Europe in the Global World by Maria Paula Diogo/Dirk van Laak/Matthias Middell

2.6 The truth that lies beneath: European Rivalries and Portuguese African Railways

1. The British Ultimatum to Portugal: the myth of the diplomatic incident

On the 16th January 1890 one of the main Portuguese newspapers - *O Século* - posted on its front page an inflamed call urging the people of Lisbon to rise against the British navy, which was supposedly sailing from Gibraltar to bomb Lisbon. This was the answer to the British ultimatum, delivered five days before, by the British government to Portugal demanding the retreat of the Portuguese military forces from the all the lands between the Portuguese colonies of Angola and Mozambique. Suggesting that the British ships, the cruel and savage John Bull navy, should be received by patriotic artillery shots, the article stresses the support of other foreign nations to the Portuguese cause, namely France, Spain and Italy.



Figure 1. The headline of *O Século* five days following the British Ultimatum reads: Fellow Compatriots! The English navy is sailing from Gibraltar to the river Tagus, where it is expected today. After having aimed its cannons at Portugal to steal the lands we have discovered, England attacks us once again to prevent the public manifestation of our outraged national pride! Disdain the English and England by showing our love to the motherland and our brotherly ties to friendly countries. Fellow Compatriots! Let our angry cries be louder than ever! Let us shout: Long live Portugal! Long live France! Long live Spain! Long live Italy! Long live all honoured nations!

In the context of the Scramble for Africa, the British ultimatum to Portugal, together with the Fashoda Incident (1898), which opposed Great Britain and France, ¹ is one of the critical events which unveil the importance of technological infrastructures in the occupation and exploitation of Africa.

Although Cecil Rhodes' Cairo to Cape Town technical projects (telegraphs and railways) are leitmotifs in colonial historiography, the British ultimatum to Portugal is completely neglected as far as World history is concerned and, for Portuguese history, it has been approached as a political event.² In this chapter we argue that the ultimatum is mostly a technologically driven event, the result of the clash between two major railway projects, which were at the core of both the British and the Portuguese imperial strategies.

At the time, the ultimatum was perceived both as the British revenge *vis à vis* the close relationship between Portugal and Germany and the result of the British ambition to take over the African colonies that, by historical right, belonged to Portugal.

Although with different geometries, the general concept of the Pink Map - a continuous strip of Portuguese sovereignty between the western (Angola) and eastern (Mozambique) coast of Africa - was an ancient project that dated back to the 18th century. Portugal perceived the advance into the African interior as the only way to oppose the British, the French, and the Boer growing appetite for the Portuguese colonies. As "informal imperialism", based on historical rights, gave place to the effective occupation of African territories, the rivalries among European colonizing powers became increasingly critical. Portugal answered to this new international framework by launching a set of "civilizing stations," which should secure the Portuguese sovereignty over both the Angola and the Mozambique hinterland.

This active policy was reinforced by the 1877 expedition to Africa, headed by Capelo and Ivens, in order to explore the inland territories of Angola and to pave the way to the official establishment of the Pink Map (1886). Ten years after, already under the pressure of the Berlin Conference, a set of four expeditions was launched to consolidate the South Portuguese Africa project (the Pink Map). The aim of these expeditions was to reinforce or to impose to local rulers Portuguese sovereignty across the territories of Zambezi, Bié (Angola), Niassa (Mozambique), and the (today known as Shire river). It is precisely the expedition to the river Chire, headed by Serpa Pinto that was the pretext for the British Ultimatum. The British government claimed that the Portuguese explorer had lowered the British flag and taken over by force the territory of the pro-English tribe of the Makololos.

² This political approached has focused on the diplomatic history and on the role of the ultimatum in the rise of the republican movement in Portugal (see Nuno Severiano Teixeira, "Pol+ítica externa e política interna no Portugal de 1890: o Ultimatum Inglês", *Análise Social*, vol XXIII (98), 1987-4°, 687-719). The ultimatum was the turning point for the growth of the Republican Party that eventually took the power in October 1910.

¹ The Cecil Rhodes' Cape Town to Cairo "red line" (Mediterranean See to the Atlantic Ocean) dream clashed with the French ambition of a Dakar to the Horn of Africa "red line" (Atlantic Ocean to the Red Sea), near Fashoda (today, Kodok, Sudan). This incident brought France and Greta Britain to the verge of war.

