Discussion Group on the Virtual Self: Donatella Bigoni, Margherita Cattera, Piero Gilardi, Pier Luigi Gregori, Bruna Piras, Federica Russo, Elisabetta Tolosano
New Media Art: What Kind of Revolution?

The ideological tendencies of new media art

According to Andrew Ross[1] one can consider the production of new media art as referring essentially to three politico-cultural positions which are active at a global level: radical neo-humanism, radical technologism and radical ecologism.

The first position corresponds to the more intense new-age cultures and contains the hypothesis that one must use new technology, from communicative to physiological-genetic, to strengthen the human being, to invert the enthropic process of modern-day society and to accomplish the "quantum leap" of utopic humanism.

The second position has a pragmatic character and is based on the alternative or antagonistic use of technology, and includes the movement of today's cyberculture, incorporating hackers.

The third position corresponds to the part of the ecological movement that considers the role of techno-culture in the dynamics of society and that therefore links artificial intelligence with the network of intelligence of the ecosphere.

Revolutionary valences of new media art

To locate these valences, one must carry out an analysis of the changes that are trying to redefine theory and praxis of the social revolution in post-industrial society.

Obviously it is thought that the revolutionary strategy introduced in the XX Century, in its European, Asian and Latin American variations, is obsolete as it is founded on the reversal of economic and state powers connected to that which Pierre Lévy considers the anthropologic space of the territory[2].

Today's theoretical trends identify as a central dimension in the revolutionary dynamic the field of knowledge, and thus information and communication, alongside the anthropologic dynamic of goods and the cultural transformations they induce.

This is because capitalist production is no longer fundamentally the manufacture of consumer goods, but the manufacture of sense, that is, implementation, co-ordination and innovation of social interaction.

The consequence of this change, at a semiological level, is the weakening of the relationship between meanings and meaningfuls, which, like the relationship between individuals and social systems, finds itself in an environment of statistical relationships. Within this environment new effective relationships of society's power are realised; as a consequence, the exercise of political power is also subordinated to the logic of information flows which control socio-economic transactions at a global level.

"Information engineering" of the social connection is not explained by the size of the macro-systems alone, but at the same time by the "microphysics of power" 3. Our individual lives are in fact modelled on information technologies through micro-structural scannings of bytes, genes and quantums.

Thus revolutionary action must find expression both at a macro-structural level, developing, as Lotman says4, the dialogical interaction between different social cultures and between different spheres of knowledge, and at a micro-structural level, through the processing of a new ontho-dialogical individual subjectivity.

This individual appears as a subject who, on one hand, lives his own desire in the micro-structural dimension of the quantums5 of human subjectivity, and on the other hand takes a new multiple and fractional Self, interconnected to the technological network of global communications and at the same time taken into a recurring logic6.

The identity of this subject would no longer reside in the emblematic collectiveness and autonomy of his person, but would be proposed as a psycho-dynamic, dialogic and evolutive function, in the polar tension (in the difference) between quantum energy and the fractional structure.

This dynamic function would therefore start dialectic between the freed potential of the Es and the dialogical awareness of the fractional Self, interconnected with the system of distributed intelligence and knowledge; the quantums of subjectivity would abscond from the binary-type structures and would express themselves in the potential and actions of each individual.

Beyond strategies, commensurate to the historical-social conditions underway, the fundamental objective of the "quantum revolution" is the emergence of a new type of semantic individual who is both creative and at the same time aware of his fractionality.

This subject realises that the real and the virtual are entwined in a "game" without solution of continuity; the genetic code, neuro-physiologic circuits, pulsing flows, the imaginary and systems of interaction with the environment may constitute a series of "Chinese boxes" in which each level is, at the same time, contained and a container, in which the Self experiments itself in a dimension of borderlines, of limits, between it own conscience and those of others7.

