

6 Conclusion and Outlook

6.1 Conclusion

The phenomenon of labour takes the character of a prism. Labour is therefore always context-dependent and constituted through the actions of all protagonists involved in any labour relationship. On the basis of three case studies in colonial German East Africa – the construction of the *Central Railway* (1905–1916), the *Otto* Plantation in Kilossa (1907–1916) and the palaeontological Tendaguru Expedition (1909–1911) – labour and labour relations were analysed. The focus lay on labour by hitherto neglected actors and groups of actors in the colonial context of East Africa. These were especially German companies and their staff, white subaltern railway sub-contractors and labour recruiters, Indian skilled workers and (qualified) East African workers. Furthermore, all three sites of labour proved to have their individual logics and characteristics. But all of them were in tension between the ‘global’ and the ‘local’, coercion and voluntariness, machine and manual labour, skilled and unskilled labour, and reproductive and wage labour, as well as between *black* and *white*.

With the Indian Ocean experiencing its integration into the globalising world of the ‘long nineteenth century’, on the one hand major characteristic features of the Indian Ocean Area proved resilient. Generally, the monsoon winds regulated the East African climate and divided it into rainy and dry seasons. Most of the labour under investigation was limited to the dry season, as heavy rainfalls made railway, plantation or excavation work largely impossible. On the other hand, with East Africa being an integral part of the Indian Ocean Area, many characteristics of the Indian Ocean world changed. British and German colonialism were both especial perpetrators of this change. With Europeans having been only one player among many others until the early nineteenth century, the most profound changes in the Indian Ocean were certainly related to the British dominance in the seas between East Africa and Oceania, starting from the nineteenth century. As the British Empire had abandoned trading in unfree labour, that is slavery, at the beginning of the nineteenth century, she devoted much of her energy to ousting ‘illegitimate trade’ and economic activity in the Indian Ocean. In practice, that meant supplanting especially slave trade and slave labour from the area, which was dominated by regional players, and not by Britain. By means of this agitation, British economic policies slowly but surely ensured the Empire’s dominance in the Indian Ocean. In the lee of this approach, British dominance followed the central role of India as the Empire’s jewel in the crown, and the colonisation of East African territories, especially in Kenya, Uganda and Zanzibar. The Suez Canal

was primarily financed by British and French capital and fostered economic and British ties to India, the Red Sea and the Strait of Hormuz. As these areas became major access points to the Indian Ocean, they also became focal points of British dominance. With the German *Reich* seeking for colonies in Africa, the beginnings of German colonial rule in East Africa in 1884 were embedded in this context: especially because the replacement of the chartered colonising company *DOAG* by the direct colonisation of the *Reich* was the result of the Anglo-German Agreement of 1890. Of course, this imperial trade-off disintegrated the existing East African economy as it cut the Zanzibar Archipelago off from its hinterland that subsequently became German East Africa. Nevertheless, old-established characteristics of the Indian Ocean remained intact. Economic ties with India and Indian migration to both British East Africa and German East Africa continued to increase. Likewise, the significance of the Arabian Peninsula for East Africa remained intact but adapted to the new circumstances. With Omani rule over Zanzibar since the early nineteenth century, there had long been decisive links between the Near East and East Africa. German colonial influence and imperial infrastructure building now altered these links, however. It was German financing institutions (esp. *Deutsche Bank*) and companies (esp. *Philipp Holzmann*) alongside German colonial policy makers that planned and constructed both the *Bagdadbahn* in the Ottoman Empire and the *Central Railway* in German East Africa. Whereas the *Bagdadbahn* was intended as a demonstration of German engineering skills, it also challenged the British dominance of access to the Middle East and, especially, India via the Suez Canal. The *Central Railway* in German East Africa was primarily intended to compensate the socio-economic loss of Zanzibar for the East African mainland and to enhance the colonial economy. Simultaneously, this new imperial infrastructure in the German colony must be regarded primarily as an enhancement of existing pre-colonial trading routes, as the *Central Railway* only followed the established East African caravan routes to the Congo Basin, which had been dominated by Arab-Swahili merchants since the beginning of the nineteenth century.

