

'British Small Craft': the cultural geographies of  
mid-twentieth century technology and display

James Lyon Fenner BA MA

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## Abstract



The British Small Craft display, installed in 1963 as part of the Science Museum's new Sailing Ships Gallery, comprised of a sequence of twenty showcases containing models of British boats—including fishing boats such as luggers, coracles, and cobs—arranged primarily by geographical region. The brainchild of the Keeper William Thomas O'Dea, the nautical themed gallery was complete with an ocean liner deck and bridge mezzanine central display area. It contained marine engines and navigational equipment in addition to the numerous varieties of international historical ship and boat models. Many of the British Small Craft displays included accessory models and landscape settings, with human figures and painted backdrops.

The majority of the models were acquired by the museum during the interwar period, with staff actively pursuing model makers and local experts on information, plans and the miniature recreation of numerous regional boat types. Under the curatorship supervision of Geoffrey Swinford Laird Clowes this culminated in the temporary 'British Fishing Boats' Exhibition in the summer of 1936. However the earliest models dated back even further with several originating from the Victorian South Kensington Museum collections, appearing in the International Fisheries Exhibition of 1883.

With the closure and removal of the Shipping Gallery in late 2012, the aim of this project is to produce a reflective historical and cultural geographical account of these British Small Craft displays held within the Science Museum. In this process it reveals the hidden stories behind the collection and individual boat models. The research therefore considers the former British Small Craft display in terms of its geographical visual and textual presentation of national and local identity, the cultural transference of knowledge from local regional areas to a national/international stage, its evocation of coastal and river landscapes, and its techniques of landscape/seascape miniaturisation in mid twentieth century Britain.

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I am also incredibly grateful and indebted to my four supervisors Professor David Matless and Professor Mike Heffernan in the School of Geography at Nottingham and Dr. Tim Boon and David Rooney at the Science Museum whose patience, expertise and dedication to supporting me in my studies made the project possible. In particular I would especially like to thank both Davids who went out of their way to make me feel part of both the academic and museum communities at their respective institutions and who saw the importance of the small craft models, the Shipping Gallery and me – I am forever grateful.

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I dedicate this thesis to my Grandfather Lee who would have been fascinated by this project. He was an avid sailor and ships-in-bottles-maker in his spare time and lover of all things maritime and nautical.

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## **List of Archives Consulted**

BBC Written Archives Centre, Caversham Park

British Library, St Pancras

Caird Library, National Maritime Museum, Greenwich

Huxley Collections, Imperial College Central Library, South Kensington

National Archives, Kew

National Art Library, Victoria and Albert Museum, South Kensington

Royal Institute of British Architects Library, Portland Place

Science Museum Documentation Centre, South Kensington

Science Museum Library, Imperial College Central Library, South Kensington

## List of Abbreviations

### **Archive Abbreviations**

BWAC – BBC Written Archives Centre

BL – British Library

Ed 79/ (e.g. Ed 79/144) – Board of Education File

HC – Huxley Collections, Imperial College

Inv. (e.g. inv.1935-155) – object inventory number

LTM – London Transport Museum

Nom. (e.g. Nom. 4289) – Nominal File

PRO – Public Records Office File

SMD – Science Museum Documentation Centre

SSPL – Science and Society Picture Library

T/ or Tech (e.g. T/1935-155) – Technical File

Z- (e.g. Z-111) - Z-Archive File

### **General Abbreviations**

IWM – Imperial War Museum

NHM – Natural History Museum

NMM – National Maritime Museum

SCM – Science Museum

SKM – South Kensington Museum (the precursor to the Science Museum and the V & A institutions)

SNR – Society for Nautical Research

V&A – Victoria and Albert Museum

## Chapter 1 – Introduction



**Figure 1** An image of the centre of the Shipping Gallery showing the focal point: a ship's figurehead and the naval carronade (© Science Museum / SSPL).

In March 1963, the Sailing Ships Gallery at the Science Museum was opened to the public. The brainchild of the Keeper William Thomas O'Dea (1905-1981), the nautical themed gallery culminated in thirty years of this curator's vanguard exhibition work and practices at the museum. Complete with an ocean liner deck and bridge mezzanine central display area, marine engines, navigational equipment, diving equipment, hanging full sized boats, working models of paddle and screw propulsion the gallery also contained numerous varieties of British and Foreign, historical and contemporary ship and boat models. The British Small Craft models and their dioramic displays were just a small segment of this large exhibition space, and comprised a hundred models of regional types of coastal and inland waterway working vessels, mostly fishing craft, displayed within twenty geographically orientated showcases. This thesis will tell the story of these boat models and displays through the prism of cultural geography.

The aim of this project is to produce a historical and cultural geographical account of these British Small Craft displays held within the Science Museum. In this process the hidden stories behind the collection and individual boat models have been revealed. Through the close analysis of these individual objects and of the collection's broader institutional collective whole, connections can be made to wider cultural debates concerning British local, regional and national identities, maritime narratives and cultural nuances of landscapes, coastal scapes and seascapes within mid twentieth century Britain. The thesis also provides a means by which bigger broader points surrounding cultural and historical geographies can be discussed through the focused analysis of a specific exhibition of modelled coastal fishing craft.

This aim is further pursued in the answering of a series of research questions covering four areas:

- Narratives of Display – In what ways does the British Small Craft display express a part of the British island story during the mid-twentieth century? How does the British Small Craft display fit within the wider context of the Shipping Gallery with its national and international content?
- Scales of Display – How were the techniques of modelling developed to create the miniature forms of British Small Craft and their dioramic settings and who were the key individuals and groups involved in this process?
- Display and the Public – How did the museum's interactions with a series of publics (including the Society for Nautical Research) shape the development of the collections and the display through the production and donation of boat models? How did key figures within the museum – notably the 1930s and 1960s curators Geoffrey Swinford Laird Clowes and William Thomas O'Dea respectively – see their work as conveying and engaging a public interest? What were the implied and assumed curatorial practices which helped shape the displays in terms of portraying a form of technological evolution and maritime culture?
- Small Craft Landscapes – How do the displays work as craft objects to communicate meanings concerning technology, place and culture? In what

ways do the models and their dioramic settings connect the displays with certain geographical coastal and inland sites around the British Isles?

Although the Sailing Ships Gallery was the pinnacle and the lasting images of the collection on display, the British boat models have a much older lineage. The majority of the models were acquired by the museum during the interwar period, with staff actively pursuing model makers and local experts on information, plans and the recreation of numerous regional boat types in miniature form. Under the supervision of the Assistant Keeper Geoffrey Swinford Laird Clowes (1883-1937) the collections were expanded during this period. In collaboration with a sub-committee of the Society for Nautical Research, Clowes and the Science Museum staged the temporary 'British Fishing Boats' Exhibition in the summer of 1936. However the earliest models dated back even further with several originating from the Victorian South Kensington Museum collections and appearing in the International Fisheries Exhibition of 1883.

Thus this thesis traces the chronological historical narrative of the British Small Craft collection following the work of Laird Clowes and O'Dea and others and the acquisitional histories of its hundred models over a period of 150 years. In doing so it does not simply discuss and reflect the foundation, development and broader scope of the Science Museum but also speaks to wider themes within geography. In order to delve deeper into this museological narrative and to anchor it academically within a historical geography framework, the thesis is divided into the following chapters:

**Museums, Ships, Science and Geography: a Literature Review** discusses the four bodies of literature that have academically and theoretically shaped this research. It engages with museum studies literature on museums, collections, models and dioramic displays before turning to its connections with geography. The research is then considered in terms of its geographical subject matter framing the small models boats within the literature of the geographies of the sea and ships. Connecting these academic works with the boat models through the theme of knowledge production,

the third literature highlights the geographies of knowledge and explains geography's relationship with science and historical scientific practices. The fourth and final literature discusses the research's connections with notions of modernity, landscape, heritage and the vernacular.

**The threads that make up the warp and weft of my canvas** explains the methodology of the research. It does this by discussing first the nature of the Science Museum's archives and then secondly the specific file types and documents consulted, taken from the institution's Documentation Centre. In doing so, it speaks to broader debates within geography concerning the archive as a concept – not just as a resource for empirical research but also as a source of knowledge, authority and power.

**Beneath a hive of glass** provides the beginning of the small craft narrative, discussing the earliest boat models of the collection – a culmination of the end of the International Fisheries Exhibition of 1883. This period also saw the division of the South Kensington Museum into the Science Museum and Victoria and Albert Museum institutions – splitting the collections into science and art respectively. Yet this earliest part of the museum's and collection's story has a broader national context. The Fisheries Exhibition was a platform for debate with growing concerns over the state of the fishing industry and diminishing food supplies for ever-increasing urban centre populations. Therefore this chapter places the oldest models of the museum into a wider story of Victorian livelihood, natural history research, rural maritime identities and piscicultures.

**Vanished and vanishing craft** continues the narrative into twentieth century, illustrating the expansion of the model collections under the supervision of the curator Geoffrey Swinford Laird Clowes during the 1920s and 30s. Engaging with the acquisitional histories of every object of the sixty models accessioned and incorporated into the museum's broader institutional story in this period, the chapter unpacks the numerous identities and discourses at play. Through the museum's engagement with regional model makers and owners, its relationship with the Society for Nautical Research and its continuous disputes with the newly founded National



Maritime Museum at Greenwich, a better understanding of the its remit and expertise can be gained. However, the expansion of the collections in its variety and scope and the work of the SNR's River and Coastal Craft Sub-committee hint at a broader notion of nostalgia and perceived national loss of Britain's coastal marine heritage and vernacular technologies. Culminating in the joint temporary exhibition of 'British Fishing Boats' with the SNR of 1936, the period marks an important stage in the development of the museum; its boat model collections presenting scalar regional and national interwar imaginations and interactions with the coasts and seascapes of the British Isles.

**A war against boredom** follows the narrative post World War II with the building of the Science Museum's Centre Block – a catalyst of the institution's involvement in the Festival of Britain in 1951. The new building paved the way for new exhibitions and galleries including the opening of the Sailing Ships Gallery in March 1963 – the creation of the museum's Water Transport and Aeronautics Keeper William T O'Dea. Fighting 'a war against boredom in the museum' O'Dea replaced rows upon rows of glass cases in gallery spaces with themed exhibitions that included three-dimensional scenes. O'Dea's methods, made manifest in the Sailing Ships and Aeronautics Galleries symbolised a broader new direction in museum exhibition practices – a direction more closely associated with modern museum exhibition display, public interaction and interpretation techniques. This third and final empirical chapter explores the institution's engagement with new methods of display, discussion of the diorama artists involved and the addition of the last models to the collection; models which embraced newer motor technologies in fishing vessels contrasting with the preceding historical models powered under sail. In broader terms, this closing part of the story speaks to newer maritime identities which embrace modern marine technologies alongside recognition of past boat types and designs.

**Conclusion – Red Sails in the Sunset** provides the concluding comments on this nautical museological research. With the closure of the Shipping Gallery and the removal of the British Small Craft models and displays in 2012, this final chapter reflects on the legacy of the miniature boats as part of the museum's maritime

collections. This is illustrated through the laser scanning and digital mapping of the gallery before the closure. In doing so this section discusses the broader implications and ever-changing historical and contemporary roles of the institution as a whole. Yet the collections and displays speak to wider concerns within geography and other disciplines. In addressing the research's connections with geography, this final chapter will also highlight the projects limitations illustrating where the research could be hypothetically expanded further.

With these subsequent divisions in mind, the main body of the thesis begins with a reflection and review of the bodies of literature which have theoretically shaped this research.

## Chapter 2 – Museums, Ships, Science and Geography: a Literature Review

This review section explores four bodies of literature which have theoretically and empirically steered this research. The literatures are: Museums Studies and Models; Geographies of the Sea, the Ship in Geography and the Geographies of Ships; Geographies of Knowledge and Geography's relationship with Science and the History of Science; and Modernity, heritage and vernacular cultures. It connects the models to literatures which reflect four aspects of the tangible and intangible contexts of the displays: its museum context, its maritime subject matter and its placing within a wider public scientific setting, and finally a heritage and vernacular modernism milieu.

In broader terms it links the models to discussions surrounding their nature as museum objects and as part of the makeup of one of the bigger national cultural and heritage institutions. The chapter will then interconnect the model boats' relationship with the museum literature with work from within geography. The boats and their displays also resonate with their own subject matter; namely geographical imagery and depictions of the sea and the maritime's consequent close affiliation with ships within geography. Yet the models and their displays also highlight a third intangible notion: their reflection of an institution presenting a form of public scientific knowledge. This in turn speaks to a third literature which engages with ideas surrounding the geographies of science coupled with the production of knowledge in specific environments or places. The regional signatures that are assigned to individual boat models or particular displays at the museum illustrate the presence and importance of the geographical provenance of the scientific knowledge obtained. This regional maritime knowledge was crucial in the construction of this specific vernacular public perception of science and technology.

This in turn allows for a fourth literature: one which discusses the vernacular, heritage and modernity of these boats in the context of twentieth century ideas of Britishness. The model boats, thus, engage with literature on iconography, landscape and British

identities (Cosgrove, Roscoe and Rycroft 1996; Daniels and Cosgrove 1988; Daniels, DeLyser, Entrikin and Richardson 2011; Matless 1998; Merriman 2005; Morrissey 2014).

In doing so, this chapter will interconnect these four literatures through the boat models and displays, giving the research the necessary theoretical structure and foundation to delve deeper into the empirical narrative that follows.

### 2.1 Museums, Collections, Exhibits, Dioramas and the art of the miniature

As the small craft models (as objects) are an integral part of a national museum institution's broader collections and remit, they inherently connect with an extensive museological literature. Thus this section will discuss the academic theoretical arguments which underpin the general concepts of museums and at a closer level the use of collections, dioramas, models and the miniature as museum tools and forms of display.

#### Museums

Since the development of the first public museums originated from private collections in the 18<sup>th</sup> Century, museums have symbolised and functioned as multifaceted sites of culture and society. Hooper Greenhill insists that it is misguided to assume that museum's consequently only have "one form of reality...only one fixed mode of operating" (Hooper Greenhill, 1992, 1). Instead she argues that:

Looking back into the history of museums, the realities of museums have changed many times. Museums have always had to modify how they worked, and what they did, and according to the context, the plays of power, and the social, economic, and political imperatives that surrounded them. (Hooper Greenhill, 1992, 1)

So with a modern emphasis on interpretation, education and learning this has resulted in museums gaining new definitions and meanings compared with their 18<sup>th</sup> and 19<sup>th</sup> Century counterparts. As argued by Alexander once a private collection became a public museum, new demands and requirements were placed on that institution: "as long as a collection was private, it could be kept under lock and key and relatively safe." However "when the public was admitted to the museum," he continues

“precautions had to be taken against theft or handling” resulting in the origins and development of conservation and collection care practices (Alexander, 1979, 8). However contrary to this, as suggested by Thad Parsons III the developments of care collections for museums came into true fruition during and after the Second World War:

The experiences of the war shaped the modern British museum experience by increasing the level of professionalisation, reinforcing the need for atmospheric controls, and pushing conservation reforms. Many of these advances took place because of deficiencies in the previously accepted system, such as the lack of duplicate records at the Science Museum, and because they allowed better preservation of objects” (Parsons III, 2010, 85/86).

Yet by the 20<sup>th</sup> Century museums no longer were “engaged...[in] the salvage and warehouse business” (Weil, 1999, 229). Instead the demands of public admission to these collections ensured that museum functions changed during the latter half of the 19<sup>th</sup> Century and into the 20<sup>th</sup> Century. Care of collections, research and collecting functions of these institutions would now include and be superseded by exhibitions. Displays of objects and exhibitions were at first aimed at scholars and at “a knowledgeable audience satisfied with a minimum of interpretation” (Alexander, 1979, 9). Yet the development and practices of exhibitions were also to alter with collections organized by overarching taxonomic themes. With numerous world fairs and expositions stemming from the Great Exhibition of 1851, ever greater, more dramatic and more spacious exhibition systems were created sharing with the broader public “the wonders of technical and scientific accomplishments [that] were put on view to be admired and to celebrate “progress”” (Alexander, 1979, 10).

Collections, their conservation requirements and their consequent settings within displays for exhibitions, in turn brought on new roles for museums also in terms of education and interpretation. “Exhibition, education or interpretation – the conveyance of cultures – and a commitment to community or social welfare,” Alexander argues “have grown to be important aims for the museum in the last century. As public education expanded worldwide, museums joined schools as

agencies for conveying cultural conditions” (Alexander, 1979, 10). Thus, the increase in attracting visitors at museums: “has led to more of an emphasis on public service over the basic maintenance of collections” (Alexander, 1979, 10).

But regardless of how museums have been labelled and despite their ever changing roles, Hooper-Greenhill is explicit in what they present to the public: “Knowledge is now well understood as the commodity that museums offer” (Hooper Greenhill, 1992, 2). It is through the various past and current roles or definitions that museums perform – as ‘guardians’ or ‘keepers’ of collections, as research institutions, as places of learning and education, as centres of outreach and community work – that the commodity of knowledge is offered and enacted (Alexander, 1979, 11).

In addition recently museums have been more acutely aware of their institutional histories – the national museums in particular, documenting and publishing their foundation narratives in volume. Indeed the National Maritime Museum, for example, published its institutional volume *Of Ships and Stars* (Littlewood and Butler, 1998). However the most recent and certainly the most extensively used institutional history for this research was the Science Museum’s volume *Science for the Nation – Perspectives on the history of the Science Museum* (Morris et al, 2010). A year after the centenary of the founding of the museum, the edited volume was intended “not [to be] a narrative history of the Science Museum” (Morris, 2010, 7). Instead:

Readers...will obtain a richer understanding of how one of Britain’s most important curatorial institutions became the Museum we know today. For the first time, the reader can fully appreciate the complexity and drama of the Museum’s gestation and comprehend the relationship between the ambitious plans for the Museum over the years and their concrete expressions in buildings and galleries we can see today (Morris, 2010, 7/8).

Thus giving a general overview of the museum’s history and mentioning the periods in which the small boat models featured, the volume helped extensively to shape the research and the empirical chapters that follow in this thesis.

Yet as Peter Morris, the book's editor argues this volume's function was more than just a reflection of perspectives on the museum's past. The volume is also testament to the museum's ever changing roles and public perceptions. Like other national museums, the Science Museum "can be defined as a collection of objects collected in the past (even if the collecting has continued up to the present), at least some of which are on display to the public" (Morris, 2010, 1). Because it shares this description it was not according to Morris "a science centre" (Morris, 2010, 1). Yet, although initially concerned after its foundation in 1909 with current science "focussing on the display of contemporary techniques and methods in science and applied science", the museum would also later during the 1960s incorporate a historic approach to its displays and collections; resulting in an institution that "has never been wholly devoted to contemporary science or the purely historical, but a fruitful combination of the two" (Morris, 2010, 2). Indeed the volume also highlights the museums fervent commitment to research particularly in the history of science; being a pioneering institution for the discipline in the 1960s and with "the first professionally trained historians of science arriv[ing] in the late 1970s" (Morris, 2010, 2/3).

However, the Science Museum's primary role has always been "to present science – in one form or other and by various means – to the nation" (Morris, 2010, 4). "Whatever the route taken," Morris insists "the Museum has tried to engage the general public with science and thereby enable visitors to make up their own minds about the significance of science" (Morris, 2010, 4). Echoing this point Bud argues that the Science Museum has "since its origins in the 1880s – been a modernist enterprise...using the past to illuminate the present and the future of the ingenuity of our own culture" through the utilisation of its extensive collections (Bud, 2010, 250). Ultimately according to Morris the volume's purpose was to describe "how the Museum has sought to carry out this [public presentation of science] role over the last century and more" (Morris, 2010, 4).

