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Boatbuilding and urban genesis

Knowledge creation and transfer in traditional boatbuilding craft

ABSTRACT

Traditional boatbuilding today is a fading craft, raising questions of not only how to preserve this craft and reconstruct and transmit the knowledge and skills related to it to future generations but also, considering new technologies and available materials, why its preservation and perpetuation are important. Answering these questions requires a valorisation framework for the traditional boatbuilding craft and its methods of construction, considering the fact that traditional boatbuilding is the essence of modern shipbuilding and inextricably linked to the development and transmission of knowledge in city making too. To help create this framework, this paper addresses two distinct ways of thinking involved in making boats: one tied to boats made from already existing models or designs and the other to boats created ex nihilo with the help of sesto and garbo tools. Through a historical and theoretical examination and by building on the empirical case study of traditional boatbuilding in wood in the Mediterranean, this paper explores the concept of constructing boats ex nihilo in the technical, socio-economic, and spatial sense, shedding the light on the creativity inherent in shipbuilding and its implications. This paper will contribute to understanding how knowledge transmission in traditional boatbuilding has progressed and the role this knowledge model can play in shipbuilding development, offering a valuable resource also for those interested in development and transmission of alternative models of knowledge production.

Keywords:
Boatbuilding, knowledge production, creativity, tradition, intangible heritage

INTRODUCTION

The sustainability of traditional boatbuilding in Europe has come under scrutiny in recent times due to the significant changes the industry has undergone over the last two centuries. New materials, advancements in science and technology, and evolving socio-economic contexts have all enabled ships to be

constructed differently – using mathematical and scientific methods. This approach has contributed to a significant acceleration in the development of shipbuilding and navigation, resulting in the contemporary form of naval architecture and marine engineering that we know today. These changes also opened new possibilities for developments in shipbuilding and altered the uses and purposes for which boats were built, especially in the 20th century. The introduction of science and technology in shipbuilding has likewise provided new models for learning, production, and transmission of knowledge, which differ from the traditional boatbuilding model of knowledge that relies on the uses of traditional tools, apprenticeship, tacit knowledge (Polanyi & Sen, 2009), situated learning (Lave & Wenger, 1991), and communities of practice (Amin & Roberts, 2008). This is a model of knowledge transmission and building methods that have remained relatively unchanged over time. In these new circumstances, sustaining traditional boatbuilding has become more complex, and today, traditional boatbuilding is seen as a dying craft. In addition, fewer people continue to pursue this profession, and a few of the central challenges facing traditional boatbuilding today are understanding how to preserve the craft and transmit its knowledge and skills to future generations; more importantly, considering new materials and available technology, what we are seeking to preserve; and why this knowledge and its perpetuation are important.

It goes without saying that the promise offered by technology and science casts doubt on the prospect of sustaining traditional boatbuilding. However, even though contemporary construction methods of boats and ships offer greater possibilities than ever, this notion has also highlighted another aspect: How different is the vision offered by this model of knowledge, and what can it offer for future development in comparison to traditional boatbuilding? In other words, the question of how the future development of boatbuilding and the transmission of knowledge will look will also rely on this modern model of knowledge.

This paper addresses key questions arising from these challenges, such as why knowledge and ways of thinking inherent to traditional boatbuilding are important and what problems may exist in pursuing its preservation. Exploring these questions will contribute to the understanding of how knowledge transmission and boatbuilding development have progressed and may still progress, as well as what role traditional boatbuilding and its model of knowledge can play in that development. Methodologically, the paper is based on a case study of traditional boatbuilding in the Mediterranean, utilising data gathered from nine in-depth interviews with traditional boatbuilders and individuals from Venice and the Eastern Adriatic. Secondary literature was also used from a variety of remote disciplines, including human geography, socio-economic history, architecture, naval architecture, archaeology, urban planning, history of ideas, and philosophy. The goal of this approach is to contribute to forming a comprehensive framework for understanding thoughts about the development of shipbuilding and how its knowledge is evaluated. To elaborate, the paper goes beyond the distinction between conceptual and chronological descriptions and instead places its emphasis on the question of creation and the underlying ways of thinking in boat construction. Therefore, the paper focuses on the evolution of thought and ways of thinking through historical, philosophical, and real-life examples, primarily examining the distinctive knowledge perspectives associated with traditional and modern boatbuilding and shedding light on creation within these contexts.

