Cartographer's experience of time in the Mercator-Hondius Atlas (1606, 1613)

his article analyses the articulations of temporality in the Mercator-Hondius Atlas. Firstly, the atlas reflects the sense of the past as the cartographers had to assess the information included in ancient texts in relation to modern testimonies. Secondly, Hondius had to take into account the worldview provided by the explorers in the fifteenth and sixteenth centuries. Hence the experience of time articulated in the Mercator-Hondius Atlas reflected not only the cartographers' ideas of the Dutch cartographic industry but also directed the making of the atlas.

THE MERCATOR-HONDIUS ATLAS, published by Jodocus Hondius in 1606, summarises the early-seventeenth-century Dutch golden age of map-making, famous for the skilled cartographers and the atlases it produced. The atlases (bound collections of maps) reflected the expansive shift in the Dutch thinking during the years of exploration and the establishment of commercial networks around the world. The atlas existed at the juncture of intellectual endeavour and practical necessity. The maps in the atlases had to be approximately the same size and they had to be printed and drawn in the same style (Koeman et al. 2007: 1318). At the same time, atlases had a close connection with scholarship as representations of the known world. Atlases aimed to depict the contemporary world but their relationship with the past was complex, because the modern cartography was under the impact of antiquarian scholarship. In addition, atlases adapted information from ancient Greek and Roman scholarship and from early modern antiquarian studies, and reflected the rapidly changing European worldview during a time of exploration and religious wars.

The Mercator-Hondius Atlas is the work of two cartographers who belonged to different generations; Gerardus Mercator (1512-94) was fifty years older than Jodocus Hondius (1563-1612). Moreover, the scale of the atlases differed considerably, as Mercator's edition mapped only European countries (with notable omissions such as Spain), while Hondius' edition was universal. Mercator drew maps for his atlas in the 1560s and the 1570s. The unfinished Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura was published posthumously in 1595. In 1606 Hondius utilised the copperplates on Mercator's maps he had bought together with Cornelis Claesz. and added maps, some of his own, to compile an atlas that would be convenient and met current standards. (Van der Krogt 1995: 115-16)

During the publication of Mercator's and Hondius' atlases, European explorers uncovered new lands and civilisations, which challenged religious and scientific truths. As Anthony Grafton has shown, earlier knowledge of the world had been shaken, especially as a result of the discovery of America. Grafton has proposed that European knowledge was still reliant on ancient authorities in the late fifteenth century. The new discoveries, which brought information on a world that neither Homer nor the Bible had known, gradually shattered the status of classical texts - their relevance as sources of information diminished, while the impact of the observation of both nature and foreign people increased. Nonetheless, the classical tradition did not disappear over night, as most interpretations of the new worlds were based on it. (Grafton 1992)

The golden age of the atlases was a period when knowledge of the world was revolutionised. While the sixteenth- and seventeenth-century explorations shattered the sense of the past by questioning the authority of classical writers, cartography and other ways of narrating the expeditions and presenting their results made early-modern scholars aware of the problems with the use of ancient sources. The Bible and the Romans did not mention America, nor did they know about its flora or fauna. When the influence of the ancient canon gradually vanished, history became a discipline of its own. Even the past had to be studied by contemporaries, because the earlier signposts, the classical authors, were not considered as reliable any longer. (Schiffmann 2011; Kelley 1998: 156–61)

The late-sixteenth- and early-seventeenth-century atlases commented on the ideas of time and history. They had to acknowledge the changes in the worldview that resulted from the journeys of exploration and from progress in the natural sciences. This article analyses the articulations of temporality in the Mercator-Hondius Atlas. Firstly, the atlas reflects the sense of the past as the cartographers had to assess the information included in ancient texts in relation to modern testimonies. Secondly, Hondius had to take into account the worldview provided by the explorers in the fifteenth and sixteenth centuries. Hence the experience of time articulated in the Mercator-Hondius Atlas reflected not only the cartographers' ideas of the importance of the expeditions but also directed the making of the atlas.

