## LUIS VICENTE – PRECISION AND PRINT CONCLUSION

This dissertation focused on the analysis of the hydrographic and cartographic production in the Philippines associated with the Malaspina Expedition, both during its actual presence in the archipelago and during the commission of Juan Diaz y Maqueda, considered to be attached to the work of the larger expedition. The main aim was to understand how precision and intentions of publishing affected the information produced by surveying, how the "universalizing" concept of precision translated into actual work and map production, how the Spanish were interacting with this concept, and how precision and print interact with each other. To do so, and after an extensive look into secondary literature concerning European and Spanish Enlightenment and Explorations of the Pacific, two specific case studies were chosen and looked at in great detail, finding traces of the map-making process that could shed light on the choices taken by the map designers in the move towards final, published products.

Through the Literature Review, it was found that, during the Enlightenment, European intellectuals, as well institutional and colonial agents, were proceeding with a progressive categorization and recording of the world along terms defined in European circles of thought. Precision and Publishing – defined as the use of technically-advanced and adequate instruments in the creation of "accurate" information, and the divulging of this information for all to see, fact-check, and criticize, respectively – were tools in that categorization and its divulging. This continuously greater acknowledgement and study of the global context led to a "Planetary Consciousness", where Europeans began to recognize themselves within a wider reality, which they were to identify, categorize, organize, and control. In this process, mapping was of extreme importance, as it allowed for a tangible version of that wider globe – the map – to be made and defined in European "centres of calculation".

The Pacific world, the latest "world" to be added to the growing European "planetary consciousness", became a battleground for European colonial powers, a place where they could put the new "precise" methods to the test and stake a claim to through the increasing access to and movement of published information – description, accounts, illustrations, and, most importantly, maps. Here, Great Britain and France made great inroads, particularly in the second half of the eighteenth century with expeditions like those of James Cook and La Perouse. However, as was seen, the Spanish had been present in the Pacific for centuries before and did not take kindly to the intrusion by their other European competitors in what they considered their colonial domain. Nevertheless, by not being as active with their publication of information on that Ocean, and continued reliance on archival knowledge from previous centuries, Spain progressively lost their claims to the Pacific in the eyes of the rest of Europe, not being able to stop the incursions of British and French pretensions into their "Spanish Sea". The Malaspina Expedition is argued by some as a final attempt by the Spanish to recreate British and French expeditions, and by others as part of a process towards the use of precision in the renewed control of their Atlantic-Pacific empire. Regardless, the fact that Malaspina's arrest led to the failure of the expedition in producing its intended published content meant that Spain had lost the battle for the Pacific and that its efforts have been generally overlooked.

Still, these efforts were representative of that turn from the Spanish towards precision and publication as methods of colonial control, as was seen in the two analysis chapters. In the first, we saw how Malaspina, through the use of the latest instruments being produced in Europe, a committed staff, and taking advantage of local help, managed to produce the first precise hydrographic survey of the Philippines, which seems to have produced information that lasted well into the nineteenth century. Still, it raises questions on the "universality" of precision and points to a rather subjective approach to it. Malaspina's mentions of the "beautiful surroundings" and descriptions of the places he was going through do not translate into the hydrographic and cartographic production, which gives its main priority to producing information valuable for the navigation of Spanish ships. The main places being surveyed are ports and coastlines which were considered important to the Acapulco-Manila Galleon Trade, and this is translated into the information present in the charts analysed in this dissertation, as the natural and human occupation of the sites represented is given little attention.

When it comes to printed versions, the tension between a comprehensive inclusion of the precise information collected and a clear, readable, and tasteful representation becomes more and more visible, as the translation from manuscript to print leads to a simplification of information. Previously seen indications of different designers in the map production of Sorsogon Bay – spellings and visual representations, for example – disappear when the production of several sheets comes from a single copper plate. To create a recognizable representation, local realities become standardized, and the Philippines appear to the European viewer in the same way as other areas of the world, regardless of its "beauty". This process of simplification and standardisation becomes even more visible in the map production specifically connected to the Maqueda Commission. Here, individual intent is more visible in the earlier, work-in-process production, and attention to natural features is clear. Mentions of plains, islands and bights all show that Maqueda, having been tasked with a focus on navigational information, decided to further inform the Spanish metropole in natural features that he thought were relevant. In the institutional published version of the Archipelago chart, however, Maqueda's intent gets almost completely erased, reducing his and Inciarte's work to the navigational information desired by the Spanish Navy.

