

## 'Science and Culture in Theory and History: Latin America, France, and the Anglophone World' Report on Symposium held in Cambridge, July 2016

This was the fourth and final symposium held under the aegis of the AHRC-funded research network on *Science in Text and Culture in Latin America*. Our aim was to bring together leading figures working on the relationship between science and culture in Latin America and establish a set of critical dialogues with researchers in similar fields in Francophone and Anglophone contexts. Keynote speakers on the first day presented new research on the history of science in Latin American culture, while a series of roundtable discussions focused on current directions in the study of science and culture in and on Britain, France, and Latin America. The second day was more informal in style, with short papers preceding more general discussion in panels on specific questions relating to the history and theory of science and technology in Latin American culture.

**Jorge Cañizares-Esguerra** (University of Texas-Austin) opened the symposium with a keynote address entitled "'The science of nothing and the science of the colonial": A Genealogy of the Forgotten in Early-Modern and Modern Spanish America.' His focus were two texts—Lorenzo María Lleras's *Catecismo de agrimensura apropiado al uso de los granadinos* (1834) and José M. Samper's 1861 *Ensayo sobre las revoluciones políticas y la condición social de las repúblicas colombianas*—in which the authors came up with their own vanguard methods of agrimensura and governance rather than offer an application of European models. In view of such examples, Cañizares-Esguerra proposed a revision to what he called the "history of absences," or the historiography of the Spanish American nineteenth century as one of failures or omissions.

Our first roundtable, on science and culture in Anglophone studies, brought together colleagues working within literature, cultural and media studies, and history of science. In his presentation, **Iwan Morus** (Aberystwyth) reflected on an institutional history that began in earnest in the 1980s and became, in his word an "epistemological project." Thinking of a history of science that opened up questions of places of knowledge and, contiguously, the kind of knowledge that is produced in those places, Morus offered a critique of history of science's lack of a bigger picture, both in terms of the geographies that it covers but also of the ways in which it fails to reach wider audiences. **Vike Plock** (Exeter) followed from this with her discussion of the institutional trajectories of literature and science studies in English studies in the UK, with a focus on the development of medical humanities. She raised the issue of the prevalence of eighteenth- and nineteenth-century studies in the study of literature and science, to the detriment of twentieth-century and contemporary studies, but also reflected on the challenges of an interdisciplinary exchange of ideas, given the fast pace of contemporary medical advances. **David Trotter** (Cambridge) followed with a discussion on the recent developments in media theory, particularly in Germany. Looking at the work of figures like Joseph Vogel, Cornelia Vismann, and Wolfgang Ernst—the latter focusing on media archaeology—Trotter traced new media polemics that have moved from the study of the medium as a dimension of human life to the ontologization, pluralization, and "backdating" of media. Finally, **Ros Ambler-Alderman** (Southampton) explored the evolution of ecocriticism as a way of reading literature since the 1970s. While she noted that, in the hands of poets and other writers, the adoption of scientific metaphors and models (such as chaos and complexity theory) has led to some very rich engagements, the approach of critics has been less rigorous than the poets they are studying. The appeal to science within ecocriticism raises important questions about whether such approaches may simply represent an attempt to co-opt the cultural authority of scientific discourse.

In our second keynote presentation, **Gabriela Nouzeilles** (Princeton) spoke on 'Bone Rush and the Paleontological Imagination', focusing on visions of Patagonia as the origin of the world in the work of the renowned Argentine scientist Florentino Ameghino (1854-1911), and particularly on his recourse to indigenous myth in the development of his (later discredited) theories of biological evolution. This was followed by a round table on 'Science and Culture in Francophone Studies', in which all three speakers presented examples of productive intersections between science and French thought. **Henry Dicks** (Lyon 3) outlined the differences between modern dualism, scientific naturalism, and the thought of Latour and Descola on the relationship between nature and culture, before focusing on Morin's work and sketching out more broadly the possibilities afforded by thinking of culture as autopoiesis, as theorized by Maturana and Varela in biology. **Martin Crowley** (Cambridge) gave an account of the recent wave of interest in the work of Gilbert Simondon, tracing his influence on Deleuze, Baudrillard and Stiegler (among other thinkers) and outlining his theories of individuation and transduction and their relationship with crystallization, before raising the question of what this "activism without

transcendence" might mean in a political context. **Ian James** (Cambridge) focused on the contribution of Georges Canguilhem to debates on epistemology and rationality, and the significance of his axiology of life as a relational theory of biological individuation, which resonates to a significant degree with contemporary post-deconstructive thought in France.

**Jimena Canales** (University of Illinois, Urbana-Champaign) gave the third and final keynote of the day. In her talk, 'Einstein and Bergson from a Latin American perspective,' Canales offered a reflection on the need for science to be self-reflexive of its methods. Looking at examples of the pervasiveness of wartime terminology (such as the "flash-and-bang" trope) in science writing from the first decades of the twentieth century, she discussed the relations of science, technology, and society, and particularly how science and the fictional fed into each other in the wake of Einstein's theorizations about time.