TRADITIONAL BOATBUILDING AND CITIES – INTRODUCING A CONNECTION

The term 'traditional boatbuilding' in this paper refers to a particular type of boat made from wood using the carvel planked construction or frame-first method, and traditional finishes. The characteristics of these boats are that they are hand built; they are made of wood, including keel, ribs, and planking; they are built from inside out; and constructed as working boats. The method of carvel construction can be used to make different types of boats, making it a remarkably versatile approach applicable across various ship types characterised by differences in size, purpose, and other distinct traits. It involves placing planks edge-to-edge, parallel to the keel, the vessel's structural backbone. Notably, clinker construction or a shell-first method – a traditional wooden boat construction method involving over-lapping planks joined with fasteners, creating the boat's distinctive ribbed appearance – is a separate

method rooted in distinct knowledge and experiences, with its own unique attributes and different characteristics. The discourse in this paper intentionally narrows its scope to carvel construction, as this method enables the creation of new models, which is different in the clinker method. It is worth noting that this study does not put forth a preference for one construction method over the other. The matter of construction methods is inherently expansive and encompasses a wide range of considerations; however, the constraints of space preclude an exhaustive exploration of this subject in this article.

The origins of traditional boatbuilding and seafaring (Anderson, 2010) extend far back into prehistory, with no clear indication of when the first such boat was constructed. Among many boatbuilders and boats, it would undoubtedly be challenging to pinpoint one that humanity is the most indebted to, since boats were built around the world, and each was the answer to the needs of its environment and society. In fact, they are the result of a web of relations, producing a boat as an object that is dynamic and has energy. Although it is unclear where, when, or how this type of traditional boatbuilding first originated, apart from what is indicated by available archaeological findings (Knapp, 2018) and written evidence – for instance, Babylonian Talmud identifies several types of ships known at the time, such as canoes, liburnas, and ships on the Nile (Patai, 1998, p.42) – the advent of the ancient Greek city-states makes it possible to reconstruct and follow in greater detail the development of this type of boatbuilding and navigation (Nowacki & Lefèvre, 2009). This is because it was from that moment that the boat was no longer seen as just a container or shell that floated and that humans had created something that would be as complex as this type of boat.

The ancient Greeks in fact held boatbuilding in high regard, to a point where it became an epilogue of Homer's Odyssey and a symbol of Odysseus's redemption for his destruction of Troy. This is a pivotal moment of the epic, which is announced to Odysseus at the beginning of his journey home by the blind prophet Tiresias in the depths of Hades. In the prophecy, Tiresias predicts Odysseus's future and reveals details of the journey that will await him on his way back to Ithaca. Likewise, Tiresias instructs Odysseus that his journey will only be complete when, once at home, he embarks on another journey when he is to take an oar from his ship and travel until he reaches lands inhabited by people who know nothing of the sea or ships. Once he has found such a place, he is to fix the oar on the ground and make offerings to Poseidon. In other words, Odysseus must share his boatbuilding knowledge further. Why Poseidon? Because he is the founder of Troy, and Odysseus, the destroyer of cities, used Poseidon's ancient symbol, the horse, to damage the walls of Troy by making it slightly bigger than its entry gates, for cities could only be destroyed by their founder or their symbolic figure. Even though the Odyssey epic does not focus directly on boatbuilding, it highlights the connection between boatbuilding knowledge and city creation. Such a connection is not inconsequential.

