

Lilli Hasche and Janne Jensen

The Colonial Making of Bremen's Peri-Urban Port Area

ABSTRACT The colonial endeavor, being a project of extraction and expansion at its core, depended on stable infrastructures and affected both colony and metropole. Bremen's docklands, now marketed as the *Überseestadt*, come up as one such structure and indicator of the effects of colonialism in European metropolises. This article contrasts the event-centered narrative of the construction of the port with praxeological and postcolonial approaches to the making of colonialism. To lay open how ports can be described as colonial, we conceptualize Bremen's docklands through two distinct sets of practices in its global-historical context: 1) practices of representation of interests and politics of port construction; and 2) practices of technoscientific port construction. Researching the colonial and global-historical foundations of port cities and their infrastructures allow us to better understand colonialism as global praxis. They offer a trajectory through which to think about contemporary postcolonial power asymmetries and inequalities.

KEYWORDS colonial port construction, imperial infrastructures, postcolonial Science and Technology Studies, waterfront revitalization

Introduction

Since the early 2000s, after the so-called *Überseehafenbecken* in the Hanseatic town of Bremen was filled up with sand from dredgings in the outer Weser, the former port area has been transformed into a mixed-use area, now called the *Überseestadt*. This transformation follows a global trend in urban development discussed as waterfront revitalization. Alice Mah has coined the term “global legacies” to speak about the colonial histories of such spaces where urban streetscapes are packed with maritime clichés (Mah 2014). Only rarely is the expansionist and colonial context of European seafaring acknowledged when it comes to such clichéd discourse on maritime

spaces. We took this as our point of departure in 2014 to develop a critical walking tour on the post/colonial traces inscribed in the *Überseestadt*.

Both in the scope of our walking tour as well as in this paper, we start from the assertion that colonialism, being a project of extraction and expansion at its core, affected both colony and metropole. The colonial endeavor depended on stable infrastructures. Bremen's docklands, now marketed as the *Überseestadt*, come up as one such structure and a worthy object of study about the effects of colonialism in European metropolises.

Commonly, port construction is explained as a result of merchant or economic needs respectively. This claim is in line with recurring narratives about the Hanseatic city's long-standing outward orientation and the sole acknowledgment of its positive effects on the state's prosperity. Both fall short of the complexities at hand. Diverging from this argument we contrast the event-centered narrative with praxeological and post-colonial approaches on the making of colonialism. In order to reveal how these ports can be described as colonial, we conceptualize Bremen's docklands through two distinct sets of practices in its global-historical context: 1) practices of representation of interests and politics of port construction; and 2) practices of technoscientific port construction. Researching the colonial and global-historical foundations of port cities and their infrastructures can then offer a trajectory through which to think about contemporary postcolonial power asymmetries and inequalities.

We will start with a short introduction to the theoretical set we use to look at maritime and port infrastructures. In a second part we situate Bremen's port infrastructures in a colonial context, firstly by showing how they are inherently interwoven with the increase of colonial overseas trade and secondly how the field of port construction and waterways engineering itself profited from colonial expansion. In the third section we synthesize two sets of practices that allow us to better understand colonialism as global praxis. We then give an outlook on how to use this perspective for a critical engagement with contemporary phenomena of inequality in maritime and affiliated industries.

Imperial Infrastructures

Much of this research has resulted from our practice of guiding critical walking tours through the former docklands in Bremen. Methodically our undertaking could thus be best described as tracing and unearthing global legacies inscribed in dominant narratives and port city identities as well as in the material structures themselves (Mah 2014). Stuart Hall has famously

brushed off the “false and disabling distinction between colonisation as a system of rule, of power and exploitation, and colonisation as a system of knowledge and representation” (Hall 1996, 253). While in situ we deliberately intersect issues of memorialization of Bremen's former docklands with counter-narratives of entangled history that speak of dispossession and systemic violence, our focus in this paper lies on the technoscientific, infrastructural and material underpinnings of colonialism. We are interested in how port construction and overseas trade enabled and benefited each other in the colonial era, and especially in post-Suez times, and how both helped to further an exploitative and extractive system.

