

*From Mare Tenebrorum to Atlantic Ocean: Creating
the modern Atlantic World through Cartographical
Writing (1470-1800)*

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From *Mare Tenebrorum* to Atlantic Ocean: Creating the modern Atlantic World through Cartographical Writing (1470-1800)

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This paper discusses several topics concerning the representation of the “Atlantic Ocean” on early modern European world maps. In particular, it explores the process whereby the ocean has been progressively delineated, individualized, and identified through various configurations of toponymy, its shapes, and other geographic elements (islands, monsters, winds and currents, demarcation lines, etc.). Together, these gave concrete form and meaning to what is otherwise a geographical imaginary.

These processes of cartographical transformation will be analyzed through two aspects: first, the manner of “cartographical writing” (design, toponymy, etc.), and, second, the balance between the known and the unknown within the geopolitical networks and social production of scientific knowledge. This research into the representation of the Atlantic Ocean on modern world maps rests on the supposition that the configuration of the Atlantic Ocean was an expression of ideas about the geographical world, geopolitical networks and interests, and scientific developments in many fields. Specifically, the configuration of the modern Atlantic Ocean would have been an essential aspect to give continental status (*quarta pars*) to the land masses, found by chance, whose “geographical identity” aroused so much doubt and controversy.

“Maps are not records of what each part of the world actually is; regardless of historical and cultural context, maps are careful imaginings of what people wanted the world to be” (Edney, 2007: 157)

The Atlantic World is one of those few objects that seem to be easily mapped or shown on maps¹. Quite aside from debates on its limits², its place on a world map appears quite

1. Note that most of the covers of books on the history of the Atlantic World display a map. See for instance, Cañizares-Esguerra and Seeman, 2007; Greenne and Morgan, 2009; Sandler, 2008.

2. The debate about the Atlantic world’s limits involve themes ranging from the individualization of “many thematic Atlantics” (according to nations, religions, trade’s routes, etc) to the acknowledgment of many links with a broader global context. Some of the methodological problems involved in those

natural and clear. Moreover, any images, including cartographical images, of the Atlantic World are naturally centered on the geographical object that gives its name to this world: the Atlantic Ocean. In other words, the Atlantic World *needs* an Atlantic Ocean. Nevertheless, the idea of Atlantic Ocean itself and the process by which this ocean took its current shape require a more thorough investigation: the geographical nature of the Atlantic Ocean is not as obvious as it seems at first brush, and its historical existence is not ontological nor extemporal³.

Certainly, since Braudel's interpretation of the coexistence of many Atlantics, several scholars have examined the idea that "most European saw it [the Atlantic Ocean] as a series of distinct seas" (Greene and Morgan, 2009: 8). However, most of these analyses are focused on the divisions of the current Atlantic looking for the routes and areas corresponding to the experiences of different nations and empires across the ocean, rather than on a discussion of it as a geographical entity. Recent studies on the history of the Atlantic World highlight the necessity of transcending national frameworks and of rethinking the spatial dimension of history in the processes that shaped and reshape the Atlantic World. This essay is engaged with that "spatial turn"⁴ not just because it is based on a cartographical analysis (which obviously might refer to an empirical space), but also because those maps are studied as records of the process in which a marginal oceanic space -- usually on the left in world geographical images -- became the axis of what is called the Atlantic World. While this geographical concern allows a view more comprehensive than that from any national

delimitations are presented for "tracing the contours of the French Atlantic" (Dubois, 2009: 138). Renate Pieper, who analyzes the limits of the Atlantic world in early modernity by considering the trade of handcrafts and luxury objects, describes redefinitions in these limits as the result of the dynamic of historical processes.

3. Even though most recent studies assume that "it was impossible for Europeans to consider the Atlantic as a full ocean, so much so that those who made the first recorded crossing had a different idea about their accomplishment" (Chaplin, 2009: 37), they easily succumb to the temptation to organize Atlantic history in stages which involve the assumption of a naturalized geographical conception of the ocean as an object retrospectively fixed as it is today: "The history of the Atlantic's contemporary meanings occurred in three stages. In the first, Europeans thought of the Atlantic as a geographic space to get across, a rather belated idea that contradicted an ancient suspicion that the ocean was not a real space at all. In the second stage, the peoples in the post-Columbian countries that faced the Atlantic thought of that ocean as a space in which to make or imagine physical connections, both among different places and among different natural forces. In the last stage, people emphasized the Atlantic's value as a route elsewhere, especially when the Pacific became a new destination for them" (Chaplin, 2009: 36).

4. The expression is taken from Connery, 1996. Many other authors remark the crucial importance of the spatial dimension in Atlantic World studies: "With the implementation of the historical concept of the Atlantic World in the second half of the twentieth century, there was a stronger consideration of the category of space as a constitutive element of historical action. This represented the correction of a process which had led to a prioritization of time as opposed to space with the development of historiography in the nineteenth century, and in particular as a consequence of certain accentuations within historicism. This privileging of the temporal dimension has tenaciously held on until the present, as the chronologically-based division of historical seminars and the naming of journals after epochs shows. As a rule, spatial perspectives were restricted to national history in the course of the nineteenth century" (Pieper and Schmidt, 2005: 16).

perspective, the approach does not deny the complex and changing national interests expressed by almost all of the maps, but rather analyzes them as points within a set of data which together played an important role in shaping the Atlantic Ocean.

