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# Inventing the Interactive Glossary: an Approach to Documenting Contemporary Dance

The motivation of the authors to write this text has emerged from their understanding that the potential of evolving glossaries in collaborative creative processes should be taken into consideration during the creation of interactive knowledge databases for dance studies in such a way as to allow the reflection and analysis of unique artistic processes.

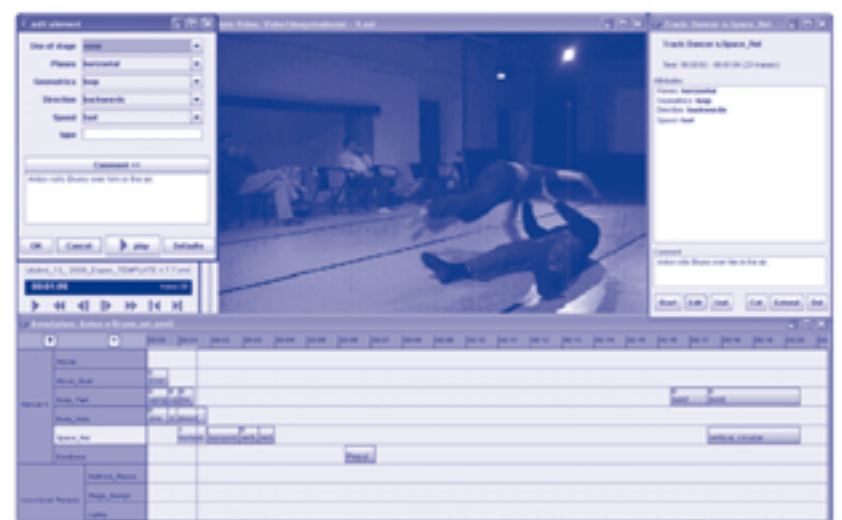
By crossing different research methodologies, world perspectives and idiosyncratic intentions, thus allowing their productive inter-contamination, we wish to implement the fundamental trans-boundary circulation of ideas and their corresponding underlying concepts, by starting to build the grounding pillars for a toll-free bridge between (only) apparently separated knowledge areas such as cognitive linguistics, choreography and digital media.

We are interested in searching for the implicit knowledge that is embedded in choreographic processes and the possible ways of presenting or expressing it. In practice this means that we start from the premise that the translation and transmission of the imagetic thought of a contemporary choreographer into an embodied-type of thought, via the dancers'

bodies, is above all metaphoric (cf. Johnson 1987 on *image schemata* in the human brain as being prior to awareness).

In the perspective of cognitive linguistics, 'the essence of metaphor is understanding and experiencing one kind of thing in terms of another' (Lakoff & Johnson 1980:5) and the organization of concepts in the brain is not considered as being arbitrary at all. Much on the contrary, the whole conceptual organization of an individual's brain is strongly motivated by her/his life-long bodily experience of the world since their first months of life in a particular cultural environment. In this sense, language is not understood as an autonomous cognitive capacity in the human brain, but as only a part of what constitutes our complex and still rather unveiled capacity to reason and think.

Metaphor is thus a powerful and sensitive mental structuring process that offers a range of characteristics particularly suitable for the art and the challenge of communicating; if it is possible to say that any creative process reflects a part of the conceptual structure of its artist, then it is not less important to note that concepts are deeply anchored in metaphorical processes. Therefore a more sensitive look



† Notation exercise on Benesh Movement Notation System drawn by Bertha Bermudez, 2025  
 ‡ PTDC/EAT/AVP/098220/2008-TXB: A Transmedia Knowledge Base for contemporary dance  
 Visualization of a frame in the annotation grid to be used in the ANVIL tool (<http://www.anvil-software.de/>) (accessed 16 March 2010) to linguistically annotate the video clips from Rui Horta's piece *Setup*. Example belonging to Task 1 (Video Annotation) in the project's Component "Linguistic annotation".

into the metaphors used in the choreographers' discourse, and which are then 'retranslated' into dance sequences by their interpreters, should light up our quest for what actually constitutes the conceptual system (the unconsciously 'structured universe') of such choreographers.

