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ARTICLE

A SUBMARINE CABLE ON THE ABOLITIONIST TIDE: MEDIA INFRASTRUCTURE AGAINST SLAVERY IN CEARÁ (1873-1888)[1]

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Abstract

Fortaleza, capital of the Brazilian state of Ceará, has become a major hub for fiber-optic cables in the Atlantic, yet the city's memory-store of underwater networks is yet to be excavated. When a submarine cable first reached its shores in the early 1880's, phantasmagorical electro-abolitionist narratives of connection, disruption and transmission surfaced. By examining the family and political ties around the Briton, William John Ayres, local superintendent of the Brazilian Submarine Telegraph Co. this article draws upon media infrastructure studies and network archaeology to add to the previous studies of historian Eduardo Silva, which connect Brazilian abolitionism with submarine cabling. The main argument is that the political articulation surrounding the submarine cable, as observed by Eduardo Silva in the abolition process of 1888, had been previously tested in the abolition of Ceará in 1884.

Keywords

abolition – submarine cable – infrastructure – telegraph – Ceará.

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ARTIGO

UM CABO SUBMARINO NA MARÉ ABOLICIONISTA: INFRAESTRUTURA COMUNICACIONAL CONTRA A ESCRAVIDÃO NO CEARÁ (1873-1888)

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Resumo

Fortaleza é atualmente um *hub* de cabos submarinos do Atlântico, mas as memórias da presença dessa infraestrutura no imaginário da cidade ainda estão para ser salvaguardadas. Quando um cabo submarino ancorou pela primeira vez na costa da capital cearense, nos primeiros anos da década de 1880, narrativas eletro-abolicionistas e fantasmagóricas vieram à superfície. Ao examinar os laços políticos e familiares do britânico William John Ayres, superintendente da Brazilian Submarine Telegraph Co., este artigo se fundamenta tanto nos estudos de infraestrutura quanto na arqueologia da rede para colaborar com estudos prévios do historiador Eduardo Silva que conectam o abolicionismo brasileiro com os efeitos sociais, culturais e políticos da chegada da tecnologia do cabo submarino. A principal colaboração do artigo é demonstrar que a apropriação política em torno dessa infraestrutura, constatada por Eduardo Silva no processo da abolição no Rio de Janeiro em 1888, foi previamente testada na abolição cearense de 1884.

Palavras-chave

abolição – cabo submarino – infraestrutura – telégrafo – Ceará.

Introduction

This article is ashore in a strand of media studies referred to as "network archaeology" by Nicole Starosielski (2015). Dedicating herself to the study of submarine cables in the Pacific, she argued that the "the spectrum of effects submarine cable technologies have had – supporting both democratic interchange and empire building – rarely surface unless they fit one of two narrative structures" (STAROSIELSKI, 2015, p. 66): *narratives of connection*, which trace the conception and installation of the cable; and *narratives of disruption*, which highlight cable failures and ruptures, often invoking cultural fears and water as forces that can dissolve human communication.

These two narrative structures prevail in the public sphere, reinforcing an opaque perception of cable systems and mediating their controlled and circumscribed appearance aligned with corporate or state interests. Starosielski proposes alternative narrative structures – specifically, *narratives of transmission*, which follow the distribution of signals from a particular node in the network, and *nodal narratives*, which involve different nodes of the submarine cable network in a critical set of narratives that encompass the three previous structures.

Network archaeology relies on this framework to puncture the discursive insulation of narratives of connection and narratives of disruption by extending "the spatiality and temporality of cable discourse to include locations such as the submarine cable station maintenance and cable maintenance itself" (STAROSIELSKI, 2015, p. 69), thereby diversifying the political and cultural perception of cable systems.

To achieve this, network archaeology seeks to identify infrastructural affects and imaginaries. Infrastructural affects refer to the experiences, sensations, and structures of feelings generated through the material encounters between individuals and media infrastructures (not only interfaces but also physical locations, installations, dependencies, workers, and hardware) (PARKS, 2014). Infrastructural imaginaries encompass different ways of thinking and imagining what infrastructures are, where they are located, who controls them, and what they do (PARKS, 2015).

Considering this framework, the present article aims to safeguard narratives involving the operation of the submarine cable that landed in Fortaleza, capital of the province Ceará, in 1882. The importance of such research that turns to archives and to the past resonates in the present: Fortaleza is currently the main hub for submarine fiber optic cables in the South Atlantic, and as stated by Starosielski (2018), it is a "topological chokepoint" of the cable system. This means that the city, due to its position in the topology of the South Atlantic, is a part of the system that can easily become a site of congestion or blockade, where data distribution between continents can be interrupted with little effort.

Thinking about the present and future of the submarine cable network from the viewpoint of Fortaleza is a project that will benefit from a deeper understanding of its past usage, and this article provides a groundwork for that. In this sense, network archaeology is an approach that perceives history not as the study of the past, but as the potential of the present and possible futures, rethinking temporalities and proposing arguments that escape linear chronologies.

Through a research of the keyword "submarine cable" in the Newspaper Library of the Brazilian National Library, a tangle of highly significant historical events emerged, shedding light on the ways in which such infrastructures operate over time. Safeguarding infrastructural narratives that were revealed to be deeply intertwined with the abolition of slavery in Ceará – and later in Brazil – requires attention to a complex web of events marked by historiographical gaps and contradictory personalities that have only recently gained better critical attention.

The history of media infrastructural development in Ceará in the 1880s ultimately revealed itself part of the history of the abolition of slavery in the province, opening a connection with historian Eduardo Silva's reflections on this technology in the process of abolitionism in Brazilian Empire's capital, Rio de Janeiro. The present article thus brings together History and Communication, arguing primarily that the political strategy recognized by Silva (2001) in Rio de Janeiro in 1888 was previously tested in Ceará in 1884.

The text begins by presenting general aspects of the submarine cable network in its imperial era, during the telegraphic period[3]. It then contextualizes the events and *narratives of connection* that put in relation the first submarine cable to operate in Brazil with the abolitionist movement in Ceará. Special attention is given to William John Ayres, the superintendent of the Brazilian Submarine Telegraph Co. in Fortaleza, and an activist of the Sociedade Cearense Libertadora, considered the "most radical" abolitionist organization of the 1880s in Brazil. It will also present a particular *narrative of transmission* from 1884 when the news spread that 58 cities in Ceará collectively abolished slavery.

Expectations that such technology could be associated with a more democratic future, one of justice, equality, and progress for humanity, constantly appear in the studied archives. They are affective responses involving the promise of a techno-political future that would be made possible by the land and sea of Ceará to the rest of Brazil. As pointed out by Anand *et al.* (2018), whether "they are being built or

[3] According to Starosielski (2015), the history of submarine cables can be divided into three eras: the imperial era of telegraphic cables, the era of coaxial cables – which was marked by the Cold War – and the current era of fiber optic cables.

crumbling, infrastructures simultaneously index the achievements and limits, expectations and failures of modernity" (ANAND *et al.*, 2018, p. 26). In the Ceará of the 1880s, the associations between the technological progress of the submarine cable and the progress of humanity towards the end of slavery were openly expressed.

Technological progress, in its promise, is offered in exchange for political subjectivation. As stated by Larkin (2018), infrastructures are "promising technological ensembles," where the term "promising" implies that a "technological system is the aftereffect of expectation; it cannot be theorized or understood outside the political orders that predate it and that it brings into existence" (LARKIN, 2018, p. 182). It is precisely because infrastructures are invested with promises and the fact that these promises constantly appear on the forefront that – whether successful or failing:

> They bring into visibility the operation of governmental rationality and offer that rationality for political debate. To understand how this takes place, how the material and the figural are brought together, it is useful to draw upon the technical device upon which political aesthetics rests (LARKIN, 2018, p. 183).

In this sense, Anand *et al.* (2018) remind us that as materials and technologies transform, their promises also change: "new infrastructures are promises made in the present about our future. Insofar as they are so often incomplete – of materials not yet fully moving to deliver their potential – they appear as ruins of promises" (ANAND *et al.*, 2018, p. 27).

Considering this, we offer knowledge here about narratives that pass through the shores of Fortaleza as a base for abolitionist mobilization and the agency of the submarine cable infrastructure for political purposes in early 1880s, culminating in the national abolition of slavery in 1888.

The cable network in the imperial era

The first submarine cable to connect Europe with South America landed in Brazil at the turn of 1873 to 1874. It was only a few years after the first cable that supported electrical transmission across the North Atlantic, following two attempts in 1858 and 1865. The effort to make such infrastructure operate for Brazil's progress is credited to Barão do Mauá, an entrepreneur, industrialist, banker, and politician engaged in infrastructure investment for decades. Richard Graham refers to him as "a Brazilian entrepreneur deeply influenced by the British and with close connections to England" (GRAHAM, 1972, p. 161).