How much did this change in historical thought influence early-modern cartography? According to Walter Goffart (2003), there were hardly any real historical maps in the early-modern period, as the cartographers concentrated on contemporary geographical information without any conscious accounts of the past that differed from the present. This article claims that cartographers reacted both to antiquarian studies and to new knowledge that expeditions produced. Often they could balance between the two sources of information, but sometimes the sources were contradictory.

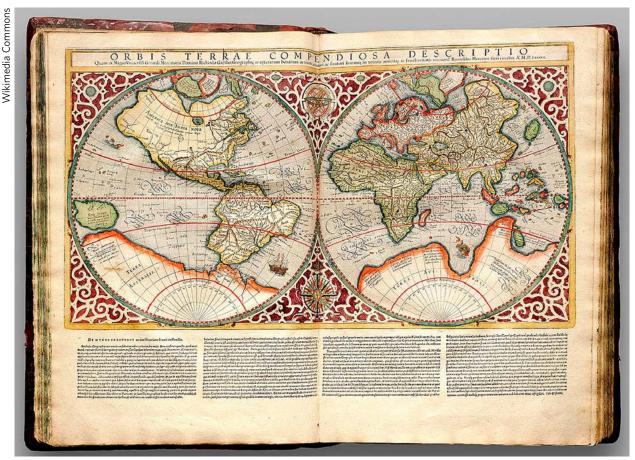
Jodocus Hondius and Petrus Montanus: two learned cartographers in the age of antiquarianism

The role of cartography and atlases in the study of historical thought can be understood in relation to simultaneous and multifaceted approaches to the past that competed in seventeenth-century learned culture. According to classical analysis of Arnaldo Momigliano (1950), early-modern historical thought was heavily influenced by antiquarians, who used both textual and material sources, while historians were limited to texts. The definition of antiquarianism remains contentious. Recently Peter N. Miller has suggested that the discipline could be understood as a study of the 'entire lived culture of a people or a period', which uses suitable methods available. Interestingly, Miller considers antiquarianism as a spatial approach, which studies the physical survivals of the past (Miller 2012: 285–315). Both cartographers and antiquarians were fascinated by topography, which involved the study of 'the examination of the Earth's surface and its salient physical and cultural features' (Castree *et al.* 2013).

Cartography, when it presented historical topography or the remnants of the past, could be regarded as an antiquarian discipline that attempted to visualise the past in terms of geography, politics and cultures (Tolias 2008: 102). Many of the key early-modern antiquarian studies, such as William Camden's *Britannia*, were topographic, as they presented their subject from region to region. They did not dismiss the past but spatialised it by dividing the presentation into regions. *Britannia*, like most topographic studies, consisted of both maps and texts, thus paving the way to both Mercator and Hondius.

Mercator, like many of his contemporaries, was aware of the outdated information that Ptolemy's Geographica contained. In Mercator's plan, the role of historical information was noteworthy as the atlas's five chapters described the creation of the world, the description of the heavens, the description of the earth, genealogy and the history of nations and chronology. In addition, Mercator divided geography into three sections: modern maps, Ptolemaic maps and historical maps. The division between the past and present maps and the inclusion of Ptolemaic maps in a section of their own suggests that Mercator considered the maps following Ptolemy's texts to be historically important. He intended to continue the tradition while simultaneously modernising it. Unfortunately, Mercator died in 1594, when he had drawn only the maps of most European regions. His son Rumold published the Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura a year after his father's death, in 1595. (Van der Krogt 1997: 31–3; Keuning 1947: 42–3, Thiele 1995: 22–6)

Like Mercator, Jodocus Hondius was a learned cartographer, who had studied in the University



The first edition of Mercator's Atlas.

of Leiden. Therefore it is not surprising that the Mercator-Hondius Atlas is a synthesis of ancient cartographic tradition and its modern modifications. It united the Ptolemaic cartographic approaches, which presented the world as regional maps, with cultural, geographical and anthropological descriptions from Strabo's Geographica (Tolias 2012: 21). The combination of cartographic and textual representation was topical, as the works of both Mercator and Strabo were rediscovered and studied ardently in the fifteenth and sixteenth centuries (Grafton 2010: 170-3). Mercator and Hondius were fascinated by Ptolemy's cartography: they studied both his theories and later maps that were drawn following them. Mercator published his own edition of Ptolemy's maps in 1578, Hondius and his associates in 1605.

