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Foundation and Resignification of Ports and Dry Docks on the Magdalena River at the Beginning of the Hispanic Period

Fundación y resignificación de puertos y varaderos en el río Magdalena a inicios del periodo hispánico

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Abstract

Throughout the history of mankind, the seas and rivers have been magnificent spaces for communication, trade, and resource extraction. In the Americas, waterways were also the main entrance from the sea to inland territories, which accentuated their function as spaces for communication, circulation of products, and contact. In this sense, this research focuses on a dual analysis of how the fluvial zones of port use in the pre-Hispanic period were adapted for the navigation system established in the Magdalena River at the beginning of the Hispanic period or were replaced by new spaces that guaranteed the viability of a strategic communication for the development of the New Kingdom of Granada.

Keywords: canoes, maritime-river ethnohistory, navigation, rivers, landscape.

Resumen

A lo largo de la historia de la humanidad, los mares y los ríos constituyeron magníficos espacios para la comunicación, el comercio y la obtención recursos. En América, los cursos fluviales fueron también la principal entrada desde el mar a los territorios interiores, lo que acentuó su función como espacios de comunicación, circulación de productos y contacto. En este sentido, esta investigación se centra en un análisis dual, sobre cómo las zonas fluviales de uso portuario en el periodo prehispánico se adaptaron para el sistema de navegación establecido en el río Magdalena a inicios del periodo hispánico, o fueron remplazadas por nuevos espacios que garantizaban la viabilidad de una comunicación estratégica para el desarrollo del Nuevo Reino de Granada.

Palabras clave: canoas, etnohistoria marítimo-fluvial, navegación, ríos, paisaje.

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Introduction

In a physical setting where overland movement was highly constrained, waterways heightened their long-standing role in linking otherwise largely disconnected territories. In this sense, the Magdalena River was already important in the pre-Hispanic period as an access route in northern South America, where diverse peoples and goods converged (Castaño, 1984). Its significance increased with the arrival of the first Castilians on the coasts of Tierra Firme, especially after the founding of Santa Marta by Rodrigo de Bastidas in 1525 (AGI, Indiferente, 415, L.1), since river courses were among the few practicable routes into the continental interior. Thus, under the government of García de Lerma (1528–1535), two major obstacles that had previously prevented sustained upstream navigation were overcome: identifying an alternative overland route that made it possible to rejoin the river several miles inland, and getting past the river mouth with light vessels as far as Sompallón (AGI, Santa Fe, 49, R. 1, nº 4, f.1v.). Building on these advances, under Governor Fernández de Lugo (1536) and with the fledgling town of Santa Marta in a state of desperation (Restrepo, 1929, p. 107), a new expedition was organized under the command of Gonzalo Jiménez de Quesada[1]. Ascending the Magdalena, this expedition led to the founding of Santa Fe de Bogotá in 1538 and inaugurated a form of river navigation that would be vital for the inland development of the emerging New Kingdom of Granada (AHN, Diversos-Colecciones, 22, nº 27).

The broader project to which this case study belongs seeks an integrated approach to navigation, contact, and cultural interaction along American rivers and to their subsequent incorporation into global networks. In this article, the main objective is to analyze the relevance of the Magdalena River from the moment of first contact onward and during the gradual establishment of the Spanish river-navigation system. It also examines the processes of learning and adaptation to an aquatic environment that imposed enormous logistical and existential demands.

To this end, the research has involved locating, classifying, and analyzing primary sources—both manuscript and printed—including early and later chronicles, correspondence, visitation records, complaints, and regulations, as well as maps, plans, and sketches relating to navigation on the Magdalena within the chronological frame under study. The analysis follows an ethnohistorical perspective and

1 Gonzalo Jiménez de Quesada (c. 1506-1579), born in Córdoba, founded the city of Santa Fe, which later became Bogotá; and the New Kingdom of Granada. Manuel Lucena Salmoral, "Gonzalo Jiménez de Quesada," Spanish Biographical Dictionary (http://dbe.rah.es/biografias/13303/gonzalo-jimenez-de-quesada).

method (Jiménez, 1972) and a transdisciplinary logic. This has made it possible to examine the functions of specific port-type spaces, their role in shaping social roles and identities, and their strategic value within a relatively stable riverine route that was essential for the development of the interior. In particular, the article highlights the decisive connection established between Cartagena de Indias and Santa Fe de Bogotá.

