Architectures of Colonialism

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EDITED BY VERA EGBERS, CHRISTA KAMLEITHNER, ÖZGE SEZER, AND ALEXANDRA SKEDZUHN-SAFIR

# Architectures of Colonialism

Constructed Histories, Conflicting Memories

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Editors: Vera Egbers, Christa Kamleithner, Özge Sezer, Alexandra Skedzuhn-Safir

Project coordination: Albrecht Wiesener, Sophia Hörmannsdorfer

Copyediting: William Hatherell

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### Colonial Enterprises and Urban Design

Transnational Knowledge, Local Agency, and the Diamond Company of Angola (1917–1975)

From Saurimo to Dundo, 70 km, the journey was made with the ease provided by one of the best roads in the District. The road, curved and flanked by acacia trees, allows for a higher speed than normal. Suddenly, a vague bright that rises between the trees reveals the electric light of the streets and houses. The headlights illuminate a large sign that reads: "Dundo, Diamang." The silent and brightened streets are more like garden alleys. The car stops between a wide carpet of grass, flowered, and a large building with sober lines, colonial style without vulgarity. ... The Governor did not hide the surprise that this set of things caused him, miles away from the coastline, in a hidden corner of Angola. ... Dundo is an oasis in the desert.<sup>1</sup>

Dundo was established in 1919 as the main town of the Companhia de Diamantes de Angola (Diamang). After its foundations in the Lunda district, a few kilometers from the north-eastern border of Angola with the Belgian Congo, the Diamang mining company put its best efforts into building a so-called "model" town. Throughout Diamang's lifespan, from the early 1920s to the late 1980s—overlapping with and outlasting the many decades of Portuguese colonial rule in Africa—, Dundo was considered an "oasis in the desert." According to the company's records, this praise was due to the "intelligent, dedicated and enthusiastic work" of Dundo's Urbanisation and Sanitation Team, whose importance in establishing and strengthening Diamang's rule was emphasized.<sup>2</sup> The account cited above of the 1936 visit of António Lopes Mateus, the newly appointed Governor of Angola, clarifies the surprise caused by Diamang's built environment, located in a "corner" of the country. The "plain" houses, the well-kept and "comfortable" gardens, the "hygienic" guarters, and the "well-built" roads all contributed to a much-appreciated setting for the town. Electric light, offered as an "unquestionable sign of civilization," further accentuated the "colonial style" of the buildings.3

To celebrate Lopes Mateus's visit, Diamang published a summary of its "origin, development and activity and colonizing action," with charts comparing the material development of the mining region through the growth of towns and roads between 1926 and 1936, and photographs of buildings, gardens, and streets. The document set out the "foundations of a nationalizing action," bringing together old territorial plans, while trying to prove the company's commitment to designing a "perfect" built environment. According to the engineer Quirino da Fonseca, the head of technical operations in Lunda, "major improvements" were then being prepared. "Alongside the industrial work," he underlined, the mining enterprise was eager to sponsor and build a "work of civilization and patriotism ..., which can, without the least fear, defy comparison with any enterprise of the most advanced or most prosperous foreign colony."5

Fonseca's words were timely and implied key interests. First, Diamang was pursuing a new and different kind of settlement in Lunda, with the goal of claiming a "civilizing" role for the mining venture. Second, the company was committing itself to the renewed Portuguese colonial effort, driven by the nationalistic agenda of the *Estado Novo* (New State) regime. The dictatorial regime in Portugal, lasting from 1933 to 1974, depended not only on colonial extension, as ensured by the promulgation of the Colonial Act in 1930, but also on acts of spatialization, which gave architecture a new goal and role.<sup>6</sup> Along these lines, private companies were seen as crucial agents in empire-building. Diamang, in particular, not only quickly became the major economic and political player in Angola, but was also considered a "stronghold" of the moral, economic, and social values of the Portuguese State.<sup>7</sup> As argued by Mathias Alencastro, Diamang and the New State fostered "one of the most successful public-private partnerships of the entire colonial era," in contrast with the majority of other colonial enterprises. Through the creation of a very profitable "extractive province," Diamang built all the infrastructure for colonization, generated revenue for the Portuguese elite, and strengthened Portugal's position in the international arena.<sup>8</sup>

In fact, the company's early dependence on foreign enterprises to carry out mining works was becoming less heavy, allowing for the construction of a unique, even if always joint, spatial "dialect." From the mid-1930s onwards, some programs that were central to the Portuguese New State's corporative, conservative, and Catholic ideological indoctrination, notably the "Casa do Pessoal" (Staff House/Club) and the church, were established in Lunda. Cutting across all other issues, spatial planning was put forward as both pre-condition and consequence of Diamang's rule. Although local conditions could not be ignored—as shown by the accounts of resistance, disease, and climatic difficulties—the company largely followed national and transnational agendas. As a result, stated "concerns" for local populations were always ultimately aimed at the profit and benefit of the company itself.