In the framework of the recently emerging international research project TKB (a *Transmedia Knowledge Base for contemporary dance*, coordinated by Carla Fernandes at CLUNL,<sup>1</sup> Lisbon) and building on practice-based research collaborations with choreographers Rui Horta<sup>2</sup> in Portugal and Emio Greco | PC in Amsterdam (in the framework of the international project *Inside Movement Knowledge*), two collaborative digital glossaries are currently being compiled: a multimodal glossary designed by Carla Fernandes to accommodate Horta's conceptual/metaphorical structure in the TKB project; a parallel hypertext glossary of Emio Greco's terms and definitions used to improve the code of their interactive installation DS/DM (*Double Skin/Double Mind*).

The closely-related research projects and respective glossaries, as examples of inter- and trans-disciplinarity, try to integrate methods and theories developed in the disciplines of linguistics and semiotics with methods and theories derived from cognitive science and new media art, with the ultimate aim of providing new insights into the realm of human meaning production.

An important fact of both research projects is the involvement of the artists, the reflection on their creative praxis being a great source of knowledge to add to the trans-disciplinary qualities of both projects. In each case, the participation of the artists differs in what concerns the creation of the glossary: in the case of Emio Greco | PC, the artists are the ones creating the terminology that defines the transmission of their artistic work. In the case of the TKB project, as will be described below, the work done by Carla Fernandes is a pioneering analysis of Rui Horta's work in the sense that it is partly generating neology, i.e. suggesting new terminological possibilities to what has not yet been codified by the choreographer himself.

In both cases the focus on the creative process and its transmission provides the process of documenting dance with an innovative departure, the cognitive structure and bodily experience of the artists, thus not departing simply from the end result, the premiered performance, as is often the case in critique reviews.

The process of transmission within dance creative processes, besides its oral, sensorial and kinetic qualities, reveals the importance of language appropriation and common understanding within the group of people working together.

A dance creative process is also a social exchange where language plays an important role by serving, as another medium, to transmit the experiences, concepts and aims that generate movements. It is for this reason that the analysis and study of the terminology, mostly metaphorical, used during dance creative processes could reveal, not only the manner of such a communicative action, but also the cognitive map of the artist, allowing a broad public to access a very specific way of thinking.

Furthermore, the creation of such interactive glossaries based on the artist's discourse can reveal the innermost experience and mechanism of dance practice. This can be of help, in a complementary way to other documentation methods, for a broader range of people to access and understand this evolving art form.

#### Rui Horta's Multimodal Glossary within the TKB Project

The motivation for the creation of an idiosyncratic glossary to define the terms and expressions used by Rui Horta derived from the need felt in the first place by each of the TKB project research teams involved to come to terms with the unique and case-specific terminology (or its absolute absence, when only the body is speaking) used by the choreographer in question. Moreover, we soon realized that the iterative design of the TKB's interface and related digital archive would have to be closely articulated with the data contained in the verbal annotations. And this naturally implied that their structuring categories, metaphors, principles or basic units should be defined as precisely as possible, in order to allow the retrieval and translatability of at least the more relevant or salient analytical features into the coding parameters.

In this sense, an interactive multimodal glossary is currently under development to be structured as a work-in-progress Knowledge-Base of choreographic elements used by Rui Horta and his interpreters; it is intended to be a pretty flexible tool, in the sense that its underlying structure, inspired by the *Frame theory* (in its derivation from artificial intelligence applications to linguistics and

lexicographical products, cf. Martin, W. (2004)) will be adapted to accommodate concepts and terms of other choreographers as well, as is indeed the case with Bertha Bermúdez working for the DS/DM hypertext glossary with Emio Greco | PC.

Besides gathering, defining and ordering textual and visual data, work will also be done on the investigation, creation and design of a multimodal interactive user interface, where terms, definitions, descriptions, notations and live demonstrations will be available to the viewer through video, sound and icons.

The pertinence of these parallel glossaries does not aim at proposing normative formats, fixation or reduction of the non-verbal choreographic polysemy to a verbal monosemy, which would indeed be the opposite of the 'intentions' of contemporary dance. With our parallel case studies we intend to share a structural vision of choreographic work, with which the choreographers can identify themselves. The aim is to organize and structure a specific choreographic process in order to make its transmission more efficient—both for the choreographer and for the dancer/interpreter—and essentially to allow the creation of a collective memory.

And it is here that the use of verbal language comes into play. We need reflection discourses, which allow us to write history and reinforce the above-mentioned collective memory.

