

The Aesthetics of Net.Art

Julian Stallabrass

On the face of it, the subject of net.art's aesthetic seems slightly perverse; indeed, a colleague of mine once asked what I was working on, and when I told her replied with the single word: 'yuk'.¹ Much of the aesthetic feeling traditionally derived from fine art depends on the interplay between representation, idea and its instantiation in some material form, and the feeling of that material being worked with. That seems absent in online art. Furthermore, much net.art, as we shall see, strives to be manifestly anti-aesthetic, and the usual procedures that the art world uses for marking objects for aesthetic attention are not available, or are not taken up, online. I hope, though, that its very resistance to the aesthetic makes it a useful because extreme test case.

'Net.art' is the term used to refer to a strain of Internet art that emerged soon after the invention and wide take-up of web-browsers in the mid 1990s: it was a conceptually informed art that explored the possibilities of this new arena for art, had an at best ambivalent relationship with the mainstream art world, was often collaborative, and was supported by a lively and disputatious criticism, much of it penned by the artists themselves.

Not all Internet art was at all like this, and artists continue to produce a very wide range of work online—some of it manifestly designed to elicit an aesthetic response. Much net.art played with the legacy of modernism; but for an example of another, more straightforward response we can look to the work of by online commercial designer and artist John Maeda, who has produced what is both a technical update, and an idealist realisation of Malevich's painted cosmological fantasies. Viewers, who have a passive relation to the work once they

¹ This is the text of a plenary lecture given to the American Society for Aesthetics, Annual Meeting, San Francisco, October 2003.

have clicked on the link to initiate the animation of floating squares, are I think meant to find it beautiful.²

The act of aesthetic attention can be applied to just about any phenomenon, though there are circumstances that seem to favour it; and it is concomitantly something that is hard to assure, though we will come to art-world tactics for its encouragement. In circumstances of extreme material deprivation, works of art may be used for manifestly instrumental purposes, and Duchamp's provocation—to use a Rembrandt as an ironing board—is realised in various forms. Equally, aesthetic attention is very difficult to abolish: at the origins of conceptualism, Duchamp's *Fountain* was described by some who sought to support its display at the American Society of Independent Artists in formal terms as a beautiful object, the comparison being with Buddhist sculpture, and this despite Duchamp's striving for 'aesthetic indifference' in the readymades.

In later conceptual art, resolutely anti-aesthetic and functional works, such as Art and Language's *Index* series, meant to provoke reading, the linking of data fragments (in this case, on index cards) and contributions from gallery-goers, came to be taken as sculptural objects, or at least as the remains of a performance (definitely over) that the viewer must take on trust. We now see *Index 01*, a venerable and valuable antique, displayed alongside prominent 'Do not touch' signs, and defended against such violation by gallery guards.

With *Index: Wrongs Healed in Official Hope*, (1998-9) Art & Language recently protested against that fate, and by implication against that of conceptualism as a whole, by producing a simulation of *Index* as prettily polychrome non-functioning sculpture, juxtaposed with a pornographic text-painting rendered nonsensical by many malapropisms (the latter meant to indicate the vulgar and self-consciously dumb misappropriation of Conceptualism by the 'young British artists'). The reasons for that wide failure to foster dialogue, to engage the viewer, to produce a continually changing work in collaboration with others, are evidently to do with the economy of the art world itself which requires the sale and collection of unique or rare objects. The data of *Index* was held in the form of a 'sculpture' by artists whose

² Maeda [url](#); see also John Maeda, *Maeda@Media*, Thames & Hudson, London, 2000.

signature or brand conferred value upon it, so naturally the general public could hardly be allowed to interfere with it.

If in the art world aesthetic value is closely linked to monetary value, it is because of the structural place of the art world in relation to mass culture and instrumental life. The economy functions strictly and instrumentally according to conventions, imposed unequally on nations by the great transnational economic bodies; it produces hierarchies of wealth and power; it enforces on the vast majority of the world's inhabitants a timetabled, and mechanical working life, while consoling them with visions of cinematic lives given meaning through adventure and coherent narrative (in which heroes make their lives free precisely by breaking the rules), and with strident or plaintive songs of rebellion or love.