This notion of the museum attempting to present science is pursued further in Sharon MacDonald's ethnographic work *Behind the Scenes at the Science Museum* (2002) in which she follows the development of the temporary exhibition 'Food for Thought'

from its creation in late 1988 to its opening in 1989. She argues that as an instrument “of liberal government” the Science Museum in presenting science to the public was in the nineteenth and early twentieth century, according to Tony Bennett in his work on the birth of the public museum, a means of giving the masses “an opportunity to civilize themselves” (Bennett, 1995, 47 in MacDonald, 2002, 29/30). For MacDonald museums then “can be explored as agencies for imagining and attempting to construct particular kinds of public without being necessarily conceived of as an attempt at class dominance or as unidimensional” (2002, 30). Consequently the changes in scientific ideas and areas of research within museums were reflected in the workings of the institutions and their exhibitions. This in turn sheds light on the nature of character of museums:

The attempt to cope with multiple demands, and what must sometimes have felt like irreconcilable dilemmas, has surely been a characteristic of the public museum from its inception and museums like the Science Museum have been shaped by multiple impulses rather than the unproblematic ‘writing in’ of any single narrative (MacDonald, 2002, 30).

With this in mind the Shipping Gallery of the 1960s and MacDonald’s discussion of the 1989 ‘Food for Thought’ temporary exhibition highlight and share the museum’s continuing issue of “labour[ing] against [its] own physicality” with the objects and architecture of the museum “not always lend[ing] themselves unproblematically to the vision of either science or of the visitors that museum staff wish to materialise” (MacDonald, 2002, 30). Unlike the liberal ideas surrounding science during the 19<sup>th</sup> and early 20<sup>th</sup> centuries where museums embodied the latest ideas, she argues, those working now within the architecture of earlier visions of longer standing museums find that these earlier visions impede their own implementations and results in objects which “can behave obdurately” in exhibition spaces (MacDonald, 2002, 30). Yet despite this, museums still carry many values and meanings providing multiple roles as complex institutions. Therefore as MacDonald concludes “Museums are invested with a rather unique and special complex of cultural authority, property and expertise. Perhaps more than anything, they need to protect this against attempts to cut this down to a more limited and culturally impoverished size” (2002, 259).



## Collections

Extensive academic writing particularly in Museum Studies has also been focused on collections as a concept – a term which is used extensively when referring to groups of museum objects. Susan Pearce, in an edited volume *Interpreting Objects and Collections* and quoting Russell Belk, arrived at the following definition of ‘a collection’:  
““We take collecting to be the selective, active, and longitudinal acquisition, possession and disposition of an interrelated set of differentiated objects (material things, ideas, beings, or experiences) that contribute to and derive extraordinary meaning from the entity (the collection) that this set is perceived to constitute”” (Belk, Sherry and Holbrook, 1991, 8 in Pearce, 1994a, 158).

Pearce also reconsiders the act of collecting. She argues that “in a unique sense, our collections are what we are, and from this all other functions flow” (Pearce, 1994b, 193). She states that an attempt to understand the nature of these collections is one way of exploring our human relationship with the external physical world of which they are a part. “The forming of the collection is part of the relation between the subject, conceived as each individual human being, and the object, conceived as the whole world, material and otherwise, which lies outside him or her” (Pearce, 1994b, 194).

Rebecca Duclos puts collecting in a more geographical light in her paper *The cartographies of collecting*. In it, she argues that “...in many respects the act of curating a collection is similar to that of drawing a map or creating a travelogue: each effort attempts to make what is not immediately perceivable perceivable – at least in the mind’s eye” (Duclos, 2004, 85). She explains that collections and maps “are both documentary and anecdotal travellers’ tales, which in Stephen Greenblatt’s words, are caught between the ‘undifferentiated succession of local moments and a larger strategy toward which they can only gesture’” (Greenblatt, 1991, 3 in Duclos, 2004, 85). As they move towards these other realms, museologic and cartographic endeavours use physical and narrative evidence to push the limits of a culture’s ‘representational technology’ by referring symbolically to things beyond their own tangible presence. “The configurations of mindscapes and landscapes brought forth

through these practices offer traces of discovery and movement which, while tangible, are derived from and give rise to intangible worlds of experience” (Greenblatt, 1991, 3 in Duclos, 2004, 85). The map and the collection-as-a-map (as Duclos calls it) are message-bearing entities that operate on two levels: “metonymically (having a direct relationship to a specific body of material or a landscape) [and] metaphorically (acquiring symbolic value related to, but not necessarily representational of, their origins)” (Duclos, 2004, 85). This duality, she says, “gives these entities a solidity of form with a fluidity of function.” In turn, this means that “when we are orienteering ourselves through an exhibition or atlas to destinations of an aesthetic or geographical nature, museological and topographical ‘maps’ allow us as individuals to journey uniquely through physical and metaphysical territories of our own choosing” (Duclos, 2004, 85). These metonymic and metaphoric nuances of museum collection cartographies is mirrored in the small craft and dioramas – the models and displays representing not just the physical shapes of boat types but also mapping the imagined coastal contexts in which they were used in different areas of the British Isles.

Duclos goes a step further by suggesting there are three noticeable themes that transpire from looking at examples of cartographies of collecting. Firstly:

collections have historically created their own topographies of space, externally generated, but often internally explored and re-visited; [secondly], collecting and mapping have a darker side, sometimes being used to assert a powerful presence in a foreign land through practices of displacement and replacement; and [thirdly], assemblages of items map out what we might call landscapes of desire – real or imagined destinations to which we can travel using objects as our symbolic guides (Duclos, 2004, 87).

Thus the geographical and vernacular technological knowledge of the British Small Craft presented by the Science Museum was mapped out through models collections and its displays.

Issues of collecting are commonplace within a museum setting. As Simon Knell puts it, “the collection problem that needs to be resolved is insoluble not simply because of the problems of deciding what to collect, but by the unrealistic belief that when

something is collected it will be kept in perpetuity” (Knell, 2004, 16). He earlier argues that collecting cannot move forward unless the cycle of acquisition, retention and disposal of collections is studied as a whole. The term ‘collecting’ is no longer simply an act of accumulation, but has a more holistic meaning which encompasses every moment of the life of an object in a collection (Knell, 2004, 19).

The holistic meaning of collections and collecting are pursued further by Sharon MacDonald. “Collecting” as she describes “is a set of distinctive – though also variable and changing – practices that not only produces knowledge about objects but also configures particular ways of knowing and perceiving” (MacDonald, 2011, 95). She goes on to say that collections and the act of collecting culturally enact “certain relations between things and people” (2011, 95). In essence then, according to MacDonald, collecting practices assert identities and represent powerful commentaries on the ways in which objects and people interact with each other. The museums in which they are housed therefore help “to define the potential value of objects and their salience for identity work” which in turn establishes “a cultural model in which collected material performs individual distinctiveness” (2011, 95).

### Models and the miniature

Yet if collections are to be imagined within the museum context beyond the store rooms and considered in terms of exhibits with the aim of engaging visitors visually, then the nature of the collection and the method of its display need to be discussed. In the Small Craft Exhibit’s context it is the manipulation of the scale of objects and their showcases settings that help make this possible. The displays in this exhibit are visually pleasing to the eye because it is done through the miniaturisation of the models and also in the miniature landscapes and figures of the dioramas. Therefore the minutiae can prove to be in museological terms a powerful method and tool of museum display. The importance of the miniature is highlighted by Stewart: “There are no miniatures in nature; the miniature is a cultural product, the product of an eye performing certain operations, manipulating, and attending in certain ways to the physical world” (Stewart, 1984, 55).

Focusing further on the idea of modelling and the miniature as a form of display and collection we turn to the work of James Roy King. In his book *Remaking the World – Modelling in Human Experience*, King discusses “the interactive experiences of human beings involved in the complex activity we call modelling” (King, 1996, 3). King goes on to clarify on what he defines as a model:

By model I mean a re-creation of some prototype or original, generally but not always smaller and usually of materials different from those of the original. Thus numerous transfers and transformations go on with the modelling process. The model builder intends to bring out certain features of the original for purposes of competition, amusement, instruction, analysis, testing, clarification, or display (King, 1996, 3).

In conjunction with this, Hopwood and Chadarevian argue that in three-dimensional terms models have “always embodied and displayed knowledge, but how this was done varied enormously and altered over time” (Hopwood and Chadarevian, 2004, 3). As objects they “share certain visual and tactile properties simply as representations in 3-D.” Therefore manufacturing and utilising such models:

Has in many ways been different from making and working with flat images; and through common sites of production and of display these differences have been shared across scientific disciplines and beyond the sciences (Hopwood and Chadarevian, 2004, 3).

Ludmilla Jordonova in the same volume argues that unlike flat two dimensional objects like books, models “can be viewed from a wide variety of angles.” This would allow an individual to touch them and in fact some are designed specifically for that purpose. Therefore models come in many shapes, sizes, colours, materials and textures and to Jordonova “they invite distinctive *bodily* reactions in their audiences” (Jordanova, 2006, 449).

Returning to King he later writes that due to the variety and breadth of modelling as a human activity, it can be useful in recording and mapping human experiences. Understanding the reasoning behind modelling gives a broader insight into the ways in which we engage with the world:

Why individuals research, build, collect, exhibit, and discuss their models thus becomes a significant question, tied in all sorts of ways to more general questions about experience. If models are indeed representations of the larger material world in which

we live, modelling itself may serve as an epitome of all the ways that a variety of individuals make contact with the world (King, 1996, 8).

King expands on this further arguing that the study of modelling activities would also be prominent in reflecting on the human experiences of the late 20<sup>th</sup> Century [and consequently early 21<sup>st</sup> Century] with aspects such as consumerism, technologies, perfecting things, abundant leisure “and the many [other] complex interactions [which] we pursue, as well as the many ways we have resisted these pressures or succumbed to them” (King, 1996, 8).

Naturally the art of modelling and creating the miniature is constricted by issues of size and detail like many other things within human experiences. “Issues relating to size” King writes “determine the nature and quality of many of our interactions with the world. Enormous structures threaten or overwhelm us, and tiny objects appear to be insignificant or insidious” (King, 1996, 9). The other aspect of modelling is attention to detail. “Realistic detailing is ultimately the most impressive feature of models, but it is inextricably linked to the small scale at which modellers work: the challenge decreases as the scale grows larger” (1996, 9). Therefore size and scale are closely linked, a coupling which King calls “the proportional relationship between prototype and model”, however this was not just a mathematical issue: “scale can enter richly into the experience of both the viewer and the creator of a model” (1996, 12). Having said this scale can still present a real challenge to model makers – “A very small scale will blur detail or render detailing impossible, and too large a scale may commit the modeller to a level of detailing impossible to carry out in reasonable time” (1996, 12).

By way of conclusion, King writes:

So there are significant interactions here between the large and small, the heroic and the intimate, the subjective and objective, the challenging and the readily controlled. At small scales the modeller always faces the terrible possibility of entrapment in parts or processes, of separation from real experience and real life in a quest for superrealism at ever smaller sizes that will always lie just outside his or her grasp (King, 1996, 24).

Yet King observes and argues that such pursuits are still important to acknowledge and study as they unlock a better understanding of human qualities through interactions and experiences. Such pursuits reflect in particular:

A human interest in perfection and meticulousness that (when under rational control) is one of the most valuable of all human qualities... (1996, 24).

The idea of models being the culmination of perfecting a representation of something is pursued further by Jordanova. She defines models as:

Representations; in a sense they exemplify something, make it material, or give it a more accessible and tangible form. Since they exemplify, 'model' as verb and adjective refers to standards, even to perfection (Jordanova, 2006, 448).

Consequently this quest for perfection in modelling can lead to certain reactions and emotions such as pleasure:

Models give diverse pleasures, and those pleasures contain many clues to their nature. People use models to think with, hence one pleasure is the intellectual mastery that models permit. Models in art are part of production processes during which problems are solved; this is thinking, as it were, with the hands (Jordanova, 2006, 448).

As models can also conceal and reveal many hidden elements and features of particular original represented objects (in some cases through movable parts), the pleasure of "intellectual penetration" is palpable. Thus it makes the reasoning clear why models are used so extensively within the sciences and social sciences as well as art; utilised as tools of instruction, demonstration and learning and as a means of furthering areas of knowledge.

### Dioramas

Yet it is only in the correct context of display that a model's full potential of instruction, demonstration and learning can be obtained. The three dimensional scene known as the diorama is one such medium. As a later chapter will show the overlapping dimensions of the coastal scenes within the British Small Craft dioramas depict images of regional coastlines and waterways. Indeed these diorama scenes, alongside many other areas of art and literature, could be visualised as iconographic works of land and coastal scapes (see Jones's work on tidal cultures through art and literature, 2010). As Daniels and Cosgrove explain:

A landscape is a cultural image, a pictorial way of representing, structuring or symbolising surroundings. This is not to say that landscapes are immaterial. They may be represented in a variety of materials and on many surfaces – in paint on canvas, in writing on paper, in earth, stone, water and vegetation on the ground. Indeed the meanings of verbal, visual and built landscapes have a complex interwoven history (Cosgrove and Daniels, 1988, 1).

In the same way, the intricate detail of moulded foregrounds, the inclusion of figurines and miniature sea gulls, complemented by colourful painted backdrops of distant scenes – all elements of a diorama – can be viewed as iconographic works recreating recognisable regional land and coastal scapes in miniature form.

Veronica della Dora's paper on nineteenth century travelling landscape boxes pursues this further by addressing dioramas and panoramas in more depth; discussing their origins in travelling modelled landscapes and their connections with the representation of landscape in imagery. Rather than discussing 'intrepid travellers' viewing picturesque landscapes, della Dora's paper "is about *these landscapes*, themselves *travelling* to the European capitals and making themselves acquainted with people" (Della Dora, 2007, 288). Alongside written and oral accounts, in newspaper articles or paintings, in 19<sup>th</sup> Century "landscapes travelled" in boxes and were assembled as panoramas rotundas (Della Dora, 2007, 288). While they originate from a broader nineteenth century lineage of optical devices and are set within a wider category of visual artefacts, della Dora argues, "panoramas are distinctive in many respects." She explains that:

Unlike a painting, postcard or peepshow, the panorama allowed a full three-dimensional bodily experience; it was a landscape the observer gazed upon, but also he moved through (or around); one that wrapped and deceived him; (Della Dora, 2007, 288)

In addition the materiality of the panoramas as objects also comes in to play with deterioration through transportation "changing their meaning and form during journeys" (Della Dora, 2007, 288). In other words "objects received, appropriated and reproduced in different ways and through different media, according to the geographical and cultural contexts through which they transited"; a point replicated in the boat models and displays of the Science Museum (Della Dora, 2007, 288).

Therefore according to della Dora the panorama can be useful as a tool in reassessing landscape. Panoramas [and indeed dioramas] she argues, makes them:

ideal case stud[ies] for rethinking landscape in terms of materiality, performance and circulation; as a medium of exchange between places (Della Dora, 2007, 288).

It is through this combination of imagined landscapes, iconographies and dioramas that a broader sense of British identity and memory emerges.

Alternatively from a museum literature standpoint Jane Insley argues that faced with mounting pressures from interactive games, media and the web, museums are being encouraged to revitalize their displays to engage new audiences through alternative methods such as the diorama. “Given the changing concept of reality in the twenty-first century and increasing scepticism on the part of their publics,” she suggests “museum messages have become more engaging rather than didactic, focusing on discussion and debate rather than laying down uncontested and uncontestable facts” (Insley, 2008, 27). She believes the diorama illustrates this transition better than most. Insley describes a museum diorama as “...a form of 3D model, showing a scene, an event or a landscape, which has been commissioned for a particular exhibition purpose” and explains that there are two main forms (Insley, 2008, 27). First there are ‘painted models’ which are scenic backgrounds that give context to actual scale models; and second there are ‘modelled paintings’ which are complete modelled scenes. The challenge for the artists and craftsmen involved in producing habitat dioramas, she suggests, was to go from a life-sized foreground scene to the distant horizon in a matter of a couple of feet. A similar challenge would have confronted artists creating historical human dioramas, especially with issues such as perspective.

Insley also refers to Karen Wonders’ research on habitat dioramas, although she strongly disagrees with Wonders’ belief that scenes showing technological or human activity “...fail to arouse the trompe l’oeil effect that is the aim of the habitat diorama” (Wonders, 1993, 17). Insley argues Wonders has missed an important distinction between these two categories. “If habitat dioramas aim to trick their audience with an illusion of reality, dioramas containing human subjects do not. More often than not, their purpose is not to deceive but to convince” (Insley, 2008, 27). Although Insley



may have a point here, it is difficult to fully appreciate as historic human subject dioramas do deceive viewers with the blending of perspective and distances of the modelled foregrounds and painted backdrops. In my view both habitat and human subject matter dioramas deceive and convince the viewer in equal measure: the one producing the *trompe l'oeil* effect of a live animal, the other recording a historical event accurately in miniature form.

Insley concludes her article by saying that despite their outdated nature, many dioramas are still left on show. She believes this to be partly because of the artistry involved, but also because they would be too fragile and valuable to move. She deems their preservation vital to offer curators an opportunity: "...for there is much to be learned about contemporary science and technology from a careful consideration of what is shown (and what is not shown) in such historical exhibits" (2008, 30).

Along with 18<sup>th</sup> and 19<sup>th</sup> century panoramas the origins of historical human dioramas can be traced to natural habitat groups, in which a major element of this is taxidermy. In Donna Haraway's paper, she focuses on the taxidermist Carl Akeley, whose work can be seen in the African Hall in the American Museum of Natural History, New York. Haraway tells us the dioramas "...contain detailed and life-like groups of large mammals which are the culmination of the taxidermist's art" (Haraway, 1984, 24). "As an altar," she says, "each diorama tells a story of salvation history; each has its special emblems indicating particular virtues. Above all, inviting the visitor to share in its revelation, each tells the truth. Each offers a vision. Each is a window onto knowledge" (1984, 24). Haraway goes on to express the opinion that the animals in the habitat groups are captured both in a photographer's and a sculpture's vision. "They are actors," she insists, "in a morality play on the stage of nature, and the eye is the critical organ" (1984, 24). In the displays themselves, she believes there is no mediation, nothing between the viewer and the animal. The glass separating the two might forbid the viewer entering the diorama, but "...the gaze invites his [or her] visual penetration" (1984, 25). To Haraway, taxidermy "fulfils the fatal desire to represent, to be whole; it is a politics of reproduction" (1984, 25).

In a similar light then, historical human subject dioramas (like their panoramic and habitat dioramic counterparts) can captivate, deceive and convince a viewer drawing them ever closer into the narrative of a particular museum's gallery space purely through their three dimensional designs and inclusion of perspective.

To summarise, museums represent society and culture reflected through their ever changing roles, their exhibitions, collections and their objects. This in itself strengthens the notion that a museum's commodity is knowledge. But the collections and objects themselves are also imbued with other values. Not only do they share learning and educational traits, collections and objects such as these boat models also illustrate the mapping of the human condition, presenting human experiences and identity through the mediums of display and the qualities of the three-dimensional and the miniature.

