Crises that mismatch canons in science: provincialization, transnationality, conviviality?

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We may fully share Law and Lin’s view (2017) that it is as if reality had exploded in myriad fragments; from many quarters comes the argument that science has made rigid both similarities and differences, disregarding variety at the micro level, ignoring the rearticulations with the norms, strategies, dramas, and all those particularities always present in the world’s societies. Some of those efforts have been published in EASTS, among others the article by Lin and Law (2019) I discuss here. At stake is whether the canon has turned into a straitjacket hindering the growth of knowledge, whether it renews and grows, or is capable of reconfiguring once and again in time without eliminating the history of those processes and the variability of the local specificities.

I use the idea of the canon here to remind us that science is often perceived as an elite phenomenon, as indeed is the case of academic freedoms, by the form in which the canon is understood as a body of principles: rules, standards or norms, idealized or generalized paths/trajectories representing common properties; deliberate activities associated to studying, thinking, experimenting and traveling, including the mastery of the English language. Because of reasons like these science is often contrasted with different rooted or provincial forms of knowing. In the background is the fact that although scientists belong to countries and are often funded with public resources, they tend to identify themselves with post national or cosmopolitan sensitivities (Vessuri 2010; Werbner 2018).

The fate of two besieged knowledge cultures in their national contexts may serve to elaborate this point. My first example refers to the consequences of the collapse of the political and economic system of the USSR, and how this affected the sciences and the scientists in the countries that until then made the Soviet block. My second example is related to a political, intellectual, cultural and economic experiment still under way in Venezuela. I refer to the project of Chávez’ government of transforming the science that was made in that country, transferring to government the control of its development through the creation of new organs and laws that removed power from the existing scientific community.

The issue in both cases can be construed as that of science as a national problem. “There is no homeland to go back to. Which country? Where to return to? My life now is here, my work, my family, even my friends are here … ” commented a former soviet mathematician interviewed by my colleague Isabel Izquierdo in Mexico (Izquierdo, Gonzálex, and Vessuri 2014;
Venezuelan scientists and engineers in Argentina, Chile or Colombia, ejected by events like those analyzed by Damny Laya (2018) in connection with Chávez’ science policy, say something similar with regard to Venezuela. The R&D system of the USSR was the largest in the world and Soviet science enjoyed international prestige (Rabkin 1987; Rabkin and Mirskaya 1993). Venezuelan science, in a different league because it is a smaller country, with a lesser scientific tradition, also produced researchers well appreciated in contemporary science (Roche 1976; 1996; Vessuri 1991). The established social order in the USSR went into crisis at the end of the 80s (Rabkin 1987) and something similar happened toward the end of the 90s in Venezuela (Avalos 2007; Laya Rodriguez 2018). New forms of politization marked particular historical and cultural trajectories and reconfiguration paths. In both cases there were scientific diasporas (De la Vega 2017; Vora 2018).

Curiously, in the case of the former USSR the crisis was resolved into a radical Americanization/“westernization” of the economy, society and political regime, which left institutionalized science orphan of public support, forcing its scientists and engineers to go out on their own into the international domain. In Venezuela the debacle of the pretended socialist model dismembered institutionalized science in the country with the aim of changing its organizational model and its direction, and also led to a massive exodus of its trained people. Analysis in the context of transnational and transregional entanglements allows us to see under another light features of science and scientific identity that had remained opaque until the recent past.

When they go into exile trying to join the international labor market, scientists have to negotiate all kinds of other cultural practices in order to survive having a possibility of fulfilling their cultural ambitions to continue/rebuild their lives and professional careers. Usually those negotiations take place in asymmetrical, unequal conditions (Sánchez Correa 2015). My point is that marked changes in the relevant structures and practices of interaction have immediate effects upon the modes of conviviality, including what Appadurai (2018) calls “contested conviviality.” I use “conviviality” here to refer to the processes of cohabitation and interaction that have become an ordinary feature of social life in the urban areas of the contemporary world, negotiating spaces in different contexts, which are often precarious, asymmetrical and sometimes risky.