However, it is clear that the so-called "Serpa Pinto incident" was the result of the new position Cecil Rhodes' British South Africa Company had in the African chess table: Queen Victoria had conceded royal privileges and autonomy to the British South Africa Company, thus feeding Rhodes' imperialist ambition.

By putting forward the Pink Map, the Portuguese government tried to recover its *status* as a major colonial power lost after the Berlin Conference (1884-85).³ To clearly establish the frontiers of the Portuguese colonies in Africa, Portugal signed a treaty with France (1886) and another one with Germany (1887), in which the Pink Map was included. Of course, the Portuguese project didn't represent a problem either for France or for Germany, as the territories claimed by Portugal were not within their sphere of influence. However, this was not the case for Great Britain, as the Portuguese ambitions collided with Cecil Rhodes' project of connecting the Cairo to Cape Town by an "all red" railway line.⁴ The Portuguese west-east axis and the British north-south axis could not co-exist.

2. Railways: the centre of the Portuguese colonial agenda for Africa

The fact that Portugal was a peripheral country within the European scene has completely obscured its role as a major colonial power during the 19th and 20th century. In fact, the Portuguese international status depended very much on its colonial authority. Confronted with the British, French, German, and Belgium ambitions concerning Africa, Portugal was forced to rethink its colonial agenda of exploration and effective occupation. Railways, roads, harbours and telegraphs were critical marks of the Portuguese presence in Angola and Mozambique. From the Portuguese point of view these material signs embodied different messages and expectations: as far as the international scene was concerned, Portugal consolidated its presence in Africa and kept its colonies; concerning the national context the profits of this strategy were quite clear: national pride was secured, Portugal undertook once again, as in the 16th and 17th centuries, the flag of the "civilising mission."

The strategy for Portuguese domination was clearly associated with technological domination: railways, roads, harbours and telegraphs were envisaged as preferential marks of the Portuguese presence in Angola and Mozambique. In 1877, together with the Capelo and Ivens expedition mentioned above, two other expeditions - Public Works Expeditions -, much more low-profile, were sent to Africa. They were headed by two engineers, Rafael Gorjão (Angola) and Joaquim Machado (Mozambique) and their purpose was to analyse the viability of

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³ Portugal lost a lot with the Berlin Conference: the effective occupation rule was imposed against the historical rights defended by Portugal, the free navigation of the African rivers was also imposed (Portugal lost its rights concerning the rivers Congo, Zambezi and Rovuma), and Portugal lost the territories of the estuary of the river Congo.

⁴ The term "all-red" refers to infrastructures which were a 100% under British control, as for instance "all-red" cables, or "all-red" railway lines. It is interesting to note that neither the telegraph cables nor the railways projected as "all-red" were, in fact, "all-red": the telegraph cables of the British empire landed on foreign territory (Portugal) and the British railway from Cairo to Cape Town was never built. For "all-red" cables see Ana Paula Silva, Maria Paula Diogo, "From Host to Hostage," in EriK van der Vleuten, Arne Kaijser (eds.), Networking Europe, Science History Publications, Sigmore Beach, 2006, pp. 51-69.

constructing two railway lines: one in Angola, linking Luanda to Ambaca and other in Mozambique linking Lourenço Marques to Transvaal.

These two expeditions were the first of a much larger set of surveys concerning the construction of the railway network both in Angola and Mozambique. Technology was clearly viewed as the right instrument to enforce an efficient colonisation. In this context the "civilising mission" was meant to reshape the races and cultures living in Africa in terms of the model of the coloniser: ⁵

A few years ago men knowledgeable of the African wilderness became aware of the fundamental help provided by railways in transforming and civilising this immense continent, for the most part still in a barbaric stage, and almost exclusively populated by a primitive and savage race devoted to hunting and war and living in complete darkness

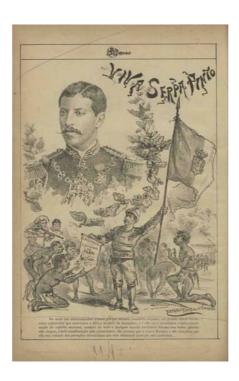


Figure 2. Cartoon by Raphael Bordalo Pinheiro a famous Portuguese caricaturist. It shows a portrait of Serpa Pinto (above, left) and the Portuguese explorer in his civilizing mission. On one hand Serpa Pinto has the Portuguese flag and, on his right hand, he has a document that reads "Civilization: Railways".