Construction of the *Baghdadbahn* had already begun in the 1890s and continued in the following decades. The railway project was financed by the *Deutsche Bank*, while the *Philipp Holzmann* Company, also from Frankfurt a.M., was entrusted with the construction. Both houses were also in charge of the *Central Railway* in German East Africa. The construction project in the German colony in the Indian Ocean was an extremely international undertaking. In addition to some German engineers, numerous others came from various countries in Europe as well as from North and South America. The same applied to other European personnel such as foremen and overseers. Of the Europeans involved in the construction, however, the largest group consisted of South-(East) European sub-contractors. In order to save construc-

tion costs, *Holzmann* outsourced most of the construction work to some Italian and German, but mainly to Greek sub-contractors. The majority of these sub-contractors migrated to East Africa via *Holzmann's* company networks. This was because most of the South(-East) Europeans had been employed in similar positions on the *Baghdadbahn* in the Middle East before their involvement with the *Central Railway*. Furthermore, railway sub-contractors were fundamental not only for the general colonial labour market in need of, for example, plantation workers for companies like *Otto*, but especially for the recruitment of railway workers. To be awarded one route section by *Philipp Holzmann* a railway sub-contractor required an accompanying workforce of at least twenty people: thus, the occupations of labour recruiter and railway sub-contractor were closely intertwined. Labour recruitment was mostly a dubious and very violent business in German East Africa. Recruiters applied various strategies that were barely legal, even according to colonial law. They faked governmental documents that were required by the colonial administration to convince local chiefs to provide workers for the railway or for other colonial companies such as *Otto's* cotton plantation in Kilossa. Other labour recruiters not only used overt physical violence to literally kidnap railway workers. The sources also reveal the recruiters' extravagant promises made to entice people to railway work. Such promises ranged from very high wages and bonuses to the provision of sex workers, feasts and *pombe*. With railway sub-contractors outsourcing parts of their own route sections to sub-sub-contractors, it is not very surprising that similar outsourcing also occurred in the field of labour recruitment. For the most part, such sub-labour recruiters were of East African descent. They often belonged to the Arab-Swahili elite, who had dominated East Africa's politics and economy in pre-colonial times.

People of Indian origin were essential for the construction of the *Central Railway* as well. They were mainly used as skilled labourers and did more demanding work as carpenters, blacksmiths, locksmiths or office clerks. While some of this group were recruited from the East African diaspora, others migrated directly from the Indian sub-continent to the German colony. The rest came to German East Africa from the neighbouring colony of British East Africa, having previously worked at the *Uganda Railway*. Yet, by far the largest part of the up to 20,000 people who worked on railway construction were East African workers who came from all areas of the German colony on the Indian Ocean.

In fact, the *Central Railway* stimulated German East Africa's colonial economic activity, as intended by major policy makers like Colonial State Secretary Bernhard Dernburg. Consequently, more German businesses settled along the line. One of them was the cotton plantation of the *Otto* Company near the town of Kilossa. The Swabian textile company from Unterboihingen, near Stuttgart, decided to establish its own plantation in German East Africa for several reasons. Firstly, since its foundation at the beginning of the nineteenth century, the com-

pany had been dependent on imports of the raw material cotton from the USA and thus on global fluctuations in the world market price, and sought independence as far as raw material supply was concerned. Secondly, in this case, *Otto's* entrepreneurial interest converged with the policy of the Imperial Colonial Office in Berlin. Since about 1900, fostering cotton production in its own colonies had been one of the main goals of German colonial policies, which in German East Africa contributed to the outbreak of one of the largest colonial wars ever: the Maji Maji War of 1905–1908. In this war, approximately 180,000 East Africans, primarily civilians, died as a result of the German colonial military's 'scorched earth' policies. Similar to the interests of the *Otto* Company, the aim of the colonial administration was to establish as self-sufficient a supply as possible of the central raw material, cotton. The raw material was crucial for the national economy of the German Empire in order to escape the vagaries of the world market and the dependency on US-American raw cotton production. As one of the largest textile producers in the world, this branch of industry was a matter of national interest for the German *Reich* at that time. Analogically to the involvement of US-American Tuskegee cotton experts in German colonial Togo, the colonial administration in German East Africa, alongside the *Kolonialwirtschaftliche Komitee* (KWK), sought North American expertise and hired a German-Texan cotton expert team to facilitate the production of this cash crop.

Besides the choice of location directly on the new railway in German East Africa, the selection of suitable personnel for the plantation in Kilossa was central to the *Otto* Company. In his search for a plantation manager, the devout company patriarch, Heinrich Otto, made use of networks that had their origins in the Pietist faith and reached as far as the UK, North America and India. For decades, German women from the Unterboihingen area had been married to missionaries, who were sent out into the world under the direction of the Protestant Basel Mission. From this context, the German-Indian missionary family Kaundinya had long been known to the Otto family. Deriving from these Pietist connections, Ranga Kaundinya, who had spent large parts of his youth in the Unterboihingen area, but later also worked in India, became head of the *Otto* plantation in German East Africa. Due to his Christian faith, his long-standing connection to the company and his experience as a so-called tropical planter in India, the German-Indian started his service in Kilossa in 1907.