In addition to documents and chroniclers—both contemporary and later—this study seeks to engage with scholars who have addressed the history of the Magdalena River from different perspectives, in order to contribute to the ongoing scholarly debate. Especially noteworthy are Ybot León's (1952) insightful work on the importance of the Magdalena in the history of the New Kingdom of Granada, the broad perspective offered by Noguera Mendoza (1980), the distinctly cultural approach of Rey Sinning (1995), and the historiographical analysis of Tovar Pinzón (2010), along with more general works that, although only tangentially focused on the river, remain highly relevant, such as Restrepo (1929) and Friede (1974). From this standpoint, the ethnohistorical method with a nautical focus—applied through intensive archival research and the systematic identification of primary sources—seeks to make a meaningful contribution to gaps in the broader debate. It does so particularly with regard to the obscure early stages in the establishment of regular navigation on the Magdalena River during the sixteenth century and its transition into the seventeenth.

The Dynamism of the Pre-Hispanic River

The role of rivers as watery routes into the continental interior was not limited to migratory movements of exploration or domination, such as those of Karib canoeists or Castilian forces. River courses were also used on a daily basis for commercial purposes, since they facilitated the transport of goods between places that were very far apart and in some cases inaccessible by any other route. In addition to the large-scale circulation of long-distance products such as maize of Central American origin (Rivera-Sandoval, 2018, p. 34), trade took place between Chibcha groups of the highlands and riverine Caribs. Wild cotton and raw gold were exchanged for "fine cotton blankets, well woven and painted red" (Simón, 1627, p. 90), emeralds and other small Chibcha manufactures, as well as the emblematic salt from the mines of Zipacón, Nemocón, Tausa, and Sesquilé (Friede, 1974, p. 15). The circulation of salt loaves in particular—"if the granulated kind went up the said river, this other went down" (AHN, Diversos-Colecciones, 22, nº 27, f. 4r.)—kept the morale of Gonzalo Jiménez de Quesada's expedition (1536–1538) high. The

loaves were interpreted as an unmistakable sign that upriver there lay a rich province of land: "And so, the Indians said that the merchants who came to sell them that salt said that, where that salt was produced, there were great riches and it was a great land belonging to a very powerful lord" (f. 4r.).

Commercial activity and interethnic communication along the river were therefore intense from the pre-Hispanic period onward. River users relied on embarkation points known to all parties (Castaño, 1984, p. 212), which also appear in chronicles such as that of Juan de Castellanos (1589), who notes that along the river "there was no lack of settlement nor lack of harbor" (p. 407). Throughout the sixteenth century, the river navigation system established on the Magdalena retained these traditional places of embarkation, disembarkation, and exchange. They included stretches of sandbanks where canoes were beached, as well as pre-Hispanic trading places redefined as ports, such as La Tora—whose "landing place boils with canoes and dialects" (Noguera, 1980, p. 14)—or the canoe port of Guataquisito, under Panche influence (Bautista, 2013, p. 108).

The existence of these points, sometimes marked by "large houses or bohíos," and at other times standing empty—since they appeared to serve not as dwellings but as trading spaces—reveals the dynamism of the river as a zone of communication and interethnic commerce. It was "where the Indians who came down from the sierras with salt and blankets, and those who went up from the Río Grande to trade and carry out their barters or 'rescates,' as the exchange of one thing for another is called here, came together" (Simón, 1627, pp. 90–91).

Finally, the rapids of Honda and their hinterland are of particular importance. In addition to marking the upper limit of the river's middle course, they constitute the end of optimal navigability on the Magdalena. From this point, the fluvial navigation system established in the Hispanic period had to incorporate an overland leg in order to maintain the route as far as Santa Fe de Bogotá. During the first contacts, the western bank was inhabited by the Indigenous Onda, and under Spanish administration the Quares and Yebes were incorporated on the eastern bank—three Indigenous groups so experienced in fishing that they held an exclusive license for this activity throughout the sixteenth century (Ardila and Martínez, 2005, pp. 189–190).

The River Mapped: The First Charts and Sketches of the Magdalena

The cartographic representation of the Magdalena has been an unresolved challenge ever since Castilian expeditions first traveled up the river in the early sixteenth century. It is, in fact, one of the ten rivers in the world with the highest erosion rates—an annual average of 180 million tons—which has contributed to very high geomorphological diversity (Restrepo, 2015; Restrepo et al., 2020). This study compiles and analyzes maps, plans, and sketch maps of the Magdalena River, from the second half of the sixteenth century into the seventeenth, in order to build a diachronic perspective and enrich the comparison of available data.

One of the most notable maps is the one commissioned by Juan de Castellanos from Juan Nieto in 1570 to illustrate the third part of *Elegías de varones ilustres*, drawn under the title *Traça chorographica de lo contenido en los tres braços que cerca de la ciudad de Popayan [...] * and preserved in the Cartography Section of the Real Academia de la Historia (RAH) (see figure 1). Despite its high degree of geographical imprecision, it is a document rich in detail and provides highly relevant information about navigation routes in the second half of the sixteenth century. From this infrastructural perspective, it is also necessary to mention the *Plano de la Villa de Tenerife*, annexed to the *Relación Geográfica de la Villa de Tenerife* by Bartolomé Briones, dated 1580 and likewise preserved at the RAH. In addition, the Archivo General de Indias (AGI) holds the *Plano de la Provincia de Santa Fe, sus pueblos y términos* of 1584, attached to the *Relación buen gobierno de Nueva Granada* signed by Diego de la Torre.