At the heart of this essay lies the question of how maps contributed to the configuration of the Atlantic Ocean and, therefore, how they participated in the creation of the Atlantic World. Traditional approaches to the history of cartography have fixated on how cartographers drew continental coastlines and the Atlantic islands with ever greater precision. Historical research has thus tended to concentrate on the trials and errors of European explorers and on the skills of European cartographers in outlining the new lands, especially the American continent. In this sense, the Atlantic Ocean seemed to have been a space defined negatively, as that which was not land and which lay between America and Europe. However, on the contrary, in the new geographic world that was being shaped within the framework of the sixteenth-century Iberian Expansion, the Atlantic Ocean gained new significance in its own right.

This study of the representation of the Atlantic Ocean on modern world maps rests on the supposition that the configuration of the Atlantic Ocean was an expression of ideas about the geographical world, geopolitical networks and interests, and scientific developments in many fields, which were vigorously debated -- and also contained various contradictions as the result of intellectual inertia.

As many recent studies have demonstrated, far from being a “hollow and empty space”, the Atlantic Ocean was part of the new regions that were being conquered by Europe (Steinberg 2001). Many geographic, cosmographic, and navigational works written or published from the sixteenth century onward clearly indicate the growing interest that kings, the learned, navigators, and traders had in taming the vast ocean.

This chapter explores the process whereby the ocean has been progressively delineated, individualized, and identified through various configurations of its shapes, toponyms, and other geographic elements (islands, monsters, winds and currents, lines of demarcation, etc.). Together, these gave concrete form and meaning to what was otherwise an empty space in the geographical imagination.

How did the “green sea of Darkness”⁵ become the axis of an intensive Atlantic World? How the “great frontier for expansion on the west” became the “inland sea of Western civilization”⁶? By raising these questions, this chapter intends to offer a geographical narrative for the historical process of configuration of the modern Atlantic world.

1. The long road to the geographical unity of the Atlantic Ocean

5. “The ninth-century Baghdad geographer al-Mas’udi called [it] the ‘green sea of darkness’” (Sandler, 2008: 7).

6. Expressions taken from Meining, 1986: 6.

Our starting point in examining the Atlantic Ocean⁷ as a space/place is a general statement which might seem quite obvious, but which is by no means as banal as it might appear: the current Atlantic Ocean has never been “our” familiar Atlantic Ocean. To put it differently: the “Atlantic” water itself has not an essential or ontological identity able to be extended into the past indefinitely.

One useful approach to examining the process of the creation of the Atlantic Ocean is to begin with early modern European navigation to the west, which had a direct impact on conceptions of the frightening seas beyond the Columns of Hercules⁸. In fact, the experience of overseas navigation implied, among many other things, the redefinition of what was known about the *Mare Oceano* (Ocean Sea). Since Antiquity and during the Middle Ages, the Ocean Sea comprised all the waters surrounding the known contiguous land masses (Europe, Africa, and Asia), and this was how the ocean was repeatedly defined in science and navigation books⁹.

By the end of the fifteenth century, it was no longer a practically unlimited *mar océano*, as it had been perceived until Columbus’ voyage: the Atlantic Ocean ceased to be the *Mare Tenebrorum* that had terrified medieval seafarers and surrounded the whole *ecumene*. Certainly, when John Parry affirmed that the so-called age of the discoveries was, in fact, the discovery of the seas¹⁰, he was emphasizing the flood of more and more refined attention dedicated to the knowledge of the seas from the fifteenth century onwards. However, new data was not automatically included in new maps: because the interpretation of geographic data from explorers was strongly influenced by classical geographical literature,¹¹ the waters and lands were mapped according to what Europeans *expected to find* beyond the limits of the known.

7. Except where I indicate otherwise, I will use the expression “Atlantic ocean” to refer to the current ocean as a general referent.

8. In Andreas Walsperger’s mappamundi of 1448, there is a text on an Atlantic island in front of the Strait which reads: “Aquí hay las Columnas de Hércules que hay que evitar por el peligro”. See Chet Van Duzer, 2009.

9. For instance, in Pedro de Medina’s words: “We say Ocean Sea due to the fast and continuous motion it moves in, because *ocis* in Greek means speedy. The Greeks and Latins name it this way, and this has remained the common name, or it is called oceano casi Cianeus because it embraces or bounds the outskirts of the land, and in the different regions it has different names, such as Indian Sea, Persian Sea, etc.” (1545)

10. In his book *The Discovery of the Sea*, Parry affirms: “Todos los mares del mundo son uno solo. Con unas cuantas excepciones de escasa importancia –lagos salados más que mares-, todos están conectados unos con otros. (...) El conocimiento de que existían pasos marítimos continuos de un océano a otro en todo el mundo (me refiero al conocimiento comprobado y no a las hipótesis geográficas), fue el fruto del periodo de un siglo y pico durante el cual los europeos exploraron los mares y que en los libros de historia suele aparecer con el título de ‘la edad de los grandes descubrimientos’. Hasta el último cuarto del siglo XV, la mayoría de estos pasos eran desconocidos en Europa, y algunos lo eran de forma absoluta, es decir, no sólo en Europa sino en todo el mundo” (Parry, 1974: 9).

