

Panel report:

## **In:visible Infrastructure: Hidden Connections and Imperial Maintenance, 1850–1950**

Lucerne, 08.07.2025, Seventh Swiss Historical Congress

*Organizers: Debjani Bhattacharyya / Paul Blickle / Lars von Felten-Kury*

*Participants: Paul Blickle / Lars von Felten-Kury / Lea Kasper*

*Commentary: Debjani Bhattacharyya*

### **Report by: Amal Shahid, University of Lausanne**

The history of imperial infrastructure has tended to focus on visible, large projects such as dams, railways and bridges. This panel attempted to highlight less visible forms of infrastructure that impacted imperial trade and mobility, distinguishing between hard (physical) and soft (institutional) infrastructure. Overall, the panel viewed soft infrastructure not as neutral to historical events, even if often hidden. Instead, the panel contended that it played an active political role and impacted the way the British imperial economy functioned.

The first presentation by **PAUL BLICKLE** (Basel) shed light on the under-researched history of ballast, a heavy material added to ships for stability. Using sources from Caird Library and Archive, Blickle demonstrated how “ballast enabled and maintained global trade flows” in the British Empire during the nineteenth century. Its obscure history was rendered visible in the 1850s due to the struggle against deplorable working conditions. Ballast heaving was a difficult and exploitative task, involving heavy manual labor on boats and long working hours, including night shifts with dim lighting. Trinity House held a monopoly on producing and selling ballast, relying on labor of the London poor without directly recruiting them. Instead, the task was outsourced to other naval suppliers such as grocers, butchers or housekeepers. Those interested in becoming ballast heavers were assembled to drink beer, and whoever had the highest tab might then be employed – their earnings reduced by the amount on the tab.

Blickle explained how the political campaign to improve the working conditions of ballast heavers was led by co-heavers and teetotalers Thomas Tighe Flynn and Henry Barthorp in the 1850s. Strikes and collective action were however of minimal effect, as ballast heaving was an unskilled and replaceable task. Despite national reporting of the exploitation, the campaign to improve labor conditions functioned on a shoestring budget. Success came in the form of support from Prince Albert, the Ceremonial Master of Trinity House, who supported direct employment of ballast heavers by Trinity House. Later, Flynn and Barthorp also successfully lobbied shipping firms and their owners for political support, aiming to remove ballast heavers from squalor.

Blickle summed up that while ballast heaving was a local affair, dependent on labor supplied by the poor, it maintained global shipping and commodity trade. This case showed how ballast heavers through their campaigning rendered themselves visible to the state and public.

Next, **LARS VON FELTEN-KURY** (Basel) presented the infrastructure of navigation channels in the North and South Sands of the Strait of Malacca from an environmental history perspective. The Strait of Malacca was known as the Suez Canal of Asia, a natural passage that was significant in capitalist expansion of the region through the commodification of nature by imperial infrastructure like steamships. Von Felten-Kury argued that particularly wind, water and sand played an essential but hidden role in maritime capitalism. Hence, according to him, imperial infrastructure had to be negotiated with the environment.

Von Felten-Kury laid out how in 1859, the fastest and main route in the strait was through the North and South Sands, giving the British Empire an urgency to navigate this area by overcoming the Pyramid Shoal. The North and South Sands were the most dangerous part of the Malacca Strait due to their specific natural make-up. In this way, von Felten-Kury noted, the environment shaped two imperial initiatives: creation of environmental knowledge and deployment of physical infrastructure to gain control over the strait. The first aspect of environmental knowledge had three categories: the first included hydrographic charts and maps to understand the details of currents, but von Felten-Kury observed that these charts were always provisional as no survey could capture all possible dangers. There could be no certainty of predictability as the sea resisted legibility. The second was meteorological and climatological knowledge to ascertain wind patterns, monsoons and storms. Von Felten-Kury found this information published in reports and gazettes, so that journeys could be timed. Still, shipwrecks continued since nature resisted prediction. Finally, sailing directories and nautical manuals contained detailed guides on navigation. Von Felten-Kury's sources used vocabulary for the North and South Sands that seemed to give it its own agency. The result of these initiatives included the construction of lighthouses near the sands and the research of new technologies like seabed engineering systems. This constant adaptation of imperial infrastructure and engineering techniques following environmental resistance is what von Felten-Kury calls 'environmental infrastructuring'.

The final panel presentation by **LEA KASPER** (Basel) focused on the British-Swiss Chamber of Commerce (BSCC) as a case of soft infrastructure. Founded by J.R. Cahill in 1920, the role of the institution was to build solid Swiss-British networks and trade relations as part of World War I recovery. Using network analysis illustrated on maps, Kasper explored how the BSCC had a dual layered infrastructure that connected financial and legal ties with state and intelligence infrastructure. The institutional history rested on extensive networks and relations, a complex management system for informal connections. Kasper thus used examples of hidden diplomatic and intelligence activities of chambers of commerce to demonstrate invisibility of soft infrastructure. The BSCC for instance functioned as a tool for geopolitical positioning. Despite periods of

institutional weakness, Kasper showed that the BSCC continues to expand today and plays an important role in both economy and politics.

**DEBJANI BHATTACHARYYA** (Zurich) commented on the thematic coherence of the panel and noted how it provided a new perspective to think about specific issues such as labor, technology and environment. Overall, the panel generated a fruitful discussion by bringing forth how certain forms of materialities have been taken for granted by historians, how more neglected infrastructure can be analyzed by examining ungovernable materialities, and how the British Empire regularly faced resistance from people and nature.

Amal Shahid

#### Panel overview:

Paul Blickle: Ballast: A Hidden History of Maritime Mobility in the 19th Century

Lars von Felten-Kury: Water, Wind, Sand: Imperial Infrastructures, the Age of Hydrology, and the Making of Transit Environments in the Strait of Malacca, c.1870-1920

Lea Kasper: Building Resilience in Fragility – The British Chamber of Commerce for Switzerland 1920-1950

This report is part of the infoclio.ch documentation of the [7th Swiss Congress of Historical Sciences](#).

**Citation:** Amal Shahid: In:visible Infrastructure: Hidden Connections and Imperial Maintenance, 1850-1950, infoclio.ch-Tagungsberichte, 19.08.2025. Online: <<https://doi.org/10.13098/infoclio.ch-tb-0366>>.