Perceptions of geographic scale in these early years were very limited. They were constantly reshaped by ongoing exploration and by the gradual development of cartography following the first depiction of American territory in Juan de la Cosa's chart of 1500, a turning point between the medieval portolan tradition and the emergence of modern cartography (Martín-Merás, 2000). It is also important to stress that faithfully representing a river like the Magdalena remains a complex task even today: "more than 90% of its basin is not scientifically known in relation to the evolution of channels, flood zones, and other fluvial environments" (Restrepo et al., 2020).

Source: Royal Academy of History (RAH), C-028-022.

Figure 1. Traça chorographica de lo contenido en los tres braços que cerca de la ciudad de Popayan (ca. 1570)

The Need for a Stable Itinerary

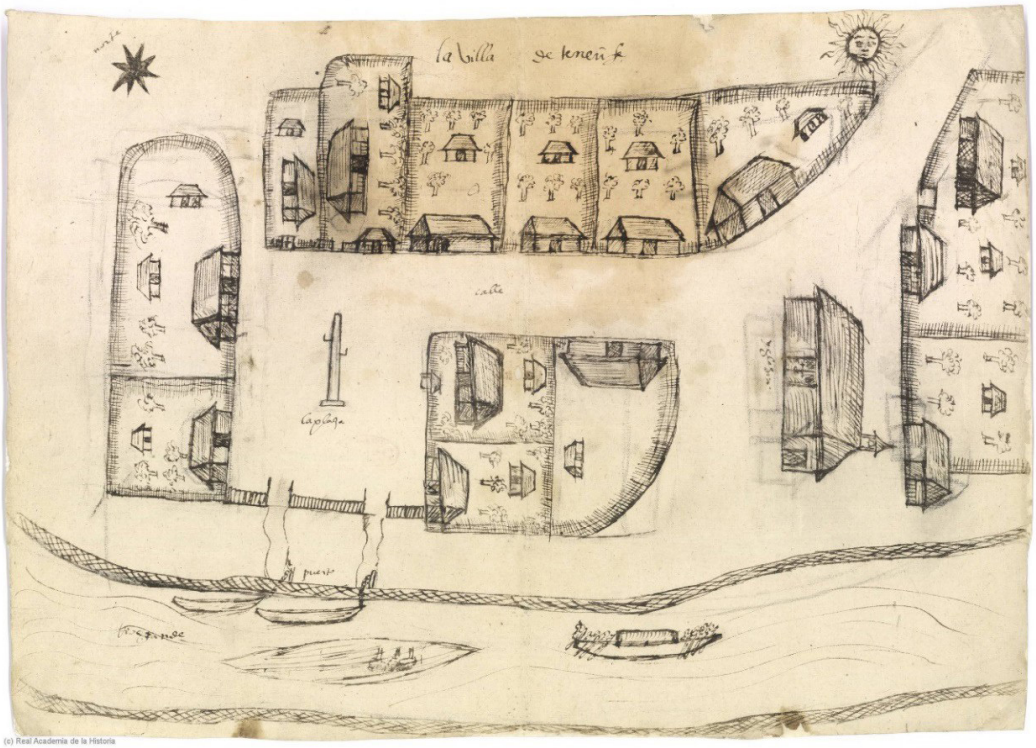
The first indications of a preferred route come from sworn testimony taken before Licentiate Santa Cruz in 1539. In that inquiry, each of the three conquistadors who converged on the Cundiboyacense highlands—Gonzalo Jiménez de Quesada, Sebastián de Belalcázar, and Nikolaus Federmann—and the other witnesses who

accompanied them as far as Cartagena were asked which route they considered the best way to reach the New Kingdom (AGI, Patronato, 27, R.18).

Although we can reconstruct the return route—launching vessels at Gautaquisito, then going downriver past the rapids of Honda and La Tora to reach the sea—the journey upriver posed far greater difficulties. Based on the testimony about the preferred route, it is clear that the river was regarded from the outset as the best option. Federmann himself acknowledged that his overland entry from Venezuela had been "very arduous and many people were lost," and Belalcázar's route, which "set out from the headwaters of the Río Grande," was equally harsh, even though he tried to favor his own interests and those of Pizarro by recommending entry from the South Sea (Pacific). Quesada, for his part, laid the groundwork for the later establishment of regular navigation on the Magdalena. He insisted that "to travel in that land has to be by the Río Grande" (AGI, Patronato, 27, R.18, f. 13r.).