However the collections, displays and boat models also connect with new strands of historical geography. It does this, in particular, through the subject matter itself coupled with the museum's context and remit: focusing on the geographical reflections of human interaction with the seas and oceans, vernacular and marine technologies and the public presentation of historical and contemporary science.

### 2.2 Geographies of the Sea, the ship in geography and the geographies of ships

Although Earth is predominantly a watery planet, human geography has, until recently, neglected the seas and oceans as sources of empirical and theoretical value; focusing more on land in the pursuit of broader geographical debates (Hasty and Peters, 2012, 660). Yet as MacDonald tells us: "If geography has been largely a terrestrial affair, it has also, less conspicuously, been at home on the sea" (MacDonald, 2006, 629). Thus this section, will anchor the small craft models and the research in the new and emerging geography literatures of the sea and the ship which in turn influence the discipline.

Throughout its development as a discipline then, as MacDonald continues, geography "has found the ocean to be a ready field of scientific enquiry, producing important

information relating to the geopolitical, environmental and economic interests of the state” (MacDonald, 2006, 629). However, over the past decade within human geography interest has been shown in “challenging the apparent terracentrism of the discipline” and nautical based geographical research “has been growing steadily” amounting to “a rich set of debates [which] have been prompted and pursued by those engaging in various ways with the seas and the worlds of seafarers, past and present” (Hasty and Peters, 2012, 660). MacDonald suggests that through this new emerging literature a substantial amount of attention has been focused on the sea being a “medium for different cultural formations and ethnic identities; as an area of economic exchange; as an important site for labour and class consciousness; as a sphere of scientific endeavour and exploration; as well as being a geopolitical stage” (MacDonald, 2006, 630). As MacDonald succinctly puts it:

The sea is being rediscovered in geography not as an undifferentiated empty space between the land (where the real action supposedly takes places), but as a culturally configured site of knowledge and power where philosophical, scientific and aesthetic discourses intersect with socio-economic, technological and political forces (MacDonald, 2006, 630).

One such investigation into these more recent marine orientated realms of geography is a special issue of the *Journal of Historical Geography* in which it shares the many scholarly works that address the sea and ship. With authors such as Felix Driver, Miles Ogborn, Fraser MacDonald and James Ryan the issue tackles the geographical themes of maritime knowledge, maritime labour, of empire, power and commerce alongside the aesthetical nature of the seas and oceans. The journal issue’s intention was to offer a holistic version of historical geography “that puts the seas and oceans at the centre of its concerns” (Lambert, Martins and Ogborn, 2006, 479). Lambert, Martins and Ogborn do this by looking at three themes:

the epistemological and historiographic perspectives that might be taken towards geographies of the sea (‘sea currents’), the imaginative, aesthetic and sensuous geographies of the sea (‘sea visions’) and the material and social geographies of the sea (‘seafaring’) (2006, 480).

These themes and others, Lambert, Martins and Ogborn argue, are “demonstrating the potential – if not freedom – offered by the sea” (2006, 480). The freedom of the

sea is certainly an apparent theme visualized within the breadth and variety of boat models that were displayed at the Science Museum. For Lambert, Martins and Ogborn the main focus for the epistemological perspective of the geographies of the sea is the Atlantic, which is seen as “a particular zone of exchange and interchange, circulation and transmission” (Lambert, Martins and Ogborn, 2006, 481). Apart from extensive interest in the Atlantic, the paper also suggests that older, more obvious forms of history of the sea, such as naval history, are just as important, which links with narratives of exploration, scientific discovery and the concept of a ship as a scientific instrument; marine technological themes which are too present within the numerous ship models, marine engines and navigational equipment of the Science Museum’s 1960s Shipping Gallery.

Turning to the aesthetic and sensuous geographies of the sea (‘sea visions’), it is argued that the sea has been seen and imagined in many ways in different cultures over the centuries. In all these civilizations and time periods, there seems to be a recurring “oceanic vision: the sea as a changeable and unpredictable element.” As Chris Connery remarks: “liquid is always the problem element – shapeless but not abstract; temporal; changeable” (Connery, 1996, 290 in Lambert, Martins and Ogborn, 2006, 484). It is understandable, then, that there are so many varieties of small craft design geographically all over Britain, when the sea can be unpredictable and dramatically changeable in character when ventured across, and dangerous to navigate along certain coastlines. This is shown in the museum’s displays and reflected in the technical information in each model’s label – from the flat bottomed hulls of the Thames river barges to the double ended design of the Yorkshire cobsles in the tempestuous high waves of the North Sea; boat shapes corresponding to the particular harsh and volatile marine environments in which they worked. The museum was thus interested in this variety of small craft types directly because of the unpredictable nature of the seas and oceans, inherently shaping the historical and contemporary designs and development of vernacular and more complex technologies within marine engineering.

The final theme of geographies of the sea addressed by Lambert, Martins and Ogborn was that of the notion of 'seafaring'. Lambert, Martins and Ogborn argue that there are three forms of seafaring. The first is to consider the changing relationships between land and sea. The second is that understanding the geographies of these maritime worlds requires consideration of the relationships between elements and materials and the cultures of nature that combine them into different practices and technologies. "Each form of seafaring," they argue whether it be fishing, piloting, salvaging or laying of undersea cables for example, "finds ways of combining materials to mediate between people and the sea" (Lambert, Martins and Ogborn, 2006, 486). Thirdly and finally, these material geographies of fishing, sailing and navigating raise questions about knowledge and the sea. Lambert, Ogborn and Martins argue that "all of these practices of mapping and exploring, alongside those of navigation with log and line, rulers and dividers, astrolabes and compasses, but also with sail, tiller and halyards...are part of the production of formal maritime knowledge, but also far exceed their written and visualised forms" (Lambert, Martins and Ogborn, 2006, 487).

Further multifaceted notions of the seas and oceans as predictable and unpredictable spaces with many functions and implications are pursued by Steinberg in *The Social Construction of the Ocean*. Going beyond the limits of Lambert, Martins and Ogborn's work, Steinberg delves into the multiple economic and social constructs of the sea with a preface illustration of some containers of Nike trainers being lost at sea and washed up on the North American coastline. Although the Nike case is an exception, the story does demonstrate "how the ocean is perceived and used by various social actors" (Steinberg, 2001, 3). Furthermore the story "demonstrates how multiple constructions of the ocean serve to maintain the concentrations and movements of wealth that characterize modern capitalism" (2001, 3). Steinberg later suggests that if each actor were to pursue its strategy:

The result would be a set of social institutions, attitudes, and norms that would reproduce the construction of the ocean as unclaimable transport surface, claimable resource space, a set of discrete places and events, *and* a field for military adventure (2001, 4).

Steinberg later explains the basis of human marine interaction can be summarised in three areas of function: “the ocean as resource provider, the ocean as transport surface, and the ocean as battleground or “force-field” (Steinberg, 2001, 11). These three areas of human-marine interactions could only be possible if oceanic and sea waters are traversed by means of a ship or indeed a boat. Thus in order to fully understand the geographies of the seas and oceans it is crucial to study it in tandem with the geographies of ships and the concept of a ship in geography; a point emphasised further by James Ryan: “any account of historical geographies of the sea necessarily involves thinking also about ships and the spaces on board ships” (Ryan, 2006, 580).

This sentiment of the ship in geography and geographies of the ship is acknowledged and continued in the work of Hasty and Peters: “Ships, it seems, have ever been a means of satisfying the wants of curious minds and acquisitive societies” (Hasty and Peters, 2012, 661; Lambert, Martins and Ogborn, 2006, 487). They argue that the ship has always loomed large within the history of knowledge production “entangled not only within the workings of formal scientific societies [Livingstone 2003 and Sorrenson 1996], but with the everyday production of knowledge by ‘ordinary’ seafarers, whose observations were often coveted by those in the more formal business of science and philosophy [Hasty 2011]” harkening back to Lambert, Martins and Ogborn’s notions of ‘seafaring’ – “ways of living with the sea” (Lambert, Martins and Ogborn, 2006, 487).

Yet as Hasty has already alluded to, it would be misleading to limit the ship to just formal spaces as scientific instruments of knowledge production or “floating laboratories described by Sorrenson (1996) and others” (Hasty and Peters, 2012, 662). Ships have also “fostered different cultures of knowledge production” in more informal manners, illustrated most notably in Hasty’s own doctoral work on piracy and in particular his journal article on the travels of the 17<sup>th</sup> Century pirate William Dampier (Hasty 2011). As Peters (2010) has also shown, examples of these informal spaces of knowledge production can be seen within modern contemporary contexts as well as through historical case studies. Therefore the ship has become continuously:

Entangled in the production of knowledge, a site of thought and accumulation of thought, a place wherein the facts and theories about which curious minds wonder or hold dear are both crafted and contested. The ship then has a place within geography, in the making of geographical knowledge (Hasty and Peters, 2012, 662/663).

The consequences of this Hasty and Peters argue is that even in the broadest sense of a 'history of knowledge' depicted through histories and geographies of imperialism and commerce, the ship has always heavily featured. "Indeed, at the heart of some of the grandest stories told about our world, of empires, of trade, of conquest, past and present, are ships. As the primary "means of communication between continents" the ship has long been the chief mechanism driving the wheels of global commerce" (Linebaugh and Rediker, 2000, 152).

In addition to the ship geographies set out above by Hasty and Peters, other authors focused on the variety of specific spaces of vessels as a means of unpacking the geographies of the marine. In Ogborn's work of tracing the passage of royal letters on board ships to the edges of the empire for the early English East India Company of the 17<sup>th</sup> Century, he set about "understanding the ship in three ways: as a material space, as an accounting space, and as a political space" (Ogborn, 2001, 161). Yet, as is shown in Ryan's paper, the ship was not just considered as a space of war, trade, state power or of scientific discoveries. Indeed, following the duties of Lady Brassey on board the many voyages of her husband's private steam yacht *Sunbeam*, Ryan illustrates that the ship was also a space of domesticity – a sense of 'home' and Victorian daily life on land transferred on to the sea. As Ryan later explains while her husband captained the yacht: "at the centre of Lady Brassey's world lay the *Sunbeam* itself. It is the ship, with her readily waiting crew, familiar domestic routines and fixed social spaces that encapsulates the domestic and civilized universe – a little floating piece of imperial England – at the heart of Lady Brassey's world view" (Ryan, 2006, 587). Therefore through Ogborn's and Ryan's work the ship can encapsulate the performances played out in these maritime spaces, illustrating the 'seafaring' lives and forms of knowledge production enacted at sea.

However, the realms of the ship as a concept within geography are not limited to the function or purpose of a particular vessel or a specific context. The ship, returning to Hasty and Peters, can also shape the lives of individuals at sea revealing “complex questions relating to identity, resistance and embodiment”; areas of research which are “currently animating the geographic literature, not least because of how the specific spatialities of the ship might be seen to produce particular or different socio-cultural outcomes” (Hasty and Peters, 2012, 664). Therefore Hasty and Peters enforce the point that through these ship-shaped identities “as being *of* the ship and ship-board life” a notion of ‘geographies of the ship’ can be fully visualized alongside academic work of the ship featuring frequently within geography (Hasty and Peters, 2012, 664).

Moreover “by considering the plethora of ships more explicitly – transatlantic steamers, coastal fishing boats, river canoes, deep-sea sailing ships, and so on – historians of geography could further unpick some of the ways ‘landscapes, regions and places inform – consciously or not – scientific theories and practices’” (Naylor, 2005, 11 in Hasty and Peters, 2012, 667). This matters because as Sorrenson explains the formation of geographical knowledge is only thoroughly understood if certain prior information is known such as “what kind of ship was chosen for a particular voyage, who had commissioned it, and what kind of scientific instruments and techniques made certain its navigation” (Sorrenson, 1996, 222). Hasty and Peters therefore summarise Sorrenson by saying that “the ship then, is not simply a vehicle for exploring the creation of knowledge, but is part and parcel of that knowledge” (Hasty and Peters, 2012, 667).

By way of conclusion Hasty and Peters argue that a move towards geographies *of* ships “will...prove fruitful for opening new lines of exploration” (Hasty and Peters, 2012, 671). They suggest that new areas of geographical academic inquiry could be focused on going beyond the ship and concern smaller water craft (such as canoes, kayaks or sailing boats). While this is a justified point to raise it does not consider the ship within geography or geographies of the ship beyond historical and contemporary full size vessels. Therefore I would argue that this new emerging aspect of geography needs to



also consider the imagined “iconographies” of seascapes, coastlines and the maritime; a nautical geography which also includes art work, models and museum displays (Daniels and Cosgrove, 1988). Only then will ship geographies fulfil Hasty and Peters concluding statement that “it acts not only [as] a vehicle for innovative and exciting empirical research but also as a tool in reframing some of geography’s core concerns and for breaking across borders and voyaging towards new insights for the future” (Hasty and Peters, 2012, 671).

### 2.3 Geographies of Knowledge, the History of Science

As has already been noted the use of ships as scientific instruments, in mapping and traversing the world, and as the means by which global trade networks were supported, also encouraged the pursuit of knowledge. As argued by Sorrenson, the ship was not merely the vehicle on which the scientific discoveries were made (such as Darwin’s *Beagle* or Cook’s *Endeavour*) but was in its self an integral part of the production of new scientific knowledge; to Sorrenson the ship was the “scientific instrument”:

A ship that conducted a voyage of scientific discovery was never *merely* a vehicle that transported investigators to observe mundane new worlds, anymore than a telescope was *merely* a vehicle that transported images of heavenly new worlds to an observer. Just as the telescope expanded the science of astronomy and allowed astronomers to explore new worlds and make images of them, so too did the ship for geography and geographers (Sorrenson, 1996, 222).

Following Livingstone’s original arguments of ‘putting science in its place’ numerous other scholars have endeavoured to place the production of scientific knowledge beyond the traditional sites. As Livingstone said himself alongside high tech laboratories and observatories, scientific inquiry “has also been pursued in coffee shops and cathedrals, in public houses and stock farms, on ship’s desks and exhibition stages” (Livingstone, 2003, xi). As a Sorrensonian ‘scientific instrument’ in its own right, the ship has revolutionised and made advancements in “cartography, hydrography, surveying and navigation” becoming in expressive Latourian language “the inked needle of an instrument of enormous proportions that scribbled the shape of [coastlines]” (MacDonald, 2006, 629; Latour, 1990, 56 in MacDonald, 2006,

629/630). Therefore the geographical concepts of the sea and the ship connect with notions of geographical knowledge and the emphasis of 'place' within scientific knowledge making.

In order to understand the relationship between geography and science fully, it is important to understand the basis of 'geographical knowledge'. As Felix Driver and Gillian Rose write the discipline has changed in focus: "rather than being seen as a spontaneous expression of the encounter between people and the earth they inhabit, notions of place, space and landscape are now seen as cultural and social products" (Driver and Rose, 1992, 3). The concept of landscape for example is increasingly connected with "a set of specific cultural and technical practices, unimaginable outside the historical and geographical contexts in which they were developed" (Driver and Rose, 1992, 3). In addition Driver and Rose suggest that images of landscapes are "more than passive reflections of social needs and aspirations"; rather that the images themselves are responsible to do "cultural work, re-presenting the world to the spectator" (Driver and Rose, 1992, 3). Therefore geographical knowledge as a concept (that is produced through the landscape, places and space), is not merely a gathering of data or information nor is it just a set of ideas or theories; "rather, we define it as a specific form of knowing the world" (Driver and Rose, 1992, 4).

As explained by Simon Naylor, Livingstone's book *Putting Science in its Place: Geographies of Scientific Knowledge* continues a fifteen year tradition of scholarly work of numerous disciplines outside but also inclusive of geography which collectively argue "that science should be treated like any other form of knowledge" (Naylor, 2005, 1). As Livingstone writes, science "is, as 'a cultural formation, embedded in wider networks of social relations and political power, and shaped by the local environments in which its practitioners carry out their tasks'" (Livingstone, 2002, 236 in Naylor, 2005, 1). Livingstone however goes further arguing that "a geography of science [is] in opposition to the general perception that science is placeless, that science is in fact a triumph over place (Naylor, 2005, 2). Livingstone takes exception to the common belief that the laboratory "has come to epitomize the scientific success story precisely because it lacks any local connections" and that any science that has

local affinity “has got to have something wrong with it” (Naylor, 2005, 2). Instead, Livingstone insists that place and a science enquiry having ‘a geography’ are a crucial focal point for scientific knowledge and practices; thus the remaining chapters of his book illustrate “the provincial nature of this seemingly universal endeavour” (Naylor, 2005, 2).

By way of conclusion Naylor writes “Demonstrating that science can be understood geographically should therefore not be viewed as an end in itself, but as the basis upon which rich empirical stories can be built. A historical geography of science is a partial perspective on science but nonetheless one that can shed light on certain aspects of its life world” (Naylor, 2005, 2). Combining the arguments of Livingstone and others, Naylor surmises that: “it is not simply the case that science can be spatialized; it is also that science itself creates spaces and places for its own activities and in turn spatializes the world in a variety of ways” (Naylor, 2005, 2/3). Although they may not be perceived as such, I argue that the models, the boat types they represent and their dioramas are media through which space is spatialized at the Science Museum; indeed the displays and models have shaped the spaces of the museum and the public presentation of science.

Another aspect of the geographies of the history of science and of scientific knowledge can also be found in regional urban centres, as Withers et al (2008) discuss through the activities of the British Association for the Advancement of Science. In their paper Withers et al’s concern was “to understand the ways in which towns promoted themselves for provincial civic science, to explore the use made of particular urban spaces and localities as scientific venues and to document the reception afforded the association, its science and its science visitors” a point reflected further in Finnegan’s work on civic science societies in late Victorian Scotland and Withers’ own extensive work *Geography, Science and National Identity – Scotland since 1520* (Withers, Higgit and Finnegan 2008, 386; Finnegan, 2005; Withers, 2001, 158-160). Withers et al, through analysis of empirical data concerning the annual meetings of the BAAS, found evidence which “pointed to local urban expertise vested in scientific institutions whose members variously formed civic delegations to invite the association, or led BAAS

excursions, and who wrote and edited meeting handbooks so that local sites might be used to instruct visitors and locals.” With Livingstonian nuances the authors expand on this suggesting that “museums, meeting rooms, botanical gardens and other civic spaces were places of scientific knowledge and of social display, just as drawing rooms and even kitchens may have been spaces of scientific conversation” (2008, 413).

In conjunction with this, Withers et al also agree in the point made by David Aubin that “when the city is involved, the historian of science must pay as close attention to it as to the science conducted there. Not only do specific cultural and geographic issues deserve to be finely analyzed, but so does the very way of conceptualizing the city and its metamorphoses” (Aubin, 2003, 81). However contrary to this point, Withers et al in considering and “contributing towards a historical geography of science” argue for sites, spaces and places that are beyond the fixed institutions of scientific inquiry and beyond the city itself “through which science was locally made public” (Withers, Higgit and Finnegan, 2008, 413/414). Therefore like the numerous BAAS meetings held in regional areas, the knowledge production through the discussion and manufacturing of British small boat models and other information collated by the Science Museum, prove that scientific practices are not just enacted within urban spaces but also in rural coastal regional spaces. By way of summary Withers et al propose that the city:

No longer becomes the only or even required unit of assessment in such an urban historical geography. Rather, the focus becomes certain sites, matters of mobility and of different social intention and scientific practice (2008, 415).

