The Guide schématique de la ligne [1957]
Tracing the infrastructure landscape along the Matadi-Kinshasa railway line (DR Congo) through a living archive

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Introduction

In his book The River Congo, an 1895 travelogue of his journey to the lower reaches of the Congo River, the British scientist Harry Hamilton Johnston, used an array of tactile adjectives to describe the landscape of the Bas-Congo region, largely unknown to his audience of the late nineteenth century. In one particularly colorful passage, leaving all scientific objectivity behind, Johnston discusses the “boldly shaped hills,” the “velvety woods,” the “tiny streams” and the “sounding cascades” of the landscape he was crossing. When 40 years later, the Belgian journalist Chalux traveled through the same landscape, Congolese nature was not what caught his eye. On the contrary, he saw a landscape in full transformation; the many industrial and agricultural investments he witnessed, so he added lyrically, were “the symbols of a Congo in the making.” Traveling by train from Matadi to Kinshasa, via the 400-kilometre-long railway line that had been constructed between 1892 and 1898 and was being reshaped in the early 1920’s, Chalux explicitly pointed at the transformative impact the railway had already had on the Congolese landscape:

1 Research for this text was conducted in the context of a 4-year fwo-project entitled “Re-assessing Congo’s architectural history from 1918 till 1975 through a construction history approach” (fwo project n° G053215N), supervised by prof. Johan Lagae (Ghent University), prof. Rika Devos (Université Libre de Bruxelles), prof. Luc Taerwe (Ghent University) and prof. Jacob Sabakinu Kivilu (Université de Kinshasa). The material on which this article is based was mainly collected during a mission in DR Congo during the months of September—October 2017. This text furthermore draws on the significant work done on mapping the infrastructure along the Matadi—Kinshasa railway line by master students Fien Deruyter and Jana Vandepoele in the context of their master dissertation, presented at Ghent University in September 2018 and supervised by Johan Lagae, David Peleman, and myself. [Fien Deruyter and Jana Vandepoele, Mapping a transforming colonial landscape. An atlas of the Bas-Congo region along the Matadi-Léopoldville railway line, master’s dissertation, Ghent University, Ghent, 2018.]


3 Chalux, Un an au Congo Belge, Brussels: Dewit, 1925, p. 96.
“The track rises and rises. And now it is Songololo with its network of shunting yards. Then, a huge bridge over the Kwilu river and it is Lukala with its cement plant. More bends and slopes, and then all of a sudden, a small town on the slope of the hill, nestled in the greenery: the spacious workshops, beautiful houses and refreshing, invigorating breezes of Thysville […] Here, Kisantu and its mission. Then it is Madimba where I met a colonialist who was making a fortune with oil palms. […] Here you can see Kasangulu, where already 200 blacks are working on the tracks.”

Today, infrastructural investments have again drastically transformed this landscape. The former colonial railway is now largely dysfunctional, and transport takes place along the N1 highway. As a result, the many industries that depended on rail transport are either in ruins or have turned to the road. For instance, the city of Mbanza Ngungu—described in Chalux’s book as the lush company town of Thysville, headquarters of the railway company Office du Transport Colonial (Otraco)—became a post-industrial graveyard. The rusting carcasses of trains are slowly stripped of vital parts in a courageous attempt to revive others. Yet what this “imperial debris”—to borrow Ann Stoler’s expression—mainly reminds us of, is the extent to which the landscape of the Bas-Congo was redefined by the instalment of this colonial railway infrastructure in the first place. Industries were established; open-pit mining operations left huge craters in the surface of the earth; workers’ camps grew into towns; and large-scale agricultural companies developed their own road networks to transport goods to railway stations. The planning of the railroad route even required negotiations between the Belgian colonial government and the Portuguese, to define the borders of their colonial territories. In the course of these talks, Belgium traded 3,500 sq. km. for a meagre 3. In other words, if you want to decipher the contemporary landscape of the Bas-Congo, looking back on the life of the railway line is a good place to start.