Another witness, Pedro de Puelles, also endorsed the route via Santa Marta and the Río Grande, but stressed the need for it to be kept "continuously open and well maintained, so that the land is well supplied with whatever is needed" (f. 16r.). His statement not only concludes a set of testimonies that identify the preferred route and future itinerary, it also underscores the need for effective upkeep. In the mid-sixteenth century, given the limited resources of the first Castilian settlers in the Magdalena basin, to maintain the route meant to populate it. In other words, if the route was to be kept permanently open and in good condition, it was essential to found and refound settlements and ports. Only in this way could they "master" the landscape and sustain the regularity required by an emerging system of river traffic.

Beyond regularity, navigational requirements also imposed constraints linked to the limitations of Castilian vessels: "the current runs very strong and the brigantines cannot go up," and stretches of rapids extended for "a hundred and fifty leagues" (Aguado, 1906 [16th c.], p. 95). This combination of navigational challenges and demanding physical conditions (Nieva, 2022) shaped the itinerary. The route had to be marked out by a series of towns and "port spaces" that ensured a reasonably reliable—if never risk-free—passage, and by a chain of segments that, through overlap and relay, made safe transport possible.



Source: Royal Academy of History, C-028-003.

Figure 2. Plan of the Villa de Tenerife (1580)

In this sense, the infrastructure of traffic on the Magdalena developed gradually. Strategic settlements were founded step by step: the early town of San Sebastián de Tenerife, later repopulated by Beltrán de Unceta and Luis de Manjarrés (AGI, Patronato, 156, R.3); Santa Cruz de Mompox (AGI, Santa Fe, 37, R.1, nº 4); and the key settlement at La Tora—later Barrancabermeja—refounded by Licentiate Luis Enriques, who "went down there to pacify the said Indians and settled a port called Barrancas Bermejas" (AGI, Santa Fe, 96, nº 5, f. 444r.). La Tora quickly became a strategic point for navigation on the Magdalena, as reflected in multiple recommendations by Pedro de Puelles, who advised founding "a town of Christians along the way, in La Tora or somewhere nearby." Quesada likewise urged that "a town of Christians be established there so that it may serve as the disembarkation point" (AGI, Patronato, 27, ff. 15r–16r).

Along with Honda, which marked the opposite end of the route and the limit of what was considered "practicable" navigation (AGI, Santa Fe, 18, R.4, nº 29, 2.r.), other early refoundings took place, such as Tamalameque, and later foundations such as the port of Ocaña, described by Captain Lorenzo Fernández in 1583

(AGI, Santa Fe, 87, nº 38, ff. 400–412). Most of these new towns—or refoundings on top of Indigenous polities—appear in the first depiction of the itinerary, produced in 1570 (see figure 1).

Although the route was repeatedly modified, there were two principal ways to begin the journey from Cartagena. One could enter through the river mouth, accepting the risks involved (Nieva, 2022, p. 454), or travel overland for several days and rejoin the river farther upstream (AHN, Diversos-Colecciones, 22, nº 27). From that point on, the journey was largely by water until reaching Honda, but it required passing through rapids and stretches that slowed travel considerably. According to Antonio Ybot León's calculations, from Barranca Vieja it took four days by canoe upriver to the town of Mompox. From there travelers embarked again and continued by boat to Honda, and from Honda overland to Santa Fe, for a total of approximately forty days (1952, p. 38). In other words, the time needed to connect the capital of the New Kingdom with the port of Cartagena was not very different from the time required to sail from the Andalusian coast to the Antilles across the Atlantic Ocean. This comparison gives a sense of the difficulties of communication at a time when waterways were the preferred means of transport.

In addition to the physical demands imposed by the river, conflicts with Indigenous groups in certain areas also shaped the route. Documents repeatedly mention the problem posed by "Indigenous archers" along the river, particularly the Carare. According to one account, they "shot under the tongue and pierced the palates of the Spaniards, then ran a cabuya through them—which is the same as a rope or cord—and led them about during their drunken feasts. Others cut flesh from their bodies and roasted it in their presence, and from their skulls they made totumas to drink from" (AGI, Santa Fe, 18, R.4, nº 29, f. 4v.). The process of learning about and assessing such dangers was also part of the consolidation of Spanish control over the river. It led, in some cases, to the abandonment of particular locations or routes. Around 1568, for example, an attack in which seven Franciscan friars were killed led to the decision that "that port and road were abandoned" (f. 4v.).

Even so, the river's navigability increased over time as settlement became more effective, the number of river towns and ports grew, and vessels were adapted through hybridization and empirical learning. This need, shared by royal authorities and subjects alike, was articulated through Spanish regulations. A letter to the king dated 20 May 1577, for instance, refers to allowing "all persons who wish to open ports and roads to the great river of the Magdalena, insofar as it may

be for the benefit and relief of the Indigenous natives of the said river, to open and discover them" (AGI, Santa Fe, 85, nº 29, f. 547r.). This passage points to another key issue for the present study: both the distance from centers of decision-making and the logistical difficulties within the Magdalena basin required the colonial administration to adopt a more flexible stance. Only by doing so could it foster a gradual, cumulative form of cooperation in which individual efforts contributed to an undertaking of extraordinary difficulty and shared interest.

