# Towards the Work of Art in the Age of Digital Simulation: Walter Benjamin Revisited

*Geir Sigurdsson*

I. Introduction

In a discussion of the relationship between art and technology it has become something of a convention to remark that the Greek word for art was *techne*, from which the term 'technology' is derived.[1] This etymological reference is not so frequently made in order to substantiate an already established relationship, but on the contrary to point out that the strong tension usually considered to hold between art and technology is a kind of historical paradox. For originally, if we take ancient Greece to be the cradle of Western culture, there was no distinction made between them. By having them subsumed under the term *techne*, Greek writers understood both art and technology as 'the power to produce a preconceived result by means of consciously controlled and directed action', to quote R. G. Collingwood's definition.[2] As Collingwood is quick to point out himself, however, this definition is obsolete for art as we understand it today. Although we do not have an adequate definition of art, and probably (perhaps also hopefully) never will, we do not generally consider art works to be products in the same sense as, say, manually assembled lawnmowers or mechanically manufactured rubber gloves. One apparent difference between art and a technical undertaking is that, in the latter, the finished product is normally decided upon beforehand — and often by others than the one who actually does the work — whereas this is more an exception in the former. Another would be the tendency — one that already finds its expression in Kant — to make different and perhaps

incongruous evaluations of these products in terms of either their aesthetic or their functional qualities.

At the outset of the twentieth century, the general attitude towards technology was extremely positive, even to the point of being reverential. The early proponents of modernism, with their explicit agenda of progress over tradition, are of course the embodiments of such a standing. To be sure, there were certainly *some* cases of artists and designers who, while otherwise being largely modernist in their dispositions, tended to see technological progress as a threat rather than a blessing, but these were relatively uncommon. Let's not forget that modernism was not a coherent unified movement in any sense of that word; the term rather refers to all the streams of thought responding and reacting to the great transformation of society that resulted from the political, scientific and technological revolutions that had taken place in the eighteenth and nineteenth centuries, such as the upheaval of the empirical sciences, the rise of individualism and of the bourgeoisie, and last but not least, the industrial revolution. Belonging to the modernist category are fundamentally opposed movements such as the futurists and the socialists, both of which welcomed technology, but for very different reasons. Whereas the futurists glorified the aesthetic quality of the machine as a symbol of society's radical transformation and evolution, the socialists praised technology for its accelerative effects on the mode of production which they believed would facilitate the advent of a classless society.

The atrocities of the two world wars, however, resulted in a much more ambivalent attitude towards technology, and it was then that art began to take on a role as a counterweight to the dehumanizing forces of technology. A philosophical representative *par excellence* of such a view is the later Martin Heidegger. One of the claims in his seminal essay from 1954, 'The Question Concerning Technology', is that art is opposed to technology in its mode of relating to the world. The world, or Being, reveals itself to the technological mind in a way which he calls 'enframing'(Gestell); that is, as a

desacralized standing reserve (Bestand), a stock of energy or commodity.[3] Art, on the other hand, can disclose entities for their own sake, reveal things as things, in their individuality, their depth, their being. It thus opens up a poetic or aesthetic sensitivity towards the world which enables us to have a meaningful relationship with Being, but also with technology itself by 're-anthropologizing' its determination, since it brings our manner of relating to the world into balance, by disclosing it as not merely a bulk of material to be exploited for our own use, but as a source of value and truth. The kind of art Heidegger has in mind is meant to transcend the subjective concentration of modernist aesthetics and eventually lead to the reunification of (craft) production and art in *techne*.[4]

Now the technology of Heidegger's concern is the machine age's technology of nuclear energy, large-scale industry, the conveyor belt and mass production, which in essence is also the technology that fascinated the futurists and the socialists. Whilst such technology is certainly still a strong feature of our late post-industrial capitalistic era, the notion of technology rather makes us think of cybernetic systems, computer networks, biogenetically engineered organisms, robots, or even androids. This technology is predominantly electronic, not mechanistic, controlled almost exclusively through the operation of the computer. Incidentally, the computer has also become the most innovative medium for art. Admittedly, computer art, or cyberart, as I will call it here, may still be in an experimental stage. However, it already comprises a multiplicity of highly different art forms, such as media art, multimedia art, interactive art, net art, electronic art, telepresence art, and much more, which are all created and circulating in the various spheres of modern society, from e-commerce, through the universities, to the art galleries and museums. Its functional capacities and potentials are continually being expanded, both by means of new technological innovations, as well as the aptitude of artists to appropriate and utilize the possibilities of their media. Owing to its recent development, especially after the World Wide Web was made public in 1995, its effects on our notion of the

work of art, our perception of the world and of society as a whole, have not yet been fully ascertained.