Considering the interplay between these layers, Benoît Henriet sees company settlements as "peculiar fields of power within the imperial superstructure, where broader tensions are made more visible and challenged."

11 Unpacking such a perspective, this article explores Diamang's built environment as a magnifier of the complex nature of the colonial space(s), merging diverse actors, times, and spaces while diving into the conflicts, contradictions, and dissonant narratives that undermined them. The town of Dundo, in particular, will be used to outline these dynamics. Following Jiat-Hwee Chang and Anthony King's argument that private corporations were among the first imperial actors to enact space-building as a "power-knowledge configuration inextricably linked to asymmetrical colonial power relations," research on the outposts of these corporations can provide more nuanced pictures of the spatial footprint(s) of twentieth-century colonialism in Africa, engaging with growing calls to diversify archival sources, move away from the canon, "intersect" actors and agendas outside the architectural field, and critically dialogue with concepts of race, labor, and gender.

The following section addresses private companies as key players in the spatialization of colonial empires in Africa. This is followed by a study of Dundo's spatial layout as a "model company town" and then a discussion of the many architectural models adopted and adapted in Lunda, questioning how borderlands, often dismissed due to the absence of aesthetically appealing buildings, may be critical places to uncover other significant facets of architecture built under and over colonialism. The final section focuses on Lunda as a whole to understand the variety of plans across Diamang's space, ranging from struggles to learnings.

### Architecture of a Mining Empire

The concession of large "pockets" of land was a fairly common strategy of European powers to support colonialism in Africa at the turn of the twentieth century. After the Berlin Conference of 1884–1885, several private companies were organized as key tools to explore and exploit the colonial ground. Amidst plantations of coffee, cotton, and sugar, mining activities stood out due to their industrialized landscapes, where thousands of African laborers and hundreds of European employees were involved. Operating within fairly bounded areas—carved out as "concessions" and later described as "enclaves" mining enterprises achieved significant power in producing and controlling space. A particular group of corporations, from De Beers to Union Minière, Forminière, Bécéka, and Diamang, later known as the "Cape-to-Katanga Miners", "Team," or "Lobby," paved the way for numerous company towns and workers' villages across Central and Southern Africa. These settlements were often the only manifestation of the colonial apparatus in such remote areas, thus arguably showing up as crucial "scaffolds" in building empires both politically and materially.

The emergence of Diamang was well-timed for Portuguese territorial sovereignty. The organization of the company underpinned the formalization of the so-called "Portuguese Lunda," ocinciding in time and space with the reshuffle of colonial boundaries. Having overcome the European imperial disputes at the turn of twentieth century, colonial Angola was reshaped by a new political framework and gained a generous "slice" that included part of the ancestral Lunda Empire. Despite various plans to occupy Lunda, the region remained under the fragile control of the state authorities until the late 1910s. Overlapping with the ratification of the Treaty of Versailles, and in the face of the so-called "pacification campaigns," Diamang was usefully considered a "buffer" to quell any political ambitions over that part of the territory. Without disappointing these expectations, it became one of the major players in the Portuguese Empire, sometimes called a "state within the state" or the "ninth colony."