Art appears to stand outside this realm of instrumentality, bureaucratized life and its complementary mass culture. That it can do so is due to art's peculiar economy, founded on its resistance to mechanical reproduction. That resistance can be seen most clearly in the tactics used by artists and dealers to artificially constrain the production of works made in reproducible media, with limited-edition books, photographs, videos or CDs. Through that resistance, the cultural enclave of fine art is protected from vulgar commercial pressures, permitting free play with materials and symbols, along with the standardised breaking of convention and taboo.

Plainly, contemporary art does not only try to assure by these means an *aesthetic* view of its productions. Indeed, the 'aesthetic' as a category and art-world institutions have often been challenged in linked attacks, in that an assault on the coherence of the former makes the constitution of the latter appear more a matter of arbitrary social fiat. In contrast, there have been many works that strive to bring about a feeling of the uncanny, the abject, the traumatic 'real' (or its eternal absence), and the sublime (including, it should be noted, a strong engagement with the sublime of data).

It is unclear, though, how far separated these other experiences remain from the aesthetic. All are supposed to be extra-linguistic, incorrigible sensations, undercutting cognitive approaches to the object, and yielding perhaps some essential quality of object or of the

viewing mind. The theories with which they are regularly supported are updates of the mystical Bergsonism that propped up aspects of early twentieth-century modernism. In that all bear on self-awareness and self-realisation (if only to assure the viewer of the vanity of such ambitions, straightforwardly envisaged), they are not so distant from the development of the sovereign individual that at least some version of the aesthetic presupposes. The continuity between them is indicated by the resilience of the art institutions which, while they have efficiently adapted to new market conditions, retain their basic function as purveyors of celebration and mystification. What they offer is strictly separated from both the general run of instrumental life (including giving or listening to lectures like this) and the narrative comforts of mass culture.

We are familiar with the ways in which such experiences, including the aesthetic attitude towards works, are encouraged: there is the mounting and framing of work, literally or metaphorically, which mark it off as a discrete realm of experience. The gallery and museum also emphasise their own discreteness, with architectural drama and authority, so that we go to a unique place to commune with unique objects. These objects, aside from not being mass produced, are often very laboriously produced, or use large amounts of expensive material, and to the extent that the experience of the aesthetic is bound up with an experience of uniqueness in time and space (Benjamin's aura), that quality of rarity is important. They are further cocooned with promotional and befuddling literature, about which little need be said. Finally, the works appear to have no immediate use, and are so associated with free self-realisation.

In addition, it will hardly have escaped your attention that there has in the last few years been a revival in writing and theorising about beauty and the aesthetic in contemporary art, along with the production of many works that seem, in addition to having a conceptual dimension, to be really very pretty, and even attempts to make shows that are more about spectacle than concept. A recent example is Dave Hickey's 2001, Site Santa Fe's Fourth International Biennial, entitled *Beau Monde: Towards a Redefined Cosmopolitanism*. It was an attempt to refashion those overtly political biennales which tend to depress aesthetes, and produce a show that would make its viewers wonder at the variety and beauty of cultural exchange.

Art production in the 1990s is sometimes thought of as a synthesis between grandiose and spectacular 1980s art with the techniques and some of the concerns of Conceptual art, the result being to splice linguistic and conceptual play with visually impressive objects: to give a single example, Tobias Rehberger's *Seven Ends of the World*, shown at the Venice Biennale in 2003, fills a room with clusters of glass balloons that glow with different coloured lights in a beautiful, slowly



changing display. The lights in the balloons are renditions of local light conditions in various locations around the world, relayed over the Internet, and the piece is both a technically accomplished, spectacular and appealing object and the manifestation of an idea.