Figure 1
Direction of Telegraphic Lines – Brazilian Submarine Telegraph from Lisbon to Pernambuco and Other Lines

Source: Arquivo Nacional. Fundo Ministério da Viação e Obras Públicas. BR_RJANRIO_4Y_0_MAP_0443

The cable connected Carcavelos, Portugal, with Recife, via Madeira and Cape Verde. As noted by Roland Wenzlhuemer (2012), several other cables along the South American coast connected Pernambuco with Ceará, Pará, Cayenne, and Demerara in the North. South of Pernambuco, the connection extended through sections that went to Bahia and Rio de Janeiro.

In the Pernambuco newspaper *A Província*, on January 3, 1874, the inauguration of the telegraph service by the Western & Brazilian Telegraph was reported. The celebration may not have been the most imposing, but it lived up to the expectation that the arrival of the new technology would improve the "social economy" and contribute to democracy: "The inauguration of the submarine cable was above all a democratic celebration. – In the current conditions of society, everything that can unite people – the railway, the steamship, the telegraph – cannot go unnoticed by democracy" (A PROVÍNCIA, January 3rd, 1874).

It was announced that the "inaugural festivity" involved the exchange of a series of telegrams among authorities. Emperor Dom Pedro II communicated, celebrating the "introduction in the country of one of the most audacious enterprises of the human spirit, and which is unquestionably one of the most powerful agents of modern civilization" (A PROVÍNCIA, January 3rd, 1874).

Barão do Rio Branco, another investor in infrastructure innovations in the country, stated that "from today's impression, let us judge the moral and economic advantages that will come when the electric messenger puts us in contact with Europe and America" (A PROVÍNCIA, January 3rd, 1874).

The president of Pernambuco responded directly addressing the implication of such technology for the moral question, specifically stating that its arrival was only possible after the promulgation of the Free Womb Law (1871)[4]: "It was determined that electricity would only start running through Brazilian territory after no more slaves were born in it." In this *narrative of connection* (as is recurrently done), infrastructure appears as text, the economy as pretext, and politics as subtext (APPEL, 2018).

In Grão-Pará, it is known that on the day of the inauguration, two enslaved children were freed in honor of the progress promised by the cable. In the Municipal Chamber of Belém, there was "an immense horseshoe-shaped table, with 350 place settings, on top of which there was a representation of the telegraph cable in miniature, formed by 4 rods with flags representing the provinces connected by the submarine telegraph." During the toast offered to the Emperor, the liberation of the young Manoel and Joanna was witnessed (A REGENERAÇÃO, January 4th, 1874).

Larkin (2013) highlights how difficult it is to separate the analysis of infrastructures from the belief that, by promoting circulation, "infrastructures bring about change, and through change they enact progress, and through progress we gain freedom" (LARKIN, 2013, p. 332). Such a process, for him, "explains why such objects provoke deep affective commitments, especially in developing societies" (LARKIN, 2013, p. 332).

Brazilian Submarine Telegraph Co. was established in 1873 (later changing its name to Western Telegraph Co. during the 1880s), owned by a Manchester politician and pioneer of submarine cable infrastructures, "the cable king" John Pender (LINGE, 2018): he had 32 telegraph companies in Africa, China, Australia, Europe, and America. At that era of the industry, seven cables were anchored in Pernambuco, the province that was the real hub of South America, a status now held by Fortaleza.

[4] The Free Womb Law (Law No. 2.040) was enacted on September 28, 1871, and signed by Princess Isabel, declaring all children born to enslaved women from that point forward to be free.

Despite difficulties in securing strategies of insulation (protecting infrastructure against environmental or social threats), the technology of telegraphy through submarine cables advanced rapidly between the 1870s and 1880s, promoting an electric globalization of communication. To situate this process through a data-based historiographical study, Wenzlhuemer (2012) analyzed the growth rate in communication speed between London and the world in the 1870s and 1880s. "Samples were taken from The Times of London in the 1850s, 1860s, 1870s, 1880s, 1890s, and 1900s in four distinct periods of each year to avoid bias due to monsoon seasons" (WENZLHUEMER, 2012, p. 125).

Wenzlhuemer (2012) mentions that all regions included in his analysis exhibited a dramatic increase in communication speed rates, "with the notable exception of the South American Northeast," attributed to the fact that The Times in the 1880s contained almost no "information from the cities of Pernambuco, Ceará, and Pará (now Recife, Fortaleza, and Belém in Brazil)" (WENZLHUEMER, 2012, p. 127). No further explanation is given by the historian regarding this notable exception.

It is a coincidence that there is a lack of such data about Ceará (the first province to abolish slavery in Brazil in March 1884), Grão-Pará (the second in May 1884), and Pernambuco, the province with the highest number of abolitionist organizations, according to Castilho (2016, p. 10). It is precisely in the 1880s that Brazil experienced its "abolitionist momentum" (YOUNG, 2015), as will be seen, electrified by telegraph lines.

Anand (2018, p. 158) draws attention to the widely described phenomenon by historians that the modern infrastructures that emerged in the mid-19th century were instrumental in consolidating the liberal governance project, shaping the material form of the liberal state. By the time Brazil abolished slavery in 1888, the Brazilian telegraph network had already established direct communication between all major cities in the country, spanning 11,000km of lines and over 18,000km of conducting wires connecting 173 stations nationwide (SILVA, 2011, p. 109). Historian Eduardo Silva was the first to recognize the role of this infrastructure in the abolition process in Brazil, asserting that the transatlantic cable profoundly influenced the country's political and cultural context, accelerating its modernization along with its population.

According to Silva (2001), with the rapid communication established by the submarine cables in the vast country, the urgency of progress and modernity accelerated in contrast to the backwardness of slavery. This correlation between the acceleration of abolitionist processes and the speed of communication is particularly notable in Ceará, something that went unnoticed by the historian from Rio de Janeiro.

> The heroic abolitionist movement in the province of Ceará should increase in direct relation to the development that human progress presents. The telegraph has always been the vanguard of freedom, as it emancipated peoples from the slavery of distance long before humans did. Onward. Paula Ney (O LIBERTADOR, April 3, 1881).

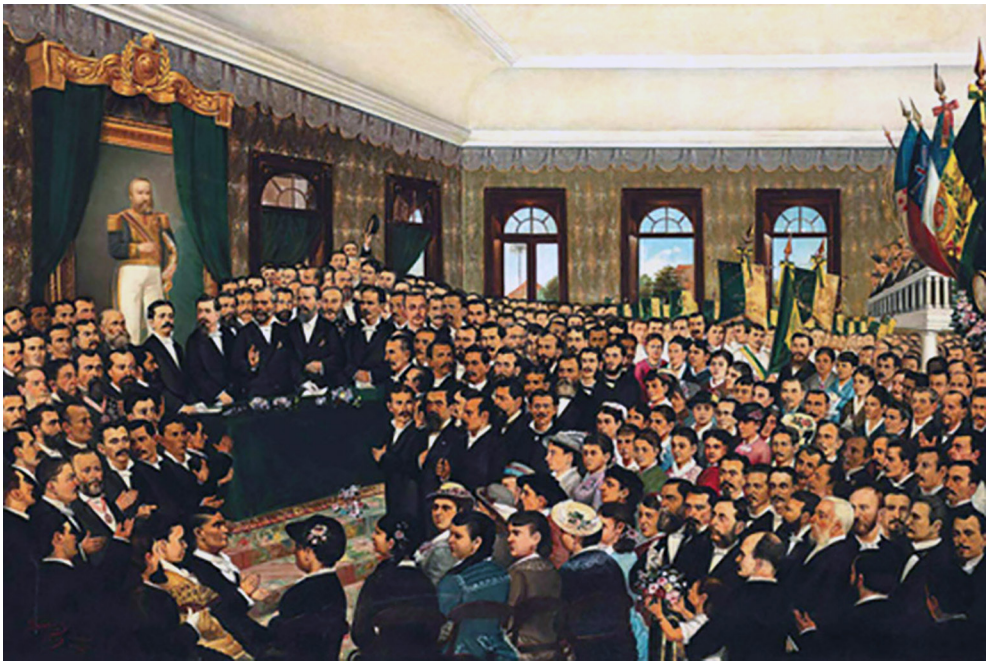
Such urgency took a few more years to reach Rio de Janeiro, but Silva asserts that when it arrived in 1888, it was no longer possible to wait for the normal publication of the Lei Áurea (Golden Law). Initially consisting of a single amendment immediately approved, the law eventually incorporated a new view of time into the initial proposal of the performative sentence "slavery is declared extinct in Brazil" with a few more words that made all the difference: "since the date of this law." It caught the reactionary slaveholders off guard: since the date of this law, that is, immediately, as quickly as it can be transmitted by electric telegraphy. "The Golden Law, perhaps a unique case in history, carries within itself the existence of electric telegraphy. It is therefore a modern law not only in terms of its content, the question of freedom and civil equality among men, but also in terms of its form of dissemination and framing of society" (SILVA, 2001, p. 111).

