

ABSTRACTS

Challenges and opportunities for the development of consumer electronics in developing countries: lessons from Argentina (2003-2014)

Juan E. Santarcángelo, Guido Perrone

Abstract

In Latin America, most countries are net importers of consumer electronics and only a few countries have succeeded in producing a significant portion of inputs and final products. The purpose of this study is to study the consumer electronics complex in Argentina for the period 2003-2014 observing the dynamics of local production and their effects on public finances and balance of trade. Thus, it is intended to account for the main elements and challenges that Argentina will face if the country wants to advance the strategy of import substitution under the current configuration of the global value chain.

KEYWORDS: CONSUMER ELECTRONICS — ARGENTINA — ECONOMIC DEVELOPMENT — IMPORT SUBSTITUTION

Can the Foucaultian notion of dispositif help us to escape from the structuralist vices of Actor-Network Theory in order to move forward in the study of technoscientific research?

Antonio Arellano Hernández

Abstract

By using the concept of network, many scholars were able to express heterogeneous, relational, post-systems aspects in the description of the socio-technical organisation; they were also able to incorporate linguistic and communicational descriptions in the relations among actors and to support

with scientific and technical elements the composition of social relations. These explanatory capabilities were organised in the movement known as Actor-Network-Theory (ANT). However, after the rise of countless ANT-style studies that privileged a descriptive and nomological position, the result of this was, paradoxically, the weakening of ANT's original methodological qualities. In this context, this article presents the result of our analysis of Foucault's post-structuralist work, in order to keep alive a methodological position capable to move forward in the knowledge of technoscientific research and of knowledges and technics in general. To do this, we explore the development and use of the notion of actor-network as an organizational description of the technoscientific phenomenon; then, we analyse the common criticisms towards ANT. Finally, we present the epistemological capabilities of Foucault's notion of 'dispositif', this in order to help science and technology studies to move forward favouring an analytic attitude rather than a nomological ambition.

KEYWORDS: ACTOR-NETWORK – DISPOSITIF – FOUCAULT – TECHNOSCIENTIFIC
RESEARCH

Innovation and uneven regional development: towards a comprehensive re-view

Andrés Niembro

Abstract

While in times of globalization it can be somewhat paradoxical, in recent years there has been a growing interest in regions as focus of analysis, as well as in the problem of uneven regional development and the role of innovation to account for these disparities. However, there are still important gaps when analyzing the links between these topics. The aim of this paper is to provide a comprehensive re-view of the literature that has been studying, although often in a partial manner, the relationships between innovation, inequalities and/or regional development. If something stands out, it is the fact that we are facing a very complex, multifaceted and difficult phenomenon, in which there are interwoven interactions between all its different parts.

KEYWORDS: SYSTEMS OF INNOVATION – REGIONAL DEVELOPMENT – INEQUALITIES
– PATH-DEPENDENCE

Resistance to nuclear technology in Argentina: mapping the terrain

Agustín Piaz

Abstract

This article introduces an exploratory study of resistance to nuclear technology in Argentina, based on the description and analysis of three controversies that involved collective claims making, promoted several impacts—whether in production processes, plans supported from the promoters of this technology or future resistance—and that reached periods of high visibility in public space. We show that the perception of nuclear technology as highly risky is central in the processes of social construction of threat and fosters shared arguments against this technology. We also highlight the presence of organized groups who had established networking and participated actively and repeatedly in different contentious episodes, setting a common ground that favored collective action. Overall, we support there is a significant resistance to nuclear technology and the hypothesis of an existent coalition of anti-nuclear groups in Argentina.

KEYWORDS: NUCLEAR TECHNOLOGY — RESISTANCE TO TECHNOLOGIES — CONTROVERSIES — RISK

Studies on Interdisciplinarity: building an area in the field of Science, Technology and Society

Bianca Vienni Baptista

Abstract

The aim of this paper is twofold. It seeks to deconstruct the concept of ‘interdisciplinarity’ to contribute to the production of knowledge through reflection on its possibilities, impacts and limitations as a way to consolidate a research area called Studies on Interdisciplinarity (ESI, for its initials in Spanish) located in the field of the Studies of Science, Technology and Society (STS). In turn, this article wants to reconceptualize the purposes defined in 2009 for the Espacio Interdisciplinario (EI) of the Universidad de la República (Uruguay). We advance a proposal consisting of four axes (research, teaching, extension and academic management) that build on the activities consolidated so far and the projected advances in university policy to promote interdisciplinarity. The text outlines the conceptual and theoretical approach, the

institutional background that gave empirical support to this proposal as well as the establishment of a methodological strategy called “inter-approach”.

The ESI have the substantive objective to systematize practices on interdisciplinary and transdisciplinary research in Uruguay and propose the development to strengthen these practices in other Latin American contexts. It builds on the experience of EI as part of the institutionalization of interdisciplinarity.

KEYWORDS: INTERDISCIPLINARITY – TRANSDISCIPLINARITY – STS – URUGUAY

Critical Theory of Technology: a conceptual review

Fernando Tula Molina, Héctor Gustavo Giuliano

Abstract

At our times, machines are oriented toward automation and virtual reality; by massively adopting them, central features of social relations are modified: the quantity-quality relationship, on the one side, the power-equity relationship on the other. It is the design step that fixes the many possibilities open by knowledge; in most cases this process follows a hierarchic path that strengthen social domination.

Nevertheless, in accordance with critical theory of technology, technological design is embedded with both technical and social values; pursuing its goals they intervene in a wide way in the design, production, commercialization, and discard procedures of technical systems and artefacts. Ethics and politics have in consequence a central place; they render possible not only to identify those interests, but also to rebuild our technological practices by a democratizing process.

This way, every concrete possibility of emancipation must have a critical stance in relation to our tools, theirs culture and practices, and theirs consequences over both the material and the symbolic worlds. This view urges to drive the critical reflection on technology to the formation milieu of engineers and technologists, in order to contribute to a wide consciousness on the way technology imbricates with society.

Our purpose here is to review the key concepts of critical theory of technology, to retain its merits and to state those points that we consider require further reflection and debate.

KEYWORDS: ANDREW FEENBERG – CRITICAL THEORY – TECHNOLOGY – EMANCIPATION