How is the practice of art tied to this revolutionary hypothesis? Marcus' thesis8, which saw the revolutionary valence of art in its intrinsic features of uncensored expression of pulsations and profound needs, appears correct but insufficient. More adequate would appear the positions held by Deleuze and Guattari, who assign the function of a break in the over-determination of technological society, and thus re-singularisation, to "new aesthetic paradigm" in the context of "chaosmotic" social interactions9.

The new media artist no longer manages his breaking role in the sense of a prometeic battle of the self-sufficient and solitary subject against the perverse over-determination of society, but instead alternatively relates to that same informational hyper-system which authority instrumentally uses, that is, by enhancing the chaosmotic potential of individual subjectivity in the context of a continuous and open interaction with the other and with the universe of widespread intelligence, including artificial intelligence.

An example of this rather proven practice may be found in a series of works that play on the so-called process of inversion of the human-machine relationship: we refer in particular to World, Membrane of the Dismembered Body by Seiko Minami, Digital Therapy by Seisuke Oki and Terrain 0/2 by Ulrike Gabriel.

Specifically, the latter work presents a stratification of metaphors belonging to the theme of inversion : the photo-sensitive robots at the centre of the installation move fluidly when the two participants, equipped with electrocefalographs, doze off, renouncing thought. The machine, subjectivity and language, faithfully reproduce a part of ourselves and allow us to experiment new forms of relationship, beginning with a mental state which is less constrained by the over-determination of rationality and logos.

New Media Artists thus work in a symbiotic relationship with virtual and connective technologies, but with the objective of crossing them to recover the quantum energy of our unrepresentable subjectivity, thus placing ourselves with respect to a more existential and profound, osmotically communicative identity. This act of re-singularisation can be considered coherent with the objectives of the "quantum revolution", but in order to actually be so on an operational level, the corollary of several specific methodological formalities is required: the open and co-variant form of the works, the visibility and legibility of the technological processes implied and the use of non-discriminate codes at a socio-cultural level.

This qualitatively revolutionary quantum-fractional creativity is related with the historically determined complexity of existing social relationships. In some cases, it favours the emergence of elements of critical knowledge with respect to the dominant management of the media; in other cases with respect to the narcissism of the self; in yet other cases with respect to the economic globalisation and the geo-political consequences.

Based on this document, a study was developed and put to a selected group of artists. Among the answers received so far, we extracted those three artists whose positions are extremely different.

Questionnaire

What social scenario in the society of hypertechnology and new media?

How do you see the current balance of forces between the strong politico-economic powers and the movements that use hyper-technology, in an antagonistic and liberational sense, in the name of society as a whole?

How do you see the problem of growing unemployment determined by automation technology?

What solution for the problem of geopolitical unbalance between the technological powers and the so-called third world?

What chances do individuals have of satisfying their human needs and of improving their conditions of existence through the new media and biotechnology?

What function can art have in the new media in the political scenario of the hypertechnological society?

Is your artistic activity directly or indirectly connected to today's social scenarios?

Are you concerned about your social target? About the way your public interacts with your work? Of the politico-social connotation of your network interlocutor?

Do you think that your art provokes critical awareness? That your network artistic communication gives rise to "connective" critical thought?

A selection of the answers to the questionnaire

by artists Olivier Auber, Ennio Bertrand, Mario Canali, Claude Faure, Mark Pesce, Paolo Rosa, Giorgio Vaccarino

Olivier Auber (F) is a graduate of the Ecole des Arts et Métiers and an "engineer-artist". He was responsible for the set-up of the "Expressions et comportements" department of the museum in the Cité des Sciences et de l'Industrie in Paris. Since 1986 he has been working on the online project "Générateur poétique", which is functioning as a multitask system at the moment.

Ennio Bertrand (I) is a staff member of ARSLAB. He has carried out a variety of Internet projects (including "Smell Link," the transmission of smelling images) and installations ("La memoria della superficie"). His works have been shown at New Media exhibitions in France, Holland, Germany and Japan.