Thus the implications of this, from the perspectives of both geography and history of science disciplines, is that spatial, environment and social contexts are crucial and necessary in the pursuit of the production and understanding of scientific inquiry and knowledge. This is certainly mirrored and visible within the vernacular small craft technologies of the variety of regions of the British Isles represented in the models and displays of the Science Museum.

## 2.4 Modernity, landscape, heritage and vernacular cultures in twentieth century

### Britain

Yet the models and their displays also speak to a further fourth literature: one that incorporates ideas of modernity, heritage and the vernacular through landscape. In their very subject matter and the way they were displayed in three dimensional showcases, the boat models play to debates concerning modernity, heritage and the vernacular. This is achieved through the various representations of landscape and seascape in the models and their settings creating regional and national forms of identity.

As argued by Morrissey geographers “have long been concerned with the study of landscape in all its various forms” with its conceptualization changing more recently to include “interpretive metaphors of landscape as text, symbol and [as a] way of seeing” (Morrissey, 2014, 169). This has in turn meant that landscape can be seen as an “ideological construction and [as a] site of emblematic representation” having iconic characteristics which pertain to notions of national identity (2014, 169). For Morrissey the pursuit of landscape inquiry within geography has resulted in “the nexus of landscape, memory and identity” (2014, 169). Indeed images of landscape and seascape such as those depicted in the models and their dioramic settings are imbued with notions of national and regional identity; amounting to the “weaving together [of] the natural and cultural, the immaterial and material” as argued by Merriman following Matless’s suggestion that landscape “may be approached as a Latourian ‘quasi-object’” (Merriman, 2005, 114; Matless, 1998, 12). Daniels goes further to suggest that national identities are “co-ordinated, often largely defined, by ‘legends and landscapes’” and concluding that “landscapes, whether focusing on single monuments or framing stretches of scenery, provide visible shape; they picture the nation” (Daniels, 1993, 5).

As Cosgrove, Roscoe and Rycroft argue with regards to landscapes and British identity “Geographers have...long recognized that national identity is constructed in the context of local identities which cut across both it and each other in complex ways. But it is arguable that different kinds of regional landscape play distinct roles in the

complicated discourse of national identity” (Cosgrove, Roscoe and Rycroft, 1996, 536). Matless goes further by explaining the close connection between landscape and identity: “the question of what landscape ‘is’ or ‘means’ can always be subsumed in the question of how it works; as a vehicle of social and self identity, as a site for the claiming of a cultural authority, as a generator of profit, as a space for different kinds of living” (Matless, 1998, 12). The relationship between landscape and identity in the British context conceptually and set within empirically rich and art/literature-focused narratives has long been the focus for historical and cultural geographers and has been pursued in numerous works (Agnew, 2011; Brace, 1999; Lowenthal, 1991; Merriman, 2005). Likewise the dioramas and their boat model focal points support Brace’s idea that the “diverse regions in England [and elsewhere in the British Isles], distinct in terms of landscape and culture, have been mobilized to represent something of the nation” (1999, 90).

Set in a broader context of craftsmanship and landscape cultural heritage preservation, however, the models and displays conjure contrasting images of modernity and the vernacular. As the later chapters will show, the activities of the museum and external bodies during the interwar and post-war periods, highlighted a maritime nostalgia for these coastal craft alongside the presenting of future marine technologies by way of an engineering development narrative. In some small way these activities mirrored those of the terra-centric interwar work of the Council for the Protection of Rural England (CPRE) and the Rural Industries Bureau (RIB). The former advocating a commitment to modernity “and which expressed a notion of tradition itself a version of modernism”; presenting the preservation of the English landscape through a Georgian influence of “orderly and progressive design” (Matless, 1990, 203). The latter governing its regional ‘rural development agencies’ tasked with protecting traditional ‘rural industries’ such as “blacksmithing, wheelwrighting...and thatching, alongside hand craft practices such as handloom textile weaving, basket-making and pottery” (Bailey, 2006; Bailey, 1996, 35; Williams, 1958, 7 in Thomas, Harvey and Hawkins, 2013, 81-82). In a similar fashion the commissioning and crafting of these models boats for the museum during these periods from various regions “point[s] to the importance of providing opportunities” historically and contemporarily “for

makers to develop national and international connections” connecting rural tropes of landscape and identity with those of urban centres and suburbia as part of a wider national sense of Englishness (Thomas, Harvey and Hawkins, 2013, 84; Matless 1998; Gilbert and Preston, 2003). The activities of these organisations – both earth and maritime focused – helped contribute to this wider sentiment of nostalgic discourses for past technologies and ways of life alongside future ideals. In essence the vernacular networks created in the gathering of these modelled small craft coupled with the imagined landscapes and identities constructed hints towards a geography of craft and craftsmanship – an avenue pursued further in the work of Nicola Thomas (Thomas, 2010, 2013).

Therefore, depicted as symbolic sites and vernacular miniaturised landscapes, the models, “cut through the culture, polity and economy” of a long period of British social history, emphasizing regional and national identities combined with notions of science, craftsmanship, technology and modernity (Matless, Short and Gilbert, 2010, 256). Through the interwar and post war exhibitions and gallery, the models – as maritime symbols and through their iconographic landscape settings – amplified the notion of British modernity as being a series of compromises and contestations. As argued by Conekin et al, they illustrated: “a balancing act between innovation and tradition”; a notion all too familiar within the remit of the Science Museum (Conekin, Mort and Waters, 1999, 20).

## **2.5 Conclusion**

It is these key four areas of literature which best suit the subject matter of my research. Not only do these modelled small craft and their dioramic scenes engage with bigger themes within geography such as identity, the ship or of geographical knowledge, modernity and the vernacular but they also speak to broader debates through the literature of other disciplines including museum studies and the history of science.

The models and their displays could be seen as 'nuance accounts' of science and the history of the discipline through the prism of historical geography encapsulating the variety of scales of scientific inquiry argued by Livingstone and supported by Withers, Higgit and Finnegan. The British Small Craft collections and displays held within the Science Museum, become not merely examples of scientific knowledge shown and exhibited in a solely science orientated institution; they also are illustrative of more expansive complex discourses of local, regional and urban identities, spaces and sites of knowledge production played out in the historical manufacturing, gathering and development of the collection.

The concept of collections, displays and models are also important to consider when viewing the models and displays, engaging them through museum literature. The small craft models and indeed the other elements of the Shipping Gallery like numerous other museum collections encompass the characteristics of a 'collection' in their formation and origins: their active selection, possession and retraction as a group of objects through their acquisitional history. Through these acquisitional histories a collection, as suggested by Duclos, can map tangible and intangible cultural and social meanings. In turn these cartographic functions of models, collections and indeed displays link to King's notion that the models themselves can be illustrative of human experiences.

Yet the Science Museum's relationship with science and its long commitment to presenting it to the public is reflected further in the work of Sharon MacDonald. Overlapping with the issues present in the Shipping Gallery, her analysis of the 1989 Food for Thought exhibition illustrates the difficulties faced by the museum to break away from its own physicality; the museum objects and collections not always proving to seamlessly display the envisioned depiction of science required (MacDonald, 2002, 30).

This is even more apparent when coupled with the methods of displaying such models. As part of three dimensional scenes, the models and their dioramic settings can short-circuit the difficulties faced when communicating 3D information from a two



dimensional plan “allowing”, as Nahum says “a broader audience to comprehend a complex mechanism or arrangement” (Nahum, 2010, 180). Furthermore, the small craft dioramas, like della Dora’s travelling panoramas can make us geographically rethink notions of the iconography of landscape and coastal scapes in terms of materiality, performance and circulation as much as entertainment, learning and instruction. Dioramas, in addition to the model’s they contain also go beyond the realms of reality, creating physically restricted windows into new worlds of optical liberation; they visually, culturally and constantly reconfigure reality.

Combined with notions of geographical knowledge, history of science and the theoretical concepts of museum collections, displays and objects, the Small Craft exhibit also speaks to debates concerning the geographies of the ship and the ship within geography. The ship has been argued as being a scientific instrument in its own right, shaping scientific discoveries and the mapping of the world rather than just being the transport for scientific and exploration endeavours. The small boats of coastlines and inland waterways represented by the Science Museum models may not directly reflect this ‘scientific instrument’ role of the bigger ships. However the shapes and designs of the models taken from the craftsmanship of regional boat types presents an institution interested in the science behind the building of water transport inclusive of vernacular technologies as well as more complex marine engineered oceanic vessels giving in a sense contesting version of modernity (Conekin, Mort and Waters, 1999, 20).

Yet there is a theme which encompasses all four bodies of literature: knowledge. As this chapter has shown knowledge has been perceived in many forms most notably as the commodity through which museums operate. But the practices of knowledge production are also visible in the various sites and places in which science is perceived; not only at a local, regional and national level but also through geography’s interaction with the sea and ships.

Ultimately, as models and nautical dioramic scenes have not yet featured prominently within academic circles of maritime research, this thesis will show that in the most

severe reductions in scale physically and theoretically, come new considerations of the ship and boats through the models. I will therefore argue that the British Small Craft collections of the Science Museum not only speak toward a new aspect of the historical geographies of science and geographical knowledge but in some small way support the notion of a new historical geography – one that focuses on the iconographic, vernacular and imaginary scapes of model boats, ships and dioramic museum displays.

## Chapter 3 – “The threads that make up the warp and weft of my canvas”: a Methodology

Taken from the last line of the preface of Edgar J March’s 1952 volume *Sailing Drifters*, the above quotation “the threads that make up the warp and weft of my canvas” hints towards the purpose of this section of the thesis (March, 1952, ix). This chapter will explain the methodological approaches used to trace the history of modelled small craft at the Science Museum through its archival documentation. In doing so it will describe and break down the categorization of sources identified, how they were used and what this meant for having a better understanding of the model boat collections and their displays at the institution. Furthermore by studying the nature of the Science Museum’s archive, it will speak to wider academic debates concerning ‘the archive’ as a concept from an institutional context. Thus, this chapter has two objectives: firstly to discuss the background of the Science Museum’s archive covering the museum policies involved and the nature of the archive in the way it was shaped and regulated and secondly to explain the contents of the archive and the various file types that helped shape my research.

While based at the institution I also interacted with curators and other staff giving me a better understanding of the museum’s heritage beyond the historical documentation. The consequent subsidiary ethnographic experience of researching at the national museum enabled also for a clearer idea of the institution’s future and planned changes alongside its past. Although historic in focus the research shares some observations with Sharon MacDonald’s 2002 contemporary work *Behind the Scenes at the Science Museum* in the pursuit of the museum’s shifting relationship with science and its presentation to the public. The Shipping Gallery of the 1960s and MacDonald’s discussion of the 1989 Food for Thought temporary exhibition share the museum’s long lasting challenges with presenting science. Yet as argued by MacDonald the changes made within the museum historically and contemporarily speak “not only about visions of science and of the Museum’s role, it was also about professional identities, about relations between staff..., about relationship between

the collections and the public, and between the past, the present and the future” (MacDonald, 2002, 60).

The doctoral project has at its core methodology the investigation of sources held in the Science Museum’s basement Documentation Centre. This Centre was opened by the Director Neil Cossons on 4<sup>th</sup> June 1994 and was the result of a review of the collection management of objects and documentation at the museum (Boon, 2010).<sup>1</sup> Since then it has housed all the museum’s records of 150 years including administration documents, object records, museum annual reports, internal/external correspondence and building plans – amounting to 478,500 records on the museum’s collections database MIMSY XG.<sup>2</sup> This has helped curators, external researchers and public enquiries in learning more about the institution and its collections. However in the institution’s long history its documentation along with its staff and exhibitions “had to conform to the Civil Service’s standards” while being governed by the Board of Education (Morris, 2010, 5). The museum and its censored paper records, therefore, reflect a role which MacDonald describes as an “instrument of liberal government” alongside its broader concerns towards “an expression of an object-based epistemology...[to] changing ideas in science” (MacDonald, 2002, 29).

The documentation held within the Centre can be divided into two parts: the museum registry of objects and later the Z-Archive (administrative records of the history of the museum). With the bureaucracy limitations of the civil service of the Board of Education framing the records of the institution from 1851 until 1984, official emphasis was placed on the items within the South Kensington Museum and consequent Science Museum’s collections – known as the museum registry (Records Management, November 2004, 1). Little importance was given officially to the history of the museum itself and it is only recently that the Science Museum published its own institutional historical perspectives volume *Science for the Nation* in 2010. With this

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<sup>1</sup> SMD Z-233/3 Pg 4 Science Museum Newsletters, a newsletter on the opening the Science Museum’s Documentation Centre, June 1994

<sup>2</sup> Documentation Page, Science Museum Website  
[http://www.sciencemuseum.org.uk/about\\_us/collections/documentation.aspx](http://www.sciencemuseum.org.uk/about_us/collections/documentation.aspx) 2013, accessed 31st July 2013

bureaucratic civil service past then, the documentation of the institution can be therefore viewed as both a systematic and ordered space but also a disjointed environment full of omissions, gaps and filing errors. Yet as Gagen, Lorimer and Vasudevan argue, this is common place within archival research, with: “partiality [being] a primary feature in the practising of research on aspects of the past. Either through the (un)availability of sources, the negotiation of absent, powerful or powerless voices in the archive, or the immaterial qualities of certain kinds of historical source” (Gagen, Lorimer and Vasudevan, 2007, 4).

Steedman supports this too suggesting that: “the Archive is made from selected and consciously chosen documentation from the past and from the mad fragmentations that no one intended to preserve and that just ended up there” (Steedman, 1998, (note 4), 67 in Ashmore, Craggs and Neate, 2012, 82). As Ashmore et al explain further this observation indicates:

The need to consider both things intentionally ‘preserved,’ as is often the case in ‘official’ collections, and the accumulations of materials gathered together in other spaces, where accumulations occur with and without intent, and whose broader value might be considered archival (Ashmore, Craggs and Neate, 2012, 82).

In conjunction with this Ashmore et al discussion of the fragmentary nature of the ‘archive’, Lorimer and Philo raise the question: “can it be assumed that a disorderly archive necessarily gives rise to a disorderly account simply mirroring that disorder ‘at source’?” (Lorimer and Philo, 2009, 229) In answer to this they write:

The researcher might yet find ways to tell coherent tales on the basis of such a partial archive, perhaps detecting strange consistencies in, say, things said and not said, images shown and not shown, which end up demanding a fresh look at their more orderly archival cousins (Lorimer and Philo, 2009, 229).

Such a statement has been very apparent in this project, chasing specific avenues of enquiries and ‘detecting strange consistencies’ which shed new light on the ordered archival material I had already consulted. Despite its limitations then, as a space of scientific knowledge, the Science Museum’s Documentation Centre and its contents are an important source for the better understanding of an institution which promotes

science, technology and industry. Consequently the Science Museum Documentation Centre could be defined as a 'classical' archive as explained by Withers:

The 'classical' archive is a situated expression of political and intellectual authority, a centre of interpretation and open to interpretation as a constructive site of knowledge's making. The archive is sustained by classificatory practices and by criteria of credibility that underpin the knowledge that is made there and which, when enacted, travels beyond its filing cabinets and walls (Withers, 2002, 305).

In the Science Museum's case this intellectual authority equates to scientific subjects illustrated by its' collections such as chemistry, physics, transport and astronomy. Likewise the archive is kept in order to promote and preserve this knowledge with specific store rooms with movable shelving units designated for particular file types.

With this in mind, my use of these archives mainly concerned the acquisition of the models at the museum between 1865 and 1980, the exhibitions featuring those models and the establishment of the 1960s displays of British Small Craft. As Alberti explains: "the collection thereby includes not only things in their material form, but also the legacy of their acquisition route, and of the people involved" (Alberti, 2009, 91). Thus the acquisitional routes taken by the hundred model boat objects to reach the museum during these periods, was of crucial importance from the beginning of the project.

During the eleven month period of being permanently based at the Science Museum in my second year, I had unlimited access to the broad range of archival material. The archival documentation was also supported by the museum's own library and complemented by external libraries and archives in London.

With each file, internal or external of the Science Museum, came the need to record relevant information and, in effect, create my own 'archive' (Gagen, Lorimer and Vasudevan, 2007). For each document or file consulted the process was the same: after an initial study of the material I made detailed handwritten notes on any relevant information. My judgements as to which pieces of information were important and those that weren't were based on whether the material related to a specific individual

model maker, a museum label, museum exhibitions or the broader history of the museum. The notes included the file name, file number, the specific document title or context, page number, the author, the date and references to important quotes. These notes were followed by making photocopies of each document page consulted considered important and were also accompanied with photographs. Photographs and photocopies were colour coordinated in my notes linking the archival material to my analysis and making it easier in terms of later referral. Correctly labelled, my handwritten notes and the photocopies for each document were placed in specifically assigned folders or box files. In turn each folder and box file was labelled according to which person, boat model or event it was attributed to along with a reference to the file type, the original source and its file number. In this systematic manner the beginnings of an overview of the research and the empirical narrative was realized.

In addition to the notes and photocopies during the collation of empirical material, an Excel spreadsheet was created containing information regarding each boat model studied. With each column auto-filtered this allowed for easy analysis and cross-referencing. The columns were labelled accordingly: year of acquisition; inventory number; scale of model; boat model type; attributed showcase or display; technical file number; nominal file number; name of model owner or presenter; model maker; attributed institution; nature of acquisition (e.g. bequest, loan, gift, purchase); model location within each showcase or display; nature of display; associated diorama artists; attributed museum staff; and lastly any additional notes.

My extensive collation of archival material, in hard copy and electronic forms, made it easier long-term to refer back to particular models, individuals or events while writing the thesis. The creation of my own 'archive' allowed me, as the researcher, to trace the full chronological story and crucially see where gaps and anomalies arose (Lorimer and Philo, 2009). It was with this detailed but holistic approach that new avenues of research were carried out, visiting other library and archive institutions while at the same time returning to specific files within the Science Museum's archives by way of clarification.

With this method and process in mind, there are several main categories of material and media that were consulted in this research which are explained further below:

### 1. The models and displays

In order to understand the collections, the displays and what the Science Museum was attempting to achieve in the subjects of marine engineering, boats and ships during 19<sup>th</sup> and 20<sup>th</sup> Centuries, a closer look at individual objects was needed. Relating the documentation of a particular model to the model itself and also being able to picture where it sits in a display case and in the exhibit as a whole was extremely important in this research. Like every other object that has entered the museum collections since the institution's origins in 1857, each model is assigned an inventory number which is laid out as follows:

Year of accession – followed by the serial number

Take the Brixham Trawler model by way of an example; the model's inventory number is 1935-155. This means that it was the 155<sup>th</sup> item to enter the museum's collections as a whole during the year 1935. In order to identify each model the inventory number is put on every museum label. The museum labels themselves proved useful in the research as they not only gave the technical information for a particular boat type in model form but in some cases they differed in text from those kept in the technical files. They also helped when a technical file did not exist for a specific model. The technical information generally gave a brief history of the vessel explaining its features, design, functions and any variations. Unless it was unknown and therefore not acknowledged, in most cases the label also showed who the original owner/presenter was and the scale of the model compared to a full sized original vessel.

The displays themselves were also interesting. Examining each one gave an idea of the dioramic methods used, seeing the modelled scenes as an original 1960s visitor would have seen them and also crucially gave insight into what O'Dea was hoping to achieve with this display and gallery. Furthermore visualising the exhibition space supported the descriptions and discussions found within the Documentation Centre files. During the dismantling of the showcases with the Shipping Gallery removal in the summer of



2012 it was possible to clearly see from all angles how the dioramic showcases had been manufactured and the materials that had been used.

