

MUSICAL THOUGHT NETWORKED

Dante Tanzi

Laboratorio di Informatica Musicale
Dipartimento di informatica e Comunicazione
Università degli Studi di Milano
Via Comelico 39/41
20135 Milano
+ 39 5031 6380
dante.tanzi@unimi.it

ABSTRACT

The processes involved in the digitalisation of audiovisual knowledge call for a change of perspective. This derives from diverse factors: the adaptation of perceptual abilities required for using digital devices, the change in social and cognitive profiles involved in computer-human relations, and the operational dimension of time. While networked technologies introduces a system of proximity independent of distances in physical space, an overlapping of communication channels in on-line environments is accompanied by some uncertainty and non-linearity. Consequently, within the intermedial, interactive spaces of the net, the musical objects can be processed through ways which destabilise their original connotation. As for musical navigators, between retracing contents, extracting connections and meanings, and modifying musical features, they enjoy a sort of hidden co-authorship. This paper describes how on-line technologies are gradually modifying the relationships between the authors, music and audiences, and inquires whether the production of musical meaning can remain unchanged in a distributed environment.

1. INTRODUCTION

The interpretation of information flows and the control of structures constitutes the core and the communicative specificity of music. Music, by nature, effects forms of change within the intertwining of various narratives. Musical experience habitually has to interpret a variety of materials and styles, and cope with a communicative environment pivoting on the control of time and musical forms. But the presentation of musical contents is usually linked to codified variations, through itineraries starting from and flowing into particular dimensions of social acceptance.

Present day digital technologies have produced a more refined control of temporal structures, of timbre dynamics and of spatial parameters. Just as the stratification of time granularities used in contemporary and electroacoustic music mirrored the collapse of linear narrative in literature, the advent of hypertext and decline of linearity reflected the weakening of the subject-centred paradigm [1]. This explains why, on the net, musical activities can evolve through the coexistence of different subjectivities: relationships between composers and their audiences are modified; the

communicative exchange may become more important than the description of contents [12]; the cognitive environment of navigable spaces proposes a different frame for spatial and diachronic communication values [9], since it presents different interaction paths every time. Consequently, within the formation of musical meanings, on-line communication proposes new articulations that influence the existing relations between producers and consumers.

2. PHENOMENOLOGY

In an on-line context, messages and their contents are jeopardised by the often unpredictable effects of latency [2]. Despite the attempts to correct [16] or use it as an aesthetic ingredient [4], latency still creates difficulty in the management of interactive sessions in a multi-channelled environment. Hence, on a global scale the reception of musical messages differs with the users' localisation. Besides, the mobile environments of cyberspace may lead communication away from a sequential and linear style: the same cyber-scenario can be accessed, changed and represented many times, and the flow of subjective time has to cope with decisions already made. But the overlapping of diverse temporal frames may produce dissonance in cognitive paths, and also in strictly musical relationships. All these facts influence subjective inclinations in reconstructing or deconstructing the framework of sonorous events. Besides, in on-line musical communication, identity and authorship become uncertain. So, the hypotheses listeners come up against are no longer centred on the idea of a subject and linear discourse. Not by chance, well-known projects like Brain Opera and Cathedral emphasised on-line experience based on multiple-source listening sessions, where the musical results may not be ascribable either to a single temporal chain or to one author alone, although identifiable as such.

3. RE-TUNING MUSICAL AWARENESS

On-line musical awareness can be conceived of as a condition based on an encounter between a plurality of individual times, sound environments and listening situations. In many cases, on-line interactive sonorous environments are shared experiences of listening and production; listeners can receive musical input and pass it on to a sociality composed of endless subjective profiles.

Browsing music on the net, listeners gradually become more skilful in recognising and combining musical patterns. They learn to distinguish sounds, sources and intentions. Listeners can also be free to substitute contents and extract some parameters from given musical rules. Originally conceived as personal, a sound object can now be shared, even transformed, depending on individual orientations, and then shared once again. But the disruption of linearity due to repeated mutations, may jeopardise the musical codes and connotations. Nevertheless, the ensuing uncertainty and the probability of losing part of the musical meaning actually creates communicative tension, and arouses the navigators' curiosity. They want to understand what governs the mutability of repeatedly transformed objects.

