1st Global Thematic IASC conference on the knowledge commons

"Governing Pooled Knowledge Resources in a World of Rapid Social and Technological Change. Building Institutions for Sustainable Scientific, Cultural and Genetic Resource Commons"

12-14th September 2012
Louvain-la-Neuve, Belgium

Organized by:
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In Collaboration with

CODATA (Task Group on Global Information Commons for Science)
Faculté Universitaire Notre-Dame de la Paix (FUNDP), Belgium
Ghent University, Belgium
International Association for the Study of the Commons (IASC)
UNU-Merit (Maastricht)
University of Utrecht, Netherlands

and the Support of
The National Science Foundation, Belgium
Codata International

International Scientific Program Committee

- Tom Dedeurwaerdere, Professor at the Université Catholique de Louvain, Belgium.
- Professor Paul David, Research Chair in the Digital Economy, Telecom-ParisTech and l'Ecole Polytechnique, France, and Stanford Institute for Economic Policy Research, US.
- Professor Jerome Reichman, Duke Law School, US.
- Professor Gurdial Singh Nijar, Director of the Centre of Excellence for Biodiversity Law, Malaysia
- Professor Carlos M. Correa, Director of the Center for Interdisciplinary Studies of Industrial Property Law and Economics at the University of Buenos Aires (UBA)
- Charlotte Hess, Associate Dean for Research, Collections, and Scholarly Communication
- Paul Uhlir, Director of the Office of International Scientific Information Programs, The National Academies, US.
- Michael Halewood, Head of the Policy Research and Support Unit at Bioversity International (CGIAR), Headquarters in Rome, Italy
- Eric Brousseau, Economix, Paris
- Francoise Genova, Director Strasbourg astronomical data centre, France

Organizing committee

- Tom Dedeurwaerdere, Professor at UCLouvain, Belgium.
- Severine Dusollier, Professor at Facultés Universitaires de Namur, Belgium
- Kathleen Cass, Executive Director, Committee on Data for Science and Technology (CODATA), Headquarters in Paris, France
- Peter Dawyndt, Professor at Ghent University, Belgium
- Tine De Moor, Professor at Utrecht University, Netherlands

Call for papers

The increasing enclosure of publicly available tangible and intangible resources has lead in the mid 1990ies to a dramatic expansion of initiatives for the sharing of resources in jointly managed pools on local, regional and global scales. This movement is especially prominent in the fields of the knowledge and cultural commons where new modes of organization have co-evolved with the advent of the Internet and the genomic revolution in the life sciences. However, in many cases, commons based production and management still fails to be recognized at the policy level as a valid institutional alternative to both market and state based governance. Moreover, commoditizing trends in all these fields put a high pressure on the social fabric that underlies successful initiatives, in spite of their contribution to a wide range of local and global goods and services in the general interest. As a response to these challenges a thriving literature dedicated to the study of the new commons has emerged over the last decade, although still in dispersed and sometimes unconnected scholarly communities. The aim of this global thematic conference is to bring these communities together and to organize a 2 or 3 yearly stock taking exercise within the context of the work of the International Association for the Study of the Commons.

Sustainable knowledge commons will prove crucial to tackle global challenges faced today. An important focal area to be considered at the conference that emerged from early discussions in the scientific committee is the scientific research and genetic resources common's potentially important role in sharing and coordinating the diffusion of reliable knowledge and practices required to address problems of global warming and climate change.

6 Sub-themes that will be addressed in the conference are : Cultural Commons, Genetic Resource Commons, Scientific Research Commons, Historical Knowledge Commons, Digital information commons, Traditional Knowledge Commons.

Background and Rationale of the Conference

The rapid advances in technologies and digital networks over the past two decades have significantly altered and improved the ways that data and information can be produced, disseminated, managed, and used, in science, innovation, culture, and in many other spheres of human endeavor, and have created unprecedented opportunities for developing new polices. These developments are part of the emerging broader movement in support of formal and informal “peer production” and global dissemination of information by mobilizing the cooperation of distributed knowledge communities in open networked environments. Indeed, as recognized increasingly in the literature, the emerging economics of knowledge in the digital environment can be seen as a complex mix of social sharing and exchange in self-governed communities of peers as a modality of production, along with public support and private appropriation as an incentive for translating knowledge outputs into new commercial applications.