11. As were geographic conceptions of Africa as a continent: see Francesc Relaño, *The Shaping of Africa. Cosmographic Discourse and Cartographic Science in Late Medieval and Early Modern*

One way to explore this “cartographic inertia”¹² is to study some cartographical writings, such as the toponymy of the Atlantic¹³. The Atlantic toponyms had different reaches and meanings, according to different authors and historical moments. Those variations express not only a toponymic problem but also, and more importantly, the lack of a common understanding about the unity of these waters. Firstly, it should be mentioned that the earliest maps that included some information about the New World did not inscribe any name on those waters¹⁴, or just wrote *Mar Oceano*¹⁵ or *Oceano*¹⁶, as if the way of imagining the surrounding ocean (or more precisely, an unique mass of water¹⁷) had not been fundamentally changed by the discovery.

Likewise, the redefinition of the Ocean Sea -- and the concomitant appearance of many “regional seas” -- also implied the emergence of new names which identified parts of that large water mass. At first glance, the most significant event in the toponimic field of the sixteenth century is the emergence of *Mare Occidentale* (and its variants) as the main toponym for the recently extended oceanic section in the western area of European world

Europe (Hampshire-Burlington, Ashgate, 2002). A similar process governed conceptions of the southern hemisphere, on which see Lois, 2008.

12. This phrase was coined by Matthew Edney to explain the persistent retention of nonexistent sea and other geographical features on maps; it is useful in helping us to understand the complex process of mapping new places or mapping with new techniques, and illustrate how intricate cartographical writing could be (rather than a transparent act of mechanical inscription of data on a graphic surface).

13. Due to the nature of the object that they denominate, the oceanic toponyms act by radiating metonymically that power of attributing identity so typical for names to on a surface (in opposition to punctual implantations) (Jacob, 1992: 263). From a graphic point of view, there are three strategies that allow us to read those names as marks of the process of the creation of the geographical identity of the present Atlantic. The first one is the presence of a unique toponym, the name applied to the whole surface, without lines indicating limits or boundaries, and regardless of typographic hierarchies or its specific location on the graphic surface. The second mode is the central or strategic location of the toponym, where the visual radiation over the seas does not contradict any other information inscribed on the same map. The third is the clear hierarchical primacy of one toponym over others, basically through typography or font size. These three strategies are not incompatible, and in fact were used in combination. Mention should also be made of other “local” toponyms which multiplied the possible combinations (Lois and Garcia, 2007).

14. Giovanni Contarini-Francesco Roselli, *Universalior cogniti orbis tabula. Ex Recentibus confecta observationibus* (Florence, 1506); Johannes Ruysch, *Universalior Cogniti Orbis Tabul Ex Recentibus Confesa Observationibus* (Roma, 1507) and Francesco Roselli, no titled worldmap (Florence, 1508). Giovanni Vespucci, *Totius orbis descriptio... Ioanis Vespucci Florentini... 1524* (Florence, 1524); anonymous attributed to Nuno Garcia de Toreno, (Valladolid? 1525); Baptista Agnese, no titled world chart (1536); Jerónimo de Chaves, no titled world map (Seville, 1548.)

15. Juan de la Cosa, no titled worldmap (Cadiz, 1500), Cantino, no titled worldmap (Lisbone, 1502), Anonymous known as “Carta de Pesaro” (Seville?, 1506).

16. Gregor Reisch, *Typus Universalis Terrae, Iuxta Modernorum Distinctionem et Extensionem per Regna et Provincias* (Strasbourg, 1504).

17. Many illustrations show this idea: for instance, the “Mapa de los vientos” in Pedro de Medina, *Arte de Navegar*, Valladolid, 1545.

maps¹⁸. It is neither rare nor surprising: *Mare Occidentale* expressed one of the few certainties about these unknown waters: they were situated to “our” west, which meant strictly to Europe’s West.

A closer examination of the toponym *Mare Occidentale* reveals that it was always written in the northern hemisphere. Furthermore, most of the maps which have the name *Oceano Occidentale* also have *Oceano Australis* or *Meridionalis* (or some variant) south of the Equator (see, for instance, the several editions of the oval planisphere by Sebastian Münster and the planispheres of Ruscelli, to mention only two well-known maps in the sixteenth century¹⁹).