The living archive / part 1

My current research project involves writing a construction history for the Democratic Republic of Congo during Belgian colonial times. Focusing on the various actors (contracting companies, engineers, laborers, construction site overseers, the public works department or—in this case—the railway company) and placing them at the center of the history of Congo’s built environment, I aim to complement Congo’s spatial history—which still largely hinges on the architecture and planning of European architects working overseas. However, this shift towards currently overlooked spatial actors also forces me to look at more “mundane” architecture. Turning my attention to the dusty archives of private contracting companies or the bureaucratic paperwork of the colonial government, rather than the more commonly used architectural archives, I was immediately confronted

4 Ibid., p. 88-90.
with the sheer bulk of infrastructure that was constructed to turn the Congolese land into an “operational” Belgian colony; factories, dams, roads, railways, harbors, office buildings. Although construction remains at the heart of my PhD research, investigating these files, I realized that the history of these infrastructural projects provides an interesting spatial lens for viewing the contemporary urban and rural landscapes of the DRC. Although in European or American contexts, infrastructure has long been accepted as a source of information for spatial analysis, the widespread idea that infrastructure is completely absent in the “non-West” seemingly stood in the way of a similar approach for places in Africa or Asia. Only recently, with anthropologists starting to understand the resilient human networks as infrastructural systems, infrastructure seemed to have regained its analytical value for the “horizontal cities of the global South.” Investigating how these infrastructures reshaped the Belgian colonial territory, in particular in the Bas-Congo region, is the topic of a planned future research project at Ghent University. The railway line through this region was not only indispensable for the extractive economy strategies that were the basis for Belgian colonialism. It was also a catalyst for the restructuring of the colonial landscape. Companies were established along the line; private infrastructures connecting to the railway were disclosing huge swaths of land and workers camps slowly transformed into villages as surrounding inhabitants gathered around these economic centers.

Evidently, writing a spatial history of this infrastructural line requires adequate source material. Documents concerning the operation of the railway line are, however, rather sparse in both the state archives of the Democratic Republic of Congo (ArNaCo) and in the colonial archives kept in the Belgian ministry of foreign affairs. This is due to the fact that the company responsible for the management of this railway line during the largest part of colonial times, namely the Otraco (Office du Transport du Congo), which was responsible for the operation of the railway line are, however, rather sparse in both the state archives of the Democratic Republic of Congo (ArNaCo) and in the colonial archives kept in the Belgian ministry of foreign affairs. This is due to the fact that the company responsible for the management of this railway line during the largest part of colonial times, namely the Otraco (Office du Transport du Congo), which was

9 A plausible explanation is the Western centrality in the conceptualization of infrastructure, which closely relates it to “our” ideals of modernity. In a seminal essay, systems theorist Paul Edwards talks about how infrastructures can be conceptualized as invisible systems; “our civilizations fundamentally depend on them, yet we notice them mainly when they fail, which they rarely do”. [Paul N. Edwards, “Infrastructure and Modernity: Force, Time, and Social Organization in the History of Sociotechnical Systems,” in Thomas J. Misa, Philip Brey and Andrew Feenberg (eds.), Modernity and technology, Cambridge, MA; London: MIT Press, 2003, p. 167.] In a recent apologetic text however, Edwards explicitly had to acknowledge the complete uselessness of his own conceptualization, when analyzing the infrastructures with which the “majority of people” are confronted. [Paul N. Edwards, “The Mechanics of Invisibility: On habit and routine as elements of infrastructure,” in Fiona Shipwright and Sarah Nichols (eds.), Infrastructure Space, Berlin: Ruby Press, 2017, p. 327-336.]
founded in 1935, was conceived as a parastatal organization and thus never was fully part of the government’s bureaucratic apparatus. This also holds true for its successor after independence, the so-called Onatra or Office Nationale du Transport. The company, currently officially renamed to Société Commerciale des Transports et des Ports, is still operational. Therefore, it has never donated its archival records to an official archival institution, the way many private companies active in (the former Belgian) Congo did. The only substantial collection of historical documents providing insight on the origins, development, and functioning of the railway line and its related infrastructure is kept by the company in Kinshasa. The bulk of these documents are stored in a room in its majestic headquarters, situated on the Boulevard du 30 Juin, Kinshasa’s main street. The collection of plans is kept in a different building, located in an industrial zone in the Limete neighbourhood. Although the company clearly values these documents, which remain in use in several of the company’s operations, for a researcher, working with such an in-use company collection posed several challenges.

The biggest challenge I faced when working with this collection was the absence of a clear conservation policy. The company does not treat the collection as a pristine archive. Contrary to the archival material I am used to, the drawings and documents were still very much part of its day-to-day operations; they were adapted, written upon, redrawn in AutoCAD or by hand, copied, renamed. As such, they were not only the paper remnants of a long-gone colonial past. More information, layers of more recent histories or even traces of futures still to be realized, was continually scribbled all over the once pristine documents. Besides, since most documents were still in use, my fortuitous encounters with these documents were only snapshots in their ongoing day-to-day lives. For instance, a plan of a labor camp in Lufu Toto was accompanied by several lists of the names of the camp’s inhabitants at several moments in time. Besides teaching me a lot about the deplorable living conditions in the camp during colonial times—“Even if we reduce our personnel in Cattier [today’s Lufu Toto] to a minimum, we will still be far from able to house the remaining employees properly. And I am not even talking about legal requirements or comfort, but merely ethical considerations,” as the Chef de la Division Main-d’Oeuvre Indigène put it in