The Mecator-Hondius Atlas reflected the changes in cartography that took place as a result of the invention of printing. The printing press standardised information through the easy reproduction of immutable texts. In cartography, the impact of printing was even more decisive, as the copperplates or woodcuts used by printers made it relatively easy to make identical reproductions of the maps, which the scribes had not succeeded in copying properly (Jacob 2006: 56–7). The standardization of cartography contributed to the differentiation between the ancient and modern maps. Unlike many other publishers, Mercator did not want to make changes to the maps he published in the section of Ptolemaic maps. They were instead separated from the works of modern cartographers.

Without the invention of printing, the Mercator-Hondius Atlas would not exist. Jodocus Hondius, who acquired the copper plates for Mercator's maps in 1604, was at that time a notable businessman and a famous engraver and cartographer. He had been born in Ghent but as a Protestant had escaped to London when the town was captured by the troops of the duke of Parma in 1584. In England, Hondius blossomed as an engraver; he became famous for the copperplate engravings of the globes by Emery Molyneux. Hondius was able to follow the latest news on the expeditions and the gradual unveiling of the

world. He made acquaintance with many leading explorers and cartographers; for example, his friendship with Sir Francis Drake is well documented. (Hind 1952: 154–77)

Hondius returned to the Low Countries in 1593, when he started a new career as a businessman in Amsterdam. He worked with other refugees from the southern provinces and with the erudite Petrus Montanus (Pieter van der Berghe, 1560–1625), who, like his brother-in-law Hondius, had lived in England from 1585 to 1593. Petrus Montanus was as heavily involved with the business of cartographic and geographic publishing as Hondius. He was an entrepreneur who could make engravings but he was obviously more textually oriented than Hondius. He thus became responsible for the texts of the atlas, which covered over half of the book.

The often neglected role of Petrus Montanus highlights how atlases were made up of texts and maps working together. Scholars such as Svetlana Alpers (1989) have interpreted early-modern Dutch cartography as a pure representative of the Dutch visual culture, but in reality the maps cannot be detached from the texts. The negligence is partly understandable, as the texts in the atlases usually continued the learned tradition of antiquarianism and chorography, the form of cartography which divided the world into regions. The atlas texts were historical in the sense that they described past events in a manner the maps were unable to. Like most antiquarian studies, the texts in the atlases were still above all spatial as they did not present the events in chronological order. Petrus Montanus followed the maps by describing nature, history and local manners from region to region and from continent to continent.

Petrus was the right person for such a gargantuan task, as he had mastered the classical languages, history and literature and was fascinated by local histories. He is nowadays mostly known for the editing of the text for Ptolemy's *Geography* published in 1605 together with Jodocus Hondius and Cornelis Claesz. and for the annotations he made for Lodovico Guicciardini's *Beschryvinghe van alle de Nederlande* (1612) (NNBV: 645–6). Publications that connected maps and historical texts were typical of Renaissance antiquarians. The Meractor-Hondius Atlas nonetheless marked a difference: it aimed to include the entire world at a time when information on the world was expanding significantly.

The Mercator-Hondius Atlas was published under the title Rumold Mercator had used. The 1606 Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura still differed completely from the eleven-year-old Mercator project, as Hondius added thirty-six new maps to Mercator's atlas. They depicted Spain but also non-European areas, especially the Americas, which Mercator's atlas had completely lacked. In addition, Hondius engraved maps of continents such as Nova Africae Tabula, Asiae Nova Descriptio and America. Hondius thus expanded the Mercator atlas considerably by responding to the ideal of up-to-date information.