Of course the Europeans, especially through their technology would head this cooperative process and the natives would evolve in a perfect symbiosis with the construction of

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⁵ J.J.Machado, "Memória ácerca do caminho de ferro de Lourenço Marques à fronteira do Transvaal", *Revista de Obras Públicas e Minas*, 1882, 12 (445): 1-57, 23.

the railway. To "bring civilisation to the natives" was an ideological imperative and the best way to enhance their desire for progress was to dazzle them with technological devices to devices.

In the century of steam engines and electricity Europe does not have to use old methods to civilise Africa. (...) A gun, a sophisticated fire engine, a steam machine, a large road, a railway, the whistle and movement of an engine, etc., produce in the inhabitants of Africa a deeper stimulus to their intellectual development than masses and sermons preached by the most eloquent missionary.

The wealth of African soil - coal, copper, iron, cobalt, gold, diamonds, woods and rubber - and its agricultural potentialities - coffee -, demanded strict rules for space management, and therefore the quantity and quality of means of communication was considered vital. Railways played a strategic role in the promotion of commerce, industry and agriculture, bringing Africa to the heart of the 19th century world economy, by "taking advantages of the natural wealth of the continent, and creating great overseas markets for European and American textiles". Becisions on which route to choose were, therefore, extremely important as they had to balance, on one hand, the economic *status quo* and, on the other hand, the future leading economic areas. These decisions were often quarrelsome, opposing different local economic interests and different technical views, as, for instance, in the quite fierce discussion about part of the line linking Luanda to Ambaca. When international economic interests were at stake, these tensions often developed to a war situation, such as the British Ultimatum and the Fashoda Incident.

It is clear that the Portuguese government was quite committed to build a railway network in Angola and Mozambique. In 1877, from a total of 400 000\$000, 165 000\$000 (41%) were allocated to preliminary studies concerning the railway line Luanda-Ambaca (Angola); in 1878, the engineer Joaquim José Machado, was shipped off to Lourenço Marques (Mozambique), on a Public Works Mission, in order to study the railway line linking Lourenço Marques to the Transvaal border, in spite of the fact that he would have to work during "the worse period of the year (...). The season of heavy rain, of strong heat and dangerous fevers." ¹⁰

The year of 1878 marked the beginning of railways in African territories under Portuguese administration. The railway from Lourenço Marques(Mozambique) to the Transvaal border (at the time an independent Boer-ruled country) was the first to be ordered by the government (Royal Decree 144, 10th August 1878). The engineer Joaquim Machado, already mentioned above was in charge of this project. Four years later, he published in *Revista de Obras Públicas e Minas* a memoir about the project titled "Memoir on the Railways from

⁶ Letter of the Chief Engineer of the Companhia Real dos Caminhos de Ferro atravez d'Africa (Royal Railway Company across Africa), 1888. AHU (Arquivo Histórico Ultramarino, Overseas Historical Archive), 2678. Sala 3. Est.16. Prat.17. n°13420

^{2678,} Sala 3, Est.16, Prat.17, n°13420

Machado, op.cit. (5), 5. David Nye's concept of technological sublime fully applies to this case. See David Nye, *American Technological Sublime*, Cambridge (mass.), The MIT Press, 1996.

⁸ Machado, op.cit. (5), 2-3.

⁹ AHU, 866, DGU, 3^aRep.1874-78.

¹⁰ Letter of J.J.Machado, AHU, 2678, Sala 3, Est.16, Prat.17, n°119.

Lourenço Marques to the Transvaal Border". The first chapter was named "The need to build up the railway to civilise Africa". Its subtitle is a quite clear statement of the author's view of the role to be played by railways in Africa.

After praising the unexplored African wealth as well as the fertility of its utterly wasted lands¹¹, Joaquim Machado reminded that in the English colonies of Cape, Elizabeth and Natal there were already at the time 1,300 km of railways. Although there was no net profit, the governments of those colonies did not give up "because of the indirect advantages that result for the country" 12, and he concludes:

> Many kilometres of roads and railways is what developed nations have to build in Africa, if they want to follow the most straight and effective way to put an end to the slavery of the black race, promote its moral and intellectual improvement, and to benefit from the considerable natural resources of such an extensive territory. 13

In addition to a technical assessment, four main issues are raised in this memoir:

- 1. The potential profits of the coveted and extensive African colonies.
- 2. The backwardness and slavery of the native peoples.
- 3. New destinations for the Portuguese emigration.
- 4. The actual occupation of the territories, probably the most important of all.