In Homer's time, the knowledge of boatbuilding and navigation played a crucial role in society and the foundation of new city-states. The fact that Greek colonists were all first boatbuilders and sailors before they created new cities is paramount for understanding the former craftsmen's intentions and interpreting the traditions from the past (McEwen, 1993). The Odyssey references this point through Odysseus' encounter with Polyphemus, highlighting the lack of shipbuilding skills on Cyclopes' island. The epic portrays the Cyclopes as uncivilised not only because they have no assemblies, laws, and agriculture but also (and mainly) due to their lack of boats, shipwrights, and craftsmen on their lands to build them and create of their island a fair settlement (McEwen, 1993). It is apparent that this way of thinking had a significant influence on the city's development as well as creation of knowledge.

The importance of boatbuilding for the ancient Greeks cannot be overstated. The association between boatbuilding, navigation, and cities is evident, as some cities began to develop by following the knowledge model of ships and navigation. In fact, some of the first thriving cities known to history were maritime cities. Apart from the Greek city-states, other examples can be found, such as Alexandria; Italian maritime republics, such as Venice, Genoa, Pisa, and Amalfi; Dubrovnik; the Hansa cities in the North and Baltic Seas; Antwerp; and Amsterdam. Furthermore, through the creation of ships, people demonstrated their understanding of not only their immediate surroundings but also broader geography, astronomy, navigation, and the possibilities for interactions between societies. They also transported new knowledge from different areas of human activity. For instance, boatbuilding, boats, and navigation have played a significant role in developing and advancing various fields, including trade,

economy, law, and insurance. Additionally, the knowledge gained from boatbuilding has significantly contributed to the development of architecture. Evans (2000), for instance, mentions the use of arches and squinches, whose use in urban architecture shipbuilders influenced; Nowacki and Lefèvre (2009) detail the connection between the origins of civil architecture and naval architecture; sacral architecture and boatbuilding; politics and state organisation (Plato, in Book VI of The Republic, with a metaphor of a ship, already likens the governance of a city-state to the command of a ship), as well as city building (McEwen, 1993) and democracy (Cantarella, 2010), demonstrating that boats and shipbuilding not only have been essential at the local level but have also become a critical aspect for the creation and transfer of knowledge to other areas of human activity. For this reason, boats and ships are seen as some of the most complex objects created by society (Adams, 2001, p. 300, 2013). In fact, ships were the largest and most complex 'machine' of antiquity (Knapp, 2018, p. 50; Oleson, 2014, p. 510; Pomey, 2011; Steffy, 1994, p. 34). Therefore, it is not surprising that, in ancient Greece, the boat became a model for the development of social relations and that the knowledge surrounding boatbuilding encompassed a broader vision than just skills and technical expertise.

What was the significance of boatbuilding in the creation of cities, and why was boatbuilding knowledge important? To fully explore this topic, it is first necessary to understand what boatbuilding entails and its meaning for the process of making boats. This paper considers two distinct ways of making boats: (1) boats made based on pre-existing models and (2) boats crafted ex nihilo, using sesto or garbo, traditional boatbuilder's tools for making boats, resulting in an original – i.e., a new model as the foundation for future construction. By analysing these methods, we can better understand the role of boatbuilding in the making of cities and recognize the value of boatbuilding knowledge.

Building a boat from a model

In modern shipbuilding, when a contemporary builder begins to build a new ship, the process of construction, which is based on mathematical and scientific methods, at one stage includes referring to a model or prototype of an already existing ship (or a combination of data from several models of ships). This stage is crucial in the shipbuilding process, and failure to undertake it would make it impossible for the builder to proceed with the construction. The model provides them with the necessary guidelines for the final construction process and serves as the foundation upon which the builder can create the final product. This construction method is prevalent in modern shipbuilding and consists of several distinct stages, each of which is contingent upon the completion of the previous stage. By using the lines of the existing ships and the constructor's expertise, they can further build the ship and ultimately achieve the final design. Every ship constructed from a model has the 'genetic material' of an already existing ship, and this inheritance is a vital component of the shipbuilding process. The question then arises of how the model is created or, in other words, how one creates a vessel ex nihilo without preparatory mathematical calculations or design.