3.1. Beyond the evidence

Within cognitive science, F. Varela developed a vision of emergence as inevitably contemporaneous with a way of relating to a meaningful reality. So, he sees structural combining as causing the world we know to emerge [14]. By extension, we could say that on the net structural combining builds up musical objects. If, on the one hand, directionality and predictability are fundamental connotations of musical events, on the other hand creative processes do exist. They add meaning to musical information. They go beyond mere evidence and interpret the gradual shift from "less realised" to "more realised". Thus, even meanings which are not directly generated by underlying processes can be distinguished and then recognised [3]. When the musical results are unexpected, thus not clearly recognisable, interest may become surprise. This is because musical connotations and codes are assumed to be stable. In many ways, coping with a random variety of messages, on-line musical negotiations can orient the emergence and the organisation, and define the formal punctuation of musical meaning. As a result, musical experience will probably be compelled to modify some of its paradigmatic indexes [10].

4. SOCIAL SPACES QUALITIES

Concluding his philosophical essay "Extended Spatialization and Existential Spatialization", E. Chia-Yi Lee stated as follow: "Extended spatialization, to our understanding, is not only what decides the spatiality of the social space, but also extends into cyberspace to define its trajectory of socialization.[...] What extended spatialization attests to is that inasmuch as the subject has to rely on the body to substantiate its factual being, the presence of substantiality will persist, its correlative spatialization will ensue to constitute and determine the social space; and insofar as this spatialization is present, the social space will witness various apparatuses or discourse performing the filling function to striate any possibly empty and small space so that the subject can safeguard its being in identities of sameness and constancy".

4.1. Extended spatialization

But it is worth noting that the experiences in the universe of cyberspace lead to a different meaning of the term "extension", since social relationships typical of 3D space contiguity are replaced by those expressed in an n-dimensional, electronic continuum. According to Chia-Yi Lee "Cyberspace is not an exception especially if what is at stake is its sociality. Like the offline social space, cyberspace too is a socialised space of subjects only with a likely better technological matrix. The presence of this matrix does not mean that cyberspace can evade or ignore the determination of extended spatialization. Once the premise of nonspace fails, the associated promises of an absolute free cyber-society where totally fluid subjects roam around like nomads riding on war machines to carry out unbounded subjectivity will be concurrently discredited" [5]. Nevertheless, on the cognitive plane, the dimensions of electronic continuum are characterised by frequent re-modulations of perceptual flows which contrast with the usual expectations of continuity/contiguity. While, on one hand, the inevitable, recurrent adjustments of communicative configurations are bound to have repercussions on motorial and multimodal experience, on the other hand, the contextual overlaps favour the creation of new symbolic segments.

4.2. New proportions

These changes on the cognitive plane clearly affect the determination of the properties of the so-called "extended" space. At this very moment new kinds of relationships and exchanges are emerging from net-communication [9], like the parallel, simultaneous conversations; the chaotic, non-rhythmic, unequal and non-reciprocal dialogues of chat sessions. Communication networks have introduced new proportions into our personal affairs, into our perception of the world, as well as into the principles of differentiation of reality. This has also happened in other media. Even the anthropologist M. A. Ruiz Torres has pointed out that new modes of communication, new ways of constructing personal and collective identity, and new forms of interaction are extending. They are now overflowing into other spaces, hitherto occupied by ancient forms of socialisation and subjectivation based on geographical territory. Hence, a change of paradigm has come to light, conditioning the relational and communicative processes and influencing the qualities of both "extended" and ordinary space.

5. CO-ORDINATED CAUSALITY

G. Wittig pointed out that on the net, while topological-informative maps elicit a model of interactivity highlighting the de-localisation processes, decentralisation globalises the emerging properties. The relationships between such aspects have been described in depth in the article *Situated and Distributed Knowledge - Production in Network Space*: "The

phenomenological emphasis on physicality and context is aligned with situated knowledge production, but a networked social system creates the capacity of distributed knowledge production. It is the interaction and intertwining of the contextuality of the situated and the expanded field of the distributed that triggers emergent resonance between the local and global. A dialectical relationship exists between the localised interactions of the components of a networked social system and the global, emergent properties of the whole. A co-ordinated causality exists between the two. The interaction of system components, in an embodiment of the self-organising network system, gives rise to a whole, or unity, which continuously maintains its identifying boundaries. The global feature, in turn, constrains the components to maintain a specific operational coherence, otherwise the unity will not be sustained. The organisational closure of the self-organising networked social system does not indicate interactional closure. [...]. A networked social system demarcates possible network interactions of applicability for maintaining self-production, embodying a particular perspective and identity” [15].