In a first phase, i.e. in the phase where gestures, bodily phrases or sequences of the most emblematic movements are being identified, we find ourselves confronted with the problem of identifying the objects to be analysed: What is a gesture? What is a sequence of movement? Where does it start and where does it end? How do we delimit them? In a second phase, we are faced with an equally complex problem: How do we designate each object we have selected and annotated? How do we find corresponding words, terms or expressions that enable the members of the community to describe and transmit their knowledge, their sensations?

In order to answer the first questions of the first phase it is necessary to observe the functioning of the community that is being analysed. The second phase requires a methodological approach that has been successfully tested in terminology works, for example, within the framework of

specific terminological committees. The onomasiological perspective (starting from the concepts to arrive at words) implies the suggestion of creating a designation, which may be highly motivated and aimed at stabilizing the relationship between the designated object and the designation. The use or non-use of the suggested designations by the community in its social habits will validate the success of our methodology. In this sense, creating new words, terms or expressions (in other words, producing neology) in order to designate the observed realities is not only important for a possible communication between members of the community but also for the organization and structuring of a Digital Archive. Terms and structural metaphors can then be used as means of indexing, accessing and restoring information.

In terms of methodology, the concept as object of study (before the words used to describe it) is essentially important to those who need to organize and structure knowledge. In the case of Rui Horta's multimodal interactive glossary, an onomasiological approach is being followed, since we could only start from the video material we have been compiling from the live rehearsals of the most recent dance pieces by Horta. A semasiological perspective, however, is being followed by Bertha Bermúdez for the DS/DM installation glossary, since their research team have to deal with the analysis of already fixed denominations by Emio Greco and their final aim is to use his discourse (during the transmission of ideas and instructions to the dancers) as a starting point for the organization of units of knowledge representation.

#### Emio Greco | PC's Double Skin/Double Mind Glossary

Within the work of Emio Greco | PC (EG|PC)<sup>3</sup> the use, definition and transmission of words are extremely important. Movements are named, or conversely, concepts find a moving representation through movements. Describing the need to engage with research projects around dance notation and documentation, Emio Greco expressed the view that making *dance textual* was one of the main targets when initiating the artistic collaboration with Pieter C. Scholten in 1995. In this quest the body asserts and transforms itself through movements, anticipating the path that needs to be created in order to communicate to an audience. The mixture between linear structures and unpredictable impulses of the body provides their artistic work with a rich paradox that

1.1 Growing:  
Definition: embodiment of the action  
of breathing through a gradual  
vertical increase in length and  
extension of the whole body. > Goal:  
to install the mechanism of breathing  
in the whole body. To gain length  
between the joints

Description: (video) breath in, expand  
vertically by reaching the maximum  
length of the body changing the level  
of head, shoulders, pelvis and knees.  
breath out, release and come back to  
starting position.

the toes of the feed > breath out  
while releasing the achieved length  
> reduce distance between different  
parts of the body by coming closer  
to the ground, head close to the  
feed > Each time increase length and  
releasing

Weight > levity, against gravity  
Metaphors: illustration > thin line  
of air running through your body,  
soft skin, delicate fingers, endless  
sense of reaching, disappearing inside  
yourself

Definition: breath through the mouth  
> breath in while reaching upwards  
verticality/stretching > when reaching  
towards the maximum length aim to  
stretch outside the finger tips and

Measurable Parameters: Space > Change  
of level vertically within the line of  
the spine / Time > gradual duration  
(linked with length of breath) /

Sound: Body > breath / External > air,  
water, birds

has allowed the development of a specific terminology that maps their creative process.

From 2004 EG|PC initiated and supported the interdisciplinary research project Capturing Intention together with the Amsterdam School of the Arts, research group Art Practice and Artistic Development, headed by Marijke Hoogenboom. This project focused on the efficiency of existing methods to document, notate and preserve dance's ephemeral nature, starting from its methods of transmission and its intentional directions. The outcomes of the interdisciplinary project were a publication, an interactive DVD-ROM, an interactive installation and a film documentary.<sup>4</sup>

During the research process an internal glossary of terms from the *Double Skin/Double Mind* (DS/DM) workshop was drawn up. This workshop developed by Emio Greco|PC since 1996 served as a case study for the project. Specific words, sounds and movement directions are used throughout the structure of this workshop, where breathing exercises, repetitive rebounds and jumps, changes of rhythm and extreme expansions provide an acute awareness of the inner body. The choice of words as well as different elements used to teach this training (sounds and physical direction), are the result of a constant process of research that aims for an ultimate understanding of the specificity of the artistic work.