Building a boat ex nihilo

When examining different types of ships throughout history and how they were built, it is worth noting that each has specific features that suit its intended purpose and navigation area. All around the globe, shipbuilders had to develop boats and ships suited for their regions and people started building ships by discovering the ideal lines of boats for their environments and their intended uses. This process began long before the emergence of mathematics and geometry as a science, as well as naval architecture, which raises the question of how this was done – and how to make a model, i.e., of boat ex nihilo. The Mediterranean, as a pivotal crossroad where diverse cultures and knowledge intersect, initiating a transformative shift in perspective and giving rise to a new way of thinking and approaches to making, is an area where a great number of different types of boats and ships have emerged throughout history (e.g., kaikia, gozzo, and trabàccolo, among others), making it an ideal place to look for answers. Moreover, today, there are still boatbuilders in the Mediterranean who can build boats ex nihilo and only from their own minds.

The word that is most often encountered in the Mediterranean when talking about building a boat ex nihilo is *sesto* (see Figure 1 below). Sesto is an ancient name for compass and the word refers

to a notion of geometry, in fact for the curve of an arch (Rieth, 2009: 126). This word is used in Mediterranean slang, especially in northern Italy and the Adriatic, while the word *garbo,* translating as kindness, grace in speaking and dealing with others and a proper form in doing things, but also denoting a graceful shape, is encountered more frequently in the south of the Apennine Peninsula. Both words indicate that something (i.e., an object) is made in harmony with the essence of that object and that something has a good position – be it physical, moral or economic position – and is rightly systematised. The French, for instance, use the word *maître gabarit* or *trébuchet*; however, this word does not have the same meaning. Sesto is, in fact, a shape or a template, and this word is also used in other crafts (e.g., stonemasonry), as for instance sesto in architecture denotes a curved line of the arch's intrados, which can take on various shapes (circular, elliptical, polycentric, etc.). Even though, oftentimes, sesto is referred to as a shape, template or an outline, when talking about boatbuilding, it represents a much greater degree of abstraction, and depending on the location and dialect, it is used to denote a method of construction, the measuring and tracing mechanism, a tool of thought for examining the ideal lines of the boat, and the actual first rib of the boat. It serves the expert craftsmen as an instrument that can help them examine their idea, creating the first rib of the boat directly on the material that will consequently be used to develop other relationships, parameters, and shapes of the boat ribs (frames) until the completion of the boat's construction. This means that no measurement or relationship of the boat is defined until the very end of its construction, and the limit of the expert's work is in the material, the desire, and the need of the buyer and the expert's knowledge and experience. Therefore, with the use of sesto, a boatbuilder can start creating a boat without mathematical calculations and a design due to the simple reason that to obtain a desired product – a boat – a boatbuilder must consider all the parameters that the boat needs to meet at the same time, such as transverse and longitudinal stability, hydrodynamics, manoeuvrability, and economy in construction and exploitation. Calculating these parameters one by one in a sequence of consecutive stages through this process would disrupt the next one, and so, all these parameters must originate simultaneously.

