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Science, Culture, Media: Untimely Meditations [1]

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1. SCIENCE, CULTURE AND SOCIETY

Around the mid of 20th century, Beltrand Russel lucidly commented with the following words on the different kinds of impact that science and technology can have on our society:

> the effects of science are of various different kinds. There are direct intellectual effects: the dispelling of many traditional beliefs, and the adoption of others suggested by the success of scientific method. Then there are effects of technique on industry and war. Then, chiefly as a consequence of new techniques, there are profound changes in social organization which are gradually bringing about corresponding political changes. Finally, as a result of the new control over the environment which scientific knowledge has conferred, a new philosophy is growing up, involving a changing conception of man's place in the universe. (Russell 1951: 9-10)

Cultural and social studies in the last three decades have generally shunned such sweeping analyses and devoted themselves instead to micronarratives and local issues, but time is come perhaps to deal again with wider topics.

The variety of effects mentioned by Russell can in my view be basically reduced to three fundamental types: practical, theoretical and imaginative or figural effects. As such, they therefore pertain respectively to politics, philosophy and art, – or, to put in Kantian terms, to practical reason, pure reason and judgement, be it of taste or of value, aesthetic or teleological. However, we also ought to consider that these effects are neither unidirectional, nor cumulative and synchronous, since they all take part in a complex and unpredictably

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dynamic socio-cultural environment. Today, we can observe for example that the results of the huge technological developments of the last 50 years do not look at all like what Russell and other intellectuals of his time had hoped for. In fact, they have neither produced an increase of cooperation and tolerance, nor a more intelligent strategic planning of our common future, guided by the wise authority of supranational institutions. On the contrary, they have triggered a convulsive competition, an uncontrolled exploitation of natural resources, an ever more iniquitous distribution of riches and, as a counterpart to all this, new kinds of obscurantism, a plethora of minority reports and a widespread religious fanaticism, both in the rich and the poor countries. This situation forces upon us the conclusion that scientific and technological progress do not necessarily lead to the kind of open and enlightened society hoped for by a number of scientists and philosophers in the Fifties and the Sixties of the Twentieth century. Consequently, we have to rethink the whole relationship between science, technology and culture as a field of (often antagonistic) interactions between practices, discourses and disciplines; that is, as a complex epistemic field (quite in the way suggested by Foucault), marked by numerous conflicts and contradictions, by the different times of development of its several components and, finally, by possible unpredictable emergencies. In conclusion, cultural development appears today conflictual and asynchronous, and its overall outcome uncertain as never before.

Technical and scientific progress in particular, not unlike cultural progress as a whole, takes place in a field of interaction between tradition and innovation, that is between the principle of authority on one hand and that of observation and inference on the other. Scientific progress not only destroys old authorities (dogmas, superstitions, habits), but also helps create new ones. That means that there is a sort of re-productive circle (more or less virtuous or vicious) between belief and science, involving the whole field of culture. In any case, we cannot trace any stable or direct relationship between techno-scientific progress on one hand and social improvement on the other.

Bertrand Russell also argued that the invention of gunpowder and of the compass in the late middle-ages, followed by the invention of print in the early Renaissance, were crucial factors for the formation of strong nation-states as well as for the beginning of what we now call 'globalization': the artillery of the king could dismantle the castles of the barons, the compass pave the way for the discovery of the Indies and America, and both of them contribute to break down local medieval autonomies. This increasing capacity for communication and control by the central powers was reinforced in the next few centuries by the inventions of the steam engine, electricity and the telegraph. But

this general centripetal tendency has, in Russell's view, undergone a strong reversal with the diffusion of radio, photography and the cinema at the turn of the 19th century, followed by that of television some fifty years later, all of which are powerful vehicles of propaganda hardly controllable by a centre. This process of reversal, we may say , has come to its climax with the invention of the computer and the diffusion of the internet. Nowadays fluxes of goods, money and news have all become almost uncontrollable by any central institution, and this has contributed to the revolution of world-economy, causing the crisis of nation-states and of traditional politics.

The major themes of the reflection on the impact of techno-science on society to be found in Russel's pamphlet-book are in my view, (as it is also the case with those to be found in the Frankfurt school's philosophers), still relevant today: 1) the relationship between local and global; 2) the cultural impact of networked hypertexts, both as tools and models of knowledge/power; 3) the consequent change of several forms of social games through the combination and synthesis of older kinds.