Concerning profits, by the end of the 19th century very little farming and mining exploitation were actually going on in Angola or Mozambique, the exceptions being located on the coast, far away from inland territories.

The slavery issue remained a hard question to solve. Although slavery was officially abolished in 1836, it continued to be common practice in Angola. England took advantage of this situation by leading an international campaign against Portugal, arguing that Portugal should be dispossessed from its African territories, because it violated of anti-slavery rules.

Concerning emigration, those who left Portugal preferred to go to Brazil. From 1853 to 1888, between 10.000 and 14.000 persons emigrated per year to Brazil. 14 They rarely chose Africa, because of the hostile climate and the difficulties in the exportation of goods. The Berlin Conference brought to the front line of the Portuguese political scene the question of the effective territorial occupation of Angola and Mozambique. The problem was in fact quite dramatic as very few Portuguese emigrated to Africa. Joaquim Machado estimated that in the most inhabited city, Lourenço Marques, the population reached the number of 80,450

Machado, "Memórias" (ref.1), p.5.

Machado, "Memórias" (ref.1),, pp.5-6.

¹¹ Machado, "Memórias" (ref.1), p.3.

¹⁴ Rui Ramos, *A Segunda Fundação (1890-1926)*, in Mattoso, José (ed.), *História de Portugal*, Vol. 6, (Lisboa, n/d).

individuals, of whom only 450 were white ¹⁵. On the whole, the white population was composed "in the province of Angola of less than 4,000 souls, including the deported, and 800 in Mozambique" ¹⁶. Taking into account the vast area of the two colonies, which amounted to more than 2 million km², these numbers were frightful, especially when confronted with the international policy of effective occupation.

The solution which was advocated consisted of replacing the slave-trader by the entrepreneur, the missionary by the technician, that is, the engineer, and to build up fast means of communication, such as railways, roads and seaports.



Figure 3. Lourenço Marques railway station

The memoir on the railway from Lourenço Marques to Transvaal and the memoir on the railway from Mossamedes to Bié (1889), both written by Joaquim Machado, show a deep concern for the absence of basic colonial structures in which the new project of colonisation stemming from the Berlin Conference should be built. The international context, namely the growing interests of England and Germany on the Portuguese African colonies, forced the Portuguese government to reassess its priorities. The main concern was to occupy the inland regions of Angola and Mozambique and to link the two colonies by railways and roads. The presence of Portugal in its African territories had to be made visible to the European great powers.

In this context Joaquim Machado, presents his sketch of the first 178 kilometres of the railway from Mossamedes to Bié, a project cherished by "the illustrious explorers Hermenegildo Capelo and Roberto Ivens." ¹⁷ In fact, the Geographical Society of Lisbon and its explorers were deeply concerned about the outcome of the Berlin Conference, which deprived Portugal of extensive territories to the north of the river Congo. Joaquim Machado also recalled the findings of Portuguese explorers to justify the route chosen: to cross the Plain of the Mossamedes district and to expand to the interior, a region which "has a pro-

¹⁵ Machado, "Memórias" (ref.1), p.23.

¹⁶ Dating from 31 May 1889, the draft "Caminho de Ferro de Mossamedes ao Bihé" was published in *Revista de Obras Públicas*, Vol. XXI, 247 and 248 (July-August, 1890), 219-296, p. 232.

European climate, most adequate for the settlement of the white race in Africa (...), where the European settler finds an easy living, with all the benefits of abundant resources, and [to which] the Portuguese emigration should converge" 18. Last, but not least, Joaquim Machado unveils the real aim of the project, also by quoting Capelo e Ivens:

> To emphasise the colonisation in the African inner land and to block any attempts from any country to occupy the territories between our possessions and the inner regions, thus preventing us from building our African empire, are part of an enterprise we should not give up (...) To link those markets [from Angola] to the port of Mossamedes through a railway would bring us considerable immediate results, as well as far-reaching economic and political benefits. (...) it would incite Portuguese settlers; and the Portuguese, thus gathered, would become a barrier against the German invasion, and would perpetuate our domain up to the heart of the Austral inter-tropical Africa, linking Angola to the province of Mozambique. 19

There it was, the Pink Map: to build up an African empire which would actually occupy the vast territory between Angola and Mozambique, a dream that European power games would make impossible to come true.