The creation of a boat with sesto, thus, involves various factors that must be considered simultaneously to obtain the desired product, resulting in a boat that is in harmony with its purpose and space. This means that the boat must be seen both from the inside and outside, in perspective and in time, and that the boatbuilder must also see how that boat will sail years in the future. Therefore, in the moment a boatbuilder use sesto to build the initial rib from which the whole boat will be created, the idea, appearance and characteristics of the entire boat and the final product is already formed in his mind before construction even begins. With the initial rib, the boatbuilder, following his idea for a boat, outlines all the other ribs and the hull, and this construction process continues until the boat is launched. Boatbuilding is, thus, a mental exercise, but it also requires engaging the builder's entire body and all their senses as they build a boat. When the boat is finally launched, the final evaluation determines whether it is good and in harmony with its intended use. If it is good, it is the pride of the boatbuilder, and it is said to be in sesto – in harmony – with the space and the reason for which it was made. In addition to skill and freedom of creation, this method has another characteristic, which is unpredictability (see Figure 2 below), giving a boatbuilder numerous possibilities for creation, shapes, and lines. The Venetian gondola is a fantastic example of this process in practice.

FIGURE 1. Two sesti for making Venetian gondolas. Using sesto, and without using a prior model or design, the idea of the entire boat's shape is first abstracted to the level of a virtual rib in the boatbuilder's mind. Then, it is examined and tested for whether it could work with a virtual rib and a method and consequently translated and drawn directly on the wood that will become the first-main rib of the boat. Since all construction information is directly measured and translated onto the wood, the use of the material is maximal, and there is no trace of construction, except for the boat itself.

FIGURE 2. Two boats made from the same design by using sesto do not produce two boats that are the same. By using sesto, it is not possible to construct two boats that are alike, similar to how there are no two experts who can build the same ship.

Venetian gondola

The gondola is a fascinating type of boat, known for its asymmetrical shape that is longer on one side and shorter on the other. This peculiar shape did not emerge just for aesthetic purposes but serves a functional role in the way the boat is manoeuvred. The gondolier, with the aid of an oar and a skimmer called 'forcola', changing the position of the oar and their own position by moving forward or backwards on the gondola, can shift the bisector of the boat – the point around which the boat turns. Essentially, the gondolier becomes the real bisector of the boat, allowing them to control the boat's turning direction. Interestingly, the evolution process of the gondola was not the result of a computer-generated blueprint or a team of engineers in a construction office. Instead, it was the result of a collaborative effort between boatbuilders and gondoliers who are experts in navigating the Venetian lagoon. The gondola's current form is thus the result of its society's collective knowledge and experience, and the Venetians themselves believe that the process of its evolution is still ongoing. Consequently, the possibilities for improving the gondola's design are limitless, with only the material used for construction serving as a limiting factor. This process of boatbuilding requires human ingenuity, experience, and knowledge, as well as the cooperation of those involved in both the construction and utilisation of ships. Creating a boat is, therefore, a collaborative effort that relies not solely on the ingenuity of an individual but also on the collective efforts of society.

In comparison: building a boat from a model and ex nihilo

Through the course of this discussion, one unique insight can be gleaned regarding the boatbuilding process and the distinction between building from existing models and creating entirely original boats ex nihilo. This paper highlights the concept of creation ex nihilo, which involves crafting entirely new and original vessels based on the knowledge and vision of an expert craftsman. In this approach, perspective in making and practical geometry serve as a tool of thought (Sersic, 2015; Sersic & De Munck, 2023), enabling the creation of one-of-a-kind, unique boats that can, in turn, serve as models for future ships. This insight underscores the contrast between modern boat construction, where perspective acts as a rule of thought (ibid.), and which relies on reference models and existing designs. Specifically, while building from a model is practical for production in series, ex nihilo construction results in an original, unrepeatable, and irreplaceable vessel. Furthermore, a significant difference between these two approaches is that the boatbuilder in traditional boatbuilding has the boat 'in their head' and is hands-on in the entire creation process from laying the keel to finishing the boat, while the builder in modern industrial boatbuilding performs their work completely separated from the building process itself and often not at the site of construction. However, the differences between these methods extend beyond the construction process itself. The method of building a ship reflects a broader way of thinking, distinct thought processes, and creative practices. The modern construction approach is grounded in science and technology, while creating ex nihilo is characterised by the bodily work of the craftsmen and grounded in their unique vision. The latter is born out of a desire for knowledge and the goal of achieving a singular result; it is also a result of mutual interaction between the environment and society.