Now the point about net.art is that little of this applies—not that it cannot (though some of it really cannot), but it did not. Art work can be framed online, in museum or art sites, or by linking practices that suggest discreteness, but net artists often did the opposite. Again, to take a single example, in Alexei Shulgin's *WWW Art Medal* (1995-7), pre-existing sites are linked together on a page that awards them virtual medals for their artistic appeal.³ The artist 'draws' links between these sites, presenting them within a new frame, both conceptually and literally (a gilt picture frame is thrown about them). The sites include what seems to be a philosophy page actually advertising beauty products, a collection of pretty if anodyne photographs (the medal being awarded 'for innocence'), and pages comprising song lyrics alongside examples of 'glamour' photography ('for correct usage of pink colours'). This piece of online curation, or curation as art work, is a particularly pure form of Internet art that links pre-existing data in a singular manner, as if it were the result of a database query. It is an act of appropriation, in the manner of Duchamp, though of a particularly minimal and

³ <http://www.easylife.org/award/>

filmy kind, since there is no movement or signing and dating of objects. It is also, of course, a critique of the art institutions' apparently assured marking of works as works. Much of the conceptual tradition is distinguished by striving to be free of the burden of aesthetic judgement, and Shulgin echoes Duchamp's remark about the readymades that they should reflect a total absence of good and bad taste.⁴

Websites can be marked as distinguished by impressive design, just as galleries and museums are by their architecture, but again, net artists tended to foster online confusion about what it is one is seeing by placing their works on non-art sites, or making their own sites but not declaring the contents as art, and indeed making them seem very unlike art sites. Heath Bunting, and many others, have placed their 'works' in non-art sites, just as a graffiti writer throws up a tag on some place where you would normally see an advertisement.⁵ A well-known example of a discrete site that confounds such expectations and does not declare itself as art, is Jodi's rapidly changing, visually clunky and low-tech site, which is designed to bringing about a Brechtian education into the functioning of the net and computer culture.⁶ Computer code is held up for ideological examination on pages where spectacle normally unfolds, while sometimes the code that produces those pages contains pictures.

Linked to the shunning of these means of marking art as discrete, is the suspicion of the very term 'art'. For Bunting, net.art tries not to carry too much baggage, and a lot of it is about hoaxing, faking and rewriting. 'So if you say: this is an artwork, you've blown your cover immediately.'⁷ Again, this is the opposite of typical art-world practices.

The 'objects' of Internet art are far from being conventional art objects. They are not only reproducible without degradation but are almost free to transmit (or rather, once the initial outlay has been made, the marginal cost of each transmission is close to zero). Cheaply reproducible artistic media have long existed, of course, but attempts at their wide dissemination have foundered on the cost of distribution. Generally, when the code of

⁴ Pierre Cabanne, *Dialogues with Marcel Duchamp*, trans. Ron Padgett, Thames and Hudson, London, 1971, p. 48; Rachel Baker, 'A Conversation with Alexei Shulgin', nettime posting, 16 March 1997.

⁵ An example would be Bunting's *Skint: The Internet Beggar*, which can be found on www.irational.org

⁶ www.jodi.org

online work is left open to examination, the work is subject not only to copying but alteration. So artists borrow or 'steal' from each other; Vuk Cosic talks of how he, Heath Bunting, Alexei Shulgin, Olia Lialina, and Jodi, in effect, had neighbouring studios, 'like Picasso and Braque in Paris in 1907', so that each could see what the other was doing, respond to it, or collaborate.⁸ There have been attempts to make online work exclusive, to sell it or to tie it to a particular site and charge for access, but equally they have failed, not least because of politically motivated hacking.

Net.art poses a challenge to the protected art economy. In his short book, *Behind the Times*, Eric Hobsbawm convincingly argues that fine art has condemned itself to cultural marginality by refusing fully to embrace reproducibility.⁹ While literature, music and film are industrially reproduced and widely owned, fine art has stuck to craft production and archaic systems of patronage. The art world is in an analogous situation to an economy, long sunk in static agrarian activity, which finds it has the opportunity, not to follow through the stages that led the first industrialised countries to modernity, but to leap right over them into the present.¹⁰ As in such an economy, archaic and modern elements abut each other in the sharpest contrast, and those contrasts may foster radical totalising thought about the system as a whole.¹¹

Art world and net.art discourse are very different. Cosic remarked that in each the default position for conversing is switched: in the online world you talk to everyone unless they give you a good reason not to; in the gallery world, you only talk to someone if you know who they are and want something.¹² (It is, of course, not hard to work out why this should be so.) Email forums such as nettime have provided sites for the discussion of art, culture, new

⁷ Josephine Bosma, 'Ljubljana Interview with Heath Bunting', nettime posting, 11 June 1997.