To sum it all up, the developments in techno-science are changing the typology as well as the economy of social interaction, introducing a new ratio between four different ideal types of games: those of collaboration, competition, randomness and vertigo (Callois 1967: 45-91). In the case, for instance, of the internet multi-user dungeons (MUD) or role-playing games, as well as in those of stock exchanges and bets, chats and forums, virtual communities and fanzines, it is clear that social games are taking up new shapes, often by recombining and synthesizing older ones.

Needless to say, amongst all games, those of war are of particular importance, since they have a bearing not only on the power-relationships between nations and peoples, but also, and more dramatically, on the survival of the human species as a whole. More than fifty years ago Bertrand Russell described the changes induced by technological progress in the conduct of war, understanding what was at stake therein and pleading for the necessity of a rational solution to the problem:

> we have to choose, within the next fifty years or so, between two alternatives. Either we must allow the human race to exterminate itself, or we must forgo certain liberties which are very dear to us, more specially the liberty to kill foreigners whenever we feel disposed to. I think it probable that mankind will choose its own extermination as the preferable alternative […] we are perhaps living in the last age of man, and, if so, it is to science that he will owe his extinction. (*ibid*.: 102)

This seems to me a very clear and still valid diagnosis, registering a decisive

change in our responsibility (both individual and collective) in the field of ground-breaking scientific research as well as in that of political action. Involutions as well as revolutions, both in science and politics, might in fact have disastrous consequences, since their potential impact on the planet has now become incalculable. Responsibility therefore can no longer be restricted to single individuals and to their intentions, or applied to local situations, but has to be stretched beyond the scope of our single actions, which seem now to fall under the spell of some 'universal sympathy' principle (cf. Jonas 1979).

In any case, the main issue regards the ratio between the ever growing knowledge-power of man and the stability of the ecosystem. With respect to this, the instrumental as well as the modelling value of the internet appear to be of great momentum: the economic and eco-logical games of the future will in fact be played mostly on the web; the new imaginative patterns, forms of judgement and behavioural norms will issue from this telecommunication-matrix.

We have previously observed that, at the moment, no centralized institution (either nation-states or supranational organisms) can neither exert a total control over the global economy, society and culture, nor establish clear, explicit and effective norms for their functioning. We should therefore acknowledge the fact that our global village is built on a number of scattered multinational gambling subjects, decentred and hardly localizable, which tend to act obeying no statutes, long-term projects or ideologies, but rather extemporarily, and according to chance and opportunity. Not only traditional war has therefore drastically been changed by the introduction of a new tension between blind-striking terrorism and 'international' (mostly biased) police agency; not only war, but the whole sphere of social interaction is being in fact configured around these two poles. More so, it is the entire ecosystem which is now constantly solicited by such opposing drives of terrorist insurgency and police intervention (just think to the routine production/management of 'natural' emergencies such as earthquakes, floods, tornados and so on). Although it is not easy to predict how humans and their environment will interact in the next few decades, we should nevertheless keep in mind that the evolution of a system may have a point of no return and take a sort of qualitative leap after which catastrophe for it becomes unavoidable, and that this cautionary principle equally applies to the evolution of natural as to that of cultural systems.

2.   IDEAS OF CULTURE AND SOCIAL MODELS

As Raymond Williams once remarked, both the idea and the common use of the word "culture" were developed in Great Britain during the so-called Industrial Revolution (Williams 1961: 7), that is more than two centuries ago: nowadays, in the post-industrial age, this word-idea has undergone further considerable mutation. With the advent of the mass media, followed by that of the digital technologies and the internet, the modes and places of cultural production/transmission have multiplied and scattered. Hierarchical institutions such as state, school, university, church and political parties, which once presided over cultural re-production and transmission, no longer have a total control over it, and are much less able than before to exert forms of hegemony, which have as it were been handed over directly to the economic-financial powers that be. And high culture has been fleeing its old temples, churches and academies, flooding over streets and squares, in the theatres of the real as well as of the virtual world, apparently becoming more democratic and 'demotic', affecting and infecting us with ads and clips. However, as I have been arguing before, technological changes usually destroy older forms of authority and hegemony only in order to create new ones. Therefore, understanding what new forms of hegemony the telematic era is now bringing about, is of greatest importance. Such an understanding will probably require the creation of a whole new theory of cultural transmission, along with a reformulation of the role played in it by old practices and institutions such as the public school, the study of literature, the printing press, the state, political parties, and all the (more or less secret) associations and corporations of sundry kind.

