

# ***Liveness in mediatized dance performance - an evolutionary and semiotic approach.***

Ivani Santana<sup>1</sup> & Fernando Iazzetta<sup>2</sup>

<sup>1</sup>Federal University of Bahia, Brazil, ivani\_santana@oul.com.br

<sup>2</sup>University of São Paulo, Brazil, iazzetta@usp.br

**ABSTRACT:** In the information era dance performance is taken as a construct which results from the relationship between the biological and technological bodies. The idea of *liveness* can be understood as a process of communication in which these two bodies are no longer disengaged nor distinct. In this sense, the notion of liveness in mediatized performance acquires new implications, different from the ones proposed by different authors such as Peggy Phelan and Phillippe Auslander. This article addresses some issues related to the idea of liveness in mediatized dance performance, such as real time vs. delayed time, real body vs. virtual body. Taking the theories of Semiotics (C.S.Peirce) and some branches of Cognitive Sciences (G. Lakoff & M. Johnson) as a point of departure we propose to discuss the role of technology in a mediatized culture as an agent that operates in the configuration of new instances of what can be understood as liveness.

Based on this conceptual framework we propose a reflection on the use of new technologies in dance and its implications for the establishment of new configurations in which body, dance, music, image and environment are used to challenge the dichotomies between mind/body, natural/artificial and real/virtual. For this purpose we present a brief analysis of two works - *Corpo Aberto (Open Body, 2001)* and *Pele (Skin, 2002)* created by the choreographer Ivani Santana in collaboration with the composer Fernando Iazzetta. These multimedia/dance works result from a partnership established between the two artists since 1996 and are focused on the critical exploration of the use of new media in the creative processes that are embodied in contemporary performances.

**Keywords:** dance, music, technology, interaction, liveness, real time.

## **Introduction**

This paper analyses the relationship between body and technology in the field of dance by proposing a reflection on the idea of *liveness*. Our starting point is a restatement of the ideas raised by Philip Auslander and Peggy Phelan on this subject. Taking the theories of Semiotics (C.S.Peirce, 1931-1935) and some branches of Cognitive Sciences (Lakoff & Johnson, 1980, 1999) as a point of departure we propose to discuss the role of technology in a mediatized culture as an agent that operates in the configuration of new instances of what can be understood as *liveness*.

The connection between the individual and its environment occurs through a continuous and reciprocal information exchange. Thus, the human being is coupled with the technology he or she uses. This relationship affects the way by which the individual perceive, understands and acts in the world. According to Lakoff & Johnson (1999), thought is mostly related to what they call

*cognitive unconscious*<sup>1</sup> and the whole process of knowledge construction begins with and depends crucially upon our bodies, especially our sensorimotor apparatus.

Our concepts structure what we perceive, how we get around in the world, and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities. (Lakoff e Johnson, 1980:3)

Our conceptual system is grounded in, neurally makes use of, and is crucially shaped by our perceptual and motor systems. (Lakoff e Johnson, 1999:555)

Thus, we can understand the contemporary dance scene as an aesthetic result of its interplay with the world. The structure and organization that underlies this art is a reflex of the current intensification and complexification of the informational flow. This brings a reconfiguration of our bodies as we are confronted with different relationships with the surrounding environment. This *embodiment* of new knowledge generates new forms of dance. In the current dance production, in which technology plays a significant role, the creation of artificial contexts is frequently taken in opposition to the idea of *liveness*. However we believe that both biologic and technological bodies represent different, but not opposite, types of existence, and they both act as interconnected instances of a live performance.

### **Phelan's and Auslander's concept of *liveness***

According to Peggy Phelan (1996), *liveness* can only take place when there is no mediation, when it represents a situation in the “here and now” and only depends on the presence of the performer's (organic) body. This would be the ontological condition for the existence of a performance: “Performance implicates the real through the presence of living bodies” (Phelan, 1996:148). The performance is experienced by the audience in the very same moment of its realization, but it “disappears into memory, into the realm of invisibility and the unconscious where it eludes regulation and control” (Phelan, 1996:148). Phelan indicates that the mediatized world does not place importance on the instant of the performance since it is sustained by the reproductive technology.