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12 Prospecting in the Onatra archives was conducted in the context of the abovementioned fwo project (see note 1), and was part of a mission initiated by Johan Lagae, who had already consulted part of the Onatra archives during a previous research project related to the architectural and urban heritage of Kinshasa in 2009-2011. See a.o. Bernard Toulier, Johan Lagae and Marc Gemoets (eds.), Kinshasa. Architecture et paysage urbains, Paris: Somogy, 2010 (Images du patrimoine, 262), p. 127; Johan Lagae, “Des pierres qui parlent ? Documenter le paysage urbain de Kinshasa dans le temps par une recherche d’archives et une enquête sur le terrain,” in Pierre Alain-Tallier and Sabine Bomuku Eyenga-Cornelis (eds.), Afrique Europe Archives. Besoins? Collaborations ? Avenirs ? La République Démocratique du Congo, le Rwanda, le Burundi et la Belgique. Actes du colloque international, Bruxelles, 15-17 Décembre 2010., Brussels: KMMA/AGR, 2013, p. 157–175. The prospection of the Onatra archives was meant to investigate the possibility of mounting another project on the presence and activities of Onatra as a key building actor in colonial/postcolonial Congo, especially in the Lower Congo region, a topic that is currently being further developed for an upcoming research grant application. Our thanks are due to Daniel Mukoko Samba, Director General of Onatra at the time, for providing us unlimited access to the Onatra archives, and to Prof. Sabakinu Kivilu, who significantly facilitated our fieldwork in Kinshasa during the 2017 mission.
1957\textsuperscript{13}—it also showed how the company constantly tried to adapt this colonial “legacy” to the ever-changing housing regulations. Similarly, the plan \textit{Trace de la Ligne de Matadi à Kinshasa V.T. 9306R}, indicating the location and form of all the bridges of the railway line, clearly already had a long life behind it; at several places the paper was taped, stained or ripped. Next to most of the bridges, calculations, marks and doodles were added, and some of the drawn bridges were struck through and replaced by new drawings. Although on the bottom left of the 3-metre-long plan a handwritten dedication bestowed it upon Mr. Kados as “a memento for your retirement,” the document was still in use. The original plan, hand-drawn by Mr. Maleba on the 18\textsuperscript{th} of March 1959, was now being redrawn in AutoCAD, freed from the layers and adaptations that were scribbled on top. The other idiosyncrasy of this archive was that once a document left the storage room for the desk that had requested it, it rarely returned. As a result, slowly but steadily, the collection is being dispersed ever more widely throughout the vast number of offices in the majestic building. Finally, since the collection was not treated as a closed archival fonds, no (comprehensive) inventory existed. Apart from some lists of documents that are part of a particular folder, or marks on the content scribbled on the cardboard boxes, there are no indications about what kind of documents are “floating” through the building. The only existing catalogue is made up of handwritten filing cards, describing the collection of drawings. Although these filing cards allowed staff members to locate drawings quite efficiently, they were also an ironic testimony to an ever-shrinking collection; the plans and drawings, kept in the metal warehouse, clearly suffered from the lack of maintenance of the building.

While working in the site during the mission, I experienced the precarity of the conservation of the collection first-hand when the roof leaked during heavy October rains. Even though most of the drawings were kept in wooden cabinets, many were already seriously damaged by mold. The history was vanishing before my eyes. For instance, although the \textit{dortoir pour machinistes}, an impressive building that was scheduled to be built in Matadi in 1959 to house the engine drivers, was documented in numerous plans and sections, all of these drawings were severely affected by mildew. Only after virtually piecing together the remaining fragments of these drawings could I begin to grasp the modernist ambitions of the otherwise anonymous company architect A. Antoine.

Unlocking the Onatra collection: the \textit{Guide schématique de la ligne [1957]} as a spatial inventory

After spending several days in the Onatra headquarters, I had photographed an endless number of plans, detailed drawings (like floor plans, sections, construction drawings and camp layouts) and binders filled with reports, letters or other paperwork produced in the company’s bureaucratic processes. Although in and of themselves these documents held interesting information, floating from one desk to another in the building, they were

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\textsuperscript{13} Bertrand, “Note à Monsieur le Directeur - Cité de Cattier,” 28/08/1957, Kinshasa (drc), Société Commerciale des Transports et des Ports, Onatra Archives, Box 187-Cattier.
completely detached from their original context. Besides, most often they lacked a clear geographical reference, making it difficult to relate these singular documents to the scale of the territory.