⁸ Tilman Baumgärtel, 'Interview with Vuk Cosic', nettime posting, 30 June 1997.

⁹ Eric Hobsbawm, *Behind the Times: The Decline and Fall of the Twentieth-Century Avant-Gardes*, Thames and Hudson, London 1998.

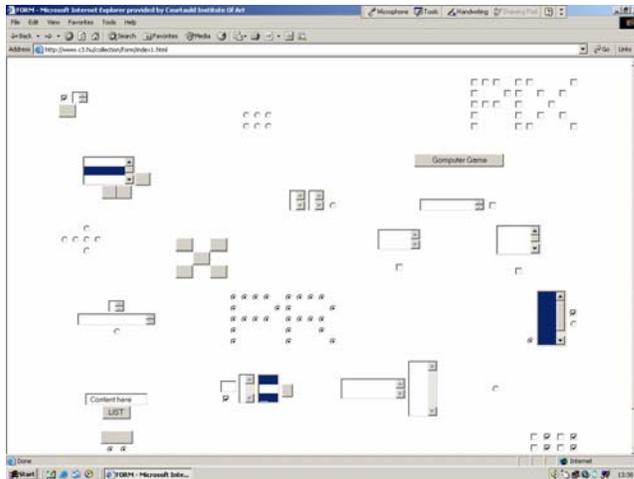
¹⁰ This type of situation was analysed by Trotsky as 'combined and uneven development', drawing on the exposure of agrarian Russia to Western industry. See Leon Trotsky, *The History of the Russian Revolution*, trans. Max Eastman, Pluto Press, London, 1977, vol. I, ch.. 1.

¹¹ This is the argument made about such economies in Fredric Jameson, 'Marxism and Postmodernism', in Fredric Jameson, *The Cultural Turn: Selected Writings on the Postmodern, 1983-1998*, Verso, London 1998.

¹² See Cosic's contribution to Sarah Cook, Beryl Graham and Sarah Martin, eds., *Curating New Media: Third Baltic International Seminar*, Baltic, Gateshead 2002.

media, politics and their intersections. While fractious controversies may sometimes rage there, they also form a collective programme to which individuals make contributions with works or words, analogous to the donation of time, creativity and labour in the free software movement. Such forums for discussion and exhibition are open, disputatious, democratic and egalitarian, and permit a glimpse of a culture that is founded, less on broadcast by celebrities than dialogue among equals.

So, given these differences, let's look at some contrasting examples of net.art to get a feeling for the role the aesthetic plays in them, if any.

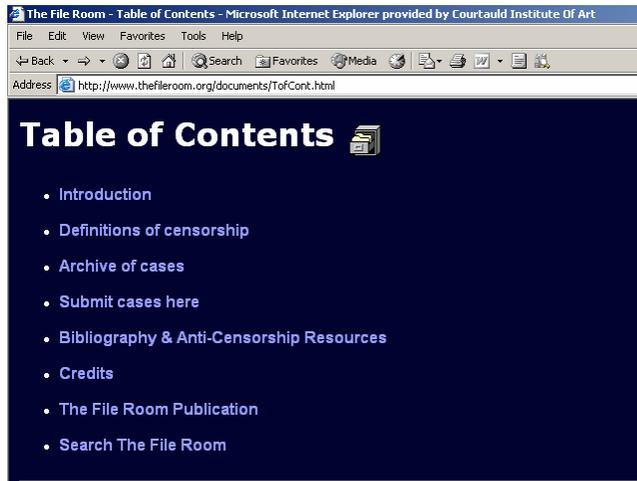


In ‘[form art](#)’, Alexei Shulgin makes formal, modernist patterns out of the standard components of the interface, in a highly self-conscious play on the link between modernism and the look of the new online realm. This is a (deliberately) gruesome cross between Greenberg and appropriation art, in which the pre-existing elements of the

interface are taken as the fundamental elements of the medium. I referred briefly to the renewed engagement with beauty in contemporary art: in contrast, some of the work on this site (and in this it is not atypical) is actively horrible. The paradox here is much the same as that with photographic formalism: that the focus on the inherent qualities of the medium (or in this case, the standard interface of the communications system) leads not as with painting to formal qualities of flatness, colour and texture but to a sharper focus on the world itself—in photography’s case, the physical world, in net.art’s the virtual; and in both cases, the social.