In the same letter, Captain Martín Polo reports the personal effort and expense involved in opening roads and building houses by clearing forest, so that "more easily than before, and sparing the natives much river and road and labor, they could arrive with their canoes and carry people and merchandise up to the said New Kingdom" (f. 547r.). All this reveals the scale of the difficulty and effort required to establish a stable system of river navigation in a landscape as rugged as the Magdalena's course. This gradual assertion of control over the riverbanks later appears in the words of oidor Francisco Guillén Chaparro, who wrote that "more land will be discovered, and the forest will be opened up, and the port can be dug farther downstream" (AGI, Patronato, 27, R.33, f. 1r.). In this way, the itinerary evolved toward longer stretches of waterborne travel. A 1603 testimony underscores earlier limitations: "To go up to the city of Santa Fe and Tunja, one used to reach only half the river that is now navigated, that is, as far as Carare. There was a port called Vélez, and they loaded the merchandise that came from Castile and then traveled eight or ten days by a very rough road" (AGI, Santa Fe, 18, R.4, nº 29, f. 1v.).

Riverine towns such as the Villa de Tenerife were therefore indispensable for asserting control over a highly complex natural and human environment. In 1556, Beltrán de Unceta wrote to the king describing the great service he had rendered by founding and invigorating that town together with Luis de Manjarrés:

> I went from the city of Santa Marta with Captain Luis de Manjarrés to settle the town of Tenerife, which is on the Río Grande de la Magdalena, and to secure the natives who lived in the surrounding highlands, bringing them into obedience, and thus they have remained there ever since. Most of them are Christians, for having brought them and taught them this knowledge, and in this God Our Lord and Your Majesty have been well served. And because this town has been founded, the passage along the Río Grande de la Magdalena, going up and down, is now without danger or risk as before, for previously it could not be navigated without an armed fleet. (AGI, Santa Fe, 80, nº 56, f. 345r.)

This brings us to one of the key points of this part of the research. In the same statement of merits, Beltrán de Unceta also claimed to have gone "to discover a landing place," which reveals how important it was to create port zones or even simple, practicable landing beaches in order to secure a stable itinerary (f. 349v.). It is striking that in a list of merits addressed to the king—a document that usually offers a carefully curated selection of one's greatest services—he chose to highlight actions that, in similar documents produced elsewhere, might have seemed minor. In the face of a vast and difficult environment, however, each small contribution helped to stabilize and/or control the river's course. It did so both by limiting the threat posed by unconquered groups and by intensifying human modification of an extraordinarily demanding landscape.

Travel Problems: Dangers and Complaints

The very high mortality recorded during Gonzalo Jiménez de Quesada's expedition between 1536 and 1538 makes clear how hostile the Magdalena was for human travel. Moving along one of the continent's major rivers meant confronting a powerful current, inaccessible banks, and a harsh climate marked by humidity, heavy rainfall, and high average temperatures. On top of this were dangerous animals on land, in the water, and in the air—above all jaguars, caimans, and mosquitoes. To these natural hazards we must add human risks tied to riverine commerce: heavily loaded vessels that were difficult to maneuver, extremely poor food and sanitary conditions for Indigenous crews, exhausting workdays with few opportunities for rest, and the presence of "very warlike Indians" (Aguado, [16th c.] 1906, p. 108)—that is, Indigenous groups in open resistance to Spanish authority who frequently attacked canoes, targeting both passengers and *indios bogas* (AGI, Santa Fe, 18, R.4, nº 29, f. 4v.).

This section offers a focused assessment of the conditions and consequences of *boga*[2]—the Indigenous rowing labor system—during its early years, in order to understand the high mortality rates among the first *bogas* or Indigenous rowers, which in turn prompted numerous complaints, ordinances, and penalties.

2 "Bogar" is the 'action of rowing', according to the Diccionario de Autoridades, t. I (1726). With greater nautical detail, "bogar" is said to be 'rowing in smaller rowing boats', in Avelló de Valdés, Diccionario náutico o prontuario marítimo (s.XVIII). The oldest reference is that of García de Palacios (1587, f. 133v.).