Infrastructures and engineering projects have played a significant part in the implementation and maintenance of colonial rule, resulting in lasting asymmetries and continued violence (van Laak 2004). The idea however that a pre-configured, seemingly neutral, and universal technoscience diffused from the European metropolises to the colonial margins is called into question from a postcolonial perspective (Cooper and Stoler 1997; Anderson 2002; Tsing 2005). In the wake of such epistemological reconfigurations and calls to provincialize Europe, scholars have begun to research the global entanglements of formerly contained historiographies and to engage in attempts to transcend the local-global dichotomy in research designs (Chakrabarty 2010; Knecht 2010; Beckert 2015; Conrad, Randeria, and Römhild 2013). These attempts are of significant interest for a renewed understanding of knowledge production, science, and technology.

It is not within the scope of this paper, especially with regard to the archival material at hand, to reconstruct and document colonial ways of knowledge production across the co-productive tensions between non-Western epistemologies and Western modes of knowledge production (Cooper and Stoler 1997; Eckstein and Schwarz 2019). Beyond these constraints, the sole examination of written European accounts inevitably produces a bias. In effect, the notion of colony as laboratory of modernity rather serves as a continuous reminder to question local history back to front.

Studies on imperial infrastructures have long focused on “rail imperialism,” as railways exemplarily highlight both inner and outer tendencies of imperial integration and expansion (van Laak 2004). Daniel Headrick (1981) has slightly expanded the debate to the marine realm. He writes on technical innovations in shipbuilding, the construction of canals such as the Suez Canal and the introduction of submarine cables (cf. Barak 2013). Yet, both in Headrick's work and in other classics of transnational or global history, port construction in the “post-Suez” colonial era has been an underexplored theme (cf. Headrick 1981, 165–79; Osterhammel 2014).

This holds especially true for the German context, in which the critical reassessment of its colonial past has only recently gained momentum.

Despite their transformations in the colonial era, ports are all too often treated as seemingly a priori facts that serve the transit of global flows. But does it suffice to use “harbor” as a containable and stable frame of analysis, in which interactions between goods and people can be analyzed (Brugger, Schürch, and Tremmel-Werner 2018)? Ports are not just places “where mobility is interrupted, at least temporarily” (Heerten 2017, 166). Instead, we suggest regarding these places as continuous consolidations, based on heterogeneous processes and with often unintended effects. In short, we argue that marine infrastructures should be investigated in their material and nature-cultural becoming. We herewith loosely plug into approaches that are interested in the making of colonialism through heuristics of practice. We think of practice as a historical process acted upon by specific actors while at once providing a hook for further practices to hinge on.

John Law has famously shown how colonial trade and its securitization depended on “heterogeneous engineering” (Law 1987, 230ff). He therewith wishes to conceptually grasp the dialectic interactions of diverse actors beyond the nature/culture divide. Such approaches contrast both dominant and recurring narratives: firstly, the paradoxical fashion in which port cities tend to regard the development of their ports as a locally contained process; and secondly, stories about the construction of infrastructures, in which authorship is solely attributed to engineering geniuses. Latour writes about such narratives, that in the light of far-reaching effects it would seem absurd not to ask for equally enormous causes (Latour 1986, 2). Nonetheless, both Latour and Law have been famously criticized for their *en passant* rearticulation of the diffusionist idea (Anderson 2002).

Furthermore, we would like to reaffirm the critique of the myriad of hydraulic metaphors and especially “flows” that lack explanatory power (Rockefeller 2011, 558). Instead, “[p]ostcolonial approaches [...] can reveal the terrain that channels [...] circulation, showing the historical and political forms and interactions, the systematic exclusions and inclusions that make these flows turbulent” (Anderson 2015, 652). We would like to build on this apt description. For us, in order to study specific cases of colonial port construction, Anderson’s call implies scrutinizing the robust field of civil engineering itself and situating it in its colonial context. In the following, we thus want to give a suggestive account of how (technical) transformations in port cities could be studied in their interrelations with the colonial project, specifically with the demands of colonial trade but also in their dialectic relation with nature.