The most fundamental characteristic of this art is that it deals with data, and can be thought of as a variety of database forms. Many works use the familiar look of databases. Installation artist Antonio Muntadas’ *The File Room* was one of the first works made for the Web, going online in May 1994. It is an extensive worldwide archive of cultural censorship, at first

compiled by a team of researchers but later added to by the public, and covering incidents old and new, from Diego Rivera's dispute with the Rockefeller Center over his depiction of Lenin, through to the religious Right's assaults on the National Endowment for the Arts. It is a collaborative site to which users can contribute information within the framework established by the artist.¹³ Naturally, censorship on the Internet itself was soon highlighted with subscribers to AOL writing about the company's deletion of postings that it considers vulgar or sexually explicit.



Aside from its continuing online display, *The File Room* was also established as an installation at the Chicago Cultural Center in 1994.

In its physical form, Muntadas' *The File Room* was close to many Conceptual art projects that built physical databases, including card-index systems (such as Art and Language's Index series). Yet while the object lends itself to gallery display and, whatever the intention of its authors, tends to come across as fully formed, and to be venerated rather than used, this is not so of the same information offered in dematerialised form on the Web. The break from the aesthetics of the isolated art object and the move towards an art of discursive process that was begun by Conceptual art could be completed online where the provisional, ever-changing character of material is taken for granted. As Lev Manovich puts it in his meditation on the database form, historically, artists made unique objects in particular media in which interface and content were inseparable (and in the assimilation of Conceptual art, we may say that over time they congealed). In the new media, the content of the work and the interface are separated; a work in new media can be understood as the construction of an interface to a database.¹⁴

¹³ <http://www.thefileroom.org/>: for an account of Muntadas' work, see Judith Russi Kirshner, 'The Works of Muntadas' at the same site: for an account of the installation of *The File Room* at Chicago, see the same author's 'The File Room' in Gerfried Stocker/Christine Schöpf, eds., *InfoWar*, Springer, Vienna 1998, pp. 285-9

RTMark demonstrate a model of radical politics and cultural activism coming into synthesis. They pursue political ends through cultural means, and this form of political-cultural fusion is found not only online but is matched by the actions of anti-capitalist protesters who have found ways of uniting actions comparable to performance, environmental and installation art with practical acts of subversion.¹⁵ RTMark was founded as a corporation, a clearing house to aid subversive acts, online or off, and it armours itself with corporate law. Just as the copyleft agreement that protects free software is a hacked copyright law, RTMark is a hacked corporation.

While much of their activity is merely organised over the Net, RTMark also make online interventions, particularly with spoof sites that stylistically mirror those of official organisations but load the pages with radical content. RTMark's WTO pages (using the old name of the organisation, GATT, for the site) imparted frank information about the management of global trade to maintain the system of exploitation.¹⁶ They did the same in a very funny site devoted to George W. Bush which was uploaded during the last presidential election (there is a new one now).¹⁷ Both sites have faced threats of legal action, and in November 2001 the WTO pressured the sever organisation hosting the GATT site to remove it from the Web. Going to gatt.org now redirects the user to a copy of the official WTO site.

A theoretical model of the character of corporations and the mass media underlies much of this activism. Based on Michel de Certeau's book, *The Practice of Everyday Life*, which explored popular, radical misuses of mass culture, and developed by a number of Net theorists, particularly David Garcia and Geert Lovink, the practice of 'tactical media' stresses mobility in the face of fast-moving technological and social change.¹⁸ The issue is put clearly by RTMARK:

¹⁴ Lev Manovich, *The Language of New Media*, The MIT Press, Cambridge, Mass. 2001, pp. 226-7.