While I shall be exploring some of the latter issues at the end of this paper, my focus will be on Walter Benjamin's Marxist analysis of the effects he believed film and photography would have on our conception of the work of art, and on the function he wished to assign art in his political philosophy. Benjamin serves a twofold purpose in this paper. First, he provides me with a philosophical perspective from which to compare the different effects of different media on the work of art. While not always lucid, Benjamin's analysis is, I believe, insightful and challenging, and remains up-to-date precisely through the latest electronic innovations in art media, to which many of his ideas can be extended. Second, it seems to me that at least some of his observations may be more applicable to the development of the digital 'revolution' we have been witnessing in the last few decades than to the emergence of film and analogue recordings with which he was concerned. This pertains no less to his political theory of art than to the more technically (or 'purely') aesthetic inquiry.

Although these two aspects of Benjamin's analysis — the aesthetic and the political — are not readily separable, I shall attempt to single them out, respectively, in the next two sections. The final section, as I have already suggested, will present a somewhat brief look at the latest fusion of art and technology in the light of Benjamin's discussion of the new media of his own time.

II. Aesthetics in the Age of Technical Reproducibility: Walter Benjamin

About sixty years after the first instrument was invented to produce photographs mechanically in 1837, the moving pictures appeared on the screen for the first time. Only a few years later the possibility of sound recording also put an end to their silence. Photography, film, radio and music recordings changed the perception of the world. It seemed

that events, occurrences and things that before could only be perceived by a limited number of physically present individuals could now be lured into some kind of magic bottle and then let out again in a different time and space to be presented to an entirely different audience. Technology had once again achieved magic.

In his essay from 1936, 'The Work of Art in the Age of Its Technical Reproducibility', Walter Benjamin investigates the effects of this new technology on art and our understanding of it. He believes that the innovative art forms of photography and film will eventually replace older forms such as painting and theatre, and that they are already in the process of bringing about a qualitative change in the art work. This change is characterized by a destruction of what he calls the art work's 'aura'. This rather mysterious concept refers both to the work of art as such and to the way in which we tend to relate to works of art. A confrontation with an original art work of great quality often inspires feelings of elevation, reverence or even awe. Benjamin argues that the apparent sacredness of art works derives from the sacred 'cult value' of art which it obtained through its original ritual function. During the long process of the secularization of art this cult value has gradually been replaced by 'authenticity', which is constituted by the art work's unique particularity. It then has taken on a value in itself, detached from any kind of external function, except perhaps as a commodity. The late nineteenth century doctrine of art for art's own sake, which Benjamin calls a 'theology of art', represents the peak of the demand for art's independence of any kind of social function.[5]

It is precisely this notion of the autonomy of art which is at stake here. With the advent of the technical reproduction of art, Benjamin argues, it can no longer maintain its autonomy as an end in itself. By 'de-auratizing' the work of art, it becomes a part of the mundane world, just like any other thing, and thus requires an external criterion of value in terms of *function*.

Benjamin grants that authenticity cannot be reproduced, neither manually nor technically. It is ontologically inseparable from the original work of art. While the authentic original maintains its full authority in the case of a manual reproduction or a copy, however, it is not the case with technical reproduction. The reason for this is twofold. First, the technical reproduction turns out to be more independent than the original, whether it be the object of an art work or the art work itself. Photography, for instance, can highlight only certain aspects of its original object, distort it through the use of special lenses, or cut up and paste together disconnected parts of it through photomontage. Secondly, it can bring a copy into circumstances which for the original would be inconceivable. Instead of the observer or listener having to access the original in its location, the copy can now be brought to him, for example, in the form of a photograph or an LP: 'The Cathedral leaves its place to find appreciation by a connoisseur in his studio; the choral work, performed in a hall or under the open sky, can be heard in a room'.[6] In essence, the original is unchangeable and only partly mobile, while the copy can be changed in any way one pleases, and because of its mass reproducibility, be moved anywhere. But in the first case, one may ask whether Benjamin is speaking of 'true copies' (to use a kind of oxymoron), and in the second, whether he is not reducing quality to quantity by overly valuing the possibility of an indefinite distribution of art by means of its speedy reproduction. These issues are actually intimately related.

