Adriana Feld (2015)

Ciencia y política(s) en Argentina (1943-1983)

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The emerging field of science policy studies in Latin America will certainly welcome the current contribution by Adriana Feld, historian and Argentinean National Scientific and Technical Research Council (CONICET) researcher at the Science, Technology and Society Research Center (Universidad Maimónides) Buenos Aires. While previous similar works combined the history of Argentinian science with a discussion of science policy (Hurtado 2010) or provided analysis focused on specific periods or authors (Albornoz and Gordon 2011; Oteiza 1992), Feld's contribution Science and policy/ politics in Argentina (1943-1983) is the first book-length historical analysis of the construction of science and technology policy in Argentina. The book spans from the beginning of public support for science in the 1940s to the end of military rule in the early 1980s.

The book is organized in four chapters, an introduction and a conclusion. The first section deals with the rise of science

policy during the 1940s and 1950s and the configuration of two political and institutional approaches. Chapter describes the creation of the CONICET in 1958 and the stakeholders and institutional ideologies involved in its first years of existence. In turn, the third chapter focuses on dissecting the movement called Latin American Thought on Science, Technology and Development (LATSTD) and assessing the originality of their contributions. Finally, the last chapter analyzes the 1970s and the early 1980s when a new bureaucracy for science policy emerged in the context of a military dictatorship. The conclusion sums up the main arguments and includes some remarks on Argentina's current science policy.

The book opens with the discussion of science during the Peronist regime (1943-1955) and describes the different stakeholders and ideologies surrounded the institutionalization of science policy in Argentina. On one hand, Juan Perón's government favored a

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model of state planning for science and technology that favored the interests of the industrial and military complex and the nuclear and aeronautical sectors. In contrast, the academic environment was critical and demanded support for basic research and freedom of inquiry.

After the military coup that removed Perón from office in 1955, new institutions for the promotion of science and technology were created, including the research council CONICET and mission-oriented agencies for industrial and agricultural research. Chapter II focuses on how the political cultures that emerged in the 1940s evolved within the new institutions. Drawing on Arie Rip's (1994) characterization of science councils as both a parliament of scientists and a public bureaucracy, Feld discusses whether CONICET embodied Michael Polanyi's ideal "Republic of Science". She also deals with the Cold War context and describes the discussions triggered by the funding received by Argentinian universities from American philanthropic foundations, such as Rockefeller and Ford.

Ideological disputes on science and technology are the central topic of the third chapter. In it, Feld addresses the main ideas of the members of LATSTD. It is one of the most interesting and original parts of the book. Feld challenges previous works such as Renato Dagnino, Hernán Thomas and Amílcar Davyt (1996) or Manuel Marí and Carlos Martínez Vidal (2002) in her discussion of the unity of the movement. The main achievement of her

appraisal of LATSTD is the emphasis on the differences between the thinkers. She identifies two wings: a moderate (Jorge Sabato, Amílcar Herrera) and a radical one (Oscar Varsavsky). The moderate perspective provided an analysis of science and technology inspired by dependency theory and systems' approach, whereas radical outlook also drew unorthodox Marxist framework. an According to Varsavsky's radical stance, science and technology cannot regarded as neutral tools. To overcome dependence and underdevelopment, they have to be deeply transformed and aligned to a national revolutionary project. While the moderate thinkers emphasized science policies, radicals stressed the need to incorporate politics into the analysis. All authors, however, agreed on a critique to curiosity-driven research as a prerequisite for socioeconomic development and demanded more applied and demanddriven research.

The last chapter addresses the emergence of a new bureaucracy linked to science and technology policy in the 1970s and early 1980s. The new technical jargon included notions such as "scientific programming" that can be regarded as a response to LATSTD authors' critique of supply-driven science policies. Moreover, the chapter discusses science policy in the broader political context. From 1976 to 1982, a military dictatorship that repeatedly violated human rights ruled the country. In her analysis, Feld transcends the well-established view of this period as completely negative for science and

technology. She describes how the government actually strengthened the budget and staff of CONICET. It was its link to the university system that was weakened as part of a strategy to depoliticize universities and isolate researchers. On the other hand, sectors perceived as strategic were generously supported, such as the petrochemical. Feld also notes that this development happened in an atmosphere of authoritarianism and arbitrariness.

The conclusions revisit Aant Elzinga and Andrew Jamison's (1995) classical contribution to political cultures in science and technology policy. Feld argues that the four stakeholders (academic, economic, bureaucratic and civil culture) appear in a more hybridized fashion in the Argentinian context. The representatives of the economic culture only had a marginal influence. On the other hand, the academic culture of scientists played a privileged role in defining policies for academic research. Finally, authoritarian regimes that embodied the bureaucratic culture silenced the civic movements that emerged globally in the 1960s.

The book successfully attains its objective of providing a rich and detailed account of the history of Argentinian science and technology policy. Although its focus is almost exclusively on academic research, Feld also refers developments in mission-oriented public research institutions. One of the main accomplishments of the book is that it goes beyond an analysis of the explicit science and technology policies. It is successful in highlighting the underlying political and ideological disputes and heterogeneities involved in the policy-making process.

The book also establishes a fruitful dialogue and comparison with policies and trends in developed countries and discusses the role of international organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) or the Inter-American Development Bank (IADB). However, it does not relate the events in Argentina with the history of science policy in other countries in Latin America, such as Brazil or Mexico. This is, in my view, the main shortcoming of the book. The inclusion of a regional perspective would have been useful to assess whether Argentina's trajectory was similar to that of its neighboring countries and to highlight its distinctive features.

In summary, Science and policy/politics in Argentina (1943-1983) is a very useful resource for any historian or sociologist who aims to understand Argentina's institutional framework for academic research. The book provides a rigorous nuanced account that idealization or demonization of persons and institutions and aims at understanding them in their own terms.

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