



Geopolitics, culture, and the scientific imaginary in Latin America

edited by María del Pilar Blanco and Joanna Page, University of Florida Press, Gainesville, 2020, 352 pp., \$95.00 (hardback), ISBN 13: 9781683401483

Marco P. Vianna Franco

To cite this article: Marco P. Vianna Franco (2021) Geopolitics, culture, and the scientific imaginary in Latin America, Tapuya: Latin American Science, Technology and Society, 4:1, 1919417, DOI: [10.1080/25729861.2021.1919417](https://doi.org/10.1080/25729861.2021.1919417)

To link to this article: <https://doi.org/10.1080/25729861.2021.1919417>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 29 Jun 2021.



Submit your article to this journal [↗](#)



Article views: 949



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

BOOK REVIEW



Geopolitics, culture, and the scientific imaginary in Latin America, edited by María del Pilar Blanco and Joanna Page, University of Florida Press, Gainesville, 2020, 352 pp., \$95.00 (hardback), ISBN 13: 9781683401483

Unfavorable economic and political power relations have notoriously marked the dissemination of ideas and resources that shaped the history of science in Latin America. Yet, the region has also been the cradle of a culturally rich and epistemologically diverse set of intellectual and scientific achievements, which this book – a collection of essays – aims to redeem and situate in the light of a complex geopolitical web from early colonial times to contemporaneity. Combining history of science, science and technology studies, and cultural studies in an inter- and transdisciplinary manner, it reaps the fruits of such integrative approaches to the expense of some level of literary detail or historical rigor. A fair trade, considering the obvious relevance of the task and the size of the challenge faced by historiographical work grappling with a frail balance between internal dynamics and external influences for the production of knowledge in a wide range of fields and with deep cultural and political repercussions on a global level.

The book also shows how research pathways based on comparative thinking can be useful to assess the historical and contemporary roles of a so-called colonial science in Latin America. Once bound to the science of the colonizers and today still largely subordinated to the economic and cultural hegemony of Western science, local and regional interactions with technology and the natural world over time remain relatively obscure. Another pickle dealt with in the book is the age-old but context-specific dichotomy between, on the one hand, processes of internationalization of science and universalization of knowledge and, on the other, the local benefits of situated knowledge-production. These matters constitute not only a question of redeeming the place of indigenous science, but also of calling attention to crucial issues arising as implications thereof in the present. One pressing example is the problem posed by knowledge ownership and the commodification of indigenous practices and resources as expressed by notions such as “biocolonialism” (Whitt 2009) or “biopiracy” (Martinez-Alier 2002).

The first section of the book, “Latin American Scientific Landscapes,” deals with knowledge flows and local techno-social engagement against a backdrop of scientific imperialism and the simplistic notion of an epistemological center-periphery divide. Each of its three chapters shows how scientific discourse has been an object of dispute, and highlights how identity formation, adaptation to changing geopolitical power, and the need to respond to local socio-economic demands were constitutive elements in the construction of such landscapes.

Gabriela Nouzeilles presents a counterhegemonic combination of science and fiction in stories about Patagonian fossils. She draws on nationalistic imaginaries and reassessments of the notions of progress and modernity to explain the use of primitive myths and Romantic views toward Patagonian prehistory as political artifacts stemming from a wider anti-imperialist, postcolonial resentment in the country. In the same vein, María del Pilar Blanco addresses the political tensions in late-nineteenth-century Mexican writings aimed at the popularization of science. In these narratives, indigenous heritage and natural wealth morphed into Mexico’s well-equipped “laboratory” in the project of becoming a democratic, modern, scientifically and industrially developed nation. Jens Andreemann unveils the same tensions in Argentinian

regionalist essays in the 1930s, portraying waning human-nature ties in the advancing commodity extraction frontier. The loss of biological and cultural diversity due to industrial-scale logging for export is depicted as the integral phenomenon of “unlandscaping”: environmental deterioration and the transformation of the former subsistence agricultural economy into alienated, nomadic wage-labor. In the aftermath, modern science and technology appear as promises of a “sensible colonization” which remedies the devastation caused by modernity itself.

In Section 2, “Latin America as a Site of Knowledge Production,” focus is given on epistemic pluralism in Latin American history of science, notwithstanding violence and conflict during the process, as well as biases in historiographical accounts which neglect the relational aspect of such hybrid approaches to natural and social phenomena. Yari Pérez Marín calls attention to the mixture of European and indigenous medical knowledge in sixteenth-century Mexican writings, which refrained from appropriative scholarly prestige in favor of a more socially engaged contribution to local well-being. Also within medical science, Edward Chauca looks into early twentieth-century works that fostered Peruvian national unity based on the role played by Andean traditional knowledge pertaining to mental health. Heidi V. Scott, in turn, shows how geological knowledge applied to mining in the colonial Andes was produced by a wider network of Spanish and indigenous stakeholders, and how their contributions shaped both the way in which nature was perceived and also the social organization and economic development of the Peruvian colonies.

