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"Unfortunately, the toll is high for some of your blacks": Moments of Crisis in the Belgian Congo's Construction Industry

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Abstract: Throughout the Belgian occupation of Congo, construction sites were thwarted by all sorts of failures, accidents, and labor strikes. These "moments of crisis", not only confirm the continuous struggle of empire builders to build, or the difficult translations of technologies, however. They also allow to identify the otherwise anonymous construction workers, who, ironically, often had to pay the price for mistakes made elsewhere. Guided by the theoretical approach of STS scholars, this paper understands the myriad of building site accidents happening on the construction sites of the Belgian Congo as a prism through which individuals, the relations between them, the tools and machinery at their disposal, or the conditions in which they had to work, become visible. As this conceptualization of "moments of crisis" is the direct outcome of the cross-over between construction history and colonial history, the paper also carries a meta-argument about the importance of crossing disciplinary boundaries for the field of construction history.

Introduction

Throughout the Belgian occupation of Congo, construction sites were thwarted by all sorts of failures, accidents, and labor strikes. These "moments of crisis" not only confirm the continuous struggle of empire builders to build, or the difficult translations of technologies, however. They also allow to reintroduce construction workers in the narrative. Whereas the archival material of a (rare) smooth construction process in the Belgian Congo barely allowed to even identify its builders, constructive difficulties—and the subsequent reporting—bring the different actors, and their diverging agendas, back into focus. Explaining in a themed issue of *Artefact*, entitled *Pannes et Accidents*, why such moments of crisis are of interest for the history of technology, Guy Lambert and Olivier Raveux give us a welcome frame of interpretation for these constructive difficulties: "Breakdowns and accidents allow to situate the history of technology in a more social field, to illuminate the social history of technology as they highlight the interactions between protagonists […] [They] form an entry into a more fine-grained lecture of the working relations and the hierarchical chains, of the responsibilities over machines and tools as well as of the tasks to be completed by the different actors involved in the production of goods and services." (Lambert and Raveux 2019, 12)

Hitherto, such "moments of crisis" were seldomly the explicit focus in construction history. This is even more remarkable, given the inherent dangers of the construction industry, and the occasional disasters on construction sites. One exemption is the work of Jacob Paskins. Focusing on the construction industry in Paris in the second half of the 20th century, he writes about the collapse of a building on the *Boulevard Lefebvre* to argue that such "events could make visible the building industry's structures of employment and processes of production". (Paskins 2013, 1) In other words, "moments of crisis" in construction are an interesting diffracting prism to reveal on-site construction workers, their different roles, responsibilities, tools and tasks, as well as the conditions in which work had to be done.

Introducing these "moments of crisis" as a subject for construction history, the paper tries to add another dimension to the thematic session's framing. Instead of the more systemic "times of crisis" identified in the call—like climate change, war or colonization—this paper forwards "moments of crisis" as generators of paperwork on construction labor. (Beech, Clarke, Wall 2023) These "moments" are of a smaller scale, related to a particular construction site, and often insignificant for any uninvolved party. However, for all actors entangled in the construction, they are of utmost importance and for some—as we will see—they can have life-altering and devastating effects.

1. "Moments of Crisis" in "Times of Crisis"

In this paper, I will discuss three different types of "moments of crisis" and illustrate them with examples from concrete construction sites in the Belgian Congo: failures, accidents and strikes. For this selection, I took the cues of Bruno Latour, who wrote in his seminal work *Reassembling the Social*, how: "[In] accidents, breakdowns, and strikes: all of a sudden, completely silent intermediaries become full-blown mediators; even objects, which a minute before appeared fully automatic, autonomous, and devoid of human agents, are now made of crowds of frantically moving humans with heavy equipment." (Latour 2005, 81) The boundaries between these three categories can be fluid, in particular as one moment of crisis can often link to another. However, I mainly think of failures as the lack of an envisioned on-site

result, accidents as unexpected events resulting in damage or casualties, and strikes as moments of workers' resistance.

The first moment, failure, is important to understand how local, on-site construction workers were often left to their own devices when confronted with unworkable plans coming from engineering offices elsewhere. Hence, failures are a good lens to understand the multi-sited and situated production of building knowhow. Moreover, these failures also give an insight into the extreme pressure these on-site engineers and overseers were under. To find workable solutions, they had to work day-and-night. Deprived of their usual comfort, far-away from friends and family, and without any distractions, it was not rare for such people to collapse or—as historian Johannes Fabian termed it when discussing early colonial explorers—to go "out of their minds". (Fabian 2000)