A crucial key to understanding the collection proved to be the Guide schématique de la ligne (fig. 1). The accordion booklet, measuring eleven by twenty-six centimetres, could be unfolded into a lengthy plan of twenty-six centimetres by twenty metres. Even though it had been printed on unusually high-quality paper, the plan had been repaired in several places and was slowly dissolving, at the edges. The thick cover that protected similar plans, enclosing them from both sides (like the Trace de la Ligne mentioned above), was missing. The fact that the legend normally printed on the inside of the cover was missing clearly showed that the Guide Schématique had once been bound in a similar way.14 As suggested by its title, the plan schematically depicted Otraco’s building stock along the railway line from Matadi to Kinshasa. On the plan, the footprint of every building owned by the company was mapped and related through its relative angle and distance to a segment of the railway. These footprints were colored orange or pink by hand, and—most importantly—they were all numbered. As a result, the Guide schématique could be used as a georeferenced inventory list; these identifying numbers make it possible to associate building-sized “floating documents” to the scale of the territory.

For instance, zooming in on Kiasi-Col (the site/railway stop now known as Bangu), these numbers allowed us to identify all of the individual buildings. (fig. 2) The files on these buildings, and their architecture, subsequently gave us valuable insights into the growth of this settlement. For example, the railway station teaches us that in 1928, the place was still considered a fairly minor node in the Otraco network. Although its architectural design suggests a certain grandeur, it is only fifth-echelon type of building, the second-lowest category. (fig. 3) By the late 1940’s, however, Kiasi-Col had become more important. A new labor camp provided housing for 44 families. These laborers were employed in Otraco’s stone quarrying and crushing plant, which supplied Otraco’s concrete factory in Cattier (now known as Lufu Toto) with the necessary raw materials for the production of prefabricated concrete railway sleepers. By the 1950’s, though, housing conditions in the camp were as crowded and unsanitary as those in Cattier. A new camp was needed on the other side of the railway line to relieve overcrowding. As suggested by the fascinating leaflets in the archive, the feasibility of several prefabricated housing solutions was investigated. (fig. 4) Ultimately, however, “Hamel”-type housing was built. This type, which became widespread in Otraco labor camps in Kinshasa and Matadi, was conceptualized as a steel structure, filled in with prefabricated concrete blocks. (fig. 5) Ironically, these blocks, made by the concrete plant in Cattier, only raised demand for the crushed stone of Kiasi-Col, increasing pressure on the quality of life in the camp.

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14 Because of the missing cover, it remains uncertain when the original document was drawn. However, when the plan is compared to a 1958 inventory list, it becomes clear that some newer buildings were not yet part of the Guide schématique. Since the new labor camp of Kiasi-Col is depicted, and was constructed only in 1957, I presume that the original document dates back to 1957.
Figure 1: Guide schématique de la ligne, 1957.
Source: Société Commerciale des Transports et des Ports.
Yet the *Guide schématique* was more than a crucial key to understanding this unusual archival collection. Its territorial scale also lends the document a particular analytical value; it immediately makes the impact of the railway line on the landscape of the Bas-Congo visible. As the case of Kiasi-Col already showed, Otraco annexed large swaths of land for the operation and upkeep of its railway. Smooth day-to-day operations had to be ensured by workshops in Thysville and Cattier, a stone quarry in Kasangulu, a power plant in Mpozo and a sand pit in Luila, in addition to the stone crushing plant and the concrete factory. Moreover, the railway line also required a huge labor force—obliging Otraco to build labor camps along its entire length, with major nodes at both endpoints: the port city of Matadi and the capital city of Kinshasa. Whereas laborers at industrial facilities were generally housed in big camps with hundreds of people, the railway-maintenance staff, or *piocheurs*, were housed in smaller compounds of up to ten families, established at regular intervals along the line.

