

## **OWNING AND DISOWNING INVENTION: INTELLECTUAL PROPERTY, AUTHORITY AND IDENTITY IN BRITISH SCIENCE AND TECHNOLOGY, 1880-1920**

Comparative approaches are now methodologically central to the history of intellectual property (IP), especially international comparisons that interrogate assumptions of national autonomy and exceptionalism in patent legislation (see, for example, Eda Kranakis “Patents and Power: European Patent-System Integration in the Context of Globalization”, *Technology and Culture*, 48 (2007), 689-728). This session explores the benefits of extending this methodology both to provide a contextualized understanding of three different means of establishing IP – patents, licensing and secrecy - and also to make comparisons in IP management between three innovative technical disciplines. Focusing largely but not exclusively on developments in the United Kingdom in the period 1880-1920, it explores the relationship between developments in the British patent system and in the new, techno-scientific fields of electrical engineering, aviation and plant breeding. The session thus historicizes contemporary (21<sup>st</sup> century) concerns over patents, licenses and secrecy in science and technology by showing how scientists’ and engineers’ problems in managing and maintaining ownership over their IP were addressed before, during and immediately after World War I.

Rather than treating IP records as offering neutral “facts” of innovation, all three papers in this session look at past debates over the propriety of claiming intellectual property. Hitherto, historians of IP have typically looked to patent data either to recover features of otherwise undocumented innovation processes or to generalize quantitatively about the types and changing amounts of innovative activity across place and time. Such positivistic approaches have been challenged, not least because they fail to address the many innovations that were not patented, since many creative practitioners either would not or could not claim patent rights for them. In this session we go further by looking at the qualitative disputes over IP, to see how far and in what ways the very scope and prerogatives for claiming IP (whether through patents, licenses or other instruments) could be controversial.

For the particular case of IP management through patents, we argue that the patent record should be read less as a neutral, factual record of inventions, and more as the contingent outcome of competing power-laden claims to ownership and creativity that were fought out in courtroom dramas, as much as in the esoteric domains of engineering. These comparatively under-investigated dramas had major consequences not just for the form and content of the patent record, but also for the careers of those engineers involved as defendants, plaintiffs and, especially, as expert witnesses. This session will also explore the extent to which similar dramas materialized in the licensing of agricultural plant breeds and in attempts to control aeronautical innovation through measures to sustain secrecy.

By focusing on disputes over the appropriateness of particular IP regimes, the panelists will explore the implications of formal (legal) and informal procedures of IP management for both intra-professional and also public perceptions of the authority and trustworthiness of technical practitioners. Likewise, debates about the emerging “pure” and “applied” science dichotomy will be closely scrutinized to understand how that terminology came to be the common yet contested taxonomy in discourse on technical creativity, and specifically to account for the kinds of knowledge over which ownership claims could be made (e.g. “applied” science) and those over which they could not (e.g. “pure” science).

These are the main historical questions that the papers in the present session address:

- a. How did British science and technology in the period 1880-1920 co-develop with innovations and controversies in intellectual property (IP)?
- b. To what extent did differentiating “pure science” from “applied science” *qua* invention help scientists and engineers to resolve problems in managing IP?
- c. What impact did these developments have on the trust relations and public authority of scientists and engineers?

By presenting studies of intellectual property in the three techno-scientific domains of electrical engineering, aviation and plant breeding, this proposed session will offer three benefits to those who might attend. First, new historical results will be revealed in the three techno-scientific fields that either have been overlooked in the past or

have been studied in only an incomplete and historiographically uninformed way. Secondly, the papers will adopt new interdisciplinary approaches to history of technology that draw upon techniques from the history of intellectual property, history of science and cultural history. Thirdly, this session offers a new comparative approach to studying the particularities of intellectual property management in particular fields of techno-science. On that basis we anticipate that this session will be of broad value and interest to historians of technology in the second half century of the Society for the History of Technology.