In the correspondence on failures, it are mainly the European on-site employees that surface. African construction workers on the other hand, often remain completely anonymous—although their skillsets and knowhow were of course as essential for any on-site solution. This should not come as a surprise, as the absence of African voices is the most common critique on the colonial archive. (Reid and Paisley 2017) Usually, the indigenous construction workers—in a typical colonial fashion—were only described in generalizing terms, like *main d'oeuvre indigène*. Their numeric strength, rather than their individual capacities, seemed to matter most for overseers and engineers. A more shocking example thereof can be found in the correspondence on the employment of convicts, a common practice for large-scale colonial infrastructure works. Rather than talking about the number of workers needed, it was common practice to ask for a number of "chains": literal chains of people, bound together by the steel shackles around their ankles. In a colonial contractor's archive—in particular the archive of the *Compagnie Congolaise des Constructions* (CCC) on which this research is largely based—this is not different. (Lagae and Fivez 2022) Though they often employed the same construction workers for years on end—often highly-skilled craftsmen—even their names remain hard to trace. In most archival sources, if labor is discussed, it is in highly general and often racist terms. For instance, before the construction of their own office building in Léopoldville begun, the head of the company reminded his local employees how "as little African construction workers as possible [should be seen on site], given their bad reputation". (Versluys April 17, 1950)

One of the few exemptions, are accidents and the paperwork they generated. Few other sources than accident reports, allow to name and identify construction workers. Ironically, for a construction worker to be named, he apparently had to be the victim of an accident. As Susan Verdi Webster rightfully argued, naming is the first step that "admits the possibility of individual agency". In a colonial context in particular, she continued about colonial Quito, the absence of native artisans in the archives "has fostered a general vision of colonial architecture as built by masses of nameless native workers labour under the legal control, intellectual supervision and according to the designs of Europeans". (Webster 2009, 11) Therefore, the names in these accident reports are extremely valuable, even though—in line with the prevailing paternalist and racist assumptions in colonial society—workers were often displayed as unskilled or even blamed for causing the accidents they were most often only the victim of.

The paperwork on strikes, the third moment of crisis under scrutiny, is perhaps the most important one in that sense. Beyond naming the strikers—or at least the so-called instigators of the strike—reports on strikes often disclose the on-site working conditions these workers resisted against. Hence, strike reports are fantastic instruments to identify construction workers, but also to understand them as political subjects, instead of as mere victims.

The introduction in this paper of these "moments of crisis" tries to expand the scope of the thematic session. However, it is not a critique of the chairs' claim that it is in "times of crisis" that "documentation on construction labor is found in archival sources". (Beech, Clarke, Wall 2023) On the contrary, based on my research in a colonial contractor's archive, I would contend that in "times of crisis", like colonialism, such "moments of crisis" occurred more regularly, and that, hence, such colonial archives indeed give some more insights into construction labor. Besides, the effects of "moments of crisis" might also have surfaced more crudely in colonial archives. In the case of failures, this is perhaps most tangible. After all, the mental and physical distance between engineering offices in Europe and the construction site, often led to faulty interpretations of on-site conditions, and, hence, failures. Moreover, this distance also placed the initiative to keep the project going completely with local employees. As these local employees were often little experienced in working with the new building techniques or materials proposed, it is not unthinkable that more accidents happened on colonial construction sites than elsewhere. Numerous accidents happening on colonial construction sites, some of which I discuss below, probably would not have happened if the construction site was more closely supervised by adequately trained people. Finally, due to the appalling conditions in which construction workers were (often literally) forced to work, the colonial construction site also seemed a more nervous environment than any European one. Despite the lack of institutionalized labor unions—or perhaps just because of it—workers struggles and resistance often ended in strikes or even fully-fledged riots.

2. Failures: construction workers as problem solvers

On construction sites in the Belgian Congo failure was constant. Reading through back-and-forth correspondence and reports on numerous colonial construction sites of the CCC and of the Belgian Congo's *Travaux Publics*, it quickly becomes clear how ideas envisioned in far-away engineering offices were often difficult to implement on site. The correspondence on occurring failures, of machines and tools but also of proposed constructive methods, discloses how the on-site labor force was often left to their own devices to come up with a workable alternative. As such, these sources disclose how building knowledge and building technologies were not simply transferred from Europe to Africa but were transformed in the process.

The construction site of the Ango-Ango harbor (1925–1930) is a case in point. The harbor, a large reinforced concrete quay wall, was one of the earliest reinforced structures in the Belgian colony, and a turnkey project for Belgium's colonial exploitation economy. As the minister of colonies did not trust his own colonial services with this project—until then most colonial state projects had been entrusted onto the *Travaux*

Publics, with limited success—a temporary association of a Belgian and British contracting firm, *Construcol*, was commissioned. The British expertise in concrete harbor construction was the main motivation in the selection. As I discussed the project elsewhere, I will not go into detail here. (Fivez 2023) However, the case is important, as its construction was thwarted by all sorts of failures: mechanical breakdowns, a completely unworkable constructive scheme, and even a flawed concrete composition. Since the British "experts" turned out to be unreliable, the Belgian engineer Henri Descans was completely left to his own devices.