A 'true copy' would seem to require all, or at least most of, the attributes of the original. Such a copy of a painting, for instance, would at least have to appear to be painted with the same kind of paint on the same kind of canvas. A mere photograph of a painting would hardly suffice to count as a 'true copy', and even less if the artist had somehow deliberately distorted it —by rearranging its symmetry through montage, for instance. Similarly, a recording of a concert in Benjamin's time must have been greatly inferior in quality to the concert itself. Although a piece that before could only be heard at the site where it was being performed

could now be heard in thousands of private rooms, it would be questionable to equate the two — for the simple reason that the copy would be bad. The recording would, of course, deliver the *same* composition as was played at the concert, but the conditions for having the same *experience* of it would be largely different — and probably much worse.[7]

In the case of art works that are originally created through photography and film, however, Benjamin seems to be right. It makes little sense to speak of the original photograph or film, since their reproductions are practically indistinguishable from the original. But why is it, then, that we make so much fuss when comparable situations arise in the case of painting; that is, when a copy is so close to the original that its true identity can only be revealed by means of precise scientific analysis?

Benjamin's argument is that the new art forms will eventually replace the traditional ones, such as painting and live concerts, and thus bring about a total collapse of the reverence with which we tend to approach art works. Although it is true that the traditional art forms' share of the art world has been reduced somewhat, this prediction has not turned out to be entirely correct. 'Authenticity' is still one of the fundamental categories for appraising art, and not merely for the sake of assessing its market value.

Most of us would probably be of the (for Benjamin, decadent) opinion that an excellent reproduction of an art work, even if visually indistinguishable from the original, would *not* be another instance of the same object, because it would not be the same 'physical object'. For example, upon learning that the beautiful old town square in Warsaw is a 'mere' post-war replica of what it used to look like before 1944, a person's perception of it tends to undergo a curious metamorphosis whereby he or she suddenly considers it in some way less worthy of admiration or respect — what was 'delightful' before learning its history now becomes, certainly not 'ugly', but 'nothing special'. In a rather Benjaminean fashion, Eddy M. Zemach calls such a position an 'irrational reverence' and a 'sort of fetishism in art',

whereby the material is falsely identified with the art work itself. Artefacts, he argues, are 'types', not 'unique particulars'. We value certain paintings because of their arrangement of colour expanses, and this arrangement defines a certain thing:

> The thing may coincide (for a while) with a certain canvas, but there is absolutely no reason why it . . . cannot also coincide with other canvases at the same time, or at different times: reproductions (on other canvases) *are* the same painting.[8]

In fact, Zemach takes a stance rather more radical than Benjamin.[9] He locates the original work of art, not in the physical thing itself, but in its non-physical image. Therefore, all instances of the same image (presented in its original form) are the same art work. Now it is not my intention to evaluate Zemach's claim for the moment. His argument is relevant to my discussion in that it brings up an important ontological question about the art work, a question which has become even more compelling today, namely concerning its locative being: where *is* the work of art? I shall readdress this question in the final section.

## III. Benjamin's Critical Aesthetics

Although Benjamin seems on the surface more descriptive than prescriptive in his analysis, he has an explicit political agenda. He sees the new mass media as both symbols and causal factors of an era in transition in which technological progress has the potential to serve as the foundation for political progress — the latter meaning, to him, the liberation of the masses from the exploitation and alienating powers of capitalism. This possibility arises from the effects that the new forms of art have on our perception. The transformed structure of the art work corresponds to a transformed manner in which art is perceived and received. In contrast to the traditional art of painting, which called for individual contemplation, the art of film aims at shock effects. It seeks to grasp the attention of the viewer by stimulating her senses through a disruption of the flow of information. Benjamin

compares the film with the art works of the Dada movement in which the display of unorthodox motifs, mundane objects and obscene remarks shook (and often shocked) the observer into distraction, thus disallowing her to fall into the contemplative trance that characterizes the enjoyment of classical paintings. The contemplative 'immersion, which became a school for asocial behaviour in the degeneration of the bourgeoisie, is confronted with distraction as a certain kind of social behaviour'.[10] The film does the same job, only more effectively, by virtue of the time-space compression essential to its mode of displaying itself:

> Compare the screen on which the movie unfolds with the canvas on which the painting is located. The latter invites the observer to contemplation; before it he can let his associations take their own course. Before the movie recording he cannot. He has barely had a look at it when it has already changed again.[11]

With the intention of underscoring this point, Benjamin quotes the words of Georges Duhamel, a passionate enemy of the movie: 'I cannot any longer think what I want to think. The moving pictures have taken the place of my thoughts.'[12]

Duhamel may actually seem to have touched upon one of the weakest points in Benjamin's argument. After all, the Nazis used both film and photography as a most effective means of indoctrination, mute subordination and political self-monumentalization. Films such as *Triumph of the Will* and aerial photographs of the cheering masses helped to realize the individual's cathartic submission and to drown his or her possible discontent. Benjamin tries to escape this quandary by making the following distinction: while Fascism aestheticizes politics under the banner of art's autonomy, he wants to politicize art. The former is a utilization of art to justify and maintain the dominating power by means of anaesthetizing the masses. Even wars and atrocities are justified as aesthetic phenomena, as in the Italian futurist manifesto by Filippo Marinetti on the Ethiopian colonial war:

> War is beautiful because it establishes man's dominion over the subjugated machinery by means of gas masks, terrifying

> megaphones, flame throwers, and small tanks. War is beautiful because it initiates the dreamed-of metalization of the human body. War is beautiful because it enriches a flowering meadow with the fiery orchids of machine guns. War is beautiful because it combines the gunfire, the cannonades, the cease-fire, the scents, and the stench of putrefaction into a symphony. War is beautiful because it creates new architecture, like that of the big tanks, the geometrical formation flights, the smoke spirals from burning villages, and many others.[13]

Under the illusion of 'autonomy', the art work merely serves the interests of the ruling classes, be it the bourgeoisie or the Fascist elite, and thus presents itself to the masses as an esoteric medium controlled by the few. The auratized work of art further supports concepts celebrated in the Fascist ideology, such as creativity, genius, eternal values and mystery. When the creative process is transferred from the human being to machinery, however, such concepts lose their application. But this does not come about automatically. It is here that Benjamin's notion of the politicization of art becomes relevant. For the artist must show the right tendency. Art must, in other words, be 'politically correct', and reveal, not mystify, in order to help people negotiate the norms and attest the institutions of collective life. Benjamin is not speaking of propaganda, for he emphasizes that the quality of the work cannot simply be evaluated on the basis of the political tendency it displays — it must have artistic quality as well. This may seem somewhat problematic, for an explicitly political work of art would tend to be appraised more for its message than for its style. But 'artistic quality' is for Benjamin a very special concept, tied up with the artist's ability to utilize technological innovations for his works. This should become clearer in a short while.

Now it is customary for Marxist thinkers to analyze the art work by asking what its position is *vis-à-vis* the present production relations of its society. Benjamin, however, wants to ask what its position is *within* them.[14] To clarify what he means by this, he takes the example of the German New Objectivity movement in photography and literature. Photography had been a powerful medium for social realists

who wished to bring attention to crucial social issues. However, fostered by the invention of superior German cameras, New Objectivity developed such a refined technique that it 'succeeded in turning abject poverty itself, by handling it in a modish technically perfect way, into an object of enjoyment'. Similarly, their literature 'has turned the struggle against misery into an object of consumption . . . The characteristic feature of this literature is the way it transforms political struggle so that it ceases to be a compelling motive for decision and becomes an object of comfortable contemplation'.[15] Benjamin calls this tendency regressive, for whereas it addresses material of revolutionary significance, the technical treatment of this material simply involves the refinement of existing techniques of specialized artistic production. By transforming it in this way into an object of aesthetic contemplation, bourgeois culture manages to avoid having to respond to potentially revolutionary material.

The way to deal with this defence mechanism, Benjamin argues, is to subvert specialization by breaking the conventional barriers of the medium. Dadaism is here a paradigmatic example of this alternative:

> The revolutionary strength of Dadaism consisted in testing art for its authenticity. Still lifes were made out of tickets, spools of cotton and cigarette stubs in conjunction with pictorial elements. The whole thing was put in a frame. And then it was presented to the audience: look, your picture frame blows up time; the smallest authentic fragment of everyday life says more than the painting.[16]

In this way, Dadaism subverts the claims of painting as a bourgeois specialism. One could also mention John Heartfield's photomontage, which, by shaking up the medium through a combination of image and text, was capable of making a book-cover into a political weapon.[17] Now these would be prime examples of what Benjamin calls artistic quality: he identifies it with technological innovation that disrupts bourgeois specialization. It is thus demonstrated by the ability to break down the barriers between the media

in order continually to override the fixed definition that is forced upon it in the dominating superstructure of society. A good work of art always overcomes itself.

Let me now just briefly summarize Benjamin's analysis, and clarify some of its most important insights. He believes that owing to the reproductive technologies of film and photography the work of art is in the process of a radical transition, which he describes as the loss of its aura. This has two main, interrelated consequences. First, it loses its ostensible autonomy, and is thereby revealed as a medium of communication with necessary political tendencies. Secondly, especially in the case of film, it both changes and sharpens our perception with its constant flow of new sensory data. Technology also enables the artist to transcend the traditional understanding of art, both by introducing new ways of artmaking, which brings about a cognitive awareness of novel forms, and by opening up the possibility of blending different media in one and the same art work. Thus the bourgeois claim to specialism in art is subverted, which means that art becomes an object of mass consumption and critique, but also that the art work itself becomes an open texture without boundaries, defying all definitions.[18] Implicit in all this is also the belief that the established artist-consumer relationship breaks down when the making of art is no longer restricted to specialists belonging to the privileged classes. For Benjamin, then, art is a saving power, as it was for Heidegger. However, it is not saving us from the perils of technology: on the contrary, technology becomes art's most important means to the end of saving us from an unjust society.