The differences between the two editions did not concern only cartography. Petrus Montanus had written large treatises on every map. In most parts of the world, they contained similar cultural, political and natural elements such as had already been Strabo's objectives. Petrus followed the chorographer's pattern and adopted a similar approach from region to region. Thus, while writing on France, he started with a brief general description of the regions, then wrote about the noteworthy cities, after which he moved on to describing the opera publica or the essential public buildings. The general review ended in a brief description of learned life and academies (MHA: 150-2). The description of the county of Boulogne concentrated more on the natural world. After the cities, Petrus Montanus wrote on rivers, mountains and forests (MHA: 153).

The texts of the 1606 edition followed the Straboan tradition with its mixture of topography, information on the key features of civilisation and detours to the past. The disparity with Mercator's Prolegomena, also published in the 1606 edition, is striking. Mercator referred to biblical texts and ancient authors in his explanation of the world. Petrus Montanus made references to classical authors and modern scholars, and he aimed to describe the current state of the regions. The role of observable geographic features had grown considerably. This was a result of what David Livingstone (1992: 51) has called as early-modern cartography's desire to 'achieve ever-growing intellectual respectability. The fabulous maps, the use of mathematics and complex instruments argued for the place of cartography among the other sciences. Despite this, the classics had not disappeared, as recognition of the discipline's long history increased its respectability.

Traces of the past in the atlas

As Walter Goffart (2003) has argued, historicity in the early modern maps was controversial as purely historical maps hardly existed. He refers to the maps that described historical states or geography without any reference to the modern natural, cultural or national reality. Despite this, the presence of the past was recognised in various ways. Many early-modern maps aimed to reconstruct national, cultural or topographical features in ancient landscapes, but presentations of the medieval past or its traces in the modern landscape also existed.

It is evident from the outset that the Mercator-Hondius Atlas is not historical: it does not include historical maps and it did not attempt to describe the world of the past. It is a modern atlas, published to inform readers about current knowledge cartographically and to entertain them by presenting the wonders of the world. It is also a work for which Hondius published the maps he had bought or received in addition to his own works. In turn, Petrus Montanus' descriptions depended on the maps Hondius had acquired.

The early-modern Dutch cartographers had attempted to map the historical world as well. Abraham Ortelius' collection of historical maps, *Parergon* (1579), originated from his atlas, where the appendix of twenty-six maps depicted the regions of the old world. The maps referred to classical antiquity and to the biblical world. The maps had no dates as they presented timeless and unchanging antiquity (Goffart 2003: 17). Classical antiquity was an unchangeable entity to which modernity was compared. Goffart has argued how 'time was homogenized' as the historical analyses could take only two standpoints: they presented the ancient world and the modern one (*ibid.* 26). Neither was historical in the sense that it could change, progress or decline.

Nonetheless, as Christian Jacob (2006: 66–72) has noted, atlases formed open structures, which meant that the publisher could add or delete maps and texts as he wished. While Mercator attempted to design a collection of maps and texts which would reflect his own worldview, Ortelius and Jodocus Hondius made assemblages that consisted of texts and maps that were used by them or that they could acquire.

The reproduction of earlier material increased the presence of classical tradition in the Mercator-Hondius Atlas. First of all, its role is considerable in Petrus Montanus' texts, which connect current information with the views of ancient authors. Even if the cartography did not refer to its classical predecessors, Montanus' texts used antiquarian studies, which in turn had adopted the views of the Greek and Roman classics. The authority of the ancients was not complete, but they still acted as useful points of reference for the moderns. For instance, the description on the British Isles begins with the analysis of their name. The reference to Aristotle, Lucretius and Caesar was compulsory even if Petrus mentions the concept 'Britannus', used by the antiquarian Thomas Elyot (1490-1546). Yet the use of classical or medieval authors concerned not merely the distant past, where they were considered as invaluable witnesses. Petrus Montanus' analysis of British topography included references, for example, to Livy, Rusticus and William Camden (MHA: 45).