The 1st Global Thematic IASC Conference on the Knowledge Commons aims to bring together leading people from a number of international scientific research communities, social science researchers, practitioners and policy analysts, to discuss the rationale and practical feasibility of institutional arrangements designed to emulate key public domain conditions for collaborative research. A variety of initiatives and policies have been proposed that are going beyond “open access”, and aim to facilitate more effective and extensive (global) sharing on local and global pools of not only scientific information and data but also genetic resources and cultural expressions. There is thus a need to examine a number of these

proposals' conceptual foundations from the economic and legal perspectives and to analyze the roles of the public domain and commons in facilitating sharing of scientific and technical data, information and materials. But it is equally important to examine the available evidence about actual experience with concrete organizational initiatives in different, and to devise appropriate, contextually relevant methods of assessing effectiveness and identifying likely unintended and dysfunctional outcomes.

The motivating questions for this conference is how best to devise and diffuse institutional and organizational models that would maximize social benefits and returns from the knowledge commons, by promoting broad access to and reuse of research resources, rather than restricting it; and how this can be done while preserving reputational benefits and essential ownership rights, as well as transparent and shared quality standards. The conference on "Governing Pooled Knowledge Resources in a World of Rapid Social and Technological Change. Building Institutions for Sustainable Scientific, Cultural and Genetic Resource Commons" approaches these questions by building upon previous initiatives in which the organizers have been involved -- specifically, the *Global Information Commons for Science Initiative* (GICSI) that was launched by the Committee on Data for Science and Technology (CODATA) in collaboration with other international organizations at the Tunis World Summit on the Information Society (WSIS, November 2005), the Conference on Global Science and Economics of Knowledge-Sharing Institutions (*G-SEKSI*, 2nd COMMUNIA Conference, June 2009, Torino, Italy)[1] and the Microbial Commons Symposium at the US National Academies (Washington, October 2009) [2] (add : call on New Commons within IASC conference at Brescia).

This event therefore differs in several respects from other larger conferences that have been organized on the subject of "open access" (OA), and "access to knowledge" (A2K). It seeks to address in an integrated way the problems of knowledge sharing, by initiating a systematic comparative analysis of the broad range of existing experiences with commons based modes of production of knowledge.

To address these issues, the conference organizers contemplate a three days conference, including introductory sessions by high level key-note speakers, parallel sessions with selected papers from the call for papers and three policy panels organized at the end of each afternoon.

Proposed key-note speakers to be contacted
Paul David, Stanford, Stanford University, US and Telecom-Paris Tech, France
Yochai Benkler, Harvard University, US
Stephen Brush, UCDavis, US
Arti Rai, Duke University, US
Jose Esquinas-Alcazar, Politechnical University of Madrid, Spain
Samir K. Brahmachari, Director General of Director General of the Council of Scientific & Industrial Research, India

Proposed special panel organizers
Melanie Dulong, CNRS, France (digital commons)
Tine De Moor (historical knowledge commons)
Enricco Bertaccini and Walter Santagata (cultural commons)

[1] http://communia-project.eu/conf2009
[2] http://sites.nationalacademies.org/PGA/brdi/PGA_050859

Proposed resource persons for the policy panels
Emile Frison, Bioversity, Italy
Lawrence Helfer, Duke University, US
Philippe Aigrain, directeur de Sopinspace, France
Pat Roy Mooney, ETC group, Canada
Gerd Winter, Bremen University, Germany
David Bollier, USC Annenberg School for Communication, US
Susan Books, University of North Carolina, US

