), *Understanding me: Lectures and interviews*. Toronto, Canada: McClelland & Stewart.
- McLuhan, M., & Fiore, Q. (1968). *War and peace in the global village*. New York, NY: Bantam Books.

- McLuhan, M., & McLuhan, E. (1988). *The laws of media: The new science*. Toronto, Canada: University of Toronto Press.
- McLuhan, M., & McLuhan, E. (2011). *Media and formal cause*. Houston, TX: NeoPoiesis Press.
- Means, N. (1998). *Temiar-English, English-Temiar Dictionary*. St. Paul, MN: Hamline University Press.
- Mumford, L. (1995). Art and technics. In D. Miller (Ed.), *The Lewis Mumford reader*. Athens, GA: University of Georgia Press.
- Nystrom, C. (1973). *Towards a science of media ecology: The formulation of integrated conceptual paradigms for the study of human communication systems* (Unpublished doctoral dissertation). New York University, New York, NY.
- Nystrom, C. (2006). Symbols, thought, and reality: The contributions of Benjamin Lee Whorf and Susanne K. Langer to media ecology. In C. M. K. Lum (Ed.), *Perspectives on culture, technology and communication: The media ecology tradition* (pp. 61–70). Cresskill, NJ: Hampton Press.
- Ong, W. (1982). *Orality and literacy*. London, UK: Routledge.
- Postman, N. (1970). The reformed English curriculum. In A. C. Eurich (Ed.), *High school 1980: The shape of the future in American secondary education* (pp. 160–168). New York, NY: Pitman.
- Postman, N. (1979). *Teaching as a conserving activity*. New York, NY: Delacorte Press.
- Postman, N. (1992). *Technopoly: The surrender of culture to technology*. New York, NY: Vintage Books.
- Postman, N. (1999). *Building a bridge to the eighteenth century: How our past can improve our future*. New York, NY: Alfred A. Knopf.
- Postman, N. (2006). The humanism of media ecology. In C. M. K. Lum (Ed.), *Perspectives on culture, technology and communication: The media ecology tradition* (pp. 275–302). Cresskill, NJ: Hampton Press.
- Probyn, E. (2005). *Blush: Faces of shame*. Minneapolis, MN: University of Minnesota Press.
- Rose, P. (2009). *"Pragmatism not idealism": Radiohead, technopoly, and the global movement for change* (Unpublished doctoral dissertation). York University, Toronto, Ontario.

- Rose, P. (2013). Silvan Tomkins as media ecologist. *Explorations in Media Ecology*, 12(3&4), 217–227.
- Rose, P. (2014). *Roger Waters and Pink Floyd: The concept albums*. Madison, NJ: Fairleigh Dickinson University Press.
- Roseman, M. (1991). *Healing sounds from the Malaysian rainforest: Temiar music and medicine*. Berkeley, CA: University of California Press.
- Russell, J., Bachorowski, J., & Fernández-Dols, J. (2003). Facial and vocal expressions of emotion. *Annual Review of Psychology*, 54, 329–349.
- Strate, L. (2004). A media ecology review. *Communication Research Trends*, 23(2), 3–48.
- Strate, L. (2005). Media transcendence. In L. Strate & E. Wachtel (Eds.), *The legacy of McLuhan* (pp. 25–34). Cresskill, NJ: Hampton Press.
- Strate, L. (2006). *Echoes and reflections: On media ecology as a field of study*. Cresskill, NJ: Hampton Press.
- Strate, L. (2008). Studying media as media. *Media tropes*, 1, 127–142. Retrieved from <http://www.mediatropes.com/index.php/Mediatropes/article/view/3344/1488>
- Tomkins, S. (1995a). The quest for primary motives: Biography and autobiography of an idea. In V. Demos (Ed.), *Exploring affect* (pp. 27–63). New York, NY: The Press Syndicate at the University of Cambridge.
- Tomkins, S. (1995b). Role of the specific affects. In V. Demos (Ed.), *Exploring affect* (pp. 68–85). New York, NY: The Press Syndicate at the University of Cambridge.
- Tomkins, S. (1995c). Script theory. In V. Demos (Ed.), *Exploring affect* (pp. 312–388). New York, NY: The Press Syndicate at the University of Cambridge.
- Tomkins, S. (1995dc). Revisions in script theory – 1990. In V. Demos (Ed.), *Exploring affect* (pp. 389–396). New York, NY: The Press Syndicate at the University of Cambridge.
- Tomkins, S. (1995e). The varieties of shame and its magnification. In V. Demos (Ed.), *Exploring affect* (pp. 397–410). New York, NY: The Press Syndicate at the University of Cambridge.
- Wolf, M. (2007). *Proust and the squid: The story and science of the reading brain*. New York, NY: Harper Collins.