



The Academia Europaea & The Wenner-Gren Foundations Conference

Crossing over to the future: Interdisciplinarity in research and higher education

Thursday 18 - Saturday 20 May 2017
***Wenner-Gren Center, Stockholm, Sweden**

Programme

Background of the conference

More than fifty years has passed since C.P. Snow in his famous Rede Lecture of 1959 (Snow, C.P. 1964) on the 'two cultures' stressed the duality of the natural sciences and the humanities as a seemingly self-evident reality organizing academic production of knowledge. Snow argued that the university was a divided community with radically different cultures and languages. As is well known, his views have been greatly quoted, challenged and criticized. However, over the decades the contemporary research landscape can no longer be mapped by simple dichotomies. Today the concept of 'interdisciplinarity' has slowly but surely come to the forefront of research interests and is seen as leading the way to answering major research questions, often known as the Grand Challenges, that mankind faces today.

When one views what at present comes most frequently under the heading of the Grand Challenges (climate change, water resources, multiculturalism, migration, energy supplies, etc.) the two most dominant characteristics of this kind of research are encapsulated in the concepts of *Inter/Multi/Transdisciplinarity* (in the following mentioned as *Interdisciplinarity*) and the *Global Dimension*. This stems from the global nature of the Grand Challenges themselves and from the fact that they do not easily fit within the traditional disciplinary boundaries. The complexity implied by *interdisciplinary* research challenges both research and education within all research domains. *Interdisciplinarity* in many ways poses challenges both to research and education in all domains of research. The complex nature of crossing boundaries and integrating different lines of thought brings to the forefront a reconceptualization of research itself as well as the education necessary for it. It is not possible to mention all the great thinkers that have stressed and developed the notion of 'interdisciplinarity' over the decades. However, it is necessary to mention the work of Jürgen Mittelstraß (1982), who advocates the necessity of transforming 'empirical knowledge' into 'orientational knowledge' which is by definition *culturally* defined and *socially* implemented. Also, the work of Nowotny, Scott and Gibbons (2001) on what is called Mode 2 knowledge production, that is, knowledge production seen as a process for which people come together in temporary networks to work on specific problems in the real world.

No matter whether ‘interdisciplinarity’ is knowledge-led (research driven), risk (crisis) induced or challenge-driven, ‘interdisciplinarity’, the basic requirement for scholarly engagement across all research domains is the capacity to adapt a fundamentally open and experimental approach to disciplines, research questions as well as their potential for addressing societal issues. Therefore, ‘interdisciplinarity’ not only aims at crossing the boundaries of disciplines, but is also a challenge for research governance, funding agencies and policy makers. It stresses the necessity of investing in high risk and curiosity driven research initiatives as key drivers for research advancement as well as the developing of new practices and criteria for evaluating research projects and results. However, gaps persist between the widespread rhetoric for support of interdisciplinarity and the realities of practice within the realm of research, the institutional environments in which this research should be carried out. Universities as a rule (with a few exceptions) have not implemented systematic reforms for lowering institutional barriers and creating favorable cultures for both research and education (Klein et al. 2001). With respect to this, experiment and risk often may be controversial principles in those environments that provoke constraints of a political and ideological nature, thus hampering the development of ‘interdisciplinarity’. The freedom to follow curiosity-driven research questions in relation to the Grand Challenges is not met with the same enthusiasm everywhere inside and outside the scientific community. What also has to be recognized is the fact that a particular concentrated effort has to be made to bridge the divide between the hard sciences and the Social Sciences and the Humanities (SSH). This is crucial if we are to address the many-layered problems inherent in the Grand Challenges. Thus, the necessity of raising the level of awareness to bridge gaps and work across boundaries is very much felt throughout the entire research community. However, in turn, this underpins crucial necessities such as mutual understanding and respect especially between the hard sciences and SSH.

