

What scientific imaginaries are at the heart of Big Neuroscience?

Actors of governance and professionals in a comparative perspective
(Human Brain Project – Korea Brain Initiative, 2001-2018)

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Our project aims to produce a detailed investigation of Big Neuroscience, by relying on a comparison between the Human Brain Project (HBP) and the Korea Brain Initiative (KBI). Endowed with significant public funding of hundreds of millions or billions of euros, these large-scale projects are rooted at the centre of (inter-)national strategy with regards to mental health, technoscientific progress and economic growth. Furthermore, the introduction of large-scale collaborative organisation would cause a mutation in the neuroscientific field (Parker, Vermeulen and Penders 2010). To understand the novelty of this innovative practice in neuroscience, our research will focus on both the governance and the scientific work of these large-scale projects. However, on the other hand, as this type of organization is unprecedented in neuroscience, the Big Neurosciences are confronting internal conflicts as well as external criticisms despite a rapid increase in political supports and public investment. From this perspective, our analysis will deliver the very first evaluation of large-scale neuroscientific projects as well as a mental health policy based on technoscientific research project.

Big Neuroscience has so far attracted very little attention on the part of political and social scientists in spite of their growing importance at the social and scientific level. Research on the technicality of neuroscience has focused on brain imaging technology (Gaillard 2015), with researchers now, mainly paying attention to the medical aspects at the individual level (Chamak, Moutaud 2015), contrary to other emerging techno-sciences such as nanotechnology which have stimulated extensive debates in the academic and public sphere. While the HBP was the subject of analysis, the studies were limited to either opponents' criticism (Panese 2015) or participants' optimism (Sainsaulieu et al. 2017) with regards to this novel venture. From this perspective, our research aims to carry out an interdisciplinary study to understand the political and organizational challenges of Big Neuroscience from the actor's point of view (Sainsaulieu, Saint-Martin 2017). We propose a notion of scientific imaginary composed of the actor's vision and scientific knowledge, this being a novel approach which is indispensable in the investigation of Big Neuroscience's multiple facets – interdisciplinary, interprofessional and international (Leresche et al. 2006). What are the particularities of Big Neuroscience from the actors' point of view? Does this novel practice lead to a mutation in the way in which knowledge is produced? What is the impact of this innovative strategy on public health policy and scientific governance at the (inter-)national level? Our research will focus on these questions.

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