Our perception is built upon a process of signification, that means, by means of representations that are captured by our whole body and became metaphors – in the sense given by Lakoff and Johnson (1980) – that constitute our conceptual systems. Thus, even a performance situation experienced without any technological mediation can only be captured through a chain of successive representations. The direct apprehension of the object itself, as stated in Phelan's theory, is an impossible task if we consider the ground brought by Charlers S. Peirce's semiotics

---

<sup>1</sup> Lakoff & Johnson assume that the “most of our thought is unconscious, not in the Freudian sense of being repressed, but in the sense that it operates beneath the level of cognitive awareness, inaccessible to consciousness and operating too quickly to be focused on” (1999:10).

or by Johnson & Lakoff's cognitive approach. In the same way that one cannot reach any type of absolute truth, it is also impossible to apprehend the object in its totality. If the phenomenon occurs as a signic process and if it can only be known through successive representations, then one cannot support the idea that what is real is only what has a physical or qualified existence in the "now".

Bringing up a political approach, Phelan criticizes the role played by technology in reproduction as it acts as a commercial mechanism in the control of the performance. Although we agree with the author when she says that the nature of performance avoids its commercial reproduction, we consider that new media can also play a critical role. One example is Eduardo Kac's transgenic art in which the artist created chimerical living beings such as Alba, a genetically modified rabbit that becomes green when exposed to light. These works are not only mediatized by technology, but they also employ technology as a way to expose and explore artistic conceptions and political concerns.

The artistic research developed by Kac and many other contemporary artists eradicate any fixed boundaries between art, science and technology. Their work can be taken as performances of the digital era. They criticize the domination of capitalism over art and society and, at the same time, assume the unpredictability and the impossibility of reproduction which are characteristic of performance situations. They coherently contribute for the emergence of new performance forms to conceive a critical view of new political and social circumstances.

Philip Auslander disagrees with Peggy Phelan's definition of liveness by creating another conception of presence and mediation. Auslander doubts "very strongly that any cultural discourse can actually stand outside the ideologies of capital and reproduction or should be expected to do so" (Auslander, 1996:197). He believes that "live" and "mediatized" coexist in a close relationship and he notes that even the notion of liveness could only emerge after performance became mediated. It wouldn't make sense to talk about liveness before recording technologies brought the possibility of reproducing events after they have been performed. "The live and the mediatized exist in a relation of mutual dependence and imbrication, not one of opposition. The live is, in a sense, only a secondary effect of mediating technologies" (Auslander, 1996, 198). Thus the author conceives the term *im-mediate* to clearly define the counterpart to mediatized situations: "Mediation is thus embedded within the im-mediate; the relation of mediation and im-mediate is one of mutual dependence, not precession" (Auslander, 1996:197).

However if we agree that the body is coupled with its environment and that human cognition is an effect of the embodiment of metaphors, the concept of im-mediate becomes useless: being part of the human conceptual system and being involved in the process of embodying the "metaphors we live by", technology cannot be conceived as something opposed to the biological body. They both coexist in the processes of configuration and evolution of the human beings.

By assuming a semiotic and evolutionary approach we believe that mediation is not a byproduct of the information era, but it is something that has always existed. In this sense, the concept of liveness is not a social and cultural consequence of the recent technological dissemination as suggested by Auslander. Even in prior periods in which technology played a (apparently) less significant role in the individual's everyday life, mediation was a reality.

## **The idea of liveness in performances involving dance, music and technology**

During the 80' we saw the development of computer systems that were able to generate and process music data in real time. Two circumstances have been crucial for that development: the advent of MIDI protocol and the widespread availability of personal computers. By the end of that decade a choreographic software called *Life Forms* was developed at the Simon Fraser University. At the same time the dance has opened new paths for the creation of collaborative works involving choreographers, musicians, videomakers, researchers and technicians.