5.1. Systemic features

Wittig's position, which can be seen as deriving from Luhmann's theory of communication, allows us to think that some individual creative skills may be transferred from a mental-subjective to a systemic level and described in an innovative way [13]. In fact, systemic features of a net-based social system ensure the survival of creativity, but not necessarily as individual expression. Creativity on the net tends to develop through new relational forms, innervated by a self-productive dynamism. Can we affirm that such forms grow in an environment based on the mere extension of the relational qualities of space we already know ? A. Cicognani reported that cyberspace claims “its own structure construction, which would not have to reflect the one of original space, but could *reinvent* itself with a new system of metaphors” [6]. While, on the question of creativity, P. Lévy stated that in the deterritorialised semiotic plan of the internet the division between messages and micro-territories - previously at the complete disposal of the authors - tends to disappear. Consequently, “the creative effort is gradually transferred from messages to devices: for example the mechanism of implication, from simply being just a conceptual tool, becomes a form of art which doesn't produce works: it allows creative processes to emerge while facilitating the possibility of their autonomous life” [8].

5.2. The in-between

The informational universe that relies on communication between real and virtual environments has been capable of producing semiotic spaces which, in turn, affect the

processes of integration between real and virtual. But the overlapping of real space, cyberspace and on-line communication also succeeds in upsetting the system which governs the mind-reality relationships, to the extent that the linearity of discourse is affected. Hence the conditions under which the cyber-realities can generate cognitive paths deserve to be investigated. P. Gemeinboek has done so: “The term virtual reality, although it seems oxymoronic at first, not only hints at a clearly drawn borderline between virtuality and reality but also an implicit hierarchy. It implies a virtuality that wishes to be real in the sense of a virtual real that is at best indistinguishable from the real we know - or at the very least from what we are able to imagine. Yet apart from a colliding connection of the virtual and the real, the term also evokes another concept of their relationship that emerges not from a process of negative differentiation, aiming for either real or virtual, but for both; something in-between emerging from a process of negotiation. The in-between refers to two fundamentally different notions of space whose only intersection is continuously negotiated by our Self: the physical presence in the space of performance and the performative presence of becoming in the virtual. The first one is real, secure, measurable and predictable, while the latter is virtual, uncertain, unscripted and unpredictable. Is the boundary between the two drawn by the contour of our body ?” [7].

6. DISCUSSION

Understanding music within intermedial spaces appears to be associated with on-line transformations. In such a frame musical production will probably end up by being part of the more general paradigm of re-presentation. In which case hybridisation among musical objects and their re-contextualisation can dictate the conditions for the emergence of musical meanings. In planning musical performances through online technologies both to local and global emerging processes require particular attention. Music, in fact, creates and adopts rules in an attempt to outline listening hypotheses through different levels of intelligibility. Instead, the planning of musical performances in cyberspace has to cope with the articulation of net-times and the occurrence of contextual transfers. Thus, on-line music discourse calls for close observation of the transforming qualities of digital objects, and of how the mutation of ideas like action and participation affect the conditions for the permanence of meaning [11]. Hence it is a matter firstly, of distinguishing which processes can foster creative realisation, then, of discovering when and why the configurations of musical meaning come to light, and lastly, of identifying the conditions which encourage its emergence.

7. CONCLUSION

The relationships existing between the localised interactions of the components of a networked social system and the global, emergent properties of the whole

affect the quality of musical spaces. Hence, musical intentions have to deal with three different aspects: first, the modes of fruition of a sound object in virtual spaces; second, its reception in the frame of on-line communication and third, the mutations that could eventually affect the dynamics of perception. The complex relationships between these three aspects suggest that the production of and the listening to music come about in forms that differ slightly from what we are familiar with. Whether one wants to consider listening as an individual task or as a relational path, what needs to be verified is the extent to which the spatial, emotional, and social variables of the extended spaces and cyber universes affect the contours of recognition of musical objects. This requires investigation into the nature of cyberspace and into changes in musical reception. Besides being modified, the musical and audio contents can be re-visited and re-contextualised by listeners during their navigation. What should be considered then, is whether these repeated contextual readings and the interference between ordinary and virtual spaces can generate musical meanings.

7. REFERENCES

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