Nonetheless, the Lunda border was not a sharp edge. On the contrary, mining companies faced similar economic, technological, and social problems on both sides of the border. Far from the "model" and "perfect" descriptions, the reality on the ground was complex and rough. First, it must be noted that mineral wealth had deep roots and routes in Africa, with local communities having their own uses of land and ownership that had to be negotiated by the colonial power.<sup>23</sup> Later, riots starting in the 1930s and successive labor policies were significant signs of the many struggles that persisted across mining sites.<sup>24</sup> Coercive recruitment led to massive displacements and poor health conditions among workers; the housing conditions offered were often appalling; local families were constrained to a way of life very different from their own; and most work tasks were harsh and poorly paid.<sup>25</sup> Space, from urban planning to village layout and house design, thus became a key asset to sustain company rule and counter such hardships. Over the years, enterprises built an extensive yet exclusive "trans-imperial cloud" of knowledge, which resulted in plenty of shared information, fieldtrips, and intertwined research. As noted by Wendy Roberts, company spaces were "exemplar" evidence of "multiple agents and architectural influences operating on a single project in a region remote from established centres of ideas and practice."26 Each company built its own particular "architectural dialect,"27 shedding light on "networked modernities" beyond imperial hierarchies while challenging prevalent colonial dichotomies.<sup>28</sup> Across boundaries and under paternalist guises, managers, doctors, and engineers envisioned and planned mining settlements as "panoptical" spaces, which, while supporting labor productivity, should act as "civilizing" and "modernizing" stations.<sup>29</sup> In particular, "stabilization policies" were enacted as crucial tools to support this informal "mining empire," focusing on house, health, and hygiene as the core aspects of a "social engineering" project.<sup>30</sup>

Converging with Kamissek and Kreienbaum's remarks on the concept of "cloud," this network of connections emerged as a "messy," "fractional," and "diffuse" knowledge reservoir, of creative processes rather than clear-cut transfers, which today ultimately bring not only metropolis and colonies but also different empires and colonies into the same analytical field.<sup>31</sup> Although Diamang had the overall support of the Portuguese state, its remoteness within Angola encouraged long-lasting cross-border connections with Belgian Congo neighbors as well as increased need (and self-government) to experiment with new urban ideas.<sup>32</sup> The following section thus questions how and to what extent the remote and borderland position of mining sites stimulated new urban technologies and architectural repertoires. Was Dundo a real "oasis in the desert"?

### Dundo, an "Oasis in the Desert"?

Dundo was founded on a plateau at the intersection of the Luachimo River and the Dundundo tributary, equidistant from the first Diamang mines, in the last months of 1919. The place broadly replicated the physical conditions of Tshikapa, headquarters of Forminière about 150 km to the north. Both towns grew up funneled into river intersections, while making use of the same grid system to functionally organize their space. Dundo was closer to the border than any other Diamang site and therefore guaranteed the best (and much needed) land access to the mining posts in the neighboring colony. After six years of exploratory work, the engineers working in Lunda considered the opening of Dundo as the moment of the "true settlement of the company," 33 illuminating the importance of this particular town in supporting Diamang's venture.

Planned by American engineers with experience in the mines of South Africa,<sup>34</sup> Dundo's center followed the main lines of the "company town" model, later described by John D. Porteous.<sup>35</sup> From its earlier days, the settlement was based on an orthogonal structure, with long tree-lined avenues (fig. 1). Around the town's main square were a club, the Administration House and sports fields. Single-family houses for European employees were lined in spacious blocks with gardens. Workshops and warehouses were placed in the north part of the town, facing a slope down to the river. The hospital for European families, on the other hand, was the farthest possible southwards. By the mid-1930s, 150 white employees lived in Dundo's town center and the site had more than seventy brick buildings.

Just like most company settlements, the city plan mirrored the company's labor hierarchy, reserving the largest and best-placed buildings for the senior staff. By the 1940s, Dundo town center housed an international "European" community of more than 300 people, comprising Portuguese, American, and Belgian experts and families. As part of an industrial machine, both streets and buildings were numbered rather than named. Over time, Dundo became fully equipped with a Native Museum, schools, plant nurseries, a laboratory, and a weather station, picturing the "scientific colonialism" promoted by Diamang. Following the "company town" ethos, the goal was to "qualify and not quantify:" Since buildings were frequently demolished to



1 Aerial view of Dundo's streets and bungalows (c. 1970).

make way for new ones, following the finite nature of mining operations, the town did not grow much until the late 1950s. This building synchronicity further emphasized the homogeneity typical of the "company town," namely among the houses for European staff, which showed a great uniformity in typology and materials. The red brick bungalows and well-designed green areas, modelled after both South African and Belgian mining sites,<sup>37</sup> soon became one of Diamang's symbols. Notably, not a single building was planned by an architect.<sup>38</sup> Organizing space in the mining fields was considered under more "practical" and "scientific" standards, turning engineers, doctors, and locally trained drawers, always closely supervised by the management board, into the main planners of the town.

