

Dear participants,

Thanks for joining this online-version of the biennial PhD conference for the history of science and humanities.

From its very beginning in 2007, the purpose of this PhD conference has been to bring together early career scholars working in the history of science and humanities in Belgium and the Netherlands. This year, we will be part of the 8^{th} edition of this discipline-building event, and we feel honored to continue this tradition.

The 8th edition is unique due to its unprecedented circumstances, but luckily still managed to go through. With 10 speakers, representing 8 universities and institutions in both Belgium and The Netherlands, we are very happy to have an good mix of backgrounds and affiliations.

In this booklet, you can find the program for the talks, abstracts, and contactinformation of the participants.

We are looking forward to the conference, and we hope to have some great discussions!

Hein & Robert

History of Science and Humanities PhD Conference 2021 Program

Time	Speaker	Commentator
Thursday		
10.00 – 10.15	Opening	Hein & Robert
10.15 – 11.00	Michiel Bron	Hein Brookhuis
11.00 – 11.45	Franco Capozzi	Vincent Oeters
Lunch		
12.30 – 13.15	Andrew Matthew Alistair	Robert van Leeuwen
	Morris	
13.15 – 14.00	Robert van Leeuwen	Andrew Matthew Alistair
		Morris
14.00 – 14.45	Jan Huurman	Virgile Royen
14.45 – onwards	Drinks in the virtual bar	
Friday		
10.15 – 11.00	Anne Por	Mette Bruinsma
11.00 – 11.45	Mette Bruinsma	Anne Por
Lunch		
12.30 – 13.15	Hein Brookhuis	Michiel Bron
13.15 – 14.00	Vincent Oeters	Franco Capozzi
14.00 – 14.45	Virgile Royen	Jan Huurman

Abstracts

Nuclear Oil: agency of engaging and disengaging oil actors within nuclear energy

Michiel Bron, Maastricht University

The Multi-Level Perspective (MLP) has been fruitfully used in histories of science and technology to describe transition pathways from new technologies to full-fletched regimes capable of overthrowing, completing or competing with already existing regimes. However, because the model of MLP pays relatively much attention to overarching policies or technological developments, attention to individual actors and their agency remains limited. My research aims to refine the Multi-Level Perspective by conceptualising agency of individual incumbents within existing regimes in reaction to emerging new technological regimes.

To do so, my research focusses on how various oil actors engaged and disengaged with the development of nuclear energy from 1945 to 1986. In this time period nuclear technology developed from a niche bearing the promise of an almost infinite source of energy to an energy regime competing with existing fossil fuel regimes. This research project investigates how different oil executives, managers and engineers reacted to the new technology of nuclear energy by examining the interactions between the oil actors, states and the nuclear niche. The hypothesis of this research reads that both short-term and long-term disruptions in the existing energy infrastructure, combined with changing state policies and the reliance on economic profits, shaped the action space and decisions of the oil actors regarding nuclear energy in this period.

The research project is currently in the stage of developing the research proposal and drafting the literature review and methodology. I would love to discuss your takes on establishing agency within MLP with you.

New markets and new expertise: the Belgian Nuclear Research Center and the growth of nuclear medicine in Belgium (1990 - 2020)

Hein Brookhuis, KU Leuven; SCK CEN

This paper will address the role of nuclear medicine in the recent evolution of the Belgian Nuclear Research Center (SCK CEN). As an aspect of nuclear technology that has caused less public debate, it provides new perspectives on the theme of nuclear expertise in society during the past decades (1990 – 2020). Most literature on nuclear medicine has focused on the period of the 1940s and 1950s, and rightfully emphasized how the spread of nuclear technology during the Cold War had a major impact on the development of nuclear medicine and its related industries, described by historian Hans-Jörg Rheinberger as "big science coming in small pieces." However, the closedown of many research reactors during the 1990s and its consequences for nuclear medicine have remained largely understudied. Interestingly, In Belgium the medical and industrial applications increasingly became a political justification for investments in their major research reactor (BR2) from the 1990s onwards. In this paper, therefore, I will explore how the Belgian Nuclear Research Center defined its activities and identity in relation to its infrastructure, the global medical industry, and the public legitimization of nuclear technology by means of the history of their main research reactor and expanding expertise in nuclear medicine.

The small voices of geographers-in-the-making (1954-2014)

Mette Bruinsma, University of Glasgow

Disciplinary histories of geography often emphasise the works of established academic geographers. Their work takes place in grand 'scholarly' spaces (journals, conferences). Students who complete geography undergraduate degree studies vastly outnumber professional academic geographers. Their undergraduate dissertations demonstrate the geographical interests of many cohorts of students, as well as the educational context they are formed by. Working with Glasgow University's dissertation archive, this paper will address a series of critical questions. How aware were geography students of the discipline they were part of? Is it possible to see a development over time, of growing awareness of one's role as a geographer-in-the-making within the geographical community? Will this archive of dissertations just affirm existing histories of geography, akin to a group of minor voices as a background choir to the much better-known soloists? The *vastness* of the collection of many particular knowledges will perhaps turn out to be the critical aspect of this archive.

