

FCT Relatório Científico 2011 Print: 29-03-2012 19:30:30 [Centro de Filosofia das Ciências da Universidade de Lisboa]

General Information

Name of Research Unit:	(FIL-LVT-678) Centro de Filosofia das Ciências da Universidade de Lisboa
Coordinator:	Olga Maria Pombo Martins
Main Scientific Domain:	Filosofia
Other Subdomains:	n/a

Host Institutions

Leading Host Institution:	Fundação da Faculdade de Ciências - Faculdade de Ciências da Universidade de Lisboa
Other Institutions Involved:	Faculdade de Ciências - Universidade de Lisboa

Objectives & Achievements

Unit Description

The Centro de Filosofia das Ciências da Universidade de Lisboa (CFCUL) is a Research Unit founded in 2003. It is organically constituted by the Director, the Executive Committee, the Scientific Board, the Permanent Scientific Counseling External Commission, and the Honorary Founding Members. The CFCUL's director is Prof. Olga Pombo.

The Scientific Board (SB) is constituted by the 38 PhD integrated members. The SB meets several times per year in a regular basis and decides when to gather the whole team (88 integrated members, of which 9 are FCT Post-doc students, 26 PhD students and 6 Master students; 45 collaborators, of which 24 international). The SB meets annually with members of the Permanent Scientific Counseling External Commission. The Executive Committee (EB) is constituted by the following integrated members: Prof. Olga Pombo, Prof. Rui Moreira, Prof. Maria Estela Jardim, Prof. José Manuel Pombeiro, Dr. Zaza C. de Moura, and Prof. Isabel Serra. The EB executes the decisions taken by the SB in order to guarantee: 1) all the management and budgetary issues regarding each activity's implementation; 2) the evaluation of all the achieved (or not) goals, always trying to analyse what worked out well or what did not go as initially expected. The Permanent Scientific Counseling External Commission (PSCEC) is constituted by internationally renowned researchers in the field of the Philosophy of Science, namely: Prof. Daniel Andler (Université Paris-Sorbonne, Paris IV, France) and Prof. Maria José Frapoli (Universidad de Granada, Spain). The Honorary Founding Members (HFM) is constituted by Prof. Andrade e Silva (Faculty of Science, University of Lisbon, Portugal) and Prof. Franco Selleri (Università di Bari, Italy).

CFCUL has currently 6 Research Groups (RG):

- Unity of Science
- Philosophy of Nature Sciences
- Philosophy of Life Sciences
- Philosophy of Mathematics
- Philosophy of Human Sciences, Ethics and Politics
- Science and Art

RGs are responsible for the development of the CFCUL's research projects: 2 projects granted by FCT, 4 international projects (one of which funded by "Acções Integradas Luso-Espanholas - CRUP"), 1 partnership project, and 13 internal projects.

CFCUL is funded mainly by the FCT - Programa de Financiamento Plurianual de Unidades de Investigação e Desenvolvimento and FACC. However, CFCUL was also funded during 2011 by other institutions such as CRUP, FLAD, British Council and Gulbenkian Foundation.

General Objectives

The CFCUL is the only R&D Unit exclusively committed to the Philosophy of Science. Supported by an idea of Unity of Science that comes from the tradition of Leibniz and Neurath, CFCUL has a plural but coherent conception of Philosophy of Science. Within that commitment, CFCUL's main objectives are:

- to encourage and promote the development of Philosophy of Sciences research in Portugal, more specifically, within the research lines: «Unity of Science», «Philosophy of Nature Sciences», «Philosophy of Life Sciences», «Philosophy of Mathematics», «Philosophy of Human Sciences, Ethics and Politics» and «Science and Art», by stimulating and supporting both specialized and interdisciplinary research;
- to develop national and international research projects;
- to establish national and international partnerships;
- to organize colloquia, workshops and conferences;
- to promote a Philosophy of Sciences Permanent Seminar for seniors researchers and a Gymnasium for post-graduate students;
- to assure the supervision of graduate and post-graduate students on Philosophy of Sciences;
- to integrate research and post-graduate studies through Master and Doctoral programs;
- to publish the most relevant studies carried out in the several activities organized by CFCUL's research groups.
- to edit Kairos - Journal of Philosophy and Sciences;
- to edit the series of books on Philosophy of Sciences («Philosophy of Science Notebooks»);
- to edit the series «Thesis» with the most relevant Master and PhD dissertations in philosophy of science;
- to edit the series «Documenta» with the proceedings of the conferences and colloquia organized by the CFCUL;
- to reach the wider national and international scientific community and the specific publics we thought might be interested or benefit from our research in Lisbon as well as in the rest of the country and abroad (through CFCUL's webpage and through the organization of several

our research in Lisbon as well as in the rest of the country and abroad (through CFCUL's webpage and through the organization of several outreach activities, like free courses, conferences and book debates).

Main Achievements during the year of 2011

During 2011, the CFCUL largely overlapped its goals and tasks, namely those concerned by the FCT Projects "Image in Science and Art" and "Poincaré Philosopher of Science". In general terms, the CFCUL was able to develop the foreseen research, to bring together researchers from several fields at a national and international level, to organize high scientific level events, to present the research results in books, articles and communications and to provide supervision to a relevant number of post-graduate students. Here, some of our main achievements:

1. 22 books

We highlight:

- O. Pombo, J. Symons, J. Manuel Torres (Eds.), *Otto Neurath and the Unity of Science*, Dordrecht /Londres /New York: Springer, 264 pp.
- Redmond, Juan. *Logique dynamique de la fiction: pour une approche dialogique*. London, Colledge Publications (Col. Cahiers de logique et Epistémologie).
- Diogo Sardinha, *Ordre et temps dans la philosophie de Foucault*, Paris, L'Harmattan, 251 pp.
- Hassan Tahiri (org. and edited). *Poincaré's Philosophy of Mathematics: Intuition, Experience, Creativity*. Lisboa: CFCUL
- Levy A, Carrapiço F, Abreu H, Pina M (Dir.). *'Vida: Origem e Evolução'*. Lisboa: Esfera do Caos.

2. 61 articles (29 peer-reviewed)

We highlight:

- Joana Ricou, John A. Pollock, «The Tree, The Spiral And The Web of Life: A Visual Exploration of Biological Evolution for Public Murals» , *Leonardo Journal*, Volume 45, Issue 1, 18-25;
- Olga Pombo. Espinoza e a Linguagem. In *CID – Revista de Ciência da Informação e Documentação* 2(1): 16-30.
- Diogo Sardinha, «L'émancipation, de Kant à Deleuze: devenir majeur, devenir mineur», *Les Temps modernes*, n°665, p.145-164.
- José Croca com Magalhães, Guildo, "The principle of eurhythmy a key to the unity of physics" in *Foudations of Physics*, Kluwer (In print).

3. 38 book chapters

We highlight:

- Alexander Gerner, *Diagrammatic thinking*. [Encyclopedia entry] In: *VítHavránek/tranzit (Ed.) Atlas of Transformation: jrp-ringier Zürich 2011*, pp.173-184.
- Augusto J. Franco Oliveira. *The Principle of Mathematical Induction in Poincaré's Criticisms of Logicism and Formalism*. In: Hassan Tahiri (org. and edited). *Poincaré's Philosophy of Mathematics: Intuition, Experience, Creativity*. Lisboa: CFCUL, pp.95-106
- Ricardo Santos, Francisco Carrapiço. *Darwin and Mereschkowsky: two images, two evolutionary concepts*. In: Ana Leonor Pereira, João Rui Pita and Pedro Ricardo Fonseca (Eds.), *Darwin, Evolution and Evolutionisms*. Coimbra: Imprensa da Universidade de Coimbra, pp.91-96

