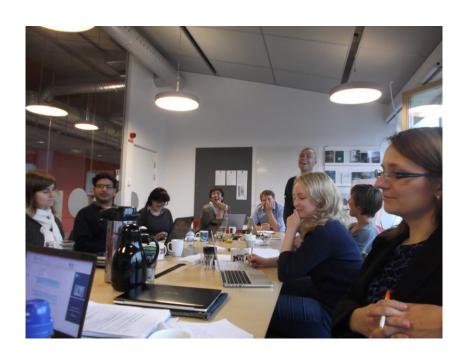
News from the ToE young scholars network

Report on the ToE Early Career Researchers` Summer School, 1-3 September, 2015, Stockholm

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The Summer School "Crises and Grand Challenges in European Past and Present" was held on 1-3 September 2015, at the Division of History of Science, Technology and Environment at the Royal Institute of Technology (KTH) Stockholm. It was the third meeting organized by the ToE's Early Career Scholars' Group, and formed part of the 7th Tensions of Europe Conference. A report by Elena Kochetkova.



Crisis and Grand Challenges

The ToE Early Career Scholars` Group was established in October 2014, as part of a three-day workshop in Chios, Greece. The aim of the group is to bring together scholars trained within the ToE network, and to encourage and support early career researchers of history and technology by organizing discussions and providing scholars with assistance in improving their research. The group's communication relies on digital technologies, as well as face-to-face meetings during ToE events.

The summer school addressed the broadly defined topic of "Crises and Grand Challenges". The three days of the school were made up by presentations, question and answer sessions and general discussions. The organisers invited doctoral students and early career scholars to discuss crises and challenges in European history with an emphasis on technology. The program included 18 participants, six of whom presented online. The virtual presentations were arranged by Anna Åberg, and were done over Skype and Google Hangouts. As instructed in the CFP, participants presented work in several stages and formats. The presentations varied from traditional papers to talks on draft articles, hypotheses, and visions for future projects, as well as on-going research. Pre-circulated papers received special comments from two participants selected ahead of the meeting.

Tuesday September 1

On Tuesday, Frank Schipper (Eindhoven University of Technology) started the school's first day by presenting an introduction to the crises and challenges topic. He outlined a scope of themes and questions to examine, followed by a discussion regarding sustainability, infrastructures, mobility, among other topics. Among key points of his talk, crucial for research in the humanities, was the position of historians of technology in the present world, and finding strategies to make historical research relevant to policy makers.

The first session, "Mediating crises", was opened with Elitsa Stoilova's (Plovdiv University) talk via Skype on a future research project on Live-Action Role-Playing games (LARPs). She stressed that larping originated in the 1970s and currently is getting more popular in post-socialist countries, in particular in Bulgaria. She proposed to conduct a comparative analysis of LARPs in the Soviet Union and Bulgaria. Her specific questions included transfers of knowledge, the relation between virtuality and reality, and identities of players.

Johan Gärdebo (KTH) talked about his project on European remote sensing satellites and their role in dealing with environmental crises. He discussed the history of remote sensing, stressing its shift from military-scientific to civil and commercial use, which in the European case acquired a transnational character. Gärdebo assigned part of his presentation as a workshop where participants analysed satellite images. Participants were to try to identify the objects depicted, for example the Chernobyl disaster 1986, the Philippines Land Survey 1989 and the Baltic ecosystems 1993, and discuss the image's source and use. Few guessed the images correctly, leading to a lively discussion of the purpose and function of satellite imaging as a form of producing knowledge.

Elizaveta Zhdankova (Institute of History in Saint-Petersburg) discussed, in another virtual presentation, film making technologies in the early Soviet Union and their meaning for government and society. Her point was that in the age of political and societal transformations, the film making industry went into a crisis and sought new technological and ideological methods to attract the audience. In this search, film making technology proved itself as a means for leisure and education, but also became an ideological tool used by the new leadership.

The day ended with a session on "Regulations and Management" devoted to legal policy and management of water basins. Tirza Meyer (University of Science and Technology Trondheim) presented a key part of her current research on deep sea mining. In her paper, she examined the United Nations Law of the Sea Convention and the concept of common heritage as part of the international governance of shared resources. She illustrated the roots of the concept, how politicians and scientists developed it over time, and showed practical effects such as the establishment of the International Ocean Institute in the 1970s, publishing research, etc. Through a biographical approach, she illustrated how a conflict around resources was finally transformed into a transnational treaty about maritime borders.

