### Organization:



Centro de Filosofia das Ciências da Universidade de Lisboa



Project «Image in Science and Art»
Task II\_ Diagrammatic reasoning
(PTDC/EAT/64201/2006)

# Diagrammatology and diagrammatic praxis

Interdisciplinary Workshop 23rd & 24th of March 2009 10h00- 19h00

Amphitheater of the Foundation of the University of Lisbon Faculty of Sciences Building C1, 3<sup>rd</sup> Floor

A diagram is a representamen which is predominantly an icon of relations and is aided to be so by conventions. Indices are also more or less used. It should be carried out upon a perfectly consistent system of representation, founded upon a simple and easily intelligible basic idea

Peirce, CP 4.418

By diagrammatic reasoning, I mean reasoning which constructs a diagram according to a precept expressed in general terms, performs experiments upon this diagram, notes their results, assures itself that similar experiments performed upon any diagram constructed according to the same precept would have same results, and expresses this in general terms. This was a discovery of no little importance, showing, as it does, that all knowledge without exception comes from observation.

Peirce, NEM IV, 47

#### 23th of March 2009

#### Fundamental issues of Diagrammatology I

10h00 Opening Lecture: Prof. Frederik Stjernfelt (University of Aarhus, Denmark)

The extension of the Peircean diagram category

Different semiotic schools have had different ideas about what counted as the prototypical semiotic phenomenon. In structuralism, the single word in the paradigm was probably the prototype; in Chomskyanism, syntax and recursion was seen as prototypical; in cognitive semantics - closer to Peirce's ideas - bodily based image schemata and metaphors are prototypical. Taking diagrams as prototypical invites us to a wholly different way of approaching semiotics, and by Peirce's operational criterion for iconicity, sign uses far from common sense diagrams - logic, algebra, aspects of grammar must be reconceptualized as subtypes of diagrams. So Peircean diagrammatology not only develops our understanding of diagrams proper and their importance - it also invites us to redescribe the whole of semiotics and see its connections to logic in a new light.

11h30 Discussion with the workshop participants

12h00 Coffee Break

12h15 Jan Wöpking ("Excellence Cluster Topoi" FU Berlin, Germany)

Diagrammatic Simulation. A Case Study of a Galilean Diagram

12h45 Dr. Irene Mittelberg ("Excellence Cluster HumTec", RWTH Aachen, Germany)

Diagrammatic iconicity in grammar and gesture

13h15 -15h00 Lunch Break

15h00 Prof. Franco Oliveira (CFCUL)

Picture-proofs in mathematics: a chapter in Robert Brown's philosophy of mathematics, with examples

15h30 Prof. José Croca (University of Lisbon, CFCUL/FCUL)

Diagrams in Physics

16h00 Marta Menezes (Gulbenkian Lisbon)

Feynman Diagrams/ Joseph Beuys

16h30 Discussion with the workshop participants

17h00 Coffee-Break

17h15 Springerbook-session On Prof. Frederik Stjernfelt's book Diagrammatology. An

Investigation on the borderline of Phenomenology, Ontology and Semiotics (2007) and Prof. Ahti-

Veikko Pietarinnen's book Signs of Logic (2007)

Prof. Pietarinnen commentary on Stjernfelt's book (30min)

Prof. Stjernfelt commentary on Pietarinnen's book (30min)

Discussion with the participants (15 min)

18h15 Remarks and outlook by Alexander Gerner

20h00 Dinner in Bairro Alto (Optional)

#### 24th of March 2009

#### Fundamental issues of diagrammatology II

10h00 Prof. Olga Pombo

Operativity and Representativity of the Sign in Leibniz

10h30 Prof. Ahti-Veikko Pietarinnen

Is non-visual diagrammatic logic possible?

11h00 Coffee-Break

#### Fundamental issues in diagrammatology III

11h15 Dr. Catarina Pombo (CFCUL)

Rhizome - Thought

11h45 Prof. Nuno Nabais (University of Lisbon, CFCUL/FLUL)

Diagrammatology

#### IV Diagrammatic types: Learning and refiguring knowledge with maps

12h15 Alexander Gerner (CFCUL)

Notes on diagrammatic knowledge in contemporary art

12h45 Prof. Frederik Stjernfelt

What can we learn from maps as a diagram type?

13h15 -15h00 Lunch Break

## V. Diagrammatic praxis: Diagrammatology in inter-media art, scenographic media, collective robotics and architecture in the making

15h00 Prof. Matthias Bauer (University of Flensburg: Germany)

Diagrammatology, scenographic media and the display function of art

15h30 Tiago Lanca (Architect: Ordem dos Arquitectos, Lisbon)

Architectural and space drawing: Thinking with the hand

16h00 Dr. Paulo Urbano (Department of Informatics, FCUL)

Mimetism and Collective Pattern Formation

16h30 Discussion with the workshop participants

17h00 Coffee Break

17h15 Miguel Cardoso/Santiago Ortiz

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17h45 Final debate

19h00 End of the Workshop

20h30 Dinner at Fábrica Braco de Prata (Optional)