Speakers in the final round table of the day, 'Science and culture in Latin American studies', attended to the political limitations and affordances of certain approaches to science and culture within scholarship in/on Latin America. Thinking specifically about the nineteenth century, **María del Pilar Blanco** (Oxford) considered how science and Latin America have been historicized in terms of incompatibility and inequality. To counter this, and thinking alongside Rubén Darío, who celebrated Spanish America's "immediate" forms of physical and non-material commerce with the world, she proposed a reading of the compatibilities in transatlantic relations centred on science, based on the idea of science as a form of cultural and spiritual capital. **Joanna Page** (Cambridge) argued that the key constraint on creative and critical engagements with science on the part of Latin American writers, artists and critics from the late nineteenth century onwards has been the limited extent to which it has seemed possible to appropriate science within an emancipatory politics of society and culture, especially given the problematic reception of Darwinian thought in Latin America. Drawing on the work of Malabou and Stiegler, she suggested ways in which analogies from biological evolution might now provide the terms for a resistance to capitalism that had previously been lacking. Finally, **Brais Outes-León** (CUNY) argued how the recurrent critical and skeptical views on science expressed by Latin American intellectuals and writers are inseparable from their ambivalent and shifting attitudes towards capitalist modernity and the role allocated to Latin America within it. According to Outes-León, José Vasconcelos in *La raza cósmica* and José Carlos Mariátegui in *Siete ensayos de interpretación de la realidad peruana* employ scientific terminologies for different purposes—utopian or not. The result, as Outes-León argued, is a destabilization of the universalizing authority of science, and a reminder of its historical and cultural contingencies.

The second day opened with a panel on 'The history of science and culture in Latin America: new paradigms, new periodizations.' In this workshop, we sought to explore issues of periodization in thinking about the relations between science and culture within the region. To address this, **Mark Thurner** (ILAS, University of London) offered an overview of the aims of his own research network, [LAGlobal](#), which seeks to redress the common historiographical assumption that Europe has been the centre of world of knowledge since the early modern period. In this spirit, he proposed we look again at such concepts as "baroque" and "Renaissance" in order to implode them and reorganize them from a perspective that takes into account different locations of knowledge production particularly within the region that we now know as Latin America. In his presentation 'Writing the archive: Mental health, fiction, and non-Western medicine,' **Edward Chauca** (College of Charleston) explored the work of Peruvian psychiatrist Hermilio Valdizán, author of *Locos de la colonia* (1919) and *Historia de enfermos* (1923). Valdizán's texts combined a reflection on local and foreign knowledge about mental illness; they also demonstrate a direct engagement with national fiction (such as Ricardo Palma's "El Cristo de la Agonía" from *Tradiciones peruanas*). This, according to Chauca, reflects a history of absences and creativity in the construction of a canon of scientific writing in early twentieth-century Peru.

The second workshop, on 'Theories of biopolitics, discipline and control in Latin America: moving beyond Foucault?', brought together three speakers who, in different ways, demonstrated the limitations of Foucauldian and post-Foucauldian paradigms for the analysis of Latin American culture and society. Opening with a paper on 'Psychopower or biopower? Televisual thoughts on Pinochet's corpse', **Paul Merchant** (Cambridge) showed, through an analysis of the films *La muerte de Pinochet* and *Lucía*, how Stiegler's distinction between biopower and psychopower begins to break down in the Chilean context, in which a shift to psychopower does not obliterate previous modes of control. A presentation by **Mara Polgovsky** (Cambridge) on 'The blinded webcam: Automated surveillance and the politics of the super-panopticon in contemporary Mexico' engaged with the

political uses of video surveillance technology in a post-panopticon society that is conspicuously failing to produce the advances for justice that seem to be held out by the promise of hypervisibility. **Emily Baker** (Cambridge) gave a paper entitled “Hyper-industrial biopower” and the “*becoming-anthropod of society*”: Reading Pola Oloixarac's *Las constelaciones oscuras* (2015) with Bernard Stiegler’, where she traced a series of convergences and divergences between Stiegler’s ‘Allegory of the Anthill’ and Oloixarac’s novel, drawing out the consequences of this for our understanding of (dis)individuation and control.

The final workshop, on ‘The exploration of scientific ideas in Latin American art and literature’, opened with a presentation on ‘Beyond Benjamin: Cult mechanically reproducible images in Bioy Casares’ *The Invention of Morel*’ by **Antonio Córdoba** (Manhattan College), who focused on how the novel problematizes Benjamin’s distinction between cult, sacralized images and those created by means of mechanical reproduction, in a supposedly post-auratic age. **Viviane Carvalho Da Anunciação** (Cambridge) gave a paper entitled ‘Visual, holographic and virtual: Concrete poetry and scientific discourses’, in which she explored the use of terms from biology and physics by Brazilian concrete poets, their conception of the role of the poet as a scientist, and their formal experimentation with notions of chance, showing how these allow the articulation of virtual and material realities. Finally, **Vanessa Badagliacca** (Universidade Nova de Lisboa) spoke on ‘Hydroponic environments in the artistic context: The case of Luis Bénédict’s *Fitotrón*’, reading Bénédict’s live plant installation as a reflection on the dynamics of power between colonizing and colonized nations that governs scientific development.

Those participating in the symposium appreciated the possibilities for the exchange of ideas beyond their usual academic milieux. The event revealed interesting and challenging fault-lines in academic research, not just between specific regions and language-areas, but also between history and theory, and different historical periods (colonial and the C19 onwards, for example). Despite—or precisely because of—those challenges, the organizers consider that the symposium reinforced for them (and for many others present) the value of ongoing dialogue of this kind in order to shine a light on areas that have been unjustly neglected, to reveal hidden disciplinary assumptions, to facilitate the exchange of ideas, and to open up new possible research agendas for the future.