

Turriano-ICOHTEC Book Prize 2020 – Report of the Committee

Members of the Turriano-ICOHTEC Book Prize Committee 2020 were Irina Gouzevitch (Paris), Per Lundin (Gothenburg), Darina Martykánová (Madrid), Klaus Staubermann (Berlin), and Ernst Homburg (Maastricht), chairperson. The Committee received no less than 20 applications, many of a high standard. As a result the competition between the candidates was strong. We received 20 applications: 9 in English, 4 in French, 4 in Spanish and 3 in German from 14 different countries, as the following table shows:

Applications for the Turriano Prize (in alphabetic order).

Author	Title of PhD Dissertation or Book	Language	Country of Residence	Institution
Benjamin Bothereau	À la lanterne! Modes d'existence d'un objet banal, entre imaginaire technique et politique. Invention, économie urbaine, publics et circulations du "réverbère", Paris, Barcelona, XVIIIe siècle	French	France	Centre de Recherches Historiques, Paris
Aurélie Brayet	Un frigidaire et nous serons heureux! Histoire technique et culturelle du réfrigérateur	French	France	Université Jean Monnet de Saint-Étienne
Patricia Andrea Dosio	Artífices eruditos. La circulación de saberes técnicos y pensamiento moderno a través de la actividad de la elite de artesanos en Buenos Aires (1776-1835).	Spanish	Argentina	Universidad de Palermo
Lukas Engelmann and Christos Lynteris	Sulphuric Utopias. A History of Maritime Fumigation	English	UK	The University of Edinburgh / University of St Andrews
Bolivia Erazo Villacres	How Sound Cinema Arrived in Ecuador: Case Study of Quito in	English	Finland	Helsinki

	the Late 1920s and Early 1930			
Johan Gärdebo	Environing Technology: Swedish Satelite Remote Sensing in the Making of Environment 1969-2001	English	Sweden	KTH Royal Institute of Technology, Stocholm
Robert Groß	Die Beschleunigung der Berge: Eine Umweltgeschichte des Wintertourismus in Voralberg/ Österreich (1920-2010)	German	Austria	Innsbruck University
Lucía Jimena Juárez	Trading Nations: Architecture, Informal Empire, and the Scottish Cast Iron Industry in Argentina	English	UK	University of Edinburgh
Claas Kirchhelle	Pyrrhic Progress: The History of Antibiotics in Anglo-American Food Production	English	Ireland	University College Dublin
Clemens M. Knobling	Münchner Dachwerke	German	Switzerland	ETH Zürich
Christoffer Leber	Arbeit am Welträtsel: Religion und Säkularität in der Monismusbewegung um 1900	German	Germany	Ludwig-Maximilians-Universität Munich
Will Mari	A Short History of Disruptive Journalism Technologies 1960-1990	English	USA	Louisiana State University, Baton Rouge
Sophie Omère	Hydraulique somptuaire et transferts techniques vers l'Espagne aux XVIIIe siècle: l'activité des fontainiers français dans les jardins de La Granja de San Ildefonso	French	France	Lyon
Víctor Pérez Álvarez	Técnica y fe: el reloj medieval de la catedral de Toledo	Spanish	UK	Scientific Instrument Society; Edgware, Middlesex
Rachel Plotnick	Power Button: A History of Pleasure, Panic, and the Politics of Pushing	English	USA	Indiana University Bloomington

Vicente Ruiz García	Los Arsenales del Rey: Ciencia, tecnología e industria bajo el espíritu de la Ilustración	Spanish	Spain	IES San Juan de la Cruz, Úbeda (Jaén)
María Carolina Sanhueza Benavente.	Por los caminos del Valle Central de Chile: el sistema vial entre los ríos Maipo y Mataquito (1790-1860)	Spanish	Chile	Pontificia Universidad Católica de Chile, Santiago de Chile
Nicolas Simoncini	Histoire de la recherche sur les piles à combustible en France des années soixante aux années quatre-vingt	French	France	Université de Technologie de Belfort-Montbéliard
Heidi Tworek	News from Germany: The Competition to Control World Communications, 1900-1945	English	Canada	University of British Columbia, Vancouver
Sara Venditti	New Wings for Europe: Western European Strategic Cooperation and Integration in the Aerospace Field: Ariane and Eurofighter, 1973-1985	English	Italy	LUISS Guido Carli, Rome

In its selection procedure, the Turriano Prize Committee 2020 took several aspects into consideration:

- whether a dissertation was defended in 2018 or 2019, and whether a book was published in 2018 or 2019?
- whether the candidate was an early scholar, or not?
- whether the study submitted was indeed (mainly) in the field of history?
- whether the study was bringing novel aspects or approaches to the field of history of technology?
- we gave priority to studies on history of technology over contributions to the history of science (or other fields related to technology, for that matter).
- and, last but not least, we looked at the quality, novelty, importance and relevance of the study.

In a first round we rejected 5 submissions on formal grounds (book/ PhD not from 2018 or 2019; or not being an early career product), and/or because of the fact that the field of ‘history of technology’ played too marginal a role in the book. This left us with 15 titles to evaluate. During the 2nd round 5 titles were selected as potential Prize winners from the 15 titles studied. In a third round the 5 remaining titles were studied in more detail by members of our Committee.