In a published article on the harbor's construction, this Belgian engineer elaborated long and wide on "his" on-site innovations and experiments: he altered the drill imported from Germany, he tested new concrete compositions and he eventually succeeded in coming up with a workable construction method. (Descans 1934) This emphasis on his ingenuity and the solutions he devised—though it never led to the realization of the harbor—shows the extent to which his status as "expert" also depended on being able to perform as such. (Vandendriessche, Peeters et al. 2015) In Descans' case, his "ingenious" reactions to the failures on the colonial construction site, and in particular the way he stressed this ingenuity to a Belgian audience, later ensured him a position as a harbor "expert" in Belgian and French scientific circles, working on large-scale projects like the passenger port terminal in Verdon-sur-Mer, the breakwaters in Soulac, or the Albert Canal. Also in other construction projects in which on-site engineers or building overseers were forced to adopt an inventive attitude towards failures, the reports on failures and their solutions often stressed their ingenuity to the extreme, as they tried to capitalize on their problem-solving capacities.

However, carefully reading through the letters of Descans to the British headquarters, it becomes clear that this performing of expertise also took its toll: during his time in Ango-Ango, Descans was almost singlehandedly responsible for the enormous construction site. In one report on the Ango-Ango failures, a government inspector stated how he "was left in absolute isolation". (David July 4, 1927) When sending letters to the headquarters in the UK, Descans only sporadically received a response, and repeated calls for clear instructions or additional personnel remained unanswered. Though this was already a stressful situation, the fact that the local government officials, who felt side-lined by the British experts, actively tried to thwart Descans' plans—the shipments with materials for the harbor's construction, for instance, were delayed on purpose in Matadi—only added to his desperation. Even a local newspaper reported on the engineer's stressful situation: "A single Belgian engineer is paid to draw up plans and to run a sinking company with no equipment and no money: everyone in Matadi knows what a lamentable and burlesque fate this was." (INTERIM 1929) In several of Descans' letters this "burlesque" situation was made palpable, when he wrote about having to work day-and-night, once even collapsing on-site due to a severe illness that he had left untreated. Eventually, though in his own publication he claimed that he had finally found a workable solution, Descans was sacked. Probably on the verge of a mental breakdown, he first refused to leave the construction site, and eventually took all construction drawings and documents with him—he considered them his personal intellectual property—when he finally left the construction site. Immediately after, he was discredited by his successors, and it was only because they eventually did an even worse job, that Descans could exonerate himself.

Yet, it was not only the engineer who paid a toll for the on-site failures. Once the other European employees of the company had arrived on site, mechanics and building site overseers mainly, the working pace was terrible: the numerous experiments and ideas of Descans had to be brought into practice by the limited number of European employees on site. Though their proper voices are lacking in the archive, their personnel reports are telling: several of them were frequently hospitalized, some became "mentally deranged because of the African climate", and a fatal accident happened to overseer Aubry, who was crushed underneath one of the concrete test piles—the report was remarkably brief and the accident was barely investigated. (Cochrane May 3, 1928) The most insightful file, however, was probably the one of Henri Berrens. In his dismissal report, it was mentioned how Berrens became an alcoholic who "lost his mind" on the building site: "Saturday, he descended to the construction site, after he had apparently emptied a whole crate of beer overnight, he acted strange and left the site again. The next day he caused public scandal in the post when he was walking naked and not at all silent on his terrace. […] The doctors diagnosed him with brain damage, not being able to conclude if this had to do with his excessive drinking or the African climate." (Descans June 15, 1929) This tragic