In addition to setting up the plantation in Kilossa, *Otto* was also interested in mining fossil raw materials in German East Africa. Therefore, at the same time as Kaundinya's employment, the company engaged the renowned Stuttgart geologist and palaeontologist Eberhard Fraas, who was to prove possible mineral resources in the colony as an expert. During this work, however, Fraas received sensational news: in the difficult-to-access area around Tendaguru Mountain in the south of

the colony, an African foreman of a colonial company had alerted his employer to huge fossils, the quality of which Fraas was now to assess. The find at the Tendaguru turned out to be a sensation and was to mark the beginning of the largest excavation of dinosaur fossils the world had seen so far, which considerably boosted the prestige of the German Empire as a colonial power and scientific nation. Furthermore, the excavation soon proved the perfect means to refurbish the blemished reputation of German colonialism within German society in the aftermath of the war against the Ovaherero and Nama in German South West Africa and the Maji Maji War in German East Africa between 1904 and 1908. Even today, the skeleton of the *Brachiosaurus brancai* in the atrium of the Berlin Museum of Natural History bears witness to the excavations in German East Africa.

It was the predecessor institution of the Berlin Natural History Museum that took over the patronage of the corresponding Tendaguru Expedition. During the principal excavation period between 1909 and 1911, the two German palaeontologists, Werner Janensch and Edwin Hennig, were in charge. During these years, they were mostly the only Europeans at Tendaguru. While they were mainly responsible for the scientific management and administration of the excavations, the majority of the fossils were discovered and uncovered by East African preparators and foremen, and transported to the coastal town of Lindi, about 100 km away. From there, tons of fossils were shipped to Germany to be scientifically examined in Berlin. In addition to their qualified East African excavators, fossil preparators and porters, Hennig and Janensch were also dependent on their personal servants. These so-called *boys* and chefs of East African origin did the daily housework for the palaeontologists and thus made the work of the German scientists in the remote region around the Tendaguru possible, in the first place. The international experience of these personal servants and their knowledge of local conditions also made it easier for the palaeontologists to find their way around German East Africa. In addition to their daily work, the personal servants functioned, among other things, as language teachers of Swahili and as travel and hunting guides.

Similar dependencies regarding reproductive labour existed at the *Otto* cotton plantation and at the *Central Railway* construction sites. While European engineers like the Anglo-German Clement Gillman had their own personal servants, many East African workers brought their wives or partners with them to the work sites, where about a third of the people present were female. As a rule, the women were responsible for domestic and care work, while their husbands pursued (wage) labour for ten to twelve hours a day. Especially at the *Central Railway*, many women also worked self-employed as beer-brewers, petty traders or sex workers. Regarding sex work, the boundaries between prostitution and sexualised violence were generally blurred. While women did not work at Tendaguru in the

excavations *per se*, there were quite a few women who also did railway construction work and were employed in cotton plantation work at Kilossa.

Regardless of gender, the qualifications of a worker were central. As initial plans to lower the costs of African labour by the introduction of the latest technology to grow cotton on a large scale via steam ploughs failed miserably, East African labour remained crucial for any cotton production in Kilossa. Plantation managers like Kaundinya were aware that experienced East African cotton workers produced up to ten times more raw cotton than unskilled staff. Not surprisingly, other colonial plantation companies repeatedly tried to poach these experienced cotton workers from Kilossa. If another place of work seemed to offer the workers better conditions or higher wages, they were usually willing to change employers.

The staff of the *Central Railway* also took advantage of the competitive situation of the colonial economy. Literate office staff and qualified craftsmen were especially essential for *Holzmann*. Since the Indian skilled workers were more expensive for the construction company, compared to similarly qualified East African personnel, East African mission school graduates were increasingly recruited. Especially, former students of the Moravian Mission trained in handicraft or in reading, writing and accounting worked as craftsmen and office clerks for the colonial railway. An important reason for this employment was that the construction company paid the qualified personnel higher wages and granted more personal freedom when at work than the mission itself.

The migration of skilled labour to all three places of work under investigation was hardly associated with colonial coercion. For the Tendaguru Expedition, this can hardly be proven. The majority of ca. 500 workers came to the palaeontological excavation sites independently and out of their own initiative from as far away as *Lake Nyassa*, a distance of 700 km to the west. Sometimes, Hennig and Janensch even had to reject newly arriving volunteer workers. The overall sufficient labour supply at the Tendaguru is even more surprising as East African workers received lower wages excavating dinosaur bones than they would have received working at the 100-km-distant coastal plantations of the *Lindi* district. It is striking that despite this pay gap, the coastal plantations of the *Lindi* district frequently complained about a shortage of labour, whereas the Tendaguru Expedition experienced an oversupply of workers. In contrast, physical abuse of all kinds, including manslaughter, was commonplace both during labour recruitment and during labour deployment at the *Central Railway* and the *Otto* plantation. In addition to arbitrary beatings with or without the use of a whip, false promises, inadequate food, accommodation and medical treatment, withholding of wages or forced detention at the place of work after the end of the employment contract were the order of the day at both places of work.