Additionally, for a boatbuilder who creates ex nihilo, a fundamental prerequisite is space – a boatbuilder must be immersed in the space and environment where the ship is made. These differences also have implications for society and their perspective on the world. Creating a boat ex nihilo allows for individual authorship, as the craftsmen who create in this way are the authors of their work, as Odysseus's myth informs us. In contrast, building from or in relation to a model results in a product that can be replicated according to a specific method, which means that, in essence, anyone can become a builder once educated. The resulting products in modern boat construction are identical, with main differences resting primarily in aesthetics and design rather than in their essence and ontological value. Ultimately, the choice between these two shipbuilding methods is about not only building boats but also the ways of thinking and the method underpinning the process. This understanding has implications for not only what creativity in shipbuilding entails and what it means to be an author but also what visions of development these perspectives may conjure (Sersic, 2015).

Therefore, understanding the difference between creating and constructing a boat is a fundamental aspect of boatbuilding, and it is crucial to distinguish constructing a boat from a model from creating one ex nihilo. Although modern shipbuilders design and construct boats, they are, according to this distinction, not necessarily creators. In contemporary speech, however, the line between a creator and a builder, a creative person and an innovator, or a designer and an artist is often indistinct. The nuanced differences in terminology have significant implications.

The knowledge model perpetuated through boatbuilding, specifically through creation ex nihilo, holds significance in understanding the city. One of the critical aspects of Greek city making was ensuring its longevity, making it socially and spatially sustainable, and perpetuating the idea that its inhabitants must find their place in it over time (Cantarella, 2010). Similar to crafting a ship, city making consequently necessitated sustainability and readiness to confront forthcoming challenges. In this context, it was approached with foresight that parallels the kind seen in shipbuilders. Boatbuilding, thus, played a vital role in shaping this society. The boatbuilder's approach to creating a boat is not only a means of constructing a vessel in the technical sense but it is also a model of thinking that can be applied in various contexts. The act of creating an original boat without any prior blueprint is a process that creates a unique and innovative product. This product, in turn, serves as a prototype for future vessels, setting the standard for what is possible. For the builders of that era, constructing a city, thus, transcended technicalities, but it delved into the character of its creators, the nature of society and their vision for development. It is worth exploring what kind of people created it, what kind of society it was, and finally, what their vision for development was.

BOATBUILDER – THE CRAFTSMAN AND CITIZEN

A new vision of reality emerged between the eight and sixth centuries BC, where humans were placed at the centre as the authors of their works, precisely during Greek colonisation. The fact that the Greek colonists of the fifth century B.C. were all first craftsmen shipbuilders before they were city makers is relevant in this respect because it informs us about their way of thinking as well as their perspectives on building a society. The world of the ancient Greeks was, in fact, said to be the world of craftsmen (McEwen, 1993). A craftsman or *dēmiurgós*, as the ancient Greek word suggests, were understood as the 'workers for the people', and they consisted of an entire class of public workers such as boatbuilders, carpenters, and bakers as well as doctors, lawmakers, and poets, as McEwen (1993) suggests. They not only were the creators of cities in the physical sense but also constituted them socially and politically (ibid.). It was only later that Plato transformed dēmiurgós into a divine craftsman or artificer of the cosmos. Craftsmen were likewise instrumental in upholding the new socio-spatial order emergent in these cities. From this perspective, craftsmen were understood as creators and the authors of their works, not just the executors of work or design (Sersic, 2015). It is worth noting that the concept of an author is not fixed (Cantarella, 2011); it is rather a result of a long discovery and creation of a subject. According to Bogdanović (1966, p. 27), to be a creator is not something instinctive to humans; instead, humans become creators only when they cross their act of building or physical creation with their thinking paths. Odysseus, the Homeric figure, epitomised this way of thinking, as foretold in the Tiresias prophecy.