The nature of these names shall be analyzed within a broader context. Said that all of them refer to the position of the waters relative to Europe (the *Oceano Occidentale*, West of Europe, and the *Oceano Meridionale*, south of the known lands), it should be added that, more than that, these names also imply forms: longitudinal for the first, and transversal for the second. And the *Oceano Meridionale* is not only the southern counterpart of the Mar Occidental²⁰, but it seems to reach far away and unknown coasts. Perhaps that is why they are more profusely inhabited by monsters and fantastic creatures²¹. In this sense, the

18. It appears in Gregor Reisch, no titled map in *Margarita Philosophica* (Fribourg, 1503), Martin Waldsemüller, no titled world map in *Cosmographiae Introductio* (1507) and others. Nevertheless, in spite of the preponderance of the name *Mare Occidentale*, it should be remarked that the name Ocean Sea (or simply Ocean) lasted and, even though once in a while, still appears in maps of the sixteenth century. It is used as a generic name for all waters in the Ramuscio’s planisphere (*Universalle della parte del mondo nuovamente ritrovata*, Venecia, 1565). And sometimes it names vaguely ocean waters far and unknown, such as in Thorne’s planisphere (*Orbis Universalis Descriptio*, London, 1527) and also in Porcacchi’s sea chart (*Discorso Intorno Alla Carta Da Navigare, in L’isole piu Famose del Mondo... Venecia ;DLXXII*, Venecia, 1572), where all the waters situated under the Equator are called Ocean Sea.

19. Additionally, in Joan Honter, no titled map, Basel, 1561; Paolo Forlani [and Jacopo Gastaldi, *Vniversale Descrittione di Tutta la Terra conosciuta fin qvi*, Venecia, 1565; Marco Gasolfo, no titled world maps, Genoa, 1565, George Best, no titled map in *A True Discourse of the Late Voyages ... of Martin Frobisher*, London, 1578; and Antonio Lafreri, *Vniversale Descrittione di Tutta la Terra Conosciuta fin qvi*, Roma?, 1580), among others. The terms *Mar Oceano* and *Mar /Oceano Meridional*, referring to the present South Atlantic, were dominant between 1500 and the early 1620s. In Portuguese maps, this denomination appears for the first time in three sheets of the manuscript Atlas Miller (1519) by Lopo Homem/Reinéis. Soon thereafter it appears in the printed Münster/Holbein planisphere (*Typus Cosmographicvs Vniversalis*, Basel, 1532), from which it spread to a wider audience.

20. All those names gave shape to an oceanic system centered in the ecumene and it lies on, at least, two classical geographical conceptions usually applied to the Mar Oceano: on the one hand, oceans were thought and imagined from the landmass, then the main reference kept being the Old World; on the other hand, all those new ocean, considered as parts of a huge and unique ocean sea, allowed to reconstitute de contiguous ocean.

21 See, for instance: Francois de Belleforest, *Typus Orbis Terrarum in Description Universelle de tout le monde*, Paris, 1575. Also, Pedro Apiano and Jerónimo de Girava, *La cosmographia de Pedro Apiano/ corregida y añadida por Gemma Frisio, medico y mathematico ; La manera de descriuir y situar los Lugares, con el Vso del Anillo Astronómico, del mismo autor Gemma Frisio ; El Sitio y*

impressive upside-down world map by Nicolas Desliens (manuscript, Dieppe, 1567) gives an unexpected prominence to the southern hemisphere, and, more specifically, to the Southern Sea, whose name, *Mer Australle Incognue*, signals that the fact that it is unknown is one of its more distinctive characteristic.

This distribution of toponyms and implied shapes suggest that, rather than a longitudinal ocean mass, the present Atlantic was perceived as two seas or oceans divided by the equinoctial line.

This transverse ocean that characterizes most of the planispheres printed during the first half of the sixteenth century contrasts with what we see in many manuscript planispheres from Spain (from Casa de la Contratación), Portugal and Italy. On the one hand, as it had already said, some of these maps had no name for the ocean, or used generic names, such as *Mar*, *Oceano* or a combination of both names. On the other hand, those manuscript maps show a longitudinal ocean, a unique entity, even in those cases where the Tordesillas Line could give a misleading first impression as a dividing limit (on the contrary, rather than a line separating two oceans, one might better speak of an unique ocean crossed and articulated by a vertebral line). In sum, the visual image of a longitudinal shape seems to be strongly connected to the maritime Atlantic experience of the Iberian crowns.

Comparing both ocean types suggests that, while the name and the shape of *Oceanus Meridionale* reflect a scholarly way of seeing from the European perspective (the name and position remark the situation of the water relative to Europe, and located it south of the *ecumene* / *oikoumene*), the ocean that appears in the Iberian charts seems to result from the perspective of the sea routes, from the North to the South. In the first case, the ocean is looked upon (and built) from landmasses. In the second case, from the sea.

Nevertheless, if the longitudinal configuration of the Atlantic Ocean was in part a result of Iberian navigation, the emergence of America in the European mind was no less crucial. It is not surprising that this design was very typical not just in Iberian cartography²², but also in those map that early assumed the existence of a New World: one of the few printed world maps that stamped this longitudinal configuration was the famous and innovative 1507 world map by Martin Waldseemüller.

