

Metamorphosis in the Source Code

Computer choreographies

Beat Mazenauer

What happens to dance at the interface between digital stage and analog space? Media philosopher Beat Mazenauer

visited a studio to find out |

“*The body is obsolete,*” declares performance artist Stelarc, relegating it to a mere shell housing a totally independent psychological and intellectual identity. By seeing the body as a biotechnologically perfectible object, Stelarc dreams the utopian dream of immortality. His notion of “bionic”

ture in Elicottero Prodotti. Vidach’s productions integrate dance into an interactive system that “*translates movements into a visual and audible language*”. This necessitates elaborate technical facilities enabling dance choreography to become live performance art. The dancers are, for exam-



metamorphosis pushes media guru Marshall McLuhan’s thesis that the media are essentially extensions of human functions to its extreme.

The search for the New always transcends the familiar.

It is in this electric field of metamorphosis and transformation, myth and machine, that dance, too, operates today. Yet its relationship to technological progress remains contradictory. As a mute, gestural form of expression, dance would seem predestined for aesthetic interaction with the new aural and visual media. At the same time, it is still considered a remnant of authentic physicality, unwilling to be forced into a rigid mould by technology. This discrepancy has been the source of two innovative trends in the post-modern dance scene.

Technical infrastructure. One of them is typified by Ariella Vidach’s Ticinese-Italian troupe, Avven-

ple, recorded on video and projected onto on-stage screens as shadows (so-called “motion capturing”). Or the dance floor is studded with sensors via which the dancers set off sound effects as they move (interactive systems). The internet also allows dance performances put on in totally different places to be brought together virtually (telepresence). In AiEP’s words, the interactive system “*allows a codification of the expressive values of dance movements by emphasizing them during the performance and developing them further in real time.*” This generates sculptures in space that expand dance expression, but could as easily overwhelm it.

Choreographer Pablo Ventura, who works in Zurich, takes a different experimental approach. Wanting the “free body” to remain the central element of dance, he allows it to be neither imposed upon nor hindered. Although he, too, works with sound and video installations, the dancers retain their freedom of movement at all

times. Ventura does not bring digital technology into play at the end – during the actual performance – but at the beginning – during the choreography phase. Thus his interest is less in multimedia stage sets than in the expansion of the basic dance vocabulary. In his work, the computer replaces the choreographer – at least in part.

Work that goes on in the mind. Dance is an extension of the body by natural means. This can remain the case under new technological condi-

About ten years ago, a computer program called Life Forms offered him a potential solution to the dilemma. It offers an avatar, a plastic muscle man, who can be programmed to execute all sorts of dance figures, possible and impossible. These figures are stored in a library, where they are freely accessible and can be recombined – for instance, at random – to produce surprising, unconventional figures. In recent years, Ventura has choreographed his “mathematical dances” with the help of this program.



tions, but at the cost of dance becoming a nostalgic retreat for natural beauty. But if dance is also an expression of contemporary body-consciousness, it must transform itself artistically by opening up to the new technological possibilities. And it possesses a particularly sensitive means of responding to them: movement.

Nonetheless, after years of experience as a dancer and choreographer, Pablo Ventura admits that he himself finds it difficult to transcend the conventions of dance. His brain is programmed to think in terms of a traditional repertoire of dance figures and patterns of movement, and his body automatically tends to fall into pleasing, organically beautiful poses. He notes that doing a figure the other way round already causes him enormous problems. So – to use the language of *The Matrix* – how can the chip implanted in people’s heads be exchanged? How can ingrained patterns be overcome?

Life Forms. Life Forms was developed in the 1980s for Merce Cunningham, the master of post-modern dance. Originally devised to translate dance pedagogue Rudolf von Laban’s system of dance notation into computer software, it ultimately exceeded its objective.

But Ventura’s work bears a further, surprising affinity to this pioneer of modern dance. Von Laban’s dance academy, which attracted such dancers as Mary Wigman, Suzanne Perrottet and Sophie Taeuber, was part of a dance revolution that took place in Zurich in 1916. The Dadaists at the Cabaret Voltaire liberated themselves from conventions of any kind, including those of dance. “No tradition or law is valid” went the motto promulgated by Hugo Ball and fulfilled particularly well in the “abstract dances” performed by Sophie Taeuber at the first Dada Soirée on 29 March 1916. As Ball noted in his diary: “Abstract dance: a stroke of the gong is enough to stimulate the dancer’s body

into fantastic configurations. Dance has become an end in itself. The nervous system registers all the vibrations of the sound, perhaps even the hidden emotions of the gong player, and gives them visual form.” Even if the Dadaist dance intervention remained an isolated episode, it lives on subliminally. Dada turned “Cubism into dance on the stage”, and Ventura stages the operational logic of the computer.

Working systematically with chance. While the parallelism of the two experiments should not be overestimated, they are definitely rooted in similar motivations: the wish to find new, contemporary dance figures that, rather than ennobling human beings as beautiful creatures of nature, show them in conflict with their technological environment. The point is to question traditional aesthetic norms and expand the formal vocabulary. The resulting creative choreographic process is both formally and thematically at the interface of the relationship between human being and machine.