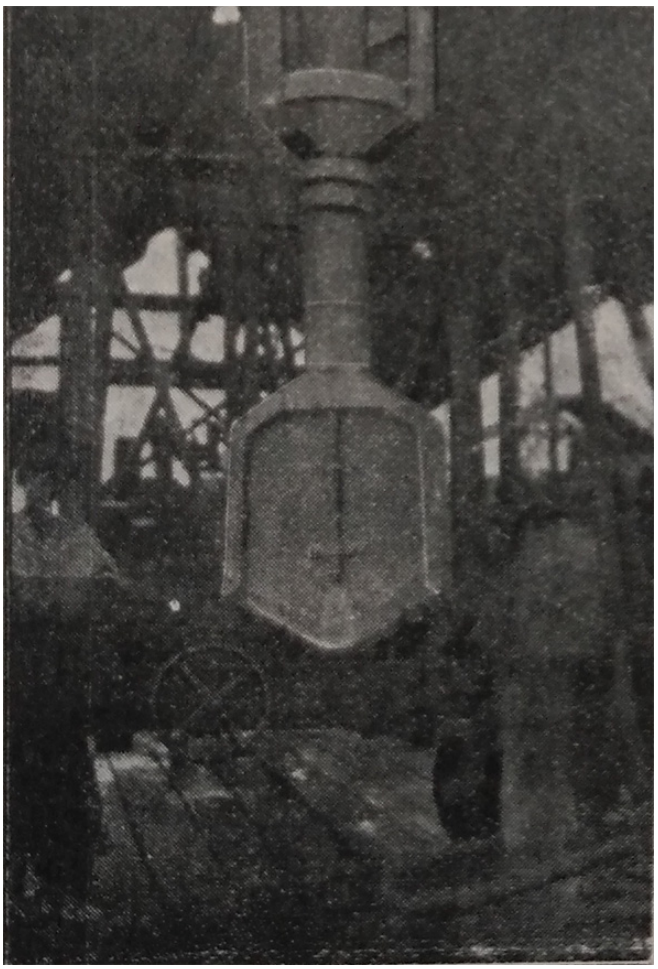

Figure 1. The Ango-Ango drill, as adapted on-site by the plans of Descans (Descans, H. (1934) "Une Construction De Port Colonial À Ango-Ango." in Bulletin de la Société belge des Ingénieurs et Industriels).

anecdote testifies to the difficult on-site working conditions for European personnel, including compensatory alcoholism many of them fell victim to.

Such construction site failures were by no means limited to the early colonial period. The construction site of the CCC's own office building (1950), one of the first high-rise buildings in the colonial capital Léopoldville, was ridden with constructive failures. One of the most spectacular finds in the archive in that sense, was the letter at the end of the construction process to the architect who had been responsible for the calculation of the building's columns: "I did the calculations for a building similar to the CCC-building in Léo[poldville] and I realize that the reinforcement of my columns is much more important than the reinforcement in yours, even though this building only has two floors [instead of five]." (Coppens September 15, 1950) As it was considered too costly to rebuild the complete building, and afraid of the bad publicity this would entail, the head office in Brussels decided not to act upon this. Eventually, they did not even admit the mistake to their own employees in Congo, who still had to work inside the building for the years to come.

Despite claiming perfect skill with concrete, several such miscalculations happened in engineering offices in Belgium, still causing a lot of stress for the local European engineers and artisans, as they had to try to come up with (temporary) solutions. In one letter, the local company manager Louis Richir complained to the Brussels' office how the life of a colonial employee of the firm "was completely deprived of all charm […] It is almost a continuity of work, then sleep, then work… Combined with the climate here you really have to push your limits. My friends tell me that I won't last long in such a sustained working rhythm." (Richir March 2, 1950)

Failures on construction sites in the Belgian Congo were run-of-the-mill. From the main engineers, to the mechanics, overseers, and artisans, down to the construction workers: they were all affected by these failures, most-often caused by flawed assessments in faraway engineering offices. While for high-ranking employees these failures formed an opportunity to showcase their "ingenuity", the creativity and adaptability required of the lower-ranking European employees and African construction workers remains largely unacknowledged in the archival sources. However, the European artisans do figure in the colonial archive—as *staffage* in letters of others, or as subjects in their own personnel files. From these sources, some ideas on their work and life on the construction site can be distilled. The African construction workers, by contrast, remain more anonymous. Ironically, as we will see in the next part, it is through accounts of accidents—when construction workers are listed as casualties—that we can start to identify these previously faceless people.

3. Accidents: construction workers as casualties

Almost miraculously, the grave miscalculations of the CCC-building's reinforcement steel never led to a serious accident, and the building is still standing in Kinshasa today. Another mistake on this construction site, however, did take its toll. On the 5th of September 1950, a crane crashed to the ground while it was hoisted from the second floor to the third. Though the CCC head office immediately concluded that a lack of caution from the construction workers must have caused the accident, going in detail through the building site correspondence reveals that there was a lot of uncertainty about the operations required for lifting the crane. In one letter, the local building site overseer Pierre Schaukens explicitly indicated that they were "still waiting for the plans and instructions for lifting the cranes from one floor to another". (Schaukens April 2, 1950) His question was probably lost in the avalanche of constructive problems they faced and remained unanswered. Hoisting up the crane was therefore done as Schaukens, with not much prior experience, saw fit. When the crane crashed to the ground, five out of fifteen construction workers disassembling the crane were dragged along. The heavily injured casualties are the first construction workers who are explicitly named in the archive: "Injured: no. 16 Biamba Joseph (face injuries) no. 27 Bala Forola (face injuries) no. 33 Sanda André (broken thigh) no. 48 Makundela Jean (4 fingers of the left hand amputated, cranial fracture) no. 73 Mendes Gracia (cranial fracture)." (Schaukens September 8, 1950)

The swift conclusion of the accident and the rather crass correspondence about it by the Brussels managers discloses how their major concern was the material toll—the crane was "luckily" still working—rather than their workers' safety: "It could have been much worse… It is a good lesson for the future. Unfortunately, the toll is high for some of your blacks." (Versluys September 12, 1950) As we can see from this remark, the recognition and identification of these men as individuals was only a very brief interruption from the general way in which the *main d'oeuvre indigène* was usually depicted.