Draft conference program

Tuesday	Wednesday	Thursday	Friday
Pre-conference training workshops			
	9:00 2 Keynote speakers	9:00 2 Keynote speakers	9:00 2 Keynote speakers
	10:30 Coffee Break	10:30 Coffee Break	10:30 Coffee Break
	11:00 Parallel sessions (panel sessions)	11:00 Parallel sessions (call for papers)	11:00 Parallel sessions (call for papers)
	12:30 Lunch	12:30 Lunch	12:30 Lunch
	14:00 Parallel Sessions (call for papers)	14:00 Parallel Sessions (call for papers)	14:00 Policy Forums
	15:30 Coffee Break	15:30 Coffee	15:30 Coffee Break
20:00 Opening Ceremony	16:00 Policy Forums	16:00 Policy Forums	16:00 Closing session

Practical details

Calendar
Meeting of the organizing committee : skype meeting April 2011 and June 2011
Invitation of the keynote speakers : May 2011
Call for papers and physical meeting of the CODATA task group : September 2011
Deadline call for papers : December 2011
Selection of the papers : February 2012
Proposed Conference date : 12th-14th September 2012

Logistics Support from UCLouvain staff, conference rooms and catering available at university available at low charges, conference shuttle to main hotels in the area.

Possible field trips (to be completed)
Traditional animal breeds and participatory plant breeding in the organic sector
Bioversity international banana collection Leuven
Historical innovation system of guilds in Brussels and Leuven.

Possible sponsoring organizations (to be contacted) National Foundation for Scientific Research, Belgium (FRS-FNRS and FWO), Codata International, Bioversity International, NWO open access initiative.

Thematic conference tracks

A. Sub-fields of research on the knowledge commons

Track on "Digital Information Commons" (short paragraph: Melanie Dulong)

Digital and network technologies make it easier to share information, whether in the commons or not. Digital Information Commons gather disparate communities around the usage of open content licenses (e.g. Creative Commons licenses) indicating a resource can be reused under certain conditions. Users include artists, researchers, educators, media, governments. Digital information includes text, images, databases, audiovisual. The construction of digital commons have been analyzed mostly along legal, economical, sociological and technological dimensions.

The emerging research field needs to develop theoretical exchanges with more grounded scientific domains and areas of the commons. Besides, both researchers and advocates would benefit from collecting documented use-cases and scalable argumentation on the impact of the digital commons on economy, democracy, education, health and society welfare as a whole. Issues related to incentive to share, incompatibilities, network effects, reputation and evaluation require further research to be overcome and provide evidence and guidance for various user communities and policy-makers.

Track on "Scientific Research and Innovation Commons" (short paragraph: Paul Uhlir)

Beginning with the open source software movement in the 1980s, digital technologies have been applied for the global sharing of data and literature in various research fields, leading in the past decade to an explosion of research and innovation commons in almost all scholarly disciplines and knowledge contexts. In recent years, these disparate commons, developed largely from the bottom-up by the researchers who saw the need and the capabilities and seized the initiative, have begun to be institutionalized from the top-down by research funding agencies, science policy organizations, and even some legislatures. The researchers themselves have moved beyond the development of initial commons designed for specific information types and narrow discipline use, to more integrated and holistic "open knowledge environments" that take full advantage of the advancing digitally networked technologies. It is therefore both timely and appropriate to take stock of where we have been, what the current landscape of scientific research and innovation commons is, and where we can and should be going. This track of the Conference, therefore, will examine issues such as:

- The historical, current, and future trends in the development of institutional and governance models for scientific research and innovation commons, and the variability in disciplines.
- The relative strengths and weaknesses of fully open, semi-commons, and proprietary approaches to research and the progress of science, in both the public and private sector contexts.
- The institutional sustainability of different digitally networked commons in different sectors.
- The social, cultural, and political norms and practices that are both enabling and inhibiting the development of research and innovation commons.
- Evaluation techniques for better understanding the positive and negative effects of digital commons, specifically on the progress of science and innovation, and on economic growth and social welfare more generally.

- Strategies for promoting successful approaches to institutionalizing such commons.