Bremen's Docklands as Imperial Infrastructures

Against this conceptual backdrop we symmetrically regard both colonial and metropolitan ports as imperial infrastructures that have to be scrutinized in their making of and through the interactions of heterogeneous actors beyond the nature/culture divide. But in what ways can we speak of the Bremen ports and today's *Überseestadt* as imperial infrastructures? To approach this question, we will draw a brief historical sketch of the Bremen ports from 1800 until the beginning of World War I in 1914 as colonial infrastructures.

In the beginning of the nineteenth century, as Europe's imperial powers controlled the access to their respective colonial "possessions," Bremen traders were bound to trade via the European ports of France, Britain, Portugal, and the Netherlands. It was not until the independence of the North American Thirteen Colonies in 1776 that the traders could establish direct trade relations with a then former colony. Despite the absence of formal German colonial territories, Hanseatic merchants thus became a force in the imperial endeavor by trading colonial goods like coffee, tobacco, cotton, tea, and rice (Müller 1971, 47–8; Becker 2002, 64).

Meanwhile the river Weser, an artery of Bremen's Hanseatic past, had silted up. Trade to the inner-city ports slowed as ship owners preferred less obstructed destinations further downstream. In the town of Brake, then part of the competing Grand Duchy of Oldenburg, the number of unloaded goods rose steadily—a serious threat to Bremen's dominant position on the lower Weser. While shipping and colonial trade in particular became increasingly important, Bremen's traders and politicians feared being disconnected and losing its title as port of call.

Two deciding treaties then made the year 1827 a turning point in Bremen's trade history. In response to the siltation and the danger of disconnection from overseas trade, the Bremen mayor Johann Smidt acquired land from the state of Hanover and founded a new port and the corresponding city of Bremerhaven at the mouth of the Weser estuary. With the signing of a free trade agreement with the young American republic, trade could flourish. Early on, the shipment of tobacco played a predominant role, while from 1850 onwards, cotton became the most important good. With 95 percent of the imported cotton coming from the USA, Bremen became the main importer of raw cotton in continental Europe (Schwarmann and Wellmann 1997, 14; Liffers 1994).

Furthermore, the cotton import was of major importance for German industry: around 1900, the German cotton processing industry was the largest on the continent and employed 13 percent of German industrial

workers. The textile industries produced rich surplus value, with textiles among the Reich's most important articles of exportation (Beckert 2015, 328). But trade relations intensified for yet another reason: as Bremerhaven was one of the main ports of departure for migrants to the United States, transporting cotton on the return journeys was of mutual advantage for both shipping companies and cotton traders (Liffers 1994, 93–7; Becker 2002, 53).

Whereas the principal importance of cotton is well regarded in common narratives about Bremen's history, discourse on the conditions of cotton production is hardly ever present: through the trade of raw cotton Bremen is linked to the enslavement of Black people of African descent in the Americas—the Maafa. Enslaved people suffered excessive violence and inhuman living and working conditions on tobacco, cotton, and sugar plantations. Furthermore, the cotton business was responsible for the violent displacement and murder of American Natives and the exploitation of the European working classes in textile factories. Across locales, this business model depended on the availability of cheap labor to enable the production of cotton and textiles in huge quantities and at low prices. Bremen's cotton traders significantly benefited from that violent business model. Yet they upheld an ambivalent stance with regard to their involvement: like most Hanseatic merchants, they identified as progressives and liberals, while at the same time their actions condoned the exploitation of up to four million Black people. Rarely did they advocate for abolition or the amelioration of living conditions (Liffers 1994, 98).