Petrus Montanus aimed to present cartographic and geographic information by discussing the views of the ancient authors but not by repeating them without criticism. He obviously felft that the authors had to be cited while discussing the world they knew best, that is Europe and Asia Minor. When he had to describe the African continent, Petrus was well aware that the two-millennia-old information was not valuable. Most of the modern antiquarians were silent about the continent as well. While discussing northern Africa, which the atlas still named as Barbaria, Montanus stressed its cultural achievements by naming the cities and empires, along with the flora and fauna. In constrast, the analysis of Abyssinia is based at least ostensibly on observation and not on the information given by classical authors. Nonetheless, Montanus refers to the Old Testament when he describes, for instance, the animals in the region (MHA: 326).

Like Petrus Montanus' text, Hondius' references to Africa were mainly biblical as the Old Testament was his text's main source. Hondius' map of the continent contains a mention of the Queen of Sheba, but his map of Abyssinia localises the place of residence of the Amazones, the anthropophagi and the Nubians (MHA: 326v-327r). The references to the Bible were outdated in the context of the sixteenth-century expeditions, but they formed a vital part of early-modern intellectual history, which had many political allusions as well. Above all the inclusion of the biblical texts and the ancient authors on the maps is part of the phenomenon termed 'cartographic literature'. Tom Conley has noted that in early-mod-

ern cartography the boundaries between texts and maps are fluid, and that both produce space. Conley (2007: 491) argues that both belong to the tradition of graphic rhetoric, which formulated reality by the collocation of the texts and pictures. The Bible could be used as a historical source, because the graphic rhetoric was used along with recent knowledge and traditional narratives to form a plausible and intriguing presentation of its subject.

The role of biblical history in the African maps was analogical with the use of classical references in other continents. In the Mercator-Hondius Atlas the maps were based on geographical information, but the literary references are still conspicuous. Thus, for instance, in the map of *Scotia Regnum*, Mercator refers to the works of Bede, Eubonias, Ptolemy and Pliny in the texts attached to the map (MHA: 57v–58R).

Walter Goffart has noted how Hondius' work includes many examples of literary geography. It is scarce in the atlas of 1606, but the literary references were increased in the Atlas minor (1607). Hondius added some new maps with historical purport. The Atlas minor thus includes maps tracing the routes of St Paul and Aeneas. Goffart (2003: 33) remarks how the textual and cartographical elements were united as the maps presented the story 'by pictorial means', showing the ships that were destroyed by the storm. The ancient, semi-fictitious travels were the most concrete features of historical culture that Hondius capitalised on in his cartography. The other references were scarce. Most of the early historical maps were drawn to trace the travel routes of famous persons, imaginary or real. In a period when principles of pure historical cartography were not yet articulated, the routes made it possible to understand the spatiality of past cultures.

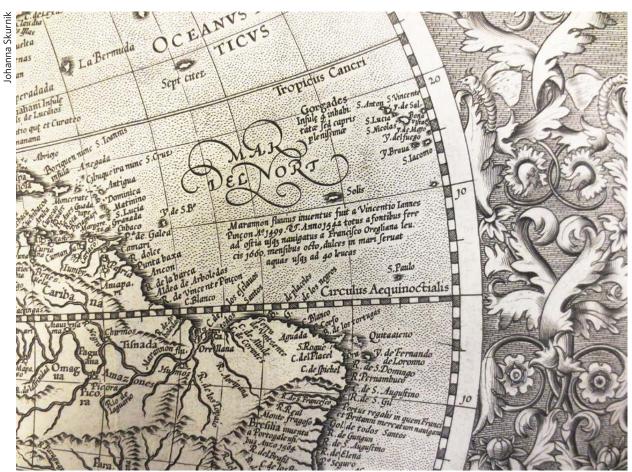
Despite the increase in classical allusions in the *Atlas minor*, the Mercator-Hondius Atlas testifies to the end of an era. Its 1612 edition still reproduced Petrus Montanus' texts unchanged. The later versions of the atlas, such as its French translation, lacked many of its classical references (MHAFr). When the text was translated into another language, it could be modernised as well. Thus observations on nature and geography were preferred to the texts of the Greek and Roman writers. This removed one historical layer from the atlases, even if the content of the maps did not change.