As the displays varied in size, style and composition close attention was given to their designs and layout. The displays which contained modelled scenes and partial scenes were divided between three categories: Complete dioramas, Modelled foreground landscape scenes and Painted backdrops.<sup>3</sup> The complete dioramas were displays which made a complete three dimensional scene out of part or the entire space of each showcase – this incorporated a modelled foreground scene and painted and modelled backdrop which blended into each other to create the desired perspective and distance effects. The modelled foreground landscape scenes depict modelled foreground scenes with no backdrop usually for a specific boat model for a particular corner of the showcase. Some other showcases however did not contain modelled foregrounds consisting only of the model(s) set in front of a painted backdrop.

Yet the research went beyond this simple categorization of the dioramas. The displays as visual objects were embedded in a much broader theoretical debate concerning iconography, symbolism, imagery and visual methodologies. Turning to Gillian Rose she argues that there are numerous examples of visual representation in the modern western world. In fact for her and many other scholars “the visual is central to the cultural construction of social life in contemporary Western societies” (Rose, 2007, 2). There are numerous visual technologies which surround us every day in the western world – from TV, to film, to paintings, to photography. “All these different sorts of technologies and images” Rose argues “offer views of the world; they render the world in visual terms” (2007, 2). However these images are never impartial viewpoints on the world. As Rose puts it these images are “never innocent” or “transparent windows into the world” (2007, 2). Instead they “interpret the world; they display it in very particular ways.”

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<sup>3</sup> As opposed to the showcases which just displayed the models with minimal visual accompaniments

It is within Rose's work that we get a better sense of what she describes as the visual and examples of visual cultures. Visuality she explains "refers to the ways in which both what is seen and how it is seen are culturally constructed"; thus visual culture "refers to the plethora of ways in which the visual is part of social life" (Rose, 2007, 2; 4). Corresponding to the many examples of the visual are the numerous interpretations of images through various methods. Rose concludes that there are three sites at which the meanings of an image can be deduced and thus work towards a framework of "approaching the almost equally diverse range of methods...used" (2007, 13). The three sites are: the site of production, the site of the image itself and the site of where it is seen by audiences. Within each of these three sites Rose explains also that there are three aspects which "can contribute to a critical understanding of images": the technological, the compositional and the social (2007, 13). The technological refers to any apparatus used to enhance natural vision; the compositional "refers to the specific material qualities of an image or visual object" and the social refers to the many economic, social and political practices which have influenced the image in how it is made, seen and used (2007, 13). It was through this methodological framework devised by Rose that I was able to analyse the dioramic displays in more depth. Close attention was given to the production of the displays, what they depicted, where they were placed within the gallery and how they were viewed by the public. The three sub aspects – the technological merits of the displays, their composition and the social and economic period in which the displays were made and viewed were also considered. Therefore analysis of the displays combined the visual of the displays themselves with the textual of the archives giving a better understanding of the geographical knowledge at play. As argued by Daniels, DeLyser, Entrikin and Richardson the study of the Science Museum small craft displays provided "a mixed medium of image and text, designed for telling as well as showing, plotting time as well as space, including making and remaking the terrain of cultural memory" (2011, xxvii).

However the imagery and visuality of these museum displays could also be considered from a geographical perspective seeing that they depict British modelled landscape

and coastal scenes. As suggested by Denis Cosgrove “a landscape is a cultural image, a pictorial way of representing, structuring or symbolising surroundings” (1988, 1). Echoing Rose’s comments above about the range of examples of the visual, Cosgrove explains that landscapes are not intangible but are also reflected in many material forms and on many surfaces “ – in paint on canvas, in writing on paper, in earth, stone, water and vegetation on the ground” (1998, 1). Therefore in order to understand built landscapes like these museum dioramas “it is usually necessary to understand written and verbal representation of it, not as ‘illustrations’, images standing outside it, but as constituent images of its meaning or meanings” (1988, 1). From a methodological angle studying these dioramas as miniaturised landscapes opens up opportunities for further meanings, “depositing yet another layer of cultural representation” on them and engaging in notions of iconography – the historic examination of symbolic imagery (1988, 1).

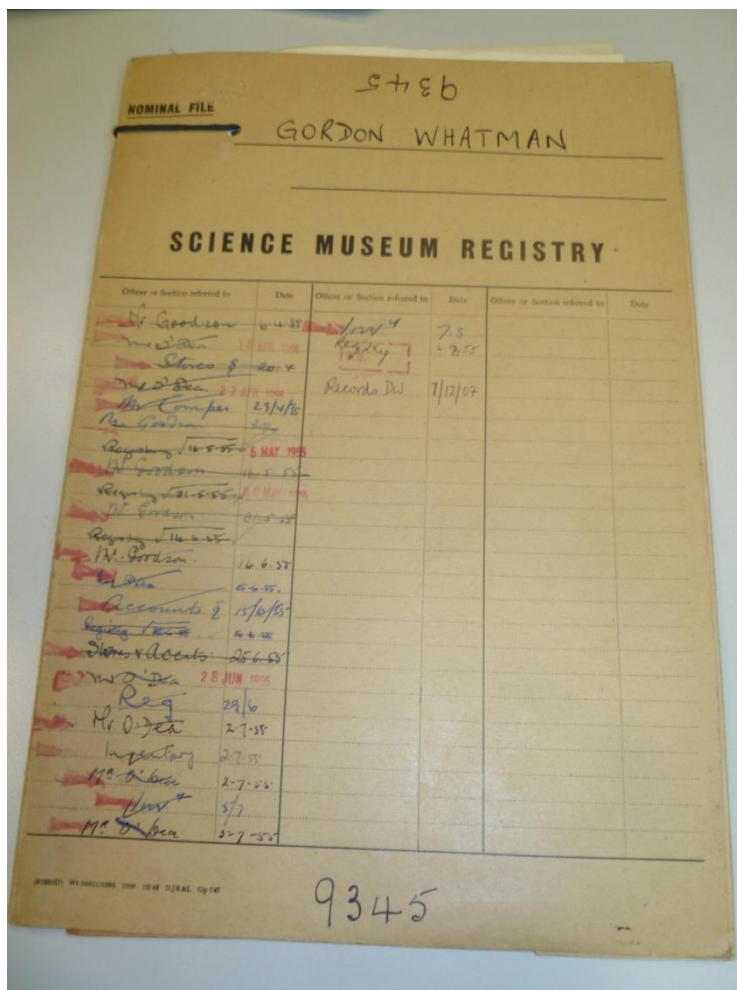
As concluded by Sturken and Cartwright, these British coastal museum displays as visual iconographic representations of landscapes were viewed as images that contained “layers of meaning that include[d] their formal aspects, their cultural and socio-historical references, the ways they ma[d]e reference to the images that precede[d] and surround[ed] them, and the contexts in which they [we]re displayed” (Sturken and Cartwright, 2009, 42).

## 2. Technical Files

Each of the models, along with all other objects in the museum’s collections, has associated with it a technical file. This gives technical information about the model and the museum’s understanding of that type of craft’s significance in the historical narrative. These are usually in the form of drafts and copies of the labels for each model. A technical file is generally recognised by ‘T/’ in front of the inventory number of a particular object. However not all the models had a technical file; either they never existed or they had been lost.

### 3. Nominal Files

The Nominal Files contain the correspondence between the museum and individuals or companies discussing objects donated, purchased or loaned to the museum and background information on scientific and technological subjects (**Fig. 2**). It is through these letters of correspondence that the motivations of both the museum staff and the individual or company donor become apparent, tracing the acquisitional narrative of every object in the museum's collections. (It is important to note that more often than not there is overlap between the technical and nominal files, with some technical information finding its way into a Nominal File, suggesting that the filing system is structured but in some places only loosely). In many cases, the relationships between museum officers and boat model-makers or donors were strong, extended over long periods and were very clearly expressed within the correspondence. A nominal file is recorded as a three or four digit number and can be followed by part numbers indicated by a '/' signifying an exact document page. Not all of the models had nominal files particularly the earliest models pre 1910 as they followed the museum's earliest years of Victorian documentation system amounting to one line ledger entries.



**Figure 2** A photo showing an example of a Nominal File. This particular file is for the diorama artist Gordon Whatman hired by the museum to create the displays for the Sailing Ships Gallery. Notice all the signatures written on the front including O'Dea's – this system was used to sign out each file. (James Fenner, Sept 2011).

#### 4. The Z-Archive

The Z-Archive – the Science Museum's own institutional history archive – contains extensive material regarding the origins, development, range of remit and politics of the institution and its museum collections. This includes: administrative documents; internal memos; Staff Lists; Annual Reports; Building Plans; Gallery Schemes; photographs. For the boat model collections in particular this consists of: correspondence files on the exhibition of the British Fishing Boats Exhibition of 1936; significant documentary evidence of the development of display plans in the Science Museum's Centre Block (including the 1960s Shipping Gallery); ledger registers of ship models owned or borrowed by the Science Museum in its early period; additional correspondence with potential donors or lenders of objects (presenting a historical narrative of desired acquisitions as well as that of reality); detailed plans for dispersal and display of the collection during the Second World War; and substantial archives on

the advancement of museological display techniques at the Science Museum, which sheds light on the British Small Craft collections and later 1960s displays.

#### 5. Ed 79/ Files

These are files which were part of the Z-Archive but were separated as the Z-Archive index explains: “To the listing is added the list of ED 79 files which were sent to the P.R.O. [Public Records Office] in the 1970s but which were returned in 1988” (Sharp and Taylor, 2004, 1). These files covered correspondence with other museums (national and overseas) but also highlighted the schemes of developments for particular collections including the Small Craft models, special exhibitions and annual reports.

#### 6. Curator notes and clippings

Although unexplored until recently, this substantial collection of notes, newspaper clippings, photographs and published articles gathered by past curators on British Small Craft and Shipping are held in the Documentation Centre. Consisting of 13 (now split into 14) box files, the notes, clippings etc. were kept in the gallery in the store rooms behind the cases on the mezzanine level (**Fig. 3**). Roughly divided into geographical regions of the British Isles, the box files also hold cuttings on shipping in general, inland water craft and vessels from other countries. The majority of them relate to the British Small Craft Exhibit specifically assigning particular boats to rough geographical regional areas of the country via the points on a compass.

The full list is as follows:

- Small Craft – England – the East Coast (Northumberland to the Wash)
- Small Craft – England – the East Coast (Thames Estuary to Cromer)
- Small Craft – England – the West Coast
- Small Craft – England – the South Coast
- Small Craft – England – Inland Water Transport
- Small Craft – Scotland and Ireland
- Small Craft – Europe (now split into two box files)

- Barges, Yachts, Trawlers etc.
- British Fishing Boats
- Canals and waterways and Sealink
- Misc. information regarding sailing and steam, ships, small craft etc.
- Nineteenth century small craft – Exploration and whaling ships
- Correspondence of the late Mr Laird Clowes

These box files provide a unique individual curated history of British small craft and the rest of the shipping model collections. In particular it was within one of these thirteen box files that I was able to find the photographs of Hastings Beach that inspired the Jenny Clements/Gordon Whatman Hastings dioramic display backdrop. Also in another separate box labelled ‘Scotland and Ireland’, I discovered the painted mock-up by Dunstan Mortimer for the Ireland display. The box files also provide insight into the cultural settings and identities in which these models and their displays were placed. Furthermore the ‘disorderly’ nature of these box files, without any definite stamp of a specific curator or any clear order or guidance on their contents, means that they contrast vividly with the systematic categorization or ‘orderliness’ of the Z Archive and ED 79/ files (Lorimer and Philo, 2009, 227/8).



**Figure 3** A photo showing a newspaper cutting from the Times 17<sup>th</sup> March 1931 from the third box file of curator’s notes and clippings (The East Coast – the Thames Estuary to Cromer). As well as photos, postcards, pamphlets, booklets and projector slides, newspaper cuttings are typical items found in these box files. (James Fenner, April 2011).

## 7. The Huxley Collection and the Science Museum Library Imperial College Central Library

Both the Huxley Special Collection and the Science Museum's library housed in Imperial College's Central Library, have been extremely valuable sources in tracing the three periods of the small craft collections. On the third floor of the library is the Science Museum's library. Amongst its collections of books and archive material were volumes relating to shipping and small boats, exhibition catalogues and institutional histories written by current and previous members of staff. In addition to this, the more fragile historical documents were held in a special locked room. This contained bound volumes of old newspapers, journals and magazines which included *The Illustrated London News*.

In the Central Library of Imperial College were volumes which were extremely useful in finding out more about the earliest period of my study namely the late 19<sup>th</sup> Century episode in which the International Fishing Exhibition of 1883 occurred. Within the Huxley Special Collections are stored the fourteen volumes of the International Fisheries Exhibition published by William Clowes and Sons Ltd. – the official publishers and printers for the six months exhibition. These volumes proved essential in gauging a better understanding of the exhibition, scientific arguments made at the conferences, influential people involved and recognising some of the oldest models in the small craft collections on display and entering competitions. These volumes consist of three handbooks devoted to the exhibition itself, four following the conferences proceedings, four volumes presenting the winning essays of the conferences on all aspects of fishing, a concluding official catalogue and jury awards (for models and exhibition displays) volume and an index book.

## 8. MIMSY XG Computer Database

Alongside the index and hard copy lists of files in the Documentation Centre, is the museum's computer collections database known as MIMSY XG. As this database system has numerous functions, fields of entry and specific methods of keying in information, training was required in order to be proficient in the use of the software.



For the staff, curators and more permanent researchers it enables the user to search for numerous files, individuals and objects tracing the museum's collections acquisitional histories. For the purposes of my research specifically it was a very useful tool for cross referencing models through their inventory numbers and also the donors or presenters through their Nominal files, allowing me to see the nature of acquisition of a particular model (i.e. lent, gifted or purchased), any additional background information and whether the same individual had donated to the museum before. Yet in places gaps and errors were apparent and so the process of tracing the acquisitional narrative of these models enabled these electronic records to be revised and corrected.

#### 9. Blythe House

In addition to the Science Museum's large objects store at Wroughton outside Swindon, the museum also has a facility in London, in an old 1930s Savings Bank known as Blythe House in Kensington Olympia. Here the smaller objects not on display are stored including the ship and boat models removed from the closed Shipping Gallery. In addition to this the building also houses the collections of the V&A and British Museum. But Blythe House is also the home to the Science Museum's Photograph Studio. In the huge vaults of the bank's basement are stored the 100,000 images and negatives of the museum's history which are methodically being digitized. It was through contacts there that I was able to find some original images of the Shipping Gallery and some of the models during the 1950s and 1960s.

#### 10. Later additions to the Curator files

In addition to all of the sources mentioned above there were also miscellaneous document items that were given to me by the curator Jane Insley. As part of an office move for the curators and collections team during my time at the museum, Insley found some archive documents while emptying her old office. By way of example, one of these was the script for a presentation given by Bathe at a conference in the early 1960s on the new Sailing Ships Gallery at the Science Museum while another script appears to be a radio audio guided tour, used for the telesonic Iorgnette hand-held receiver and earphone, of the nearly complete gallery around the same period –

possibly read aloud by O’Dea. Again these helped picture the events surrounding the development and opening of the Gallery.

### 11. Shipping Gallery Removal

During the summer of 2012, the decant project began in the Shipping Gallery with numerous displays dismantled and individual objects recorded and packed away. I was lucky enough to be part of this process, being attached to the Conservation team. Although it was originally intended that I handle and remove the small craft models from their displays, this was not possible as other areas of the gallery needed attention first. Despite this, I was able to understand the make-up and breadth of content of the gallery better but also see hidden aspects of the displays. As well as holding objects, weighing them and photographing them, I was given access to the storage rooms on the mezzanine level enabling me to see the displays from the back. This was particularly useful when seeing the three hidden diorama sections of the Portland Lerret rotating turntable display – aspects of the exhibit that were no longer on view. Furthermore additional documentation was found in the two store rooms on the mezzanine level. This included a scrap book which had notes and postcards on boat types and the models of Foreign and British Small Craft.

### External Sources

Although the Science Museum material is the core archival documentation for this research, there were some areas where additional information was needed to enrich the small craft narrative and strengthen the material at the museum.

The main three external sources were:

#### 1. SNR Archive, Caird Library, National Maritime Museum

Currently held on loan by the National Maritime Museum Greenwich, the Caird Library at the museum was visited to study the SNR’s annual reports and document’s surrounding a sub-committee tasked with gathering information on all forms of small craft. Consulting these files also shed more light on the work of the Society and what they did to help the museum in its hunt for information on small craft and also for the later 1936 Exhibition.

## 2. BBC Written Archive Centre, Caversham Park, Reading

Amongst the annual reports for the Science Museum an entry for the small craft collections in the report for the year 1952 referred to a couple of the models being used in some children's programmes. This prompted a visit to the BBC Written Archive Centre in Reading where they had one file devoted to the programmes. Although there was no footage of the programmes (as they had been filmed live) the few documents in the file and references books at the Centre gave a better explanation of the models used in the programmes, where it was filmed and other children's programmes that were on at that time.

## 3. The British Library

In order to follow the collections and indeed the exhibitions they featured in at the Science Museum through the media, the Radio Times collections for the 1930s and 1960s were consulted at the British Library. The micro film collections also were accessed in order to see Radio Times issues from 1936 around the time of the British Fishing Boats Exhibition. The library's volumes of the Museums Association Museums Journal were also studied to see if there were any links with the Science Museum's boat models.

Additional briefer visits were made to the following institutions:

- The Royal Institute of British Architects Library, Portland Place

The RIBA library was used to find out more about Welbury Kendall ARIBA, the architect from the Ministry of Works.

- The National Archives, Kew and the National Art Library, Victoria and Albert Museum

The National Archives was visited to trace the Science Museum's East and Centre Blocks alongside finding out more about the latter block's Ministry of Works' architect Welbury Kendall. This included Ministry of Work papers and building plans of the Science Museum's new buildings. The National Art Library, held within the Victoria and Albert Museum, was consulted to find any references to the dioramas artists through their online catalogue.

- London Transport Museum, Covent Garden

It was also discovered that there were original and digital copies of posters made for the Science Museum for their temporary exhibitions during the 1930s and were owned by the LTM. Predominantly made by William Beath for London Transport, one of these posters was for the 1936 British Fishing Exhibition. Several others represented other exhibitions including O’Dea’s first exhibition Electric Illumination of 1936/7.

### Conclusion

This chapter has shown the many ‘threads’ of fragmented archival material from both the Science Museum and beyond, which I have studied, collected and woven together to make my museum and small craft ‘canvas’ narrative (March, 1952, ix). The 11 months at the Science Museum, sorting through its archival material and researching external sources in London enabled me to trace the biographical story of these collections and the cultural settings in which they were situated from the mid/late 19<sup>th</sup> Century to the present. The numerous research avenues acted upon through many sources speaks to Ashmore, Craggs and Neate’s argument that: “In sorting archival materials, things prompt tangents, and allow stories to be told, opening up old and new significances in and of things” (Ashmore, Craggs and Neate, 2012, 87). Although piecemeal with some areas left unanswered, the fragmented or ‘partiality’ nature of the historical documentation meant that a rich narrative could be compiled from the archival material through photocopies, notes and photos (Gagen, Lorimer and Vasudevan, 2007). This combination of ‘orderliness’ and ‘disorderliness’ of the archive, as proposed by Lorimer and Philo, helped detect the consistencies in the research matter, hint at further external research avenues and question the reliability of those perceived structurally ordered files already consulted. Yet the disjointedness of the material was also a reflection of the nature of the Science Museum’s Documentation Centre as a national museum’s institutional archive; a carefully constructed record of the museum’s history – one which retained some events, performances and discourses but omitted others. Referring back to Gagen at al, even with those written documents, articles, notes and papers consulted the hidden nuances or traces of emotions and ‘non-verbal gestures’ of the individuals involved are missing (Gagen, Lorimer and Vasudevan, 2007, 4/5).