The *Double Skin/Double Mind* glossary has been the first attempt by EG|PC to break down the creative process through the use of words. Such a process provided the different disciplines<sup>5</sup> involved within the research project with a common basis of understanding around the *Double Skin/Double Mind* workshop. This first approach to use terminology for documenting dance was done through an html document that gathered the previously defined structure and substructure of the workshop as well as fundamental terms of the artistic work of EG|PC. Definitions and descriptions were constructed through interviews and different transcriptions of the live transmission of the workshop, in some cases complemented by visual demonstrations. Divided in two parts, *Inside and Outside*, the glossary tried to present the language used by the company (*Inside* section) versus a more general definition of the same terms gathered from dictionaries (*Outside*). The tension between individual specificity and generalization is at stake in this division since the appropriation of language represents

a way of perceiving dance that is unique to the artist, revealing his/her socio-cultural background, knowledge of the world and dance/movement background. In this case Emio Greco's and Pieter C. Scholten's experiences and perceptions were the basis to redefine terminology that could best adapt to their artistic vision.

The DS/DM glossary is being developed and confronted with disciplines such as dance education, dance theory and cognitive linguistics within the framework of Inside Movement Knowledge<sup>6</sup>, a two-year (2008-2010) collaborative, interdisciplinary research project into new methods for the documentation, transmission and preservation of contemporary choreographic and dance knowledge.

Special interest has been placed on the area of cognitive linguistics, where examining the process of creation, content and structure of the DS/DM glossary together with Carla Fernandes, has revealed very interesting issues in relation with the construction of the metadata of EG|PC's creative process. The collaboration with Fernandes was initiated in June 2008 after a few informal meetings that besides forming a rich interdisciplinary relation, augment the potential of categorizing movement through the use of words. Understanding the manner in which terms, actions and structures get categorised through the process of naming is one of the main challenges of the DS/DM glossary.

Through the analysis of the terminology (gathered in the former DS/DM glossary) used during the DS/DM workshop transmission, conceptual categories (slots) followed by specifications (fillers)<sup>7</sup> are being created. Through this still primary phase of the project we have found that in most of the cases what was recorded in the DS/DM glossary as a definition was actually an explanation of the action; a task that belongs in a much more complex and challenging project. Which terminology should be used when making the definitions? The one developed by the company or a more neutral and accessible one? How can a bridge between artistic choices and the need to make them accessible to the broad public be created through the use of language?

It is under this frame of continuous questioning that the DS/DM glossary will aim to provide context on the artistic work of Emio Greco|PC, as well as the methodology to document the different areas of their creative process in the near future.

**Conclusion**

The growing necessity perceived in the dance field to open and expose its experiential knowledge towards a broader public has been generating throughout the last decade an innovative and interesting realm of tools, publications and human interactions, where different disciplines cross research methodologies, perspectives and needs.

Such a situation provides ground for interdisciplinary projects where separated knowledge areas such as cognitive linguistics, choreography and digital media can merge, developing common methodologies as well as informing each other's perspectives.

The proposed interactive glossaries are an example of the above-mentioned innovative research projects and aim to provide the public with insights of what the artistic type of thinking behind choreography can be.

1 For more info on the TKB Project: <http://www.clunl.edu.pt/PT/projecto.asp?id=1555&mid=157> (accessed 16 March 2010)

2 [http://www.oespacedotempo.pt/pt/prog.php?idpan=pro\\_det&recid=49](http://www.oespacedotempo.pt/pt/prog.php?idpan=pro_det&recid=49) (accessed 16 March 2010)

3 [www.ickamsterdam.com](http://www.ickamsterdam.com) (accessed 16 March 2010)

4 (Capturing intention) Documentation, analysis and notation based on the work of Emio Greco | PC, 2007, Emio Greco | PC, Amsterdam School of the Arts, authors and artists, EG | PC and AHK ISBN: 978-90-818813-2-0

5 dance notation, motion capture, new media design, cognitive neuroscience, cinematography and dance analysis

6 [www.insidemovementknowledge.net](http://www.insidemovementknowledge.net) (accessed 16 March 2010)

7 Fernandes, C. 2004, (PhD Thesis), "Interactions between Words and Images in Lexicography: towards new multimedia dictionaries," Vrije Universiteit Amsterdam / FCSH—Universidade Nova de Lisboa