Evidently, the placement of the Americas on the map rendered the toponym *Mare Occidentale* meaningless. However, despite the awareness that *Mare Occidentale* was in effect suddenly anachronistic, and even though some maps and cosmographical books pointed out that this name was misleading²³, maps kept it for more than more than a century.

Descripcion de las Indias y Mundo Nuevo, sacada de la Historia de Francisco Lopez de Gomara, y de la Cosmographia de Ieronymo Girava Tarragonex, Amberes, 1575.

22. In referring to “Iberian maps” I wish to call attention not just to the peninsular origin of their authors, but more importantly to their role as strategic resources used by and for all those European Crowns that lead the overseas expansion. In this sense, maps signed by cartographers of the Casa de la Contratación could be thought of as a family of maps (from an institutional point of view as well as from the geographical conceptions depicted).

23. Jerónimo Girava, in *El sitio y descripción de las Indias o Mundo Nuevo, sacada del libro de Cosmographia del S. Ieronymo Girava Tarragonex* (1575), says about the *Mare Occidentale*: “Y así tiene en todas las otras partes el Mar, el cual de la parte de Levante se llama el Océano Occidental, a

The displacement of the Atlantic Ocean from the margins to the center of the map -- to its left, America; to its right, Europe -- might be connected with the redefinition of the model Orient-Western²⁴. When Martín Fernández de Enciso organizes the new geography in his *Suma de Geographia* (1519), he asserts that those lands occupying the “twelve unknown hours” belong to one of the two (the oriental and the western) hemispheres of the world. The oriental one was divided in three parts, as the ancient books divided it, which are Asia, Africa and Europe; the western one was divided in two parts: the Canary Islands and the Western Indies. That description created an image where the Atlantic Ocean separated two natures, two worlds.

The problem then becomes how best to examine that displacement. The first question that should be addressed is the relatively marginal position of Iberian maps in European cultures. Spain as much as Portugal had played a crucial and pioneering role in the configuration of the Atlantic world: Spain by the conquest of the New World, and Portugal by the triangular commercial network articulated between Brazil, Angola and the home country, creating one of the most extended “Atlantic surfaces” of the time. However, despite the fact that “Portugal created networks within the North and South Atlantic and between the two hemispheres” (Russell-Wood, 2009: 97), and that Portuguese cartographers recorded it on their maps, those early maps did not determine the configuration of the international imagery of the Atlantic mainly because they were manuscript maps with restricted circulation, especially in comparison with printed images (even though most printed maps inscribed modern empirical data retained within a classical framework for some years).

The map by Herman Moll (1701) was a milestone in the modern cartographic imagery of the Atlantic Ocean, where “the cosmographical significance of the Equator finally undermined and the entire oceanic basin mapped and named as a single entity” (Edney, 2010: 6). One could suggest that this was not an isolated and unattended fact, but a refined formulation and a broadly accepted synthesis of several previous images. Among those previous figures, the “un-Dutch Atlantic,” so skillfully described by Benjamin Schmidt, may have played a crucial role. After the Dutch Republic had passed its zenith, by the middle decades of the seventeenth century, this change implied not just a redefinition of colonial and commercial engagements, but also a new way of conceptualizing the Atlantic space. The Dutch moved “from a provincial sense of Atlantic space, which played to local debates and bolstered colonial ambitions, to an expansive vision of the Atlantic, which declined to highlight any single imperial strategy and thus appealed to a broadly European community of consumers. They created a ‘universal’ form of knowledge (from Europe’s perspective, to be sure), which offered a non-national, non-imperial image of the Atlantic” (Schmidt, 2009: 181). The importance and the potential impact of this last point on European culture will not be well understood if one does not consider the famous business in geography that characterized the Dutch Republic of the time: the extraordinarily intensive production of cultural materials (maps, views, atlas, and gravures) that depicted the Atlantic world.

causa que antes que esta tierra se descubriese se llamó siempre así. Y ahora se llama también del mismo nombre aunque a respeto de aquella tierra se habría de llamar Oriental; pero retenemos en esto, aunque impropriamente, el vocablo ya usado” (fol. xiv).

24. On the spatial and cultural creation of the Orient and West, see Lewis and Rigen, 1997: 47-103.

From a restricted geographical point of view it could be proposed that, by acknowledging the physical processes that governed Atlantic waters (such as currents), the idea of a unique water mass was progressively reinforced in many thematic maps. The milestone in the consecration of this geographical identity is no doubt Alexander Supan's map of the ocean floor (1899), the first to name features after the nearest major geographical masses²⁵. Islands, a crucial element in all images of the ocean (especially in early modernity), are almost invisible in this map. This German geographer gave the first and inspiring step towards the "Carte du fond des océans" (1979), an imaginative map which clearly shows the "geological backbone" that confirms a scientific identity and unicity by representing the Atlantic mid-ocean ridge. Moreover, since "its calculated clarity has the effect of drawing back the dark mass of the sea and revealing an unsuspected region" (Withfield, 1994: 136), it seems to close all of the mysteries that the Atlantic waters had embodied since ancient times.