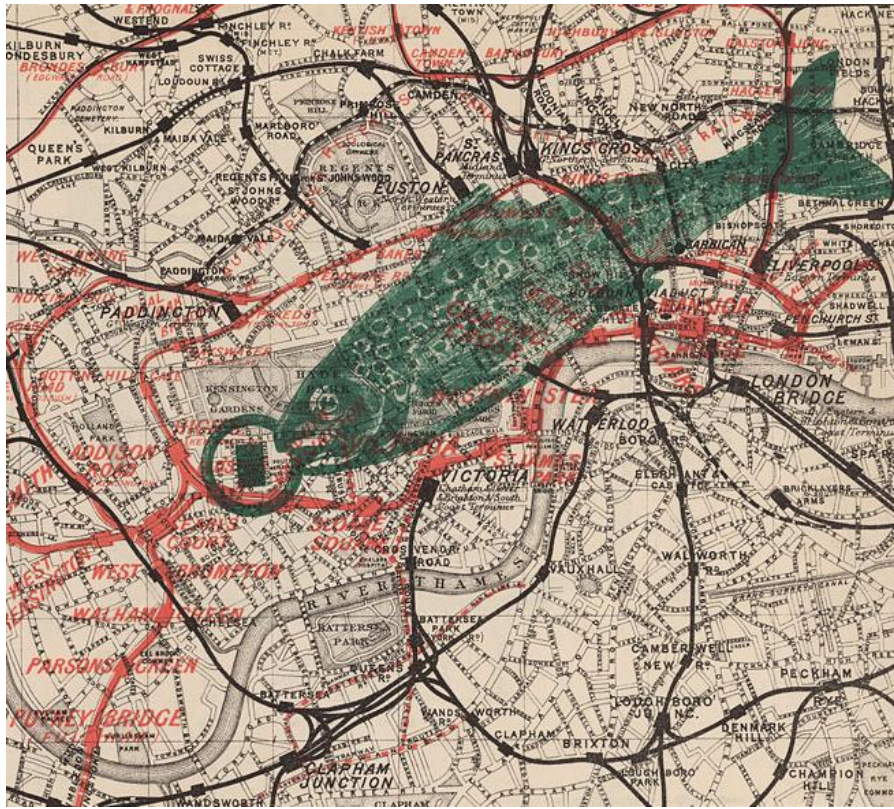
Therefore as an institutional archive, the Science Museum's Documentation Centre – with its mixture of dominant voices and hidden nuances of 'non-verbal gestures' – is a repository of scientific 'textual artefacts' creating a space of authority and power through the discourses of science based exhibitions and objects (Gagen, Lorimer and Vasudevan, 2007, 6). Yet although this may be apparent through its seamlessly working filing system and general orderliness, the archive at a deeper level reveals inconsistencies, omissions and anomalies which hints more towards a 'disorderliness' of the archive files – the culmination of censoring and restrictions impressed by the Civil Service's past bureaucratic governance over the museum.

In the end the link between the museum's archive and my own research was not just a physical transference and reordering of material to and from the museum but was also an intangible effort to collect specific individual and institutional memories. Returning to Withers he surmises that: "the archive as a conscious articulation of others' memories – 'unlocking' *their* archive – is always *in formation*, brought into being through our intervention" (Withers, 2002, 309).

Yet the research did not just engage with the archival material of the Documentation Centre. Talking with curators and other museum staff everyday about my research during the placement enabled me to have an embedded ethnographic understanding of the institution and its history. Although not contemporary in scope, the research shared aspects of Sharon MacDonald's study aim of understanding "the construction of science" in the Science Museum's past exhibitions "exploring the agendas...involved in creating science for the public" with the marine collections in the 1930s and 1960s (MacDonald, 2002, 3).

With the 'threads' explained and collected, let us see how these archival sources informed the 150 year narrative of shipping and small model boat collections at the museum in the empirical chapters which follow. The story begins in the late 19<sup>th</sup> century with the birth of the Science Museum as a separate institution from the V&A and the opening of the International Fisheries Exhibition in 1883.

## Chapter 4 – ‘Beneath a hive of glass’: modelled fishing craft in the collections of the South Kensington Museum 1880-1914



**Figure 4** Detail of a map of London showing the location of the International Fisheries Exhibition at South Kensington, April 1883 (Source: Peter Jackson Collection File number XJ120648

<http://www.lookandlearn.com/index.php>, accessed 12<sup>th</sup> September 2013)

In this chapter the origins of both the museum and what would later be known as the ‘Small Craft’ collections will be illustrated through the narrative lens of the late Victorian and the Edwardian periods. The chapter focuses on the oldest models of the collection, following the sporadic nature of some of the accessioned models and culminating in the increases of objects in the collection after the International Fisheries Exhibition of 1883 (**Fig. 4**).<sup>4</sup> It combines museum practices of collection and display with Victorian attitudes towards the British fishing industry, of state intervention, and concerns over food supplies with ever growing urban populations and the safety of fishermen at sea.

<sup>4</sup> Peter (Charles Geoffrey) Jackson (1922-2003) was an artist and illustrator for the Children’s Illustrated Magazine *Look and Learn* (1962-82) and this image of the International Fisheries Exhibition Map 1883 was part of his collection of maps, prints and artefacts recording all periods of London’s history (<http://www.lookandlearn.com/history/illustrators.php>, accessed 12<sup>th</sup> September 2013).

However, this chapter is not merely an introductory narrative to the later 1936 and 1963 British Fishing Boat model exhibitions of the Science Museum. Rather it is a much more complex independent story concerning museum collecting, the origins and changes of meanings within collections and display coupled with a broader theme of evolutionary technological and piscicultural sciences linking fishing cultures to the fishing industry and ultimately to boats. It illustrates how the boat models of 19<sup>th</sup> Century exhibits differed greatly in motivation and meaning from those of the later 20<sup>th</sup> century; being attributed to a broader subject of fish and fisheries rather than focusing on the technical information surrounding specific craft.

To put the chapter in a broader institutional context, the Science Museum can trace its origins back to the Great Exhibition of 1851. After this point the collections became part of the South Kensington Museum (Bud, 2010, 15/16). This was understandable as South Kensington, by the 1870s and 1880s, had become an epicentre of scientific endeavour, learning and education with notable figures such as T.H. Huxley lecturing and teaching at the Royal College of Science (Forgan and Gooday, 1996). But by the 1880s at the South Kensington Museum, it had become more apparent that the title was a misleading heading for the institution. As Robert Bud explains a “new institution was nonetheless slowly evolving in which the ‘Science’ and ‘Art’ collections were becoming increasingly intellectually, institutionally and physically separate” (Bud, 2010, 24). It was not until the turn of the century, in 1909, that the Science Museum was separated from the V&A.

In respect to the Fisheries exhibition I would like to emphasise from the start that the models gathered were displayed on an individual basis by different individual parties and so their accessioning into the collections was a product of the exhibition rather than a precursor. Therefore the exhibition had a character of commerce and trade on the international stage and was not an event displaying the South Kensington Museum’s collections. “For the Victorian mind” Greenhalgh argues, “the real beauty of trade as a source both of civilization in a wide sense and the exhibitions in an immediate one, was that it allowed the mystical and exotic to freely mingle with the practical and material” (Greenhalgh, 1988, 23). However, as it will be later explained,

trade and commerce were not the only motivations and anticipated purposes of the Fisheries Exhibition or indeed other Fisheries Exhibitions of the period.

#### **4.1 The earliest coastal and fishing vessel models of the South Kensington Museum (the later Science Museum)**

The earliest models of what would eventually be known as the later British Small Craft collections, and before the International Fisheries Exhibition, are below as follows:

<b>(Inventory number) 1865-41</b> - Launch for Landing Troops c.1800
<b>Inv. 1869-20</b> - Half block model of a Yorkshire "Coble" W.Y. 15
<b>Inv. 1869-28</b> - Half block model of a Whitby Fishing Boat with Coble on deck
<b>Inv. 1882-32</b> - Steam Drifter

As has been previously mentioned in the methodology chapter, due to the fact that these models and those following the International Fisheries Exhibition of 1883 have ledger entries, little correspondence exists in relation to what would be found usually in the nominal files. Therefore what is known about these models before and after 1883 is found just through the technical files. However even with the limitations of the archival material in existence it is clear that these models and those post-1883 were a gradual build up of the collections, sporadically being collated under the premise of the museum's technological and scientific promotional remit. It is only in the later post-World War II exhibition of the Shipping Gallery that their value as part of a growing collection of small craft models was fully realized.

The first of the above pre-1883 models was the 1800 military launch for landing troops **(Fig. 5)**:





**Figure 5** A photograph of the Launch for Landing Troops c.1800 model displayed within its 1963 showcase of military Landing Craft on the mezzanine level in the Shipping Gallery. It also is the oldest model within the British Small Craft collections. (Inventory No.: 1865-41) Scale 1:24. (© Science Museum / SSPL)

As the model's museum label reads, this type of launch was designed in England during the Napoleonic Wars for landing troops "and also for use as gunboats in shallow waters."<sup>5</sup> It continues turning to the model directly:

The workmanship of the model marks it as dating from the early years of the nineteenth century. Its wide beam gives it great capacity, while the shallow draught, combined with the broad "swim" bow, renders it suitable for beaching.<sup>6</sup>

Four years after this accessioned object, two models (Inventory numbers 1869-20<sup>7</sup> and 1869-28) joined it in the growing ship collections, in this case representing the Yorkshire Coble (**Fig. 6**). This boat type, made famous by the Victorian heroine Grace Darling (the original coble used in the rescue of survivors of the *SS Forfarshire* in 1838

<sup>5</sup> SMD T/1865-41 Extract from the Science Museum label for the Launch for Landing Troops (c.1800) model.

<sup>6</sup> Ibid.

<sup>7</sup> SMD T/1869-28 As the technical file was created to incorporate both models of Yorkshire Cobles no technical file exists for 1869-20 and there are no nominal files for both models on the lender Mr. Turnbull.

was on display in the International Fisheries Exhibition of 1883 see **Fig. 17**), was “designed for launching off beaches in the face of breaking seas and they are one of the most distinctive types of craft to be found in the world. They are launched bow first and poled through the breakers before the rudder is shipped and the mast stepped.”<sup>8</sup> Both of these models were loaned to the museum by T. Turnbull in 1869 and as the label explained the technical features, Cobles were built “of wide oak or larch planks, which give them their typical angular appearance” and although they were fine sea boats “are difficult craft to handle under sail and especially difficult to steer while running.”<sup>9</sup>

Cobles were used:

Mainly for line fishing in the North Sea cod, ling and haddock fisheries where a crew of three men using six lines will handle a total length of nearly two miles of line. They were also used from larger fishing boats for tending long lines and net fishing for bait.<sup>10</sup>

This last line is illustrated further in the foreground model (**Fig. 6**) of the Whitby Fishing boat where the coble is turned upside down on the deck of the larger vessel:

The half model with a coble on deck...represents to a scale of 1:24 a Whitby Fishing Boat of about 1870 and...[were] used for line and herring fishing, they carried nine men, three for each of their two cobles and three for the remaining crew.<sup>11</sup>

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<sup>8</sup> SMD T/1869-28 Extract from the Science Museum label for the Yorkshire Coble..

<sup>9</sup> SMD T/1869-28 Extracts from the Science Museum label for the Yorkshire Coble.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.



**Figure 6** A photograph of the Yorkshire Coble models displayed within its 1963 showcase of English Smacks/Yorkshire Cobles in the Shipping Gallery. Notice that they are half block models with the lower model depicts a coble on the deck of a Whitby Fishing Boat 'WY 15'. (Inventory Nos.: 1869-20 upper model and 1869-28 lower model) Scale 1:12. (© Science Museum / SSPL)

The last model accessioned into the collections before the International Exhibition was the Steam Drifter *Rob Roy* (**Fig. 7**). A loan to the then South Kensington Museum it was presented by the Scottish Boat and Ship builders A.G. Gifford and Co. based in Leith on 3<sup>rd</sup> May 1882 consequently coming from the International Fisheries Exhibition in Edinburgh that same year.<sup>12</sup> As was duly noted in the accession form for the object it was to be delivered to the 'Naval Gallery' where the Keeper wrote that it was "In excellent condition, + nothing similar in section."<sup>13</sup>

<sup>12</sup> SMD T/1882-32 The Steam Drifter *Rob Roy* model's signed original accession form document

<sup>13</sup> Ibid.



**Figure 7** A photograph of the Steam Drifter *Rob Roy* model displayed within its 1963 showcase of Scotland I in the Shipping Gallery. It also is a good example of the combination of sail and steam power within some of the vessels represented in the British Small Craft collections. (Inventory No.: 1882-32)

Scale 1:24. (James Fenner, November 2010).

The model, the museum label reads, was an early example of a: “steam fishing-boat...built at Leith, for line and net fishing”, with the original vessel being built by A.G. Gifford and Co.<sup>14</sup>

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<sup>14</sup> SMD T/1882-32 Extract from the Science Museum label for the Steam Drifter *Rob Roy* model.

## 4.2 Buckland, the South Kensington Museum and his Museum of Economic Fish Culture



**Figure 8** An image of Frank Buckland taken from his biography *Life of Frank Buckland by his Brother-In-Law George C. Bompas* 1885 (<http://ruthkowslowski.files.wordpress.com/2010/02/buckland.jpg>, accessed 20<sup>th</sup> October 2011)

In addition to this earlier life of the institution and its collections there were many external actors that contributed to the collections and public services of the museum. One of these was Frank Buckland (1826-1880), **Fig. 8**, a natural historian and Inspector of Salmon Fisheries for the government who was appointed as a ‘Scientific Referee’ or Scientific expert in Fish Cultures to the South Kensington Museum in May 1865 (Burgess, 1967, 119). It was also around this period that Buckland began “to develop his interest in ‘acclimatisation’ ‘a term which may be said to comprehend the art of discovering animals, beasts, birds, fishes, insects, plants, and other natural products, and utilizing them in places where they were unknown before’” (Lever, 1992, 24).<sup>15</sup> This had stemmed from his many articles within the natural history journals *The Field* and *Land and Water* where a knowledge and passion for what he termed ‘practical natural history’ (**Fig. 9**) had been developed. Thus the short lived introduction and

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<sup>15</sup> Originally quoted from Buckland, 1861, in his paper on the acclimatisation of animals, *Journal of the Society of Arts* 9:19-34

notion of acclimatisation in the UK (influenced by the French *Société*) had a dramatic effect on the work of Buckland in natural history and in turn his lecturing and demonstrating at the South Kensington Museum.<sup>16</sup>

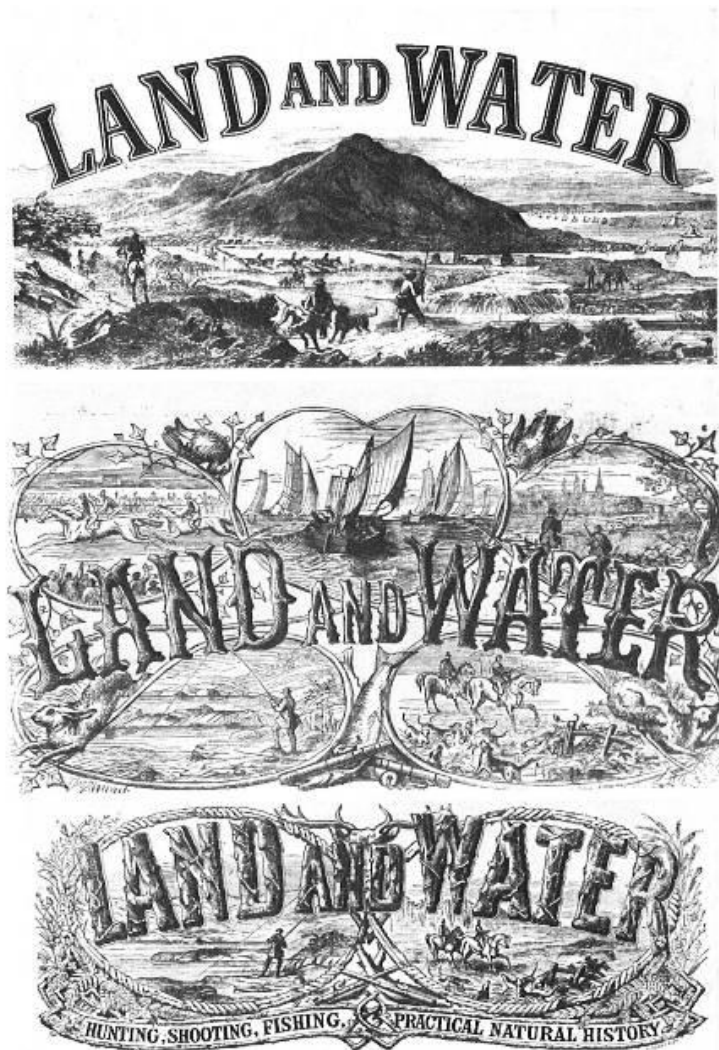


PLATE XII

*Land and Water*

- (a) The illustrated heading was changed after eleven numbers, and
  - (b) remained unaltered until 1869 when the size of the paper was enlarged.
  - (c) This design remained as the heading of the paper until after Buckland's death.
- They are good examples of Victorian typographical design.

**Figure 9** An image showing the changing title headings for Buckland's *Land and Water* weekly journal. Notice how the second heading (b) depicts sailing fishing craft alongside hunting and shooting scenes while in the banner of the third (c) it refers to his term of 'practical natural history'. (Burgess, 1967, Plate XII).

<sup>16</sup> For literature on 'Acclimatisation' see Lever 1992 and Osborne 1994.

So it was against this scientific background that Buckland carried out his museum role which required him to give many series of lectures and demonstrations on fish and fish cultures. In order to illustrate the lectures he established a large collection of hatching apparatus, models of fish passes, casts of fish, implements of fishing, fishing boat models and other objects at the museum. The collection, which Buckland constantly added to, would later be known as the Museum of Economic Fish Culture (**Fig. 10**). Consequently it expanded to eventually form the basis of the International Fisheries Exhibition and became part of the collections of the later Science Museum, after his death. As his biographer, the brother-in-law George C. Bompas, said “By his will Frank Buckland gave his Museum to the nation, to be retained at South Kensington; the rest of his property he bequeathed to his widow, after whose death £5,000 was given to found a lectureship on fish culture, in connection with his Museum” (Bompas, 1885, 427). Again this is illustrated further by a reference in the annual report made by the Science and Art Department of the South Kensington Museum for 1882:

The Museum has hitherto been kept as nearly as possible in the state in which it was left by Mr Frank Buckland, and we propose that it shall so remain during the approaching Fisheries Exhibition in the adjoining gardens. After this we hope, with the assistance of a committee of advice and reference which has been appointed, to revise and develop the collection (The Science and Art Department, 1883, xii).





