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From *Dance!* to "Dance": Distance and Digits

The relationship between "art" musics and vernacular (or "popular") musics in Western society is complex and has a long history. From engagement and synthesis to incomprehension and antagonism, this relationship has reflected larger social trends—themselves the product of economic and technological change. Within this continuity, there are periods of intensified exchange. In the 1920s, for example, it centered on jazz, but in the 1990s the picture was not so clear. There is a cautious consensus that in the 1990s, there was a profound difference: art music itself appeared to be increasingly isolated as a minority interest (an old argument to be sure, but increasingly highlighted). Another major contribution to this polemic has been the ever-increasing access to sophisticated tools for music production that computer technology has enabled.

The Roots of Music

Let us assume that music has its origin in the earliest experiences of our evolution, namely in the body and in the environment.

The Body

The body generates many rhythms and sensations with cyclic periodicities lying within the duration of short-term memory. The most important are breath, pulse, and the limb movements of physical work, dance, and sex. These are a product of our biological evolution, our size, and our physical disposition in relation to the mass of the earth—hence its gravitational field—and would be different if we had evolved to be the size of a bat or an elephant, or if the earth had possessed a different mass.

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The Environment

The environment has a different time scale—with both periodic and aperiodic rhythms—and this is often beyond the limits of short-term memory. This often necessitates repeated listening and consignment to long-term memory, thus encouraging contemplation and consideration: water, wind, the seasons, landscape.

The body and the environment are in perpetual interaction, of course, but this interaction is sometimes uneasy. The relative values of contemplation and distance versus body action and involvement have varied from mutual support to outright hostility within the social fabric of different cultures. There has always been an uneasy relationship of altar to maypole—of a "modern" religion to its "pagan" predecessors—alternating dramatically between destructive and punishing anger and wholesale appropriation, adaptation, and absorption.

Early religious music of the European tradition articulated the contemplative (distanced) condition, banning nearly all aspects of body rhythm and expression for many centuries, aiming to create a sense of transcendental timelessness beyond that of the corporeal. Even breath was harnessed in the creation of long lines of chant, quite beyond the normal periodicities of regular breathing. While the description of a musical activity such as plainchant as "art" is relatively recent, it embodies in prototype many of the values of what was to become art after the Renaissance: distance, contemplation, and extended concentration. However, as Christopher Small (1998) has pointed out, strictly silent concentrated listening at concerts only emerged in the 19th century.

As the vernacular and secular European world invented "art" as separate from religion, the emphasis shifted back from the timeless to the clear articulation of time (through meter and rhythm)—increasingly so from the *Ars Nova*. This separation was finally crowned in the flowering of the Western art music tradition at the time of the Renaissance

itself, which increasingly threw the body and voice, dance and song, to the forefront of its discourse.

While we may not usually dance to the rhythms of the environment, we have an apparently insatiable desire for mimesis of its sounds and their relationships. From Jannequin's *Chant des Oyseaulx* through Beethoven's *Pastorale* to Debussy's *La Mer*, the relatively simple periodicities of dance and song became progressively extended and distorted through the influence of these "environmental" forces, finally being displaced altogether by the large gesture and the grand sweep of the elements (but always from a distance, in our imaginations).

The Rite of Spring (1913) is an example of this confrontation at its most unmediated, where the different rhythms of body and season meet in such a dramatic confrontation. The body dies at the end. This symbolic death was also very real: body and dance rhythms were never again to be central to the modernist aesthetic. *The Rite* left the world of art music a dilemma: neither the temporary "solution" of neo-classicism nor the continuation of Romantic rhythmic rhetoric in the serial works of Schönberg (which Boulez so detested) confronted this issue. This gauntlet was perhaps only picked up by Varèse and subsequently Xenakis, who progressively moved modernist musical languages towards the environmental—of which science since the Renaissance has been the most ruthlessly "objective," distanced, and contemplative tool. After 1945, science further expanded this environment to include the extremes of atomic and astronomic metaphors (for example, Stockhausen's "sound atoms" and "constellations"—both of which, interestingly, are pointillist).