After Lopes Mateus's visit, and confirming Quirino da Fonseca's statement, Dundo underwent a noteworthy spatial renovation. In 1942 the region was reorganized into a "Concession" and a number of teams exclusively dedicated to "urbanization and sanitation" tasks were set up. Three years later, the mining post was suggestively renamed an "urban center." Henceforth, the settlement began to expand southwards, transforming the original polygon into an elongated shape. The "Concession" had plenty of services, including a petrol station, churches, markets, brickyards, vegetable gardens, a swimming pool, a hydroelectric station, the Luachimo River's Touristic Promenade, and an Acclimation Park.

In parallel, both the slope and the river, and later the hospital, were used as physical barriers to separate "Europeans" from African laborers. Different layers of labor and racial segregation



2 Dundo's "indigenous village" to house workers during the "preparation and adaptation period."

were set forward. Around Dundo's central nucleus, more than a dozen "workers' villages" were built for native laborers, and even those had different sizes and shapes according to the origin and role of their inhabitants. Baluba people, for instance, were cherished for their "expertise" in heavy duties, thus being treated with more reverence by the company's administration. Servants from the houses in Dundo, on the other hand, lived closer to the town center, in orderly "neighborhoods." Conversely, laborers newly arrived to work in Diamang's mines, coming from other regions of Angola, were housed and physically evaluated in "acclimation camps," with long rows of adobe houses, located further away (fig. 2). Finally, most local workers, called "volunteers," remained in their wattle and dub huts. All in all, housing was a critical instrument to produce and organize the company space. Lopes Mateus's visit, in particular, coincided with the inauguration of the exclusive Bairro Escola (school neighborhood), built between the workshops and the river, which was regarded as "a hygienic and modern example of the standard of living to which every African can rise through education and work." <sup>39</sup>

According to the company's records, every space in the "Concession area" should obey a "regime of practical sense and beauty," in which concepts of "embellishment," "modelling," and "improvement" of and through space were key<sup>40</sup> (fig. 3). Notably, the dissemination of the veranda would be considered the main evidence of the transformation of the housing model into a form that was "legible" to Diamang's landscape. Vegetation was also seen as an essential part of this system: on the one hand, it responded to climatic and "moral" challenges faced by European employees, while on the other, this system was a tool for the "civilization" and surveillance of African families. "Model" villages, for instance, were shaped by long rows of trees, orchards, vege-



3 House for the European staff, Dundo, 1945.

table gardens, and even flowers, all of them contributing to a sense of order, while the company demanded that the perimeter around houses be kept completely clean of any vegetation, so that moves inside the villages could be easily spotted.

Unsurprisingly, Dundo was pictured as an "oasis in the desert" by the colonial apparatus—both the state authorities and the national press. The town provoked feelings of strangeness and wonder within the Portuguese imperial scene, so different from the white-washed villages that stood for the Portuguese "national colonization." As previously noticed, both this "oasian" idea and the town's layout were very much in line with the numerous "workingman's paradises" spread around the world to support industrial ventures. Throughout the first half of the twentieth century, the "company town" design had materialized as "one of the most efficient and convenient models of space management, both in practical and political terms." Colonial exploitation sites, in particular, offered the perfect ground to experiment with this model. While both European and African workers were said to benefit from such a "paradisiacal setting," the reality did not comply with these aims. Dundo's history was one of conflict, displacement, dispossession, and destruction since the town's inception.

### Broader Circuits: Contact Zones and Transnational Networks

Dundo had its singularities, but it was far from being original. There are many similarities shared between "company towns" built under twentieth-century colonialism(s), from urban planning to the aesthetics of buildings (even if remarkable differences are surely to be acknowledged). The

examples of Leverville in the Belgian Congo, studied by Benoît Henriet, the CDC camps in Cameroon, surveyed by Ambe Njoh and Liora Bigon, as well as Robert Home's pioneering work on Natal and Northern Rhodesia workers' housing, are all very close to Dundo and illuminate broad circuits still to be explored, in both their connections and disparities. 44 Beyond this far-reaching background, Diamang's spatial layout would mainly result from the "Miners" circles of knowledge transfer, thus placing emphasis on the particular role of these mining locations in giving shape to the exploitative nature of European colonialism.