Accelerating time: maps and exploration

Reinhart Koselleck has seen the early-modern period as a turning point in the relationship to the past. The sixteenth- and seventeenth-century pictures and texts suggest that the division between the past and the present were becoming more explicit at this time (Koselleck 1989). Koselleck's theory is usually assessed in relation to the ancient and medieval periods. The Mercator-Hondius Atlas makes it possible to study the sense of the difference within the modern period. The thirty to fifty years between Mercator's maps and Hondius' publication saw an increase in information about the world, provided by explorers and as a result of the Dutch revolt against the Habsburg Empire. How up to date was Hondius' atlas? Did it comment on the political and intellectual changes that had taken place after Mercator's maps had been engraved?

Exploration did not have a direct influence on sixteenth- and seventeenth-century maps. The explorers did not use maps and they did not contribute to the works of cartographers (Fernández-Armesto 2007: 738). The atlases reflected European expansion by adding maps of distant regions, showing European rule there. They did not, however, react to the new information afforded by measurements or studies of topography, botany or history. The flexibility of the atlases facilitated a reaction to or commentary on the latest knowledge disseminated by explorers. Hondius had added to the atlas a map of America meridionalis, which included a small picture of Cusco, where the Spanish and Incas were fighting continuously in the 1530s (MHA: 362v-363r). The Inca Empire is not, however, discussed properly even though the stories and studies on it were published widely in the late sixteenth century (Woolf 2011: 235-48). Arguably the cartographer did not need to respond to the increased knowledge.

There is nonetheless one historical turning point that Hondius emphasised: the finding of America by Christopher Columbus. Even the exact date of Columbus' arrival, 11 October 1492, is mentioned for example in Mercator's world map as well as in the map of America. In the latter, the text above South America reminiscences about the trip there of Vicente Yáñez Pinzón in 1499 (MHA: 39v–40v). Pinzón had been the captain of the *Ninã* in Columbus' first voyage. Mercator's emphasis on the time of Columbus and his contemporaries signalled



The Map of America celebrates Pinzón's Ninã.

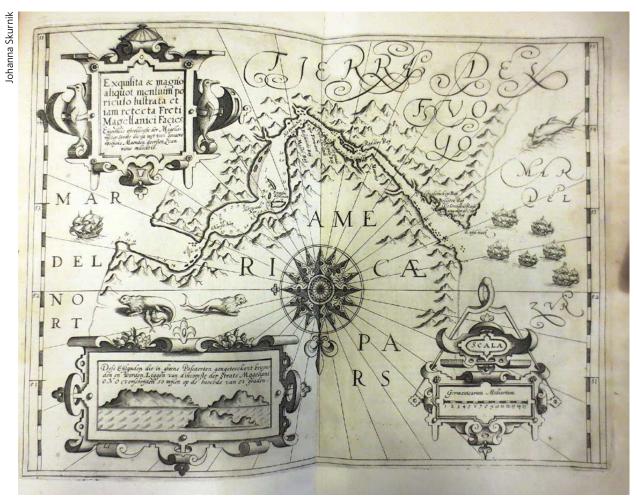
the beginning of a new age. In his maps, Columbus and his crew are the only explorers who are referred to constantly.

The stress on Columbus' voyages and the discovery of America is understandable as the encounter with the new continent radically changed the conception of the world. The atlas does not celebrate recent events but rather the historical voyage that had drawn the line between the past and the modern period. At the time when the separation between the Middle Ages and the modern age was not drawn comprehensively, the voyages of Columbus helped to define such a division. The discovery of the Americas concretised a decisive turn in world history. It signalled the modern age, whose symbol was the world map.

While the Mercator-Hondius Atlas pays tribute to Columbus, it is less vocal in describing the contemporary achievements and voyages that were uncovering new aspects of the world. There are rare exceptions, which comment on recent discoveries, such as the map of Novaya Zemlya, where the

route of Willem Barentsz's expedition in 1594 is included (MHA: 342v-343r). The slow adaptation of the explorers' knowledge to cartography is axiomatic in Hondius' edition. He could best modernise Mercator's maps by including maps of the areas that were missing from the previous edition. The content of maps could not be changed quickly, even if there was a wealth of new information.