¹⁵ An example is Reclaim the Streets. See Aufheben, 'The Politics of Anti-Road Struggle and the Struggles of Anti-Road Politics: The Case of the No M11 Link Road Campaign', in George McKay, ed., *DIY Culture: Party & Protest in Nineties Britain*, Verso, London, 1998.

¹⁶ See <http://www.rtmark.com/gatt.html>

¹⁷ See <http://www.rtmark.com/bush.html>

¹⁸ For a discussion of tactical media, see Josephine Berry, "'Another Orwellian Misnomer?'" Tactical Art in Virtual Space', *Inventory*, vol. 4, no. 1, 2000, pp. 58-83; Michel de Certeau, *The Practice of Everyday Life*, trans.

the flexibility of corporate power, its lack of a center, comes at a price: it has no brain. It may be as tenacious as a virus, but it also has the intelligence of one: mechanical, soulless, minuscule.¹⁹

Since it reacts to attack by mutation, the argument goes, a sustained series of minor assaults, each tailored to the new situation brought about by their predecessors, can drive real change. It is ironic that this view of corporate power buys into the conservative view of the market and its creatures as natural forces. In fact, corporations remain highly structured and hierarchical entities with geographical bases (generally in global cities), and are far from being indifferent to vertical organisation. Corporate and state powers are perfectly capable of acting in concert, of long-term forward planning, and of systematic destruction of their opponents. Indeed, the entire neoliberal and postmodern turn is proof of that.²⁰

Etoy's ia another collective that has established itself as a corporation and makes art by playing with corporate components just as others played visually with the elements of the interface. Etoy even took to issuing shares, which, while not recognised by stock markets, do fluctuate in value. People who invest in these shares get dividends, not in money but in seeing the realisation of etoy's cultural output. Where does this practice lead? Josephine Berry has argued that etoy, in their pursuit of a brand image, in their issuing of 'shares' for their supporters to buy and their awarding of loyalty points, have come so close to the corporate activities that they set out to undermine as to be indistinguishable from them. The crucial test for Berry is function, for art risks its autonomy when it moves into market manipulation and legal disputes, especially when they are effective (as Etoy's legal dispute with online toy company, etoys, famously was).²¹ This is a widespread view, but the insistence on art's uselessness can appear arbitrary: failed interventions can always be

Steven Rendall, University of California Press, Berkeley 1984; David Garcia and Geert Lovink, 'The ABC of Tactical Media', nettime posting, 16 May 1997.

¹⁹ RTMARK, 'Sabotage and the New World Order', in Stocker/ Schöpf, p. 242.

²⁰ Noam Chomsky has written much about the sustained, massively funded corporate propaganda efforts to change the political climate. See, for instance, his book *World Orders, Old and New*, Pluto Press, London, 1994, ch. 2.

²¹ Josephine Berry, 'Do as they do, not as they do', *Mute*, no. 16, 2000, pp. 22-3.

interpreted as conceptual art experiments, but successful ones must leave the realm of art for politics.

It is this issue of use that bears on aesthetics, at least as conventionally conceived, most directly. Some net.art has sought to be directly useful, and this should not be a cause for surprise. While computing is often lazily considered to be a matter of simulation alone, digital technology synthesises reproduction and production. If modernism was most strongly associated with new technologies of mass-production that had a profound impact on everyday life (such as electric lighting, cars, planes and ocean liners) and postmodernism with new technologies of reproduction that transformed domestic life (above all, television), then the new era is brought into being by their synthesis.²² To take effective action online is to gain power that can have immediate consequences in the offline world.