Especially from the 1950s onwards, these colonial exploitative borderlands arguably became critical sites to be usefully studied as "architectural contact zones." Corporations were thriving and growing due to substantial post-war demands while international scrutiny became bolder. By the 1950s, "welfare" and "development" flourished as watchwords and were translated into the need for good housing conditions. Transnational meetings, organized by social scientists and institutions that were settling in Africa, such as the Commission for Technical Cooperation in Africa South of the Sahara (CCTA) and the Centre d'étude des problèmes sociaux indigènes (CEPSI), brought mining companies together and made these circuits even stronger. However, the recycling of discourses and ideas dating back to the 1930s, even if sometimes wrapped or named differently, revealed that the reality on the ground did not correspond to the "good" conditions expected and often heralded as "exemplary" among the colonial and business community.

In fact, as the following paragraphs highlight, living conditions in Lunda were far from positive. Although reports were filled with photographs of the already mentioned "model" villages, often presenting a *neutralized* version of Diamang's spaces, these did not correspond to the majority of the workers' settlements. First, the company was never able to house all of its laborers, with many of them remaining in huts built around the pictured settlements. Second, it was not until the early 1960s that the existing adobe houses were in fact almost fully substituted by brick ones. Even in these circumstances, Diamang would report the resistance of local families to being housed in the company's villages. While the colonial authorities celebrated a higher number of "good and big brick and zinc" houses within the "European standard," social scientists acknowledged that the models offered did not correspond to the real expectations of Lunda's communities, who "preferred to live next door, in grass huts they had built themselves, which, according to Western conceptions, arguably did not have all that was necessary for a decent life."

In the face of this challenging reality, Dundo became a major "laboratory" to try out different housing models, therefore adding other layers, challenges, contexts, and goals to be considered within (and further complicate) the impressive "colonial modern" approach. After Orenstein blocks or Kimberley brick houses spread as particular typologies in mining villages—mainly because they were considered "healthier", companies experimented with other, more universal, models so that both economic and social demands could be faced. Local issues were never dismissed, from topography and climate to communities' specific demands, pointing to the importance of "editing" skills when it came to the diffusion of urban design. A few examples confirm the introduction of new building technologies and methods in Diamang's landscape. The works on the Luachimo hydroelectric station in Dundo, for instance, resulted in the trialing of Wallace Neff's "Airform bubble houses" to quickly house numerous teams of workers. In 1953, twelve houses made out of an air balloon covered with gunite concrete were built in the Bairro Escola, which by then had been renamed Bairro Norte. Unsurprisingly, the camp had been

presented as Diamang's first "model neighborhood" to showcase the "best modern buildings" for the so-called "specialized" laborers. After that, two prefabrication systems were tried out to further meet accommodation needs.<sup>52</sup>

It was mainly these models that have endured in the urban imagery of Dundo. While the first adobe houses were lost over time, the new "modern" models, namely the balloon houses and the brick houses with balconies, became symbols of Dundo's urban development. Today, the city remains the main hub of Lunda, despite its infrastructural weaknesses as well as the reproduction of socioeconomic hierarchies in the town plan.<sup>53</sup> Furthermore, some of the above-mentioned typologies were later used in other parts of Angola—such as the balloon houses in the late 1950s along the Benguela Railway line<sup>54</sup>—, suggesting that companies had a role in spreading architectural models throughout the country. Accordingly, Diamang was often asked by the colonial authorities for workers' housing plans that "could be displayed as standards for other enterprises in Angola,"<sup>55</sup> making Lunda a point of arrival, transit, and departure of architectural ideas. Housing built in the Mwinilunga District in Zambia by communities that migrated from Lunda in the 1980s illuminates the resilience of some of these spatial models, particularly through the prevalence of well-kept garden spaces and verandas, and unveils the still unexplored paths that merge colonial and postcolonial periods.<sup>56</sup>

### Local Agendas: Conflicting Narratives and (Still) Invisible Expertise

The previous section showed how Diamang presented and advocated its construction activities as innovative and beneficial for African families. By the 1960s, more than 25,000 laborers were employed in the Lunda mining fields. The company's profit was indeed mainly dependent on its ability to engage labor. Learning how to make Lunda's space more manageable—as an example of James Scott's "social gardening"57—was Diamang's greatest concern. The growing and fine-tuned "stabilization policies" were a clear symptom of this need. Their supranational scale, while surfing through broad circuits of knowledge, went hand in hand with activity on restricted concessions. It was thus the combination of both scales that resulted in a capillary "infrastructural power,"58 probably more effective than the state's arterial rule. Yet, even if it is accepted that corporations' control through and over space was above average,59 that did not mean that Diamang's authority, just like the colonial government itself, was not "simultaneously strong and weak, with overlapping and ambiguous agendas."60 In fact, what significantly stems from the company's accounts is precisely a finer view of the conflicts and contradictions on the ground.