Highlighting how the Golden Law's text embedded its own distribution through the infrastructure of submarine cables and telegraph lines, Silva (2001) points out that even though Princess Isabel (who signed the law) did not distance herself from her palace in the capital to travel by train to Petrópolis, government ministers hurried to telegraph the immediate validity of the sanction to the Brazilian capitals connected by submarine cable, which in turn carried the news to the major capitals of the world. The following day, modern nations congratulated the last nation in the Western Hemisphere to belatedly surrender to a modernizing stage of industrial capitalism. "It was a *fait accompli*. The instant validity of the law, the speed of the telegraph, and the popular reaction through celebration proved to be fundamental blows in dismantling any possible – and even predictable – resistance movement" (SILVA, 2001, p. 111).

Throughout the article, archives of Ceará newspapers from the 1880s are presented to safeguard narratives about the cable and to reinforce the main argument: such strategies and political appropriation of the infrastructure of submarine cables were previously rehearsed in Ceará in 1884, from where the first "electro-abolitionist waves" emanated, paving the way for the delayed Brazilian abolitionist momentum.

A narrative of connection to the "Land of Light"

Figure 2
Artwork by the Ceará painter José Irineu depicting the voting ceremony for the abolition of slavery in Fortaleza in 1883



Source: Public domain

The still used nickname "Terra da Luz" (Land of Light), attributed to Ceará, is old and was given by the novelist, activist, and journalist José do Patrocínio[5]. He was one of the key protagonists of what Young (2015) names the "abolitionist momentum," when the abolitionist movement gained strength in Brazil. Patrocínio was a national organizer of abolitionist movements such as the Brazilian Society

[5] The first use of the nickname referring to Ceará that we could find is in the newspaper Gazeta da Tarde, on March 6, 1883. There, we can see a telegram sent by the abolitionist organization Sociedade Cearense Libertadora reporting the emancipation of 200 enslaved individuals, along with a text by José do Patrocínio analyzing the abolitionist movement in the province. The local government's reactions to such activism are also reported.

Against Slavery (1880) and the Abolitionist Confederation (1883) (RODRIGUEZ, 2015, p. 84). In Ceará, Patrocínio even had his face featured on an abolitionist hat, which was traded in a series of promotions that paid tribute to the movement's leaders (O LIBERTADOR, Chapeus Abolicionistas, 1884).

The nickname was given when he was visiting cities that now make up the metropolitan region of Fortaleza, which abolished slavery one after another in 1883: Acarape, Pacatuba, and Fortaleza. The latter had its abolition ceremony painted by the Cearense artist José do Irineu, and the painting was exhibited a year later in 1884 when 58 cities jointly declared that the province of Ceará was free from slavery. The gesture of liberation, as will be seen throughout the article, was imbued with an affection that can be called "electro-abolitionist": the transmission of Cearense heroism across the oceans through the electric waves of the submarine cable was a gesture of politically conscious subjects aware of their new technologies of communicational distribution.

As a writer and journalist, Mr. Patrocínio visited the province north of the imperial capital for the first time between May and September 1878. He was in Fortaleza to report on the Great Drought (1877-1879), a climate disaster that tragically coincided with a smallpox epidemic. A mass grave was opened on December 10, 1878, possibly the most tragic day in the city's history, known as the "Day of a Thousand Dead."

Although it may seem strange, it is not surprising that the coincidence of rain on the day the submarine cable landed in the city in 1882 embedded abolitionist hope as an affect of this media infrastructure. The arrival of the submarine telegraph in the Cearense imaginary was associated with better climates and times:

> We are in the middle of April... in winter, the somber afternoons bring joy, hope, fantasies to a great and virile people. [...] It is an undeniable truth: it was the cable, or rather the vessel Norseman, that brought us winter (A CONSTITUIÇÃO, Folhetim, April 2, 1882).

The *narrative of connection* identified in the newspaper A Constituição presents us not only with affects related to hope but also with a sense of curiosity regarding the monumentality of the cable:

> Regarding the cable: there was a commotion at the customs house (as we are informed) when about twenty workers were carrying a large cable from the beach to a warehouse on this side of the square. The piece or roll was enormous in size and weight, and as the carriers were unrolling it, they all looked like a phenomenal post. Someone suggested saying, 'Look, the submarine cable!' And everyone rushed to see the cable. If someone had seen it more, they would have asked the inspector for an order not to allow the disembarkation of that creature – in case it was a ferocious animal! (A CONSTITUIÇÃO, Folhetim, April 2, 1882)

This *narrative of connection* found in the newspaper A Constituição on April 2, 1882, also reveals an intriguing relationship between phantasmagoria, technology, and the abolition of slavery. To better situate the following passage, Fortaleza was (and still is, to a large extent) built on sand dunes[6]. It was elevated to the status of a city in 1726, and its urbanization took place around a dune hill that in the 19th century was known as Croatá. Since the late 1840s, the deceased in the city started being buried in a cemetery located near this dune, which was closed due to overcrowding a few years later. Another cemetery was built not too far away.

> When Mr. Lacy, master of the vessel Norsemann, first laid the cable beneath the slopes of Croatá hill, a mist rose amongst the graves so that our friend Codolino and his companion had to hold guard at the gates of the resting-place from where none never returned – officially. Our friend's opinion gives peace to the phenomenal event: in contact with electricity even the dead arise. And our friend has proven that the Sociedade Cearense Libertadora is a living fetus (A CONSTITUIÇÃO, Folhetim, April 2, 1882).

Who could this friend be who understood electricity, cables, and could prove that a new abolitionist organization was effectively alive in the city? It is not stated. One can only speculate that it was a member of the "most radical" organization affiliated with the Abolitionist Confederation: Sociedade Cearense Libertadora, active in Fortaleza.

Regarding the association between the submarine cable and phantasmagoria, it should be emphasized that, according to Stolow (2006), the infrastructural project of telegraphic modernization altered the conditions of communication on a global scale by offering new opportunities and expectations for the presence of the subject in the ethereal world of electric flows and currents – a universe in which the human body seemingly could not enter and that could be the gateway to "the world beyond":

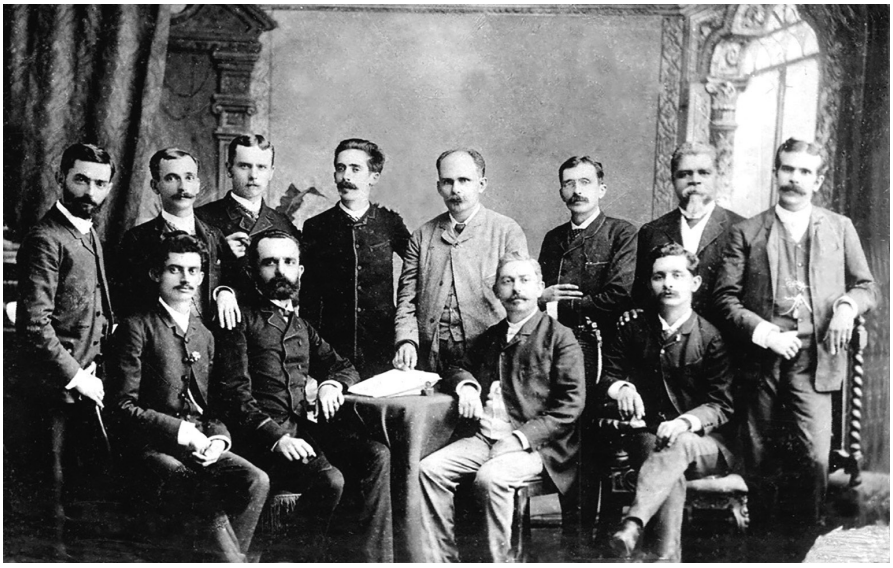
> Telegraphy encompassed important elective affinities with religious movements and with the work of religious imagination in the nineteenth century, especially with regard to circulating ideas about progress, transcendence, social and ecological harmony, health and vitality, and death and the afterlife. […] Telegraphic communication was frequently described in the nineteenth century in terms of miracles and sacramental power. […] And more often than not, at the level of popular culture, such debates concerning the moral implications of telegraphy were absorbed into a largely animistic understanding of the universe, where the lines dividing science, spectacle, and magic were often exceedingly difficult to draw (STOLOW, 2006, p. 11).

[6] In 1649, the Dutch built the fort of Schoonemborch at the mouth of the Pajeú River. Five years later, the Portuguese expelled the Dutch and renamed the fort to Fortaleza de Nossa Senhora da Assunção.

A crucial element of the logistical operation of the global telegraphic network were the cablemen, workers at submarine cable stations. An impressive feature of this infrastructure's presence in 19th-century Fortaleza was the British electrical engineer and activist who allowed himself to be photographed as a member of the *Sociedade Cearense Libertadora*: William John Ayres (1851-1943)[7].

As the superintendent of the submarine cable station in Fortaleza, Ayres left his job one year after the national abolition, in 1889 (1944 Institution of Electrical Engineers: Obituaries). For over a century, his role in the narrative of Cearense abolitionism has lacked historiographic attention, with no reference found offering such information. Throughout the article, his work will be contextualized, as well as his family ties in Fortaleza, his operation on the day of the provincial abolition in 1884, and what else can be known about him through the archives of the National Library – Digital Newspapers Library.