4. 2 issues of *Kairos. Journal of Philosophy and Science*

5. Organization of 18 scientific meetings (6 colloquia, 2 workshops, 10 seminars)

We highlight:

- International Colloquium *Image in Science and Art*, Gulbenkian Foundation, Lisbon, 17-19 February
- À quoi l'Europe sert-elle encore? Un débat entre l'Allemagne, la France et le Portugal. Organized by the CFCUL, Collège International de Philosophie, FreieUniversität Berlin, FondationCalousteGulbenkian, Paris, 2-3 December.
- International Colloquium , VI Jornadas Ibéricas – Lógica, Lenguaje, Mente y Ciencia, organizadas no âmbito da Acção Integrada Luso-Espanhola. Universidade Complutense de Madrid, 17-18 Nov
- Colóquio "Espaço, Tempo de Devir. Primeiro Encontro de Filosofia e Física", Universidade dos Açores. Ponta Delgada, 1-2 Setembro de 2011.

5. 144 talks (82 international, 62 national)

6. Organization of 18 conferences

7. Organization of 13 courses

8. Post-graduate education, namely:

- 9 Post-docs
- 27 PhD students
- 103 Master students

Activities

Integrative/multidisciplinary activities during the year of 2011

Given the nature of CFCUL's research field, a great number of its activities are inherently integrative and multidisciplinary. Besides the fact that Philosophy of Science is in itself an interdisciplinary area, CFCUL's team is composed by members coming from a significant variety of disciplines (Philosophy, Physics, Biology, Medicine, Mathematics, Sociology, Logics) and institutions (Faculties of Sciences, Medicine, Letters, and Fine Arts).

1) Some of our projects are strongly interdisciplinary. For instance, the following FCT projects:

- Poincaré, Philosopher of Science, with researchers from Physics, Mathematics, Philosophy, Logics, History of Science and Mathematical Learning
- Image in Science and Art, with researchers from many fields: Philosophy, Epistemology, History, Sociology, Art, Semiotics, Medicine
- What is Physical Theory?, with researchers from Philosophy, Physics, Mathematics, and History

- 2) The international colloquia organized by the CFCUL in partnership with other institutions also have a strong interdisciplinary aspect:
- Poincaré. Problems and Perspectives. CFCUL and FCT Project Poincaré, philosopher of science. FCUL, Lisbon, 26-27 Jan (15 talks)
 - Image in Science and Art. CFCUL and FCT Project Image in Science and Art. Gulbenkian, Lisbon, 17-19 Feb (21 talks, 1 debate and 1 round-table)
 - Espaço, Tempo, Devir. I Encontro de Filosofia e Física. CFCUL, FCUL and University of Azores. Ponta Delgada, 1-2 Sep (12 talks)
 - The 75th anniversary of Delfim Santos. An evaluative assessment of Neopositivism. CFCUL and Arquivo Delfim Santos. FCUL, Lisbon, 4-5 Nov (19 talks)
 - VI Jornadas Ibéricas – Lógica, Lenguaje, Mente y Ciencia. CFCUL and Universidad Complutense de Madrid. Madrid, 17-18 Nov (26 talks)
 - À quoi l'Europe sert-elle encore? Un débat entre l'Allemagne, la France et le Portugal. CFCUL, Collège International de Philosophie, Freie Universität Berlin, Fondation Calouste Gulbenkian. 2-3 Dec (8 debates with 32 participants)

3) CFCUL is also committed to the objective of inviting speakers from different research areas to its colloquia, conference cycles and seminars, for instance:

- A teoria lógico-dinâmica da representação do discurso, por Francisco Salguero, 25 May
- Right & Left in images – Laterality and Art, por Andrea Pinotti (Univ. de Milão), 15 Jun
- Kant and real numbers, por Mark Van-Atten, 28 Jun
- Difficulties of intuition by the hand of Poincaré, por Olga Pombo, 7 Oct
- O Corpo Máquina, por Porfírio Silva (IRS-IST-UTL), 29 Oct
- Lei Natural, Ordem e Epistemologia, por Gildo Magalhães (USP, Brasil), 25 Oct
- A noção de imagem em diferença e repetição, por Nuno Carvalho, 22 Nov
- Imágenes cerebrales en las humanidades, por Francisco Gomez Mont Avalos (Neurohumanities Research Centre, Mexico), 16 Dec
- Jean Cavaillès and the Historicity of Mathematics, por David Webb, 12 Dec
- Filosofia do Corpo, por Nuno Nabais, 19 Dec

4) Several specialized seminars in different domains (The Void and the Atom, Intuition, Territory, Whitehead, Philosophy & Biology, Philosophy & Law) organized by CFCUL integrated members started in 2011.

5) CFCUL's members teach in several institutions such as:

- PhD in History & Philosophy of Science (FCUL) and Fine Arts (FBAUL)
- International Master and PhD Programs in Complexity Sciences, ISCTE/FCUL
- Master in History and Philosophy of Science (FCUL), Bioethics (FMUL), Palliative Care (FMUL), and Artistic Education (FBAUL)

Outreach activities during the year of 2011

We consider as CFCUL's most important outreach activities:

1. The maintenance and improvement of the CFCUL's official webpage through which we divulge our activities;
2. The maintenance and the improvement of the Center for Image in Science and Art webpage;
3. The organization of the exhibition "corpoIMAGEM", organized by the CFCUL, Pavillion of Knowledge – Ciência Viva, and the FCT Project Image in Science and Art (This exhibition was seen by more than 15.000 visitors);
4. The organization of a series of conferences in the context of the above mentioned exhibition:
 - O desenho de nu na antiga Academia de Belas-Artes de Lisboa, por Alberto Faria (FBAUL), 5Mar
 - Fabulosas raças de humanoides: monstros e robôs, por Porfírio Silva (IST-UTL), 12Mar
 - Uma nova imagem do cérebro, por Mário Forjaz Secca (FCT-UNL), 19Mar
5. The co-organization with the Fundação Calouste Gulbenkian of a series of open conferences on the Image in Science and Art, that reached a wide audience:
 - Visiting Time: the Renegotiation of Time through Time-based Art, by Boris Groys (New York University, USA), 19Jan
 - Functional Images of the Brain: Beauty, Bounty, and Beyond, by Judy Illes (University of British Columbia, Canada), 2Feb
6. The co-organization with the Institut Français du Portugal of 6 sessions of the Café Philo, that were dedicated to the following subjects: Superstition (January), Spirituality (February), Creativity (March), Revolution (April), Passion (May), Nostalgia (June).
7. The organization of 5 book presentations, such as:
 - Solaris. Sistema Beta Pictoris, by Rodrigo Vilhena. Book presented by José R. Croca, Catarina Nabais and Olga Pombo, 13May
 - Vida – Origem e Evolução, edited by André Levy, Francisco Carrapiço, Helena Abreu and Marco Pina. Book presented by Pedro Ré, 16May
 - As Imagens com que a Ciência se Faz, edited by Olga Pombo and Sílvia Di Marco. Book presented by Palmira Fontes da Costa, 1Jun
 - Marie Skłodowska Curie – Imagens de outra face, by Raquel Gonçalves-Maia. Book presented Olga Pombo and José Manuel Anes, 9Nov
8. Integrated members of CFCUL gave several interviews, of which we highlight:
 - Interview with Olga Pombo to TVCiência about the exhibition "corpoIMAGEM", February
 - Interview with ZbigniewKotowicz to BBC Radio 4 about Egas Moniz, 7 November
 - Interview with Olga Pombo to TV program ComCiência (RTP2) about the exhibition "corpoIMAGEM", 23Feb
 - Interview with José R. Croca to Brasil 247, 14Ago

- Interview with José N. Croca to Página da Educação, 27/1/2009

- Interview with Olga Pombo to Página da Educação about "A escola é o lugar onde a memória se faz futuro", n.º 195, pp.9-20