Records produced by Diamang's planning and construction services support a mostly benevolent picture. Accounts of the several works in progress, the manufacture and high expenditure of construction materials, and the endless maintenance of buildings evoke a modern, fertile, prosperous landscape. Annual reports, packed with statistics, graphs, and figures, reinforced such a sense of control and achievement, leading Diamang to constantly stress the high number of houses built for the workers as a great "triumph." Labor reports, though, reveal a different, messier scenario. Although accounts of struggles are scant—requiring a careful reading "along and against the archival grain" , they persist throughout time, pointing to the many histories to be found



4 Workers' neighborhoods in Caingagi, Lunda, 1960.

As expected, housing excelled as an "arena of contestation." <sup>63</sup> The most repeated notes refer to the frequent abandonment of the company's villages. Accounts written in the 1960s, for example, denounced several empty houses around Dundo. By that time, quarters with all the requirements (e.g. durable materials, a yard for each family, kitchen, latrines, running water) were being offered and even a "Diamang's Type House" was proposed (fig. 4). However, workers still preferred to build their own houses in nearby places, where certain rules—particularly the ban on raising animals—were not enforced. <sup>64</sup> In parallel, families would play with the companies' legal demands for housing to easily get a place to live, exposing the ability to use the rules to their advantage. This became particularly true during the "reordering process" of the Lunda district, set up by the Portuguese authorities in the 1960s to fight the liberation movements, when a large number of families moved near mining sites to be sheltered by Diamang.

Diamang's managers would also let their lack of power slip in between the lines. The "Best Village Contest," organised in Lunda since the late 1940s, exposed some of these anxieties. The goal of the contest was to select the settlement built by locals that proved to be most aligned with the company's spatial guidelines, including the application of orthogonal layouts, the construction of verandas, and the use of bricks, doors, and windows. The competition came to an end in the 1960s due to the growing disengagement of the local families, who favored an independent building approach. The company's employees tried to cover the flaw by building a "winning village," but the deliberate assembling of different components—mixing Lunda's painted walls with Diamang's carefully designed windows—was undeniable (fig. 5). In parallel, some old wattle and daub houses still in use had to be neglected because only African workers knew how to master this building technique, showing that it was not only legal regulations to push Diamang towards "definitive", more expensive, adobe houses, but also the critical availability of the local expertise.



5 "Winning village" in Diamang's Best Village Contest, 1962.

The efforts to master Dundo's built environment also engaged many still invisible actors who actively participated in the construction of the settlement and its buildings, namely the non-European designers and builders. Diamang's great autonomy under the Portuguese Empire meant that it had to create and support its own structure. Several departments and teams, as well as brickyards, workshops, and quarries, were organized to plan and carry out construction works. This structure became more specialized over time, evolving from the first general teams in the 1930s to the later Planning Department and the Civil Construction Service in the 1960s. As a result, thousands of men were able to acquire and master new skills, from the production and application of construction materials to the handling of heavy machinery. Dundo's "Concession," for instance, had a team of 1,000 men permanently dedicated to "urbanization issues." In addition, more than 5,000 seasonal contractors and helpers engaged with varied tasks such as bricklaying, transport, road maintenance, and sanitation works 66 (fig. 6). Technical drawings and plans had the signatures of the same African drawers over long periods. Dibué and Domacié, for instance, worked in Diamang's planning services for more than two decades, thus being able to exercise and refine their knowledge in architectural design. Yet, they were never considered "specialized," probably because they remained based in their root communities. Finally, women and children also had a role in Diamang's space, despite records being scarce. Most of them were mainly responsible for cleaning the villages and for less heavy work in bricklaying. Women, in particular, were often key agents in defining the household layouts and materiality, since the company often had to accommodate their agendas and labor requests.