This erasure is part of a wider consideration that the precise acquirement of information is selective, focusing on the information desired by the entity responsible for said acquirement. This entity was often associated with imperial interests, as is the case with the Malaspina Expedition and its association with the Spanish Navy and Crown. The cartographic and hydrographic production associated with the works done aboard the *Descubierta*, *Atrevida*, and *Santa Ana* between 1792 and 1793 had an explicit goal – creating knowledge for Spanish navigation in, to and from the islands – and other collected information is rarely given the same importance, being mostly erased in the versions of the maps to be published. This also reveals that precision, although intending to create a universalizing narrative, is simplified for map production, not only to accommodate printing mediums and the requirements of readability but also to maintain the desired information over that which is considered irrelevant – in the Malaspina case, it is information on the specificities of the Filipino landscape.

This information selection and standardization of representation is an integral part of map production, being a result of the choices taken by the different participants in the making of hydrographic and cartographic objects. These choices should be thought of as design choices since they impact the final characteristics of the map as an object, both in the way they are made and the way they are to be seen. The importance given to the detailed look at the process of making the final printed maps of Sorsogon and the Filipino Archipelago was because it is through said process that the design choices taken by the map makers become clear, seeing what disappears and what is added. The question of who designs these objects is more difficult, however: is it the officers surveying depths and coastlines in the Philippines? Is it those drawing the maps back in Spain, looking at the data collected two oceans and almost two decades away? Is it those involved in the printing of the finalized charts, be they the writer, the drawer or the engraver? In a way, all of these people are the map designers, as are the sailors responsible for maintaining the surveying vessels in the route that is then translated into the charts, and the locals involved in the works beyond the Spanish "mobile laboratories".

As designed objects, made by identifiable figures – even if not exclusively and/or extensively – maps represent an important object to study through Design History. One of the earliest calls for this study was by David Woodward in 1985, in his work 'Cartography and Design History: A Commentary'. Here, Woodward, one of the initial editors of the *History of Cartography* volumes, states that 'it could be argued that maps are among the most intensely designed graphic products of man's material culture [...] designed for often very specific functions of visual representation and communication'.<sup>1</sup> According to him, Design History. The first issue being 'since by mythologizing these maps we tend "to lose the memory that they were once made" - the maps-grow-on-trees syndrome - the apparent necessity of understanding how the artifact was made is

<sup>&</sup>lt;sup>1</sup> David Woodward, 'Cartography and Design History: A Commentary', *Design Issues*, 2.2 (1985), pp. 69–71 (p. 69).

removed'.<sup>2</sup> The second being that 'by mythologizing maps and mapmakers, by encouraging the idea that these objects and people appear to be something important by themselves, we conveniently abolish complexity and contradictions and encourage the removal from their political and social contexts'.<sup>3</sup> However, it seems as if the connection between Cartography and Design History never materialised to the level that Woodward considered it should have, with the secondary literature containing few entries which could be classified as such. The focus on the process of map-making and the people behind it in this dissertation is an important step in the direction of a wider Design History of maps, but it is important to recognize that there are these gaps in current research.

Another aspect that this work attempts to rectify is a certain scarcity of Design Histories of the Spanish Philippines, with an active call being made here for greater focus on the study of this and other colonial contact zones in the early modern period. Again, these are relatively under-researched, but it feels like Design History could provide greater insight into how Design was used as a colonial tool at this time. In the case of this dissertation, it is clear that the studied maps were designed not towards a greater knowledge of the Philippines per se but rather on a greater knowledge of how the Spanish metropole could better control these islands through navigational and anchoring information. Malaspina's description of the Bay of Sorsogon as being able to hold in it a large number of ships indicates exactly which intentions were behind his and his expedition's design choices – the continued occupation of the Filipino space by the Spanish. This dissertation creates work that focuses on how map design was used in this occupation, but it is by no means a complete study on the Design Histories of Spanish

<sup>&</sup>lt;sup>2</sup> Woodward, 'Cartography and Design History', p. 70.

<sup>&</sup>lt;sup>3</sup> Woodward, 'Cartography and Design History', p. 70.

colonialism in the Archipelago and beyond, studies that would provide interesting contributions to the field.

This dissertation opens up further questions for possible future studies on the material representation and comprehension of space in the Philippines. Due to the selective nature of the source material, local geographic conceptions are muted, with Filipinos only being present in the design of the maps as aids to Spanish officers and sailors. A look at said conceptions of space, as well as their material presences and remains, would provide an interesting counterpoint to the colonial map production, and a deeper look into how European concepts of precise geographic representation at this time differed from and disrupted the local reality. Still, this dissertation does intend to be a starting point for a wider study of spatial objects in Design History, of which cartography is but one example. To overlook them would be to contribute to the "maps-grows-on-trees syndrome" and to ignore maps as the designed, intentional objects that they are, as this dissertation has worked to show.