Though the construction of the CCC-building was spared from worse, an enormous accident did happen on the building site of one of the other early high-rises in the city: on the 27th of August 1951 at 4:15 pm, the Farinha building completely collapsed during its construction. [Figure 2] All that was left of the building, was concrete rubble that littered Léopoldville's majestic Boulevard. In her account of the accident, focusing mainly on the heroic acts of the rescue workers, the Belgian journalist Whyms reported how immediately after the collapse, "European and Indigenous people were working shoulder to shoulder" to rescue those buried underneath the rubble. (Whyms) Quite soon the first casualties were excavated: eight bodies were counted. The rescue workers continued deep into the night. Bulldozers and drills were illuminated by the projectors and orchestrated by the loudspeakers of the cinema.

Once again, it was only because of this collapse that the faceless construction workers got a voice in the archival sources. One Belgian newspaper even printed the distressing testimony of Augustin Bona, one construction worker of a group of five, all saved by a big stack of cement bags: "Protected by bags of cement, we were no less than buried alive. There was rubble between us. We did not see one another. Everything was black. […] We were digging around us with our hands, trying to crawl towards the sound just to the end of our strength." (1951) The undoubtedly heart-breaking story of the final construction worker who was saved in the morning of the following day—after having survived underneath the rubble for more than 15 hours next to two deceased co-workers—was never published. Eventually, thirty Congolese construction workers were victim of the Farinha collapse, most of them were seriously injured and eleven died in the accident.

In the aftermath of the accident, a commission of inquiry was put together to find its cause. The commission concluded that the "project of the building was drawn up by someone who does not know a thing about reinforced concrete […] the conception of the building is a monstrosity from the building's structural skeleton down to the details like the positioning of the reinforcement bars". (1951) The resulting responses to the accident were therefore geared towards a better control of the construction industry—with opportunistic Belgian contractors trying to benefit from the accident by proposing protectionist measures to secure the colonial market. However, the newspapers did not mention a word about things like the on-site working conditions, the lack of protective clothing for construction workers, the long hours these people were subjected to, or the fact that no overseer had been on site—though all part of the report on the accident.

Construction site accidents—often directly resulting from the failures discussed above—generated only little public outcry in the Belgian Congo. Though, accidents happened on several of the construction sites I studied, the workers' toll was mostly considered of subordinate importance to the material or image damage for the company. The accident with the crane during the construction of the CCC-building is a case in point. The only one who seemed concerned with "his men" was the overseer Schaukens. Maybe taken by guilt—without any guidelines from Brussels, it was his instructions that had led to the accident—he brought flowers to the injured employees in Léopoldville's hospital.