Mario Canali (I) founded the artists group "Correnti magnetiche" in 1985; his work with this group was singled out for recognition by the Prix Ars Electronica in '87 and '88. Since 1992 he has been working with VR in connection with biofeedback ("Neuronde e Phatos").

Claude Faure (F) is an advisor to the Cité des Sciences et de l'Industrie in Paris, where he is a curator of technical-scientific exhibitions. He develops CD-Roms dealing with the hyper-representation of linguistic terminology ("La dérive des Continents"). He also does work in the fields of theory and education.

Mark Pesce (USA) is a cyberspace theoretician and researcher, and author of the book "Why in the World Wide Web?", in which he elaborates on the implications of the development of

the Infosphere. One of his web projects is "Web Earth", for which he received a Honorary Mention at Prix Ars Electronica 96.

Paolo Rosa (I) founded the group "Studio Azzurro" in 1982; they conduct artistic research by means of complex interactive video installations. He is active in the theoretical field and teaches prospective multimedia artists.

Giorgio Vaccarino (I) is one of the pioneers of Network Art in Italy. With "Passaggio a Netville", which went online in 1993, his goal is to establish a networked link-up between cyberspace and urban space. He is a staff member of the ISEA and of ARSLAB, where he responsible for networking.

What social scenario in the society of hypertechnology and new media?

How do you see the current balance of forces between the strong politico-economic powers and the movements that use hyper-technology, in an antagonistic and liberational sense?

O. Auber: Current powers hoard the codes with which the masses communicate and exchange. An art form which highlights the specific logic of the signs, the dynamics of the codes and their precepts can contribute to a certain re-appropriation of these phenomena. […] It is not a matter of directly fighting one power or another […] but of elucidating the myths and processes which permit their existence, their representativity and legitimacy."

E. Bertrand: If one took all the foam washed up on the beach by the waves of all the oceans and put it all together, one could cover a territory as large as the U.S. I would like to lower onto this image of waves the position that I believe the new technologies occupy: a notable position, but certainly a position that does not reach all humanity. On the contrary, I see the ditch, or should I say abyss, widening between individuals and populations that have access to new communication systems and others who for the moment ask themselves questions related more to a contingency of survival.
Innovative uses of network communication exist and they are extremely interesting: chat, mail, conferences, but I feel that for now they remain in the sphere of the individual and the small group. From here I would start a line of research on hypertechnological communications, with the focus on the development of new types of relationship between individuals joined only by a telephone connection.
Concerning hypertechnologies used with liberating intent in the name of the entire social body, it may be because of my indomitable difficulty in delegating, but I prefer not to have anyone who creates or destroys something in my name.

M. Pesce: I see this question as situated in a political rhetoric that is inherently polemical and therefore completely misrepresentative of the present situation.

M. Canali: It seems to me that such overly simplified interpretations are not only historically outdated, but also are applicable to precisely those mechanisms that one is desirous of changing here. […] The only possible approach seems to me to be that of complexity, […] the reinvention of interpretational paradigms on more or less a daily basis.

C. Faure: The relationship of forces you have spoken of massively favors the economic-political powers.

P. Rosa: It is difficult for me to identify movements that are using these technologies in a conspicuously antagonistic way. […] I do not believe that, in this phase, antagonism is the proper attitude with which to resist this dynamic process. […] Such acts of self-investiture seem to me to be predominantly a component of a reactionary culture to which I certainly feel no affinity.

G. Vaccarino: It is certainly not easy nowadays to advocate positions that are unequivocally antagonistic toward powers whose development often displays chaotic dynamics […]. A liberalizing function of 'hypertechnologies' can develop only by means of capillary growth of adequate cultures […], by means of a hypersensibility that encompasses all articulations of multiethnic society.

How do you see the problem of growing unemployment determined by automation technology?

O. Auber: I see automation technology more as complexity and energy expending factors. As a result work is globally demultiplied and its form changes. That is all.

