



Dance *with...*

Choreographic tools for technology design
and Technology for artistic development

Dance *with* Technology
K. Danse and Wholodance

- **K. Danse, a brief presentation**
- **Artistic approach, meaning and use of technology**
- **K. Danse and Wholodance**
- **Developments to come...**

K. Danse, a brief presentation

- **Performance making**
- **Mediation**
- **Research**
- **Organization of events**

K. Danse's dance and technology productions

- [Metaphorá](#) 2016, [Errance](#) 2015
(interactive immersive installation, dance performance, audience physical participation)
- [Monster](#) 2014 (choreography and digital media)
- [The Tiger's Bride](#) 2013, [Tactile Sensations](#) 2010-2011
(reactive costumes and augmented tactility)
- [Echo Room](#) 2009, [Para site](#) 2007 (physiological sensors)
- [Gameplay](#) 2005, (semi autonomous environment)
- [Nuit Ecran](#) 2006, [Lovely User](#) 2004-2005
(interactive real time image-sound environments)
- [Icare Ecart](#) 2003 (body sensors, interactive 3D and motion capture)
- [Danse e-toile](#) 2009, [Fronter@](#) 2004, [Danse et Toile](#) 2002
(tele presence choreographies)

Artistic approach, meaning and use of technology

- Staging the metaphor of a given close relationship human beings have with technology
→ *i.e. man-machine* (social control, body tracking, ...)
- Technology merged in a way which tends to open up, augment and magnify the fine perception audiences can have of the intangible, in a given context (for example a body state or the many facets of a person to person relationship).
→ *technology as revealer of the invisible*

Para_site, an example

[Video excerpts](#)



Gameplay

Dance as a “serious” game



[Video excerpts](#)

[Video excerpts](#)

Another example,
Tactile Sensations



Echo Room
physiological feed-back

[Video excerpts](#)



Metaphorá
dialog with a distributed avatar




[Video excerpts](#)

Artistic approach, meaning and use of technology

- meaningful and sensitive use of digital media
- lived body integral part of the dance composition
- dual point of view of the staging of intentions and the crafting of movement material
- Interactive and reactive environments
- Dramaturgy of the co writing of dance and digital media

K. Danse and Wholodance

- Link between the artistic approach and technology development
 - Choreographic composition and technology for movement analysis
 - Gamification and the learning process
 - Choreography for interactive design
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- A person in a red outfit is captured in a dynamic dance pose, illuminated by red light. The background is dark with a complex, glowing blue and white geometric pattern of interconnected lines and nodes, resembling a network or molecular structure. The overall atmosphere is futuristic and artistic.

Link between the artistic approach and technology development

- Artistic design → Technology development

Choreographic tools for technology design?

In-depth analysis of compositional tools do provide novel directions in the understanding of movement analysis and body interaction

- Technology design → Artistic development

Technology as a choreographic and creative tool ?

Specially when technological environments provide and induce new conditions and novel constraints for the making and the perception of movement and choreography