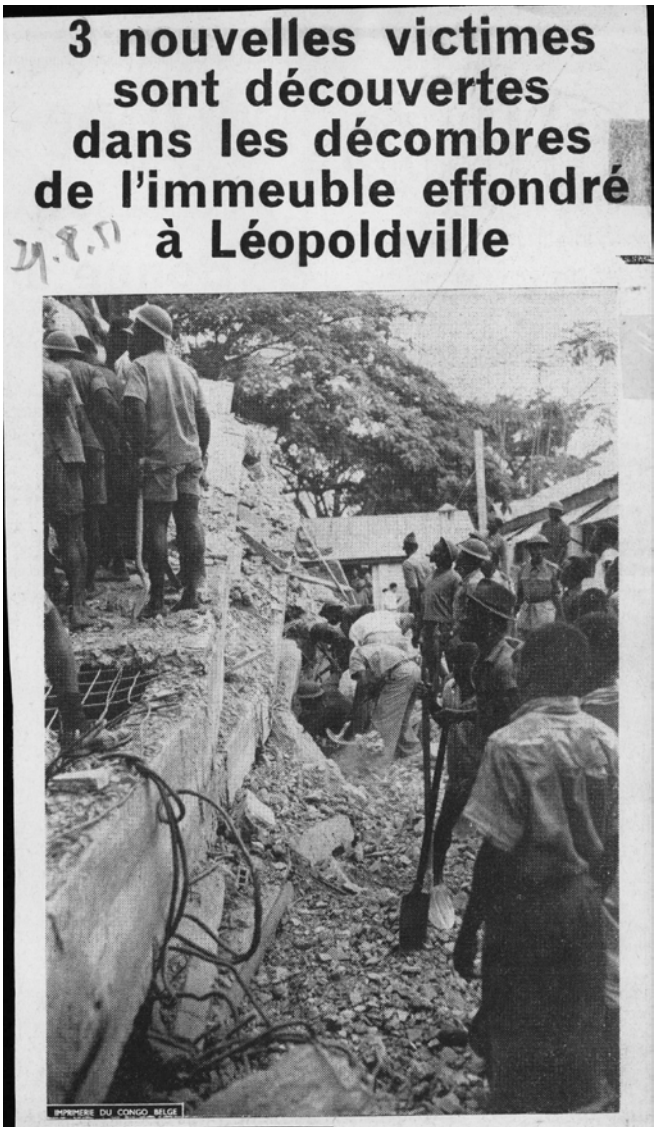

Figure 2. Farinha collapse, 1951 (HA.01.0147, RMCA Tervuren, Fonds Hélène Guillaume-Whyms, p. 2085).

Schaukens' compassion, however, should be carefully approached: from lawsuits against him, we know how he was repeatedly condemned for severely beating his employees in July, August and September 1951 and January 1952. Though I did not treat abuse as a separate "moment of crisis", it is clear that a colonial construction site in the early 1950s was not free from such colonial violence. It is telling how Schaukens was eventually fired from the company, not because of this violent track record, but because of an embezzlement charge.

The quick disposing of accidents stands in strong contrast to similar building site accidents occurring in Europe. The collapse along the Boulevard Lefevbre described by Jacob Paskins, for instance, sparked serious debates around building site safety. The building trade unions in particular "used the boulevard Lefebvre disaster to push their respective political and social agendas". (Paskins 2013) However, in the Belgian Congo, with trade unions for Africans still non-existent (Etambala 1999), such events often faded out without much consequence for the construction workers. The collapse of a school under construction by modernist architect Huib Hoste in Belgium, killing 5 Belgian construction workers in 1926, sparked more public outcry and trade union indignation than the collapse of the Farinha building, killing 11 Congolese construction workers in 1951, ever did. (Van de Voorde 2011, 159-160)

Still, concluding that construction workers were always merely the victims in such moments of crisis would be wrong. In the next section, I will discuss how failures and difficult on-site working conditions not only led to accidents, but also sometimes sparked social unrest among these workers. Though such unrests were not backed by trade unions, nor by any legal right to strike, these workers still resisted. Though most of the resulting strikes were—in a typical colonial fashion—quickly quelled by intervention of the *Force Publique*, on several occasions the political agency of these workers led to actual change.

4. Strikes: construction workers as political subjects

An accident that happened on 5 August 1953, during the construction of a hydraulic dam in Kailo—described in detail in several reports by CCC overseer Nestor Billy—is revealing for this political agency. In comparison to the accident on the CCC-building's construction site, the lethal accident in Kailo was quite unfortunate and banal: when backing up over a bridge with a Ford tipper truck loaded with formwork planks, the European mechanic Ragon accidentally ran over Lufutu Mwambayu. Other than his name, the report on the accident learns us that Mwambayu had only been working on the construction site for four days, after his employer *Cobelmin*—the commissioner of the construction works—had "lent him out" to the CCC, and that his official job title was "barrow-man". Probably Mwambayu had not been sufficiently warned for the dangers of the construction site. (Billy August 6, 1953)

However, different to the other lethal accidents discussed above, the other construction workers did not react peacefully or with understanding. When some of the European overseers,

including the truck driver Ragon, wanted to transport the victim to the nearby hospital, the construction workers barred the route. According to the journal of overseer Billy, they "wanted to lynch Rayon [and only because] the other Europeans were able to intervene, Rayon could be saved and and evacuated to Kifukuta, a village further away". The local *Agent de Territoire* of Kifukuta apparently did not shy away from "giving 3 soldiers of the travaux publics" to Billy. At the same time another European employee "could escape from the raging mob to alert Kailo". An additional 6 soldiers, a missionary father, and the *Chef du Main d'oeuvre Indigène* of Cobelmin arrived from Kailo. Together, they could apparently quieten down the construction site after four hours. 12 people were considered the instigators of the strike and were arrested. (Billy August 7, 1953) Though initially the legal deputy of Kindu first "gave these bandits only a 200 frs. fine and immediately put them to work again", Nestor Billy "threatened to leave work, to evacuate all white personnel, and to go to Bukavu—in his words to 'make a big fuss about the whole affair'— if they did nothing for our security". He eventually managed to influence the court procedure, and all 12 were imprisoned for 2 months. (Billy August 8, 1953)