E. Bertrand: I would like to highlight the schizophrenic movement of the solution to a problem using an object. It is probably a legacy from forest-dwelling primates, something like 2001 — A Space Odyssey, and the discovery of the manufactured item. I think the solution lies in knowledge.

M. Pesce: I don't see it.

M. Canali: The new technologies are even altering the concept of money in a radical way. Due to the progressive dematerialization of money, the reduction of it to pure information, it is no longer necessary for it to refer to a natural equivalent, a productive process, or a form of labor, however that is defined. […] On one hand, automation makes human labor less and less necessary; on the other hand, this results in an increasingly arbitrary monetary valuation of labor. In this current state of affairs, the problem can be solved only by a radical reformulation of the Social Contract, a reformulation so radical that not even the wildest utopias surpass it.

C. Faure: One can only hope that the domain of culture (in its broadest sense) benefits from this development by reaching a wider audience and, at the same time, increasing the number of jobs it makes available.

P. Rosa: Both the concept and the practice of labor have undergone profound transformations over the course of human history. In my opinion, a comparison shows that the model that has been produced by Industrial Society has not brought about the greatest level of equilibrium and justice. […] Can we all agree that we ought to use these changes as an auspicious opportunity to re-establish the bond between work and the quality of life?

G. Vaccarino: I do not believe that there will be fewer opportunities to work as a result of automation. Actually, I believe that the opposite is the case. […] To a much greater extent, the problem is the speed with which these often rapacious and exploitative automation processes are being implemented, so that the number of jobs is decreasing in those sectors in which new opportunities have not yet emerged.

What solution for the problem of geopolitical unbalance between the technological powers and the so-called third world?

O. Auber: The accumulation of codes presents a new feature with respect to the accumulation of capital: codes, to a certain point, can be reproduced infinitely. In this way, disadvantaged groups can acquire 'operating systems', like all other software, and transfer them to their own advantage.

E. Bertrand: As far as the solution to unbalance is concerned, I sense a sort of implicit belonging to the first world. I don't believe that an inhabitant of the Amazon would have put the question in these terms.

M. Pesce: There is no unbalance; implying that there is further marginalizes your "so-called" third world. The racist connotation of such a question should not be underplayed.

M. Canali: Certainly these new technologies could make the process of advancement of the so-called third world easier, faster and more economically sound. […] But beyond that, I see no solution to a problem whose causes are not primarily economic, but rather has a deep-seated cultural basis.

C. Faure: Should an artist reply as an artist? Furthermore, the term "third world" is too simplistic; it is no longer adequate to characterize the situation.

P. Rosa: This imbalance does not so much make me think of a drama, but rather about the fact that it could transform itself into a resource — though certainly accompanied by surcharges and price increases. It is possible that this type of domination is relatively fragile, particularly on the level of identity, insight, culture, and memory. The necessity to revaluate and protect minority cultures could emerge from this situation, and this could help us to remain rooted in tradition and history.

G. Vaccarino: I believe that the intrinsic nature of network-linked technologies make them most suited to function as resources advancing global diffusion, but of course this presupposes that the corresponding political policies are not side-tracked by perverse interests.

What chances do individuals have of satisfying their human needs and of improving their conditions of existence through the new media and biotechnology?

O. Auber: I hope and believe that there is simply enough space for everyone within the folds of complexity. From here to talking of improvement, that is a step which I don't feel I can take.

E. Bertrand: I wouldn't know what chances they have. I interpret these novelties as a new type of work, a new way to make money.

M. Pesce: Humans satisfy their own needs because of their will to do so; technology plays no role in it, except to sound the same symphony with different instruments.

M. Canali: Instead of an improvement, I regard this as an opportunity to put axioms up for discussion that have been considered generally accepted for two millennia.

C. Faure: A certain degree of individual mastery of the computer (and the Internet) will hopefully enlarge the scope of human freedom, but that is still a long way off because all types of perversion remain possible. In my opinion, there is not a single form of technology that possesses intrinsic virtue. On the contrary, the field of biotechnology will remain in the hands of specialists, even if it must be subjected to democratic control. The individual will remain largely dependent upon the alliance uniting those in positions of technical-scientific authority and economic interests.