The politics of nation-building and its entanglements with science comes to the foreground in Section 3, “Science and the Modern Nation,” displaying tensions between emancipation and a culturally determined development based on local natural wealth, on the one side, and allegiance to Northern hegemony in political and scientific issues, on the other. In this context, Lina del Castillo presents innovative incursions during the rise of nineteenth-century Latin American social science, as illustrated by land surveying for the purposes of integrating indigenous populations as citizens of a market economy, and by a pioneering approach to comparative political sociology, arguing how institutional improvements could produce a new “race” of democratic republicans. Also in the context of independence revolutions, Miguel de Asúa conveys the role of science beyond nature-taming in the early nineteenth-century nascent Argentinian republic, namely as a symbol of novelty and freedom amongst the intellectual elite of Buenos Aires; although, to a large extent, also an effect of the French Revolution and contemporaneous events in North America. Fast-forwarding to the mid-twentieth century, Hernán Comastri depicts a curious balance between autonomy in popular technical imaginaries and a modernizing public discourse at the national level.

Section 4, “Utopian Convergences between Science and the Arts,” reassesses the bidirectional flows between these two categories in Latin America, seen as inherent manifestations within a systemic or even monist view of cultural dynamics that weaves together modern science, literature, and indigenous cosmologies, while bearing a utopian character based on alternative, more egalitarian futures. Soledad Quereillac delves into the scientific appeal of spiritualism and theosophy in Argentinian literary magazines at the turn of the twentieth century, and Julio Prieto provides examples of how the complex links between science and poetry in Latin America have overcome long-standing divides between natural and social sciences, and between Western and indigenous epistemologies, suggesting what is possible. Joanna Page goes even further in her stance on the epistemological imbrications between a contemporary post-Darwinian, systemic, co-evolutionary science and literature, as well as on political implications associated with the notions of symbiosis and co-existence, the role of social cooperation, and the need for denaturalizing capitalism.

Finally, in Section 5, “Science, Epistemology, and the Critique of Modernity,” the early twentieth-century opposition to a positivist universal science and liberal ideologies of progress highlights an emergent epistemological view in Latin America in which relativism, complexity, and historical contingency translate into a quasi-metaphysical philosophy of science with important effects in terms of political emancipation. The tensions between the local and the universal in Latin American literature are, to Carlos Fonseca Suárez, best illustrated by the characters of lonely inventors in remote locations, who at once strive for universality in their scientific endeavors but must necessarily fail in their rejection of the local and illusion of a teleological order guided by the center and its institutions. Brais D. Outes-León focuses on the links between philosophy and political thought by Peruvian Marxist intellectual José Carlos Mariátegui, explaining how he made use of Einstein’s theory of relativity to build on a type of epistemological relativism according to which a Marxist discourse can decolonize science by turning modernity on its head. Finally, Mara Polgovsky Ezcurra brings forth the theory of complex systems of Argentine physicist Rolando García, which went beyond similar approaches in the sense that it combined natural and social phenomena, emphasizing the relations between science, ethics, politics, and the ontological and epistemological tensions between them, as in the case of the relations between human activities and large-scale environmental problems.

Either for the classroom or as research material for scholars from different fields, the book excels above all in its capacity to inspire further work on the raised issues: not least because the contents seem to gravitate toward specific countries like Argentina, Mexico, and Peru, hinting to an untapped potential for historical inquiry. The issue of scientific and cultural integration – or lack thereof – in Latin America, and more specifically of knowledge flows within the region, poses yet another subject for future studies. In any case, the book does not shy away from the challenge of digging deeper and redeeming forgotten or unknown figures and episodes in the history of Latin American science and culture, which is the reason why it is highly recommended for a broad readership.


References

- Martinez-Alier, J. 2002. *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*. Cheltenham: Edward Elgar.
- Whitt, L. 2009. *Science, Colonialism, and Indigenous Peoples: The Cultural Politics of Law and Knowledge*. Cambridge: Cambridge University Press.

Marco P. Vianna Franco

Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, Austria

 marco.franco@kli.ac.at

 <http://orcid.org/0000-0002-0054-8717>

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
<https://doi.org/10.1080/25729861.2021.1919417>