From 1857 onwards, trade further accelerated when traders from merchant families like Vietor, Lahusen, Lüderitz and Meyer, Oloff and Kuhlenkampf complemented their barter trade on so-called *Spekulationsfahrten* with the establishment of trading posts along the West African coast (Müller 1971). Not only were these strongly connected to the missionary activities of the Northern German Mission, they also culminated in the creation of German colonies in 1884. In Togo, the *Kolonialwirtschaftliches Komitee* (KWK) with financial support of Bremen merchants would later establish the *Baumwollvolkskulturprojekt* to reduce the dependencies of the German cotton industry on the US-American market (Bärwald 2017; Schwarmann and Wellmann 1997, 14; Habermas 2016; Beckert 2005).

In 1872, Bremen-based cotton traders founded the Bremen Cotton Exchange (*Bremer Baumwollbörse*) in order to facilitate trade. This meant the provision of general trade conditions and fire insurance and the introduction of a warrant system, quality standards, and frameworks of arbitrage (Schwarmann and Wellmann 1997, 10–1). The *Baumwollbörse* later initiated the foundation of the *Bremer Lagerhausgesellschaft* (BLG),

a public–private company operating the turnover in Bremen ports from 1877 onwards.

Yet the Weser was still barely navigable. Furthermore, since 1867 a new railway bridge hindered sailing ships from reaching the old inner-city harbor, which was desperately in need of repair (Schwerdtfeger and Aschenbeck 2002, 44–56). In 1870 the siltation had then proceeded so much that some sections had a fairway depth of only 40 cm. To reach Bremen, goods thus had to be transshipped downstream. Both to maintain Bremen's prominent position among the riparian states and to further overseas trade, new infrastructures were needed: a navigable Weser, new and accessible harbor basins, and efficient port infrastructures (Hofmann 1995).

In 1878 Ludwig Franzius, the city's *Oberbaurat*, provided the first draft for the regulation of the Weser to the commission entrusted with the task of making the river navigable again. The straightening and deepening of the river then took place between 1887 and 1895 “so that ships with a draft of up to five meters could reach the city of Bremen without any difficulties” (Schlottau and Hofschien 2005, 26, translated by the authors). As a result of the regulation, the tidal amplitude increased from an initial 20 cm to 145 cm in 1900.¹ Even today, the tidal change bears witness to this massive intervention.

To meet increasing demand, three new harbor basins were constructed on the right bank of the river between 1880 and 1906. The new basins were supplemented by port infrastructures: sheds and storage buildings were directly connected to a two-track railway system—an innovation called the *Bremer System*. Incoming goods such as heavy and bulky cotton bales could be unloaded into the sheds with cranes and further transferred to storage buildings, from where the owners could sell and deliver on demand. The cotton bales would then be loaded onto trains and transported to textile factories in the hinterlands.

Port Construction: The Colony as Test Bed

The overall project of the regulation of the Weser is attributed to Ludwig Franzius, honored as the man who “opened Bremen to the shipping world,” as inscribed on an inner-city monument. Lindon Bates, a US-American civil engineer and colleague of Franzius, further stated that “the world is

1 The river has since been dredged several times, resulting in an average tidal amplitude of 3.88 m.

indebted to Oberbaurath Ludwig Franzius, whose monumental success on the Weser attests the genius which won an erratic river to a regular flow” (Bates 1905, 65). Both of these statements signify common beliefs about engineering geniuses and their alleged ability to control nature. They further mirror colonial imaginaries of domination over both nature and people, as well as male fantasies of omnipotence. Colonies were imagined by Europeans as an empty space to be shaped by their own interest, imaginations, and necessities.

In the following, the transnational interrelations of the necessities of colonial trade, public and private capital with the dredging and channeling of the river Weser and the creation of the docklands have to be critically engaged with. More generally, we further think that in order to shed light on port construction in the colonial era and the transnational constitution of the technosciences of port and waterways engineering, their networks, and communities themselves, have to be taken into consideration. We will therefore sketch out connections that illustrate the global context in which the *Weserkorrektion* (correction of the Weser River) and port construction in Bremen took place.