These processes of "specialization" were much celebrated by the colonial apparatus as proof of the alleged "modernization" of Africa. Even if they have to be studied cautiously to avoid the pitfalls of perpetuating untrue linear narratives of "development" —intentionally merging here three very challenging concepts to be dealt with by architectural historiography—, it appears



6 Construction works at Dundo's hospital, 1961.

imperative to acknowledge the extensive and cumulative expertise of Diamang's laborers in building techniques and technologies, which probably influenced later construction works throughout Lunda. Within the rather heterogeneous, erratic, and disputed nature(s) of colonialism, mining locations thus show up simultaneously as pictures of the "repressive developmentalism" as well as places for new skills, offering fertile ground for assessing knowledge that was produced between the silenced layers of the colonial web.

### Concluding Remarks

Today, Dundo stands as a thick assembly of layers, connecting different political, social, economic, and technological realities. Recent news show how Diamang's building protocols are still ingrained in Lunda. The company's commitment to its built environment arguably influenced the mining community's relationship with its space. The "exceptional" nature of Lunda continues to be celebrated by today's mining societies, who replicate many of the earlier urban planning lines in the villages they are still responsible for building. For instance, Orenstein red bricks remain acknowledged as the best "solution" for housing while large mining neighborhoods are equipped with green areas and museums.

In particular, Diamang's settlements were designed as part of a larger social engineering project, like an ensemble of shared forms that were (and still are) meant to be exemplary in particular ways. Due to their wide-span chronology and their borderland condition, workers' villages, like those founded in Lunda, challenge the colonial epistemic structure. These places confront us with the need to expand our understanding of architecture and space production

beyond nationalist scopes while engaging with local and transnational connections. In addition, since most private companies outlived the end of colonial rule, their housing landscape, as their main tool of control, became a resilient structure. For this reason, we need to focus on these buildings not as inert remains, but as persistent imperial formations that are unfinished histories running in the past continuous, as argued by Ann Laura Stoler.<sup>69</sup> Understanding their role and impact on the spatialization of imperial norms and forms seems paramount to critically engaging with difficult architectural legacies.

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- 1 "O Senhor Gov. Geral" 1936.
- 2 "Diamang's Administration Report, March 1952." ANTT, PT/TT/AOS/D-N/2/10/1.
- 3 Series of news stories from the newspaper *A Província de Angola*, covering Lopes Mateus' visit to Lunda, July 1936.
- 4 "Súmula da origem, desenvolvimento e actividade e acção colonizadora da Companhia de Diamantes de Angola, Dundo, June 1936." ANTT, PT/TT/AOS/D-N/2/2/1.
- 5 "Admirável síntese" 1936.
- 6 Brites 2017; Brites and Correia 2020.
- 7 Alencastro 2004; Varanda 2007.
- 8 Alencastro 2022.
- 9 Roberts 2014.
- 10 Rosas 1995.
- 11 Henriet 2021, 7.
- 12 Chang and King 2011.
- Nasr and Volait 2012; James-Chakraborty 2014; Bremner et al. 2016; Itohan Osayimwese, "From Postcolonial to Decolonial Architectural Histories: A Method," keynote lecture at the conference Architectures of Colonialism: Constructed Histories, Conflicting Memories, Brandenburg University of Technology Cott-bus-Senftenberg, 2021 (see in this volume).
- 14 Coquéry-Vidrovitch 1972: Honke 2010.
- 15 Ferguson 2006; Rubbers 2018.
- 16 Wolfe 1962.
- 17 Boonen and Lagae 2020; Larmer et al. 2021.
- 18 Scriver 2007.
- 19 Carvalho 1895.
- 20 Vellut 2006.
- 21 "No distrito da Lunda" 1932.
- 22 Galvão and Selvagem 1952.
- 23 Larmer and Laterza 2017.
- 24 Perrings 1977; Seibert 2015.
- 25 Dibwe Dia Mwembu 1990; Cleveland 2005.
- 26 Roberts 2014.
- 27 Roberts 2014.
- 28 Lim and Chang 2012; James-Chakraborty 2014.

