

Practicing Evidence – Evidencing Practice. How is (Scientific) Knowledge Validated, Valued and Contested? Pre-Conference Workshop

Veranstalter: Veranstalter: Sarah Ehlers / Stefan Esselborn / Karin Zachmann, DFG Research Group 2448: Practicing Evidence – Evidencing Practice

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The concept of evidence has become central to public controversies, with little agreement on an exact definition of „evidence“ to this day. The interdisciplinary research group Practicing Evidence – Evidencing Practice wants to approach the question from a different angle: instead of asking what evidence is, they first want to know how evidence is „done“ in practice. As part of the research group, both a conference¹ and a pre-conference workshop were held to examine questions such as: What counts (or does not count) as evidence in different (disciplinary) contexts? How does context affect evidence production and performances? How do evidence practices change over time? As organizers Stefan Esselborn and Sarah Ehlers (both Munich) emphasized in their introduction, the variety of specific evidence practices in different scientific fields, different domains of application, and at different points in time make it all the more important to collaborate within and between disciplines. Only then, they argued, can we compare, contrast, and thus draw larger conclusions about the form and function of evidence in society. Early stage researchers and doctoral students from a range of disciplines presented their works in progress at the pre-conference workshop in the Carl Friedrich von Siemens Stiftung and took this opportunity to discuss evidence practices with invited experts.

In the first panel *Evidence for Planning*, WIEBKE PETSCH (Frankfurt am Main) critically examined the methodological approach of the interdisciplinary research

agency, Forensic Architecture. Her research investigated practices of truth-making at the intersection of aesthetic and scientific knowledge production. In order to take non-human agency and multiple ontologies equally into account, Petsch presented navigation rather than experimentation as the research design's epistemological tool of choice. She argued for a material, as well as a sensory-based interdisciplinary research that acknowledges the co- and constant re-production of multiple truths: the socio-material constitution of evidence.

NADIA ALAILY-MATTAR (München) focused on the Bilbao effect, or, the capacity of star architecture projects to trigger economic and social effects. The Bilbao effect has become an urban policy but its popularity accentuates the need for scientific investigation of the evidence base regarding whether, and if so how, star architecture projects work to achieve impact. Alaily-Mattar and her team undertook a multidisciplinary investigation of three case studies of star architecture projects – from which she presented the case of Phaeno in Wolfsburg – to develop a conceptual impact model to evaluate success. A useful tool for dialogue in multidisciplinary research, in which analyses are undertaken in very different ways and involve the mobilization of different interpretative skills.

In the second panel *Evidence in the Media*, ANNEGRET SCHEIBE (Karlsruhe) presented aspects of the performance of scientific evidence and authentication in the TV shows *CSI* and *Lie to Me* as examples of contemporary audiovisual fiction. The crime drama show *CSI* builds on the visualization of (invisible) evidence through scientific imaging procedures. It is succeeded by *Lie to Me*, where the validity of the visual evidence is negotiated, focusing on intent as evidence.

In contrast, MAX LONG (Cambridge) presented non-fiction natural history programs in film and radio by the BBC in the early twentieth century, which showed familiar el-

¹ <http://www.evidenzpraktiken-dfg.tum.de/en/english-conference/>; Tagungsbericht: Practicing Evidence – Evidencing Practice. How is (Scientific) Knowledge Validated, Valued and Contested?, 19.02.2020 – 21.02.2020 München, in: H-Soz-Kult, 27.04.2020 (<https://www.hsozkult.de/conferencereport/id/tagungsberichte-8741>).

ements of nature in an unusual way through the means of the media, and examined how these perform evidence. The discussion following this panel emphasized the possible hierarchies of media (text, image, sound, film) depending on the amount of senses required for their reception. Some might seem to present evidence more clearly but simultaneously be perceived as more dubious.

UPONITA MUKHERJEE (New York City) started the third panel *Evidence in Court* with an analysis of „admissible“ evidence in the common law world. She examined this issue through the lens of decomposed body parts, wooden boxes and the chemical preservatives in which they circulated across crime scenes, police stations, morgues, hospitals and laboratories on their way to the criminal courts in British India in the late 19th century. By adopting this material approach to a history of evidence production, she looked to restore visibility to forms of labor that are otherwise overlooked in discussions about the nature and meaning of evidence in law.