Figure 3
Sociedade Cearense Libertadora



Standing: Isaac Correia do Amaral, Papi Junior, cableman William John Ayres, Abel Garcia, João Cordeiro, Antonio Bezerra de Menezes, the great hero Francisco José do Nascimento (Dragão do Mar), Alfredo Salgado. Seated: Manoel de Oliveira Paiva, João Lopes Ferreira Filho, José Correia do Amaral, and Antonio Dias Martins.
Source: Arquivo Nirez

[7] To check the list of members, please refer to the edition of March 25, 1884, of *O Libertador*, available at: http://memoria.bn.br/DocReader/229865/136.

It was previously mentioned that Wenzlhuemmer (2012), using data from The Times, failed to confirm the statistical growth of information flow between Northern Brazil, London, and other European capitals. However, the social fabric of the telegraphic network indicates that the effects were sufficient to accelerate political changes.

Whether this acceleration had British imperialist purposes, it can become a question or discursive line to consider the presence of William John Ayres in the abolitionist movement in Ceará. To understand if this question or line of thought would make sense, it was examined here how the production of historical discourse on submarine cable technology was revised by Wenzlhuemmer in his effort to contextualize telegraphy and its role in the process of globalization during the 19th century.

He complexified the conception of submarine lines as an imperial tool and pointed out how they affected business and finance, news distribution, and the social fabric of culture. Wenzlhuemmer (2012) reviewed the previous relevance of historiographic emphasis on imperialism, stating that it represented a way for historians to understand how global communication and empires were correlated, showing "how politicians and colonial administrators were eager to benefit from rapid communication between distant parts of the world and how global communication networks were shaped by imperial interests" (WENZLHUEMER, 2012, p. 83).

A complex relationship between cables, colonialism, and imperialism was also highlighted by Simone M. Müller (2016). For both authors, most historical research on cables and telegraphs focused on the macro level of imperialism, and only recently has there been a shift in this regard. She points to a less macro perspective for thinking about British imperialism: one must be aware that British ascendancy as a global power was related to technological progress and development, but it is now necessary to reduce the emphasis on imperialism by increasing awareness that:

> Although the actors strongly benefited from imperial and national structures and a global coloniality, i.e., a world shaped through the experience and logic of centuries of colonialism, they did not necessarily embrace imperial interests. [...] The relationship between individual actor networks and imperial and national structures, or the micro and macro levels, was much more complex; the strong entanglements between social and cultural practices and economic and political strategies were much more important for the structure, coordination, and regulation of the global media system than so far explored (MÜLLER, 2016, p. 7).

Considering the relevance of such attention to the socio-technical entanglements of cable existence over time, the following topics will delve deeper into sources that explicitly depict *a narrative of transmission* operated by the British individual W. J. Ayres and the abolitionist organizations in Fortaleza in 1884. This narrative leaves it ambiguous whether Ayres acted in accordance with imperial actors

steeped in coloniality or in a mere alliance with his mother-in-law, Maria Tomásia Figueira Lima, and the historical narrative that constructed her as a heroine of the abolitionist movement in Ceará.

The Sociedade Cearense Libertadora and the beach as a battleground

Part of the archives that make an appearance here were published in *O Libertador*, the property of the abolitionist organization to which Ayres belonged. This topic will better situate the organization and aspects of the struggle for the end of slavery in Ceará. Although the topic briefly deviates from the focus of the article, it is essential in terms of historical contextualization.

As pointed out, the cable network of that time supported a globalized media system (rather than merely facilitating imperial and colonial enterprises), and *O Libertador* worked for the abolition of slavery, taking advantage of Ayres' presence in the operation of such infrastructure. In the photograph of the Sociedade Cearense Libertadora (Figure 3), Francisco José do Nascimento, known as Dragão do Mar (Dragon of the Sea), the most celebrated personality of the abolitionist movement in Ceará, is present. Also known as Chico da Matilde and originally nicknamed Lobo do Mar (Wolf of the Sea)[8] by Patrocínio, he became the symbolic hero of the abolitionist activism of the working class *jangadeiros*, operators of the emblematic *jangadas* – small vessels – of the Northeastern sea culture.

His position as a hero and member of the Sociedade Cearense Libertadora was negotiated between white abolitionists and one of his colleagues, Luiz Napoleão. Napoleão was a black man who was not born free like Dragão do Mar but a liberator who bought his own freedom and used his savings to continue emancipating his family and others like him (GIRÃO, 1984, p. 105-106). Sobrinho (2005) advanced the historiographical revision of the role that black leaders played during such political events. The researcher draws attention to the relationships of solidarity and affection among enslaved and free blacks in the organization of the *jangadeiros*, which were fundamental to the development of abolitionist strategies in the province (SOBRINHO, 2005, p. 151).

[8] José do Patrocínio bestowed the nickname "Lobo do Mar" (Sea Wolf) and "Dragão do Mar" (Sea Dragon) upon Francisco José do Nascimento, with the latter being the recognized hero to this day. To verify the earliest mention found, please visit the edition of May 2, 1884, of *O Libertador*: http://memoria.bn.br/DocReader/229865/226.

Two strikes by the *jangadeiros* in 1881 can be understood as a trigger for the unleashing of the "abolitionist tide" that spread throughout Brazil in that decade. The strikes were moments of popular commotion, but individuals like Luiz Napoleão, his wife Maria Simôa da Conceição (Tia Simôa), and Francisco José do Nascimento assumed key roles[9]. The first strike took place on January 27, 30, and 31, 1881 (MILES, 2012, p. 64). The following citation illustrates what happened in Fortaleza during those days and exemplifies what historian Angela Alonso states about the abolitionist movement of the 1880s in Brazil: it hardly fits words like "elitist" or "popular," constituting, in fact, a complex web that is difficult to classify (ALONSO, 2012, p. 116). The newly created *O Libertador* thus narrated the first strike:

> On January 27, some gentlemen who know no other way of life than buying and selling human beings attempted to export fourteen men and women to the southern ports. When, in the light of civilization, society as a whole rises against slavery, the people of Ceará could not lag behind their century and be left in the rear of times long gone. Thus, they understood it was their duty to protest against this inhumane trafficking, and more than 1,500 men from all classes and conditions flocked to the beach. The *jangadeiros*, performing their valuable and indispensable services, were already there. The slave traders turned to them, soliciting the embarkation of the unfortunate individuals they intended to sell in the south. – NO MORE EMBARKING OF SLAVES AT THE PORT OF CEARÁ! This firm and decisive response came simultaneously from everyone's lips. It is not even known who uttered it first. It was an idea that resided in every mind, a feeling that sprung from every heart (O LIBERTADOR, February 7, 1881).

On January 30, 1881, the Sociedade Cearense Libertadora was officially founded amidst the atmosphere of the first strike. Its foundation included the performance of a blood ritual with vows to "kill and die" for abolition, according to one of the active witnesses of that event, Antônio Bezerra (2001, p. 44). The blood vows divided "the radicals" from those who believed that abolition should come through a peaceful transition.[10]

The first invitation to the *jangadeiros* to join Sociedade Cearense Libertadora was made by its president, José do Amaral. It was directed to Luiz Napoleão and not to Francisco do Nascimento. Historian Eduardo Girão states that Amaral was insistent and expected Napoleão to lead "the beach front" of the struggle. Napoleão

[9] While Mr. Nascimento became the hero in the local imagination throughout the 20th century, Napoleão and Tia Simôa have only recently been gaining visibility through the local black movement via internet blogs and dissertations such as Hilário Sobrinho's (2005).

[10] In this meeting, Bezerra indicated that they also discussed the use of pseudonyms and cryptography for communication. Although W. J. Ayres dared to appear in the photo of the radical abolitionist organization, any radical writings of his published in *O Libertador* would not be signed.

declined but pointed to Nascimento, saying, "here is one who fits what you want" (GIRÃO, 1984, p. 108).

The 1882 submarine cable anchored in this beach battleground where the black people also knew what they wanted, triggering a strike at the city's port and staging demonstrations to resist the embarkation of enslaved individuals for sale in the Southeast[11]. Meanwhile, in Rio, conferences were organized by men like José do Patrocínio, who professed speeches aligned with the radical *jangadeiros* and *Cearenses*.

It was Patrocínio who first called Chico da Matilde "Lobo do Mar" and later "Dragão do Mar." Alonso (2012) recounted 43 abolitionist conferences in the imperial capital between July 1880 and July 1881. They usually had one or two speakers, and José do Patrocínio spoke in 17 of them, asserting that abolition should happen without compensation to slaveholders (ALONSO, 2012, p. 106). Such events and characters adequately represent Castilho's assertion that Brazilian abolitionism had a dynamic nature – "decentralized character, extensive interracial composition, and national and transnational formations" (CASTILHO, 2016, p. 9).

The second strike occurred on August 30, 1881. Francisco do Nascimento had already emerged as the rising hero of the working class *jangadeiros*, in association with poets, industrialists, judges' children, and the British superintendent of the Brazilian Submarine Telegraph Co. From then on, there are no more records of enslaved individuals being embarked at the port of Fortaleza[12].