There were constant disputes about who was responsible for these grievances, especially at the *Central Railway* construction sites. While the colonial administration held *Holzmann* responsible, the construction company constantly referred to its numerous sub-contractors: to *Holzmann's* view, they alone were responsible for the proper treatment of the East African workers. As many of *Holzmann's* sub-contractors outsourced their own railway sections even to another level and hired sub-sub-contractors to act on their behalf, clear responsibilities about labour conditions along the railroad further dissolved. In the course of this dispute, however, the working conditions remained scandalous until the end of formal German colonial rule in East Africa. Only the discourse around blame changed. German politicians, especially competing German railway construction sub-contractors in German East Africa, increasingly held their Greek colleagues responsible for any grievances. In doing so, they used racist clichés of the supposedly lazy, deceitful and uncivilised South(-East) European, who due to his culture and origin, was closer to the colonised population of Africa than to a Central European or German coloniser.

Similar discourses were also served up at the *Otto* Plantation in Kilossa. There were several reasons for this: for one thing, the enterprise was never profitable during its existence. Secondly, the plantation was staffed by poorly qualified German overseers who behaved violently towards the plantation workers and consumed a lot of alcohol. However, the plantation manager Kaundinya was primarily blamed for these abuses. Similar to the Greek sub-contractors in railway construction, the Indo-German was accused of lacking qualifications, especially because of his origin and his status as an alleged 'half-caste man'. Both Kaundinya and the Greek sub-contractors thus occupied a conflictual intermediate position between *black* and *white* in German East Africa's colonial society, qualifying them as white subalterns. In this field of tension, discourses about colonial labour were combined with those about origin and identity. The devaluation of anything non-Central European was linked to the German claim to cultural superiority in Europe and in other parts of the world, which at the same time legitimised colonial rule in racist terms.

All three places of work exerted colonial command in German East Africa as well. Given the ephemeral character of the colonial administration, comprehensive rule could only be exerted in the direct environments of governmental *bomas*, or centres of administrative offices. The farther away from such a centre, the less colonial claims to power were effective. With German economic and scientific undertakings in German East Africa also representing colonial claims on the East African territory, the construction sites of the *Central Railway*, the *Otto* plantation in Kilossa and the excavation sites of the Tendaguru Expedition may all be regarded as representatives of colonial rule. All of them were almost the only representation of a European presence on their spot and all were thus also representatives of colonial command. This is especially demonstrated by the fact

that all the European protagonists of labour felt entitled to represent and exert colonial dominance at the three places of work.

Although each place of work had its own characteristics and dynamics, their individual claim as a site of colonial rule is reflected by the topography of each place of labour, in the first place. Similarly to colonial towns and larger settlements, the three places of labour also attempted to represent colonial hierarchies *en miniature*. The allotment of the accommodations at the exemplary construction camp of the Anglo-German railway engineer, Clement Gillman, reflects the colonial hierarchy clearly. Gillman, as the only middle-European and middle-class man, positioned his hut at the very centre of the construction camp. This privileged position was enhanced, as his dwelling was protected from the sun by a large tree, and had sanitary facilities nearby. Moreover, provisions were in his direct environment and sometimes Gillman's ruling position was underscored by the presence of an *Askari* living right next to him, who enhanced his means of asserting colonial power. A few metres away from the engineer's hut lived his South(-East) European foremen, who were on a lower level of the colonial hierarchy as white subalterns. As shown by Gillman's sketch of the construction camp, the East African workforce lived in the direct environment of the uncleared bush, reflecting the colonial ideology claiming African people as less civilised than Europeans. Further emphasising that the colonisers valued primarily the local population's physical strength, the workforce lived close to the actual site of construction where the railway was being built. The topographies of the *Otto* plantation in Kilossa and at the Tendaguru Expedition reflect the claims of colonial rule as well. In contrast to Gillman's railway camp, colonial hierarchies there were not reflected by centrality, but by elevation. At both places, the dwellings of the Europeans were ultimately built at a higher altitude than those of the African workforce. Reflecting colonial notions of health and hygiene, the colonisers at the Tendaguru and in Kilossa reserved the supposedly healthiest altitudes for the Europeans, and attempted to live spatially separated from their East African workforce. But the topographies of the places of work also reveal other rather inconclusive and precarious facets of colonial rule.