In contrast to Bremen’s popular narratives of engineering geniuses, the idea of self-enclosed docklands originated in London, Hull, and Liverpool, from where it was transferred to the docks of Marseille and Bremen’s peri-urban port area (Osterhammel 2014, 278). In late August 1885, the commission for the intended customs union with Prussia (*Deputation für den Zollanschluss*), among them Mayor Buff, Ludwig Franzius, some of his civil engineers, as well as business representatives, traveled to Britain to inspect the docklands of London, Hull, Newcastle, Liverpool, and Glasgow (W. Franzius 1982, 47). Only after did they develop what became known as the *Bremer System*.

Beyond his activities in Bremen, Franzius as well as many of his engineering colleagues were consulted when it came to the planning and construction of water infrastructures across the globe. Early in his career, Ludwig Franzius took part in the opening ceremonies of the Suez Canal as a member of the German delegation. Later, he not only oversaw the projects in Bremen, but his position also made him engage in international maritime congresses as well as providing his expertise to projects overseas, such as the regulation of the Hwang Pu in Shanghai (Ye 2015; L. Franzius and Bates 1902). In sum, these episodes raise the question of how to attribute historic agency to seemingly self-contained individuals.

This is reflected in another brief account of colonial port construction. In the spring of 1897, Georg Franzius, engineer for the German navy in Kiel and the younger brother of Ludwig Franzius, was posted to China in

order to find a German port in the Pacific to supply the German merchant and military marine. His expedition was part of Alfred von Tirpitz's larger strategy to advance the Reich's naval power. Franzius argued for the potential suitability of Jiāozhōu Bay for establishing a German naval base and coaling station (Warner 1996, 81; Osterhammel 2014, 278). Franzius' assessment then led to the conquest of Jiāozhōu Bay and parts of Shandong province.

Upon return he reported to the German Colonial Society (*Deutsche Kolonial-Gesellschaft*) in Berlin that "one will probably not be allowed to use wood for marine structures" due to the presence of shipworms (G. Franzius 1898, 81). The *Reichsmarine* had long struggled with the sudden appearance of these relatively unknown mollusks in its domestic ports and was thus eager to find solutions to the potential threat (Grundig 1957, 2:10f). In Bremen, wood traders suffered from the loss of imported wood due to shipworm infestation (Troschel 1916, 350). The government in Qingdao thus ordered diverse sorts of hardwood from across the Pacific and mobilized German firms and experts in wood conservation for them to send treated mine props to Qingdao. C. Vering, a Hamburg-based construction firm tasked with the construction of the Great Harbor in Qingdao, tested and patented a ferro-concrete sheet pile system in close coordination with the *Reichsmarineamt* in Berlin (Rechtern 1900). Subsequently, for the later construction of the port of Qingdao, the *Reichsmarine* set up a sophisticated test bed in order to study and control shipworm, said to be especially "ravenous" in the colonies (Troschel 1916, 208).

Similar, yet less sophisticated, efforts to control potential shipworm damage were made in Swakopmund and Lomé, where the frequent deaths of Kru boat operators and the subsequent loss of goods were common due to the strong surf. In both locations new jetties were built. In Swakopmund, from 1899 to 1903—right before the genocide against the Herero and Nama—German engineers updated the pier against the dangers of shipworm infestation in order to facilitate the increased arrivals of the Woermann-Line (Kalb 2018). In Lomé, in May 1902 the situation worsened when two members of the Tuskegee delegation drowned after their landing boat capsized upon arrival in Lomé. The delegation of experts in agriculture was appointed to Togo to help the Germans with the *Baumwollvolkskulturprojekt* encouraged by the *Kolonialwirtschaftliches Komitee* in order to decrease the German cotton industry's dependency on raw cotton imports from the United States (Zimmerman 2010; Beckert 2005; Habermas 2016). The colonial authorities thus constructed a similar pier under the direction of Maschinenfabrik Augsburg-Nürnberg (MAN) in Gustavsburg (Preiss 1904).

