

# ***http://Web.La.Radia: Comments on the Social, Economic, and Political Aspects of Media Art and Art Technology***

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## **Abstract**

This informal essay addresses the current status and trajectory of media art and media technology. In formulating my ideas on these topics, I found myself being drawn away from my usual technical concerns, and increasingly to the sociology, economics, and political relationships of electronic media art and its modes of production and dissemination. There are several rather bold statements below on the subject of new media art and art-making on the world-wide web, and I rely heavily on a series of quotes taken from the literature to make my points, without the implication that I necessarily agree with every one of them. I take a critical stance in these comments, but still do not wish to be considered a “web-Luddite.” I use the web daily, and it is a major component of my research. On the other hand, I am very concerned by several trends I see in the web culture and feel that it is necessary to draw attention to them.

## **1 Music, Technology, and Media**

A number of media theorists have noted that the most important changes in the performing arts that have come about due to 20th-century technologies were precipitated by two inventions that trace their roots back into the 19th century: recording and broadcast. Sound (and later visual) recording gave the audience freedom of time—one did not have to hear (watch) an event in the same moment as its production. This technology also gave rise to the notion of direct archival of artifacts (recordings) rather than of spoken or written accounts, which had served as the medium for the recording of history up to this time. The advent of radio (and later television) broadcast granted the 20th-century audience freedom of place—an event taking place in one city could be simultaneously “witnessed” by audiences throughout the world.

With respect to how these technological advances have changed our relationship to the arts, however, “many of the elements that are supposed to provide access to music actually impoverish our relationship with it” (Michel Foucault in *Contemporary Music and the Public*). Now that music-making and music-consuming are completely disjoint for the majority of listeners, “music has [...] shifted from a medium of creation to the excessive archiving and consuming enterprise that Jacques Attali described [in *Noise: The Political Economy of Music*]” (Dominique Richard in *Computer Music Journal*).

Three more recent developments based on the digital technology of the 1970s give us three more “degrees of freedom.” Digital sound synthesis gives the musical performer freedom of gesture—one can control an organ sound with the gestures of playing a saxophone, for example. Digital recording and CD mastering give musicians

freedom of production—there is today no significant technical differentiator between “low-budget” and “high-budget” recordings. Lastly, electronic distribution, especially via the world-wide web, gives creative artists freedom of availability—one does not need a major marketing organization and widespread distribution channels to find an audience for one’s music, graphics, or video.

Many voices in the community have noted that the new media have not brought significant new art forms or aesthetics with them. “The new face of computer music is as shallow as it is broad. [...] Rather than promoting research into basic musical questions, most computer music now merely substitutes newer, cheaper technology for strings and pipes. In that sense, the field of music has effectively ‘absorbed’ computer music with little or no effect on what music is produced or our understanding of it” (F. Richard Moore in *Computer Music Journal*).

## **2 The Sociology of the New Media**

### **2.1 Technologies that Empower, Equalize, and Free—or Separate, Rigidify, and Stratify**

Technology is, by nature, socially neutral, but much can be determined by how a new technology is applied within a society. Especially in the 20th century, we have seen examples of new technologies used to link people together, to lessen the distance between the “haves” and the “have-nots,” and to make it easier for every person’s voice to be heard. Media theorists often point to the telephone as a good example of such a technology; they cite the fact that (in the developed world, at least) telephones are widely available and relatively inexpensive. This is, however, largely due to the fact that telephone service has historically been either entirely state-run (as in most of the developed world) or heavily regulated (as

in the USA). Because of its generally wide availability, we have also tended to lose sight completely of those who—because of choice, poverty, geographical location, illiteracy, or other reasons—do not have access to telephones; they are simply no longer members of society. Seen politically, this aspect of electronic technology has led to an even more strongly stratified society. It has “helped to build the sense of deprivation of man’s birthright, and that sense of deprivation has played a large part in the national revolutions of post-war Asia” (Indonesian dictator Sukarno, as quoted by Marshall McLuhan in *The Medium is the Message*).

