Powering the world: STS and anthropology towards social studies on new energies

More and more countries, regions, communities and companies worldwide are looking for alternative methods of power generation, other than based on fossil fuels. Power generation tends to be associated with natural sciences and engineering, which directly contribute to the development of new technologies. Power generation, however, also has very important social aspects, such as the political and social organization of making energy infrastructures, of gaining access to different fuels, the meaning of these practices and technologies for communities, nations, companies and for relations of power which are either reproduced or subverted when energy is produced in a new way. These social aspects of energy production and consumption occupy such disciplines as anthropology and social studies of science and technology (STS).

The authors of this project are aware of the fact that studies of these new ways of producing electric energy are developing dynamically. Social sciences can and should contribute to the understanding of this on-going transformation, as the creation of new energy sources and relevant infrastructures is possible only due to complex socio-technical processes. Thus, the aim of the project is to develop a theoretical and a methodological approach to social studies of (1) how new socio-technical infrastructures for electric energy production and consumption are made by actors differently positioned towards markets and state institutions, (2) what the meaning of electric energy is for different actors involved in the making of these infrastructures and how it may change (3) how these new infrastructures are positioned towards markets and states in terms of power relations and various types of dependencies.

Through the first question we want to unpack a seemingly socially and politically unproblematic way in which we perceive electric energy as an element of physical nature, technical object or an economic product while, even if electric energy seems to be the same everywhere, the processes through which it is produced in different configurations of actors, technologies, institutions and power relations are different. By posing the second question, we want to delve into a more specific inquiry about the changing meaning and classification that the actors assign to electric energy. The meaning, we argue, is not only given through its economic valuation expressed in price, but that it is also valued in a moral sense through by being classified as “green”, “clean”, “modern”, “dirty”, “old”, “new”, “local”, “our” or “safe”. The third question introduces the problem of power relations which constitutes one of the central problems of critical social theories developed in sociology and anthropology. Energy production has been traditionally the domain of state politics and policies, state-to-state relations and market economics. In the proposed project, we would like to study how production and consumption of electric energy in the three studied cases relates these projects, actors and infrastructures to the states and markets.

The project will apply case study methodology based on ethnography, in-depth interviews and document analysis which are well-established both in STS and anthropology. Three case studies that represent contemporary challenges in constructing electric energy infrastructures have been selected: (1) making renewable energy clusters in Poland in the Pomeranian Region, (2) electrification of some communities in the Cuzco Region (*Departamento del Cusco*) in Peru (mainly with solar panel technologies), (3) making the electric car in Poland. The results of the three case studies will be analyzed both separately and at a later stage also integrated in a joint analysis in order to address the theoretical objectives of the research project.