Practices of Port Construction in the Colonial Context

Through these brief sketches of historical events, we have situated the ports of Bremen in broader schemes of colonial expansion and the exploitation of resources and labor. Further, we highlighted how the construction of port infrastructures was itself shaped by transnational connections and how engineers and state officials used the colonies as test beds to solve persistent issues in port construction.

As outlined, overseas trade was central (and perhaps principal) to the colonial endeavor, as colonies served as important markets and spaces of extraction (Mezzadra and Neilson 2017). The history of Germany's African colonies reflects this emphasis on the primacy of trade. On the West African coast, it was the establishment of trading posts that initiated the following securitization and formalization of imperial rule into so-called *Schutzgebiete*. Yet across various locales colonial trade tended to be dependent on port and waterway infrastructures for the turnover of the extracted resources and cheap imports. The transport of enslaved people across the Atlantic had already required great logistical effort. Traders were well aware of this dependency. They prominently advocated their interests and thus lobbied for the construction of capable infrastructures.

The regulation of the Weser and the construction of the peri-urban docklands in Bremen was no exception in this regard. But does the *Weserkorrektur* and the subsequent construction of Bremen's ports qualify as a project of imperial or colonial extent? Narratives about those events are commonly established in regional frames. The port of neighboring Hamburg certainly experienced accelerated growth in times that are often described as precolonial for the German context. Yet such localized accounts miss the bigger picture of the colonial setting.

By the middle of the nineteenth century, the existing infrastructures reached their limits in Bremen, due to the increase in trade and shifts towards other types of goods. More seriously, the natural state of the river Weser was called into question, as its end as a public utility, waterway, and commercial transport route became foreseeable. Against this backdrop, Bremen's traders realized their need to secure and maintain functioning trade infrastructures. They were necessary to connect Bremen to the colonial world. Efforts were thus made to address the issues functionally, through the construction of new docklands and the regulation of the river. Yet in understanding the development of Bremen's peri-urban docklands, adopting this functionalist argument falls short of the complexities at hand.

This is where we wish to depart from event-centered accounts. Instead, we take the course of events as a starting point to situate the construction

of Bremen's ports through the analysis of two distinct sets of practices in its global-historical context. Our aim is not to assert any colonial essence with respect to ports or their construction. Projects of port construction of the late nineteenth century are of course not one-dimensionally colonial. We rather wish to bring to light the making of such infrastructures and their workings in the colonial context. For the sake of analysis, we condense the sketches provided into two specific sets of practices significant in the making of port infrastructures and their utilization. These practices can only be understood against the backdrop of colonial expansion. Put differently, because we are convinced that the needs of colonial trade offer a starting point to analyze the making of ports, we argue for a historical saturation of local processes and practices. The focus on the practices of port construction in their socio-economic historical context allows us to pinpoint the colonial aspects.

Firstly, we identify practices of representation of merchants' interests aimed at port construction and river regulation. In this, specific private interests culminate and manifest themselves in public infrastructures. Secondly, we look at the interactions of distinct application-oriented practices and object mobilizations in the name of science. Determining these practices may further help to better understand contemporary dynamics in the postcolonial maritime industry, including persisting inequalities and asymmetries of power.

The first set of practices revolves around the representation of merchant interests towards the state and the following transfer of private into public interests. As traders were well aware of their needs, they lobbied for the construction of new port facilities and the fight against siltation. Political contestations around trade politics and infrastructure projects indicate that traders could advocate their interests against the city without much objection, as both political and economic spheres had a shared interest and merchant and political circles often overlapped. The creation of Bremen's docklands goes back to the commitment of associated cotton traders. The regulation of the Weser was a particularly capital-intensive undertaking, for which the city had tried to acquire financial backing from the riparian states for decades, as it could not afford to undertake such a project on its own. It therefore stands to reason that the project became worthwhile with the massive increase of colonial trade. This situates the *Weserkorrektion* in a broader process of transforming private into public interests as a strategy for their enforcement (Miles 2010, 12). We have thus far based our argument mostly on selective but recurring observations: overlaps in personnel between the city's political sphere, port construction authorities, and merchants, or the actions of associations like *Bremer*

Baumwollbörse or *Bremer Lagerhausgesellschaft*. It seems worthwhile to trace these relations and the involvement of commercial circles in issues of port construction in a more systematic manner.