Reassessing the Legacy of Cesare Lombroso: Criminal Anthropology in the Courtroom in Liberal and Fascist Italy (1910-1930).

Franco Capozzi, KU Leuven

The impact of the criminological theories of Cesare Lombroso (1835-1909) in Liberal and Fascist Italy continues to be object of scholarly debate. While some historians have argued that Lombroso's criminal anthropology had a deep and lasting impact on the Italian criminal justice system (Musumeci 2018; Dunnage 2017; Gibson 2002), others have questioned the extent of support for Lombrosian criminology in Italian state institutions and its influence on the Italian legal culture after 1909 (Garfinkel 2016; Martucci 2009; Frigessi 2003). This paper aims to contribute to this ongoing debate on Lombroso's legacy by investigating the influence of Lombrosian forensic psychiatrists on murder trials in Liberal and Fascist Italy. It draws on a series of criminal proceedings that took place in Turin between 1910 and 1930 in which Mario Carrara (Lombroso's son-in-law and his successor to the Chair of Forensic Medicine at the University of Turin) was called on by the court to express his medical opinion on the mental state and the legal accountability of the defendant. What were the techniques and methods adopted by Carrara to reach his diagnosis? How did he put into practice Lombroso's theories to carry out his psychiatric evaluations? How often and in which cases did his expert testimony persuade judges and jurors and influence the final sentence? How many times, instead, were his judgements disregarded or contradicted by the verdict and why? The findings of this research shed new light on the legacy of Lombroso in the forensic science, as well as on of the role of forensic experts in European modern history.

Dutch Public Health and Health Care 1940-1945

The German occupation as pressure cooker and litmus test

Jan Huurman, Utrecht University

At the eve of the German occupation (1940-1945) the Dutch system of Public Health and Health Care had some typical and distinguishing features:

- 1. Public Health was predominantly organised in bottom-up voluntary organisations ('Kruiswerk' and Tuberculosis-associations).
- 2. Public Health measures and legislation too had a predominantly voluntary basis (no legal vaccination duty, no compulsory declaration of tuberculosis, no system of compulsory sick fund insurance).
- 3. A clear split in organisation between individual curative medical doctors in the NMG on the one side and the collective acting doctors in the ANVSG on the other side.
- 4. The NMG (Dutch Society on promoting Medicine) was clearly the most powerful of these two, organising nearly all general practitioners and specialists, and dominating or owning most of the voluntary sick funds.
- 5. An excellent set of quality parameters: in the European top of (low) infant mortality rate, (low) tuberculosis morbidity & mortality and (high) life expectancy.

Dutch medical doctors – both in NMG as in ANVSG – and politicians were proud of the system and the output, but at the same time critical on the negative side effects, especially the chaotic patchwork like pattern of relatively small organisations. The lack of a compulsory system of sick funds, leaving a significant proportion of workers and poors uninsured, was also regarded as a negative aspect.

Both in the medical and the political arena these points were heavily discussed when German occupation intervened. In the following five years the combination of a relative friendly approach and of 'Bismarckian' conceptions lead to some remarkable outcomes. In this the Dutch Health Inspectorate (top of the collective part of the system) played an important role. Under German pressure a part of Dutch medical doctors failed the litmus test of integrity, and the split between NMG and ANVSG became even more evident.

The content of this presentation is part of my study on life and works of Piet Muntendam (1901-1986), a Dutch medical doctor (PhD in social medicine) who was Health Inspector between 1938 and 1945.

The role of the empirical in early string theory

Robert van Leeuwen, University of Amsterdam

Currently, there is a (highly visible) debate raging in the field of high energy physics concerning the role of the empirical. A central question is whether string theory can be considered a viable scientific theory. String theory is the largest program that attempts to unify the theories of quantum mechanics and gravity and move beyond the established body of knowledge in particle physics. However, despite being around for over 40 years, it still lacks empirical support. Proponents of string theory uphold that it remains the most promising way to make progress, while arguing for new views on the role of the empirical in physics. Critics, on the other hand, distrust the stance taken by strings theorists and believe that the marginalization of empirical input in string theory is leading fundamental physics astray.

In this talk we will look into the origin of this crisis by examining the development of string theory in the period 1968-1984. Through a historical-philosophical analysis of the different understandings of the role of the empirical that were present during the construction of string theory, we aim to elucidate how these are tied to a shared sense of what counts as proper physics in a scientific community.

