

Abstracts (İngilizce özetler)

An introduction for Science, Technology and Society Studies

HACER ANSAL - MEHMET EKİNCİ - DUYGU KAŞDOĞAN

Writing the intellectual and institutional history of STS based on a singular moment of origin and following a linear historical timeline is not possible due to its transdisciplinary, heterogeneous and dynamic aspects. Despite the impossibility of such a historical narrative, this article aims to tell the story of STS in terms of its emergence and configuration world-historically and generate its intellectual genealogy and institutional map in Turkey's recent history.

This article is comprised of three sections. First, we start with a discussion of the historical background and relevant political-intellectual discourses which played significant role for the emergence of STS particularly in North America and Europe since 1960's. Numerous approaches to STS are results of this historical background and discursive practices arguing for rethinking the dual categories of "science and technology" and "society" in entangled forms rather than separated. In the second section, significant work produced in Turkey's various social sciences and humanities disciplines with respect to their scholarly treatment of scientific, technological and social phenomena are excavated deploying an archaeological method. This archaeological excavation attempt opens up the intellectual genealogies of STS for further discussion and puts emphasis on three main threads of STS work that have been conversing with STS implicitly: critique of science and positivism, social studies on engineering and architecture, discussions revolving around science, technology and society in relation to capitalism. In the third section, the recent history of STS within Turkey's academic institutions with respect to specific education and training programs is outlined. As an outcome of this outline, an insti-

tutional map of the STS courses and programs offered in Turkey's numerous public and endowment universities in both undergraduate and graduate levels since 1990's is generated. In conclusion, a set of institutional and policy-level suggestions for improving Turkey's academic STS programs both in qualitative and quantitative terms are submitted to the reader's consideration.

Keywords: STS, Science and Technology Studies, science, technology, society, intellectual history.



A laboratory, yet another: Nettachmental curating

EBRU YETİŞKİN

In this article, the curatorial research practice that I have been conducting will be examined as "another laboratory." The main objective of this article is to discuss how "nettachmental curation" has been constructed as a transdisciplinary research practice by adopting "Science, Technology and Society - STS" studies. In this way, the article also aims at laying a theoretical and conceptual groundwork that would contribute further research. In order to examine a conception of another laboratory, first of all, there will be a literature review about the emergence and the institutionalization of laboratory studies, which became a subfield of sociology and sociology of science. This historical process will also be overviewed by making nettachments with the sociology of arts. However, a comparative reading approach will not be adopted due to its problematic function of preserving the distinction between 'science' and 'arts'. Instead, transdisciplinary lines will be constructed because the focus will be given to present laboratory studies' strong nettachment with sociology of science, and its lack of making any nettachments with the sociology of arts. Then, the conditions that led to the conceptual development of "nettachment", such as the deprivation of transdisciplinary research in Turkey, and subversive inquiries of today's art will be overviewed. As a concluding part, the focus will be given to a recent work, "Experimenting with Authority", which I have realized with Paul Vanouse within a seminar series that I have curated, "Contagious Bodies: Network Politics" (2016).

Keywords: Laboratory, curation, curating, transdisciplinary research, sociology of science, sociology of art, nettachment.



Social movements, networks and body

ÖZNUR KARAKAŞ

The article dwells on the possibility and setbacks of conceptualizing embodied and performative aspects of recent Occupy Movements through the concept of net-

work. It's witnessed in the literature that these Occupy Movements are mostly conceptualized through the concept of network as it is developed by Manuel Castells. This is for sure mostly related to the visibility gained by the savvy use of social media in these mobilizations. Nevertheless, it is also seen that this conceptualization of the concept of network falls short of construing the emergence of new communities through embodied encounters, the latter being an important aspect of these movements.

In my article, I claim that the concept of actor-network - as it is developed by the actor-network theory (ANT) and the Deleuze-Guattarian concept of assemblage (agencement) would be more appropriate conceptual tools to account for both emergence and embodiment in Occupy Movements in general and the Gezi Movement in particular.

Keywords: Assemblage (agencement), Deleuze-Guattari, Actor-Network, Actor-Network Theory, social movements, occupy movements, Gezi Movement, body, embodiment, emergence.



“Gendering” science and technology: Feminist Science and Technology Studies

MARAL EROL

An important subfield of Science and Technology Studies is the collection of studies that are conducted with a feminist approach on the relationship between gender, science and technology, and called Feminist Technoscience Studies. This field started roughly in the 1980s with critiques of how few women work in the science and technology careers, and continued on a broad spectrum from studies on sexism in the language and structure of science as an institution, to gendering of domestic technologies, and the new frontiers that reproductive technologies bring to gender roles and relationships. This article aims to summarize and exemplify the main categories of the Feminist Technoscience literature in order to provide for a point of entrance for those who are interested in the field. After a general introduction, the article will summarize Feminist Technoscience with special emphasis on the studies on the body and life in this field, and conclude with a discussion on the possibilities that Feminist Technoscience perspective and concepts can offer us for here and now.

Keywords: Feminist technoscience, gender, feminism, the body.