Benjamin's utopian multilateral theory raises a number of issues. One may note, first, more than sixty years later, that neither film and photography, nor art influenced by the technologies of reproduction, has been particularly helpful for the liberation of the proletariat. As already mentioned, film was exploited by the Nazis for purposes of propaganda, and much the same holds for the authoritarian Communist regimes, by reconstructing auratic impressions, and thus

mystifying rather than clarifying the complex structure of political institutions. I believe that a comparable case could be made for the proliferation of aura in the form of special effects in contemporary Hollywood blockbuster films. Since both the production and distribution of the latter are largely dependent on the commercial interests of private corporations, there is a preference for works that 'enchant' the masses into comfortable contemplation, rather than 'distract' them to perceive the problems of the real world. In fact, there is certainly distraction involved, but it is distraction *from* problematic social issues. Script-writers' freedom is severely limited by the financial interests of the producers. Similarly, ballistic films, à la Benjamin, that *do* get produced are usually low-budget films whose distribution is made difficult through the unwillingness of most larger cinemas to take the financial risk of presenting them to their auratically spoiled patrons. Thus, none of these seems to represent the triumph of distraction over aura. Further, Pop art, Conceptual art, and more ironically, the art of Dadaism, have been made impotent through their incorporation into bourgeois culture, whereby they have become objects of aesthetic contemplation, very much like the New Objectivity movement which Benjamin criticizes. By interpreting these art forms as presenting new aspects of reality whose aesthetic nature has not been explored before, and placing them in the contemplative space of a gallery, the art work's threat to our most cherished values is dramatically minimized.[19] Consequently, the subversion of the bourgeois claim to specialism fails.

Benjamin's longed for disintegration of the barrier between the artist and the consumer has also been realized to only a small degree. This is partly due to the interplay between the strong commercialization and the segregation of art works in spaces explicitly defined as the 'proper' sites for art, but also to the limitations of the media of photography and film. For these are one way media, instruments of a communication that only flows from the artist to the consumer without offering the possibility of direct feedback. Interestingly, the playwright Bertolt Brecht, who happened to

be a close associate of Benjamin, criticized the radio for the same limitations, and insisted upon the invention of a two way medium that would take its place:

> The radio should be transformed from an apparatus of distribution to an apparatus of communication. The radio would be the conceivably greatest apparatus of communication of public life, an enormous system of channels; that is, it would be so if it had the capacity of not only transmitting, but also receiving.[20]

With the advent of computer technology and the World Wide Web, Brecht's wish may actually have come true. This will be taken into further consideration in the final section.


IV. Digital Aesthetics

In the last few decades we have witnessed a massive eruption of technological innovations whose effects on art, on our relationship with art, and on society can still be assessed only hypothetically. The most important of these are probably the video, the computer, and the Internet. This last section will be limited mostly to a discussion of the last two, highlighting only a few aspects that relate to some of the issues already discussed.

When the video appeared on the public scene in the mid 1960s, it was not only embraced as a promising new medium for artistic creation, but soon also came to be seen as a powerful critique of the standardizing grammar of broadcast commercial television. For some time, it became television's 'other', as it were, re-presenting subjective and concealed aspects of human behaviour, something which at the time was inconceivable for a broadcasting medium. It was not long, however, until video, with all its experimentation and cultural critique, was incorporated into television, in much the same way as art galleries incorporated and institutionalized the avant-garde. Furthermore, and more importantly, the video has been in a process of digitalization, since it has largely merged with the computer, and is therefore disappearing from the arena as a distinct medium. As Michael Nash wrote

in 1996: 'It was said a decade ago that video art may have been the only art form to have a history before it had a history, and now its history is history before we had a chance to mourn its passing'.[21] Thus, although the video certainly plays an important role in contemporary art, with good reason we can allow ourselves to turn away from the video as a *particular* medium and consider it as largely belonging to the digital realm of cyberspace as well.