Apart from the workplace's topography, the performance of labour was also always an arena of colonial command. As long as labour was functional, forced labour and other means of coercion were comparatively low. In turn, whenever the smooth functioning of colonial labour was threatened, force and coercion intensified. If *Philipp Holzmann* had not enough workers for railway construction, they turned to the colonial administration first to ease the shortage. The colonial administration was ready to increase the pressure on the local population, if demanded by the construction company, accordingly. If the colonial authorities failed to provide workers *Holzmann* turned to freelance labour recruiters, who often exerted coercion on the local population. If this attempt also failed, *Holz-*

mann's own personnel engaged in coercive recruitment. Therefore, the question is not simply whether the ordinary, that is, comparatively unskilled, East African railway workers experienced forced labour or coercion, but rather who exerted it, to what degree and at which points in time. It appears that the most intense coercion occurred in times of intense colonial warfare, such as during the Maji Maji War, when POWs performed convict labour, and during economic upturns. At times of stirred economic activity, the general demand for workers rose correspondingly. As far as railway construction is concerned, increased pressure to work after the Maji Maji War was especially exerted between 1912 and 1914, when the colony experienced an economic upturn.

The findings on labour and labour supply at the *Otto* plantation further support these arguments. When Indo-German plantation manager, Ranga Kaundinya, arrived in Kilossa in 1907, the Maji Maji War was experiencing its last skirmishes. Luckily for the Indo-German plantation manager, *Holzmann* had just finished their construction works between Dar es Salaam and Morogoro and would only resume railway building in 1909. With the cooperation between *Holzmann* and Kaundinya in 1907, railway workers were turned into plantation workers for *Otto*. Yet, Kaundinya experienced labour shortages as soon as *Holzmann* resumed construction work in 1909: It is thus very likely that *Holzmann* got their initial railway men back, as East Africans generally preferred railway labour over plantation work. There is another important aspect regarding the origin of the workers and the character of their employment, however. With *Holzmann* employing POWs as punitive workers along the railroad during the Maji Maji War, it might be the case that Kaundinya had employed exactly those convict workers, which he was obligated to return to *Holzmann* as soon as the company from Frankfurt ordered them back when resuming railway construction. In subsequent labour competition with *Holzmann* in 1909, Kaundinya thus had to turn to freelance labour recruiters who delivered workers to Kilossa from the central *Iringa* and *Tabora* regions. With the economy in German East Africa experiencing an upturn from ca. 1911 onwards, the demand for workers remained also high in Kilossa. As the court files against the plantation owner, Walter Grund, in 1914 reveal, many plantation workers had been forced to stay in Kilossa longer than they had actually wanted. This meant that labour was particularly scarce when the colonial economy flourished and many enterprises sought for workers accordingly.

The Tendaguru Expedition provides both similarities and major differences regarding labour and command. Compared to the *Otto* plantation and the *Central Railway*, forced labour and coercion was largely absent. With voluntary workers pouring to the Tendaguru Mountain, hardly any shortage of labour occurred. Hence, no coercion was needed to recruit sufficient labour. Like the plantation manager Kaundinya, the palaeontologists Hennig and Janensch were initially sup-

plied with workers – in this case, by the established colonial mining employer, Bernhard Sattler. Hence, in the direct aftermath of the Maji Maji War, when the Tendaguru Expedition started in 1909, no labour recruitment was necessary for this undertaking. At this point in time, the German colonial military's 'scorched earth' policies during the war had caused many thousands of deaths and led to widespread famine in southeast German East Africa, with the *Lindi* district being among the hardest hit. With the destruction of villages and food stuffs, especially *Lindi*'s surviving population had lost everything during the war. Likewise, most colonial businesses had been destroyed. Although there were people who resisted colonial employment, even in the face of starving to death, research on the local economy shows that labour supply was best in the years directly after the war. Especially women, whose husbands had either died in battle or had been detained, readily took up work at colonial plantations to survive. Hence, as a result of destroyed colonial businesses, there existed a war-ridden economy experiencing a downturn (reducing competition for labour), coupled with demand for employment on the part of the local populations. As a result, there was no labour shortage in the *Lindi* district between ca. 1907 and 1911. In this very period, the Tendaguru Expedition carried out its major excavation works between 1909 and 1911. The conclusion to be drawn is that the good labour supply at the Tendaguru Expedition resulted largely from the local one-off effect that the famine after the Maji Maji War had caused more demand for colonial wage labour among the African population of *Lindi*. When the economy of German East Africa experienced an upturn from 1911 onwards until WWI, large-scale excavation works had already ceased at the Tendaguru and only a handful of workers were needed for smaller excavations until 1913. Thus, as far as labour supply in the *Lindi* district is concerned, the Tendaguru Expedition took place in the perfect time frame, as between 1909 and 1911, competing labour demand by colonial enterprises was particularly low, as many plantations had been destroyed during the Maji Maji War and could not employ any workers.