Infrastructures in Science and Technology Studies: The black box of GAP

AYBIKE ALKAN

Infrastructure studies, which have gained increasing interest in the field of Science and Technology Studies (STS) in recent years, promise to open an analytical window to help us understand the multidimensional relationship between society and technology and to bring a new approach to contemporary ecological research and social movements. These studies underscore the political and social dimensions that are inherent in technologies with a focus on how physical structures such as roads and railways, water supply systems, waste channels shape management systems and social fabric. This article aims to address the different factors playing a role in the formation and development of technologies by following the relationships that make technologies possible and bringing emotions as a field that technological rationality has long ignored. The article introduces different academic approaches to infrastructures and discusses the contribution of STS to elaborate on the relationship between infrastructures and the concepts such as relationality and affect. The dams of Southeast Anatolia Project of Turkey are used as a case to illustrate the conceptual remarks of the article.

Keywords: Dams, affect, development, materiality, technology transfer, technopolitics.



The science of uncertainty: The expected Istanbul Earthquake and the anthropology of experts

EBRU KAYAALP - ONUR ARSLAN

The expected Istanbul earthquake is immersed within a network that is composed of state institutions, universities, legal practices, earth scientists, technological devices, earthquake waves and the earth itself. Driving from Science and Technology Studies, this article aims to unfold the ways in which the earth scientists produce scientific knowledge about the not-yet-happened Istanbul earthquake. This study is about the earth we live on; the technological devices that make the earth legible; and the experts who speak on behalf of the earth. Thus, it would not be wrong to call this research as an anthropology of experts. In the article, we will respectively discuss the studies conducted in the earth sciences before the 17 August 1999 Earthquake; the international transfer of experts, projects and technology to Turkey after the 1999 Earthquake; the various scientific representations of the earth via state-of-the-art devices within the emerging scientific setting; and lastly, the governing power of numbers and maps as outcomes of scientific studies.

Keywords: Earthquake, earth sciences, earth, experts, maps, risk analysis, Istanbul.



Eugenics as a “modern” technology and genetic sciences in the twenty-first century

MURAT ERGİN

Mapping the human genome in the beginning of this century has, for many, ushered in an age that marked the end of biological race and ethnicity and full use of human potential. This paper opens the “black box” of new genetic technologies and discusses some of the assumptions and prospects in the background of genetic studies. These assumptions emerge in three layers: those that have to do with humans as a “species”; those that build on the uniqueness of the individuals; and those that include humans into sub-groups, such as race and ethnicity. While examining the way new genetic technologies respond to these three layers, this study also establishes conceptual parallels with the global spread of eugenics in the nineteenth century in order to make observations about how science and technology cross borders in an unequal world.

Keywords: Genetics, eugenics, black box, race, ethnicity.



Making families in secrecy: Seeking forbidden biotechnologies as last resort abroad

BURCU MUTLU

This article focuses on the disguised reproductive travels of Turkish citizens, —as it is popularly called as “tube baby tourism” in the media, —seeking abroad reproductive technologies such as sperm and/ or egg “donation,” which are forbidden in Turkey. These travels continue despite the 2010 ban on transnational gamete donation that the AKP government put into force by taking the national ban on gamete donation a step further. Turkish couples’ quests for donor gametes abroad to have children, in cooperation with clinics and doctors, might seem a subversive move from below vis-à-vis the AKP governments’ recent pronatalist policies. However, for couples, gamete donation, as long as it is kept hidden, is more a technology of “normalcy,” reproducing the heteronormative family ideal, rather than subversive of social norms and values. Based on ethnographic fieldwork I carried out in a Turkish-Cypriot IVF clinic which provide reproductive services predominantly to Turkish citizens, and interviews I conducted with Turkish couples seeking donor gametes in this clinic, travelling from Turkey, I will discuss in this paper how these couples keep their use of forbidden biotechnologies hidden from others through various interrelated practices of secrecy, and how this enables them to maintain a “normal family” appearance.

Feminist STS-informed, and mostly Western-centric, studies on reproductive technologies problematize the ontological boundaries between “biological” and “technological” by focusing on the implications of these technologies on reproduction and kinship relations. Within the context of gamete donation, secrecy is mostly discussed in limited terms of anonymity and disclosure, adopting a biogenetic perspective. Exploring family secrets as knowledge practices, this article aims to address different aspects and meanings of reproduction, family and kinship relations beyond genetic reductionism, and by doing so, to contribute to feminist studies of reproductive technologies. In the age of technologized and globalized reproduction, not only reproductive processes but also secret practices are temporally and spatially *distributed* across (individual and national political) bodies and borders.

Keywords: Reproductive technologies, reproductive tourism, family, gender, biopolitics, transnationalism.