One signal example is Brett Stalbaum's programme Floodnet which, as its name suggests, overloads a site with calls to load its pages, and also returns pointed error messages. For instance, in an attack in support of the Zapatista rebels on the Mexican government's official site, Floodnet returned the message 'human_rights not found on this server'. If an attack is to be successful, many people must launch Floodnet against the targeted site at the same time, gaining legitimacy by weight of numbers, much as a political demonstration does. Stalbaum is clear that Floodnet, in addition to being a tool of political protest, is also a work of art—a 'collaborative, activist and conceptual art work of the net'.²³

Contemporary art, as we have seen, positions itself between instrumental life and consoling culture, and net.art seeks to do the same but without the various strategies that gallery art uses to mark itself off from the rest of the culture and defend itself against the commercial pressures that affect mass culture. Net.art does so in an environment in which commercial competition is intense, and failure can mean invisibility. Lacking these usual defences and strategies, it can (dialectically) only mark itself off as art, and as non-instrumental, by becoming useful in the struggle against instrumentality and exploitation. In different ways, by

²² For this view of the division between modernism and postmodernism, see Perry Anderson, *The Origins of Postmodernity*, Verso, London, 1998, pp. 87-89.

²³ Brett Stalbaum, 'The Zapatista Tactical FloodNet', www.nyu.edu/projects/wray/ZapTactFlood.html

mounting Brechtian education, by establishing participatory and collective data projects, by overt political activity, it tries to break down the regular expectations of the online viewer for seamless spectacle and the smooth running of business.

Such works also appear to be about creating circumstances in which human interaction can develop in ways not normally permitted by either broadcast-mode mass culture or the administered circumstances of working. In this, online art is not alone, for there has been considerable gallery engagement with this activity. There are two recent and contrasting accounts of how one might approach this general trend.

The first takes the engagement in recent art work with human relations aesthetic. For Nicholas Bourriaud in his book, *Relational Aesthetics*, 1990s art has been most characterised by work which makes of social interaction an aesthetic arena in which artists offer services or contracts to visitors or simply facilitate talk between them. One of his examples illustrates the idea well: Jens Haaning broadcast jokes in Turkish through a speaker in a square in Copenhagen, forging a temporary bond between those who understood and laughed.

For Bourriaud the innovation of art employing social interaction in art is a direct reaction to human relations becoming increasingly subject to the division of labour, mechanisation and profitability. Such work offers, not theoretical prescriptions but instead small, momentary and subjective 'hands-on utopias' in which people can learn to live in a better way. Lived time, rather than the occupation of space (by works), is most important here. Yet this 'arena of exchange', says Bourriaud, must be judged by aesthetic criteria, through an analysis of its *form*. Social relations are treated as another artistic medium. They are to be judged formally as they are looked at (and they may well include things that look like conventional art objects and which may be bought and sold, though they, too, are judged only as part of the overall scene). Even the participants have this aesthetic relation to the work, for they both participate and have a consciousness of themselves participating (in the way that you do in an artificial social environment set up in a gallery).

There are certain key features of these socially interactive works: first there is a trade-off between the number of participants and their diversity and likely discourse. Active

participants tend to be few, elite and self-selecting. Second, in these temporary utopian bubbles, no substantial politics can be arrived at, not least because even among those who do attend real differences and conflicts of interest are temporarily denied or forgotten.

If all this activity seems self-consciously token and even futile, then the rise of this art can be taken to be a good deal less rosy than Bourriaud suggests. Coupled with thinking about the hollowing out of democratic politics, what Bourriaud describes is merely another art-world assimilation of the moribund or the junked, the re-presentation as aesthetics of what was once social interaction, political discourse and even ordinary human relations.

The second view, in contrast, would look to the transformation of work by computer communications, and see the emergence of new ways of working and by implication new subjects as a result. In *Empire*, Michael Hardt and Antonio Negri argue that the new mode of production makes cooperation immanent to the act of labour. People need each other to create value, but no longer necessarily capital and its organisational powers. Rather it is communities that produce, and as they do so, reproduce and redefine themselves, and the outcome is no less than 'the potential for a kind of spontaneous and elementary communism'.²⁴ While they do not mention it, the free software movement would seem to be the model here: emergent software, often freely distributed, that is made by mass collaboration, time being given in reward for prestige and (sometimes) monetary reward. If the aesthetic as an ideal of self-realisation was coincident with the rise of the bourgeois subject, then this ethos of gift-giving, open exchange and dialogue may be concurrent (and is on the *Empire* view) with the emergence of the networked subject more interested in exchanging bits—and bytes—than pieces.