During the 20th century we have witnessed to the gradual passage from the local community, based on the concept of ethnicity, residence in place and the personal acquaintance between its members (the so-called *Gemeinschaft*) to modern society, based on complex impersonal relationships, depending on the functions exerted by the single individuals in the whole system, rather than face-to-face interactions: the so-called *Gesellschaft* (cf. Tonnies 2002). Nowadays, in the information age, we are already witnessing to an increasing tension and contrast between territory-based communities and delocalized interest-communities. And this could cause a new unpredictable synthesis of the two previous models of *Gemeinschaft* and *Gesellschaft*, as well as of the two distinct figures of the freelance task-worker and of the functionary [2]. If the whole

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[2] This is in fact already happening in Europe in many spheres of the so called public service such as healthcare, education, territorial management, which are more and more being delegated to external contractors.

shape of society-and-culture is dramatically changing at the beginning of the new millennium, surely that of cultural studies cannot remain untouched.

3. CULTURAL SYSTEMS AND EVOLUTIONS

Using a wholly different approach from that of the British cultural studies – an approach, strangely enough, almost completely ignored in the Anglo-American world – the Russian semiotician Jury Lotman has been studying for some decades the forms and evolutions of culture. Lotman proposes an operative definition of culture both as language and text – that is, as a system of systems (Lotman 1973: 25ff.). Lotman makes some very interesting observations on the relationship between society and culture: first of all, he notes that, for how much cultural expressions may seem a form of luxury as compared with primal needs, a brief historical survey may suffice to show how they are indeed an indispensable luxury from which no civilization, even in the most extreme conditions of survival, has managed to abstain: "the life of a community of any kind is not possible without a culture." (*ibid*: 26)

Why this is the case? Well, because if man is an organism whose life is determined by biological processes, society owes its existence to a symbolic, that is a cultural, diet. Culture is for society as necessary and inevitable as breathing is for man.

For Lotman, culture can first of all be considered as a process of accumulation and exchange of information. It can be defined as "the ensemble of all non-hereditary information and of the means needed for its [society's] organization and conservation. [...Therefore] information is not an option, but an essential condition for humanity's survival. The struggle for survival, both biological and social, is a struggle for information." (*ibid*.: 28) [3].

This exchange of information happens in each and every cultural organism, and as every culture has been shaped firstly through language, for this reason it tends to reproduces the structural scheme of language at all levels of its internal organization. However, rather than as a single language, culture should be conceived of as a (more or less cohesive and hierarchic) set of languages, caught in a process of constant interaction and mutual translation, as well as of the texts that have been produced through and in these languages.

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[3] This idea of culture as a mechanism of accumulation and exchange of information (being computational in kind) may be useful to understand the relationship between culture and the digital media, as well as the problems of present-day hyper-wired society.

One could conclude that Lotman conceives of culture as a hyper-language as well as a hyper-text. This concept of culture as a set of different codes, texts and media may allow us to think of its development as a process of constant translation and trans-codification, through which the collective memory of a given community is conserved and reproduced.

Lotman considers culture as a complex and polyphonic meta-language, defined not so much by a system of social conventions or by a logical syntax, but rather by a dialogical praxis: a sort of dialectics between texts, codes, systems, matters and forms of expression and content in mutual cooperation as well as competition, swinging to and fro between the opposite poles of order and chaos, meaning and noise, continuity and explosion.

Lotman thinks indeed in a holistic way, adopting a logic of complexity for the study of culture: between lived experience and thought there is speech, deploying itself in different medias; between the biosphere and the noosphere, there is the cultural semiosphere. This is a complex, steadily evolving system, partly linear, and partly discontinuous and unpredictable. To sum up the core of Lotman's argument, we may say that cultural evolution, just as literary evolution, happens in time through the change of alternating practices, media, institutions, models and genres of speech in the dominant function within a given social system. The dominant, (as it was conceived by Trubeskoj, Jakobson and Tynjanov with respect to linguistic and literary evolution) constitutes the characterizing (focusing or de/forming) element of whichever symbolic system; so different phases in the evolution of systems in general can be considered as the result of a change of dominant among their elements or functions. (Pomorska and Mateika 1971: 66-90) A cultural dominant thus shapes both the production and the reception of texts and discourses, practices and institutions – in other words, the whole episteme of a given epoch. Moreover, the replacement of dominant functions combines with that of the informing metaphors and world-models in the self-representation of a given culture: for this reason we can talk of myth, book or (nowadays) multimedia-civilizations.

