

# Morphogenesis in dance

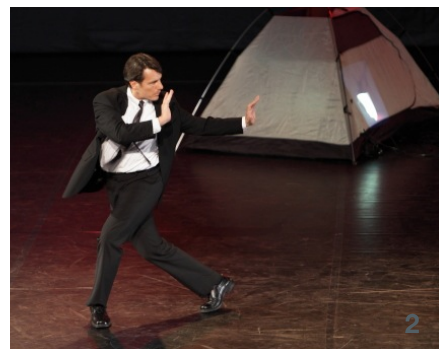
the shaping of artistic creation

Lecture-Demonstration

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## Proposal

Ricardo Viviani, Choreographer  
Frankfurt am Main - Germany



# Morphogenesis in dance

## THE SHAPING OF ARTISTIC CREATION

Lecture-Demonstration Proposal

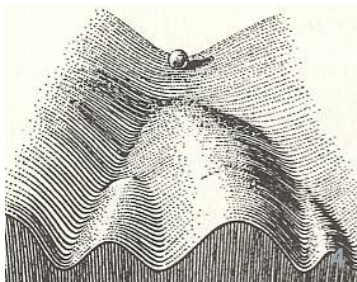
### 1. What is Morphogenesis

#### WHAT GIVES SHAPE TO THINGS?

**Morphogenesis** is the process that determines how biological forms are differentiated and organized. A right or a left limb have the same genetical materials, why and how it takes one form or another is not biologically fully explained yet. Performance undergoes similar processes; the coding and rules of genetics as in the modes of communication, the materials and mechanics of genes in the instruments and scores, dance steps and the bodies, are present in the same way. The moment of decision that differentiates and piles up a cell in one way or another, and the combination of one movement next to another has been the subject of theories in the recent past. Three approaches to this issue are presented here, from biology, from quantum physics applied to Jungian Psychology and from performance studies.

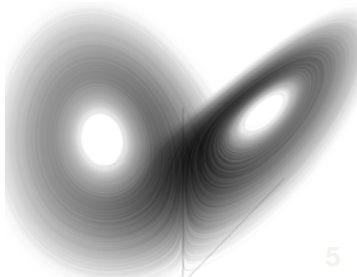


#### 1.1 CHREODE



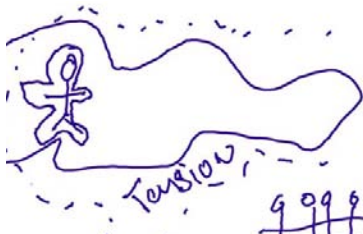
A neologism created by biologist Conrad H. Waddington in his book *The Strategy of the Genes* from 1957, chreode (chre – necessary und hodot – path) is explained by using an analogy that uses gravity as an easy to relate phenomenon in the physical world: a ball rolling along a path. The theory of chreode provides for self organisation, natural temporal framework and variation of form.

#### 1.2 ATTRACTORS



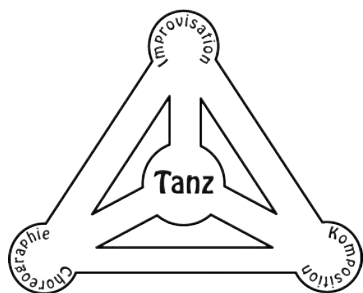
In combining chaos theory with Jungian Archetypes, psychologist John R. Van Eenwyk creates a possible model that inverts causation and lends to behavior with posterior causation. The future pulls creation as opposed to being pushed from the past. Creativity in this sense, most likely, operates freed from natural time.

### 1.3 VISCOSITY



Portuguese philosopher José Gil introduces the concept of 'viscosity' to explain movement choices in his article "O Corpo Paradoxal" (Paradoxical Body) in his book "Movimento Total – O Corpo e a Dança" from 2001. According to his postulate, dance is channeled through paths of lower viscosity that are sensed by the dancer in the act of dancing.

### 2. Observing morphogenesis in performance



In dance the morphogenesis can be observed both in the rehearsal room by observing specific interactions of the choreographer and dancer, but also in performance by restricting some parameters and concentrating the observation on specific variables. To access the creation moment, this presentation will use a methodology developed by german dance pedagogue Rolf Gelewski. Gelewski is a disciple of Mary Wigman in the analytical genealogy of Rudolf von Laban.

### 3. Summary



Models for explaining morphogenesis in performance transcend the natural sciences toolkit, still, it can be observed and described. This lecture/ demonstration proposes three approaches to observe this phenomena. After exposing these theories a short dance piece will be performed to enable an observation under the aspects of morphogenesis of a moment of creation. This dance piece - "Blue Danube" - presents a frame that constrains the observable phenomenon of improvisation in three parameters: Force, Speed and Timing.

An early full video of this dance can be seen here: <http://www.ricardoviviani.com/blog/danube/>

### 4. Formal requirements

Technical equipment, spacial and time requirements as follows:

Duration: Introduction 15 minutes, demonstration 10 minutes

Stage Dimensions: minimum of 8 meters wide, 2 meters deep

Equipment: Video projector and computer for PowerPoint and PA system for music playback

### 5. Ricardo Viviani

A biologist and a dancer, Ricardo Viviani lives in Frankfurt, Germany.



**Ricardo Viviani** is a choreographer, director and pedagogue born in São Paulo, Brazil. Based in Frankfurt, Viviani studied biology and theater direction at the Universidade de São Paulo, went to ballet school at the Joffrey Ballet in New York City. Viviani was a choreography student with the legendary, Bessie Schoenberg both as a scholarship student at Jacob's Pillow and at the sessions at Dance Theater Workshop in NYC. As a performer he was engaged at the internationally renowned Balé da Cidade de São Paulo, at the Deutsches Nationaltheater Weimar. He also worked as a musical performer

on Broadway and internationally. He produced dance evenings for 7 years in Cologne, was in the Board of Directors of Tanz Performance Köln producing yearly dance festivals. He has extensive experience in the commercial field of Trade Shows, Event Staging, and Gala evenings, and choreographed for the past 10 years for Operas and Musicals.



His current project is an elaboration of strategies and testimonials for the art dance in the 21st Century: *why.what.how.*

**why.** explores strategies of insertion of dance and dance knowledge within sustainable economy strategies from the 'Crie Futuros' movement.

**what.** is a primer for the mediation of corporeal knowledge, opening a transfer channel of the 'secrets' that only dancers know.

**how.** exposes a specific creative process of artistic creation developed by German dancer and pedagogue Rolf Gelewski.

### 6. References

#### Images

1. Blue Danube LifeForms Analysis © Ricardo Viviani 1998/2015
2. Ricardo Viviani performing the Blue Danube in 2012
3. Gestures after 19th century original
4. Chreode - Waddington, C. H. (1957). The Strategy of the Genes.
5. Lorenz attractor CC BY-SA 2.5 made by User:Wofl Wikipedia
6. O Corpo Paradoxal - José Gil Analysis for ID\_Frankfurt - Biweekly Meetings 2013
7. Ontology of Dance after Rolf Gelewski - Viviani 2013
8. Photo by Roberto Frankenberg - 1982 of Blue Danube <http://www.ricardoviviani.com/blog/danube/>
9. Ricardo Viviani portrait
10. Postcard lecture series *why.what.how.*

#### Contact

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