- Interview with António Bracinha Vieira to Ana Marques Gastão, Colóquio/Letras, n.º 177, pp.151-166

9. CFCUL's integrated members were invited by High Schools to give talks, namely:

- Ciência e Interdisciplinaridade, by Olga Pombo. Jornadas Interdisciplinares organizadas pelo Núcleo de Estudantes de Psicologia e Ciências da Educação da Universidade de Coimbra, 22 March

- A importância da Filosofia para a compreensão das relações entre Arte e Ciência, by Olga Pombo, Escola Secundária Maria Amália Vaz de Carvalho, 28 March

- Celebrar McLuhan. Escola e Currículo na sociedade de informação, by Olga Pombo, Escola Secundária Sebastião e Silva, 4 April

- Lugares da Escola, by Olga Pombo, Escola Secundária Prof. Herculano de Carvalho, 4 Maio

Funding

	2008	2009	2010	2011
LA FCT	0,00	0,00		
Units FCT	27.989,00	99.515,63	110.859,38	104.393,00
Projects FCT	86.776,00	77.372,00	67.811,50	25.915,12
Other (National)	20.700,00	21.568,00	8.600,00	5.761,12
Other (International)	0,00	1.500,00	0,00	0,00
National Industry	0,00	0,00	0,00	0,00
International Industry	0,00	0,00	0,00	0,00
	135.465,00	199.955,63	187.270,88	136.069,24

General Indicators

	2007	2008	2009	2010	2011	Total
No. of Researchers Hired (Ciência Programme)	0,00	0,00	0,00	0,00	0,00	0,00
No. of Researchers integrated with PhD	0,00	0,00	0,00	0,00	38,00	
Training PhDs (PhD thesis completed)	0,00	0,00	0,00	0,00	2,00	2,00

Researchers Hired

Name	Start Date	End Date	Other Institution
No researchers found...			

Technical Personnel Hired

Name	Start Date	End Date	Other Institution
No technical personnel found...			

Additional Comments

Research Groups

Reference	Title / Principal Investigator
RG-LVT-678-799	<u>Unity of Science</u> (Olga Maria Pombo Martins)
RG-LVT-678-800	<u>Philosophy of Nature Sciences</u> (José Nunes Ramalho Croca)
RG-LVT-678-1049	<u>Philosophy of Life Sciences</u> (António José Feliciano Barbosa)
RG-LVT-678-1053	<u>Science and Art</u> (Catarina Pombo Martins de Castro Nabais)
RG-LVT-678-3746	<u>Philosophy of Human Sciences, Ethics and Politics</u> (Nuno Gabriel de Castro Nabais dos Santos)
RG-LVT-678-3747	<u>Philosophy of Mathematics</u> (Augusto Jose Franco de Oliveira)

Strategic Project Adjustments

- In general terms, the CFCUL was able to develop the foreseen research and activities. However, some outputs had to be delayed because of diverse reasons.

Due to unforeseen academic bureaucracies, 3 Phd thesis (Alexander Gerner, Joao Cordovil and José Carlos Tiago de Oliveira) is will be argued in

2012.

Although some of the foreseen books for 2011 were not published they were concluded and are actually in press (for instance, O.Pombo, "Os círculos do saber"; Nuno Melim, "Visível e Enunciável", Z. Kotowicz, "Psychosurgery. The birth of a new scientific paradigm"; I. Serra and M. de Paz "Henri Poincaré, Filosofia da Física).

Some seminars had to be postponed for 2012 ("on Non-Linearity" by Carlos Ramos; "Metaphysics of Science", by Mafalda Blanc)

Although it has not been possible to start the series of conferences "Rethinking Biology and Evolution: new approaches to the new century" in 2011, it was possible to put forward a seminar on Philosophy and Biology that was not originally planned in the strategic project.

- In financial terms, any adjustment was necessary.