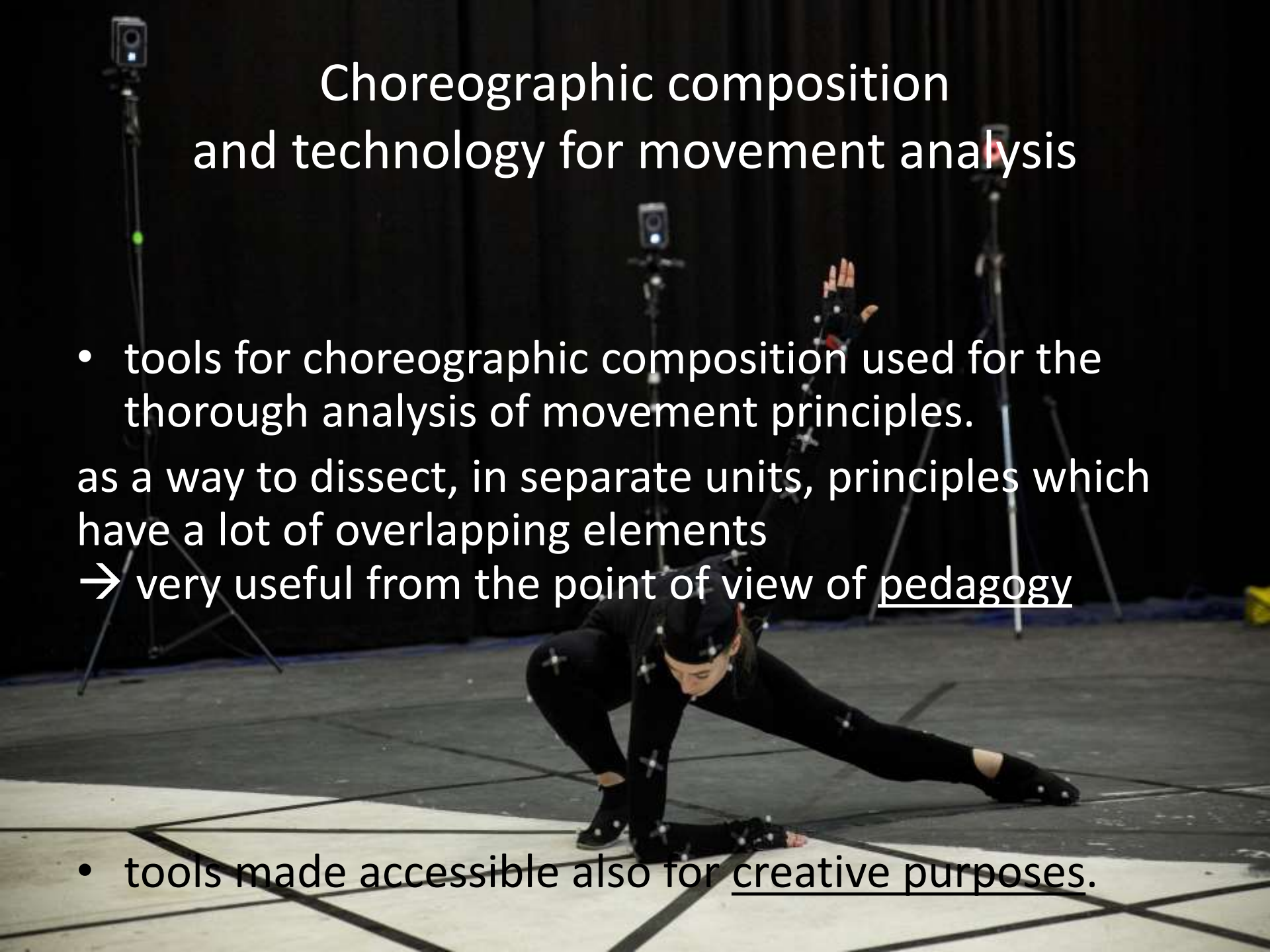
Choreographic composition and technology for movement analysis

- tools for choreographic composition used for the thorough analysis of movement principles.

as a way to dissect, in separate units, principles which have a lot of overlapping elements

→ very useful from the point of view of pedagogy

- tools made accessible also for creative purposes.



Gamification and the learning process



Description of the close relationship between:

- the movement principles used in the making of the *Gameplay* performance
- the choices of avatar visualizations
- the programming of the behaviour of the visual and sonic entities
- the rules added in the varying semi autonomy