Jira Janac (Czech Academy of Sciences) shared his preliminary thoughts on a possible project on post-war European water management. He illustrated the interplay of technology and environment by presenting visions of water storage and management in Central Europe. After the war, the problem of water scarcity became apparent and transformed into a transnational issue that enhanced discussions and searching for solutions. Among Jira's key hypotheses was that the development in a socialist Europe was not much different from Western Europe in terms of thinking about conservation. His talk and following discussion raised such suggestions as considering water policy through the Cold War dynamics, exploitation of resources, comparative analysis of socialist countries, and the social construction of crisis.

Wednesday September 2

Wednesday, the second day of the school, had a very intense program. It started with the session "Mobility and Infrastructure," which brought a number of interesting cases forward. Frank Schipper spoke about the role of urban planning in shaping the future of sustainable mobility, presenting his recently funded research project on "The Cultural Politics of Sustainable Urban Mobility, 1890-

Present." He argued that cars, bikes and other inventions both solved and created problems, illustrating an ongoing search for solutions. Another point of the presentation lay in way infrastructures shape mobility, and, thus present a crucial topic for research. The discussion also addressed the use of narratives by historians, and particularly, if a narrative of modernity is being replaced by a narrative on eco-modernism.

The paper to follow was Luisa Sousa's (CIUHCT, New University of Lisbon - NOVA) presentation on colonial roads, and the activities of Portuguese engineers in building infrastructures in the Portuguese colonies in the 1950s. She presented the hypothesis that constructing low cost roads in the colonies prior to de-colonization, was a way of legitimizing both Portuguese rule in a dependent world, as well the "colonial" engineers' professional competences. She also proposed an interesting question about reverse appropriation, or, simply put, influences from the colonies on the metropolis.

The last presentation in the session was given by Vincent Lagendijk (Maastricht University) virtually. His talk was devoted to alternative narratives on the role of infrastructures in Europe's integration, focusing on the opposition to its building, starting from protests connected to the love of nature and different senses of belonging. He contended that protests emerge when new technologies come into peoples' life and when technologies pretend to break individuals' usual order and vision of the world. Vincent's new project will examine such issues as multi-level governance, local responses and the effect of protest on identity formation.

The following session went deeper into the history of industry and production, posing difficult questions about methodology and using historical sources. While talking about arctic icebreakers, Saara Matala (Aalto University) asked a number of basic methodological questions on how to examine research objects which cannot be defined as neutral, and how to deal with your own feelings while studying technologies. Her presentation triggered discussions that related to many themes scholars must deal with while conducting their own research, like objectivity, intersubjectivity, partial perspectives, the principles of symmetry, rationality and subjectivity, and a proposal of triangulation of sources.

Samuel Eleazar Wendt (European University Viadrina, Frankfurt Oder) discussed the history of rubber and quinine in the colonial and European context. He illustrated the shifts in the production of natural and synthetic rubber and quinine, and their roles in medical, industrial and military purposes. He showed that in the 19th century natural rubber and quinine became vital materials for Europeans, which led to damage of trees in South America. To prevent this crisis, Europeans sought to transfer the seeds for cultivation in their own colonial plantations and also tried to develop a chemical synthesis of these substances. This story, thus, perfectly illustrated technological shifts and knowledge transfers through decades. It also brought a discussion on imagined and real crisis, and on the dual purpose, or multi-purpose, of rubber.

Valeria Lakshina (Higher School of Economics – Nizhniy Novgorod) made a virtual presentation on a future project (together with Elena Kochetkova, Higher School of Economics – Saint-Petersburg/University of Helsinki, who was present in the room) on the modernization of the Russian forestry industry during the 19th and 20th century. The purpose of the project is to collect a large amount of first hand sources, in order to trace the growth and failures of the industry. A hallmark of the research is combining economics and history, in order to provide an analysis which is an alternate to statistics, primarily based on examining technology.

"Social Challenge and Technological Change" was the last panel of the summer school. Maria Rikitianskaia (Università della Svizzera Italiana), presented her project on transnational radio history in WWI. Maria argued that the war intensified the development of technologies significantly, and illustrated different ways in which radio could be applied. She presented a comparative analysis of British, American, and Russian radio technologies, in particular focusing on amateur communities in these countries. The presentation was based on a large archival source base.

Andrew Kaiser (University of Chicago) gave a virtual presentation on the history of coping with plague and quarantining in the first half of the 19th century in South-eastern Europe. He stated

that plague presented a crisis in a double sense: as an epidemic and as a threat to a vulnerable border. His thesis is that the extensive sanitary cordon established by the Austrian Empire along its Balkan frontier made prophylactic technologies central to trans-border interactions.