The Revolution of Repetition

But then on separate continents, John Cage and Pierre Schaeffer gave the environment the apparently final and ultimate victory. Their meeting in 1949, their surprise at discovering the other had independently created the prepared piano, their shared delight in experiment with all sound and the power of recording to unleash its potential, remains a landmark moment as powerful as any of 1913.

But the technology possessed attributes that would never allow our binary divide to go away. Literal repetition of sound had been possible since the invention of recording, but constant repetition within a short-term memory time span had started as an accident. Schaeffer called it the *sillon fermé* ("closed groove"), which was soon followed by the tape loop. Schaeffer (and later Steve Reich) observed how such regularly repeated sound loses its source/cause recognition and becomes "sound for its own sake." Even words when repeated lose their meanings. Our listening focus changes, and we become drawn inward, immersed and perhaps even mesmerized.

Thus—ironically—the ghost of body rhythms, moreover those linked to repetitious dance, mesmeric immersion, and loss of self into the group, come bounding back at the very moment the environment had finally "won." A further irony—not lost upon those for whom popular music and minimalism are both equally at odds with "high art" ideals—is that such exact repetition could be seen as antagonistic to the body—a machine rhythm, a prison rather than a liberation. This was a perception exploited by Trevor Wishart in his classic work *Red Bird* (Wishart 1992, discussed in Wishart 1996, Chapter 8). Similarly, until relatively recently, Karlheinz Stockhausen overtly avoided metric music because of its connotations of militarism. A body rhythm had become a machine rhythm, as he wrote:

> ... marching music is periodic, and it seems in most marching music as if there's nothing but that collective synchronisation, and this has a very dangerous aspect. For example, when I was a boy the radio in Germany was always playing typical brassy marching music from morning to midnight, and it really conditioned the people (K. Stockhausen, quoted in Cott 1974, p. 28).

If the loop had moved the focus back within short-term memory, the MIDI revolution opened the door directly to the return of body rhythm to the electroacoustic medium. While not confined to any group of composers, this was clearly the case in the works of Alejandro Viñao (1990) and Javier Alvarez (1992), for example, who insisted on retaining a cen-

tral place for rhythm (sometimes based on Latin dance rhythms) within an electroacoustic milieu. This "instrumental" approach still maintained some distance from the source of its inspiration. As with the playfulness of Stravinsky's neo-classical rhythmic "slips" and ambiguities, such pieces could never be an invitation actually to get up and dance. This approach nonetheless opened up a postmodern engagement with a vernacular tradition.

Some Schaefferian purists saw this as a betrayal. For them, this was no "return" at all, but the reverse. It was simply the extension of electroacoustic technology—not music—into instrumental discourse which had more easily maintained a tenuous relationship with the "body" tradition—being in so many ways its extension. The advent of MIDI, combined with the near contemporary sampler revolution, allowed and encouraged the free mapping of performance (body) gesture to sound.

The development of affordable music technology in the 1980s addressed ever more detailed levels of musical information. Initially, the small personal computer was limited to the manipulation and storage of "events" (i.e., notes) in MIDI format. This handling of the simplest level of score and performance information allowed rapid application in the commercial music field, which had always been rooted in the world of the body, of dance and song.

But pertinent, too, is the fact that the music for "chilling out" away from the dance floor was often called *ambient*—a term and genre developed by Brian Eno from the mid-1970s (Tamm 1989, Chapter 10). Ambient music again shifted the focus toward larger time scales. These were also initially generated using tape loops, developing through ever longer spans. Thus, just as rhythm had once again "invaded" electroacoustic art music, so contemplation and distance re-entered the so-called popular streams.