Following these developments, in 1996 we started a partnership involving different artists whose main concern was to explore the poetic use of technology in our performances<sup>2</sup>. Since then, we have produced many works involving music, dance and image in which the interplay between the concepts of liveness, virtuality and real time played a significant role. Most of our attention has been guided towards the creation of environments that establish what we call "ambiguous zones". By environment we understand all the constitutive elements of a performance: the dancers' bodies and their movements, the music, the sound design, the lighting, the video scenery, the audience and so on. By ambiguous zones we mean the intermediate regions that are constructed between what is being generated "live" at the time of the performance and what is the diffusion of previously created material. The audience is always exposed to three types of events: the ones produced during the performance by the real dancers and musicians; the ones that are produced with the involved technology; and those that have been previously recorded and processed. The mixing of these types of material during the performance brings up this ambiguous zone that takes place between what is being generated "here and now" by the performers and what is just the diffusion previously produced material. To achieve this undefined zone, in which the audience sometimes is unable to differentiate real time events from prerecorded ones, we have explored different technologies and interfaces.

One example is the use of micro-cameras to intensify or enlarge the audience's view as we did in the works *Corpo Aberto* (Open Body, 2001) and *Pele* (Skin, 2002). In these performances the micro cameras were either attached to the performer's body or installed at strategic spots of the stage to provide a dynamic sight of the performance. The images were projected on screens that

---

<sup>2</sup> Although many artists and researchers have collaborated through the production of different works, most of the time the activities have been conducted by the choreographer Ivani Santana and the composer Fernando Iazzetta.

worked as sceneries giving access to details that otherwise would be indistinguishable to the audience. Eventually these images were sent to the computer to be processed before they were projected, creating a counterpoint between the real events which take place on the stage and the modified images. Sometimes the image processing was controlled by the music that was being played in real time. Thus, we could establish a networked relationship in which the dancers provided the basic material for the image generation as well as to the development of the music. At same time image and sound could be associated in the computer to create a connection between sound, image and movement.

In *Corpo Aberto* we intended to challenge the idea of liveness by confronting the movements of a dancer with the images of avatars created in the *Life Forms* software. With the use of a transparent screen for the image projection and a of careful light design, we could blur the audience's perception, putting both the dancer's body and the computer generated images at the same perceptual plane. A similar concern to create an ambiguous zone was explored in a different manner in *Pele* when two dancers verbally described a series of movements while another couple stands motionless in the front of the stage. The scene follows as the (so far) static couple dances in accordance with the verbal description. At the same time, they interact with the projection of pre-recorded images of dancers who were also reproducing the described movements.

Our experience with performances connecting dance, music and technology brings the evidence that the concept of liveness may not be regarded in opposition to mediation, as Peggy Phelan states, nor demands an opposite concept, as in Philip Auslanders's idea of im-mediated. The individual is involved with his or her environment and they both can only be understood in their connections. The environmental information is embodied by the individual, who becomes an inseparable part of the environment and vice-versa. In this framework, technology should be understood as part of our cultural environment, but also as part of our biological and cognitive structure. Biological bodies and technological devices are part of the same system, and are subject to the same processes of informational feedback. Thus, the idea of liveness should be wide enough to embrace the contribution of every element involved in the performance environment, be it a human being, an informational process or a technological device.

## References

- Auslander, Philip (1996). "Liveness. Performance and the anxiety of simulation. In: *Performance and Cultural Politics*. Diamond, Elin (ed.). London, New York: Routledge. Pp.196-213.
- Lakoff, George e Johnson, Mark (1980). *Metaphors we live by*. Chicago: The University of Chicago Press.
- Lakoff, George e Johnson, Mark (1999). *Philosophy in the flesh: the embodied mind and its challenge to western thought*. New York: Basic Books.

Peirce, Charles Sanders (1931-35). *Collected Papers of Charles Sanders Peirce*, C.Hartshorne and P.Weiss (eds.), vols. 1- 6. Cambridge: Harvard University Press.

Phelan, Peggy (1993). *Unmarked. The Politics of Performance*. London, New York: Routledge.

Phelan, Peggy (1997) *Mourning sex: performing public memories*. London, New York: Routledge.

Santana, Ivani (2002). *Corpo Aberto: Cunningham, dança e as novas tecnologias*. São Paulo: EDUC/FAPEESP.