'The joint labours of ingenious men': John Smeaton's Royal Society network and the construction of the Eddystone Lighthouse

Andrew Matthew Alistair Morris, Université Libre Bruxelles

The technological developments of the first Industrial Revolution are widely thought to have emerged out of the mixing of 'science' and 'technology.' This talk will explore how different types of know-how came together in the case of the construction of the Eddystone Lighthouse. I show that, in line with other recent research on this topic, the 'artisans' of the eighteenth-century did not confine themselves to practical know-how, and 'scholars' were not merely interested in abstract philosophising - instead, the figures I look at in this paper were hybrid knowers who possessed practical dexterity and book learning. I argue that the advice solicited by the engineer John Smeaton during, and after, the building of the lighthouse, was characterised not by exchanges between theory and practice, but by a combining of different types of knowledge from separate fields. A second feature of this intellectual co-operation is that it was not centred on a group of practical industrialists, but rather it was the Royal Society that served as the common denominator, bringing all the characters in our story into contact with each other. This is reflected in the subject matter involved, which was characteristic of the research focus of the Royal Society in the eighteenth century. I will pay particular attention to the way in which Smeaton's account of the building of the lighthouse written thirty years after the completion of the project – acknowledged the contribution of the 'ingenious men' of the Royal Society.

The Train of Thought: The Position of Belgian Egyptology in Western Intellectual History 1900-1950

Vincent Oeters

After a doctorate in Law, Jean Capart (1877-1947) travelled to various European cities to study Egyptology: Leiden, Bonn, London and Paris. Here, he befriended the greatest scholars of his time, from the British Sir William Flinders Petrie to the French Gaston Maspero. By analysing his early publications, it becomes clear that Capart was not only influenced by Egyptologists but also by scholars from other disciplines.

This paper investigates how the founder of Egyptology in Belgium was influenced by foreign scholars and research trends in the humanities during the first half of the twentieth century. To this end the networks of interpersonal relationships between him and his colleagues abroad will be inventorized, key themes in their research will be defined, and placed within the context of the then current academic debates and approaches in archaeology, the history of religion, social anthropology and art history. An attempt is made to trace Capart's accumulated network and intellectual evolution which in the end proved him able to give Belgian Egyptology the prominent position it finally acquired, with Brussels occasionally even being referred to as `the capital of Egyptology'.

The research discussed takes place within the framework of the EOS project `Pyramids and Progress. Belgian expansionism and the making of Egyptology, 1830-1952', a joint-project of the Katholieke Universiteit Leuven (KUL), the Université libre de Bruxelles (ULB), the Universiteit Gent (UGent), the Royal Museums of Art and History and the Musée royal de Mariemont.

Becoming the scholar you were meant to

Anne Por, Leiden University

During the 18th and 19th centuries, an academic genre called Hodegetik (Wegweisung, or 'showing the way') provided students from the German lands with guidance on how to study and live well. Hodegetical courses were popular, and their corresponding textbooks circulated widely amongst scholars. The emergence of the genre coincided with the rise of a new type of Protestant university and did so for a reason. Due to the relative freedom of students and lack of standardized methods of examination at these universities, means for guiding students were called for, if only to take away the concerns of well-to-do parents. In a sense, by ensuring that students from wealthy families would benefit from attending their university, these universities acquired their right to exist.

Hodegetical courses mirrored the demand for guidance as well as the newly established freedom of students. Often, instead of laying down strict rules, they taught and prompted students to find their own life goals and plan out their life paths accordingly. Students in the sciences and humanities alike were effectively instructed on how to self-cultivate to become the scholar they were meant to be. Focusing on methods of cultivation rather than straightforward advice, I will position the hodegetical courses within the many other practices of guided self-cultivation that existed in the early modern period and before. Stressing the importance of studying historical continuity, I question: How are these hodegetical methods of cultivating scholarly selves indebted to similar techniques used in other settings and earlier periods?

Virgile Royen, Université Liège

Today, employability of university graduates is in everyone's mind, as much in graduates' mind themselves as in that of the authorities. However, the fear about graduate unemployment has nothing new. The Great Depression of the 1930's also saw a huge increase of unemployment among degree-holders – at least, if one follows the contemporaneous prose.

My thesis project focuses on the graduate unemployment crisis in Belgium in the Interwar period. More precisely, I study the birth of a new expertise dedicated to this old social problem. The 19th century has been punctuated by outbursts of fear among the ruling classes against the rise of an "intellectual proletariat"; but in the Interwar period, for the first time, some people dedicated themselves to a careful, systematic study of the phenomenon, claiming on scientific objectivity to promote their views. Who were these 'experts' in Belgium? Were they recognized as such by Belgian rulers? And how did they built their claim on expertise?

What I have discovered so far in untouched Belgian archives, is that the use of transnational networks was decisive in building these experts' knowledge and authority. They met their European counterparts in the context of League of Nations institutions, such as the International Institute for Intellectual Cooperation. In this presentation, I intend to display the first promising steps of my work on these transnational exchanges of ideas about graduate unemployment policies and statistics, focusing on the conflicting political views on education and labour that shaped the work of these experts.

List of Participants

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