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IRIS Summer Fieldwork Award, 2017 – Research Report

With the support from the Institute for Regional and International Studies, I had my field trip to Paris, Zurich, Vienna, Hamburg during June 12 to July 27 2017 to collect archival materials and meet researchers for developing the full proposal of my dissertation project, "Denaturalizing the Imperative of STEM as the Common Agent of Change." My project explores how different scenarios of the "global future" were built and circulated through the reassembling of technoscientific methodologies with socio-economic and educational planning in the US, Europe and China in a way that enacts distinctions and control of population quality in the long 1970s. This field trip makes it possible for me to touch the details of the interdisciplinary and transnational transfer of STEM practices during the cold war era and thus render the visibility of operation of principles constructed through these practices that finally order and naturalize STEM as both the method and objective of education for change.

I devoted most of my fieldwork time on consulting archival and library collections at Organisation for Economic Co-operation and Development (OECD), International Institute of Educational Planning (IIEP), UNESCO Institute of Lifelong Learning (UIL), International Institute of Applied Systems Analysis (IIASA). By going through tons of archives at OECD, I found how science and technical personnel, educational planning and innovation, and social welfare were intimately intertwined during the 1960-70s. This research makes visible the conditions that certain kinds of technoscience (e.g., systems theory) were adopted to redefine sciences in a way that society could be reorganized for management. It helps me concentrate on how particular education and innovation projects at OECD (such as International Indicators of Education Systems, Interfutures, etc.) were developed historically to construct the temporal and spatial scales for developing educational needs and specialized manpower to respond to the uncontrolled and dangerous "events" and thus to sustain the economic growth.

The archives of IIASA provides me a rare opportunity to learn about how "common problems" of the modern society were concerned, defined, tackled in the wake of Post-WWII Independence Movement and nuclear crises through the discussions of a group of

international experts summoned by the RAND Cooperation, Ford Foundation, OECD, and the Club of Rome. These documents are particularly helpful for understanding the uneven process of defining the "common problems" and combining them with the "value neutral" tools as a way to bridge the division of East and West and the gap between North and South. They also help me understand the rationality embedded in certain research strategies that was developed to solve the uncertain and complex problems that were thought to be produced by certain kinds of population and their living environments. I will trace further how this rationality operates in educational planning, curriculum making, and teacher training when these strategies were applied.

The historical records of UIL and IIEP show particularly how methods of scientific forecasting and planning were invented through international comparison and reference to make education reforms. Their Governing Board program and experts meeting minutes help reveal how the "crises" of world education were identified through given scientific methods and how international ability and achievement testing were developed to differentiate learners as a way to resolve the "crises." Documents of UNESCO and other international institutes provide an entry to understanding how the shifts of different scales function in educational planning and curricular making and how these scales create "necessity" of particular changes of human beings and thus changes of learners and education.

During this summer field trip, except for consulting archival materials, I also visited researchers who work for those institutes to know how they make sense of their own work in relation to the making of global future and how they understand the historical changes of their institutes. I talked to Dr. David Istance, the director of Schooling for Tomorrow, to inquire upon how OECD differentiates the futurities in innovation and planning; I met Mr. Andreas Schleicher, the director of PISA, to understand how OECD identify the needs of students in their future life and work through international standardization; I met Ms. Cao Ying, a Chinese scientist and educator in IIASA, to learn about the historical connection between IIASA and China and how systematic modelling and scenario building were learned and used in Chinese social planning; Dr. Estelle Zadra, the Secretary General of IIEP provided me a basic timeline regarding the changes of the definition and popularity of educational planning; I also talked to Mr. Thomas

Schauer, a staff of the Club of Rome, to understand the shared vision of different projects supported by the Club regarding the notion of development or growth. At the same time, I also consulted Dr. Regula Burgi, whose dissertation deals with the institutional changes of OECD and its role in international governance of education, to give me suggestions on my project and archival research.

Part of my research has been presented in Theory and Data in Curriculum, History, and Educational Studies Conference at Madison and will continue to be presented in Anticipation Conference in London this fall.