As we have seen, according to Lotman, in a perspective similar to that of systems-theory, cultural evolution can be conceived of as "a process of information, accumulation and elaboration" (Lotman 1992: 133) That is, culture itself can be understood as a wired hypertext, a system that is subject to multiple interactions with the surrounding environment, which define its overall evolution. The metaphor of the hypertext may sum up Lotman's theory of cultural evolution, which is based on the internal dialogue between subsets and regions, on their struggle for dominance, on the interplay of production and consumption, demand and supply, as well as on feedback mechanisms, positive and negative,

which amplify or neutralize the solicitations coming from the external environment, that is from everything that is perceived by its users as not belonging to their culture. I consider the metaphor of the hypertext as the characterizing feature and the interpretative key of present-day civilization.

In *Culture and explosion* Lotman keeps further reflecting on culture as a stratified and complex system in its development through time. His analysis here stresses two points which are fundamental for the study of any system: the relationship between system and environment, and that between stasis and dynamics. As we have seen, for Lotman the interaction between two or more languages (as for instance numbers and letters), and their relative translatability within a given society is to be considered as a basic presupposition both for the functioning and the comprehension of culture itself: "a minimal functioning structure is composed by two languages which, taken apart, cannot contain the exterior world" (Lotman 1993: 23). In other words, cultural studies have to be intrinsically trans-linguistic and interdisciplinary. In this respect, Lotman clearly sets himself at a distance from all sort of structuralism: "the ideal [semiotic] model with a single perfect language has to yield to that of a structure including at least two languages, or to all the open list of different languages that are reciprocally indispensable, as they cannot express the world separately." (*ibid*.: 10) His conception of culture as multi-lingual translation could therefore be also defined, borrowing a Bachtinian terminology, as that of the 'constitutive polyphony of culture'. What we are dealing with here is the radical affirmation of a pluralistic epistemology opposed to the monological and reductive models of communication elaborated in structural linguistics and analytic philosophy in the course of the XX century. Particularly interesting in this context is the postulate of the limited translatability of two different languages or codes (for example the literary and the musical one) within a given cultural context, as a minimal prerequisite of the system's vitality and of its adequacy to survive in its surrounding environment: so the plurality of languages and their partial translatability are the preconditions of cultural life. Lotman further notices in the development of all culture a constant polarity between an irreducible multilinguism – or *babelic principle* – and a tendency towards the unification of all experiences in a unique language – or *mythical principle*. This polarity is analogous to that which, in Bachtin's view, we can find in literary texts, between the tendency towards heteroglossia on one hand, and that towards authorial stylization of the linguistic materials employed (cf. Bachtin 2001).

Within the development of such a plurilinguistic and multilayered system of culture, Lotman also detects the action of a generative tension between

continuous and discontinuous, or, in his own words, *gradual* and *explosive* processes. These two developmental modalities however are both indispensable for the functioning of a system of culture, both in a diachronic and in a synchronic perspective. Reading the works of Lotman, we find ourselves before a stratified and dialectical idea of culture, characterized by an asynchronous development of its different levels, practices, discourses and institutions. These asynchronous, discontinuous, explosive processes constitute indeed the real basis for the evolution of cultures, and only at a second stage, that of self-consciousness and self-representation, they are reflexively reconfigured , normalized and historiographically reconstructed. All cultures are thus endowed with mechanisms of self-conservation, which allow for the moment of random unpredictable change or explosion to be as it were digested and corrected by a feedback loop or conservative retrodiction, reducing the casual and fragmented events to the hypothesis of a necessary and continuous process, which ultimately sediments as figures and schemes of discourse (*logos*-in-action) in the collective memory. In this perspective, the historicization and the legitimation of socio-cultural processes seem to be indivisible and inherent to the same narrative structure of collective memory and consciousness.

Even though culture can be studied both from a synchronic and a diachronic perspective, that is both as a system and as a process, only the latter aspect represents the reality of culture, and the static condition is only a speculative abstraction. Amongst the discontinuous processes of cultural evolution, we have especially to mention semantic intersection, which produces new figures of speech, and intertextuality, which provides for new canons and discursive genres. If the interaction between texts, practices and disciplines constitutes the dynamics of a given culture, this is all the more the case with the interplay between old and new media, that kind of dense re-mediation (cf. Bolter and Grusin 1999) that takes place in times of such dramatic technological as well as social changes as ours, and constitutes cultural evolution as such.