Organising committee

Chair: Milena Žic Fuchs, Zagreb, mzicfuch@ffzg.hr

Erik De Corte, Leuven, erik.decorte@ppw.kuleuven.be

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Thursday 18 May 2017

***When you walk through the main entrance of the Wenner-Gren Centre, please take to your left and go down the stairs.**

- HERCULES Group meeting
12.00-12.30 *Lunch*
12.30-14.30 Meeting
- 14.30-15.00 Registration
- 15.00-18.00 **Welcome and Opening**
15.00-15.15 Britt-Marie Sjöberg, Chief Executive Officer of the Wenner-Gren Foundations, Stockholm, britt-marie.sjoberg@swgc.org
- 15.15-15.30 Sierd Cloetingh, President of Academia Europaea, Utrecht, sierd.cloetingh@uu.nl
- 15.30-15.50 **Presentation of topic and programme by the Convenor**
Milena Žic Fuchs, Zagreb, mzicfuch@ffzg.hr
- Plenary: Interdisciplinarity across science - challenges and opportunities**
Chair: Milena Žic Fuchs, Zagreb, mzicfuch@ffzg.hr
- 15.50-16.30 David King, Cambridge, mdk@camkas.co.uk
Can Interdisciplinary Approaches Meet Our Unique Twenty First Century Challenges?
- 16.30-17.10 Bruce Brown, Brighton, bgb@brucebrown.plus.com
The arts and humanities and interdisciplinary research
- 17.10-18.00 Discussion
- 18.15-21.00 *Welcome reception with buffet dinner, 23rd floor*

Friday 19 May 2017

Please note: 30 minutes per presentation followed by 15 minutes for plenary discussion

- 09.00-12.30 **Session 1: Interdisciplinarity in research - obstacles and opportunities**
Chair: Erik De Corte, Leuven, erik.decorte@ppw.kuleuven.be
- 09.00-09.45 Jürgen Mittelstrass, Constance, juergen.mittelstrass@uni-konstanz.de
The Order of Knowledge: From Disciplinarity to Transdisciplinarity and Back
- 09.45-10.30 Bart De Moor, Leuven, bart.demoor@esat.kuleuven.be
Scientific and technological breakthroughs are induced by inter- and cross-disciplinarity
- 10.30-11.00 *Coffee break*
- Chair: Lars Engwall, Uppsala, lars.engwall@fek.uu.se
- 11.00-11.45 Verena Winiwarter, Klagenfurt, Verena.Winiwarter@aau.at
The other kind of research: Power, epistemological status and subject construction in cross-multi- and inter-disciplinary scholarship

11.45-12.30 Bert Weckhuysen, Utrecht, b.m.weckhuysen@uu.nl
Central Science and the Grand Challenges: Towards More Chemistry between
Scientific Disciplines

12.30-13.45 *Lunch*

13.45-17.00 **Session 2: From research to teaching - principles and programmes**

Chair: Svend Erik Larsen, Aarhus, litsel@dac.au.dk

13.45-14.30 Lars Engwall, Uppsala, lars.engwall@fek.uu.se
Structural Conditions for Interdisciplinarity

14.30-15.15 Carl Gombrich, London, c.gombrich@ucl.ac.uk
Implementing Interdisciplinary Curricula

15.15-15.45 *Coffee break*

Chair: Theo D'haen, Leuven, theo.dhaen@arts.kuleuven.be

15.45-16.30 Amir Muzur, Rijeka, amir.muzur@medri.uniri.hr
Interdisciplinarity as a state of mind: how can individuals and societies reach it?

16.30-17.00 Discussion

17.30-22.00 *Departure from the Wenner-Gren Centre for boat trip and dinner*

Saturday 20 May 2017

09.00-11.45 **Session 3: Interdisciplinarity and academic career path**

Chair: Liesbet Geris, Liege, liesbet.geris@ulg.ac.be

09.00-09.45 Erin Leahey, Tucson, leahey@email.arizona.edu
The Perks, Perils, and Precautions of Engaging in Interdisciplinary Research

09.45-10.30 Helen Bridle, Edinburgh, h.l.bridle@hw.ac.uk
Strategies to foster and support interdisciplinary career paths

10.30-11.00 *Coffee break*

11.00-11.45 Hans Op de Beeck, Leuven, hans.opdebeeck@kuleuven.be
Living at the edges of disciplines

11.45-13.00 **Concluding session**

Chair: Milena Žic Fuchs, Zagreb, mzicfuch@ffzg.hr

Panel members:

Helen Bridle, Edinburgh, h.l.bridle@hw.ac.uk

Bruce Brown, Brighton, bgb@brucebrown.plus.com

Hans Op de Beeck, Leuven, hans.opdebeeck@kuleuven.be

13.00 *Lunch*

Location:

Wenner-Gren Centre, Sveavägen 166, 113 46 Stockholm, Sweden, map: <https://goo.gl/maps/71egxpoe8C22>

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24/03/17/TM