In all of these respects, the situation was far different in geopolitical contemporary disputes: while the Atlantic Ocean was gradually taking a new shape and was progressively configured as a seemingly homogeneous space, a strong and enduring debate was taking place focused on sovereignty and the rights over ocean resources. Those debates also found a place on maps.

2. *Res nullis* vs. territoriality

Divisions of the ocean -- which in the past had to do with the broadly understood imagery of the vastness of the classic ocean (Gillis, 2004: 62) -- took new directions during the early modern times in connection with, on the one hand, the more and more clear distinction between the concepts "ocean" and "sea"; and on the other hand, the imperial expansion over seas and disputes about rights and sovereignty.

Certainly, some studies of the classical toponyms for the waters beyond the Columns of Hercules state that even when a long tradition moved scholars to write there just "ocean"²⁶, there was not any accurate, stable or uniform concept mostly because of the lack of accessibility and its non-exploration (Ronconi, 1931: 317).

25. See Barber, 2003: 296-297.

26. También porque "el elenco de autores [en la época imperial romana] que utiliza cómodamente el concepto 'océano' para el mar frente a las Columnas de Hércules es impresionante" (Pérez Vilatela, 1995: 176), entre los que pueden citarse Estrabón, Timóstenes y Eratóstenes. En su sugerente artículo, Luciano Pérez Vilatela repasa las concepciones clásicas del Atlántico y su relación con la toponimia. Asume que el "'Atlántico' supone una fragmentación del concepto de Océano", pero examina no sólo las variaciones que coexistieron sino las inconsistencias que caracterizaron la descripción de las aguas del actual Atlántico. Menciona que en la tradición griega primaba la idea de *oceanos* entendido como un conjunto único. Y que las denominaciones "Mar de afuera" o "Mar exterior" eran, de alguna manera, equivalentes a la de océano, pero resaltaban la oposición respecto del Mare Nostrum (nombre con el que, en la tradición romana, se refería al Mediterráneo) y estaban muy asociadas a las columnas de Hércules. Además, el "mar hespérico" o "Mar Occidental" podían aparecer eventualmente como sinónimos de ese "mar de afuera" cuando el texto hablaba de la península ibérica (Pérez Vilatela, 1995: 172-177).

Despite the hazardous uses and non systematic combinations on maps of the terms “sea” and “ocean”, the misleading idea that both were indistinct concepts needs to be revised in light of several early modern cosmographical books that differentiate between “ocean” and “sea”: ocean seems to refer to the whole water mass, and sea, to the parts or divisions, as can be seen in the following quotation:

“As touching the seas, you shall note that is diversely called: either according to the hole or according to the part. **According to the hole, as the seas by this general name Ocean**, because they circuit the earth rounde about according to the parts, as the seas breaking into the land and making branches on **either side is called sinus**, taking also the name of the place it floweth into, as Sinus Adriaticus, sinus Arabicus, Sinus Indicus, etc.” (Cunningham, 1559: f. 143).

While “ocean” alludes to open waters -- or, in Parry’s words, an interrupted mass of water, -- “sea” (*sinus*, *stagnum* or *mare*) seems to have been applied not only to encircled bodies of water but also to “local” waters or oceanic sections, which sometimes were only gulfs (that was the most common acceptance for *sinus*). The combination of both names (for instance, the toponym Mare Oceano / Ocean Sea), far from being a contradiction, seem like they were intended to emphasize the navigable sectors within a vast ocean.

At the same time, another toponymical practice would become a common writing praxis on maps: the waters’ baptism according to terrestrial toponyms. Pedro de Medina explained that “[the ocean sea] takes different names from the countries, such as Indic Sea, Persian Sea, etc.” (Medina, 1545: fol. ciii). Luigi Lilio²⁷, Jerónimo de Chaves²⁸ and Abraham Ortelius²⁹ expressed similar ideas in their contemporary works. That seemingly natural way of naming remained at the heart of a long debate over the rights to ocean resources that began in this era and continued to shape international laws up to the present. By early seventeenth century, the “battle of books”, well narrated by Phill Steinberg, confronted the positions held

27. “*Che il mare ha diversi nomi in diversi luoghi. Il mare, che cinge tutta la terra si chiama Oceano per la sua velocita, & dove che egli apre por la terra & che e u’entra, si chiama il nostro mare*” (Lilio, 1552: 161 verso).

28. “El mar Océano se mueve circularmente por entre todas [las partes]. (...) Y según las tierras que riega: así toma nombre: puesto caso que sea uno. Por lo cual, en unas partes es llamado Scithico porque riega y baña la costa de Scithia. En otras partes se llama Índico, porque pasa por India. En otras se llama Ethiopico. En otras Atlántico. En otras Hispánico. En otras Británico. Y en otras Germánico, y así tiene otros muy diversos nombres” (Chaves, 1561: 65 recto y verso).