**Figure 10** An image of Buckland's Fish Museum probably taken by Mr Samuel Walker for *Land and Water* 18<sup>th</sup> July 1874 (Burgess, 1967, Plate XI)<sup>17</sup>

In February 1867, following the resignation of his predecessor Frederick Eden (one of the first two inspectors posts to be created by the Salmon Fisheries Act of 1861), Buckland was appointed inspector of salmon fisheries.<sup>18</sup> The Act was designed to replace all previous legislation and banned certain methods of catching fish along with enforcing a curfew on fishing with a “weekly close time from noon on Saturdays to 6 am on Mondays” (Burgess, 1967, 147/8). It also became compulsory to erect fish passes over dams and weirs. It was therefore the duty of the Inspectors of Fisheries to enforce the law with inspectors being appointed by the Home Office (1967, 148). Another inspector post was filled by his younger colleague Sir Spencer Walpole in March 1867.<sup>19</sup> The main role of the inspectors was to act as advisers between the local fishery boards and to report annually on the state of the fisheries (Burgess, 1967, 148). Following this Buckland did not only put all his energies into his duties, but he went beyond this studying every element of the history of salmon, endeavouring at

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<sup>17</sup> The Buckland Collection webpage for The Scottish Fisheries Museum, Anstruther <http://www.scotfishmuseum.org/the-buckland-collection>, accessed 14th November 2012. Also found in Burgess 1967, Plate XI

<sup>18</sup> Frank Buckland Entry, Oxford Dictionary of National Biography <http://www.oxforddnb.com/view/article/3857?docPos=2> accessed 29<sup>th</sup> May 2012

<sup>19</sup> Sir Spencer Walpole Entry, Oxford Dictionary of National Biography <http://www.oxforddnb.com/view/article/36712> accessed 22nd June 2012

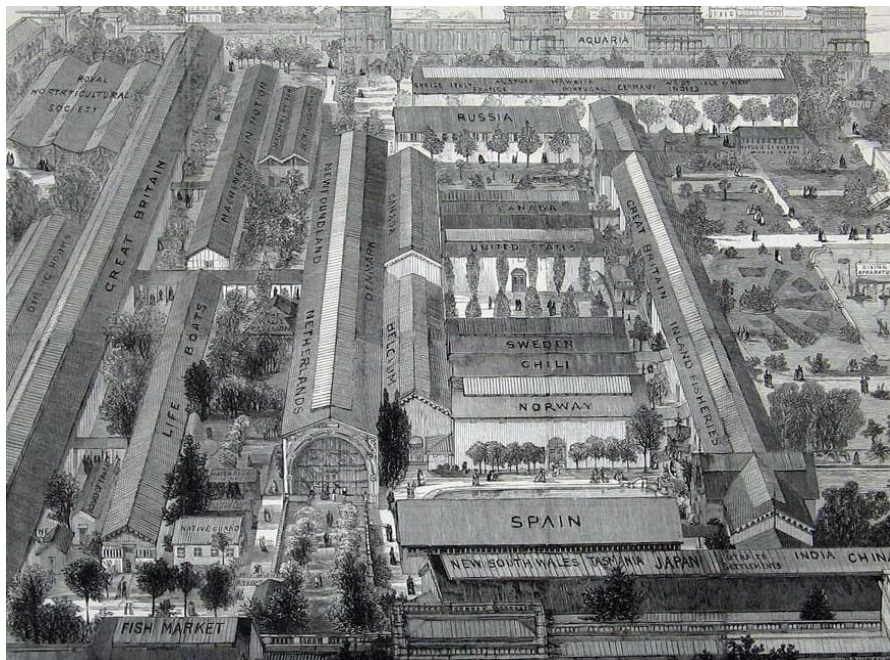


every turn to improve conditions at British fisheries and those employed at them. This involved frequent visits to coastal and river regions round the country, always a welcomed guest among people of all classes.<sup>20</sup> But by 1880 Buckland's ill health deteriorated and he died at his home in London on 19<sup>th</sup> December 1880 two and a half years before the International Exhibition opened.

#### 4.3 The International Fisheries Exhibition of 1883

On Saturday last his Royal Highness the Prince of Wales, acting instead of Her Majesty the Queen, formally opened...the Fisheries Exhibition at Kensington designed to illustrate the Fisheries of the World, and the various industries connected with this important pursuit.<sup>21</sup>

This opening first line from the Illustrated London News refers to the Royal opening of the International Fisheries Exhibition, South Kensington on 12<sup>th</sup> May 1883. Covering the entire South Kensington site, the exhibition enveloped the new Natural History Museum buildings (completed and opened to the public in 1881<sup>22</sup>) as well as those of the South Kensington Museum (**Figs. 11, 12 and 13**). It was hosted here for six months between the 12<sup>th</sup> May and 31<sup>st</sup> October 1883.



**Figure 11** Engraving of a general view of the South Kensington Exhibition site, from *The Illustrated London News* April 21<sup>st</sup> 1883 p 400.

<sup>20</sup> Frank Buckland Entry, Oxford Dictionary of National Biography <http://www.oxforddnb.com/view/article/3857?docPos=2> accessed 29<sup>th</sup> May 2012

<sup>21</sup> First sentence from the *Illustrated London News* article on the Royal Opening of the International Fisheries Exhibition, South Kensington dated 19<sup>th</sup> May 1883.

<sup>22</sup> Natural History Museum webpage 2012 <http://www.nhm.ac.uk/research-curation/library/archives/our-building/building.html> accessed 23rd July 2012

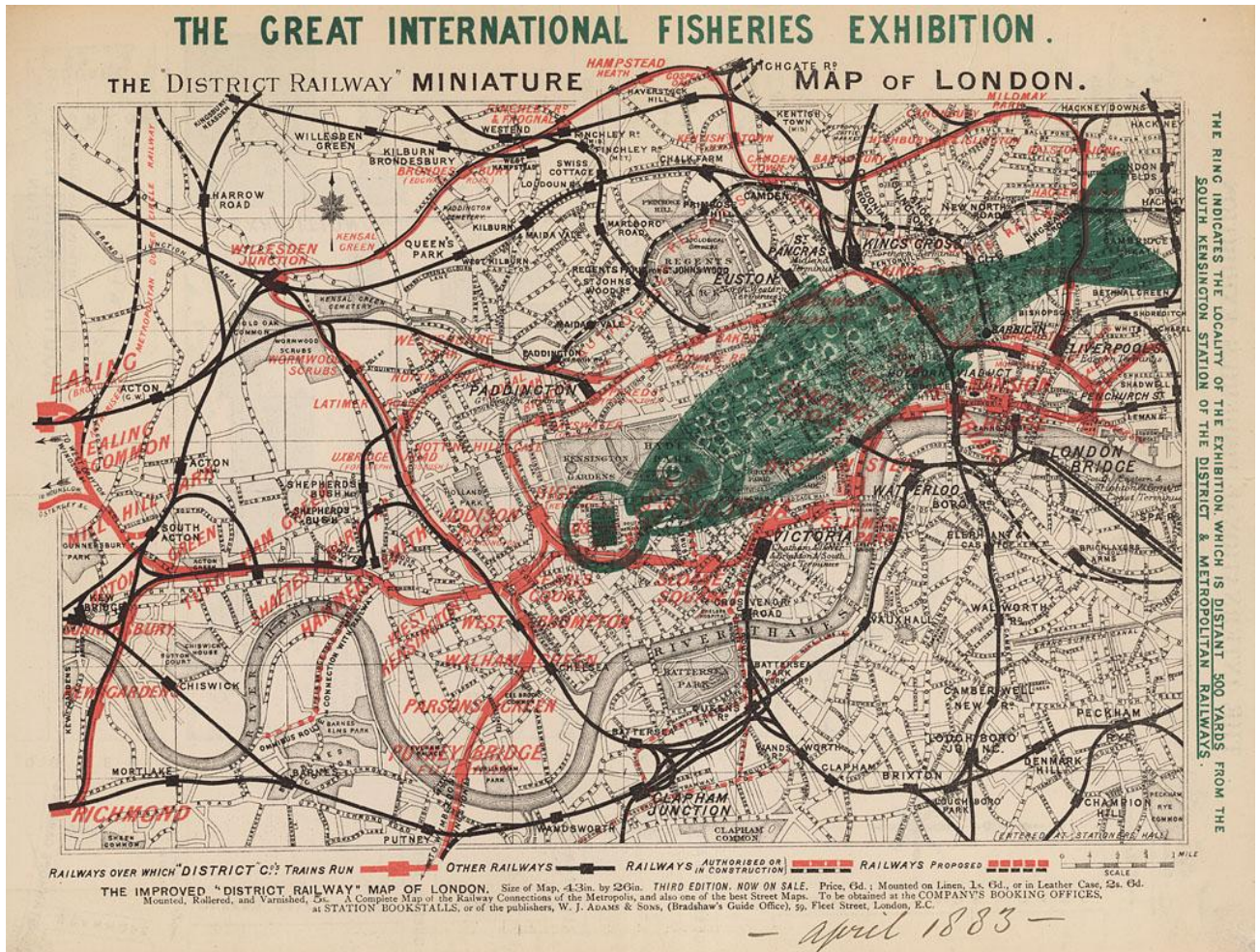
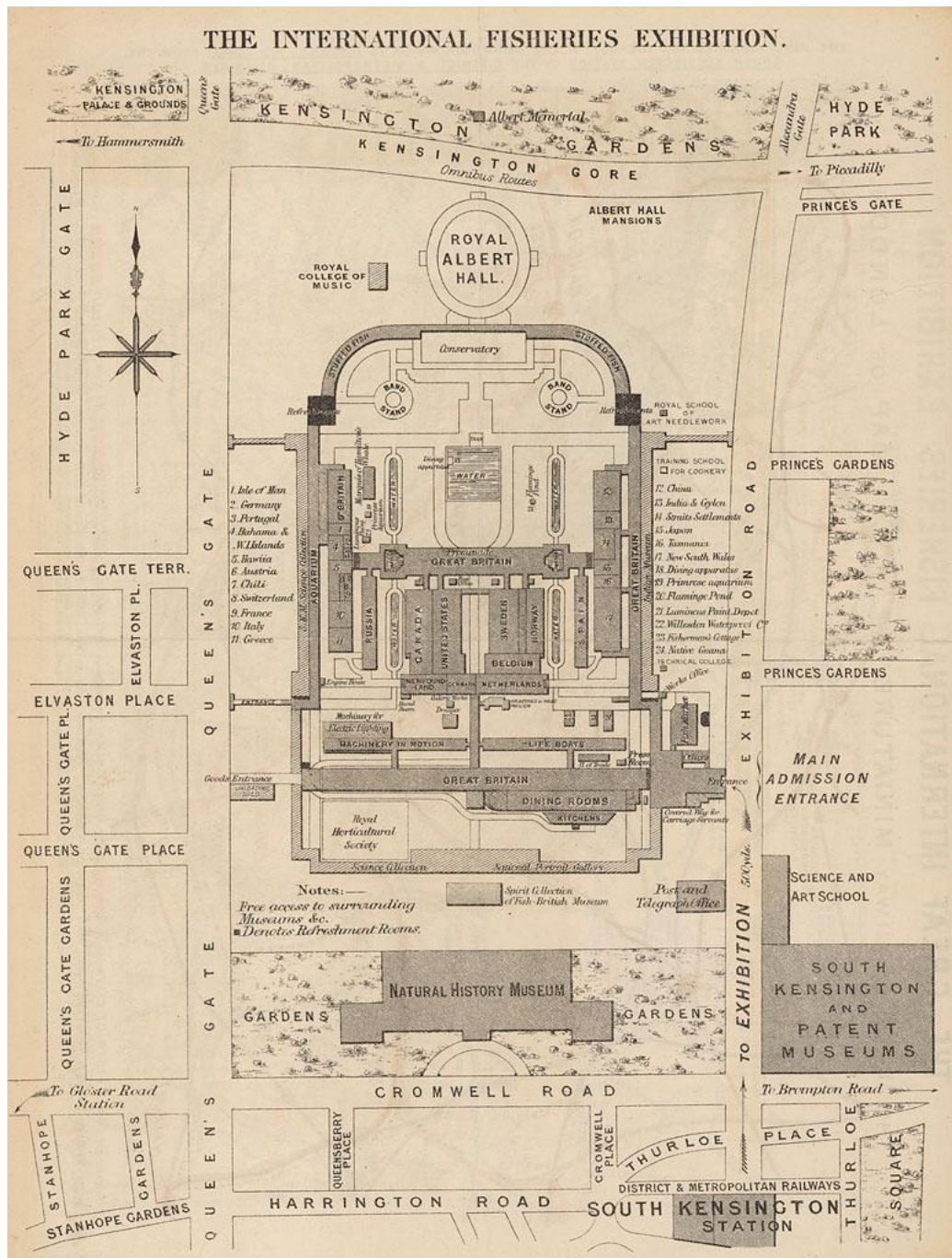


Figure 12 The full map of London showing the location of the International Fisheries Exhibition at South Kensington, April 1883. This was the front to a visitor's double-sided guide to the exhibition (Peter Jackson Collection File number XJ120648 <http://www.lookandlearn.com/index.php>, accessed 12<sup>th</sup> September 2013)





**Figure 13** The map of the layout of the International Fisheries Exhibition April 1883. This was the second page on the reverse side of the same visitor's double-sided guide to the exhibition. Note that Imperial College as a university did not exist on the site in 1883. (Peter Jackson Collection File number XJ120649 <http://www.lookandlearn.com/index.php>, accessed 14<sup>th</sup> September 2013)

In **Fig. 13** although encroaching on land that in modern terms is now the site of Imperial College London's South Kensington campus, the Exhibition was hosted on the same site before ICL was institutionally founded. In fact the Fisheries Exhibition was sandwiched between two key dates of the College's earliest formative years. In 1881 the Royal College of Science was founded and ten years after the exhibition the

Imperial Institute was opened in 1893.<sup>23</sup> The Imperial Institute was not just an influential product of the exhibition and the founding of ICL but also significant in the creation of the V&A and the Science Museum institutions two decades later.

The aim and hope of the Exhibition, as the Prince himself put in his royal address “...was to afford the means of enabling practical fisherman to acquaint themselves with the latest improvements which have been made in their craft in all parts of the world, so that...man may derive the fullest possible advantage from the bounty of the waters.”<sup>24</sup> This gives a sense of the progression and development spirit of the exhibition towards the fishing industry internationally – the contemporary boats, equipment and methods used at the time.

As William Clowes expressed it in his introduction to the Exhibition catalogue “Like all vigorous and well-conceived ideas, the notion of a Great International collection of works of industry like the World’s Fair of 1851, gave birth to similar enterprises of a more limited and partial scope” (Clowes, 1884, XII, xxxiv). Clowes goes on to explain from the Fisheries Exhibition’s influence “local and special exhibitions grew up almost from year to year for all sorts of objects and in all sorts of places” (Clowes, 1884, XII, xxxv). The first example he gives was an exhibition in Cork in 1852 showing the “collection of Irish Art and Manufactures, and in the following year New York, New Brunswick, and Madras gave illustration of their native productions” (Clowes, 1884, XII, xxxv). Clowes then lists some other global variety of exhibitions concluding that “within the last thirty years scarcely any land has been without the advantages derived from a public display illustrative of national life” (Clowes, 1884, XII, xxxv). Further examples of particular industries were:

...Exhibitions of Arts, Exhibitions of Treasure, Exhibitions of the Apparatus of Labour, Exhibitions of the Apparatus of Science, Exhibitions of Corn, of Wine, and of Needlework. The Diaries of Europe have vied each other at Hamburg; Casques and Bronzes have met in assembly at Kioto; even the Bees have had their own Exhibition in

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<sup>23</sup> Imperial College London’s Centenary Timeline Webpage 2007  
[http://www.imperial.ac.uk/centenary/flash/timeline/timeline\\_flash.shtml](http://www.imperial.ac.uk/centenary/flash/timeline/timeline_flash.shtml), accessed 7th May 2013

<sup>24</sup> Later extract from the same *Illustrated London News* article on the Royal Opening of the International Fisheries Exhibition, South Kensington dated 19<sup>th</sup> May 1883.

London, and the very Fungi have held a Congress all to themselves at Aberdeen (Clowes, 1884, XII, xxxv).

Fourteen years on from the "...commencement of this magnificent series of industrial, art, and scientific triumphs, Fishing and Fisheries asserted their claim to a special display" (Clowes, 1884, XII, xxxv). With references to many examples globally like Arcachon and Havre (1866); The Hague (1867) and Naples (1871), Clowes argued that the International Fisheries Exhibition in Berlin in 1880 "...eclipsed all others in extent and variety" (Clowes, 1884, XII, xxxv). The successes of the Berlin Exhibition in turn stimulated enough interest in the Edinburgh Exhibition (1882) and thus influencing the subsequent South Kensington (1883) international exhibition in turn. It was in Berlin that Frank Buckland had some input in the exhibition, leaving his mark on fish cultures before and after his death.

The overriding premise of these National and International Exhibitions Clowes argued was that, unlike Blue Books of Parliament (government records full of statistics and evaluation) which could easily read but also unread, "...nothing speaks so forcibly in behalf of reform as a practical example of its utility made patent to the eyes of all men" (Clowes, 1884, XII, xxxiv). In general terms these extremely large scale events on the national and international scale were able to collect:

...in a single focus the scattered rays which illuminate the recesses of the body politic; they present in a visible and striking form those features of our industrial and social life which almost of necessity escape common observation, and so to speak, they place beneath a hive of glass the operations and domestic habits of our human bees (Clowes, 1884, XII, xxxiv).

The sentiment here, although from an earlier period, I believe is a rather apt quality mirrored in the later episodes of the museum's and collections' historical story. The greater gathering of models in the 1920s and 30s for the British Fishing Boats Temporary Exhibition of 1936 and the later three dimensional dioramic displays of the models in the 1960s British Small Craft Exhibit of the new Shipping Gallery, echo and capture these 'industrial and social life features' that 'escape observation' again on a national and international level. The method of display and the historical context in which the collection was exhibited may have differed drastically between these three

periods but the reasoning and intentions behind them were similar. In other words these later periods of exhibiting and displaying at the Science Museum also, in a way, placed the activities of these fishermen and boats represented in miniature model form under a 'hive of glass'. The use of the words 'hive' and 'bee' is also of interest here. A common metaphor, the association with the Science Museum (or South Kensington Museum as it was then known) gives a complementary tone to the institution, promoting the fact that like the 'bee' there is a logical system to its collections. This in turn has a positive outcome for the image of the museum showing that it is able to understand its own purpose and remit.

To put the exhibition into a wider more general historical and thematic context, although the Great Exhibition of 1851 is seen as the identifiable first international exhibition event, the concept can trace its origins further back in to 18<sup>th</sup> Century. With the industrial revolution came institutions that were formed in both Britain and France "with the specific aim of promoting the principle of display" (Greenhalgh, 1988, 3). From the beginning these events were, as Greenhalgh puts it, "a device for the enhancement of trade, for the promotion of technology, for the education of the ignorant middle classes and for the elaboration of a political stance" (1988, 3). The longevity in tradition of the themes of progression, trade and education in these international events was well established by the 1880s. The appeal of trade as a theme at these events, was that it acted, more so than education, as a theoretical core that underpinned all European and American societal identities. "Trade had created Western power; the exhibitions were no more than an expression of that power" (1988, 22). Greenhalgh goes on to argue that 'trade' was a convenient way of justifying or hiding "imperial exploitation", the term being far less unpleasant than 'conquering' (1988, 23).