Itinerary

Although Indigenous navigation on the Magdalena was already dynamic in the pre-Hispanic period, once the fluvial system that supplied the interior was put into operation, river voyages became longer and more arduous: "a journey of one hundred leagues and a great current and force of the river, as one of the largest in the world, and a great weight and load in the said canoes" (AGI, Patronato, 195, R.21, f. 258r.). As discussed in the section on the establishment of a stable itinerary, the riverbanks saw numerous foundations and refoundations of ports, towns, and landing beaches. At the same time, overlapping stretches of navigation were organized, some more difficult than others, and adapted to deeper or shallower drafts. Different types of vessels were assigned to different sections in order to create optimal navigation zones. Beyond the full route—"from Cartagena up the Río Grande, disembarking at the Río Negro, and from there pack-trains carry the goods to Santa Fe" (IVDJ, E25, C41, 492, f. 2r.)—it is difficult to establish general travel times. Different stretches were handled by different groups of bogas tied to particular encomenderos, and the route itself depended on new foundations that prepared the riverbanks and, in a sense, "marked" the way (AGI, Santa Fe, 87, s.f.).

Initially, however, round trips lasted around forty days, including stops, some of them in the open on sandbanks along the river (AGI, Patronato, 195, R.21, f. 258r.). By the mid-sixteenth century, Yñigo Miñez de Arana provides the following approximate segment times: from the Ciénaga de Santa Marta to Mompox (10–12 days upriver and 3–4 days downriver); from Mompox or Tamalameque to the landing place of Mariquita or Río Negro (36 days upriver and 6–7 days downriver); and from Vélez to the same destination (26 days upriver and 4–5 days downriver) (f. 260r.). In other words, average travel durations were very long, especially given constant exposure to natural and human risks. These conditions were aggravated by the initial absence of rules limiting how often the same crew could repeat the voyage and by the lack of mandatory rest intervals between journeys. Such restrictions were only imposed around 1560, with the ordinances of Juan de Junco (AGI, Patronato, 196, R.4, f. 35r.).

The Precariousness of Bogas: Provisions and Exposure

The intensification of *boga* did not go hand in hand with improvements in provisions. Diets were initially based almost exclusively on maize products, which provided insufficient energy, especially during taxing upriver journeys (AGI, Patronato, 195, R.21, f. 258r.). The then-Prince Philip acknowledged this situation in

a royal decree, noting that "the food is scant and poor" and a cause of illness and death (AGI, Indiferente, 532, I, f. 95v.).

During the first years, rowers worked naked and fully exposed to the elements: sun, mosquitoes, and adverse weather conditions (AGI, Patronato, 195, R.21, f. 258r.). This resembled pre-Hispanic practice, but now took place under a regime of increased frequency and strictly scheduled departures, which turned these conditions into a major life-threatening factor. The boats themselves were also completely exposed, since canoes initially lacked any kind of cover, a combination that further increased mortality associated with *boga*. Vegetal coverings for canoes were only made compulsory for long journeys with the ordinances of Juan de Junco (AGI, Patronato, 196, R.4, f. 39v.). These coverings were arranged from gunwale to gunwale in a vaulted form, as can be seen in the plan of the Villa de Tenerife (see figure 2).

As mortality decimated the traditional canoeing communities along the Magdalena, Indigenous groups with no previous connection to the river and no nautical experience were forcibly incorporated as *bogas*, despite Spanish regulations that, in ordinances such as those of 1576, ordered that only people accustomed to this work should perform it (f. 45v.). This disconnection between new *bogas* and the canoe, the route, and the riverine landscape became another factor that heightened the dangers of navigation and increased mortality risks for both rowers and passengers. By the end of the century, this had led to repeated calls for "natives accustomed to rowing" (AGI, Patronato, 27, R.33, f. 1r.).

Dangers in the Natural Environment

Regardless of whether travelers knew the territory well or not, the riverine environment of the Magdalena basin was undeniably dangerous. During Quesada's expedition, and later in Jerónimo de Lebrón's, mosquitoes posed a serious problem both for newcomers and for locals. Juan de Castellanos (1589) lists "ticks, bats, and mosquitoes" as the agents of "such terrible plagues" (p. 342).

From the earliest Castilian experiences, anacondas—described as "an aquatic snake that is not even felt until it strikes" (Castellanos, 1589, p. 407)—and caimans were among the most feared animals in the river and along its banks. Fray Pedro de Aguado (1906 [16th c.]) offers a detailed description of the regional caiman:

> Fish ten, twelve, fifteen, twenty or more feet long, shaped like lizards and as ferocious as carnivorous and savage beasts. With great force they seized soldiers as

> they crossed certain swamps and rivers and dragged them under the water, without any possibility of help or rescue, so that they met very wretched and most cruel deaths. (p. 90)

The Problem of "Indios Aleados"

Recurrent attacks by so-called *indios levantados*—Indigenous groups in revolt—were one of the most frequently mentioned causes of death throughout the first century of river navigation, as documented in mid-sixteenth-century sources and still evident at the turn of the century (AGI, Santa Fe, 80, nº 56). These could be Indigenous communities that had never been subdued by Spanish authority or local groups (*indios comarcanos*) who, in response to extreme conditions, "took up arms and rebelled" (AGI, Patronato, 195, R.11). If we examine the *boga* system, aside from natural hazards, such attacks were the main human factor driving mortality—together with the *boga* regime itself—and they affected all people and goods traveling along the Magdalena:

> They would shoot the Indians and Blacks who were rowing at the bow and stern with very finely made arrows—the kind that, for example, Doctor Don Luis Tello de Eraso, oidor in this royal audiencia, keeps as a specimen. No matter how small the wound, they kill within twenty-four or thirty hours. (AGI, Santa Fe, 18, R.4, nº 29, f. 4v.)