Remarkably Hennig and Janensch, nevertheless, exerted recruitment coercion in the *Kilwa* district, where the aftershocks of anti-colonial resistance during the Maji Maji War were still felt. Moreover, in the very few cases where workers or porters were desperately needed, Hennig and Janensch reacted just like any other colonial employer in German East Africa: they called upon the colonial administration for help, sent their personal servants to raid nearby villages or exerted pressure on the local population themselves. Therefore, the excellent labour supply of the Tendaguru Expedition can neither exclusively be attributed to the interesting work tasks requiring skilled labour, nor exclusively to the relative appreciation of their workers on the part of Hennig and Janensch, nor to the favourable point in time regarding labour supply. It equally relied on means of colonial command. If

these means were not exerted directly by Hennig and Janensch, who did indeed use the (violent) repertoire of any coloniser in need of workers, the two palaeontologists profited indirectly from colonial command in German East Africa. As far as labour supply is concerned, the years between 1909 and 1911 just happened to be the perfect time frame to search for workers in the war-ridden area of *Lindi*. There, East African demand for employment was high in the aftermath of the Maj-Maji War. Simultaneously, the colonial economy had suffered severely during the war, and the resulting economic downturn reduced competition for labour. Exactly in this period, the largest dinosaur bones the world had ever seen so far were found and excavated close to the Tendaguru Mountain. Hence, the Tendaguru Expedition saw not only exceptional fossil finds, but also an exceptional point in time as far as labour supply in German East Africa's district of *Lindi* was concerned.

6.2 Outlook

This global labour history has illuminated the role of neglected protagonists of labour in German East Africa. In the first place, South(-East) European sub-contractors and labour recruiters were central to railway construction in the German colony and for the entire labour market in the German colony. With the majority of these railway sub-contractors migrating directly from the *Bagdadbahn* to the *Central Railway* in German East Africa, many aspects of their background remain unclear. The selection of the archives and the sources under investigation set the focus on South(-East) Europeans migrating to and working in German East Africa. Yet, only little is known about their history when working at the *Bagdadbahn*. Furthermore, nothing is known about the patterns of the sub-contractors' migration to that most prestigious German imperial railway in the Ottoman Empire. With the sub-contractors' conflict-laden intermediate position as white subalterns in German East Africa, it is further not clear whether they occupied a similar status in the society of the Ottoman Empire, when working at the *Bagdadbahn*, and whether working conditions at this railway were comparable to those at the *Central Railway* in German East Africa at all. In addition, whether the largest part of labour recruitment for the *Bagdadbahn* also lay in the hands of South(-East) European sub-contractors must remain unclear for now and thus constitutes a promising field of research for future works on the history of labour (intermediation) and imperial infrastructure.

Moreover, as revealed by the constant conflicts between *Philipp Holzmann* and the supervisory bodies of the colonial administration, latest questions of the new history of capitalism may be addressed more profoundly. In this study, it became clear that as far as the construction sites of the *Central Railway* are concerned, outsourcing construction tasks was indeed one of the most important

features of the workings of ‘colonial capitalism in action’. Regarding the *Central Railway*, by outsourcing, *Holzmann* certainly attempted to cut costs and avoid as many liabilities, as far as labour protection rights were concerned, in order to ensure rapid railway construction and the highest profitability possible. Interestingly, although colonial discourses strongly devalued white subaltern labour, *Holzmann’s* business interests ran counter to this racist-colonial trope. The construction company happily employed South(-East) European sub-contractors as they had proven to be cheaper, more effective and more qualified than their German counterparts, who were actually ranked first in the colonial (labour) hierarchy. To address these themes raised here more profoundly, further research especially in the archives of today’s Turkey appears promising. To reveal the migratory patterns of, especially, Greek sub-contractors, files held at several European consulates, for example in today’s Egypt, or archives in Greece may be consulted. These files could help to illuminate details of their emigration to the *Bagdadbahn* and to German East Africa. Regarding the Greek diaspora, the singular case of the Greek sub-contractor, John Zavellas, may inspire larger questions about the interrelationship between Greek or rather South(-East) European emigration with North America and colonial (German) Africa. At the same time, the central role of South(-East) European railway sub-contractors working almost simultaneously at prestigious imperial infrastructure projects in the Near East and in German colonial East Africa bears the potential to add another facet to the history of the Indian Ocean Area that has barely found any attention. Regarding the white subalternity of South(-East) European railway sub-contractors, the matter of skill and colonial discourse deserves further attention. Given the fact that the performance of the Greeks working at the *Central Railway* was indeed valued by *Holzmann*, for example, while the company still vilified them as ‘second-rate whites’, directs to the question whether skill and ability could in fact raise or preserve *whiteness* in (semi-)colonial societies.