Bioeconomy: A thought experiment on the “political economy of life”

DUYGU KAŞDOĞAN

This article explores “bioeconomy” by focusing on the accelerated traffic between the life sciences and capitalism by the 1970s. Bioeconomy as a concept and practice spreads through political economic, and technoscientific spaces via the reports and documents produced by the OECD, the European Union, and the White House. Although bioeconomy has not occupied Turkish political and economic agendas to a great extent, scientists play a vital but invisible role in the construction of bioeconomy sector in Turkey at local, national, and international scales. In order to make these invisible processes visible, this article investigates the conditions that make the bioeconomy possible, by whom, as well as where and how it is used as both an analytical concept and a research object. The first half of the article discusses the ways that the bioeconomy is designed at the policy scale, and further reproduced as a “vision,” or a way of seeing life, through projects in the natural sciences and engineering. The second half provides different ways to critically analyze the bioeconomy in reference to several key works in the field of Science and Technology Studies (STS); it opens a space to discuss how bioeconomy has simultaneously shaped our imaginaries of “life” and “economy.” It shows that bioeconomy leans not only on the imagined co-production of economy with biology, but on their fusion. This paper demonstrates that such an imaginary can be explored and problematized by looking at the processes of the “economization of life” within the analytical framework of *the political economy of life*.

Keywords: Bioeconomy, life sciences, capitalism, the political economy of life, the economization of life.



Industry 4.0 and its impact on employment: Can it be an opportunity for women?

HACER ANSAL - NİHAN YILDIRIM

The social and economic impact of industrial revolutions has always been one of the most important areas of research in the Science Technology and Society (STS) discipline which studies the interaction and interrelations between science, technology and society. As it is well known, industrial revolutions create disruptions just as Industry 4.0 which is also called the Fourth Industrial Revolution, started to pose considerable changes to economies as well as societies in recent years. Technological developments related to digital technologies (including cloud computing, big data, new industrial internet applications, smart factories, robotics and 3D printing) at an unprecedented rate, result in a wide range of changes to manufacturing processes, outcomes and business models as well as employment.

These changes have already generated some indications on how the nature of manufacturing work and hence employment structure will be transformed in the near future. According to the studies carried out millions of jobs are likely to vanish worldwide due to the technological changes. On the other hand, just as in the previous industrial revolutions, Industry 4.0 will also generate opportunities for those who can capture them.

The main purpose of this paper is to try to unravel the possible impact of these developments on employment and more specifically on women. Can Industry 4.0 be an opportunity for women to participate more in the sectors that will be creating more jobs and hence can it promote gender equality at work? Or will it raise the existing barriers in female careers that make it harder for women to take advantage of the new job opportunities? These questions will be tried to be highlighted based on the studies carried out on the conceivable impact of Industry 4.0 on economy and society.

Keywords: Industry 4.0, technological changes and employment, women in ICT, gender inequality on work, STS.



A discussion on the implications and limits of Industry 4.0: Is “online capitalism” possible?

ÖZGÜR NARİN

Industry 4.0 is a European project that aims to integrate digital networks and manufacturing process with the whole commodity-value chain by using sensors and cyber-physical systems, that is, the integration of computation, networking, and

physical processes. The claim of the project is that the Big Data collected by the cyber-physical systems, kept and processed on The Cloud would help system to be integrated and decentralized at the same time. The artificial intelligence and Big Data analytics can help the operation of the whole process, through which, the Industrial Internet of Things can spread across the whole value chain from suppliers through manufacturing to consumption. While these are the claims of the "Industry 4.0", to what extent it can be implemented and the criticism of the technological determinism that it implies will not be the focus of this paper. In this paper, I will rather discuss the implications and limits of the "Industry 4.0 initiative". This discussion is built over two main sets of questions: (1) If the whole process is digitalized and controlled by computer algorithms as projected, can the industrial production as a whole be optimized and integrated? Do the Big Data and analytics make online capitalism possible? On the condition of the contradicting interests and profits in capitalist competition, is it possible to think optimization only as a technical problem?; (2) Does "the invisible hand" of the market become visible by the Big Data gathered from cyber-physical systems? By unpacking these questions, this paper underlines that the "Industry 4.0" project has significant limits due to capitalist competition though the conditions of integration of the whole industry mostly exist.

Keywords: Industry 4.0, Industrial Internet of Things, cloud computing, Big Data and analytics, integration, capitalist competition.



How to use memoirs and diaries in historiography?: A methodological analysis based on the ego documents of Ottoman soldiers served in World War I

MEHMET BEŞİKÇİ

This article makes a methodological analysis on how to use autobiographical texts (ego documents) such as memoirs and diaries in Ottoman historiography; the article also dwells on potential contributions of this genre of documents to historical research, as well as possible problems that it can lead to. Although Ottoman historiography has been familiar with autobiographical texts, so far this familiarity could not pave the way for in-depth methodological discussions on the use of ego documents in historical research. Moreover, some of the existing evaluations on this genre of documents even produced various one-dimensional and restrictive perspectives, which have also had a constrictive effect on the horizon of Ottoman historiography. The article problematizes this shortage of methodological discussions and restrictive perspectives, and, on the basis of a case study on the ego documents of Ottoman soldiers served in World War I, it aims to present solutions on how to overcome them.

Keywords: Memoirs, diaries, autobiographical texts, ego documents, historiography, Ottoman soldiers, World War I, soldiers' memoirs.