- 29 Borges and Torres 2012.
- 30 Mottoulle 1946; "Social Policy" 1947; Dibwe dia Mwembu 2007; Waldburger 2020.
- 31 Kamissek and Kreienbaum 2016.
- 32 Piaton and Bodenstein 2014.
- 33 Although Diamang was formally established on October 16, 1917 in Lisbon, the agents in Lunda pointed to July 1, 1919 as the official starting date for the company. "Para a história: notas e datas acerca da Diamang, Dundo's Museum Report (1943)." UC/AD.
- 34 Namely Harold Thomas Dickinson and Lute James Parkinson, both employees of De Beers in South Africa. To learn more about these men see Parkinson 1962, 28; Carstens 2001.
- 35 Porteous 1970.
- 36 Morisset and Mace 2019, 8.
- 37 "Photograph Album of the De Beers Consolidated Mines Ltd. Kimberley, South Africa 1899–1905." John Fuller, Lehigh University Special Collections, SC MS 0230.
- 38 Nonetheless, Diamang was aware of architectural expertise as a key tool in empire-building, as shown in the hiring of some well-known architects to plan the company's headquarters in Luanda, the capital of Angola, in the late 1940s.
- 39 "Súmula da origem, desenvolvimento e actividade e acção colonizadora da Companhia de Diamantes de Angola, Dundo, June 1936." ANTT, PT/TT/AOS/D-N/2/2/1.
- 40 "Report of Diamang's Board of Directors, 1950." ANTT, PT/TT/AOS/D-N/2/5/1.
- 41 "No distrito da Lunda" 1932.
- 42 Crawford 1995.
- 43 Scriver 1999.
- 44 Henriet 2021; Njoh and Bigon 2020; Home 1997; Home 2000.
- 45 Avermaete and Nuijsink 2021.
- 46 Poncelet 2008. Although the role of these institutions remains bound to social and political issues, the study of companies' space points to a significant impact on architectural practices that is still untapped.
- 47 "Alguns aspectos da cultura quioca. Mensário administrativo, 1962." ANTT, António Soares Carneiro archives, cx. 16, n°3, doc. 1 a 13, PT/TT/ASC/D/0004.
- 48 Avermaete, Karakayali, and von Osten 2010.
- 49 Van Nitsen 1933; Dibwe Dia Mwembu 1990; Pesa 2014.
- 50 Beeckmans 2013.
- 51 Head 2011. Surprisingly, it seems that the company managers were unaware of the broad impact that Air-forms were having on the modernization of the African landscape, especially in Senegal. Some engineers in Lunda even referred to these structures as casamatas (bunkers), harking back to earlier military imagery.
- 52 A 1955 report details the construction of Studal houses around Dundo, pointing to Jean Prouvé's experiments. About this same time, Arcon structures, a British technology disseminated during World War II, arrived in Lunda to quickly house European employees. It was no coincidence that earlier that year Union Minière had built nine examples of these "balloon houses" in Lubumbashi, while prefab systems were being extensively studied across mining sites (Lagae and Boonen 2012). These experiments paralleled *Trajinha* houses, "tropical type", prefabricated bungalows used by both Lunda's engineers and Cahora Bass Dam's teams in Mozambique, a reminder that architectural repertoires travelled diverse circuits, from mining to imperial bonds.
- 53 Udelsmann Rodrigues and Bryceson 2018.
- 54 Head 2011.
- 55 Diamang's head officer in Africa, 1953, "SPAMOI's report: Recruitment (contracts, fees and accommodation), 1953–54." UC/AD.
- 56 The author thanks Iva Pesa for pointing out this connection. About Mwinilunga, see Pesa 2014.
- 57 Scott 1998.
- 58 Mann 1984.
- 59 For a framework of the multi-dimensions of spatialized power, see Dovey 1999.

- 60 Myers 2003.
- 61 "Relatórios por parte dos representantes do Governo." ANTT, PT/TT/CDA/1.
- 62 Stoler 2009.
- 63 Barker-Ciganikova et al. 2020.
- 64 The same question is exposed in an International Labour Organization's report from 1971. "Rapport de Pierre Juvigny, représentant du Dirécteur general du Bureau International du Travail, sur les contacts directs avec le gouvernement du Portugal au sujet de l'application de la convention (no. 105) sur l'abolition du travail force." Geneva. 1971.
- 65 "SPAMOI's report, 1962." UC/AD.
- 66 "Relatórios da Concessão do Dundo, 1942–1947." UD/AD.
- 67 Cooper 1997.
- 68 Jerónimo 2018.
- 69 Stoler 2013.

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