On the basis of that multi-procedure, the Turriano Prize Committee 2020 decided to grant the 2020 Turriano Prize to two authors who both wrote superb studies, that both were excellent in different ways:

- Claas Kirchhelle for his book *Pyrrhic Progress: The History of Antibiotics in Anglo-American Food Production*; and
- Nicolas Simoncini for his PhD thesis *Histoire de la recherche sur les piles à combustible en France des années soixante aux années quatre-vingt*.

Moreover, we awarded an ‘Honorable mention’ to Lucía Jimena Juárez for her excellent contribution to the field of Industrial Heritage Studies with her PhD thesis: *Trading Nations: Architecture, Informal Empire, and the Scottish Cast Iron Industry in Argentina*.

Below we will present some of the highlights of these three remarkable books.

Winners:

Claas Kirchhelle, *Pyrrhic Progress: The History of Antibiotics in Anglo-American Food Production*. (New Brunswick: Rutgers University Press, 2020)
(published December 2019).

This is a well-argued, well-written and thoroughly researched book on a very important subject, non-human antibiotic use. More precisely Kirchhelle studies antibiotic use, regulation and resistance in US and Britain during the postwar period. He highlights the dilemma of increasing use of antibiotics, short-term benefits, long-term hazards. He reveals the scale and rapid growth of the use of antibiotics and the decisive role it has played in food production. The discovery of resistant bacteria’s created different responses, Europe and US took different paths. Kirchhelle emphasizes the complexity and conflicting interests that came to characterize use, responses and countermeasures. Throughout the book the use of theory and the study of historical developments are well integrated, but in a rather implicit way. This makes the book more readable, and in the wonderful concluding section all lines of

argumentation come together. There the author emphasizes four stories: one of short-termism, one of epistemic fragmentation, one of infrastructure and one of narrow reform.

His results are novel, well-founded and important. Kirchhelle's study can be situated in the intersection of history of technology, history of agriculture, history of medicine and history of science, which only shows how entangled agriculture, technology and science have become during the twentieth century. They cannot be separated from each other. Also food production and antibiotics must be seen as topics relevant for the history of technology.

Apart from these intellectual merits, Kirchhelle's study of the antibiotics dilemma is also highly relevant for politics and society. The use of antibiotics has profound and unsettling ramifications and consequences. In his conclusions Kirchhelle is able to highlight and identify interesting and highly relevant themes and generalizations.

Nicolas Simoncini, *Histoire de la recherche sur les piles à combustible en France des années soixante aux années quatre-vingt*, PhD thesis, Université de Technologie de Belfort-Montbéliard, December 2018.

Also Nicolas Simoncini's dissertation is a very solid, though-provoking, and multifaceted work. The analysis concerns the techno-scientific, economic and political context of the production and implementation of fuel cells in France, between about 1960 and 1981. The strength of Simoncini's thesis is that he clarifies the various ways in which the production and use of fuel cells – or its non-use – are embedded in the very specific French circumstances, in terms of politics (with obvious international contextualization), industrial production and also techno-scientific networks. The study is well focused as far as the core topic, fuel cells, is concerned, but at the same time broad enough to highlight the relations with the political, industrial and scientific environment. It is a well-balanced and well-structured study at the interface of history of technology, history of science, business history and political history, using concepts from STS, innovation studies, science dynamics, and social network analysis (Linton Freeman, Ludwig Fleck, but also Michel Callon).

Although the thesis is a historical study on the 1960s, 1970s and 1980s, it is highly relevant for discussions on fuel cells today. Being the youngest candidate among the 20 applicants, Simoncini's work is mature enough to address the current paradoxes in the politics and history of technology. It is a truly original work that, among other issues, questions the very notion of a pioneering innovation that plays such a central role in many works on history of technology. He shows how long and controversial the way of such an innovation could be, depending of the context, demand, and political challenges. The fuel cell which is now

considered as a source of new ecologically-pure energy has, as the author shows, a long and controversial history, which makes the insights from this book particularly relevant for today.

Honorable mention:

Lucía Jimena Juárez, *Trading Nations: Architecture, Informal Empire, and the Scottish Cast Iron Industry in Argentina*. PhD thesis, The University of Edinburgh, March 2018.

This is very broad and solid study of Scottish-Argentinian industrial relations and Scottish industrial heritage still present in Argentina. The thesis is strong on the interplay of imperialism, technology, architectures and culture, which is of great value in itself, but is really superb as contribution to the study of industrial heritage in an imperial context. It is a truly remarkable, thorough mapping of the Scottish industrial contribution and heritage in Argentina. The non-state actors which are often quite invisible in the nineteenth-century historiography are really brought to light by the sources studied by the author. This will be very useful for other researchers who wish to trace global capitalism and the technological dimension of it. The committee was impressed by the comprehensive overview and detail of all the remaining sites of Scottish activities in Argentina. This thesis will therefore be of high relevance in the area of industrial heritage.

The Turriano Prize Committee:

Ernst Homburg, Maastricht (Chair)

Irina Gouzevitch, Paris

Per Lundin, Gothenburg

Darina Martykánová, Madrid

Klaus Staubermann, Berlin