29. Abraham Ortelius opens his *Epitome* with the “*Discurs de la mer*”, in which he states: “Ami Lecteur, vue qu’aussi bien la mer, comme la terre, est part de ceste machine ronde, il ne nous a pas semblé inutile, ainsi nécessaire, au commencement d’en parler quelque peu. En premier lieu il faut donc entendre, que **la Mer** a diverses appellations, tout ainsi que la terre, lesquelles appellations elle retient des pays par devant u après d’où elle passe : car on dit, la Mer d’Espagne, d’Inde, de Vénice, &c. ou selon les quartiers, comme la Septentrionale, ou Orientale, &c. La Mer qui est entre Europe, Afrique, & Asie, s’appelle la Mer du Milieu ou Méditerranée, parce qu’elle prend son cours par le milieu de ces trois parties du monde” (Ortelius, 1588: 1).

by the Dutch jurist Hugo Grotius³⁰, the Portuguese professor and monk Seraphim de Freitas³¹, and the English scholar John Selden³².

In a few words: Seraphim de Freitas -- responding to Grotius's statements supporting the principle of international common property of oceanic resources -- asserts that "sovereigns may legitimately exercise their authority in adjacent waters in such a way that limits the complete freedoms of navigation and trade" and Selden's work is devoted to demonstrating how past civilizations in the ancient Mediterranean, contemporary European states and England all have claimed their neighboring waters as the fully incorporated territory of the state (Steinberg, 2001: 95-96).

In this context, maps such as that that Pierre Desceliers drew in 1550 (Arques, Dieppe) -- which displays successive latitudinal sections exhaustively splitting the Atlantic Ocean as follows: *Mer de France*, *Mer d'Espagne*, *Mer Occeane*, *Mer des Entilles* and *Mer Australle* --³³, are in a certain way out of the date, but, in another way, are premonitory, announcing that the oceanic toponymical debate will become more and more intensive, and will have imperial connotations, in the future³⁴.

Traditional historiography used to fix the Tordesillas Line as a departure point in the analysis of the ocean from a political point of view, considering it as an inaugural moment for the political division of the ocean. That conception has been subject to revision and dispute. It seems now to have been demonstrated that "the ocean could be divided into spheres of influence that could serve to define the regions within which land-space was amenable to missionary activities by specific sovereigns, but the ocean itself was constructed as a transportation-space beyond possession, and its 'division' could serve to divide only movement, not territory" (Steinberg, 2001: 82).

30. *Mare liberum, sive de jure quod batavis competit ad indicana commercia dissertatio* [The Freedom of the Seas, or the Right which belongs to the Dutch to take part in the East Indian Trade, 1608] and *De jure praedae* (Commentary on the Law of Prize).

31. *De justo imperio lusitanorum asiatico* [The Imperial Right of the Portuguese in Asia, 1625].

32. *Mare Clausum, seu de dominio maris libri duo* [The Closed Sea, or Two Books Concerning the Rule over the Sea, 1617 or 1618, published 1635].

33. The Desceliers map is just one example of a pervasive tendency. From the second half of the sixteenth century, Portuguese maps, mainly by the Homem family -- picturing from early times a longitudinal Atlantic -- tried a few divisions of the South Atlantic. The divisions were geometrical, structured by the Equator, the Tropic of Capricorn and the Polar Circle. In some maps, in the middle of the South Atlantic there is a scale of latitudes over a meridian located at the same distance from South America and Africa. Therefore, the ocean was divided into four parts: *Mare Brasilis* (above left), *Mare Argenteum* (bottom, left), *Mare Aethiopiae* (above, right), *Mare Bona Espei* (bottom, right). In the eighteenth century the division of the South Atlantic recovers the coasts of South America, and three seas appear: *Brazil*, *Paraguai*, and *Magallanes* (coming from the second half of the seventeenth century, by Sanson). This division occurs in Dutch maps, and then French ones; and they seem to be divisions of the *Oceanus Aethiopicus* or Northern Sea. Near the southern coast of Africa we find *Mer de Congo* and *Mer des Cafres* (Lois and Garcia, 2007).

34. Mention should be made of similar processes at larger scales. Notably, Morieux, Renaud (2008), "La guerre des toponyms. La 'mer britannique' versus 'la Manche' (XVIIe – XVIIIe siècles)".

Nevertheless, no retrospective account could deny that the former *res nullis* became a territory in dispute among many states. If in early modern times there is no direct claim to sovereignty over marine space, the key question then becomes how to suggest correlations between debates over rights and sovereignty and writings on maps.

Instead of focusing on national claims over seas, this essay proposes an approach to consensus, discrepancies and tendencies for dividing the ocean into seas from the perspective of what was inscribed on maps. It proposes, ultimately, that, little by little, legal debates over the rights to oceanic resources affected mainly the coastal zones and indirectly contributed to the creation of a unified imagery of the Atlantic Ocean as the deep sea.