Despite the enormous power inequalities between the construction workers and their overseers (or any other European colonial for that matter)—which clearly shows in the ease with which Nestor Billy could influence these workers' judicial process—such workers' actions did not remain without any impact. In this case, their actions resulted in the removal of Ragon from the construction site. The man was so scared that he wanted to leave for Stanleyville immediately. However, he was obliged to first return to the construction site for an on-site investigation of the accident: Billy explicitly mentioned the importance of the presence of several *Force Publique* soldiers during this reconstruction. According to Billy, Ragon was "strongly depressed" afterwards and "it could remain dangerous to leave him on site". Therefore, he sent him to Stanleyville. The final remark of Billy on the whole matter "There goes my mechanic, I really still needed that" is telling for how such human catastrophes were dealt with on a colonial construction site. (Billy August 14, 1953) This rather selfish lament was topped by the Brussels office, who reacted angry on Billy's decision, reasoning that removing Ragon from site implied admitting guilt. The Léopoldville based manager supported Billy, stating that he himself "had experienced several such types of 'revolts'" and that he had defended his decision. (Versluys August 14, 1953)

This remark is perhaps most telling: such "revolts" of construction workers were apparently not an exceptional event in this late colonial period. But also during the interwar and prewar periods such uprisings happened on construction sites. During the already mentioned construction of the Ango-Ango harbour, for instance, a strike broke out among the 700 construction workers. From the police report on the strike, it turned out that the immediate cause of the strike was that the contractor—on the edge of bankruptcy—had failed to pay its employees. Yet, the report also revealed other discontents of the construction workers and denounced how the company and its European employees were to blame for the "workers' bad spirit": the African employees had been repeatedly receiving only parts of their wages, the legally obligated rations had been insufficient and the camp was in an awful state—there was no water provision, no washing houses, no waste incinerators, no warm meals. (Chapeaux 1928) As most important reason for the strike, however, the inspector raised the fact that the workers felt their work was useless. That was not without reason: the on-site failure of the original plans and the lack of a suitable alternative had indeed brought Descans to engage the otherwise idling workers in all sorts of irrelevant tasks.

Most of these 700 construction workers were recruited in foreign colonies like Angola or Senegal by a private recruiter. The lack of regulation in which such figures operated, places question marks next to the voluntariness of this recruitment—though legal measures were in place that tried to prevent such forced labor practices in the Belgian Congo by that time. As the colonial government considered such immigrant workers "more evolved" than the Congolese, they were extremely concerned that the strike would escalate further. The *Travaux Publics* director rightfully warned the minister of colonies that: "The blacks know that the construction works are done on behalf of the government; they won't make a distinction between the contractor and us and will think they are wronged by the government." (Van Leeuw February 1, 1929) Though frustrations about the lack of results on the construction site were sure part of the rationale, the strike immediately led the colonial government to end the contract with the British-Belgian association and to take the construction works under state control. Under state control, the grievances of the construction workers were largely met. Soon after the takeover, the government at least installed basic equipment in the labor camp following the limited legal requirements. Moreover, not having to worry about financial difficulties in the same way as the private contractors, they started paying the construction workers again. Eventually these labor costs would turn the never-realized harbor into an enormous financial sinkhole for the colony's treasury.

The fear that strikes on large construction sites—employing large numbers of (immigrant) construction workers—would turn into larger political unrests or riots did not come out of nowhere. Though admittedly not a construction site, the strike in the cement plant of Lukala is still worth noting here. First, because I think it is necessary to cast construction workers a bit more widely in construction history: not only the on-site workers are affected by construction processes, also the factory workers providing the building materials, or even those transporting the materials to the construction site, form an integral part of construction labor. The main reason, however, is because of its temporal and geographical proximity to the Ango-Ango strike. Hence, it says something about the "nervous state" of the colonial government, as well as about the strong political agency of migrant workers. (Hunt 2016) During this cement strike—much like in the Ango-Ango case a social struggle for better working conditions—several immigrant laborers were once again arrested. Yet, unlike in Kailo, instead of resolving the problem, the arrest of these 140 men only poured oil on troubled waters. Instead of dying out, the strike continued as all other factory workers refused to return to the factory. The political agency of the workers was not limited to these strike actions, however. Three immigrant workers, Amadou Gueye from the British Gold Coast, Samba Diaye from Senegal, and Ibrahima N'Doye from French Equatorial Africa jointly sent letters of complaint to the consuls of Great-Britain and France. In