The award of the prestigious art prize, the Golden Nica, at the 1999 Ars Electronica to the free software operating system Linux raised fundamental questions about the definition of the online art-work and the character of non-commercial collaboration. There is obviously a vast difference between Linux and most cultural projects: Linux is a shared collective project in which there are agreed aims and criteria. Speed, reliability, compatibility and simplicity are virtues agreed upon by the Linux community. Art is generally not like this, not because

²⁴ Michael Hardt / Antonio Negri, *Empire*, Harvard University Press, Cambridge, Mass. 2000, pp. 294, 304.

collective judgements are never arrived at, but because the criteria that underpin them are often unstated, and individuality—not to say eccentricity—is institutionally favoured. As Eric Raymond notes, in art projects where the utility of peer review is lower, the incentives for using the collaborative model almost evaporate.²⁵ This point, however, leaves open the question of the *evolution* of art to take advantage of this system, and we have seen that some artists have used the Internet precisely to open a forum for users' opinions.

To say that Linux is an art work may be a simple miscategorisation, and it has certainly not been adopted by the wider art world, so on any institutional definition of art, Linux could not be counted as a work of art. Further, to dub it a work of art is not necessarily to say that there is anything aesthetic about it, or that it encourages aesthetic attention. To the extent that aesthetics is opposed to business instrumentality, Linux's very functioning, let alone its success in certain markets, conventionally poses a problem to granting it such status.

Perhaps the use of Bourriaud's view is that it fixes on the shuttling between the instrumental and the aesthetic outlooks that can occur, quite rapidly, in experiencing such work. The simultaneous double consciousness of doing and seeing oneself doing (and being seen doing) that occurs in participatory work in the gallery may not apply online. What does, with works that tightly bind up elements that may be taken as political and others as aesthetic, seen in circumstances that are diverse and uncontrolled, is an oscillation of attention between the aesthetic and the instrumental.

Yet, against Hardt and Negri's view, it is odd to be talking this way or making work this way against a social and political scene that appears so bleak. After all, commercialism, and with it instrumentalism, proceeds in its global advance with little interruption; in many parts of the world, and certainly in the Western democracies where this work is largely seen, the popular power ideally inherent in democracy is more spectral than ever; social atomisation—a linked development—continues its rise; and 'Empire', of course, seems a less postmodern term than it did a few years ago.

²⁵ Eric S. Raymond, *The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary*, O'Reilly, Sebastapol, CA, 1999, p. 226.

Further, as long as the artist's position remains privileged, in creating frames in which interaction takes place, the dialectic that Adorno commented upon between bourgeois self-realisation and domination still applies. There is an inverse relation between cogency, coherence, order and domination and the degree of interaction permitted. The balance in much gallery work certainly lies with the artist, but this is even so of much the online work.

Set against this darkening background, the activities of the net artists seem ever more playful, funny, idealist—and perhaps the majority of its viewers remain just that, viewers, sitting back from these works, and taking them as performance, as aesthetic, and not too seriously as having a likely use or effect, or perhaps only a limited one, a carnivalesque irruption which serves to more securely anchor the order that it apparently opposes. On this view, even its explicitly anti-aesthetic elements, indicated by references to Dada or conceptual art, and idealism in opposing the dominant art world, are taken as (retro) aesthetic gestures—rather like wearing flares.

We are familiar with the way in which an aesthetic view of a work is more likely to assert itself when local and temporal meaning fall away, so that, for instance, propaganda works made for a government agency—the FSA, for example—become with the passing of time nostalgic and sentimental icons of a vaguely understood epoch. Sometimes, though, the effect works in reverse (as it did in the 1960s when the political charge of photography of the Depression was reactivated). So, if political and social conditions become more progressive, work made in the service of political improvement and emancipation may come to appear less gestural and ideal, and more directly useful, at least as models for further action. So, personally, I look forward to a time when net.art tends to appear less aesthetic than it does now.