LARA BERGERS and PAULINE DIRVEN (both Utrecht) combined their research to present a comparative study about performing forensics. They focused on how evidence practices of forensic experts were shaped in England and the Netherlands in the first half of the 20th century. Both practices of evidence were entangled with the performance of expertise, as experts addressed differing kinds of audience in both countries. In England, the experts had to explain their results to a jury, which needed to see with their own eyes what the practitioners had done. In the Netherlands, there was no jury and the main stage for doctors was on paper not in front of the court. The forensic evidence was enacted in moments of interaction between experts and audience.

Karin Zachmann's (Munich) comment noted how all three panelists had observed rules on how to practice evidence in legal systems and that all three legal systems favored different productions of evidence. The specificity of the law system is such that only extreme answers are possible, which comes with great responsibility. In the setting of the courtroom, experts are blackboxing the evidence with their presentation.

In the fourth panel, *Evidence for Governance*, TIM SEITZ (Berlin) presented the process of quantitative problematization in behavioral studies. The evidence deduced from quantitative tools is transformed into experimental set-ups, which become tools for governing. But how are behavioral problems developed into experiments which yield evidence? LAURA STIELKE (Osnabrück) followed with the case of (big) datafication of migration and the idea of its governability. The junction of these theories – of the governability of migration and big data – in this panel demonstrates how the approach of „the results show“ allows for evidence-based policy, from which the evidence-based discipline building emerges.

In the fifth panel, *Evidence from Bones*, NAAMA KOPELMANN (Holon) and NOA SOPHIE KOHLER (Beersheba) presented their project on genetic evidence between methodology, technology, and narrative. While genetics is generally perceived as an exact science, sampling choices and methodology have a great impact on the outcome of studies of genetic history. Interpretation of results also plays a major role in shaping scientific conclusions and therefore, as human genetic history has become a topic of great interest to the layman, they are also shaping the opinions of the general public. Kopelmann and Kohler presented two case studies; one on the admixture of *Homo sapiens sapiens* with the Neanderthals, the other on a controversy among geneticists on the possible contribution of the Khazar people from the Caucasus area to the Ashkenazi gene pool. Because of various decisions, the conclusions of these studies in both cases are different, but are based on the same scientific evidence. Furthermore, research on human genetics challenges a group's narrative of its own history, which raises the question of the impact of national narratives on scientific studies and the interpretation of scientific results.

PATRICK ANTHONY (Nashville) provided an insight into the interpretation of fossil evidence. He noted that actors were using scientific evidence in questions of identity. Based on a debate about the origin of large mammal bones found in the Franconian Alps

and the Harz Mountains, Anthony studied the different uses of fossil evidence between 1793 and 1815. The paleontological evidence was used as anthropological evidence for the emergence of civilization in Germany and shows the social and political value which was accorded to scientific evidence. As Ruth Müller (Munich) commented, both presentations exemplify how the same material can be interpreted differently and how narratives are used to claim evidence as true.

Historical examples of *Evidence for Innovation* presented in the sixth panel demonstrated the institutionalization of science and scientific evidencing. MAJA KOROLIJA (Belgrad) showed that the scientific practice in Yugoslavia – from Marxism-Leninism to socialism – was accompanied by different ideological discourses. These implied different definitions of progress, leading to different institutionalizations allowing varying scientific practices.

JOHN LIDWELL-DURNIN (Oxford) presented the case of agricultural field experiments conducted in Britain from 1789 to 1848. Through newly formed agricultural societies, the experiments aimed at data gathering created new knowledge networks of citizens working in agriculture. Citizen-led observation and experimentation and its scientification were thus used to develop methods of agriculture to improve the production of the country.

Panel seven, *Evidence and Violence*, began with SONJA DOLINSEK's (Erfurt) analysis of evidence, law and global knowledge in the United Nations' 1959 „Study on the Traffic in Persons and Prostitution“. Dolinsek approached the production of „global knowledge“ as a practice embedded in and reflective of international legal frameworks on the one hand, and of multi-scalar processes of the negotiation of knowledge across local, national and global scales on the other. She looked at the bureaucratic process within and across international organizations, states, and local governments, to offer a microanalysis of the negotiation and construction of global evidence.