Cyberart has many features which distinguish it from most other art forms. We may note, first, that digital art work is immaterial. One may play with the intriguing analogy that whereas photography and film may have contributed to the art work's loss of aura, cyberart brings about the loss of its materiality. Paul Valéry's observation from 1934, that there is a physical part in all arts, is obsolete.[22] The objects of the virtual realm of digital simulation exist only within the computer in the form of electrical signals translated into sensory experience. Taking into consideration the perfect reproducibility of the digital work of art, Zemach is correct in his claim that the work of art is a type, not a unique particular, at least if it is created digitally. The specific art work cannot be located physically; it is a concept or even just a phenomenon of a certain type. We could be tempted to identify it with the digital bits out of which it is made, but that would, first, give it the peculiar ontological status of not existing or being stored in the same format as it presents itself to us and, secondly, only give it a qualified physicality, since a bit is only a number without colour, size or weight. As William Gibson described cyberspace, borrowing a phrase from Gertrude Stein, 'there's no there there'.[23]

Now the development of the Internet as a public medium may have altering effects on our vision of traditional paintings and sculptures as well. Museums all over the world are already exploring the Net as a medium and an alternative site for displaying their art works.[24] There are even museums that have never been constructed in physical form, but are only virtual.[25] Given the further development of this tendency, the question may be asked whether we will

eventually get accustomed to viewing traditional paintings on the computer screen — whether the screen on our desk will become the 'normal' setting for *Mona Lisa* or *Guernica* — or will it simply prompt us to go and see the original in its proper location?[26] To be sure, many would say that it is not the same to see a work of art on a screen. In this respect, however, we must not forget the continually enhanced possibilities of computer technology in terms of both visual quality and modes of presentation. With the use of wearable technologies such as data-gloves and -goggles, for example, we should be able to visit any historical cathedral or other architectural edifice in virtual reality without having to leave our room.[27] Yet, we may ask once again: is it the same? Perhaps not, but it may become the most normal way of exploring a work of art, and thus change our perception and conception of it.

It would seem that the lack of distinction between an original work of cyberart and its copy would make any kind of aura in the work impossible. Not being a unique particular, the art work should not be capable of retaining its sacredness. However, Benjamin also describes the auratized art work as 'immersing' the spectator: 'he enters the work, as the legend tells us about a Chinese painter after having observed his completed picture'.[28] This is no longer necessarily a metaphor, but a virtual possibility. In cyberspace, we *can* enter works of art. Virtual reality would seem rather to immerse us, perhaps not so much in contemplation, but at least in a temporary departure from the real world. With only a few exceptions, games and other virtual reality products are generally not designed to elevate our awareness of social issues.[29] Instead, they are manufactured as relatively expensive commodities by large corporations which would probably be more interested in ignoring or concealing them. We may be looking at the return of the aura in a new form: the game as a novel opiate for the masses.

The above mentioned fusion of video and computer technology, however, is of some interest with regard to Benjamin's thesis, for it signifies a certain realization of his

demand for the elimination of the barriers between the media. Benjamin, it would seem, was asking for something we readily have today, namely multimedia. It is common among contemporary artists to have the skill and knowledge to employ different media for the creation of one and the same art work. Multi-dimensional works of art, such as a singing book written as a hypertext, or an interactive virtual simulation of a town inhabited by an 'avatar' for each of the inhabitants of the actual town,[30] are undeniably hard to define. It is unclear, to say the least, to what category of art such works should belong, or whether they can be seen as belonging to any traditional category of art at all. Moreover, the new media would seem to have a greater potential for motivating action by means of their shock effects. The question is, however, whether this potential is actualized to any significant extent.

Art created through computer technology has attracted special interest because of its interactive features. We have, of course, always interacted with works of art in the interpretative or hermeneutic sense of interaction, and there are indeed art forms, such as participatory or environmental theatre, that require the literal participation of the audience. In the latter case, however, the intended balance has often been upset by a number of specifically human factors, such as the relative timidity and passivity of the audience, as well as the tendency of actors to dominate the interaction.[31] These problems can be avoided through the computer. The interactive cyberart work can respond immediately, for as long as one wants, and, somewhat surprisingly, people tend to be more relaxed and playful when interacting with an inanimate machine, most likely because it does not judge the participant's performance — at least not yet!

What distinguishes interactive art in cyberspace from older interactive non-performative art forms is that the former, when transcending the boundaries of, say, a hypertext with only limited possibilities of choice, encompasses the framework for a multitude of individual experiences that are non-calculable and non-reproducible by another participant.

No instance of an art work that is created through the interaction between the computer and the participant will be reproduced on a different occasion. When the behaviour of the work, or the medium in which it is produced, cannot be predicted by the designer herself, the inevitable question of authorship arises.[32]

The Internet expands and facilitates the possibility of multiple interaction between the programme and an indefinite number of participants. Participation in the creation of any of the countless virtual worlds on the Net is open to anyone who has the technological means of access. The Net, furthermore, enables artistic interaction in another sense. Some fans of the musical artist Björk, for instance, have designed a website where they exchange their own remixes of her music. Björk's own remarks about this undertaking are perhaps characteristic of the changing attitudes of artists themselves to their works and modified reproductions of them, which, not so long ago, doubtless would have been outcried as insolent distortions:

> I simply adore my fans' thirst for experimentation. The fact that people enjoy exploring the edges of my songs swells my heart with joy. The idea of it all fills me with such pride, and enables me to see that people are interacting with my music. I truly believe that songs are not truly captured in one interpretation, there's a give and take. When you listen to one of my songs you bring your own emotions and experiences to the landscape. It becomes a different experience for each person and that's absolutely lovely. Thank you, I'm quite amazed at the outpour of remixes . . . I just wanted to let everyone know that I really do support this site and that I am very glad that there is such an interest in my work.[33]

The Net seems in many ways to be the answer to Brecht's demand for a two way medium. Being theoretically accessible to anyone, it can function as a 'free space' in which people can exchange their ideas and opinions on any issues without external restraint.[34] Its peculiar features of blending together different forms of communication, such as texts, hypertexts, graphics, film or animation, and various audio features, may

even have a profound effect on our general perception of our environment. Many uphold a sceptical attitude towards these effects. The computer artist and theorist Margaret Lovejoy fears that we are experiencing a crisis in our mode of representation:

> The structure of this crisis is very familiar. There is a recurrence of the loss, displacement, and change in consciousness, similar to the effects on society and culture of the machine and of the photographic representation technologies we have been following. The electronic era, because of its greater complexity and its power to disrupt, is causing even more fundamental change and loss than did the machine era. We are again at the end of a century in which technological developments have transformed culture and living standards.[35]

A contemporary optimistic Benjamin would surely see the intensified time-space compression in today's media rather as potential for elevating our perceptual habits to a stage in which our highly complex and fragmented postmodern reality of information flow, pluralism, vague identities and multinational capitalism could be better comprehended. The vast possibilities of cyberart, and the nature of those possibilities, seem in any case to suggest that Benjamin's analysis would be more timely today than sixty-five years ago. An appraisal of the current process of transformation, however, is rather more problematic, and I shall leave open the question of whether Lovejoy's sceptical or our hypothetical Benjamin's optimistic claim is the more appropriate prediction. What will be can scarcely be anticipated — but we can at least be fairly sure that because of cybernetic technology, things will literally never *seem* the same again.

In this last section, I have touched upon a mere fraction of the aesthetically relevant issues concerning digital art. Owing to its recent birth and ongoing evolution, I have chosen to restrict myself to questions and hypotheses instead of attempting to provide decisive answers. It is nevertheless my hope that I have at least shed some light on this new art form's possible effects on many of our traditional ideas of

art, our relationship with it, and its social role. Whilst specific particulars of these effects can hardly be discerned with any clarity at the present stage in the development of digital art, it is, in any case, a development that philosophical aesthetics cannot afford to ignore.

NOTES

[1] I am indebted to Eliot Deutsch, Professor of Philosophy at the University of Hawaii, for a careful reading and constructive criticism of this paper, and to my friend, Thorhallur Magnusson, for sharing with me some of his profound insights into the 'magic' of the digital world.

[2] R.G. Collingwood, 'Art and Craft', in *Aesthetics*, ed. by Susan Feagin and Patrick Maynard (Oxford and New York, 1997), pp. 215-220 (p. 215).

[3] Martin Heidegger, 'Die Frage nach der Technik', in *Vorträge und Aufsätze* (Pfullingen, 1954), pp. 13-44 (pp. 27ff.).

[4] Heidegger, pp. 42f.

[5] Cf. Walter Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit* (Frankfurt am Main, 1963), pp. 32ff.; see also Jürgen Habermas, 'Bewußtmachende oder rettende Kritik — die Aktualität Walter Benjamins', in *Zur Aktualität Walter Benjamins*, ed. Siegfried Unseld (Frankfurt am Main, 1972), pp. 173-223 (pp. 197ff.).

[6] Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, p. 13.

[7] I am of course only referring to the transmission of the music as such, not the external conditions that might affect the experience. One might think of contingent circumstances such as the concert hall having uncomfortable seats (not an unrealistic example!), whereas the listener could enjoy the music in comfort at home.

[8] Zemach, p. 245.

[9] As one might expect, Zemach's view is far from being generally accepted. See, e.g., Steven Farrelly-Jackson, 'Fetishism and the Identity of Art', *British Journal of Aesthetics* 37:2 (1997), pp. 138-154, a direct response to the former's provocative thesis.

[10]Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, p. 38.

[11]Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, p. 38.

[12]Cited from Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, p. 39.

[13]Cited from Lutz Koepnick, *Walter Benjamin and the Aesthetics of Power* (Lincoln and London, 1999), pp. 96f. Benjamin also cites this paragraph (*Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, p. 43) as a prime example of how the Fascist aesthetization of politics culminates in the glorification of war and violence.