P. Rosa: The problem is not how to best satisfy human needs but rather how to best maintain the equilibrium of natural resources in their totality. Without a comprehensive vision of this kind – in which human beings step out of the spotlight to some extent, and retain their central role only with respect to their responsibility – I do not believe that there is a prospect of improvement. Instead, absolute catastrophes could well be looming on the horizon. On the other hand, with the approach delineated above, the new technologies could be transformed into an extraordinary instrument to accelerate the development of a more suitable relationship.

G. Vaccarino: I do not preclude either of the two possibilities mentioned, either with respect to new media or biotechnology. To a much greater extent, though, I fear that it is precisely these human needs that could become the objects of rapacious and anything-but-innocuous campaigns of manipulation.

What function can art have in the new media in the political scenario of the hypertechnological society? Is your artistic activity directly or indirectly connected to today's social scenarios?

O. Auber: My activity is closely tied to them, but mine is not a political commitment, it is 'topological'. I believe that the universe of codes, of speeds, of interactions with languages, possesses intrinsic laws that must be discovered in the same way as those of physics or chemistry. But my path is far from scientific method (at least from that prevailing before the quantum revolution). I am fully aware that my entire being is a weighty part of experience.

E. Bertrand: I would think so, obviously. Otherwise I would be alone in the jungle, or rather the only inhabitant of Mars.

M. Pesce: All of my activities are directly connected to today's social scenarios.

M. Canali: I always try to orient my artistic activities upon the individual. Through this individuality, I am directly connected to today's social scenarios. I have an unshakable belief in the efficacy of the butterfly effect.

C. Faure: On the whole, my activities are unconnected with what you refer to as social scenarios.

P. Rosa: My research activities have always led to a confrontation with social scenarios […]. Since I began using the new forms of communication, I have the impression that I am constantly being called upon to come out with considerations and reflections on the dynamics of this process and the consequences it will have for society – as if this were a hot topic, a turbulent issue, as if every point that it touched upon were a neuralgic point which is highly sensitive to contemporary problems. On one hand, I am gratified to have become aware of how these experiments are again becoming so directly linked to reality following years of isolation on the part of artistic research; on the other hand, it fills me with a sense of responsibility, because it is now incumbent upon me to demonstrate that art is capable of regaining its central position in the dynamics of our time.

G. Vaccarino: The most important point of reference for my work has always been the most highly frequented public space […]. Above all, I am interested in the possibility of intersecting the pathways of the population in the Internet with those of the population on the street, or – even better – to bring about a consolidation of these two segments of the population.

Are you concerned about your social target? About the way your public interacts with your work? Of the politico-social connotation of your network interlocutor?

O. Auber: No. My work is directed at everyone. I am often surprised by the diversity of the people who show interest.

E. Bertrand: Very much so. Otherwise I could have realised a work which is not understood and which would not have established an imaginary connection between my imaginative and planning thought, and its recreation in the public's emotions. […] I am not worried about the politico-social connotations of my network interlocutors, just as I don't think about them when I use the telephone. What would the difference be if they weren't in the network? For example in an art gallery or in a museum?

M. Pesce: The 'politico-social connotation of your network interlocutor'? What the hell are you folks talking about with them fancy big words? We're not that smart over here in America — could you simplify that a bit?

M. Canali: I want my works to always display a stratification of multiple levels of interpretation and meaning which makes them accessible to a broad target audience. Interaction does not only mean to open up a work to public participation, but also to avoid strictly predefining the level of participation.

C. Faure: The answer is yes, even if that might seem to contradict my answer to the previous question. This applies primarily to the (smaller) segment of my work which employs the computer as a medium.