In short, throughout the first decades of the river navigation system, numerous physical and human factors shaped travel along the Magdalena. Together with early abuses, negligence, and the general disregard for the Indigenous people forced into one of the deadliest types of labor in the Spanish Indies, these conditions produced a marked demographic decline. This decline was denounced repeatedly by both clergy and lay officials, who pointed to *boga* as "the principal cause of ill health and death among the said natives" (AGI, Patronato, 195, R.21, f. 258r.). Modern authors confirm that this image of danger has persisted. As Ybot León notes, "the ghost of the Magdalena River always loomed dark and menacing as a constant threat, devouring lives and wealth, and its passage terrified travelers" (1952, p. 37).Top of FormBottom of Form

Proposals for Rerouting the Itinerary

As the two young Castilian foundations of Santa Fe de Bogotá and Cartagena de Indias expanded and gained greater weight in the administrative landscape of New Granada, their connection via the Magdalena River became indispensable. Upriver navigation made it possible to link the capital of the New Kingdom of Granada

with Cartagena, while downriver traffic ensured the provisioning of the Tierra Firme fleet that anchored in the Caribbean port from the mid-sixteenth century onward (Pajuelo, 2022). Because of the high morbidity and mortality repeatedly and vehemently denounced—most notably by Visitor Melchor Pérez de Arteaga (AGI, Patronato, 195, R.21)—the Crown remained open to alternative routes that might stem the loss of Indigenous lives without interrupting a form of transport that was strategic for the New Kingdom's development. From the earliest decades, navigation on the Magdalena was subject to strong logistical and economic constraints, layered over geographical ones (Ybot León, 1952), which limited the possibility of any abrupt change in strategy.

This situation created room for proposals that sought to solve the problem but would, in turn, affect powerful interests tied to the conventional route. One such proposal came from Juan López, procurator of Tunja, who in 1543 suggested establishing an alternative route via Lake Maracaibo. This would allow the abandonment of the Magdalena route and put an end to the "depletion of Spaniards and Indians who travel it, and the losses of slaves and merchandise, because the people of the said river are warriors and very bellicose Indians, already accustomed to seizing vessels with people aboard and killing everyone" (AGI, Patronato, 195, R.11, ff. 38r–39v.).

Juan López presented witnesses, recorded by notary Martín Cabrera de Sosa, who confirmed the feasibility of the Maracaibo route as an urgent alternative. In their words, "if the said port were to continue to be used from now on, it would be greatly damaging and displeasing to God Our Lord and His Majesty." López also cited economic arguments: "because of these losses, everything in this kingdom is very expensive," and he maintained that secure roads connected to this Venezuelan route would guarantee the arrival of goods in good condition and help stabilize prices. He further appealed to royal interests, arguing that constant Indigenous uprisings, fueled by the harsh conditions of navigation, were "greatly detrimental to His Majesty and his royal fifths," since they caused depopulation and delays (ff. 38r–39v.).

It is worth recalling, however, that only a few years earlier (1539), Federmann himself, in his testimony in Cartagena de Indias, had stated that the route "he took from Venezuela" was not advisable due to its difficulty and the loss of life it entailed (AGI, Patronato, 27, R.18, 4v.). It is striking that, although Juan López's proposal was never implemented, the idea resurfaced throughout the century. For example, Fray Francisco Méndez also condemned the boga system on

the Magdalena as "highly harmful to the Indians" and urged that another road be found "through the Gulf of Venezuela and Lake Maracaibo" (AVDJ, E25, C41, 481, f. 1r.). The plan was never adopted in the overall development and administration of the New Kingdom, though as late as 1588 proposals tied to the Maracaibo route continued to appear, such as those put forward by Antonio Jove, corregidor (magistrate) of Tunja, Vélez, and Pamplona, in a letter to the king dated 20 May 1583 (AGI, Santa Fe, 87, nº 39, ff. 413–416).

The initial reference to a certain economic determinism in decisions concerning navigation on the Magdalena is tied to the collateral effects that any change of itinerary would have produced. The hypothetical establishment of the New Kingdom's main supply route along roads leading to Lake Maracaibo would have required the foundation of a new port, whose location would have given it a privileged position, thereby displacing Cartagena de Indias as the principal South American port and dismantling an entire river network of ports and riverside towns founded along the Magdalena, such as Mompox, Tenerife, and Honda, among many others (Ybot León, 1952).