Digital signal processing (as opposed to MIDI's event processing) produces more intensive computing needs. The information is richer, more detailed, and complex—especially as more became possible than the recording, mixing, and simple spectral manipulation available in the analog studio. Thus, affordable personal computers were not only able to address the Schaefferian tradition in the 1990s but were able to extend and enrich it with practical applications of other disciplines, such as mathematics (chaos and fractals), acoustics (physical modeling), linguistics (generative grammars), psychology and psychoacoustics (timbral and spatial manipulations), and information science (Internet applications).

In the meantime, the dualities of modernism had given way to the pluralities of the postmodern: the fragmentation, grouping, and regrouping of entities (Miller 1993). Old distinctions such as "classical" versus "popular" forms had become more difficult to make. The electroacoustic composer has many possible sources of influence and material. But as I shall argue in the second part of this essay, such plurality may become illiberal, and the possibilities of an emerging dominant monoculture may end up suffocating some minority attitudes and approaches, especially in music.

The first stage of "postmodernization" allows greater possibilities of interaction and exchange. As we have already noted for the electroacoustic composer of concert music, this has included the introduction of "world music" resources and a reengagement with the body side of our divided universe—even though this contact has been circumspect. But then there is "Dance" with a capital "D," which has itself fragmented into many pieces (techno, house, drum & bass, and so forth). Each of these is perpetually evolving, continually regrouping and interacting as befits an oral/aural music. More importantly, its attendant DJ and club culture has articulated new listening modes, integrating sampling and mixing into the act of listening itself. The composer–performer–listener relationship has shifted; this has been made possible and in fact encouraged by the technology.

While this might suggest the impending possibility of a final rapprochement between body and environmental musics, even a healing of the mind/body duality, there are dangers which we must pause to examine. In a world in which humankind has consciously manipulated so many aspects of the world (including its culture), it will become too dangerous to rely solely on a free-market and evolutionary model (i.e., "survival of the most marketable") to determine all of our musical

values. To attempt to unravel this dilemma, we must take a necessarily broad look at history.

From Involvement and Action to Distance and Contemplation

All music is functional. Whether to encourage productive movement (physical work); celebration, relaxation and entertainment (e.g., dance); or serious attention and contemplation; challenge and engagement; and critique and reassessment—music has a role that must articulate or support that function. Physical space and musical space are mutually supporting. But let us look again at these spaces. They overlap and can become juxtaposed or superposed; they coexist and interact.

A subsistence society will tend to have music that underpins and celebrates the work needed for that subsistence; only with surplus wealth and accumulation can there be room for a non-working class. In many societies, the first such groups to emerge were the priests, elders, and guardians. As we observed above, in the short history of Western music, plainchant is the first identifiable root for our Western art music.

First the church, and then the state (in the persons of princes and courts), patronized the arts. As their own functions grew further from the realms of repetitive physical work and their dance forms ever more formal and remote from the "vulgar vernacular," so their music reflected this shift to aristocratic ideals. Then, with the rise of the industrial middle class in the late 18th century, came the packaging of music (including art music) into a saleable commodity (Chanan 1994). Thus art music increasingly became a commentary (in metaphorical form) on the worlds of work and environment which I have claimed lie at their root. The sublimation of dance forms and a host of other signs and symbols from "outside" music is a major characteristic of classical music (Agawu 1991).

This distancing is a kind of quotation: *Dance!* becomes "Dance"; *Work!* becomes "Work"; and even *La Mer!* becomes "La Mer." Lines of demarcation are blurred and can shift over time. Dowland's galliards were probably composed to be danced to (even by Queen Elizabeth), whereas now they are concert music. However, with Mozart's minuets, some make one want to dance and may have been used as such, while others move a step away, on stage, "out there." Especially in the operas, they become metaphors for "those who dance." In the finale to Act 1 of *Don Giovanni*, for example, three dances are superimposed polymetrically to represent the characters and their differentiated social status.