This example is intended to show how the same technologies that can be said to empower people, and to lessen the stratifications within society, can in fact separate us even more and further enforce economic and social boundaries. Thinking of the unrealized positive potential of the new media, I am reminded of a 1960s satirical drawing (from *New Yorker*) that shows an adult couple sitting before their television with one of them saying to the other, “When you consider television’s awesome power to educate, aren’t you thankful it doesn’t?” (*The Medium is the Message* p. 128)

## 2.2 “Technology, Commodity, Power” and the New Media

The technologies of recording and broadcast have been widely recognized as instruments of economic and social power, and have also been widely exploited by large corporations according to the capitalist value structure. “Music has always been about power. Sound itself is power, and it was very clearly understood in that sense in traditional cultures. Empowerment is then represented in socially and economically determined sites, from sacred sweat lodges and Stonehenges, to cathedrals and courts, to concert halls and universities, to ABC and MTV. [...] Technology itself is also quite clearly about power. All tools empower their user [and] electronic media are the empowered sites of our time. [...] They are the very core of power in an industrial economy” (Roger Johnson in *Computer Music Journal*).

Because there is no mass market for it, and no social power associated with it, art is being marginalized and replaced by entertainment. “The social status of modern music is characterized by the fact that an innumerable mass of people from all classes and layers of the population consider entertainment music as such, and do not even know that modern [art] music exists. It is moreover impossible to correct this view. [...] Entertainment music is the modern instrument of power” (Heinz-Klaus Metzger in *Music in the ‘Entertained Society’*).

## 3 Art in the Commercial Age

The three major shifts in the art world brought about by the emerging commercial age are (1) the transition from use value (the value to the producer) to exchange value (the value to the consumer) as a metric in the arts; (2) the centralized (and economic-based) decision-making related to arts production and distribution; and (3) the centralization of control of the electronic media. One can identify the 1970s as the dawn of the commercial era in both popular enter-

tainment music and in art music practice. In the 1980s, CD technology brought the “freedom of production” described above, and the 1990s Internet technology promises “freedom of distribution.” The problem is that all of these technologies rely heavily on large corporate structures in order to function; even though the Internet is currently a haven for “cottage” industry, there will inevitably be a consolidation of power in a small number of large corporations, just as there has been in every other powerful media- and technology-related industry.

### 3.1 Mass Market Exchange Value as an Artistic Metric

Creative artists, especially in the USA, have long lamented the predominance of the market as the determinant of artistic success. “Approval-seeking behavior aimed at the general public is considered inappropriate in creative individuals [...] but is seen as positive or even essential in commercial enterprises. [...] The desire for public approval can be as inhibiting to technological or scientific creativity as it is to other creative arts. [...] Profound and powerful changes have resulted from the dissemination of computer-based technology through market channels—essentially, from computer music’s commercialization, [...] the transition from use value to exchange value as the common and expected motivation for technological R&D for musical applications” (Laurie Spiegel in *Computer Music Journal*).

### 3.2 Centralized Decision-Making

Although the Internet has historically been praised as “the world’s largest functioning anarchy,” it is rapidly changing as governments start to regulate it and large corporations get more and more involved. “The tendency toward decentralization, even in the face of the enormous concentrations of power in the entertainment and broadcasting industries, is an exciting and optimistic sign. [...] In some circles, there is an argument that technology and information systems invariably decentralize and thus challenge the very powers that created them. This has a utopian and romantic ring to it” (Roger Johnson in *Computer Music Journal*). “The paradox is that there is a highly personalized, contained art that fits into the confines of a small screen, and yet that belongs to a global network that relies on a huge governmental or otherwise bureaucratic entity to support it. Personal computers may be just that [personal], but the technology needed to make them talk to one another [...] relies on just the kind of establishment that networked art is trying to subvert” (Richard Povall in *Computer Music Journal*).

### 3.3 Control of the Media

The optimist believes that new media art will break down the traditional “art delivery systems” and replace them with an open pluralistic anarchy run by artists. “Electronic art has little or nothing to do with traditional gallery or concert hall spaces. It is a medium that belongs in the ether, and one that is capable of entirely new models of presentation and creation. If the [galleries and concert halls] are not to become marginalized themselves in the next century, then they need to be paying attention to their models of func-

tion and presentation, and to their relationships with creators and audience. The electronic artist is also at fault in attempting to fit within this tired construct” (Richard Povall in *Computer Music Journal*).