In a previous work, I have suggested that by 1570, the pair *Oceano Occidental / Oceano Meridional*, that until that time had been dominant, gave way to a new couple of toponyms: *Northern Sea / Ethiopicus Ocean*. It cannot be denied that that Northern Sea is “dialoguing” with that Southern Sea³⁵ (the most common name for the Pacific Ocean by then), and both together seems to rearm a different pair, independently from the already mentioned classical framework for the ocean surrounding the ecumene (Lois, 2008). At the same time, the Ethiopic Sea (or Ethiopic Ocean) was cut off from the former *Oceano Meridionale* -- congruently with the intensification of Portuguese’s routes.

If this replacement (more precisely, the simultaneous substitution of the duo by another: *Oceano Occidentale / Oceano Meridionale* by *Northern Sea / Ethiopicus Ocean*) correspond to an early longitudinal configuration of the current Atlantic Ocean, is quite difficult to hold. However, the apparition and profusion of local toponyms as one of the expressions of the legal debate mentioned above, joined with the more and more accurate depiction of coastlines, could have a decisive weight in consolidating the modern Atlantic Ocean as a unique geographical entity.

While there is still a vigorous discussion about the role of Africa in the creating of the Atlantic world³⁶, its importance in the configuration of the Atlantic Ocean seems to be clearer: the creation of an African toponym for its coastal waters prefigured the disappearance of the classical *Oceano Meridionale*. Furthermore, early Portuguese links with Brazil and Angola consolidated the South Atlantic space (Russell-Wood, 2009: 89) which would have also been crucial for the modern Atlantic configuration, especially by the interaction with the more familiar North Atlantic routes, and therefore, the basis for an increasingly integrated network.

From the Enlightenment and onwards, certainly even more when each modern state had its own sea, local seas disappeared from global maps. They lost their geographical identity to keep dependant of the changing political world map. On the contrary, the toponym “Atlantic” –after a long and erratic itineraries- left its traditional place in African maps and

35. To explore the origin of those toponyms, one could have a look at the Ramusio map (1565): while all of the oceans take the generic name *Mare Oceano*, near New Spain we see, in smaller font (reflecting a lower hierarchy? Or a section of a bigger ocean?) *Mar del Norte* and *Mar del Sur* on the southern coast of New Spain, on the current Pacific Ocean, both seemingly conceived and seen from Mesoamerica.

36. See Morgan, 2009. Also Eckert, 2005.

moved into the middle of the ocean³⁷. By nineteenth century, trade, maritime traffic, the insurance industry, and increasing competition among states and empires reinitiated the debate on regulation of seas. As a symbolic event, the first International Maritime Conference (Washington, 1889)³⁸ could be taken as a symptomatic validation of those problems, which had begun with the Atlantic European experience several centuries before.

Conclusions

It is well recognized that the present image of the Atlantic was the result of a very complex series of actions by the colonial powers which organized their empires around the ocean: Portugal, Spain, Holland, and then France and England. First, the network of sea routes was the basis for manuscript nautical charts of the whole ocean, where the coastal toponyms are inscribed, and also the isles and archipelagoes, as meeting points of both ships and knowledge. Later, engraved maps, according to their scale, match different concerns and ideas: from the broad dissemination of sea routes in detailed charts, to the images of the whole southern half of our Atlantic, in both cases, with a clear connection with the objects of economical exploration: wood, sugar, mining, and always slaves.

As a result of this new configuration, the Atlantic waters became a vertical axis that separated -- and connected -- the Old and New Worlds. One of the most remarkable consequences of this process was the displacement of the Atlantic Ocean within the world's geography: no longer was it the limit between the East and the West; it was now the "backbone" of the Western. To put it differently, the *Oceanus Occidentalis* left its circular shape and stopped being an obstacle to expansion -- and became rather a route for expansion, a space for resources and a territory for conquest. This mutation implied the construction of a new ocean: the modern *Atlantic Ocean* required that the several seas were visualized as a single geographical unit complete with a reconfiguration of the meanings of ancient and new toponyms.

All in all, in many senses, the Atlantic world seems to have preceded the Atlantic Ocean: as the epigraph that opens this chapter suggests, maps offered a needed geographical object for one of all those modern worlds we create.

37. As the Ethiopic toponym, the Atlantic name originally used to refer to a punctual African referent: the Atlas Mounts. In Nicolas Barré's words: "*L'une desquelles reconnusées appelée le Pic Ténériffe, des anciens, le mont d'Atlas : & de celui selon les cosmographes est dicte la mer Atlantique. C'est mont est merueilleusement haut : il se peut voir de vingt cinq lieues*" (Barré, 1557: 8).

According to Ronconi (1931), the Atlantic toponym appeared in classical literature naming just a gulf (in supporting this statement, he quoted some classical *savants*, such as the Dionysius Periegetes' description (third century) where he mentions the *Sinus Atlanticus*). Ronconi follows from those sources that, in ancient times, "Atlantic" has had a restricted geographical meaning, and then gradually it was expanding further its toponymical influence. These classical roots would explain that most early modern maps that included the Atlantic toponym correspond to scholar works.

38. Steinberg, 2001: 125-130.

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