In other cases, the shift from action to quotation is conscious and deliberate. From the idea of "arrangements" to its absorption into the symphonic tradition in the nationalist music of the 19th century, folk music lost its original function, which was replaced with an entirely new one. In the 20th century, the shift of jazz from a predominantly oral tradition to "art" has shown parallel developments. Of course, this evolution has given us a spectrum of forms of jazz, from those which retain their relationships to dance and entertainment to those which demand concentration and contemplation. The ghosts of these relationships, however, survive in our everyday tapping of feet or fingers to music, subconscious conducting of a band or orchestra, singing along to background music as it reinforces our body rhythms in shopping malls and train stations.

But the history of "art" has also been a history of exclusion from its productive processes, at first through simple need: only those with authority and wealth commissioned and consumed art. There are, of course, exceptions to this generalization (Italian opera, for example). But in general, we observe the association of art necessarily with the elite—inherited or meritocratic. Not wishing to devote an extensive argument to this simplification, I must summarize its contemporary consequences: there has been a tendency (fashionable since the 1960s) to associate art music with materialism, privilege, and possession. Ironically, in Britain this was subsequently reinforced by a right-wing populist government in the 1980s. Thus, forms of art became associated in the popular mind with social groups (no longer simply "classes") and their specific lifestyles, and were not properly perceived for any intrinsic qualities which they could potentially contribute to all people.

Our art music, then, is profoundly one of contemplation and distance. Through a glass darkly we glimpse into other places and spaces, other times and epochs. To say that we lose ourselves in the music means that we lose our corporeal sense. We put up with fixed and uncomfortable seats and the absurd lack of communication with our neighbors—the puritanical ethic that accompanies the ritual of the Western art music concert (Small 1998).

To participate in any ritual, we need to be informed—with background information and experience—to understand the codes. This is as true for the DJ/club as it is for the concert hall. It is as true for sampler-based quotation in some dance music as for Berio's *Sinfonia* or the "reworkings" of classics by Michael Nyman. But the double coding believed to be a characteristic of post-modernist art by Charles Jencks (1986) relies to a great extent on an understanding of history: a self-referential commentary. While art carries certain qualities of its place in history with it forever, there is another part which is profoundly contemporary—only of the here and now, the moment of its interpretation. Without "historical resonance," Purcell, Mozart, Berio (and his quoted material), and Nyman become contemporaries. Our successors may progressively fail to decode the references, quotes, and ironies. While Jencks' argument gives us some clues for a language of the postmodern, it is (quite understandably!) limited to visual codes. Without getting lost in an analysis of the many different "postmodernisms" in contemporary music, I wish to contrast two coexisting models of its overall condition. These are essential to understand if we are to have any hope of preserving the values of art music within such a new universe.

Two Views of Postmodernism

There are two ways of viewing the postmodern condition. On the one hand, there is a steady move towards homogeneity. The perpetual interaction of different traditions contributes in musical terms to the commercial globalization evidently increasing during the last quarter of the 20th century. This "porridge" view might be seen initially as an exciting and bubbling cauldron, but it might all too rapidly lead to a uniform "greying out."

The contrasting view emphasizes "islands" of strong ideology (many of them survivors of modernism) within coexisting institutions (possibly virtual ones). The coexistence of these centers is often polemical, with little attempt to share the language of their discourses, let alone their products. They have sometimes been characterized by an almost messianic streak of self-righteousness. We might see these as the salt and honey on the surface of the porridge: quite often in danger of envelopment.

Ecological metaphors might assist us at this point. Reliance on a single strain of wheat, for example, leaves us vulnerable to the possibility of catastrophe were this strain to be unresistant to a particular virus. In times of change, a system needs variety and plurality to innovate, adapt, and evolve. The preservation of this variety becomes a necessity; minority interests are not a luxury.

The radical modern position might be summed up as one against history and privilege, in favor of experiment (led by the "avant-garde") to renew tradition. In our postmodern condition, this could be rephrased as a position against monoculture, in favor of preserving variety (whereby minority interests flourish) to encourage innovation.