The same author, however, states that “true guerrilla art is almost oxymoronic on the net, and net artists tend to be those individuals with the most highly developed technological sensibility—white, young, male, educated, middle class. [...] The capitalist dream of ultimate world domination (actually, forget the domination, just read ‘vast profit’) is challenging the very concept of a free network, and even the political visionaries are seeing the profit potential in the world-wide web” (Richard Povall in *Computer Music Journal*). Even though I am frequently quite optimistic, I believe it to be hopelessly unrealistic to expect the current state of affairs—with many small-scale not-for-profit web content providers and “cow-boy” Internet service providers being the rule rather than the exception—to continue. I can only cite the histories of radio, film, television, and recording as precedents. “Surely there are reasons to be apprehensive about media regulation. The whole history of state censorship counsels against it. But the increasing concentration of media outlets in a few powerful hands is creating a compelling counterargument—that ‘the state might become the friend, rather than the enemy, of freedom’ as Owen Fiss puts it in his new book, *The Irony of Free Speech*.” (Andrew Shapiro in *The Nation*).

## 4 Some Observations on the Web

I would now like to address the world-wide web and its related technology. Historically, it is important to note that the theoretical underpinnings of the web come from the hypertext experiments of Douglas Engelbart and Ted Nelson—work that was centered around accessing stored text in a non-linear fashion, and on multi-user interactive collaboration. The two standards on which the current web is based—HTML and HTTP—are aimed at representing and distributing text and still images. There is no provision in them for dynamic images, sound, music, or active behavior—these have all been added on as afterthoughts and are currently handled by web browsing software via a collection of different scripting languages and mutually incompatible, non-portable “plug-in” software modules.

### 4.1 The Web as an Art Medium

It is widely acknowledged that “the content of every new medium begins with that of its closest prior relative” (Marshall McLuhan in *The Medium is the Message* [paraphrased]), as the examples of early cinema and television demonstrate. The arrival of new media may also have a liberating effect on the media that they augment or replace. “It is no accident that the style of impressionistic painting followed closely on the heels of the invention of photography. Photography freed painting from the need to be pure representation” (Umberto Eco as quoted in *The Nation*). (This raises the natural question of what effect web-based publishing and distribution might have e.g., on the print media.) The creator, however, is often the driving factor in the limitation of a new medium. “Those who

adopt a new technology that they themselves did not create tend to expect [it] to solve problems inherent in whatever older, more established technologies they were accustomed to using. The new is usually seen through the filter of the old, and may be altogether invisible through that filter” (Laurie Spiegel in *Computer Music Journal*).

As has often been seen in electroacoustic music, there is also the danger of being enthralled by the technology and losing sight of the aesthetical goal. “The jury found that we were magically attracted to what we dubbed ‘true’ Net pages—home pages that use technology and narrative structures that are only available and only meaningful on the Net, and try to take those a step further. [...] On the down side, these true Net pages sometimes gorge themselves on new Net technologies, in spite of the fact that they don’t yet know what to do with it” (Statement of the WWW Jury, Prix Ars Electronica 1996).

### 4.2 The Web-Station as a Performance Space

In Leibnitz’s best of all possible worlds, the web-connected computer could be an excellent performance space (just like the television-based home theater systems). “Electronic art—and by this term I mean all the accepted forms that constitute electronic art—is, ultimately, a personal medium. It tends to be as trapped within its means of reproduction as it is within its means of production (despite its paradoxical potential for instant worldwide transmission), and should be enjoyed by the individual or small group in an environment where that means of reproduction can flourish—the home, the computer screen, the telephone, the bar, the automobile” (Richard Povall in *Computer Music Journal*). The most critical problem with this stems from the use of the web as a distribution medium for multimedia content (see below).

### 4.3 The Web as a Distribution Medium

One of the greatest advantages of the web, and also its most fatal short-coming, is its “portability”; web browsers run on all manner of computer and terminal, even text-only terminals with no facilities for graphical display, let alone multimedia output. Due also to the finite bandwidth of the underlying wide-area networks, and variations in the home-to-host connection, it is impossible to configure a multimedia web site for truly universal consumption (a major portion of our research at CREATE is looking into solutions for this). In the new world, it seems that the line between “haves” and “have-nots” is drawn according to who can afford enough bandwidth to run their web browsers with image display turned on (without suffering the “world-wide wait”). Note also that this situation can only be expected to be exacerbated by the introduction of new kinds of web-TVs, web-boys, palm-top web surfers, etc., many of which will provide less resolution, lower bandwidth, and fewer multimedia output facilities.