Despite these proposals, echoes of the unresolved problem can still be heard around the turn of the seventeenth century. They appear in the inspections carried out by Diego Gómez de Mena in 1600 in Honda and Río Seco (AGN, Visitas, 62, 2, D.1, f. 8v.), and by Bartolomé de Arce Pizarro in 1611 in Coscorucio (in the jurisdiction of Tenerife), who reminded authorities that boga should be voluntary, performed by men "moved by good treatment and by satisfaction with their wages and the reward for their labor" (AGN, Visitas, 62, 1, D.1, f. 2r.). From the last third of the sixteenth century onward, shorter diversions were proposed to bypass particularly dangerous stretches with high loss of life, or to bring the route closer to new river ports that were more convenient for certain interests. As discussed earlier, numerous new ports were founded and various attempts were made to divert traffic as the itinerary took shape.

Throughout the century, prominent figures from different cities of the New Granada, as well as Spanish officials, continued to put forward such initiatives. Visitor Juan Suárez de Cepeda, for instance, endorsed an alternative route discovered by the residents of Nuestra Señora de La Palma to a new port on the Río Grande. He described it as "very convenient, and the Indians row the canoes willingly because they have been raised in this work since childhood" (AGI, Santa Fe 56a, nº 10). Another notable case is that of Captain Francisco Fernández, who founded a port that, in the words of his son Lorenzo Fernández, "spares the Indians a great

stretch of rowing." His request for hereditary title to the port stresses that "his estate would be ruined and spent if such a favor were not granted" (AGI, Santa Fe, 87, s.f.). Francisco Fernández is credited with founding the "new port for boga on the Río Grande" and with discovering another port two days from Ocaña that "relieves the Indians of the Río Grande boga of much toil" (AGI, Santa Fe, 87, nº 38, ff. 400–412).

Logistical constraints loom large over every decision related to navigation on the Magdalena. The majority of encomenderos maintained that "the said New Kingdom could not be supplied, for they say there is no other road but that of the said river" (AGI, Patronato, 195, R.21, f. 258v.). Yet the complaints voiced by clergy and lay officials, together with repeated proposals for innovations and diversions, insisted both on the need for change and on the feasibility of alternative routes. They dismissed the encomenderos' arguments as mere pretexts, noting that "all their reasons in this case are frivolous and easy to refute" (f. 258v.).

Conclusions

In addition to the significant geographical constraints inherent to the riverine environment, navigation on the Magdalena was, from an early stage, shaped by economic, logistical, and "political" factors that conditioned decision-making. Despite resistance to any change in the navigation system on the part of certain sectors—particularly some encomenderos and merchants—the force of complaints and the ingenuity of several proposals led each new set of regulations to further restrict the use of Indigenous boga labor on the Magdalena River. In this context, alongside the replacement of Indigenous rowers by enslaved Africans, the last major initiative that partially brought the established itinerary to an end was the construction of the Canal del Dique, a direct waterway linking the Magdalena to the city of Cartagena, inaugurated on 20 August 1650 (Ybot León, 1952, p. 164).

In sum, from the first conjectures about how to reach the interior of the New Kingdom of Granada, as reflected in the 1539 testimony, the Magdalena River became the setting for the construction of a fluvial navigation system extending over more than 1,000 km of navigable channel. This system emerged through the situated adaptation of Indigenous techniques for designing, building, and handling canoes; through infrastructural adjustments in the use and improvement of sandbanks along the river; and through the appropriation of pre-Hispanic knowledge about river routes and the "times" of the river, which governed the boga calendar and its relationship to annual floods. On the basis of pre-Hispanic navigation—

which had long enabled the circulation of goods, people, and ideas—a slow but steady process of refounding and founding ex novo ports and towns along the riverbanks began, with the aim of establishing a stable and safe itinerary capable of provisioning the New Kingdom of Granada. The need to keep so many kilometers of river passable made it necessary to settle specific points that would anchor stretches of habitation, supply, and navigability. From 1570 onward we see sites such as the towns of San Sebastián de Tenerife and Santa Cruz de Mompox represented as indispensable milestones along the route. They also marked transitions between overlapping navigation segments that, when necessary, allowed for a change of vessel type and ensured that goods could be moved continuously along most of the course, meeting the river's demands.

Ultimately, this article contributes to the study of American river systems and their historical significance, especially for a period marked by a notable historiographical gap. It underscores the need for a transdisciplinary approach and a nautical perspective that together make it possible to understand, in holistic terms, the importance of rivers for structuring and energizing a vast continental territory, a dense administrative apparatus, and a world in which much of long-distance communication depended on waterborne movement.

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