We need choice, but not a choice that obliterates and reduces variety, not a market that forces and enforces the uniformity of the majority. We must have alternatives and find alternative ways of developing and presenting the values of our art. How might these influence and be influenced by the new technology?

The problem must now be put in different terms. We no longer need to defend an "avant-garde," forging ahead into territory the rest of us will one day inhabit. This was an intrinsically elitist argument whose historical baggage is now a burden. But the transition from elite to minority interest can be a dangerous path. The old avant-garde assumed the values of the modern age. The key difference in our postmodern condition is that some may claim precedence and centrality within an assumed historical stream, but few will recognize such a claim. Each of the competing interest

groups in a noisy Internet environment will claim its own criteria for value and quality.

So what is needed is not a defense of art in a historical setting at all, but an advocacy of the need for its values—available to everyone. I am not saying that such values will inevitably be "consumed," but they must be better articulated and advocated and able to stand in a competitive and sometimes antagonistic environment without recourse to historical justification.

Technology, the Network, and Roles

The network will profoundly affect the notions of "popular" and "minority interest." Our constituency of interest becomes virtual and globalized. The action/contemplation split I have outlined is reflected within electroacoustic music as well. There is an increasing divide between electroacoustic composers who retain strong links with the concert hall tradition and those who are fast moving into clubs, galleries, and alternative public spaces as well as producing music intended for home listening environments. These latter composers confront the "sampled listening" habits of contemporary culture in which participants are often immersed in a montage of sound that reflects the continuous flux of contemporary society (Toop 1995) with a mixture of indifference and challenge. It's simply "there," something to work with and not against.

The very tools of production that appear to be a key to the current dominance of the popular/commercial world can in fact be used to turn the argument on its head. The very issue itself may now be transformed.

While the body/environment duality and the interpenetration of musical forces is (as we have seen) not new, most interaction to date has been adversarial or at least hierarchical. The crucial difference this time around is that inexpensive technology blows apart the clear hierarchy of access to tools that was true of the 18th–20th centuries (the common practice period of Western art music—a concert hall commodity). An elite possessed the space and time for contemplation and the means for its generation—its "technology."

New technology allows a far greater proportion of us to regain control over our own space and time. The new idea of "mass customization" now fast replacing the "mass production" of the 20th century could extend into the world of music. In artistic terms, we can begin to shift the focus back from the producers functioning mysteriously beyond the proscenium arch to those on this side—the ever more active consumers. A reappropriation of contemplation and distance, consideration, and creative comment is enabled through technology. We thus have access to those qualities of life previously the domain of the patrons of art, potentially empowering us in terms of space (anywhere), time (any time), and role (composer/performer/listener: anybody). Until the last decade of the last century, these functions were strictly fixed, demarcated, and separately remunerated. The system's metaphor was the factory.

In freeing up these functions of space, time, and role, an apparent observed result might be silence or noise, if an artistic creation could exist or happen in any place at any time without any guarantee of a listener's being present. But of course humans are active and intelligent agents, and the more appropriate and communicative combinations will survive, while the others will simply disappear. The metaphor shifts to the biological and ecological.

Thus, there will form a network of space/time/role relations that will indeed fix each for a specific exchange (real or virtual) but will reconfigure for the next event—something impossible within "traditional" divisions of labor. I would add, contrary to popular opinion in the first years of the Internet, that real physical encounters will remain vital. The virtual concert will supplement and not replace the real arena of social discourse, just as the drum machine supplemented and did not supplant the real drummer. In his book *Deschooling Society* (1971), Ivan Illich argued and predicted that the power of such networks needed a balance of pointers to objects, information, and people to fulfil its educational promise.

On Quality: Electroacoustic Music

There is a very special contribution that electroacoustic art music can make to this discussion. It has a

special relationship with commercial musics through the similarity of the tools of its production (digital technology) and performance (the loudspeaker). If, as I am arguing, the values of art music are being lost as its sociology becomes discredited history, electroacoustic music may make a vital contribution—as a minority interest (or a group of such interests)—to enrich and counterbalance the prevalent popular musical forms with their basis in the body and dance, to enable comment and question, and to allow the listener to contextualize and increase awareness.