Thus, marine workers and W.J. Ayres both managed a close relationship with the ocean to generate and transmit the waves that echoed the famous phrase "At the port of Ceará, slaves are no longer embarked!" The infrastructural role of one was to discreetly operate the submarine cable, while the other acted heroically with the *jangada*, both oceanic media in a curious alliance for liberal freedom[13].

On March 25, 1884, slavery was declared abolished in Ceará. The final topic will provide a more detailed account of the *narrative of transmission* by the submarine

[11] Analyzing the senses of freedom cultivated by the black hero of abolitionism in Ceará, Miles considers it clear that Francisco do Nascimento possessed leadership, skill, and high intelligence. His ownership of two rafts also set him apart. According to Sobrinho, the fact that he was appointed by Napoleão to join the Sociedade Cearense Libertadora indicates that between the heroic refusal and the acceptance of the performance of heroism, there were two men who trusted and respected each other in the common cause against slavery. By refusing such a role, Napoleão remains obliterated from this narrative today, sometimes forgotten.

[12] Due to the highly turbulent waves in Fortaleza, boats did not dock at the port, requiring people (including the enslaved) and luggage to wait at a distance until *jangadas* came to fetch them and transport them to land.

[13] For further insights into the relationships between the ocean, boats, and media studies, please refer to "Of Cetaceans and Ships" by John Durham Peters (2015).

cable that can be found regarding that day. For now, it is worth noting that March 25, 1884 was meticulously chosen as the culmination of a long campaign: Brazil was celebrating its 60th anniversary of the Imperial Constitution on that same date.

On March 25, on the other side of the Atlantic, in Paris, a banquet was held with the presence of the renowned French abolitionist, Victor Schoelcher[14]. The ceremony aimed to unite Ceará with France in thought, as planned in coordination with the efforts of José do Patrocínio, who was visiting Paris at that time.

Such synchronized content articulation for international newspapers relied on telegraph lines distributing news of freedom through the submarine cables. The same day, inside the Senate building in Rio de Janeiro, the senator from Ceará, Tristão de Alencar, is cited to provide another layer of evidence of a political subjectivation with the submarine network:

> Gentlemen, today Ceará is covered in splendor, and from its bosom rises a beacon of light that radiates throughout Brazil, announcing to us the good news and crossing the seas to reflect in cultured Europe, showing the Brazilians as a people seeking their place among the free nations of the Earth. Yes, gentlemen, Ceará banishes slavery from its soil and declares to the world that no longer does a single slave breathe in the Ceará air. Ceará is the land of free men and invites all of Brazil to abolish slavery and declare itself free. *The telegraph has assured us that Ceará*, as promised, has completed its total liberation: the word and the honor of Ceará will fulfill their duty towards the homeland and the world (ARARIPE, 1884, p. 7).

Eduardo Silva (2001) points out how the 1880s established a new rhythm for everyday experience, implying an idea of haste that was eager for progress towards a positivist future. In Brazil, this haste involved putting an end to the slave system. The Sociedade Cearense Libertadora took the lead in this movement in the early 1880s, abolishing slavery without full respect for legal means, in the province that was then the largest supplier of slaves to Brazil's domestic market.

> The year 1881 was progressing well, and the radical group's movement was gaining strength. The great dilemma of that moment was the slave trade to other provinces. Let us remember that while Ceará was experiencing a decrease in its captive population, in that context motivated by the drought that plagued it in the late 1870s, regions with more dynamic economies like Rio de Janeiro and São Paulo increasingly needed slaves to maintain coffee production. Considering the impossibility of acquiring African slaves, which had been definitively prohibited since 1851, the purchase of domestic slaves remained the only option. This is where Ceará becomes

[14] José do Patrocínio published in *O Libertador* on May 5, 1884, messages written by Victor Hugo and Victor Schoelcher referring to the banquet, Ceará, and abolition.

important. In the early 1880s, the province of Ceará was the largest exporter of slaves in Brazil (MARTINS, 2012, p. 10).

When the submarine cable first anchored in the Fortaleza traumatized by the Great Drought and the Day of a Thousand Dead, precisely on a rainy day in the early 1880s, it was a decisive moment for local activists to use it to project their ideals as the most avant-garde expression in Brazil. Paulo H. S. Martins (2012) highlights that for Ceará, it was not enough to emancipate; it was important to showcase the actions of the Ceará abolitionism to the whole world (MARTINS, 2012, p. 16). All the waves of information generated by this abolitionist tide were transmitted across the ocean under the supervision of W. J. Ayres, the superintendent of the Brazilian Submarine Telegraph Co.

1884: narrative of transmission

Figure 4

Photograph published in the obituary of W.J. Ayres, in the *Jornal Pequeno,* in 1943

Source: Jornal Pequeno, William John Ayres, 1943

William John Ayres, responsible for the transmissions in Ceará, moved to Pernambuco in 1889, and in 1942, his photo was published in the Jornal Pequeno, based in Recife, on the occasion of his 92nd birthday, "A prominent figure in Pernambuco society and a distinguished member of the British colony in the state"

(Jornal Pequeno, Album Elegante, 1942). A year later, the same photo was published to mourn his death (JORNAL PEQUENO, William John Ayres, 1943).

Cable station workers in the imperial era operated intensively with their bodies, which were integral to the infrastructure that made transoceanic communication possible. The transmission of electrical signals across the ocean in the imperial era was a practice of distinctive bodily engagement. The operators responsible for sending and receiving telegraphic signals physically became part of the circuit, with their operationality in the network recognized by the details of their individualities.

Station workers were responsible for transmitting news that shook the political world, from earthquakes to wars, as can be seen in the Fortaleza periodicals during the period when W.J. Ayres superintended. Their working hours were unusual; they were not adjusted to the local time but to the global time of the main empires: "when they stepped into their place of work, cablemen occupied this global space, a zone of speed and pressure" (STAROSIELSKI, 2015, p. 105).

Currently, in the era of fiber optics (where stations are remotely managed), cable workers and stations operate with an automated hardware apparatus. In that era, the worker's body was a parasite of the physical infrastructure:

> The cable station was a place where microcirculations linked with global currents and local practices could disseminate through the network (from technological developments to excessive drinking). The body of the cable worker —a site through which messages and information passed and where they were interpreted—formed the key gateway to the system and the network's most important pressure point. Very small movements here could have large-scale effects; the cableman's body was understood as the site that was most susceptible to variance or interruption of flow. As Jussi Parikka argues, in networks in the nineteenth and early twentieth centuries, it was most often *people* who occupied this position of the 'parasite,' or intruder in between of *trans*-mission (STAROSIELSKI, 2015, p. 105).

Ayres began working for the Brazilian Submarine Telegraph Co. at the age of 23 in 1874. For the research, we contacted the Museum of Global Communications, located in Porthcurno, England, an important cable landing point for the British Empire. The museum holds the archives of the company Ayres worked for, but the archive administrator, Alan Renton, expressed surprise at not finding anything about him beyond his obituary, published in the Zodiac magazine:

> Among the obituaries we have to report this month will be noticed the name of W. J. Ayres, news of whose death at an advanced age has just reached us. Mr. Ayres was personally known to many generations of our Staff, and it has been stated that he went to Brazil with the first cable-laying expedition. He was born in London in 1851, went out to Brazil in 1874 for the Brazilian Submarine Company, predecessors of the Western Company, and served at Rio Grande do Sul, Florianópolis, Bahia, Rio, and finally at Ceará as Manager of the Station there until 1889, when he resigned

> and went to Pernambuco to devote his activities to commerce and the sugar industry. In 1901 he founded the firm of W. J. Ayres which in 1912 became Ayres & Son. He leaves two sons and seven daughters, among the former being Mr. Jack Ayres of Ayres, Son & Co. (ZODIAC, 1944).

The earliest mention of him in the National Library archives was published in the province of Bahia, reporting him as a passenger on a vessel named Ceará, bound for Rio de Janeiro. Ceará was carrying another Briton named John Lister, some Brazilians, and "14 slaves to be delivered" (O MONITOR, 1879).

Ayres was expected to be discreet with his abolitionist activities, as can be inferred from Starosielski (2015), as all companies instructed cablemen to maintain discretion. Marriage with locals, however, was part of the strategy of insulating the submarine cable infrastructure: "The submarine cable station was porous, and the cultural mixing in these remote environments meant that social boundaries could also become unclear" (STAROSIELSKI, 2015, p. 103-104).

In Ceará, John Ayres married Francisca de Oliveira Lima Ayres, daughter of Maria Thomázia Figueira Lima, the abolitionist heroine who represented the crucial dedication of women to the cause. The Ceará press reported at least two events with Ayres' presence, portraying him as the husband of Maria Thomázia's daughter: the inauguration of a bust in a local square and the funeral of a common relative (O LIBERTADOR, Annuncios, 1886; O LIBERTADOR, Perante a Estatua, 1888).

His mother-in-law was one of the main organizers of the Brazilian abolitionist movement and the leader of the Sociedade das Senhoras Libertadoras (Society of Liberating Ladies). Established on December 8, 1880, the *Senhoras Libertadoras* constituted the first political organization of women in Brazil (O CEARENSE, Publicações Solicitadas, 1884).

