Technology, Temporality and the Study of Central Asia

Call for Articles for a Special Issue of "Central Asian Survey"

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The study of Central Asia has been mostly a study of people. Debates have largely revolved around concepts like ethnicity, identity, religion and – increasingly – statehood, governance or networks of trade and labor migration. Besides, environmental aspects have attracted more attention in recent years.

Scholarship on technology and infrastructure in Central Asia is emerging but still needs to be related more closely to current theoretical debates in fields such as history of technology, science and technology studies, and infrastructure history (for an overview see van der Straeten 2019). With this special issue we aim at facilitating an interdisciplinary discussion of interpretive frameworks that can integrate studies on technology and material culture in the region and allow for formulating more inclusive research questions. The conceptual point of departure is the notion that the permanent structures in which people live are more than a backcloth for the analysis of social change and movement. They deserve attention on their own as they constitute the material base of state, sociality and daily life in Central Asia. By dedicating a special issue to these structures, we aim at achieving a more comprehensive understanding of Central Asia as a region and its specific patterns and trajectories of technological and infrastructural change. At the same time, the case studies of the special issue will feed into more general debates on technology and material culture in the context of the power imbalance, ontological domination and economic inequality that are characteristic for many (post)colonial and (post-)Soviet societies.

This endeavor resonates well with a current turn in the historiography of technology, a discipline that is gradually overcoming its preoccupation with novelty in favor of a more differentiated engagement with the emergence, persistency and disappearance of technology. This debate revolves around what is framed as the *temporality* of technology and aims at unpacking and critically reflecting the relationship between technology, time and historical change (for an overview see Weber 2019). It has emerged as a critique of a way of thinking about technology that

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is largely preoccupied with novelty (Lindqvist 1994; Edgerton 2006). Authors highlight the co-existence of allegedly "old" and "new" technologies in daily life and the notion that the often very long phases of use, of gradual decay and the afterlife of certain technologies deserves as much attention as their innovation phase. They are calling for a perspective that is grounded in the material world of technology-in-use that surrounds us, not in abstract imaginations of technologies that succeed each other on a modernisation path. This approach can be fruitfully related to theoretical considerations in infrastructure history: infrastructure systems can be seen as mediators between the sphere of technology and people's everyday lives and are in different ways related to political power (Engels/Schenk 2015; Högselius/Kaijser/van der Vleuten 2015). Studies on urban infrastructure have examined the interface of the human body, city spaces, landscapes, and technology in view of power relations and social pressures (Gandy 2014). Socio-technical change is understood as a contested discursive process, highlighting contingency and agency (Moss 2014). Infrastructure as well as environmental history have challenged existing chronologies because the planning, construction, and use of infrastructure as well as environmental problems do not fit neatly into political periodization but often transcend it (on the example of water infrastructure: Obertreis/Malinova 2019).

From a Western modernist perspective, the timelines of technological change in Central Asia must appear as a series of ruptures and tensions that arise from asynchronicity between changes in the technological landscape and the societies living in them. A first set of narratives revolves around the implementation of technologies that are – at least in the eyes of contemporary commentators – believed to be "ahead" of their receiving societies. Scholars of Tsarist, Soviet, and post-Soviet Central Asia have studied the large-scale, mostly state-driven (and partly forced) modernization projects that have, to a great extent, shaped the region's technological and infrastructure landscape. Irrigation systems and cotton growing have attracted much attention. Politics, practices and paradigms of development have been examined recently.

The second set of narratives are storylines of technologies being or falling "behind" the societal requirements or expectations towards them. As much as the initial transformative character of the Soviet modernization project in Central Asia, historians have highlighted its shortcomings and deficiencies. After all, the Soviet command economy's lack of innovative capacity has been widely cited as the root cause for it falling behind the Western market economy and for its eventual collapse. For post-Soviet Central Asia, studies in this category largely are concerned with the deterioration of infrastructures, the corrosion of large, formerly state-owned enterprises, and the shrinking or demise of whole industries. As a typical reaction to these processes, consumers rely on or even return to "outdated" technologies.

Several recent studies, many of them from anthropologists, have complicated these two sets of narratives and provided instructive counter-examples. They highlight not only the persistence of allegedly "old" technologies in everyday life but also their intentional and deliberate use. For post-Soviet Central Asia authors have recently emphasized the agency of people in maneuvering their way through technological landscapes, that are characterized by a highly heterogenous temporality. These studies call for a more differentiated analysis of temporality of technology in Central Asia. They illustrate the inadequacy of qualifiers like "old" and "new", "modern" and "traditional" to make sense of the ensemble of technologies that shapes everyday realities in the region. There is a need for more case studies to lay the groundwork for a debate on the temporality of technology that is truly emancipated from the modernization paradigm.

Potential contributions to the special issue could engage with one (or a combination of) the following questions with a geographical focus on Central Asia:

- How do people perceive, cope with, or capitalize on the simultaneity of technologies that are of different ages and in different stages of their life cycles? How do they maintain the functionality in often adverse environments? The focus should be on what Weber has coined the *polychronic* qualities of technology (Weber 2019).
- Which temporal dynamics can be identified for technologies in different economic sectors or spheres of everyday life? Do we observe a clear succession or a coexistence of different technologies? Are those technologies operated rather independently from each other or are they interrelated? Especially for infrastructures and buildings, can we unpack different technological layers that have added up over time? Can we identify fault lines, breaks or missing layers? What role do concepts and ideologies play that are inscribed in older layers of technology?
- What are common practices of disposal, reuse and recycling, both on individual and state level? What are technical and cultural criteria for obsolescence of technology in Central Asia? When does waste become a resource? How has industrial decline opened up new scope of action and who has made use of these new possibilities? This set of questions also offers a promising interface with the environmental history of Central Asia.
- How did the way in which Central Asia was integrated in Soviet command economy had impact on the implementation and the life cycles of technology? What were the effects of the disintegration of a highly interwoven economic space after the dissolution of the Soviet Union? How has the accelerating circulation of products and tastes changed the lifespan of different technologies, both positively (e.g. through the better availability of spare parts) and negatively (e.g. through an increasing desire for novelty/perceived obsolescence of "old" products)? Are technological lifecycles contracting along with the acceleration of global flows?

Applications are welcome from different disciplines including history, technology studies, economics, environmental studies and cultural studies. Please send abstracts of no more than 800 words and a short CV, both documents in English or Russian, to

<u>vanderstraeten@pg.tu-darmstadt.de</u> by May 31, 2019. Full article manuscripts will have to be provided by March 1, 2020. We will have the chance to discuss manuscripts in detail at a workshop in Bishkek at the French Institute for Central Asian Studies (IFEAC) in April 2020. The deadline for revised manuscripts is July 31, 2020.

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