According to Lotman, within the cultural dynamics of continuity and explosion, *art* has an especially important position. Art is for him one of the main organs of mediation between the unforeseen event, the acquisition of an awareness of it and the construction of cultural memory. And the function of artistic imagination consists precisely in the linking of events, discourses and forms of collective consciousness. For this reason the work of art ought to be ideally conceived as a hyper-media and an inter-text. The idea that firstly there is a text and then that it may show some kind of intertextuality at work proves inadequate, as the text always offers itself to the interpreter together with the

tradition to which it belongs, and in an ongoing dialogue with other texts that belong to the same tradition.

The starting point of Lotman's cultural theory is not the single sign, text or system, but rather the relationship between at least two signs, texts and systems, that is the hypothesis of a semiotic space which is to be considered as essentially synaesthetic, polyphonic and intermedial. The three fundamental oppositional axes detected by Lotman for the study of culture(s) are: system/environment, static/dynamic, gradual/explosive change. These axes may perhaps help us construct orientational grids in the wide sea of cultural studies by re-mapping the social on the media sphere.

4. CULTURE, MEDIA AND LITERATURE

In Lotman's view, art and literature constitute forms of mediation between technological innovations and social practices. As we know, this is also the starting point of Marshall McLuhan's studies on the cultural impact of the new media. In my opinion, McLuhan's contribution for an understanding of contemporary culture(s) is still of the greatest import, though it has generally been undervalued by most Anglo-American currents of cultural studies in the last three decades. It is important to remark that McLuhan, one of the major media scholars of the XX century, was first of all neither a sociologist nor a computer scientist, but a professor of English literature with a comparative slant, who at a certain point in his career realized how much modernist literary fiction (in particular Joyce's) was suited to represent the epochal transition from the literary to the multi-medial civilization. In other words, McLuhan lucidly detected in the experimentalism of the literary avant-gardes an anticipation of the networked cultures. His study of the important effects of the new media on society is in fact constantly underpinned by a strong belief in the fundamental role played by literature in adapting the reader to the contemporary mass-media world, by enabling him to go back from the clichés offered by the advertisement and entertainment industries to the archetypes of a shared tradition (Lamberti 2000: 38-49). This is a very fruitful approach indeed for the study of collective imagination, evolving between literature and the new media, and one that can also offer a considerable hermeneutic vantage point in the field of cultural studies. It would be out of place here to go into the single themes and cultural phenomena treated by McLuhan, and on which very much has already been written to date. However, it shall be useful

to stress the great potential of the approach of the whole Toronto school for the definition of the concept of culture and for the study of the many net-communities of today. The insistence on the new dialectics between cliché and archetype, for example, as well as the mechanisms of re-mythization that take place in mass-culture are a fundamental key of access to the forms of contemporary culture and to the modes of production of identity and difference, of individuals as well as of groups, in a time when the technological archives of collective memory are radically changing.

Even though this is not apparent at first sight, this approach recalls that of Walter Benjamin (along with a whole strand of Marxist sociology, especially that of the Frankfurt School) and his considerations on the technical reproduction of the work of art. For Benjamin the effect of this reproducibility can be summed up in the loss of cultural relevance (or aura) of the single work, in a generally spread popular taste for serial production, in a dangerous confusion of the spheres of aesthetics and politics, and finally in a sort of loss of identity for the artist (especially for the literary artist, as the representative of high-culture) as the privileged functionary to which the task of the cultural transmission had been assigned.

I am neither here trying to assess a direct cultural affiliation, nor to equate the Frankfurt and the Toronto School approaches to a sociology of art and literature, but only to indicate some points of contact and articulation of two major (somehow antithetical) tendencies in XX century thought: Husserlian phenomenology and Marxist historical materialism. The first tendency aimed at bracketing all hidden structures, the various entanglements of causes and ends, the biological as well as cultural conditionings of a given behaviour, in order to be fully able to appreciate it as sheer phenomenon, in its indubitable manifestation. The second tendency on the other hand has insisted on the economic dependence, and therefore on the ideological nature of every representation, which ought therefore to be openly exposed and denounced. Thinkers such as Benjamin, McLuhan and Lotman (even when strongly differing in terms of their approach and style), starting in their analysis from literature and art as crucial laboratories of social dynamics, have managed to detect the fundamental junctions of articulation between technology and society, and to consider cultural dynamics as a contended field for hegemony, that is for the redefinition of the canons and for the administration of the symbolic capital of a given society.