[14]Walter Benjamin, 'Der Autor als Produzent', pp. 683-701 in *Gesammelte Schriften II-2* (Frankfurt am Main, 1977), pp. 685f.

[15]Benjamin, 'Der Autor als Produzent', p. 695.

[16]Benjamin, 'Der Autor als Produzent', p. 692.

[17]Cf. Paul Crowther *Critical Aesthetics and Postmodernism* (Oxford, 1993), p. 74.

[18]The possibility or impossibility of defining art still remains controversial in philosophical aesthetics. For a clear summary of the most important disputes in recent years on the issue, see e.g. Eliot Deutsch, *Essays on the Nature of Art* (Albany, 1996), pp. 6f.

[19]Cf. Crowther, *Critical Aesthetics and Postmodernism*, pp. 77f.

[20]Bertolt Brecht, 'Der Rundfunk als Kommunikationsapparat', in *Gesammelte Werke 18. Schriften zur Literatur und Kunst I* (Frankfurt am Main, 1967), pp. 127-134 (p. 129).

[21]Michael Nash, 'Vision after Television: Technocultural Convergence, Hypermedia, and the New Media Arts Field', in *Resolutions: Contemporary Video Practices*, ed. by Michael Renov & Erika Suderburg (Minneapolis, 1996), p. 382.

[22]Valéry says this in his *Pièces sur l'art*, and Benjamin quotes the very same part at the beginning of his *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*.

[23]Cited from Steven Holtzman, *Digital Mosaic: The Aesthetics of Cyberspace* (New York, 1997), p. 47.

[24]Cf. Jonathan Bowen, 'The Virtual Museum', *Museum International* 52:1 (2000), pp. 4-7.

[25] For instance, the Virtual Museum of Arts El País, created in Uruguay, exists in cyberspace only. It can be visited on the following website: http://www.diarioelpais.com. Cf. Alicia Haber, 'MUVA: A Virtual Museum in Uruguay', *Museum International* 52:1 (2000) pp. 26-31.

[26] This is the view of the more optimistic curators. In an interview with George F. MacDonald, a technical innovator at the Melbourne Museum, he expresses the view that 'museums, facing the possibilities of the Internet . . . have a brighter future than ever, because of people's tendency to want to verify the images they see by experiencing the real', 'Digital Visionary. George F. MacDonald and the World's First Museum of the Internet Century', *Museum News* 79:2 (2000), pp. 35-41; 72-74 (p. 38).

[27] Cf. Myron W. Krueger, *Artificial Reality II* (Reading, Mass., 1991), pp. 109ff.

[28] Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, p. 40.

[29] Here, of course, the problematic question arises whether we are still speaking of art. Perhaps we should suspend our answer for a decade or so.

[30] The second example refers to a project by some Danish artists who call themselves Superflex. They intend to make a virtual replica of the Swedish town of Karlskrona and a possible-world model of the relationships between the actual inhabitants. The virtual Karlskrona, called Karlskrona 2, will be accessible to all through a large-scale video projector on the main square of the town. One of the hypotheses behind the project is that the ability to interact in this 'free space' without having to obey the legal, economic or social rules of Karlskrona might elevate the inhabitants' consciousness of their proper roles and situations within the 'real' society (website: http://www.superflex.dk/top.html).

[31] See David Z. Saltz, 'The Art of Interaction: Interactivity, Performativity, and Computers', *The Journal of Aesthetics and Art Criticism* 55:2 (1997), pp. 117-127 (p. 125).

[32] This question is not restricted to interactive art. Computers have been designed to create artworks by themselves. Already in the late 1980s, Harold Cohen of the University of California at San Diego designed a 'computer artist' whose system generates drawings

automatically according to a modelled visual aesthetic. Every picture is different, since some of the choices are random, but they are all clearly the product of the same artist (Krueger, *Artificial Reality II*, p. 211).

[33] Website: http://www.arktikos.com/bjork/

[34] There are some obvious qualifications to this claim: first, access to the Internet is of course *de facto* restricted by financial and social conditions; second, despite the status of the World Wide Web as a temporarily autonomous zone, there is a growing tendency among some corporations and organizations to 'block' certain websites by automatically diverting web-explorers to different ones—in most cases to their own. As of yet, the Web remains an anarchic zone (a kind of a Hobbesian virtual state of nature!) in which a fierce power struggle takes place whose eventual outcome, if any, can scarcely be predicted. The fear amongst many is that capitalistic and political powers will succeed in gaining domination over it in some form, e.g. by means of expensive technological devices.

[35] Margot Lovejoy, *Postmodern Currents: Art and Artists in the Age of Electronic Media* (New Jersey, 1997), p. 284.