The first 178 km of railways from Mossamedes to Alto da Chela provided the necessary starting point for the effective occupation of Angola. The engineer further argued that the public recognition of the prosperity of the English territories of Cape and Natal and of the states of Transvaal and Orange, inhabited by Dutch descendants, vis-à-vis the poverty of Angola and Mozambique, was due to the inexistence of means of communication to reach the good inner plains, especially those of the district of Mossamedes where the climate was similar to that of southern Europe. In Orange, Transvaal, Natal and Cape the first settlers "found themselves in a healthy and suitable environment which would encourage them to spread themselves, if not so rapidly as rabbits in Australia, at least in a rather meaningful proportion." 20

The centre and northern Angola and Mozambique had in fact a quite hostile climate, and these regions had been so far the preferred destination of the deported. Few free business men stayed there for more than two years. However, the plain to the east of Chela had a mild and pleasant climate ready to welcome countless settlers. 21

Some doubts were raised concerning the railway connecting Mossamedes to Bié. They discussed the potential profits of this investment, 22 the appropriateness of its configuration (with considerable slopes, tight curves and the use of reversions), as well as the

<sup>Machado, "Caminho de Ferro" (ref. 7), p.220.
Machado, "Caminho de Ferro" (ref. 7), p.220.
Machado, "Caminho de Ferro" (ref. 7), p.233.</sup>

²¹ 100.000 Portuguese from mainland Portugal, the Azores and Madeira, left Portugal for Brazil between 1879 and 1889. Machado, "Caminho de Ferro" (ref. 7), pp.236-7.

²² Conclusions of the Consulting Board of Public Works and Mines, 28 November 1889, published in the Revista de Obras Públicas e Minas, Vol. XXI, 249-250, (Sept.-Oct., 1890), 317-327.

appropriateness of the alternative outline, the Benguela route. In spite of all these doubts, the Portuguese government supported the project and the preliminary studies began.

In another paper published in 1891 in the same journal João Pereira Dias recalled former discussions, ²³ but considered that a rigorous study of the territories of Angola and Mozambique was urgent, in order to establish a global plan for the railway network in Africa. ²⁴ Meanwhile he advocated the immediate construction of the line from Mossamedes to Alto da Chela proposed by his fellow engineer. João Pereira Dias estimated the costs of the enterprise for the Portuguese government. Comparing the 59 contos ²⁵ the government paid the National Railway Company in 1890, as an interest guarantee for the exploration of the Mirandela line, the least profitable line in Portugal, with the estimated 152 contos that would have to be paid for the Mossamedes line, the African line still remained the cheaper of the two. ²⁶ The political advantages clearly compensated its cost:

When our domination of some regions of Africa is put into question due to an inefficient actual occupation, it is urgent to build railways; they open up ways into the inner lands, favouring the colonisation and increasing the wealth, and they are the most effective, and economical means to exercise our actual domination in those territories.²⁷

A different opinion was voiced later, in 1897 and 1898, respectively, by Henrique Lima e Cunha and Manuel Costa Serrão. The former, in a conference delivered to the Portuguese Association of Civil Engineers on 6 February 1897²⁸ argued in favour of the Lobito line, which crossed Benguela, reached to Caconda and then Bié. The author reminded that he himself had proposed to build this line in 1894, without any interest guarantees. In return he had only asked the concession of that land as his sole compensation. The proposal was

²³ João José Pereira Dias, "O Caminho de Ferro de Mossamedes", *Revista de Obras Públicas e Minas*, Vol. XXII, 255-256, (March-April, 1891), 62-75.

²⁴ He even suggested the following configuration for the railway linking the two coasts:

^{1.} A longitudinal line starting from the basin of the Zaire, going up the Cuango Valley and keeping to the meridians 17° and 15°, passing between Cassange and Malange, near Bihé, Caconda and Quiteve, to finish in the basin of the Cunene, near Humbe;

^{2.} A transversal line, already partly built, from Loanda, through Ambaca and Malange to join in the first line:

^{3.} Another transversal line from Benguela to the vicinity of Caconda, also joining in the first line;

^{4.} Another from Mossamedes to the plain of Chela, making also the connecting to the longitudinal line;

^{5.} Finally, a transversal line starting from Tigers Bay, following down the Cunene Valley, past Humbe and, keeping next to Parallel 17°, arriving at the river Zambeze, which forms the border between our province of Angola and the English possessions of the inner lands.