P. Rosa: Purely synthetically, I believe, interactivity represents an extraordinary opportunity to reestablish a dialogue with a public that has become increasingly estranged from the artistic experience and is increasingly in the throes of the dynamics of communication on a larger scale. The outcome of this relational experience has been that my thinking with respect to my projects focuses more and more on my potential interlocutors. And also because I was often compelled — outside of this dynamic process of forced acculturation and outside of this abstract dimension — to prefigure its gestures and modes of behavior as those of a target audience which is part of a marketed culture of communicative scenarios.

Do you think that your art provokes critical awareness? That your network artistic communication gives rise to "connective" critical thought?

O. Auber: It would be exaggerated to say that my path can "give birth" to a critical thought. Rather, it may constitute, on a case by case basis, a pick, a reference point, or a buffer for a multitude of thoughts. I see it every day.

E. Bertrand: I don't know. Perhaps. I hope so. When a work pleases, it starts critical thought. The thing to fear is indifference. The thought will be connective if it is a connective work.

M. Pesce: In the best of circumstances, art provokes revelation; critical awareness can be a by-product of that awareness, if that moment of revelation is accompanied by a direction, a plan. However, this is also art as propaganda, as brainwashing, as an extermination which "closes the gaps" in thought. I let my works speak for

themselves, but it is necessarily contestualized by the body of my work, and the culture against which it is situated.

M. Canali: Sometimes I observe that it happens, and I am certainly pleased when it does.

C. Faure: Yes, "**La dérive des continents**" and a few other more or less participative works might stimulate a process of reflection. But about what? About the paradox of language, about the value of play, about the relativity of opinions, etc. I do not believe that this is what you would call critical awareness, and it is to an even lesser extent "connective" critical thought.

P. Rosa: What I together with my friends at Studio Azzurro are attempting to propagate are experimental models, paths […] that make the audience aware of the scenarios conveyed to us and the resulting mutated reality, but rather through their own experience than as a result of pronouncements from us. […] In addition to a greater responsibility on the part of the project initiator, which surely confronts him with certain ethical issues, this also calls for a heightened sense of responsibility on the part of all those who have access to these experiences, and presupposes at least as much effort in their way of going about this […] that it can be regarded as a sign of their commitment. In this case, the gesture becomes a declaration of accessibility; everything that happens after that is left up to the sensibility, creativity and intelligence of the respective individual. […] The more I become — instead of an author — the observer of my audience, the more — I assume — the viewers become authors of their own experiences …

G. Vaccarino: I do not expect that either. To tell you the truth, I trust in the public and its capability of developing "critical thought" independently; the more delicate matter is to awaken those "connective" emotions which that thought should ultimately be considering.

(Translated by Brett Thorburn)

Notes

1 A. Ross, "La nuova intelligenza", in: G. Bender; T. Druckrey, **Tecnocultura: Visioni, Ideologie, Personaggi**; Apogeo, Milan 1996.

2 P. Lévy, **L'intelligenza collettiva. Per un'antropologia del Cyberspazio**, Feltrinelli, Milan 1996.

3 This is a concept from Foucault that recurs throughout his work.

4 J.M. Lotman, **La semiosfera. L'assimetria e il dialogo delle strutture pesanti**, Marsilio Editore, Venice 1985.

5 In our context, modern physics' concept of "quantum" should be considered metaphorically: it expresses the irreducibility of the subject to simple biological and linguistic dimensions.

6 Cfr. G. Deleuze, **Differenze e repitizione**, Il Mulino, 1971.

7 On the concept of borderlines, reference is made to Bachtin in: T. Todorov, Michail Bachtin, **Le principe dialogique suivi de Ecrits du cercle de Bakhtine**, Edition du Seuil, Paris 1981. The subject described by P.A. Rovatti in Abitare **a distanza. Per un'etica del linguaggio** (Feltrinelli, 1994) seems to be placed in a position which is in certain respects analogous.

8 H. Marcuse, Eros e civiltà, Einaudi, Turin 1964.

9 F. Guattari, **Chaosmose**, Editions Galilée, Paris 1992.