The *Senhoras Libertadoras* consisted of culturally engaged middle-class and elite women, some of whom were innovative literary writers, such as Emília de Freitas, the author of Brazil's first futuristic sci-fi work, *Rainha do Ignoto* (1899). Others were wives of active members of the *Sociedade Cearense Libertadora*, like Ayres' wife. She died in 1904, two years after her mother passed away in Rio de Janeiro and 39 years before her husband was buried in the British Cemetery of Recife (JORNAL PEQUENO, William John Ayres, 1943; JORNAL PEQUENO, Agradecimento, 1904). One of Ayres' daughters was a nun in Rome and wrote to him saying that she was well in Italy in 1944, unaware that he had died in the same year (DIÁRIO DE PERNAMBUCO. A irmã Hilda manda notícias à sua família no Recife, dum convento de Roma. 1944)[15].

[15] The news of his death presents a false claim about his marriages. It states that he divorced his first marriage in Ceará in 1889, then moved to Recife, but archives of Pernambuco newspapers from the

The son-in-law of Maria Thomázia and a worker at the submarine cable station appears subtly but essential in the narrative published in *O Libertador* about what happened on March 24 and 25, 1884, in Fortaleza. A series of celebratory events confirms that Fortaleza previously applied the model recognized by Eduardo Silva as a deliberate alliance between submarine cable and national abolition in 1888.

O Libertador's representation of these two days asserts "*the Cearense*" as the embodiment of progressive modernity in Brazil, combining ideals of freedom with media distribution technologies. It also positions women, such as Maria Thomázia and the organization she represents, as "Cearense Heroines". Symptomatically, however, it does not present any speeches or the presence of Dragão do Mar, Tia Simoa, or Napoleão Simões.

According to Hilário Sobrinho (2005), the abolitionist discourse in Ceará was constructed to place the abolitionists as the main leaders and some *jangadeiros* as leaders as well, but peculiarly limited to the beachfront area, as if the latter were a result of the former and not the other way around. "It is not surprising that a leader or hero was fabricated for the *jangadeiros*' movement. In this context, therefore, the appearance of the hero *Dragão do Mar* must be understood" (SOBRINHO, 2005, p. 152).

The day before official abolition, Justiniano de Serpa offered a toast at an abolitionist banquet in Fortaleza to Maria Thomázia, "the tireless protector of captives, the Cearense Heroine, who became, through her effort and dedication to the cause of slaves, the most brilliant incarnation of our patriotism." Justiniano de Serpa also later wrote an article celebrating José do Patrocínio and his support for the abolitionist movement in Ceará (O LIBERTADOR, Tribuna do Povo, 1884).

The organization of the *Senhoras Libertadoras* hosted a dinner for 58 poor people, equivalent to the number of Ceará cities that were implementing abolition, in what was called the "Banquet of the Poor" (O LIBERTADOR, Victoria e Gloria, 1884). It was just one of the many "charity festivals" spreading throughout the city (O LIBERTADOR, Acontecimento Sem Igual, 1884).

On the day of abolition, around the amphitheater, "the shifting colors of a nearly innumerable variety of lanterns, lights, gas jets, pennants, and banners made the spectacle observed seem fantastic or divine" (O LIBERTADOR, Acontecimento Sem

1890s confirm Francisca's presence with him in Recife until her death in 1904 (JORNAL DO RECIFE. Commendador Rodrigues Lima. 1894). They also state that he returned from a visit to Southampton in 1898 (JORNAL PEQUENO, Passageiros, 1898). He opened a textile factory, and through this commercial activity, Mr. Ayres became known in the early 20th-century Pernambuco society (A PROVÍNCIA, Companhia de Tecidos Paulista, 1900). Newspapers also depict him as a football player during the 1900s (JORNAL PEQUENO. Sport. 1909) and as an intense beer drinker, even at the age of 80 in the 1940s (JORNAL PEQUENO. Registos do Dia. 1938. http://memoria.bn.br/DocReader/800643/56807).

Igual, 1884). A plaza illuminated at night by electric light represented, in such news, the inversion of order promised by modernity.

The cableman's mother-in-law was the one who signed the abolition of 58 cities with a golden satin pen (O LIBERTADOR, Acontecimento Sem Igual, 1884). "The beautiful metropolis of Brazilian abolitionism was, in fact and law, constituted – LAND OF LIGHT!" (O LIBERTADOR, Acontecimento Sem Igual, 1884). Fortaleza had music playing in the streets with abolitionist compositions, and a large number of people gathered around the full amphitheater, where poets such as Antônio Bezerra (*Sociedade Cearense Libertadora*) and Francisca Clotilde (*Sociedade das Senhoras Libertadoras*) recited poems of freedom.

The "declaration of freedom" was articulated as an electricity spectacle, which is relevant to consider that, as Larkin (2013, p. 328) argues, the concept of infrastructure "has its conceptual roots in the Enlightenment idea of a world in movement and open to change where the free circulation of goods, ideas, and people created the possibility of progress" ultimately making the supply of infrastructures so intimately connected to shaping modernity and achieving the future.

The discursive network that emerges in the scenes presented from accounts published in *O Libertador* shows a meticulously planned operation linking art, technology, politics, and a romantic historical consciousness. Maria Thomázia Figueira Lima was received with enthusiastic acclamation from the people, and in front of her were 58 women waving "beautiful symbolic standards of the main crops of each of these municipal circumscriptions" (O LIBERTADOR, Acontecimento Sem Igual, 1884).

The women wore a white dress with a blue satin bow on the side. Inside, one could read the name of a Ceará city written in golden lines. All the women were around a "portable telephone apparatus" that was connected to the submarine cable station. "Immediately after abolition was proclaimed by the governor's voice, the first shots were heard; it was a beautiful idea and of magnificent effect. *Immediately, telegraph operators from both landlines and the submarine cable communicated to the whole world the realization of the grandest idea*, which remains in Brazil's history to this day [emphasis added]" (O LIBERTADOR, Acontecimento Sem Igual, 1884).

A "boisterous ocean of applause" echoed, aiming to reverberate Cearense heroism across the ocean, as Mr. Ayres fulfilled his infrastructural role in a plan sometimes toasted in devotion to his mother-in-law.

As mentioned earlier, at that same moment, José do Patrocínio was in Paris, and a few days after the ceremonies in Fortaleza, he published a commemorative news article in *O Libertador*, alongside others written by foreigners such as Victor Schoelcher and the novelist Victor Hugo. José do Patrocínio wrote a letter to Hugo a few days before the abolition in Ceará, and the original response, before being pub-

lished in Fortaleza, was kissed by Patrocínio with emotion, as he himself declared (O LIBERTADOR, O dia 25 de março em Paris, 1884).

The abolitionist momentum generated a wave of pressure through telegraphy at that moment. What *O Libertador* represented aligns perfectly with what Eduardo Silva points out about the role of submarine telegraphy in the national abolition of 1888.

Silva (2001) narrates how, four years later, the abolitionist tide flooded Rio de Janeiro with joy in the form of eight days of samba, interrupting the normal routine of the imperial capital. Shops had to close for the celebration to pass (Silva, 2001, p. 112). The most chic place in the small Brazilian Paris, Rua do Ouvidor, was filled with sensual dances that already bothered the persistent high imperial Carioca society, which complained about music made to be listened to with the hips instead of the ears.

For Silva (2011), when the party was over, "there were no more slaves," making the Brazilian revolt a phenomenon that emerges from the "immense subversive capacity of uncontrolled happiness" (SILVA, 2001) that socially inverted the codes of the slave apparatus. The grand celebration, combined with the submarine cable, synchronized semi-feudal Brazil with a modernization project that soon culminated in the fall of the empire (SILVA, 2001, p. 113). However, according to Alonso, the abolitionism of the 1880s as a movement relied on a rhetoric of redemption that limited the post-slavery achievements and the many benefits that ex-enslaved people deserved: "abolition, by extinguishing the master-slave relationship, would rescue both" (ALONSO, 2012, p. 113).

Figure 5
Painting "Abolition of Slaves" by Raimundo Cela, a native of Ceará, created in 1938 for the Government Palace of Ceará.

Source: MATTAR, 2016

Final considerations

The curious connection between abolitionism and submarine cables appears from the archives that emerged when researching such infrastructure in 19th-century newspapers: upon reaching the "beach battleground" where the people of Ceará articulated abolition in 1882, the cable was infused with phantasmagoric affections and abolitionist sentiments evident in the *narrative of connection* found in the periodical A Constituição (and even earlier, in the anchoring ceremonies held in 1873 in Recife and Belém), in the *narrative of transmission* of March 25, 1884, and in the *nodal narrative* constituted through the electro-abolitionist tide. The article contributes, therefore, to the studies of media infrastructures and the history of submarine cables by presenting situated narratives of the 19th-century submarine telegraph network, providing evidence of the unusual network of political-cultural operation (apparently well-articulated by José do Patrocínio and Maria Thomázia) exemplified in the conscious production of an electro-abolitionist historical narrative.