As the studies of Richard Helgerson and others have shown, the views of nations, their borders and their characteristics and identities were defined spatially in cartography (Helgerson 1992: 105–48). The Mercator-Hondius Atlas discusses the change in the state system that took place in the sixteenth and seventeenth centuries remarkably little. This is perplexing, as Hondius took part in a project which concentrated on the medieval origins of the Great Britain, for Hondius engraved the maps to John Speed's *Theatre of the Empire of the Great Britaine* (1611/12). Even if in this case Hondius was only the hand which engraved the copper plates, he was able to realise Speed's views on the interaction of the



Fretum Magellanicum in the Mercator-Hondius Atlas.

British past and present. For Speed, Great Britain was a modern nation which had its roots in the medieval world. Both the Anglo-Saxons and the Normans had had a decisive role in the formation of the modern nation. While most of the maps described the current state of Great Britain, historical influences were constantly present (Speed 1611/12).

While Speed's work formulates the reason for British nationalism by stressing the common history, long-lived symbols and the distinct position of the British Isles, the Dutch political currents and history of the region do not have a similar role. This certainly indicates the contemporary upheavals in the Netherlands. Despite the economic and cultural prosperity of the period, political or national instability was a continuous factor in Dutch life during the Eighty Years' War (1568–1648), which led to independence. The little over thirty years between Mercator's maps and Hondius' publication witnessed the rule of William of Orange and

his revolutionary troops, the Union of Utrecht and the United Provinces (1579) and the Declaration of Independence of the northern Low Countries in the Act of Abjuration (1581).

Although he witnessed the attempts at independence from Habsburg governance, and felt the uncertainty that was constantly present in the Low Countries, Hondius did not show these in the atlas. The maps of the Low Countries were drawn by Mercator, mostly before the Eighty Years' War had begun. Hondius' decision not to change them was justified by his desire to republish Mercator's atlas with some additional maps. Still, the Low Countries that Mercator mapped in the 1560s and 1570s differed decisively from those where the atlas was printed in 1606. The cities and environment had not changed much, but political ideas and national borders were in flux.

Jodocus Hondius and Petrus Montanus were certainly aware of their role in the making of the

atlas. Intentionally or not, they avoided mapping or describing the changing features of the Low Countries or the world. They referred to objective observation of nature and occasionally to classical authors. Unchanging nature and the past that were gradually losing their importance were the main features of the Mercator-Hondius Atlas. Such an approach to temporality was not rare in the period, as the world that was uncovered step by step and Europe segmented by religious wars changed too rapidly for large-scale projects such as the production of atlases. The universal histories, which attempted to comprise the past of humankind as a whole, were similarly slow to adapt to the changes.

Despite the difficulties in commenting on recent change, the last pages of the atlas are dedicated to one symbol of change. The atlas ends at the end of the world, or at least at the region that was on the border of the known world. The last map in the atlas is *Fretum Magellanicum*, or the Strait of Magellan, which reflects the information a Dutch cartographer had on Ferdinand Magellan's circumnavigation. The atlas does not trace the trip as a whole but highlights how Magellan and his fleet had found the passage into the Pacific during their voyage in 1519–22. The map is different from the others as it presents information vital to navigation such as the depth of the strait. Such details remind readers of the achievements of the navigators (MHA: 364v–365r).