There are four key qualities that are in need of clear articulation and to which electroacoustic music can make a fundamental contribution. The first two relate to the nature of the material and the act of listening, the third and fourth to the sociology and technology of performance.

1. A quality of listening: detail and discrimination
2. A quality of concentration: depth and duration
3. The revitalizing of performance spaces
4. The revitalizing of performance practice

The elements of music that carry the musical "argument" have shifted continuously over the last fifty years. In all genres of recorded music, sound quality (in its broadest sense) has become ever more important. It is the predominant carrier of "meaning" (however that is defined) in electroacoustic music.

While pitch may be coded on a single dimension, timbre is essentially multi-dimensional (Wessel 1979). Much pitched music contains hierarchical relationships that may more easily be grouped and reduced to knowledge structures in human memory. But the multidimensional nature of timbre contains some dimensions that may be similarly treated but others which are less capable of bearing musical form (McAdams 1989). Whatever the relative merits of pitched and timbral musical "arguments," a more complex musical material demands a more detailed listening mode to extract its salient features. At its best, it encourages repeated listening as a necessary tool for enriched appreciation.

This concentration on the sound totality itself as the signifier (and not a reduced and abstract subset of it) enables and encourages these qualities. It further has the power to revitalize the social aspects of art music.

Electroacoustic music challenges the standard concert space, which is plainly inadequate to contemporary artistic need and invention. The audience wants mobility, variety, and choice. The space/time of the Internet is flexible but alienated. To encounter another and to be convivial, we still need a degree of fixedness, an agreement to a ritual. But if "modern" rituals were monothematic (following ancient models), postmodern rituals may be plural and open works. To be specific, different listening spaces may coexist.

Firstly, our listener may seek a multimedia space, mixing music, visuals, and socializing. Here, the listening is sampled and serendipitous, layers may superpose in unexpected ways, and the experience is truly immersive. Furthermore, the experience could not be the same for any two members of the gathering. Its origins in the events and happenings of the 1950s and 1960s are carried through today in more experimental club culture and its offshoots.

Secondly, our listener, seeking the heightened experience that intense concentration affords, may wish to move to an auditorium where this is allowed and encouraged. Even here, though, we need not fix the seats or possible listening positions, and a three-dimensional experience could be created even with the presence of live performers. The attraction of this solitary yet shared experience should not be underestimated: its current low popularity as part of traditional concert experience may be owing to the issues of history we have discussed.

A further space might be an installation space. A hybrid of the previous two, this space might encourage contemplation and concentration, but allow, too, a timescale and "artistic route" defined by the individual listener/observer—while remaining in strong social contact with those around.

Our three spaces become even more radically disposed when we consider the possibilities of the integration of art and audience. The erosion of listener/performer/composer distinctions has been noted. We have seen the emergence of interactive art in which the artist still creates an object or process but which requires the onlooker to influence the final

experience. But we might suggest further stages in which the creative responsibility moves yet further towards the participant. Here, the boundaries of performance and creation become fluid. We have remarked that technology has empowered and enabled a reappropriation of creation and distribution through the affordable home studio, and "performing" on the Internet to a virtual audience is now a well-established phenomenon. Public art spaces—the spaces of social intercourse—will need to adapt to allow a similar dissolution of distinctions between audience and performer.

Electroacoustic music is the only musical genre able to address these issues in any more than a superficial way—not responding to change but suggesting it, provoking it.

On Observation and Argument

This article is not merely observation. Even scientists have long since abandoned the Newtonian idea that the observer is somehow outside the system observed. All artists have a point of view and cannot feign objectivity. It is paradoxically by understanding history, stripping it away, and reconfiguring the argument in contemporary terms that we may stop "defending" art and move to a clearer advocacy of its contribution to society: "Art is dead! Long live Art!"

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