“The [other] major problems to be addressed in the evolution of computer-mediated [content] distribution are not just the obvious technical ones of bandwidth, quality, multimedial formats, and Internet protocols. These are all being worked on already. The major problems [...] stem from the entrenched legal and economic

structures, which will fight their own obsolescence, and for which no adequate replacement structures have yet been designed” (Laurie Spiegel in *Computer Music Journal*). This situation is indeed very different from that at the time of the introduction of the telephone. None of the “competing” media sought to control its commercialization, and there was general agreement about the role that the state should play in its introduction and regulation.

#### 4.4 The Web as “La Radia”

So what is the dream? Anyone who spends time reading about the web will come across ecstatic proclamations about its potential to serve society via education, the arts, public information, and other aspects (e.g., commerce). In looking for a good expression of the vision of what the web could be (were it not for all of the forces I have been discussing), I was reminded of the Italian futurists of the 1930s and their grand utopian design for the use of radio: La Radia.

“La Radia, the name that we futurists give to the great manifestations of the radio is:

- (1) realistic;
- (2) enclosed at a fixed stage;
- (3) idiotized by music that, instead of developing toward greater originality and variety, has attained a repulsive, gloomy, or languid monotony; and
- (4) a too-timid imitation of the futurist synthetic theater and words in freedom for the writers of the avant garde.

[...]

La Radia *must not be*:

- (1) theater, because radio has killed theater already defeated by sound cinema;
- (2) cinema, because cinema is dying:
  - (a) from rancid sentimentalism of subject matter;
  - (b) from realism that involved even certain simultaneous syntheses;
  - (c) from infinite technical complications;
  - (d) from fatal banalizing collaborationalism;
  - (e) from reflected brilliance inferior to the self-emitted brilliance of radio/television;
- (3) books, because the book, which is guilty of having made humanity myopic, implies something heavy, strangled, stifled, fossilized, and frozen.

La Radia *abolishes*:

- (1) the space and stage necessary to theater [...]
- (2) time;
- (3) unity of action;
- (4) dramatic character; and
- (5) the audience as self-appointed judging mass systematically hostile and servile, always against the new, always retrograde.

La Radia *shall be*:

- (1) freedom from all contact with literary and artistic tradition (and attempt to link La Radia with tradition is grotesque);
- (2) a new art that begins where theater, cinema, and narrative end

- (3) the immensification of space (no longer visible and frangible, the stage becomes universal and cosmic);

[...]

- (6) a pure organism of radio sensations; and

- (7) an art without time or space, without yesterday or tomorrow”

(F. T. Marinetti and Pino Masnata in *The Futurist Manifesto*).

This manifesto represents an aggressive plan to create a new populist medium that surpasses all previous media in immediacy, passion, and social relevance. How does today’s commercial broadcasting live up to this vision of 64 years ago? To what extent can we expect the web to do so?

## 5. Conclusions

My comments above are not intended to cast doubt on the potential of the world-wide web to serve as a medium for artistic expression; in fact, much of the research at the CREATE center where I work is focused on developing new technology for web-based art, and several of our creative students are busy creating “web-works.” I am, however, very concerned about the web’s future as an open, non-commercial anarchy, and skeptical of its ability to live up to all of the expectations we have of its future. Perhaps it is a function of my recent move from the San Francisco Bay Area (where I had lived for ten years) to “within earshot” of Los Angeles (and Hollywood) that is making me so wary of the gradual commercialization of the web, or maybe the combination of this with my on-going frustration about the state of the public broadcast media in the USA, and the recent deregulation of the telecommunications market, and the incredible consolidation in the entertainment media industry in the last year, and the cut-backs in public funding for the arts...

It is my hope that this essay will trigger a lively discussion of the issues it raises, and perhaps lead to deeper insights into the sociological, political, and economic aspects of the future of distributed multimedia. I do believe that this understanding would allow us to better control the development of the new media.

The problem that I see is that the new media do not seem to be helping to solve the crises of aesthetics, audience relations, social relevance, and economic power in which the arts find themselves today—crises that were created, or at least exacerbated, by the media of broadcasting and recording. “Art and discourse in the 19th century distorted and idealized the external world and celebrated it as Beauty. Modern art celebrates alienation from that world and idealizes it as Freedom” (Carol Duncan in *Socialist Review*). The opportunity is that we keep the web alive and free as an exciting playground for experimenters of all sorts looking to invent new forms of narrative, collaborative creation, and personal expression. “New information and entertainment services are not waiting on fiber to the home; they are waiting on the imagination” (Nicholas Negroponte in *Being Digital*). I remain torn between these two perspectives.

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