These thinkers all conceive culture as the result of a techno-economic basis , on which the former can nevertheless have retroactive effects, thus injecting complexity in the social world, and showing the insufficiency of any

deterministic analysis of social phenomena.

The significance of these techno-cultural loops is increased by the new interactive media and telematic networks which now cover up the whole 'global village'. The cultural network of our days can be thought of as a huge hypertext, subject to a constant feedback-process, and ideally coincident with the web, functioning as the root metaphor of our days. To put it simply, that of the wired culture appears to be the most fruitful paradigm for the comprehension of the present social dynamics in all their complexity.

Since technical tools and apparels act as prostheses of the human body, the impact of a revolutionary technology can be considered, as McLuhan puts it, as a sort of *collective surgery*, producing a post-surgery shock on the social body, followed by a general narcotic effect, which prevents people for a certain period of time (as a sort of defensive mechanism) from understanding the real nature and import of the changes that are taking place within it. According to McLuhan every major technology brings with itself new forms of cultural interaction, and modifies the social background on which they operate. As a result of this 'narcosis', the new social environment which is created as a response to the advent of a revolutionary technology is not immediately recognizable for the subjects which inhabit it. For a while, they remain as it were unconscious of the new configuration. Here the artist makes his appearance on the stage, as he is the one who first perceives the alterations which a new medium provokes on human experience and is thus able to redefine a common horizon of sense. The function of art therefore is that of creating a sort of *counter-environment* in which it is possible to perceive the subliminal conditionings on man that result from the impact of a new medium. (Lamberti 2000: 91-117) Fiction thus presents itself as the laboratory of critical (de)composition of the social situation that results from the technological process, as well as the pre-figuration of its possible horizons of sense. Art is the true starting point of every cultural strategy, understood as the cognitive response of the social systems to the solicitations of technology. This is all the more evident in the case of the new hypermedia, which appeal to the whole sensory spectrum, and thus directly modify our perceptive habits, mental and practical attitudes, and create a new horizon of alternative virtual realities.

The recovery of such philosophical, semiotic and hermeneutic strands within cultural studies may hopefully help articulate the concept of culture as an ensemble of signifying practices, in the age of the digital recombination of every sign-object and of long-distance social interactions. This is a time when all phases of the cultural process (representation, identity-construction, promotion, consumption, regulamentation of exchange-processes) are character-

ized by modularity, retroaction and inter-mediality, all of which can be clearly observed in the functioning of the networked-hypertext, which I therefore consider as the radical metaphor of today, replacing the older root metaphor of the book.

The concept of culture we are dealing with here is a complex system of reproduction and self-representation, conceptually articulated around such polarities as cliché/archetype, local/global, structure/process, static/dynamics, gradual/explosive, system/environment, production/reception. This concept of culture allows one to avoid determinism, be it Marxist (economic structures determine cultural super-structures) or neo-Darwinist (culture is the product of random occurrences and the survival of the fittest), while shirking absolute, non-decisional relativism as well as the acritical optimism of those who believe in the political power of selective, critical consumption and in its capacity to destabilize the economic status quo. Culture is much more than a single language or text, and for this reason it cannot be simply understood following the games of encoding and decoding, as once suggested by Stewart Hall (1992: 128-38); we might rather consider it as a *hypertext*, that is as an ensemble of interactive, virtually accessible contexts; a horizon that is always open, though requiring, in order to become really meaningful, operative choices and provisional cuts and closures from its users and explorers, that is from all the hybrid and nomadic subjects whose intersecting paths are tracing out our new global cultural geography.

In this perspective, and taking into account the irreducible complexity of the social world, we ought in my view be ready to redefine the relationship between science, art and politics in this age of technological re-combination and quick consumption of symbolic goods; and hopefully, we should also be able to find new possible intersections between intellectual work and social engagement. I believe time is come again to get out of textual practices, campus politics and minority reports, which all have gone hand in glove with market strategies and proved equally effective in keeping a few in power, many in distress. Our environment is firstly at stake. You, the youth, have no longer a frontier to cross, nor a land to conquest or a dream to foster. You simply have a world to keep alive and enjoy, if this is still possible. No God will help. Perhaps time is come again for more relevant and responsible (i.e. also more 'totalising') thinking and more daring action, in social practice and cultural studies.

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