The Post-colonial Context of Daniel Bovet's Research on Curare

In 1943, Daniel Bovet, a researcher of the Pasteur Institute, began to seek some synthetic substitute of natural curare, which had been recently introduced in anaesthesia as muscle relaxant. After WWII Bovet moved to the Higher Institute of Health in Rome, where he fully developed his research on curare, and in 1957 he was awarded the Nobel Prize for medicine or physiology mainly for his research on curare.

In this paper, Daniel Bovet’s research on curare is framed within the transition from the colonial context of the Institut Pasteur during the 1930s and the 1940s to the post-colonial context of the Italian Higher Institute of Health in Rome in the post-war years. This paper argues that Bovet could fully develop his research on curare within the post-colonial setting. Indeed, research on curare involved the organization of expeditions to Amazonia, but also a complex ethno-biological work, which was made possible thanks to a network of scientists both in Italy and in South America.

This paper is in three parts. Firstly, the history of the Therapeutic Chemistry Laboratory of the Institut Pasteur, where Bovet worked, is briefly outlined. It is shown that, since its foundation, the Institut Pasteur was fully integrated in the French colonial and anti-German geo-political discourse, and that the creation of Therapeutic Chemistry Laboratory led to frame the catch up strategy of the French pharmaceutical industry within the French civilization mission worldwide. It is argued that Bovet developed his research skills within such context.

In the second part of the paper, it is shown that, when Bovet moved to Italian Higher Institute of Health in Rome in 1948, he adapted the catch up
strategy to the new post-war context. Emphasis is placed on the fact that the Rome Institute was trying to acquire an International reputation by acting as a centre for training of scientists and technicians of developing countries under the aegis of the new International institutions such as the WHO and the UNESCO. In this paper, this fact is framed within the context of the post-war Italian scientific policy. A number of Italian politicians and policy-makers aimed to integrate the country in the process of European Integration, and Italian scientific policy mirrored the will of participating in Intra-European and International institutions. Collaboration agreements between the Rome Institute and a number of South American scientific institutions (the University of Montevideo, the Universidad Católica de Chile, a number of Venezuelan institutions, and Instituto de Antibioticos de Recife of the University of Pernambuco) were established, and since 1963, some twenty Brazilian researchers worked at the Rome Institute (and later on at the National Research Council) to study Brazilian plants.

It is also highlighted that in Rome Bovet found two researchers, Giovanni Battista Marini Bettolo and Ettore Biocca, who were interested in confronting with the Amazon world and its people as a way of understanding their own role in the post-war Italian society, and who had those connections with South American scientific community Bovet needed. Indeed, in Paris Bovet found it difficult to develop his research on curare for South America and the Amazon world was in the 1940s a secondary area for French geo-political interest. In 1901, a mission of the Institut Pasteur was sent to Rio de Janeiro to study the yellow fever. As explained by Ilana Löwy, although, in the following years Brazilian microbiologists largely benefited from collaboration with the Institut
Pasteur, the main aim of the French mission was to study a disease that affected the French colony of Senegal.

In this paper, the interest of the Italian researchers for Amazonia is explained in the light of the cultural climate of post-war Italy, which was dominated by Catholicism and by Marxist ideas. Marini Bettolo was influenced by catholic missionary spirit, whereas Biocca was a leftist scientist influenced by Gramscian ideas on intellectuals and subaltern cultures.

In the concluding remarks, an assessment of the interaction between the national actors and the International actors in shaping research on curare is provided. The role of individual scientists in the relationship between scientific institutions, the industry, and geo-political views of politicians and scientific policy-makers is discussed. Emphasis is placed on the role Daniel Bovet played as a transnational actor in the transformation of research on curare from a colonial to a post-colonial context.