these protest letters, appealing to their civil rights as French and British citizens, they gave an extensive account of the violence during the riots: "without any explanations he [the territorial commissioner] started to hit us with the stock of his rifle and threw us in jail for several days". (N'Doye October 3, 1922) The furious factory workers even turned their unjust treatment into a geopolitical matter, asking their respective consuls to "repatriate" all "French and British Indigenes" working in Congo. (Gueye and Diaye September 15, 1922) While these requests were "diplomatically" shoved aside, the cement company, kept in a stranglehold by the ongoing strike, eventually appealed to the colonial government for annulling the court decision to expel the four "instigators": Charley Davis from Liberia, Thomas Schlenker from Sierra Leone, Joseph Johnson from Togo, and Kennare Idrissa from Senegal. Since the cement plant's striking workers were seen as a serious threat for the stability of what was considered a rather volatile region, due to the presence of religious Kimbanguist groups, the four men were eventually granted pardon. (M'Bokolo and Sabakinu Kivilu 2011) While it is unclear to what extent subsequent workers' actions were at the base, it is clear from company reports that better working conditions were implemented in the years after the strike, raising the suspicion that these empowered laborers could extend their influence over factory policies.

Perhaps the most astonishing example of the political agency of construction workers, happened before the official Belgian reign over Congo, when Congo was still the personal property of king Léopold II, known as the Congo Free State. The king, afraid for invasions from neighboring colonial nations, Portugal and France in particular, ordered the construction of the Shinkakasa fort, close to the capital of Boma, in 1891. For the construction the *Force Publique* mainly relied on Congolese natives they had conscripted for the army. These soldiers-turned-construction-workers were tasked with extremely heavy work: the fort logics of Belgium's main military engineer Brialmont, had been transposed to the Congolese context without much adaptation, resulting in a horrific construction process. (Bekers and Fivez 2019) While in Belgium these forts were built in soft clay or earth soils, in Congo whole sections of solid rock had to be excavated for its construction. According to a report of general Moulaert, who was in charge of the construction site, the soldiers continuously chanted "Bulu-Matari Luvunu [bula-matari is lying]" to express their dissatisfaction of having to work on these heavy construction jobs. (Moulaert 1948, 209) On Tuesday 17th of April 1900, at dusk, the worker-soldiers rose in mutiny: they took over the fort and aimed the fort's Wahrendorff canons to the capital of Boma. Several shells landed on the capital, but the officers had not disclosed (yet) how these shells had to be armed to cause explosion upon impact. The uprising was quelled and most of the mutineers were executed. If these shells had been armed, these construction workers would have largely erased the colonial capital of Boma and most of the officials of the Congo Free State residing there. With it, most likely every colonial ambition of Belgium would have been wiped of the map.

Figure 3. The execution of the rebelling construction workers, 27 May 1900 (Photo: AP.0.0.28525, collection RMCA Tervuren, photo A. Sillye, 1900).

Conclusion

"Moments of crisis", like the ones I discussed above, are a generator of paperwork. Reports, inquiries, liability discussions, legal correspondence: they all ended up in the contractor's archive I worked with. Latour already pointed at the importance of such sources: "Official enquiries are happening everywhere to map out for us the fabulous extension of what social ties have become in the hands of technical setups." (Latour 2005, 81) Mapping out this fabulous extension of social ties on the colonial construction site, the paperwork surrounding moments of crisis gives us highly valuable insights in construction labour. Correspondence on failures reveals the on-site working conditions as well as the—overstated—ingenuity of the European engineers and overseers. Accident reports are one of the few documents in the colonial archive that allow to lift the indigenous construction workers out of their anonymity. And the paperwork generated by strikes, can recast them as political subjects, resisting against their working conditions and the colonial building cultures, instead of as mere victims thereof.

In "times of crisis", I argue, such "moments of crisis" might have been more recurrent. In the "times" of Belgian colonialism at least, this research shows how failures, accidents and strikes were the order of the day. As these "moments" appeared so often in the colonial archives I worked with, this research urged me to understand them as essential research topics, instead of as mere anecdotic events. As the Parisian examples of Paskins reveal, however, these "moments" are not only relegated to colonial contexts, but also to other contexts where the paperwork they generate can provide valuable sources for discussions on construction labor.

Given their crude appearance in the colonial archives I have been working with, it is not surprising that this conceptualization of "moments of crisis" stems from a cross-over between the fields of colonial and construction history. Yet, it was also the highly critical approach to colonial archives so common in colonial history, that urged me to look for sources that could allow to let "the subaltern speak". (Spivak 1988) Because of this indoctrination by colonial history methods, my attention might have been drawn more naturally to sources on "moments of crisis", as it were only those that allowed me to surface the "subaltern" construction workers. Since I believe such sources related to "moments of crisis" have the potential to bring the "mute" construction workers to the fore in other contexts as well (Carvais 2010),

this paper also carries a meta-argument: a strong plea for actively crossing disciplinary boundaries and for introducing methodologies from other research fields into construction history. It will be through such methodological cross-overs that we will be able to push the discipline in exciting new directions.

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