SALMAN HUSSAIN (Massachusetts) presented his project on the politics of truth and evidence in the missing persons cases in Pak-

istan. He explored the politics of truth by examining the objects and practices of evidence-making in anthropological research. Of special interest to Hussain is the use of documents and documentary artifacts as objects of scientific inquiry and the role of ethnographers as the collector of evidence for the politics of truth. In his comment, Helmuth Trischler (Munich) noted the practice of including and excluding: in the UN's effort to globally map trafficking, data was lost; and in Pakistan's approach to the missing persons, evidence was excluded. Trischler designated that as “processes of destabilization of scientific evidence“.

The emergence of an ethic when producing and using evidence was made clear in the examples of both systematic reviews in biomedicine and research-based fictional ethnography, as presented in the eighth panel, *Evidence and Ethics*. ALEX SCHNIEDER-MANN (Hannover) showed that systematic reviews are framed as less inclined to bias and as particularly transparent in providing information about evidence. The systematic reviews reproduce evidence and its credibility, which are established as recommendations for guidelines.

ANNA APOSTOLIDOU (Athens) explained the re-conception of ethnographic evidence including the role of interference with evidence, in research-based ethnography on surrogate motherhood. She showed how the non-tellable of social reality can be more accurately represented when diminishing scholarly authorship: a new modality of ethnographic „writing“, fictional ethnology.

The pre-conference workshop was a clear demonstration of the interdisciplinary nature of the question of evidence, and reaffirmed the overwhelming relevance of the questions being addressed by the DFG Research Group 2448 and by participants at the workshop. The enthusiastic, critical, and engaged exchanges between scholars from such a varied range of disciplines is a strong indication of the pertinence of the conversation of past and present negotiation processes in the validation of (scientific) knowledge in the world.

Conference overview:

Panel 1: Evidence for Planning

Wiebke Petsch (Goethe-Universität Frankfurt am Main): Forensic architecture – Practices of truth-making at the intersection of aesthetic and scientific knowledge production

Nadia Alaily-Mattar (co-author Alain Thierstein) (Technische Universität München): On the (im)possibility of identifying the evidence base of the impact of star architecture projects

Panel 2: Evidence in the Media

Max Long (University of Cambridge): Natural history on the airwaves. The BBC and its interwar audiences

Annegret Scheibe (Karlsruhe Institute of Technology): Image of/as evidence – Visual evidence in forensic crime series

Panel 3: Evidence in Court

Uponita Mukherjee (Columbia University): Of bodies, bottles, boxes and spirits. Police-men, doctors and „admissible“ legal evidence in British India, 1870-1900

Lara Bergers / Pauline Dirven (Utrecht University): Performing Forensics. A comparative study of the entanglement of forensic examination practices and expert performances in England and the Netherlands 1900-1950

Panel 4: Evidence for Governance

Tim Seitz (Technische Universität Berlin): Governing through behavioral experiments. An ethnography of behavioral governmental practices

Laura Stielike (Universität Osnabrück): Producing migration knowledge. From big data to evidence-based policy

Panel 5: Evidence from Bones

Naama Kopelmann (Holon Institute of Technology) / Noa Sophie Kohler (Ben Gurion University of the Negev): Under the influence. Genetic evidence between methodology, technology and narrative

Patrick Anthony (Vanderbilt University): Politics and paleontology. Interpreting fossil evidence in the Age of Revolution

Panel 6: Evidence for Innovation:

Maja Korolija (University of Belgrade): Scientific practice in Yugoslavia. From Marxism-

Leninism to self-managed socialism

John Lidwell-Durnin (University of Oxford): Field experiments. Evidence, plants, and the production of consensus in agriculture, 1789-1848

Panel 7: Evidence and Violence

Sonja Dolinsek (Universität Erfurt): „Evidence“, law and global knowledge in the 1959 United Nations’ „Study on the Traffic in Persons and Prostitution“

Salmain Hussain (University of Massachusetts): Ethnographic objects. The politics of truth and evidence in the missing persons cases in Pakistan

Panel 8: Evidence and Ethics

Alexander Schniederermann (co-author Clemens Blümel) (Deutsches Zentrum für Hochschul- und Wissenschaftsforschung, Hannover): On top of the hierarchy. Evidence practices and practicing evidence of systematic reviews in biomedicine

Anna Apostolidou (Panteion University of Social and Political Sciences): Research-based fictional ethnography. Representational accuracy and the predicament of evidence

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