



The Social Life of the Syr Darya: Connecting and Disconnecting Enviro-Technical Systems on a Central Asian River.

by Jeanne Féaux de la Croix

Often described as essential arteries in bodies of land, rivers that ‘flow all by themselves’ seem to suggest a self-evident mode of natural connectivity, a narrative thread as compelling as gravity itself. Yet the 20th-century history of the Syr Darya and its upper-course, the Naryn, do not tell the story of an effortless quasi-road. Known as the Oxus to Alexander the Great’s scribes, the ‘secretive’ river (as its name is sometimes interpreted) carries snowmelt west from the heights of the Tian Shan range on the Chinese border. Descending from Kyrgyzstan through densely populated agricultural oases in Uzbekistan and Tajikistan, after 3,000 kilometres it reaches the shored-up vestiges of a once vast Aral Sea in western Kazakhstan.



City of Khojand (Tajikistan), founded by Alexander the Great on the Syr Darya. © Mokhira Suyarkulova



Map with case-study sites of the Volkswagen Project ‘The Social Life of a River: Environmental Histories, Social Worlds and Conflict Resolution along the Naryn-Syr Darya’. © University of Tübingen

Silk Road cities and irrigation networks have long moved with the fickle shifts of the river bed. Until the 20th-century onslaught of canalization, swathes of riparian tugai forests harboured a rich ecosystem stalked by tigers.



Local water manager carrying out repair work on major canal, Ferghana valley, ca. 1939.

© Max Penson, courtesy of maxpenson.com.

Since the early Soviet period, great effort has been spent in creating greater river connectivity. In the post-war period, the region's population and economy became increasingly connected through the building of large hydropower stations and irrigation canals in the Soviet republics of Central Asia. Two interdependent, river-dependent systems were controlled from offices in Tashkent: first, the massively expanded system of irrigated cereal, tobacco, vegetables and – king of the crops – cotton. Second, the highland dams securing water for irrigation in the lowlands were also designed to feed the region's electricity grid.



Dam worker on Uch Kurgan Hydropower Station, now militarized as part of the Kyrgyz-Uzbek border.

©Gulzat Baialieva

These key aspects of the Syr Darya can be readily grasped as an enviro-technical system, one which does not just encompass watery ecotopes and immediate users. As developed by Sara Pritchard, an enviro-technical system allows the river to be understood as both a natural and a technical construct, while keeping in mind that the river is not only a construct, but exists as a material force in its own right (Pritchard 2011: 15-16). The Syr Darya's evolving characteristics and life can be understood as the effect of particular infrastructures linked to it, including the artefacts, people and skills that go with them.

These heightened connections of the Syr Darya had radical effects: at least some Soviet scientists knew and accepted that sapping the Aral Sea's feeder rivers to expand agriculture would cause a radical shrinking of its surface area. The ecological, economic and human health impacts of 90% of the sea evaporating, along with its fishing industry, are well documented.



Abandoned fishing vessel on former sea bed. © William Wheeler.

In the glasnost era, the fate of the Aral Sea and other environmental catastrophes were at the forefront of public discussion; few imagined the Soviet system would not survive this critique. However, for the river and river-dwellers, disintegrating this system has not resulted in more equitable water distribution, or lower pressure on the river's resources. The post-Soviet era initiated active and conflictual disconnections along the Syr Darya, as the centralized planned economy collapsed, and as the basic regional exchange of sending water downstream, and other forms of energy such as gas and oil upstream, disintegrated. Borders were militarized and bridges destroyed, cutting multilingual Tajik-Uzbek-Kyrgyz kinship networks off from one another and creating new lines of tension between neighbouring farmers in need of water, and consumers in need of electricity in the harsh winters.



Bridge blown up between Kyrgyzstan and Uzbekistan. © Gulzat Baialieva

Regional disputes over rights to the Syr Darya's water volume, and the timing of water releases from dam reservoirs, became an intransigent knot of upriver and downriver interests. Though the demise of heavy industries along the river improved water quality in some respects, pesticides and urban pollution still continue to collect in the river, while open uranium tailings in the headwaters threaten catastrophe in this earthquake zone.

The reduced figure of the Syr Darya simply as a contested volume of water, as a potential resource for generating electricity or crops here or there, dominates policy- and news reports, with direct consequences. One consequence of this long-hegemonic narrative is that citizens in the Tian Shan highlands think of their river mainly as being wasted – until the long-promised dams are finally built.



Tourism and mobile livestock herding on the Kichi Naryn, a feeder river of the Syr Darya, Kyrgyzstan. © Jeanne Féaux de la Croix

The dominance of these twin resource narratives also means that entire sub-economies, such as reed harvesting in the Syr Darya delta, where reeds feed cattle, insulate houses and create income, remain unrecognized as significant aspects of river life.



Winter reed harvesting in western Kazakhstan. © Aibek Samakov.

As the leaky infrastructure grown from the dream of total river exploitation limps along, human and non-human river-dwellers are however making use of it in unexpected ways. As described by Anna Tsing, the potential liveliness of these post-capitalist – and also post-socialist – spaces often fails to reach our attention, as they fit neither the model of ‘pristine nature’ nor of total modernist control (Tsing 2015:18).

Along the Syr Darya, we find dam reservoirs silting up and offering new, shallow water and reed systems – in Tajikistan even serving as new nature reserves. If manipulating the flow of rivers has deprived the Aral Sea of much of its volume, some of these flows have rerouted themselves to fill the Arnasai depression west of Tashkent instead, providing a new stop for migrating birds as well as an attractive site for the weekend villas of well-to-do urbanites.

Over the last century, it has clearly been hard work controlling how and when the Syr Darya connects different kinds of people, forces and environments to each other.



Tasattyq ritual in western Kazakhstan: slaughtering a bull and mingling its blood with the river water to ensure timely rains. © Aibek Samakov

With hundreds of glaciers in the Tian Shan now clearly ebbing, the question of whether and how the Syr Darya reaches human and non-human habitats now connects to a climatic world well beyond Central Asia. And this then is a world where the 'environmental' elements of the Syr Darya start to put into question the dominant, highly reductionist engineering visions of river life.



Riparian forests on the upper Naryn, Kyrgyzstan. © Jeanne Féaux de la Croix.