This leads us to the second set of practices, namely technoscientific practices of waterways engineering and knowledge transfer in the making of ports as a transnational and colonial endeavor. Ports were, even back in the nineteenth and twentieth centuries, constructed through transnational technoscientific networks. In order to build ports that could adapt to the needs of modern trade and shipping, technoscientific research and testing was conducted. This is a field of expertise that is often denied or at least disregarded when it comes to speaking about colonialism. In addition, technical innovations did not solely come into being by virtue of great minds, nor can they be explained through atomized accounts. Instead, we argue, knowledge was transferred between expeditions and experiments across multiple locales, as illustrated by the travels of expert commissions to Britain (and Togo) and experiments against shipworm in the colonies. Colonialism further offered opportunities for engineers to advance their personal careers as well as their field's technologies. In short, studying the work of engineers in the colonial setting calls for an analysis of how control over nature and people were interrelated and how colonial imaginaries and opportunities shaped the technosciences. Accordingly, careers of engineers like Ludwig and Georg Franzius and their practices can only be understood as informed and facilitated by transnational networks. Finally, research on port construction reasserts approaches of how colonies were used as test beds to find solutions to both domestic and global challenges.

We hereby diverge from the functionalist argument both in terms of problem definition as well as in terms of its resolution. Most genealogies of imperial infrastructures escape simple narratives of localized problem definitions, as their construction cannot be sufficiently understood through localized explanations nor those based on the idea of a great mind. By extending our understanding of the history of the colonial state to metropolitan spaces, which were often at the heart of empire, local narratives quickly fall apart. What we have tried to do here is an attempt to come to an understanding of the colonial state in its making through a diverse and entangled set of practices. In our case, the history of Bremen's inner ports, we can see the entanglements of material practices of trade, finance, and lobbying, as well as knowledge, technoscience, and the construction of infrastructure—perhaps the most material in a literal sense. Through the focus on the making of such infrastructures, colonialism becomes comprehensible as praxis. Apparently, colonialism itself is praxis. A praxeological and material understanding can further help to shed light on the fact that

more often than not, dual distinctions such as the private/public divide are social and constantly reproduced and reconfigured. Simple functionalist arguments fall short of acknowledging this circumstance.

Postcolonial Inequalities Today

After having shown how colonial ports were made through entangled colonial practices, we would now like to sketch out how to use this perspective to analyze ports and trade relations today. As we have come to think about colonial trade infrastructures not solely with a historical interest, we wish to gain a deeper understanding of persisting and contemporary inequalities and asymmetries of power. Our aim in future research is to adopt this approach to study the contemporary making of distribution centers, quality standards and labor conditions, and racial segregation in maritime industries and logistics. For example, the side-effects of containerization, the so-called revolution of logistics, and sustained neoliberal policies have led to the decline of Bremen's former port areas, commonly remembered among locals for their hustle and bustle over much of the twentieth century. While the area has since been revitalized to great effect, many of the benefits of a functioning peri-urban seaport and a commercially usable riverbed have been able to be transferred to affiliated realms. In the revitalized docklands, now marketed as the *Überseestadt*, material traces and street names with colonial references bear witness to the historical context of its creation and subsequent transformations.

For our understanding of the present, we find it useful to analyze contemporary global infrastructures of trade, logistics, and ports against the backdrop of their colonial becoming. Rarely does cotton arrive via the ports of Bremen nowadays, yet institutions such as the *Bremer Baumwollbörse* together with the newly founded International Cotton Association (ICA) Bremen have maintained a powerful position as arbitrator in the international trade of raw cotton. Furthermore, the ICA Bremen also puts forward terms of trade and quality standards and acts as the highest instance when it comes to technical assessment of raw cotton. It promotes cotton standards as a neutral instrument to facilitate trade, while their implementation privileges Western cotton producers and therefore (re)produces postcolonial structures of inequality (Hasche 2017). Adopting a wider notion of "infrastructure" here opens up trajectories of analyzing the needs of trade, commercial interests, and their field of political interference. Cotton quality standards and their colonial legacies then become infrastructures of their own kind.