As the centre of the Indian Ocean Area, India had had links to East Africa for centuries. With this study illuminating the decisive role of Indian craftsmen and clerks at the *Central Railway*, the dimension of skill has been added to global labour history, also in this respect. Yet, it is too simple to speak about ‘Indian labour’ as such. With India having always been a very diverse sub-continent, little is known about the backgrounds of the Indian craftsmen and clerks who worked at the *Central Railway* in German East Africa. This is especially problematic, as the colonial archives tend to subsume anybody coming from the sub-continent as ‘Indian’. Yet, this label of ‘Indian’ falls short in the light of the sub-continent’s diversity and complexity in terms of religion, ethnicity, caste, or its relationship to British colonial power. With the sources under investigation having revealed Indian (indentured) labour migration from both India and British East Africa to

German East Africa, many aspects remain understudied. For Indian migration from the sub-continent to German East Africa, it appears promising to consult further archives, especially in India. The same holds true for the migration of skilled Indian railway workers and office clerks from the British *Uganda Railway* to German East Africa. As the COVID-19 pandemic limited my research in the Railway Museum in Nairobi to four days only, investigating the files of the *Uganda Railway* held there could be one starting point. To further reveal the role of skilled Indian labour migration from British colonies to German East Africa, the National Archives in Kew, Britain, is another option as well as the National Archives in Zanzibar, as the archipelago had hosted a significant Indian minority since the middle of the nineteenth century.

Along with highlighting that Indians were employed particularly as skilled workers for the *Central Railway*, significant details about the role of East African qualified labour have emerged from this global labour history. Receiving their training at the Moravian Missions, East African skilled labour is seen to have links to global dimensions of the Moravian railway missions. As this study proved that the Moravian railway mission was inspired by other railway missions in South Africa, further research on missions to colonial railways in Africa and beyond are promising. Regarding global labour history, research questions might investigate whether other (railway) missions provided for skilled East African labour in German and other colonies. Regarding German East Africa, the first archives to visit appear those of the Berlin Mission, which ran a railway mission between Dar es Salaam and Kilossa, in analogy to that of the Moravians in *Unyamwezi*. Moreover, the connections between the European, or rather the German introduction of *Bahnhofsmisionen* at numerous railway stations in the *Reich*, to German East Africa should be studied. Studies, taking a global approach on the history of the *Bahnhofsmisionen* and similar institutions, could add a so far neglected facet to the history of infrastructures or the global history of missions pursued and/ or demanded by many historians around the globe at the moment.

With the Moravian Mission occupying an important role for the provision of skilled labour for the *Central Railway*, it must be stressed that the global dimensions of faith and denomination were also central aspects regarding the *Otto* plantation in Kilossa. Just as the Pietist global company networks of the *Otto* Company were a significant network within the 'empire of cotton', the upbringing of the Indo-German plantation manager Ranga Kaundinya in the context of the Pietist Basel Mission also mattered for his employment in Kilossa. Whether Pietist company networks and shared denominational convictions also mattered for other entrepreneurs in other colonial enterprises has largely been ignored by global (labour) historians. The entire complex of company networks in a global colonial economy and its significance for employment strategies could thus be in-

vestigated for various colonial plantations and other companies around the globe. This bears the potential to generate new perspectives on the interconnectedness of the Pietist or rather Protestant work ethos *à la* Max Weber and capitalist expansion within the ‘empire of cotton’, but also for other research fields regarding an increasingly globalised economy. As far as the *Otto* plantation is concerned, the first archives to consult would be those of the Basel Mission in Switzerland, which could provide additional information about the Kaundinya family and the involvement of the Otto family and *Otto* company with Basel’s mission work and the (possible) importance of Pietism for the business of *Otto*, in general.

In the topic area of female labour and reproductive labour, this global labour history has revealed that female labour was central for all three places of work. Yet, many aspects remain hazy. Given a general lack of information in the sources, any new documents available to shed light on the issue should be consulted and examined closely to further highlight the role of women in railway and plantation labour as well as in scientific endeavours such as the Tendaguru Expedition. Of course, this is also relevant to reproductive labour, petty trading, and sex work. Regarding colonial labour environments and sex work, the issue of pimping has generally been ignored. Given the fact that especially railway sub-contractors and labour recruiters, searching for workers, were able to attract male railway workers by offering concubines and the availability of sex workers, research investigating the issue of pimping appears as a promising field of global labour history at the interface between sex, work, coercion and (sexualised) violence. As the files held at the Moravian archives suggest that pimps offered sex work to missionaries like Gaardee at the construction sites of the *Central Railway*, the files held in other missions to other colonial railways might be worth studying.