In the early seventeenth century, the Strait of Magellan was a standard subject in cartography. The existence of the strait was argued in cartography before Magellan's expedition, and the first map reflecting this was published already in 1520. The map in the Mercator-Hondius Atlas did not, however, adopt as much from its predecessors as from the recent observations made by mariners. Hondius' informant was Bernardus Joannis Monasteriensis, who had participated in the first Dutch expedition through the straits in 1599-1600. The copperplates were engraved by Lambert Cornelisz. following Monastersis' information. The map highlighted the beginning of Dutch colonialism, as it depicted the Dutch ships sailing towards the strait, flying the nation's flag. In the early seventeenth century, the Dutch controlled the strait and demanded high fees for throughfare. (Shauger 2007)

The belief in change and the expectations of new discoveries in the future were present in the last map: the southern shore of the strait was decorated with imaginary animals and mountains. The atmosphere of expectations is diminished in Petrus Montanus' description. He pays attention to species like cormorants and ends up by describing the Pacific and its people. There is hardly anything here that the ancient authors had not presumed, and Montanus refers to Ovid, Orosius and Aristotle in his description of the utmost barbarity at the end of the world. Even in the Strait of Magellan, the observations and ideas of the Greek and Roman writers still prevailed. Ovid and Aristotle had the last word in the discussion of circumnavigation.

Conclusion

The 1606 edition of the Mercator-Hondius Atlas seems confusingly diverse in its aims of mapping the world. It includes Mercator's maps, some thirty to forty years old, and maps that Hondius has drawn, engraved or acquired for the atlas. The maps attempted to describe the modern world but still included references to classical and biblical literature. Moreover, the maps include information that was outdated as a result of the changes in political systems or discoveries made during the explorations. Even though the atlas does not include historical maps, the past is present in the form of references to classical authors and to the Bible. The classical tradition contributes much, especially in the texts of the humanist Petrus Montanus, which fill the majority of the pages in the atlas.

I have analysed the Mercator-Hondius Atlas as an open system which had developed quite haphazardly as a result of Mercator's ideas and cartography, Hondius' own maps and acquisition of others and Petrus Montanus' antiquarian influences. The nature of the atlas as a collection of learned information made possible many references to the past, although the cartographer-publisher Hondius did not show much interest in it. Therefore it is plausible that the cooperation between cartographers and antiquarians may have increased the presence of the past in the atlases.

The textual references on the classical tradition are accompanied by another feature of historical culture, Hondius' need to acknowledge the change of the worldview that had taken place since the completion of Mercator's maps. The singular information on the changing borders of Europe or the new regions that the explorers discovered is not well pre-

sented. Hondius lacked time, information networks and decent maps to present the latest knowledge. Nonetheless, the atlas signals Hondius' passionate attempt to present the whole world in one book. He was determined to complete Mercator's project. The Mercator-Hondius Atlas is a *theatrum mundi*, which presents the entire world-theatre, even if its attention to detail is at best tolerable.

The Mercator-Hondius Atlas refers to the current political or social situation only rarely, but it does not neglect the signs of archaism or change. In some instances Hondius seems to emphasise modern achievements. From this viewpoint the last map of the Magellan Strait is of special interest. The celebration of Dutch sea power in the colonial world shows that Hondius wanted to repeat the present national triumphs as swiftly as possible. The atlas, an archetypical assemblage, made possible a reaction to current events even if cartographers did not always show interest in it.

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MHA = Gerardi Mercatoris Atlas sive Cosmographicae Meditationes de Fabrica Mundi et fabricati figura, editio quarta (folio) (Amsterdam, Hondius, 1613). Copies consulted: Turku, Donner Institute for Research in Religious and Cultural History [consulted in situ]; Darmstadt, Universitäts- und Landesbibliothek Darmstadt, Gue-10213, [consulted online] Digitale Sammlungen Darmstadt, http://tudigit.ulb.tu-darmstadt.de/show/Gue-10213> (accessed 6.3.2016)

MHAFr = L'Atlas de Gerard Mercator et d'Hondius augmenté d'un appendix [Atlas ou Representation du monde universel, et des parties d'icelui, faicte en tables et descriptions tres-amples, et exactes: divisé en deux tomes. Edition nouvelle. Augmenté d'un appendice de plusieurs nouvelles tables et descriptions de diverses regions d'Allemaigne, France, Pays Bas, Italie et de l'une et l'autre Inde, le tout mis en son ordre]

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