By agreement with the English government, this line could be enlarged in the same direction up to the Portuguese border of Mozambique, where the Portuguese government would resume and continue it through the Zambeze Valley, past Zumbo, in Tete, Senna, until the Indian ocean, in Quelimane, in Chinde, or in any other convenient place.

²⁵ The Portuguese currency at the time. 1 *conto*=1 000 000 *réis*.

²⁶ 857 thousand *réis* per km against 1 million and 77 thousand *réis* per km for the Mirandela line. Dias, "Mossamedes" (ref.14), p.75.

²⁷ Dias, "Mossamedes" (ref.14), p.75.

²⁸ Henrique Lima e Cunha, "Caminhos de Ferro de Benguella a Mossamedes", *Revista de Obras Públicas e Minas*, Vol. XXVIII, 329-330 (May-June 1897), 257-273.

accepted by the Portuguese government that, however, demanded the simultaneous unsubsidised construction of the Mossamedes-Alto da Chela line, an imposition which blocked up the whole project.

The paper by Manuel Costa Serrão entitled "The Railway System of Africa — the Line of South Angola (1895-1897)" ²⁹, is one of the most complete studies on Angola. In this paper, Serrão introduced the configuration of the Angola line as we know it today. He argued that the main route to the inner territories of Africa should start from Lobito, following the construction of a seaport, past Benguela, going eastwards up to Belgian Congo (Zaire), and from there to Mozambique and South Africa. ³⁰

The former discussions finally culminated in the choice of Lobito line. The excellent conditions offered by the construction of the Lobito seaport (about 30 km north), and the fact that Benguela was much more developed than Mossamedes was the reason of this choice. However, this project had still to wait twenty years before it became a reality. One should emphasise, however, the pragmatic spirit of the survey carried out by Costa Serrão and his engineers, favouring a set of clear decisions (the Lobito seaport and the route through Benguela) that should be taken in order to achieve, through technological investment, a real development of the Portuguese colonies in Africa.

In 1906, there were 783 km of railways already built up and working in Angola and Mozambique, and around 400 km more were in the process of construction:

3. The truth that lies beneath: politics and technology

In the age of colonialism and imperialism, European countries profited from their colonies in several ways. Beside national profits, these countries could use their colonies as assets in the European struggle for power and influence. Consequently, European countries consolidated and developed their overseas power bases and engineered ways to translate colonial power into power in the European arena.

By the 19th century technology had become the main driving force of the European industrialised society. The relationship established with non-industrialised African societies meant the integration of African populations in the European economy and culture, and technology played in this process a dominant role. The tensions existing in Europe stemming from different rhythms of industrialisation among centres, and centres and peripheries or from hegemonic disputes between European great powers, were transferred to and replicated in African possessions.

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²⁹ Manuel Costa Serrão, "Systema Ferro-Viário de Penetração em África - Linha do Sul de Angola", Revista de Obras Públicas e Minas, Vol. XXXI, 367-369 (July -September, 1900), 211-351.

³⁰ Serrão, "Systema" (ref.21), p.219.



Figure 3. Cartoon showing Portugal as an old man unable to protect his daughters (the colonies) from the advances of the two charming younger men, England and Germany.

The Portuguese industrialist agenda on the mainland, whose practical results materialised mostly in public works and especially in the construction of railways, was transposed to Africa. Despite the weakness of the Portuguese economy, which the African territories under Portuguese administration mirrored, technology became nevertheless the main building block of the ideology and the politics of Portuguese colonisation throughout the 19th century and the beginning of the 20th century. Railways were, undoubtedly, the finest instrument for the effective occupation and development of the Portuguese colonies in Africa. They fed the hopes of those who dreamed of an empire from coast to coast in Southern Africa. Although this dream never came to be true, railways allowed Portugal, a small and peripheral country facing a difficult international context, to sustain its colonies in the Africa continent, aginst England, France, and the newcomer Germany (under Bismark's Weltpolitik).

The African fever was clearly a technopolitical event, as behind the complex diplomatic and political games played in the European and African arenas, laid the domestication of the African landscape through technical infrastructures.