A such, the document can be read as an invitation to understand the colonial landscape as what anthropologist Tim Ingold has defined as a “taskscape in its embodied form: a pattern of activities collapsed into an array of [landscape] features.” Unburdened by its art-historical background, this conceptualization allows us to use the notion “landscape” as an analytical tool to scrutinize these patterns of day-to-day life (taskscape). While the *Guide schématique* makes Otraco’s taskscape immediately visible, the plan also discloses

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16 Investigating this taskscape, building on the preliminary mapping conducted by De Ruyter & Vandepoele, is the topic of a planned future research project at Ghent University.
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information about other industrial activities that started to develop in the wake of the railway line. Companies like the cement plant in Lukala, the palm oil plantations in Kolo, the manioc plantations in Kimpese or the forestry company in Sensikwa, all rolled out their own taskscapes over the existing territory. The section of the station of Moerbeke (today’s Kwilu-Ngongo), for instance, already maps part of the network of routes privées of the Compagnie Sucrière Congolaise. Implementing their own spatial logics and agricultural schemes on a huge swath of the land, the sugar industry drastically redrew over 40,000 Ha of land of the Bas-Congo region.¹⁷

The living archive part 2

Although the Guide schématique was fundamental to grasping the archives, another source was probably even more indispensable. Papa Mayemba, employed in the drawing office of Onatra’s Régie des Travaux since 1975, still works as an archivist in the central

¹⁷ For a preliminary analysis of this taskscape, see Fien Deruyter and Jana Vandepeele, Mapping a transforming colonial landscape, op. cit. (note 1), p. 117-147.
storage room at Onatra headquarters. Because of his lengthy career as a draftsman, he knew of a huge number of company documents, several of which he had even redrawn himself. As such, while the Guide schématique functioned as a georeferenced inventory list, Mayemba’s mind was a cognitive inventory. After I explained my interest in Onatra’s buildings to him, he was of valuable assistance, tirelessly taking me up and down flights of stairs, hunting for documents he thought might serve my purposes. During these trips from office to office, he had to explain which document he was looking for, usually to people who never laid eyes on this particular document before. Although he was often successful in tracking down documents—he handed me the Guide schématique on the second day of my research—the discussions that arose during the unsuccessful trips were just as insightful. Explaining documents to others through their shared memories, I got a sense of the different afterlives of these files. For instance, the earlier mentioned Trace de la Ligne de Matadi à Kinshasa V.T. 9306R, only surfaced after Jean-Pierre Nganga, head of the Voie Ferrée / Travaux department, remembered that during the 2003 flood of the Kwilu River, the plan was extensively solicited to repair the washed-out bridge. Afterwards it was sent to be redrawn in AutoCad at the Centre de Formation, in a different Onatra facility, in Limete, Kinshasa’s industrial zone.

But Mayemba was also essential to get a grasp of day-to-day operations (the taskscape) within the framework of Onatra. Through his personal connections, I was able to contact several former Onatra employees who had retired years earlier. Glad to visit his old friends, Mayemba accompanied me during my visits, and the interviews I did quickly turned into conversations, with both men reminiscing about certain episodes of their lives. During one of these conversations, we talked with Jean-Pierre Kuta, who had gone to work for Onatra in 1968. Although in the early years, he was hired to load and unload freight, later in his career he became a buyer of building materials. Responsible for transporting the building
materials for the upkeep of the railroad between Kimpese and Songololo, he rode freight trains to the various plants mentioned earlier, to pick up cement, ballast, concrete railway sleepers, etc. Another retired colleague, Daniel Kanza, started in 1967 as a draftsman, like Mayemba. Later, he became an inspector of Onatra’s patrimony. Throughout his career, he had continuously worked with the *Guide schématique*. He explained that the booklet was used by inspectors like himself to trace certain buildings, in order to assess their maintenance needs. It was after this conversation, back in the Onatra headquarters, that Mayemba dug up endless lists of building inventories. Year by year, these documents describe what works are needed for which building; they list the sale or purchase of buildings; the names of residents of Onatra housing; the number of children in these families, etc.
Epilogue

Several scholars have raised questions about the colonial archive and suggested ways of bringing the narratives of actors that are in the background to the fore. However, collections of colonial documents that are still use have received much less attention. These multi-layered documents nevertheless deliver encounters with a colonial past in a very direct way. Instead of being staged by scholars or artists, the documents and actions of the past are part of the day-to-day practices of people dealing with the present. The Onatra collection is a crucial and indispensable source of information for writing a spatial history of the Matadi—Kinshasa railway line and the resultant taskscape. When I consulted it, I also continually interacted with people who still referred to these documents, or who had worked with them all their lives. Although I am still struggling to deal with these diverse layers of information, understanding this collection as a “living archive” helped me in two ways. First, when I think of this archival collection as a living entity, it makes sense to write the “biographies” of its documents. The paperwork might at first sight appear mundane, but by tracing its life stories, I learned a great deal about how continuous changes in the operation of Otraco (and later Onatra) affected the landscape of the Bas-Congo. Secondly, I would argue that these “living” documents are animated through their continuing encounters with human actors. Although much can be gleaned from the paper trail, surrounding histories and more intimate narratives which arose in spontaneous conversations around the documents would never be included in these official sources.

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