



This is the **accepted version** of the review:

Valentines Álvarez, Jaume. «From cold war to global warming: United States, Spain, and the new world scientific order». Technology and Culture, Vol. 62, Issue 3 (July 2021), p. 904-906. DOI 10.1353/tech.2021.0147

This version is available at https://ddd.uab.cat/record/273906 under the terms of the  $\bigcirc^{\mbox{\footnotesize{IN}}}$  license

De la guerra fría al calentamiento global: Estados Unidos, España y el nuevo orden científico mundial

From Cold War to Global Warming: US, Spain and the New World Scientific Order

Edited by Lino Camprubí, Xavier Roqué, and Francisco Sáez de Adana. Madrid: Catarata,

2018. Pp. 286.

Military bases, secret treaties, submarines, KGB and James Bond himself come together in this fascinating book exploring the role of Spain and Latin America in the making of the "new world scientific order" in the Cold War and beyond. *De la Guerra Fría al calentamiento global* shows the interest of paying attention to 'peripheral countries' (in terms of American historiography) to widen John Krige's views on the co-production of "American hegemony" and its fractures.

As Michael D. Gordin has pointed out (*Isis* 108:3, 606–611), this "American hegemony" was related to the contingent postwar spread of English as a scientific "hegemonic language". The global influence of the Society for the History of Technology illustrates the process in our own field and has had deep consequences for the writing of history of technology in many countries. Published in Spanish, this book is an excellent example of how to bring vibrant debates and an outstanding bibliography (especially on nuclear engineering and Earth sciences) to other humanities disciplines and a broader audience.

The book consists of a brief state-of-the-art introduction on scientific diplomacy and Cold War science plus eleven chapters randomly ordered. This review groups them in three broad topics. In the first group, M. del Mar Rubio and Joseba De la Torre study the "American nuclear training" of Spanish engineers and managers during the central years of the Spanish dictatorship (1947–62). Lorenzo Delgado and Francisco Rodríguez deal with the U.S. educational "persuasion machine" (including language training) addressed to social and scientific elites in Spain (taking into account some of the responses it triggered, including a humorous cartoon representing dictator

Franco and Uncle Sam as flamenco artists) (1952–74). Ana Romero focuses on the landing of a U.S. "atomic library" in Madrid (1955), and Clara Florensa enlightens us about the Palomares nuclear plane crash and the internationally orchestrated media banalization of radiation (1966).

The second group goes beyond nuclear sciences and U.S.-Spain bilateral agreements. Francisco Sáez de Adana looks into the "unwillingly" autarkic development of radars in Spain and how their construction involved German scientists (1949–54). Xavier Roqué deals with the Spanish return to CERN after the fall of the dictatorship (1980–84), and the strong support this scientific policy received from diverging political parties. Lino Camprubí explores the multinational "Gibraltar Experiment" (1985–87) and the geopolitics of oceanography in an impressive *longue durée* perspective (including Morocco).

The third group focuses beyond Spain. Giulia Rispoli provides an overview of the scientific inquiry (and police investigation) conducted by the U.S. and U.S.S.R. on "nuclear winter" (1977–85). Simone Turchetti writes on the NATO Science Committee and its environmental turn, which was part of its effort to seek international consensus (1958–2005) (a shorter version of the chapter can be found in the NATO official web). Michael A. Falcone focuses on the rhetoric of scientific internationalism in Latin America (and on what could be called 'scientific Boliviarianism') (1957–69). Gabriela Soto explains her inspiring research on the socialist revolutionary (and truly transnational) background of the Green Revolution in Mexico (1924–58) (see also her paper in *History and Technology* 34:1).

The book does leave readers wanting to know more about other key dimensions of the co-production of international and national hegemonies in/from/with Spain. For example, the role of women, lay-experts, and grassroots movements as part of formal and informal transnational relationships. Also, (non-U.S.-centered) transoceanic and trans-Iberian networks could have complemented the picture (and helped to put the pieces of the third group in dialogue with the others). Additionally, the study of the changing entanglements between the "world scientific order"

and the Spanish post-dictatorship political order is promising and deserves to be studied in detail and to avoid standard approaches (p. 211).

Finally, a more nuanced and situated description of what "scientific diplomacy" is and how it works would help to clarify the book's narrative. As it successfully shows, international scientific relations, exchanges of data, and the circulation of technology became core parts of foreign policies and diplomatic strategies during the Cold War. But can any "international [mediation] motivated or channeled by scientific and technological research, collaborations, and transfers (p. 13)" be considered scientific diplomacy? As such, this excellent book—bringing together researchers who have been trained in the U.S., enjoyed Fulbright scholarships, and held positions of responsibility at the University of Alcalá's Franklin Institute, which financed the publication—could be considered a product of the academic diplomacy of an increasingly unstable U.S. "informal empire."

## Jaume Valentines-Álvarez

Jaume Valentines-Álvarez is a researcher at the Nova University of Lisbon. He has co-edited the special issue "Fun and Fear: The Banalization of Nuclear Technologies through Display," *Centaurus* 61, nos. 1-2 (2019), and is currently studying grassroots transnational networks, emotions and technologies of protest, and techno-nationalism after the fall of the Spanish and Portuguese dictatorships in the mid-1970s.