Odysseus, as is known, was different from other ancient heroes (Bonazzi, 2003; Cantarella, 2004). Even though he has characteristics of every other hero, he also has several more unusual virtues: he has *metis* (wisdom, skill, or craft) and he has the capacity of self-control, which, as Cantarella (2004) explains, is the most fundamental feature of the civilised society and a condition for the foundation of the civil. This capacity of self-control is a precondition for the foundation of cities and society outside patrimonial communities and clans, a society of equals (Cantarella, 2004), and a society of fellow craftsmen. Consequently, the social structures within these cities become a captivating blend of social and architectural experimentation, resulting in something hitherto unprecedented: democracy. Much like a boat's model taking form ex nihilo, democracy can be said to emerge ex nihilo in some places. Originally, democracy does not emerge from a clan-based society but embodies the concept of equitability among diverse individuals, a society of non-equals with equal rights regulated by the

framework of labour relations. Even though democracy is sometimes suggested to have its roots in intellectual or philosophical contemplation, however, when viewed from this perspective, it becomes clear that it emerged as a consequence of real-life human interactions and practical approaches to making. Therefore, the journey of Odysseus announced a new human who is the author of proper destiny, thus putting in motion a new way of thinking and creating society. Another distinctive feature of Odysseus is that he understands what the city is (Sersic, 2015). Here, the meaning of Tiresias's prophecy comes to light once again as he declares Odysseus's journey as one that he must undertake to learn how to create and become a creator.

This is because Tiresias possesses the unique ability to see beyond physical sight, enabling him to predict events that have yet to unfold (Camilleri, 2019). His all-encompassing vision is in his idea, and as such, it is similar to that of an expert builder who can visualise the finished ship before its construction even begins. By seeing the whole picture as a process, Tiresias, thus, anticipates events that are not visible to the ordinary eye. This is how he is able to foretell Odysseus's journey. Further, seeing Odysseus's final act of planting the oar of his ship in the ground, Tiresias harbours the ultimate idea to spread a new urban model. For this to happen, Odysseus must pass on his knowledge.

SUMMARY

The role of a traditional boatbuilder requires the capacity to manage numerous tasks at once, and a boatbuilder who creates a vessel ex nihilo must possess this fundamental characteristic. When boat-builders take sesto into their hands and fashions the first rib of the boat, they have already mentally envisioned the complete boat with all the parameters set. Essentially, the boatbuilder, guided by a vision, tackles multiple issues simultaneously.

Given this, it is also worth asking why this knowledge apparently destined to disappear should be preserved. The answer is that this knowledge teaches us how to create an original, resulting in making a model that has never been seen before and that requires a complex, comprehensive, and simultaneous approach. Understanding the perspective of boatbuilders, as well as the way of thinking and making it, has its roots far into antiquity, allowing us to consider how something different can be made because their creation process and the perspective they conjure differ from ours.

Furthermore, this understanding allows us to broaden our contemporary vision of the world, leading to acknowledge that our way of thinking is not the only correct one. In the present era characterised by rapid technological advancements, the direction of which remains uncertain, it is essential to safeguard classical and traditional knowledge, including the knowledge of creating boats ex nihilo. This ensures that we can return to our roots, as the loss of this knowledge would mean the loss of the development model that underpins our society and its fundamental ideals.

Because of this, the importance of preserving knowledge regarding the creation of artifacts and the potential for their future use cannot be overstated. Instead of focusing solely on the physical item itself, it is essential to understand the process by which it was created and the reasons behind its creation. This understanding must be accompanied by a reconstruction of the temporal and spatial contexts in which the artifact was produced, as these factors are integral to its meaning. Expert craftsmen and professionals in fields such as traditional boatbuilding or navigation can glean valuable insights into the people and cultures associated with traditional ships. Without a deep understanding of these traditional practices, our ability to reconstruct and comprehend historical eras would be limited.

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