The last paper in the session was given by Stevienna de Saille (University of Sheffield) who discussed austerity as a grand challenge to European narratives of "Progress." She examined the current political economy of the European Union, and the difficulty of reconciling the simultaneous demands from the European Commission for innovation to solve Grand Challenges by creating publicly beneficial technologies (Responsible Research and Innovation (RRI), now part of Horizon 2020), with austerity policies promoted by the European Council which are creating an extreme challenge to Europe's welfare states. She also discussed new research around the concept of 'responsible stagnation', which is aimed at using the precepts of RRI, along with heterodox economics, to counter the narrative that 'progress' is only possible in conditions of unending economic growth.

Final discussions second day

A final discussion on crisis and challenges was promoted by a "world cafe" format organized by Ana Paula Silva (CIUHCT, New University of Lisbon - NOVA). These activities enabled the participants to reflect on how the workshop contributed to their understanding of crises and grand challenges. The participants were split into three groups to answer the questions "How do we study crises?"; "How did the workshop contribute to your understanding of crisis?" and "What are your definition and examples of crisis?" After twenty minutes of discussion, the participants changed their seats to intermix the groups, while one person stayed at each table for continuity. This created a fruitful exchange which produced three posters, each presented for a general debate afterwards. The posters gave a stockpot of ideas for future research, by looking at crises as a social construction, as a cross-border phenomenon, and as both a time point and a process.

For example, to find out how to study crises, we first had to agree on the definition of 'crisis'. The group agreed on an iceberg-metaphor to simplify a complex problem. The tip of the iceberg is the only visible part of it, while the main body of the iceberg is hidden under the surface. The tip of the iceberg stands for the problems that could turn into a crisis, the big body underneath hosts all the various causes for crises. This illustration helped to define a crisis as occurring when a certain limit of accumulated problems is passed. This limit, however, is socially constructed. For us in the Titanic, the iceberg is the crisis, but for the polar bear the crisis is not the iceberg itself, but the Titanic that hits the iceberg. Consequently, what one perceives as crisis depends on one's perspective. In this iceberg-metaphor, the submarine illustrates the research we can do on crises. It dives under the surface to the causes hidden there to illuminate a tiny part of the big and complex problem, "Iceberg". This shows that our studies and the result of our studies are always limited. We already work with a construction (definition of a crisis) and therefore only see a tiny picture of it. To broaden the horizon of our research we have to study crises transparently, and in multidisciplinary and interdisciplinary perspectives.

Thursday September 3

Thursday, the third day of the workshop, was devoted to a presentation by guest speaker Prof. Aristotles Tympas (National and Kapodistrian University of Athens) who presented and debated the theme "Technology, Ability, Disability" with feedback from the participants. Tympas proposed to consider the construction of disability through technology, which would also lead to understanding technology through disability. Disability is also a means of doing research into socio-technical processes and understanding the interplay between the societal and the technical. Prof. Tympas made an example of this thesis based on the literature on cochlear implants. The community of the Deaf actively resisted implants as it meant losing a special language and a sense of community. Also, he explained that technology can enable some, but disable others. Such phenomena might be studied through different approaches: medical, which means that proper technological development

can overcome disability; social or cultural, to learn about how a society accepts disability; and constructivist, as attempts to insert STS and historical approaches. The presentation proposed that disability might be considered a generic HTS/STS category like gender, race or class.

The organisers devoted the final session to a general reflection on the school, and outlining prospects for future cooperation. The participants agreed that the school was a useful place to share ideas in an unusual community, and the event was fruitful in terms of sharing different approaches and perspectives. The participants of the Summer school have so far highlighted some aspects of particular relevance:

- The possibility of presenting work in different stages in a "safe space," which gives a sense of trust;
- Being able to discuss theoretical and methodological issues as well as practical work issues in this "safe space"
- The importance of learning from other people's work the relevance it might have to our own work but also to broaden perspective;
- Being able to receive comments and questions which illuminate aspects never considered before by the participant;
- Creating a liaison between PhD candidates and early career researchers;
- The possibility to start a new level of research cooperation within ToE, through shared source materials and applying for funding together;

The summer school gave a strong incentive for further work within both the group and the ToEnetwork, to enlarge the number of participants and to continue collaboration. As a result of the school, a platform for sharing news and ideas was set up in a Googlegroup format and proposals are being drafted for joint use of source material. We also plan to discuss the possibilities for a shared research project which more senior members of ToE could be asked to support, such as a bid for funding through Horizon 2020. The group is already planning another workshop, to be held on 24-26 June 2016, in Lisbon, Portugal, where we can discuss these plans in greater detail with a larger group of early career scholars.