Within the discipline of history, it collaborates by expanding on Eduardo Silva's article on the relationship between the telegraph and abolitionism in Rio de Janeiro. Specifically, it adds that Ceará was the laboratory for such articulation. The article safeguards these climatic, post-epidemic, and phantasmagorical affects of the province with such infrastructure. The focus is on Ceará and the brief dialogue with Rio de Janeiro based on Eduardo Silva (2001), with the possibility of further research on the narratives, affects, and infrastructural imaginaries of submarine cables beyond these two provinces, as already indicated by the brief mentions of Pernambuco and Pará.

The article also promotes knowledge about a person, William John Ayres, about whom there are no existing studies. Ayres was the type of intermediary in the communication system that John Durham Peters considers capable of making fortunes and making or destroying empires (PETERS, 2015, p. 37). Peters recalls how in the early days of communication studies, Harold Innis had already pointed out that each new medium generates a cadre of specialists who discover how to manipulate and program its special capabilities and patterns of transport. Ayres acted (not so discreetly) in the field of technopolitics in favor of liberalism, a form of governance that "disavows itself, seeking to organize populations and territories through technological domains that seem far removed from formal political institutions" (LARKIN, 2013, p. 328).

In this sense, the article contributes to the effort of infrastructure researchers to "trace out the material operation of these technologies and the ways in which this materiality has consequences for political processes" (LARKIN, 2013, p. 328), considering that "Even the free flow of goods that constitutes a *laissez-faire* economy rests on an infrastructural base that organizes both market and society" (LARKIN, 2013, p. 328).

By paying attention to the submarine cable and its political use in the hands of William John Ayres, his mother-in-law, and his partners from the *Sociedade Cearense Libertadora*, *network archaeology* contributes to recent reconsiderations of Ceará's abolitionism that adopt a more critical approach. However, the most important aspect of these recent movements is the discussion led by black scholars such as Hilário Sobrinho and Tschombe Miles, as well as other undergraduate and graduate students from the University of Afro-Brazilian Lusophony Integration – UNILAB, located in the city of Redenção, where abolition was first declared in the country.

As much as Dragão do Mar is part of the local imaginary and is honored by the decision of the State of Ceará to name its main cultural complex in Fortaleza after him in 1999, other black leaders like Tia Simôa and her husband Luiz Napoleão have been erased or made invisible in these historical narratives for refusing to play the role stipulated by white abolitionists. This issue precisely highlights one of the most problematic aspects in the construction of *Cearense* identity in the 20th century: the myth that there are no black and indigenous populations in Ceará, a myth that is currently contested by social and academic movements[16].

In this sense, Quijano and Ennis (2000, p. 555-566) point out that the ruling elites in Latin America did not share common interests with the indigenous, black, and mestizo populations, even though these constituted the majority of the population. The holders of economic and political power were aligned with imperial bourgeoisies and, in this regard, excluded the majority of the population from decisions regarding political and social organization, sustaining a logic of coloniality even in an independent, republican Brazil with declared abolition.

The connection between the topic of submarine cables and abolitionism, promoted in the, hopes to resonate in debates that consider this coloniality in the current context of fiber optic cables. However circumstantial the association of part of the infrastructure (such as Ayres himself) with the political process of abolition may be, paying attention to such events helps us understand technopolitics in history: beyond offering technical development, infrastructures also opaquely serve an ideological function of enabling the formation of other political subjectivities.

[16] Black individuals in the history of Ceará are erased through racism and epistemic. Analyzing data from the years 1808, 1810, 1813, and 1872, Hilário Sobrinho reaffirms that the majority of the population in 19th-century Ceará was not "white". Historian Geraldo Nobre also presents data indicating that Ceará was "highly mixed-race" in the 19th century. Part of the enslaved black population was removed from the state during the Great Drought, but the narrative claiming that there were no more black people in Ceará after abolition is an erasure that still resonates.

Bibliographic references

Fonts

A Constituição. Folhetim. 2 abr. 1882. Disponível em: http://memoria.bn.br/DocReader/235334/5358. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

A Razão. O Barão de Studart Abolicionista. 25 mar. 1937. Disponível em: http://memoria.bn.br/docreader/764450/8705. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

A Província. Companhia de Tecidos Paulista. 28 out. 1900. Disponível em: http://memoria.bn.br/DocReader/128066_01/9474. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

A Província, 3 de janeiro de 1874. Disponível em: http://memoria.bn.br/DocReader/128066_01/773. Acesso em: 23 fev. 2021.

A Província, 4 de janeiro de 1874. Disponível em: http://memoria.bn.br/DocReader/128066_01/777. Acesso em: 23 fev. 2021.

A Regeneração, 4 de janeiro de 1874. Disponível em: http://memoria.bn.br/docreader/226521/245. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Diário de Pernambuco. A irmã Hilda manda notícias à sua família no Recife, dum convento de Roma. 12 jul. 1944. Disponível em: http://memoria.bn.br/DocReader/029033_12/16146. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Gazeta da Tarde, A Terra da Luz, n. 51, 1883. Disponível em: http://memoria.bn.br/DocReader/226688/2691. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal do Brasil. Cabo Submarino se Completa Hoje. 8 jan. 1980. Disponível em: http://memoria.bn.br/docreader/030015_10/1116. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal do Commercio, Rio de Janeiro, 15 maio 1888, 1; O apóstolo, Rio de Janeiro, 16 maio 1888. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal Pequeno. William John Ayres. 22 maio 1943. Disponível em: http://memoria.bn.br/DocReader/800643/69086. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal Pequeno. Album Elegante, 1942, n. 125. Disponível em: http://memoria.bn.br/DocReader/800643/67363. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal Pequeno. William John Ayres. 22 maio 1943. Disponível em: http://memoria.bn.br/DocReader/800643/69086. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal Pequeno. Agradecimento. 29 ago. 1904. Disponível em: http://memoria.bn.br/docreader/800643/7322. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal Pequeno. Passageiros. 8 jul. 1898. Disponível em: http://memoria.bn.br/DocReader/800643/546. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal Pequeno. Foot-ball. 14 ago. 1909. Disponível em: http://memoria.bn.br/DocReader/800643/10817. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal Pequeno. Registos do Dia. 1938. 6 dez. 1938. Disponível em: http://memoria.bn.br/DocReader/800643/56807. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Jornal do Recife. Commendador Rodrigues Lima. 1 mar., 1894. Disponível em: http://memoria.bn.br/DocReader/705110/32076 Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Cearense. Publicações Solicitadas. 17 fev. 1884. Disponível em: http://memoria.bn.br/docreader/709506/15991. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Commercio de São Paulo, O Socialismo em Inglaterra, 1895. Disponível em: http://memoria.bn.br/docreader/227900/2379. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Liberal do Pará. Factos Diversos. 27 dez. 1873. Disponível em: http://memoria.bn.br/DocReader/704555/4565 Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. 3 de março de 1881. Disponível em: http://memoria.bn.br/DocReader/229865/1033. Acesso em: 4 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador, 25 mar. 1884. Disponível em: http://memoria.bn.br/DocReader/229865/136. Acesso em: 4 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador, Chapeus Abolicionistas. n. 97, 15 maio 1884. Disponível em: http://memoria.bn.br/DocReader/229865/271. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador, Gazetilha, A Festa da Liberdade, 18 fev. 1881. Disponível em: http://memoria.bn.br/docreader/229865/28. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador, 2 maio 1884. Disponível em: http://memoria.bn.br/DocReader/229865/226. Acesso em: 4 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador, 7 fev. 1881. Disponível em: http://memoria.bn.br/DocReader/229865/19. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador, 5 maio 1884. Disponível em: http://memoria.bn.br/docreader/229865/234. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. Tribuna do Povo. 2 maio 1884. Disponível em: http://memoria.bn.br/DocReader/229865/227. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. Applaudimos. 18 mar. 1884. Disponível em: http://memoria.bn.br/docreader/DocReader.aspx?bib=229865&pagfis=129. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. Acontencimento Sem Igual. 1 abr. 1884. Disponível em: http://memoria.bn.br/DocReader/229865/142. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. Acontecimento Sem Igual. 18 abr. 1884. Disponível em: http://memoria.bn.br/DocReader/229865/186. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. Acontecimento Sem Igual. 2 abr. 1884. Disponível em: http://memoria.bn.br/DocReader/229865/146. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. O dia 25 de Março em Pariz. 5 maio 1884. Disponível em: http://memoria.bn.br/DocReader/229865/234. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. Annuncios. 3 fev. 1886. Disponível em: http://memoria.bn.br/docreader/229865/1832. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Libertador. Perante a Estatua. 8 abr. 1888. Disponível em: http://memoria.bn.br/docreader/229865/872. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Liberal do Pará, Factos Diversos, Cabo Submarino, 18 jan. 1876. Disponível em: http://memoria.bn.br/DocReader/704555/6703. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Liberal do Pará, (Interrupção de Cabo, A Epocha, set. 1889. Disponível em: http://memoria.bn.br/DocReader/373370/152. Acesso em: 2 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Liberal do Pará. Agencia Telegraphica Havas Reuter. 19 mar. 1875. Disponível em: http://memoria.bn.br/DocReader/704555/5868. Acesso em: 3 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

O Mercantil. Petrópolis, 16 maio 1888, p. 2, "Libertas quae sera tamen".