Choreography for interactive design

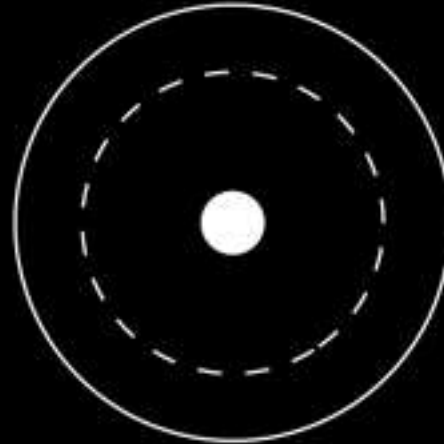
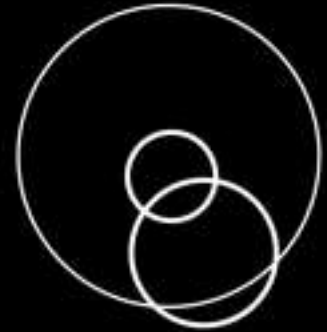
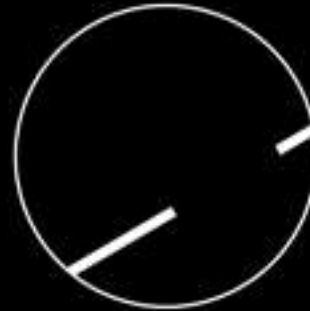
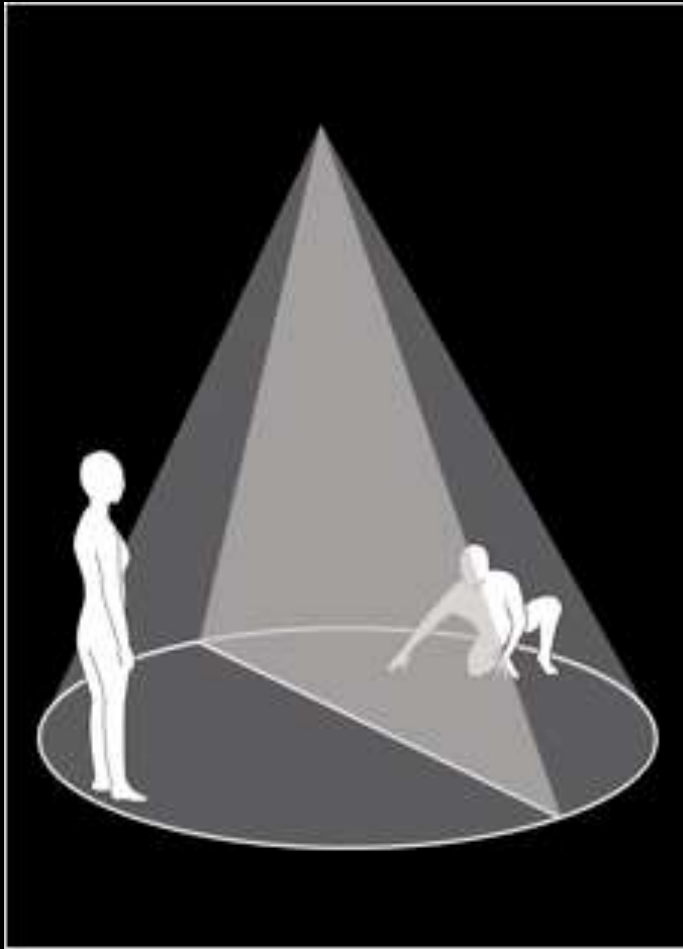
- Fine-grain analysis and automated multimodal processing of highly diversified qualities of movement can allow users to gain an improved awareness of individual expressive movement qualities, resulting in an enhanced inventiveness of specific qualities in choreographic and pedagogical terms.
- Choreographic imaginary useful for technology developers.
- The use of technology with dance can provide new ways of disseminating movement and help attract new dance students (see examples with children in playful innovative dance environments).
- Important point for research and development: the definition of the interaction rules between a user and an avatar, so that through a process that has in common elements of communication, the user could proceed through imitating, proposing, responding, resisting, improving or not, provoking, etc.
→ Devising the semantics of the interactions (see the *In play* text)


Ideas to come...

Where the choreographic, musical and visual approaches take into account:

- The choreographic staging of a playful relationship
- Different types of encounters between user and avatar
- Lights/images/sounds can visualize/materialize a kind of “architecture”, invisible space between user and avatar interacting
- An “infra thin” interface, between bodies in space, to share? A learning thread?

Ideas to come...





Jean-Marc Matos 07/16
Wholodance Thessaloniki workshop
www.k-danse.net