Track on "Historical Knowledge Commons" (short paragraph: Tine De Moor)

Although knowledge commons seem to be a fairly "new" concept, Europe has a long history of similar institutionalized initiatives, which can in fact also serve as a source of inspiration for the present day exchange of knowledge. One type of such an institution for collective action -and no doubt the most important until the 19th century- was the craft guild which tried to limit professional and personal risks for artisans, from the late middle ages onwards. Guild members their main objective was to provide a minimal but secure income for their members. The capital good they pooled in order to prevent running great risks, was their skill in combination with specific knowledge about their craft: by joining and exchanging their knowledge and training, and taking advantage of the scale of organization they could offer a uniform, high quality good, that would be sold at a minimum price. The guild system enforced the rules of apprenticeship against free-riding and exploitation and offered institutional and practical support to the migrant apprentices, journeymen, and masters who transferred their knowledge from town and region of Europe to another.

Track on "Genetic Resource Commons" (short paragraph: Tom Dedeurwaerdere)

Research on the exchange of genetic resources in various fields (microbial, animal and plant) shows that networking collections or of genetic resources in global and local common pool resources is a workable alternative to market-based solutions, which have been shown to be unable to generate sufficient investment in the vast quantities of genetic resources that are neglected because of their low commercial value or potential but as yet unknown future values.

For the improving our understanding of the design of these genetic resource commons however, a more systematic approach, based on a systematic analysis of the structure of the exchanges practices, the terms and conditions of exchanges, and the role of non-market values in the actors' motivations is needed. The main issue that has to be addressed in this context is the creation of a better fit between the design of institutional arrangements for building the genetic resource commons and the norms and practices of the various user communities. Examples which illustrate, amongst others, attempts in that direction are the use of standard material transfer agreements for exchanges within the global crop and microbial commons ; breeding associations for animal genetic resources, organizations for informal seed exchange in developing countries or participatory breeding in the organic farming sector.

Track on "Traditional Knowledge Commons" (short paragraph based on E Abrell et al., Implementing a TK commons, p. 10)

Traditional knowledge commons could provide indigenous and local communities an alternative to the choice between providing unregulated access to their knowledge that leaves it open to abuse or requesting the negotiation of a separate agreement for every use of their traditional knowledge, which would greatly restrict the sharing of that knowledge and potentially drive up the transaction costs for providers and users. A traditional knowledge commons seeks to allow indigenous and local communities to share and exchange, provided that the knowledge is used in accordance with conditions that they are able to define and control**.** Therefore, the question that confronts traditional knowledge commons is whether the notion of community can be expanded to include non-traditional users who would be willing

to use traditional knowledge in accordance with the customary law of the community and be willing to share any increase of knowledge that arises from its use with the community.

Track on "Cultural Commons" (Short paragraph: E. Bertacchini, G. G. Bravo, M. Marrelli and W. Santagata)

"Cultural Commons" refer to cultures located in time and space – either physical or virtual - and shared and expressed by a socially cohesive community. The concept of Cultural Commons proposes a new perspective for studying and analyzing cultures and cultural production. The approach is based on understanding cultures and cultural production as intangible resources shared by communities, whose generation and maintenance involve social dilemmas and collective action. Some examples are: cultural district or cultural cluster in a city, a local language, the creativity expressed by designers' communities.

Cultural Commons may be analyzed and defined along three main dimensions: Cultural expression, Space and Community. These dimensions are useful to understand cultures as a new category of shared resources, which encompasses different forms of expression produced by various communities and in several contexts. Cultural expression represents the resource that is produced and managed in a commons-like framework. The spatial dimension reflects the environmental characteristics wherein interactions take place between community members. Finally, the community, built upon an identity and symbolic dimension, takes into account the cohesiveness of its members and their involvement in the cultural process. The community can be described along the density dimension, starting from a close-knit designers' group to a loosely spread community of players on massive multiplayer online games.

B. Focal area of application

Climate change (track proposed by : Paul David and Luc Soete, UNU-Merit)

This focal area of the conference will address climate change governance and its relationship to knowledge commons. In particular, it will focus on the contribution of commons based solutions to the sharing and diffusion of reliable scientific knowledge and innovations, and of sustainable use of genetic resources and traditional knowledge, which can contribute to address problems of adaptation to and mitigation of climate change.