In contrast with a concept of pluralism that simply names the daily practices of multicultural interaction in particular transnational contexts where the exiled scientists settle down, I propose the notion of conviviality which speaks uniquely to a sophisticated ability to invoke difference, whilst avoiding communitarian or groupist precepts when referring to broader social sets (Valluvan 2016; Mecila Program 2017). I obviously see science as part of that multicultural. However, I am interested in exploring aspects of the conviviality that survive or may re-emerge by showing a new value in the ability of living with/in alterity in science. My interest in the functioning of conviviality, then, has a different starting point from that of “multiculturalism” (Illich 1973; García Peters 2016). It describes neither the absence of racism nor the triumph of tolerance. Instead, it suggests a different setting for the inter-personal rituals in the science milieu that begin to mean different things beyond any strong belief in absolute or integral class, ethnic or racial differences when we move from national to transnational and transregional contexts.

If conviviality helps to fix the local pole in this interpretative exercise, the other extreme can be focused by way of the idea of “transnationality” which I prefer to the more familiar...
notion of “globalization” because it resonates in quite a different way. The transnational suggests as much contingency as movement. It specifies a lesser scale than the global that transmits all the triumphalism and complacency of the always expanding imperial universals (Gilroy 2004; Vertovec 2009; Knörr 2018). The two terms are important to the general tone and direction of the argument because they help precipitate a different sense of being scientific and doing science.

The dimension of conviviality, with a focus on how relevant issues are disputed in different societies, such as symbolic belonging, political participation, the distribution of resources and risks, the rights of nationals and transnationals, is of interest in relation to the topics of knowledge. Contexts are crucial; the attempt to contextualize responds to the need of remedying the probably incomplete character of what is described, is present, or is said to be auto-evident. When integrated to the analysis of macrostructures, the study of interactions in scientific contexts characterized by inequality and diversity, allows accessing aspects of the Science, Technology and Society relations of mobility, neworks, national and transnational science not as epiphenomena or pre-political processes, but as “cooperative and conflictive” arenas in which the frontiers themselves that define and distinguish different groups and knowledge forms are disputed (Cardoso de Oliveira 1988; Livingstone 2003).

I am not sure whether provincializing hegemonic science is the best solution or rather, whether it is best to recognize an epistemologically more fertile manner of exploring the cognitive entanglements resulting from transnational and transcultural interaction. I take it that conviviality appears as a more promising response to globalization than provincialization. I do not see it as a constant state of relations but as a process of variable equilibrium between intimacy, distance and personal and collective interests. I am not proposing an alternative canon, simply a moment of opening up, with sometimes diffuse methods and directions, still exploratory and experimental. Technoscience has come to mean a complex international endeavor rather than a sum of particular practices, the resolution of cognitive puzzles more than the unpredictable creative activity of individuals (Ravetz 2006).

People in different countries and regions are constrained by facts of economy, politics, institutionality, and culture. Science is no exception to this. Without institutional means, financial support or external interest scientific activity of any orientation may not be practically feasible (De Greiff 2012). Aspirations to go deeper into the recovery and/or construction of a Latin American science and STS can and often do give way to reluctant or willing participation in one-world world projects and activities simply because these are the possibilities available within the circumstances one finds oneself (MacLeod 2001; Vessuri 1983).

Scientists in the diasporas often rediscover the value as well as the risk of individual freedom, of networks, of institutions to which they were “affiliated,” so far and what it means not to have a country of belonging any longer. When the former Soviet or Venezuelan scientists went into exile, their science practices in many cases changed and although in their home country/institution they could have oriented themselves to the particularities of their reality eventually marking a difference with regard to the canon, in their new circumstances they most often began by enacting conventional canonical science practices of the one-world world sort, to use Lin and Law’s terminology. In so doing, their practices became hybridized helping to generate different worlds.
There is a disparate multiplicity of practices in the world, each bearing witness, in its own way, to particular dimensions of its existence. No general framework is available to contain such a multiplicity, which is why there continues to be plenty of room for experimenting with concepts, practices and situated interventions (Mignolo 2000; Raj 2007). However, I argue that as members of the human species communication across cultural worlds is ultimately possible, including even the inevitable betrayals resulting from intercultural translation, since they are constitutive of networked relations, something one is hardly ever able to control, and, often enough, barely able to influence. In view of the recognition of such a wealth of practices, and in response to the rigidities of the view committed to the idea that a single science canon is appropriate to different places, some people have gone out of their way in the search of differences and incommensurabilities. But, ultimately, with more or less difficulty, the hypothesis that inter-cultural understanding is possible is a powerful one (Vessuri 1993). Thus it seems worthwhile to explore whether crises like the ones considered here reflect the mismatch of canons, the formation of new canons, or whether they could allow a phase of science without a canon.

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Notes on contributor
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