At his studio, Ventura demonstrates how choreographies come about, using the example of his

from the other, and putting them together “at random”. Deconstruction manifests itself here as practical work generating a new vocabulary of contemporary patterns of movement. Giving them physical form makes the highest possible demands on both technique and mental freedom of movement. The unaccustomed patterns must manage to hold their own mentally and physically against ingrained, organic movements.

Ventura writes: “Because the computer program tries to imitate human movement, this working method turns a process upside-down. The frontiers and relationships between human being and machine get muddled.” This expansion of the dance vocabulary and the continual development of a harmonious aesthetic take place independent of taste, emotion and “right-handed preference”. The “mathematical dance” does not tell a story, it inhabits the field of pure abstraction and is the result of “working systematically with chance.”

On stage, embedded in an impressive visual and sonic ambiance, Ventura’s choreographies are designed, not to imitate but to irritate. The difference between them and traditional expressive



most recent work, *Corporis* (2003). Going out from a brief genetic sequence, he generated a seemingly arbitrary sequence of movements by allocating a figure to each of the DNS molecules A, C, G, T. This produced a rigorous dance score that, at first glance, looked undanceable because the computer program took little account of physical and psychological strain. The second step was therefore to translate the abstract sequence of movements back into the physical realm. In collaboration with the choreographer, the dancers tried to get a mental grasp of the virtual figures and to translate them physically in space.

This process is an integral part of every work by Ventura. It poses particular difficulties when the figures are mixed by the software itself. Ventura will, for example, choose two dance sequences from his steadily growing archive, taking the movements of the torso from one and the legs

dance is that here perfect body control is used to demonstrate an “awkward” aesthetic. In this regard, Ventura is influenced by Deleuze and his reflections on space. In transposing movement to the stage, Ventura is interested in the “colonization of space”, whereas his choreographic work at the computer focuses on the rhizomatic combination of patterns of movement.

The choreographer as dance jockey. Pablo Ventura is a dance jockey, sampling and remixing dance figures. He regards the software he uses as digital doping which enhances aesthetic performance. The price he pays takes the form of relinquishing choreographic authorship, in line with Roland Barthes’ theses regarding the “death of the author”. Perhaps that is why so few choreographers make consistent use of this choreographic aid, which, at first glance, robs them of their creative authority.

But Ventura does not totally divest himself of it either. That the staged results continue to bear his handwriting is proven by the very development of his works. *MadGod 2.001* (2000) and *Zone* (2001), the enchanting *pas de deux* of an assembly-line robot and the dance ensemble, even mirrored the subject formally, both pieces affording glimpses of their abstract origins. On the other hand, in *De Humani* (2002) and *Corporis* (2003) – the first two parts of a trilogy completed by *Fabrica*, which is currently in development – digital technology keeps modestly to the background. Here, Ventura no longer showcases abstraction, instead giving it implicit form by allowing “unnatural” dance figures to be executed with harmonious perfection.

This “apotheosis of the body” in technological surroundings harbours a contradiction: it is both subjection to the machine and self-assertion against it. And in the end the body is not tamed, as with Stelarc, but retains its aesthetic freedom, though no longer in the attempt to replicate some sort of illusory natural beauty.

Beat Mazenauer studied German and history. A freelance author, literary critic and web practitioner, he lives and works in Lucerne and Zurich. His books include two translations of Peter Weiss (*Die Besiegten*, *Avantgardefilm*) and a volume of essays (*Wie Dornröschen seine Unschuld gewann. Archäologie der Märchen*, with S. Perrig, Leipzig 1995 / Munich 1998). He is currently sharing responsibility for an exhibition (with accompanying book) entitled *Reality Show* (to be mounted in Aarau in spring), and two internet projects: the web encyclopaedia www.encyclopaedizer.net and the EU-supported Virtual Library, which is currently being developed (www.readme.cc).

Bibliography & weblinks:

Stelarc homepage: <http://stelarc.va.com.au/>
 Avventure in Elicottero Prodotti: <http://www.aiep.org/>
 Pablo Ventura Dance Company: <http://www.ventura-dance.com>
 Life Forms Dance Software: <http://www.lifeforms.com/>
 Hugo Ball. *Flucht aus der Zeit*, Zurich, Limmat Verlag, 1992.
 Gabriele Klein and Christa Zipprich, eds. *Tanz Theorie Text*, Münster, LIT-Verlag, 2002.



Pablo Ventura’s choreographies have no message to convey. “Dance cannot be critical without sacrificing its own language,” of that he is certain. Which is why his prime concern is to “move” and render a phenomenon visible. Concealed behind this inconspicuous mask, his concept remains timely and exciting, because the process it reflects on stage is one that shapes our daily lives. Technology is more than mere illustration; as discreet as digital authorship may be, this does not diminish its impact. Technology directly affects the vocabulary, thereby changing the figurative source code behind the visible form. The freedom of the (dancing) body now stands on altered foundations. Pablo Ventura’s works offer it a language with which to express itself – a language that gives palpable form to the dilemma of the body typical of our time. ─