Two of the major beneficiaries of the imperial cotton trade, the *Bremer Lagerhaus-Gesellschaft* as well as the former transport service provider Kühne + Nagel, better known for its involvement in the “Aryanization” of Jewish-owned property under the Nazi occupation of the Low Countries (Beermann 2014), have transformed into global players in contemporary logistics. All of these actors do not publicly acknowledge their foundations in colonial exploitation. More work needs to be done on the (commercial) activities of such companies both regarding the critical reflection of logistics and supply chains as well as on their foundations in colonial trade and unjust dispossession.

Conclusion

In what ways can we speak of the Bremen ports and today’s *Überseestadt* as imperial infrastructures? First and foremost, the extractive and expansionist character of colonialism has deeply inscribed itself in infrastructures of trade. This holds true across locales, for infrastructures in both colony and metropole. The complex history of Bremen’s *Überseestadt* and the constant remaking of that formerly buzzing port area serves as a pronounced example of how imperial infrastructures came into being in the European metropolises themselves.

Starting from the history of its construction we followed a trajectory towards a theorization of port construction as colonial practice—referring to both postcolonial and praxeological theory. Against this backdrop, the making of Bremen’s peri-urban port areas can only be understood adequately through the acknowledgment of successful representation of merchant interests to the city state and an awareness of the transnational constitution of related technosciences. Thus, the colonial port of Bremen was co-enabled by two distinct sets of practices: politics of representation and the circulation of knowledge in the field of waterways engineering.

We tried to show how several colonial localities were confronted with obstacles hindering the flow of goods and people. Instead of asserting those flows to be givens, we started with the hindering of colonial trade, or what Anderson has framed as the “terrain that channels [...] circulation” (Anderson 2015, 652). Looking at the practices of port construction allows us to make visible the necessary work to be done to open specific locales for effective flows. We subsequently argued that articulated and manifested infrastructural solutions to these problems were in fact often global in scale. And instead of theorizing the flows, we retraced the making of flows through infrastructures. By analyzing the siltation of the

Weser and related events as issues of transnational and colonial relevance, seemingly singular events are set into a global-historical context of colonialism and capitalist exploitation. The regulation of the Weser does not attest a “genius which won an erratic river to a regular flow” (Bates 1905, 65), but rather the material and economic efforts made to keep colonial trade flowing.

Trade infrastructures then become the materialized witnesses of colonial trade. Questioning common narratives and the city's infrastructures enables us to uncover Bremen's connections to colonial expansion and extraction. Ultimately, this means extensive colonial violence such as enslavement and genocide. It is therefore important to understand port infrastructures not as a given but as infrastructures tailored for colonialism and through (colonial) practices. Researching port construction and its motives and politics is central to understanding ports in colonial metropolises as part of a global infrastructure of colonialism. Port construction serves as an example of how colonialism itself is made through various practices.

Combining praxeological approaches with postcolonial theory helps to theorize port construction as colonial practice. In effect, it makes it possible to describe the making of the colonial state through entangled practices. Furthermore, this makes it possible to show how historically contingent distinctions, categories, and concepts come into being, where functionalist arguments do not question these distinctions. Working on trade and port infrastructures further allows us to pick up on fundamental lines of debate in postcolonial theory. Taking a postcolonial stance enables us to think about how to conceptualize the relation between colony and metropole and what that means for research methodologies: it opens up trajectories for treating both colony and metropole with analytical symmetry, while upholding an understanding of colonialism as a fundamentally asymmetric and violent power relation. This is what makes possible inquiries into how these asymmetries are put in place and still maintained today.

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