O Monitor. Notícias Diversas. 3 jan. 1879. Disponível em: http://memoria.bn.br/DocReader/704008/2994. Acesso em: 4 mar. 2023. Biblioteca Nacional – Hemeroteca Digital.

Zodiac. Obituary. January 1944.

References

ALONSO, Angela. A teatralização da política: a propaganda abolicionista. *Tempo Social*, v. 24, n. 2, p. 101-122, 2012. Disponível em: https://www.revistas.usp.br/ts/article/view/53134. Acesso em: 3 mar. 2023. Doi: https://doi.org/10.1590/S0103-20702012000200006.

ANAND, Nikhil; GUPTA, Akhil; APPEL, Hannah (ed.). *The promise of infrastructure*. Durham: Duke University Press, 2018.

ANAND, Nikhil. A public Matter: Water, Hydraulics, Biopolitics. *In:* ANAND, Nikhil; GUPTA, Akhil; APPEL, Hannah (ed.). *The promise of infrastructure*. Durham: Duke University Press, 2018.

ARARIPE, Tristão de Alencar. *25 de março – O Ceará no Rio de Janeiro: discurso histórico do conselheiro Tristão Alencar de Araripe*. Fortaleza: Typ. do Libertador de Sobral, I. O. D. M., & CE-IOM, S. C., 1884. (Genealogia Sobralense, vol. 2, Os Gomes Parente).

BEZERRA, Antônio. *O Ceará e os Cearenses: ligeiras apreciações*. Fortaleza: Typ. Minerva, 1906.

CASTILHO, Celso. Thomas. *Slave emancipation and transformations in Brazilian political citizenship*. Pittsburgh: University of Pittsburgh Press, 2016.

GRAHAM, Richard. *Britain and the Onset of Modernization in Brazil – 1850-1914*, n. 4. CUP Archive, 1972.

GIRÃO, Raimundo. *A abolição no Ceará*. Secretaria de Cultura e Desporto, 1984.

GREENFIELD, Gerald. Michael. The great drought and elite discourse in imperial Brazil. *Hispanic American Historical Review*, v. 72, n. 3, p. 375-400, 1992. Disponível em: https://www.jstor.org/stable/2515990. Acesso em: 3 mar. 2023. Doi: https://doi.org/10.2307/2515990.

GUPTA, Akhil. The Future in Ruins: Thoughts on the Temporality of Infrastructure. *In:* ANAND, Nikhil; GUPTA, Akhil; APPEL, Hannah (ed.). *The promise of infrastructure*. Durham: Duke University Press, 2018.

INSTITUTION OF ELECTRICAL ENGINEERS. [Obituaries]. Disponível em: https://www.gracesguide.co.uk/William_John_Ayres. Acesso em: 3 mar. 2023.

LARKIN, Brian. The politics and poetics of infrastructure. *Annual review of anthropology*, v. 42, p. 327-343, 2013. Disponível em: https://www.annualreviews.org/doi/abs/10.1146/annurev-anthro-092412-155522. Acesso em: 15 mar. 2023. Doi: https://doi.org/10.1146/annurev-anthro-092412-155522.

LARKIN, Brian. Promising Forms: The Political Aesthetics of Infrastructure. *In:* GUPTA, Akhil; ANAND, Nikhil; APPEL, Hannah (ed.). *The promise of infrastructure*. Durham: Duke University Press, 2018.

MARTINS, Pedro Henrique de Sousa. *Escravidão, abolição e pós-abolição no Ceará*: *sobre histórias, memórias e narrativas dos últimos escravos e seus descendentes no sertão cearense*. Rio de Janeiro: Universidade Federal Fluminense, 2012. Disponível em: https://www.historia.uff.br/stricto/td/1641.pdf. Acesso em: 3 mar. 2023

MATTAR, Denise. *Raimundo Cela*: um mestre brasileiro: catálogo de exposição, 12 jun. – 18 set., 2016, MAB/FAAP São Paulo: RR Donnelley, 2016. 200p. il.

MILES, Tschombe. Black leaders and their concept of freedom in nineteenth century northeast Brazil. *African and Black Diaspora: An International Journal*, v. 5, n. 2, p. 264-282, 2012. Disponível em: https://www.tandfonline.com/doi/abs/10.1080/17528631.2012.695225. Acesso em: 3 mar. 2023. Doi: https://doi.org/10.1080/17528631.2012.695225.

MÜLLER, Simone M. *Wiring the world: the social and cultural creation of global telegraph networks*. Columbia University Press, 2016.

LINGE, Nigel. The CABLE KING: The Life of John Pender. *The International Journal for the History of Engineering & Technology*, v. 88, n. 2, p. 274-277, 2018. Disponível em: https://www.tandfonline.com/doi/abs/10.1080/17581206.2019.1575100. Acesso em: 3 mar. 2023. Doi: https://doi.org/10.1080/17581206.2019.1575100.

PARKS, Lisa. Media Infrastructures and Affect. Flow TV , 19, n. 12. 2014. Disponível em: http://flowtv.org/2014/05/ media-infrastructures-and-affect. Acesso em: 13 jun. 2018.

PARKS, Lisa. Stuff you can kick': Conceptualizing media infrastructures. In: SVENSSON, Patrik; GOLDBERG, David Theo. **Between Humanities and the digital**. Cambridge: MIT Press, 2015. p. 355-376.

PETERS, John Durham. Of Cetaceans and Ships. *In:* PETERS, John Durham. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. Chicago: The University of Chicago Press, 2015.

PETERS, John Durham. Infrastructuralism: Media as Traffic between Nature and Culture. *In:* STAROSIELSKI, Nicole (org.). *Signal Traffic*. Amsterdam: Brill Rodopi, 2015.

QUIJANO, Anibal; ENNIS, Michael. *Coloniality of Power, Eurocentrism, and Latin America*. Durham: Duke University Press, 2000.

RAUSCHER, Karl. Frederick. *Reliability of undersea cable communications infrastructure*: Study and report of global summit (ROGUCCI Study). IEEE Communications Society, 2010. Disponível em: https://www.ieee-rogucci.org/files/The%20ROGUCCIReportv186PART_0.pdf. Acesso em: 3 mar. 2023.

RODRIGUEZ, Juniuz P. *Encyclopedia of Emancipation and Abolition in the Transatlantic World*. London: Routledge, 2015.

SANTOS, Maria Emília Vasconcelos dos. O 25 de março de 1884 e a luta pela libertação dos escravos em Pernambuco. *Clio, Revista de Pesquisa Histórica*, v. 33, n. 2, 2015. Disponível em: https://periodicos.ufpe.br/revistas/revistaclio/article/view/24503. Acesso em: 3 mar. 2023.

SILVA, Eduardo. Integração, globalização e festa: a abolição da escravatura como história cultural. *In:* PAMPLONA, Marcos (org.). *Escravidão, exclusão e cidadania*. Rio de Janeiro: Acess, 2001.

SOBRINHO, José Hilário Ferreira. *"Catirina minha nega, Teu sinhô ta te querendo vende, Pero Rio de Janeiro, Pero nunca mais ti vê, Amaru Mambirá": O Ceará no tráfico interprovincial –1850-1881*. Fortaleza: UFC, 2005. Tese (Doutorado em História Social). Universidade Federal do Ceará. Disponível em: https://repositorio.ufc.br/bitstream/riufc/56005/1/2005_dis_jhferreirasobrinho.pdf. Acesso em: 3 mar. 2023.

SOUSA, Anastácio Q.; PEARSON, Richard. Drought, smallpox, and emergence of Leishmania braziliensis in northeastern Brazil. *Emerging Infectious Diseases*, v. 15, n. 6, p. 916, 2009. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2727349/. Acesso em: 3 mar. 2023. Doi: 10.3201/eid1506.071331.

STAROSIELSKI, Nicole. *The undersea network*. Durham: Duke University Press, 2015.

STAROSIELSKI, Nicole. Strangling the internet. *Limn Issue* 10: Chokepoint, 2018. Disponível em: https://limn.it/articles/strangling-the-internet/. Acesso em: 23 mar. 2023.

STOLOW, Jeremy. Techno-Religious Imaginaries: on the Spiritual Telegraph and the Circum-Atlantic World of the 19th Century. *Globalization Working Papers*, v. 6, n. 1, 2006. p. 1-32. Disponível em: https://ciaotest.cc.columbia.edu/wps/igh-c/0007547/f_0007547_6420.pdf. Acesso em: 3 mar. 2023.

YOUNG, Ronald. Abolition in Brazil. *In:* RODRIGUEZ, Juniuz P. (org.). *Encyclopedia of Emancipation and Abolition in the Transatlantic World*. London: Routledge, 2015.

WENZLHUEMER, Roland. *Connecting the nineteenth-century world: the telegraph and globalization*. Cambridge: Cambridge University Press, 2013.

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