Of course, reproductive labour will remain at the heart of studies investigating female labour, but it also bears the potential to further illuminate the role of personal servants in global labour history. With only few historical works dealing with the role of *boys* or chefs in charge of the colonisers’ households, the Tendaguru Expedition especially revealed further insights. Having shown the usefulness of drawing on the self-narratives of the palaeontologist Edwin Hennig to reveal the central role of his personal servants, further studies may also want to draw upon such sources to elucidate this neglected field of global labour history. In this respect, the investigation of self-narratives is especially important as files held in colonial archives are generally silent on personal servants.

Some peculiarities of the Tendaguru also point to larger questions of the global history of labour. Although the good labour supply at the Tendaguru Expedition must primarily be attributed to the special situation in the *Lindi* district between ca. 1907 and 1911, historians may wonder whether labour supply at sci-

entific expeditions, like palaeontological excavation works, generally experienced better supply than economic endeavours such as railway construction sites or colonial plantations. Comparing the labour supply at other scientific endeavours to the Tendaguru Expedition, global labour history of this fashion might be able to contribute to the question of whether primarily economic or rather capitalist endeavours were more prone to exploitation and forced labour than scientific endeavours – as the palaeontologist Edwin Hennig suggested himself when working at the Tendaguru.

In terms of larger questions of global labour history, a combination with research questions of environmental history and area studies appears promising. As all three places of work under investigation – the construction sites of the *Central Railway*, the *Otto* plantation in Kilossa, and the Tendaguru Expedition – to a large extent proved to be at the mercy of environmental conditions, it appears that not only labour policies and the actions of so far neglected groups and individuals affected the characteristics of colonial labour in German East Africa. Environmental issues impacted the rhythms of labour, the topologies of the labour sites, the feasibility of modern technology and the practicalities of transport in the colony. Thus, future research on global labour history might investigate the interconnection between environmental history and labour history more profoundly. Furthermore, with the monsoon winds of the Indian Ocean having dominated the history of the Indian Ocean for millennia, the amalgamation of global labour history, environmental history and studies on the Indian Ocean Area might provide for a renewed reference framework for global labour history. With the present study on global labour history examining the history of three particular places of work in the Indian Ocean, some illuminating pieces are contributed to the bigger picture of the entire region.

Last but not least, the major result of this study that there was no such thing as colonial labour *per se* and no prototypical colonial worker as such, may well be connected to the recurring questions of the new history of global capitalism and the fairly recent discussions about capitalism ‘as a historical concept’. These questions revolve around the findings that capitalism produced and featured a multitude of supposedly free forms of (wage) labour and many varieties of unfree labour such as (chattel) slavery. Studying forms of indentured labour and other varieties of coerced labour, not least in the context of colonial forced and/ or tax labour, highlights that this global labour history has the potential to inspire any

further research investigating colonial ‘capitalism in action’:¹ Firstly, the fact that companies and banks such as *Otto, Philipp Holzmann* or *Deutsche Bank* were decisive for the places of labour under investigation, stresses the importance of intertwining business history with global labour history and even the global history of financial capitalism.² As this study further suggests that economic upturns favoured forced labour policies in a colonial economy as a result of intensified competition for (African) labour, general questions of the interconnection between basic mechanisms of capitalist economies, that is the relation between supply and demand, and labour must be addressed in future. As Andrea Komlosy has pointed out, capitalism is also based on the inclusion and interaction of different forms of labour regimes, such as commodified wage work and, generally, unpaid forms of reproductive labour – a point that has repeatedly been made for so-called informal labour relations in sub-Saharan Africa³ – the chapters on female labour and personal servants of this study offer a starting point to take up larger and additional investigations on the characteristics and mechanisms of their mutual relationship. This also entails the matter of scope and space as all three places of labour under investigation feature patterns of labour migration – and intermediation – prominently ranging from internal migration in (German East) Africa via larger migratory patterns embedded in the Indian Ocean Area to even farther connections to Europe and the Americas.⁴

1 Beckert. ‘The New History’, p. 246.

2 Cf. Fridenson, Patrick. ‘Is there a return of Capitalism in Business History?’. *Capitalism. The Reemergence of a Historical Concept*. 107–132. Eds. Jürgen Kocka and Marcel van der Linden. London et al.: 2016. Cf. James, Harold. ‘Finance Capitalism’. *Capitalism. The Reemergence of a Historical Concept*. 133–164. Eds. Jürgen Kocka and Marcel van der Linden. London et al.: 2016.

3 Cf. Eckert. ‘Capitalism and Labor’, pp. 170–173. Cf. Cooper. ‘Von der Sklaverei in die Prekari-tät?’, pp. 3–11.

4 Cf. Komlosy. ‘Work and Labour’, pp. 34, 60–64. Cf. Beckert. ‘The New History’, p. 238.

