

20 - Science, Technology and Education in Socialist Yugoslavia, 1945 – 1990

Room: **UA.4.218**

Organisers: Maja Korolija & Milica Sekulović

Chair: Kenneth Bertrams

Session Abstract:

Yugoslavia left the Eastern Bloc on June 28th, 1948 to develop an autonomous political position in South-Eastern Europe. The new Yugoslavian system of socialist self-management combined elements of workers' self-government, controlled market relations, state decentralization and Party control. Most of these elements revised or opposed the ideology of Marxism-Leninism. The Yugoslav system represented a heterodox form of socialism. This heterodoxy was also reflected in the formation of specific traits in the fields of science, education, and technology.

Our symposium analyses some aspects of Yugoslavian science, education and technology as part of socialist self-management, in the context of economic, political, and international processes that shaped the Yugoslavian Cold War experience. Our objective is to explore ideas and decisions responsible for the creation of a unique realm of technoscientific and pedagogical practices that have a continuing relevance for current discussions on science and politics, globalization and decolonization. We ask:

- How do different ideological and economic dynamics impact the role of science, education and technology in society?
- How did the break-up with the USSR influence Yugoslavian educational system?
- Which socio-economic forces and actors put up a resistance to science, education and technological development?
- Is autonomous science possible? Is partisanship in science possible?

How are international processes reflected in science/education/technology policy organization?

Throughout its existence, socialist Yugoslavia represented a treasure trove rich in authentic dynamics between science and society. Research into this intertwining opens up an opportunity to talk about Non-Alignment and to illustrate a “third way” that has usually been ignored in the emphasis on bipolar tensions during the Cold War. The symposium thus offers a window into a relatively neglected, yet fascinating, hybrid of self-managed socialism, non-alignment and political sovereignty that were not unknown to most world nations during the post-war period.

State and Science: Yugoslav Nuclear Program (1948-1965)

- Maja Korolija

The aim of this presentation is to briefly describe the development of the Yugoslav nuclear program in the socialist self-management society during the Cold War. Main focus will be placed on the dynamics of the relationship between state and science in Yugoslavia after the 1948 break with the USSR, which was until then perceived as an ideological leader to Yugoslavs. After this fall out, the USA saw Tito, Yugoslav president and Communist Party leader, as an ally and first dissident from the USSR, and thus decided to help Yugoslavia with food and arms. These international changes during the initial stages of the Cold War have reflected on Yugoslav ideology, its economy and state organization, and also contributed to the state's different perceptions of the role of science.

The author of this presentation will try to discuss the dynamics of relations between state and scientists

(physicists), as well as the importance of these relations for the Yugoslav nuclear program and the development of nuclear physics in Yugoslavia in general. Using a comparative method in order to fully and accurately analyze the relationship between the Yugoslav state and science, the author will contextualize it by exploring the relationship between science and the state in cases of the USA and USSR in this period.

Circulation of PC Technologies in Yugoslavia before Its Break

- Jelena Stanulović

During the 80's, even though self-management was still highly praised, Yugoslavia was facing socio-cultural paradigm change towards entrepreneurial culture due to economic crisis. Western influence on the cultural elite, and youth Intelligentsia in Yugoslavia played an important role, especially in the domain of makers culture and personal computers development. All over Yugoslavia, in the late 80's personal computers were self- built, for both its hardware and software components, and the network among enthusiast was established and technology knowledge was freely shared. One PC magazine started the movement publishing in details how to construct and make it yourself your very own PC named after the magazine itself: "Galaksija".

This paper will approach the circulation of "home-made" PCs using the media (magazines, TV, radio). Those media produced other social influences and student participation in makers culture, thus the paper will propose studying "amateur culture" (Jaroslav Svelch) and student participation in socialist Yugoslavia in technology transfer. Secondly, the paper will also address the influence of economic restraints and economic crisis in socialist Yugoslavia in the '80s on entrepreneurial computer business-related culture, and the role of maker culture in the grey/black market economy.

Yugoslavia's Medical Cooperation with Developing Countries during the Cold War

- Vedran Duančić

Various East European socialist countries maintained strong ties with the developing countries across the world, yet in few places was "socialist internationalism" ascribed such an importance as in Yugoslavia, where it was made into one of the pillars of the entire political system. Together with construction and civil engineering, medicine came to play an outsized role in promoting Yugoslavia's interests abroad—and bringing in much needed foreign currency. Between the early 1960s and the dissolution of the country in the early 1990s, thousands of physicians from developing countries were educated at Yugoslavia's universities and thousands of Yugoslav medical experts practiced and taught medicine in the Middle East and Africa. Yet there was no obvious reason for medicine to become the most prominent form of Yugoslavia's international cooperation. How to explain its prominence then? The paper, first, addresses the role of public health in the contemporary developmental theories and policies (including in Yugoslavia's idiosyncratic self-managerial socialist system); second, approaches medical cooperation in light of science diplomacy; and, third, proposes to study the circulation, transformation, and appropriation of scientific knowledge arising from this cooperation in light of the shift from reception studies, which tended to reinforce centre-periphery hierarchies, to studies of appropriation of knowledge and technology, which ascribed more agency to the "receiver," and still further, to the reimagining of scientific production as plurilocal and scientific-technological exchange as globally entangled, taking into consideration actions of a multitude of actors on various levels.

Comment: Vladimir Janković