Article

Politicizing Responsible Innovation: Responsibility as Inclusive Governance

Andoni Eizagirre [1,*], Hannot Rodríguez [2] and Andoni Ibarra [3]

[1] Department of Social Sciences, Faculty of Humanities and Education, Mondragon University, Dorleta auzoa z/g, 20540 Eskoriatza, Spain

[2] Department of Philosophy, Faculty of Arts, University of the Basque Country UPV/EHU, Paseo de la Universidad 5, 01006 Vitoria-Gasteiz, Spain; hannot.rodriguez@ehu.eus

[3] Department of Logic and Philosophy of Science, Faculty of Education, Philosophy and Anthropology, University of the Basque Country UPV/EHU, Tolosa Ave. 70, 20018 Donostia-San Sebastián, Spain; andoni.ibarra@ehu.eus

* Correspondence: aeizagirre@mondragon.edu; Tel.: +34-943-714-157, Fax: +34-943-715-220

Abstract: This paper aims to provide the historical and conceptual bases underlying the inclusionary transition of European innovation policy, and critical analysis of the difficulties relating to the political nature of this transition. In the 50s and 60s of last century, linear innovation models operated on the basis of a clear division of roles among the different actors in innovation and fundamentally economistic-based strategies. The following decades saw innovation policies progressively recognize the multi-dimensional and complex nature of innovation and the need to make adjustments, but always in explicit response to the competitiveness imperative. More recent RRI (Responsible Research and Innovation) strategy within the European Union, in contrast, demands opening up the whole innovation process (including values and motivations) to collective decision, i.e., approaching responsible innovation as inclusive innovation. This paper appraises this important development primarily on the basis of in-depth analysis of the main policy literature on innovation, and also on the grounds of related academic literature. As a result, we conclude that the bid for collaboration models cohabits constitutively with another set of dynamics aimed at strengthening centralized and prescriptive forms of innovation. In other words, that inclusionary or political eagerness represented through RRI must grapple with the strategic imperative of competitiveness and economic development. Hence, fundamental tension exists, which should be elucidated in light of the objectives, demands and considerations that are integrated, and cease to be integrated, in innovation dynamics and trajectories.

Keywords: Inclusive innovation; Responsible Research and Innovation (RRI); Competitiveness; Institutional ecosystem

1. Introduction

Scientific and technological innovation systems all over the industrialized world have traditionally operated based on a number of fundamental assumptions. These include clear division of roles among the actors in innovation, subordination of innovation to macroeconomic demands, and identification of innovation with progress and well-being by default (OECD, 1972; Sarewitz, 1996).

However, these operative and ideological foundations of innovation have been progressively, and relatively, questioned in light of the institutional recognition that innovation should be conceived as a complex process. That is to say, innovation is reliant on the interaction of a wide variety of actors, considerations, demands, expectations and values. In response to this, policies addressing the constitution of "ecosystems" for innovation began to be developed in the 1990s. The policies addressed the design and implementation of programs, and strategies to promote entrepreneurial and collaborative attitudes among academic-business actors in innovation (Lundvall, 1992).

This trend toward integration of heterogeneity of aspects and actors, reflecting the complexity inherent to innovation processes, has led to more radical approaches throughout the course of the last decade. Integration is conceived as a platform for constituting the actual direction and objectives of innovation, thus reaching beyond inclusive strategies of an essentially economistic nature. Such is the case in European Union (EU), whose approach toward integration reflects the need for innovation dynamics to respond constitutively, or *inclusively*, to the plurality of social demands. This would include the integration of these demands and their actors in the innovation processes themselves. For example, in the view of Máire Geoghegan-Quinn, former European Commissioner for Research, Innovation and Science (2010–2014): *"Research and innovation must respond to the needs and ambitions of society, reflect its values, and be responsible. (...) The first key is to engage people and civil society organisations in the research and innovation process"* (Geoghegan-Quinn, 2012, p.1).

Understanding innovation as defined above, i.e., in terms of inclusivity, ultimately responds to the institutional recognition that it is insufficient to address the societal fit of innovation by formulating institutionally defined rules aimed at regulating the social and environmental impact of technological innovations. This is because the uncertainty and epistemological and regulatory complexity characterizing scientific and technological developments in our societies demand *inclusive* management of actual innovation processes, including their inception and direction (Irwin et al., 2013). This implies that innovation needs to be appraised as *inclusively contingent*—namely, as a reality that needs to be constituted heterogeneously in all its dimensions (i.e., not only concerning organizational or procedural aspects, but also normative aspects). A clear example of this can be seen from the experience of the regulatory failure linked to the development and commercialization of agrifood biotechnology in European territory (Thayyil, 2014).

In other words, this inclusive perspective demands that the issue of socially responsible innovation be focused on in essentially political terms. One can only be responsible if one is *inclusively responsible* by integrating, accommodating and institutionalizing the diversity of values, interests and knowledge dynamizing and constituting innovation. In other words, responsibility is politicized as a problem, and is directly related to the capabilities to decide collectively what kind of innovations we want as a society.

This paper aims to provide the historical and conceptual bases underlying the inclusionary transition of the European innovation policy, and critical analysis in light of the difficulties relating to the actual political