Education was another prominent theme of these events, taking the American approach from the World's Fairs, of accepting and using the challenges of total education. By the 1880s exhibitions globally had "lengthy explanations on bill-boards accompanying most exhibits, and individuals would be on hand to explain displays to the visitor" (1988, 21). This indicated a shift in mass appeal of the events, while

education was becoming ever more prominent in society. Unlike the earlier national exhibitions of Britain and France which had targeted the middle and upper classes, by 1867 and until the end of the century, “it was the lower middle and artisan classes who were the desired audience for educational exhibits. By 1900 the ‘masses’ proper were referred to as being the true beneficiaries of learning, their intellectual development apparently being vital for the survival of Western civilization” (1988, 21).

The other theme of the Fisheries Exhibitions was Progress, a word which appeared in more exhibition mottos and subtitles than any other in the years after 1851. “For most organisers, the point of an exhibition was to indicate civilization was advancing in some known direction” and for the host nation the exhibition “would invariably be a celebration of the past as a preparation for a better future” (Greenhalgh, 1988, 23). Technology Greenhalgh argues was the means by which progress was achieved. This was stated more frequently in 20<sup>th</sup> century exhibitions compared with their earlier counterparts (1988, 24).

More specifically, however the Fisheries exhibition had its origins of ship and boat modelling from the International Exhibition of 1862 where the introduction of ship armoured plating technologies (e.g. ironclads like H.M.S. *Warrior*) had stimulated much interest in the influences of scientific progress on naval warfare. William Laird Clowes<sup>25</sup>, former defence correspondent for *The Times* and historian of the Royal Navy, believed that 1862 exhibition was one of the dynamic changes in popular attitudes towards the Navy. “Laymen’ he wrote ‘were no longer satisfied to be told that all was well with the fleet.’<sup>26</sup> In time they came to demand tangible evidence that the nation’s naval strength, measured in ships of iron and, later, steel, remained greater than that of other nations. Ship models on display represented a sort of proof, being the next best thing to the ships themselves” (Littlewood and Butler, 1998, 3). However, after the 1862 exhibition – which had attracted 6 million visitors – closed

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<sup>25</sup> William Clowes and Sons Ltd. acted as the “*Official Printers and Publishers to the Executive Committee* [of the exhibition]” (Clowes, 1884, Vol. XIII) and produced the 14 volumes of the International Fisheries Exhibition in 1884.

<sup>26</sup> Originally taken from Maeve Kennedy, ‘Hope of public cash to save *Britannia* torpedoed’, *The Guardian*, 3<sup>rd</sup> October 1997, p.12

there was no permanent exhibition of ship models anywhere in London. It was from this that the needs for a permanent collection and exhibition on naval architecture was realised culminating in the formation of the School of Naval Architecture and Marine Engineering in 1864 (Forgan and Gooday, 1996).

The themes of these Fisheries Exhibitions, as illustrated by Greenhalgh, are further reflected within many aspects of the Fisheries exhibition. The seven subdivisions (or 'classes'), for example, in which the exhibition was divided give some idea of the audiences the event was trying to appeal to, the technologies promoted and the educative motives behind it:

- I. The sea fishing practices of all nations
- II. The economic conditions of fishermen
- III. The curing, preservation and utilisation of fish at fisheries
- IV. Fish culture – i.e. the breeding, growth and development of fish
- V. Natural history of fishes – examples of stuffed fish on display and live fish in aquariums
- VI. History and literature of fishing, fishery laws and fish commerce
- VII. Loan collections for the above six classes.<sup>27</sup>

Adding to these broader principles surrounding Fisheries Exhibitions, by the 1880s the concerns within the fish industry in Britain were at new heights and were beginning to be addressed at the Fisheries Exhibition. “As far as progress towards setting up a formal fisheries research structure in England and Wales is concerned,” John Ramster argues “1883 was a watershed year. The main impetus to action stemmed from the various International Fisheries Exhibitions that had been held in France and the Netherlands in the late 1860s and, in particular, that in Berlin in 1880” (Ramster, 2000, in Starkey, Reid and Ashcroft, 180). Ramster goes on to say that British visitors to these events noticed that other countries were tackling fisheries issues and fisheries science more systematically – a point which was particularly highlighted at the Fisheries Exhibition in South Kensington which was visited by 2.7 million people (Ramster, 2000, in Starkey, Reid and Ashcroft, 180). Up until this point inshore

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<sup>27</sup> *Illustrated London News* article, Royal Opening of the International Fisheries Exhibition, South Kensington, 19<sup>th</sup> May 1883, Vol. 82, 486.



fisheries of England and Wales “were largely encumbered by statute or government regulation before the late nineteenth century” (Ramster, 2000, in Starkey, Reid and Ashcroft, 174). But by the 1860s there were calls for more state intervention in the protection of fish stocks in coastal waters and in turn safeguarding the livelihoods of inshore fishermen and their communities. These demands were mainly prompted by the intensification of the catching efforts off the coast of smacks and steam paddlers who, with their indiscriminate beam trawls, “began to work grounds that had been fished for centuries by more selective nets, pots and lines of the inshore fishermen” (Ramster, 2000, in Starkey, Reid and Ashcroft, 174/5). Because of this there were genuine fears in the emerging fisheries science fraternity that a more *laissez-faire* approach towards fishing would lead to depletions in fish stocks.

In response to fishermen, local authorities and scientists, the government passed the Sea Fisheries Regulation Act in 1888. This legislation was built upon the succession of Salmon Acts since 1818 and was an extension of the Municipal Corporations Act of 1882 and the Local Government Act of 1888 (Ramster, 2000, in Starkey, Reid and Ashcroft, 175). The Salmon Acts and their administration from 1818 onwards revealed “a phenomenon of development”; several acts which “embodied what one contemporary observer called the first permanent attempt by Parliament to protect and regulate private property in the public interest” (MacLeod, 1968, 114). Thus the 1888 Act was introduced as an addition to the foundation legislative blocks of the Salmon Acts. The latter Act’s “...fisheries legislation, moreover, complemented the recently established Fisheries Department in the Board of Trade by adding a local dimension to the national framework of regulation that was evolving. This local element was embodied in the Sea Fisheries Committees that were created to implement the legislation in the many and varied coastal districts of England and Wales, though not Scotland and Ireland” (Burton, 2000, in Starkey, Reid and Ashcroft, 175). However, these restrictions through legislation, in turn achieved by environmental and scientific research in the pursuit of natural conservancy, “implied a financial and constitutional commitment which Victorian Governments were not prepared to accept” (MacLeod, 1968, 150). The result of a succession of fishery bills, frustrated and exhausted fishery inspectors, fishermen and scientists alike. Therefore

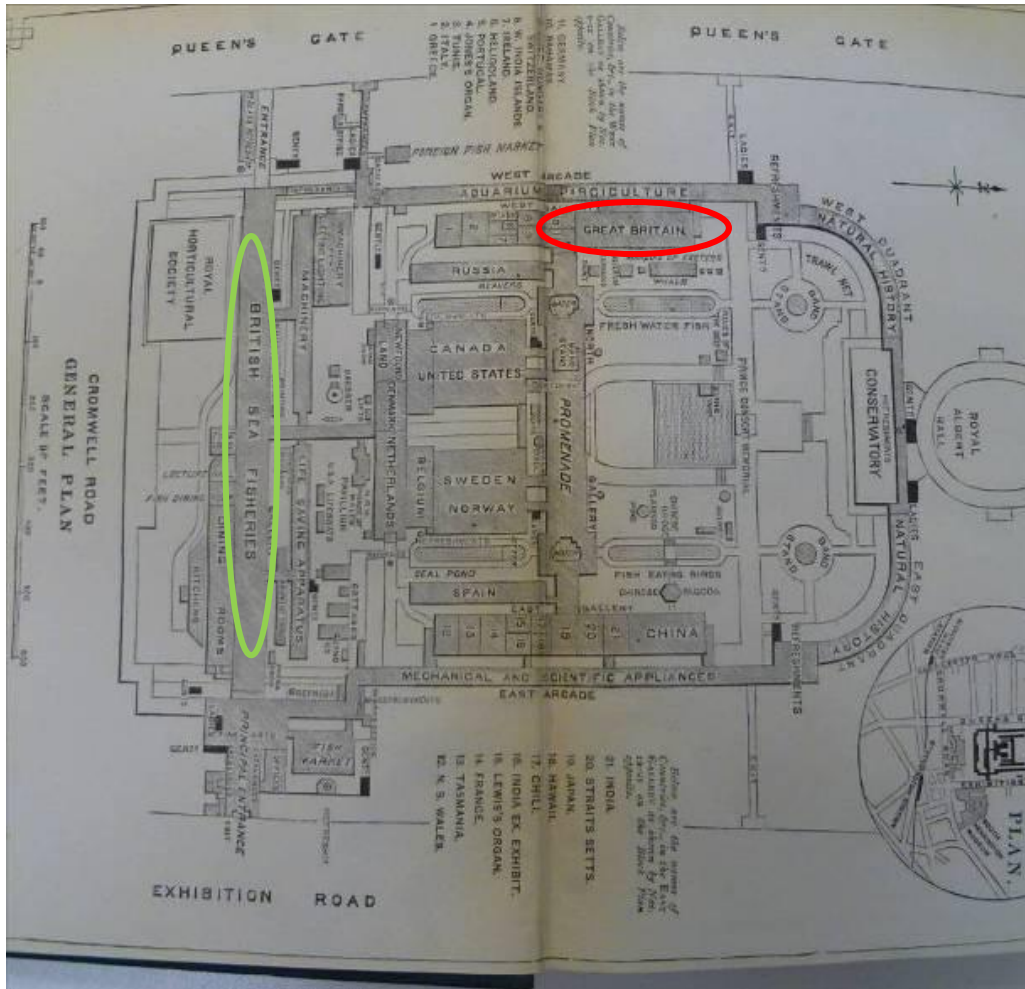
although there were several bills during this period, “successful nature conservancy,” MacLeod argues “demanded coherent policies which were not destined to come during the nineteenth-century ‘revolution in government’” (MacLeod, 1968, 150).

Alongside its international focus, there was also a national representation of the fishing industry at the exhibition as the *Illustrated London News* article later explains “In the long southern transept are ranged nets, fishing-gear, model boats, and all that appertains to the sea-fisheries of Great Britain, while such things as are employed in our freshwater fishing are in the parallel transept, the Central Promenade.”<sup>28</sup> It is here in the ‘long southern transept’ and the ‘central promenade with the ‘model boats’ on display that we glimpse the oldest miniature craft in their earliest exhibition **(Figs. 14, 15 and 16)**.

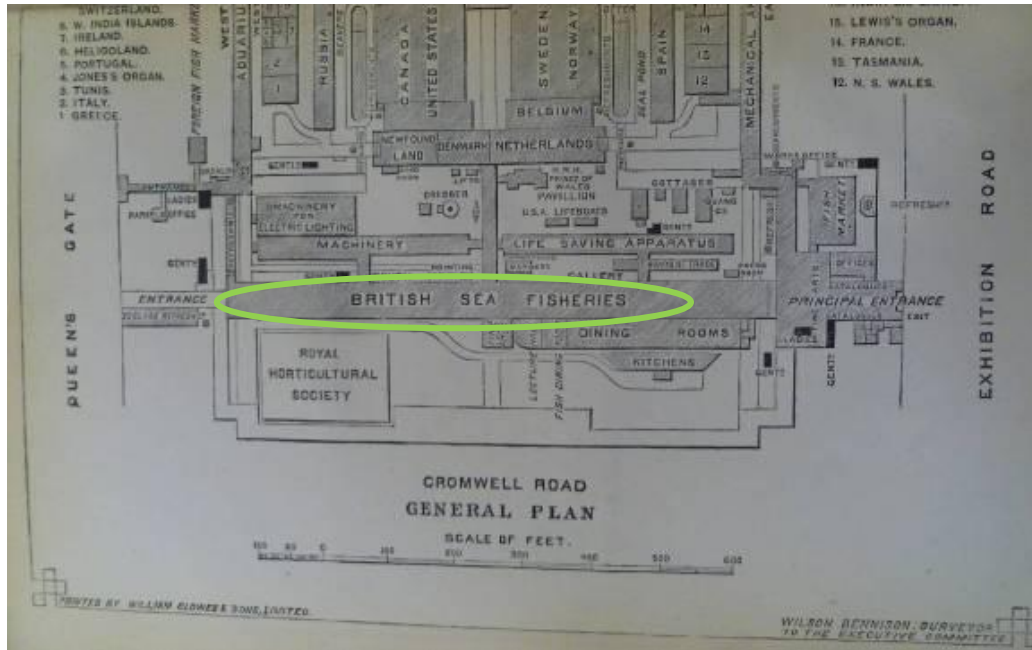
This interest for British small boats (both sea and fresh water kinds) was optimized and celebrated in the displays as shown in one of the only known photographs of the Exhibition (**Fig. 18**). The numerous galleries of the exhibition, such as this one, not only highlighted its commercial trade-like quality but also hinted towards the sensationalism and vernacular nuances of the displays – a trait which did not feature in the later twentieth century exhibitions.

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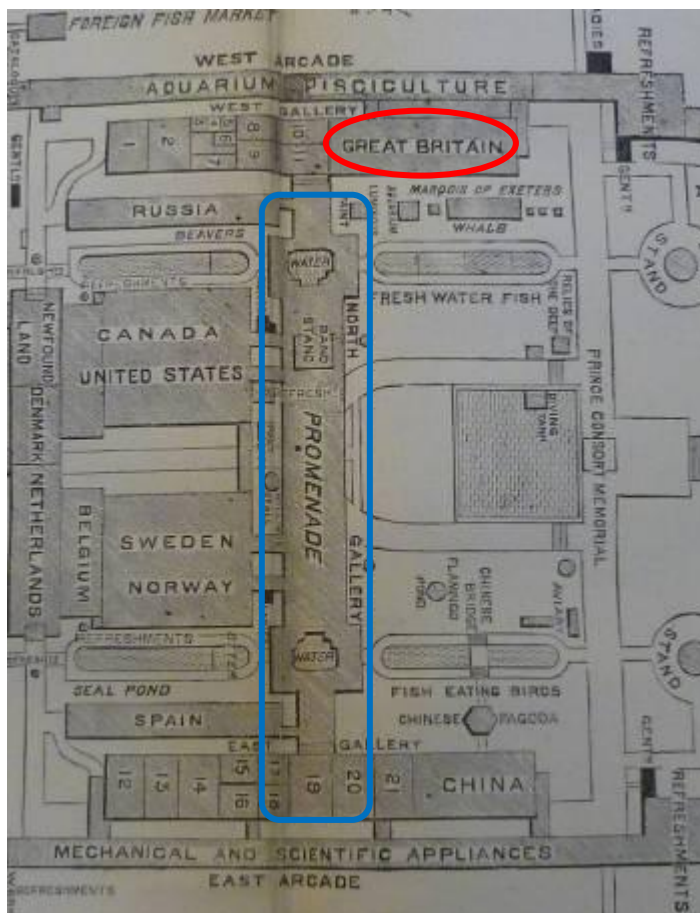
<sup>28</sup> *Illustrated London News* article, Royal Opening of the International Fisheries Exhibition, South Kensington, 19<sup>th</sup> May 1883.



**Figure 14** A photo detail of the general plan showing where both the British Sea Fisheries [circled in green] and the Great Britain Fresh Water Fishing [circled in red] gallery displays were located taken from Clowes, 1884, XII, inside front cover. (James Fenner, March 2012).



**Figure 15** A photo detail of the same general plan showing the 'long southern transept' displaying the British Sea Fisheries [circled in green] parallel to Cromwell Road taken from Clowes, 1884, XII, inside front cover. (James Fenner, March 2012).



**Figure 16** A photo detail of the same general plan showing the 'Central Promenade' [in blue] displaying the Fresh Water Fishing of nations of the world including Great Britain [circled in red] parallel to Exhibition Road taken from Clowes, 1884, XII, inside front cover. (James Fenner, March 2012).

If we consider the British Sea Fisheries transept more closely, looking at the double map pages (**Fig. 17**) and those succeeding them, one can begin to understand the variety in content and subject matter of some of the exhibition cases and displays. For example under Henry, Alexander it states that he's a "gun and rifle manufacture...[from] Edinburgh" while Fowler, William specialised as a "Whale Fishing Implement Maker" and others promoting weighing scales, various types of nets and other fishing equipment (Clowes, 1884, XII, 8). Again this demonstrates the trade and commercial as well as educational quality of the internationally acclaimed event.

Yet the exhibition and its many galleries of objects from different nations were not just reported and illustrated in the national newspapers. Some early photographs were also taken at the exhibition as **Fig. 18** shows giving some limited sense of how the exhibition was displayed. Sponsored and exhibited by the Shipwrecked Fishermen and Mariners' Royal Benevolent Society, this part of a gallery had at its focus (among the glass cases, photographs, paintings and flags adorning walls) the *Grace Darling* boat. The original Yorkshire Coble rowing boat was used by Grace and her father to save the lives of the survivors of the shipwreck of the *SS Forfarshire* off the Farne Islands in September 1838.<sup>29</sup> In doing so Grace became a national heroine – a good deed immortalised in a period of heightened Victorian values. The exhibiting of this symbolic vessel also speaks of concerns voiced at the exhibitions and the adjoining conferences of the loss of lives at sea in particular the dangerous lives led by fishermen – a point that will be readdressed later.

However in a later division (Division V – Deep Sea Fisheries Gallery) we turn to some of the model boats themselves. It was not possible to find the exact same models that were displayed in subsequent 1930s and 1960s exhibitions, within the 1883 catalogue. But there were many similar models displayed here that would have connections to the ensuing exhibitions of the 20<sup>th</sup> Century museum. Frank G. Johnson of Brixham for example presented a "Fully rigged model of a 40-ton Brixham Sailing Trawler" – a

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<sup>29</sup> The Grace Darling Museum (Bamburgh) website which the original boat can still be seen on display, [http://rnli.org/aboutus/historyandheritage/museums/Pages/Grace-Darling-Museum.aspx?utm\\_source=rnli-website-redirect&utm\\_medium=vanity-urls&utm\\_campaign=gracedarling](http://rnli.org/aboutus/historyandheritage/museums/Pages/Grace-Darling-Museum.aspx?utm_source=rnli-website-redirect&utm_medium=vanity-urls&utm_campaign=gracedarling), accessed 24<sup>th</sup> September 2012

model which was the same boat type representation as that of its later 1930s equivalent made by Dinwiddy (Clowes, 1884, XII, 21).<sup>30</sup> On another page we see Lewis Emery of Sheringham, Norwich who made a Crab boat for the exhibition; again, although this is not certain, there is a link to a later model of the same boat type in the 1930s also made by Emery (possibly a relative).<sup>31</sup>

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<sup>30</sup> Inv. 1935-155 Brixham Trawler Thomas N. Dinwiddy, Devon and Cornwall Display (See Chapter 5).

<sup>31</sup> SMD – Nom. File 42898/13/1: In a letter 6<sup>th</sup> November 1934 by Stephen Courtauld to the Science Museum Director Col. E.E. Mackintosh he says that “Emery’s family have been boat-builders for generations, and the present one is an artist, who will make a model correct to the last pin.”

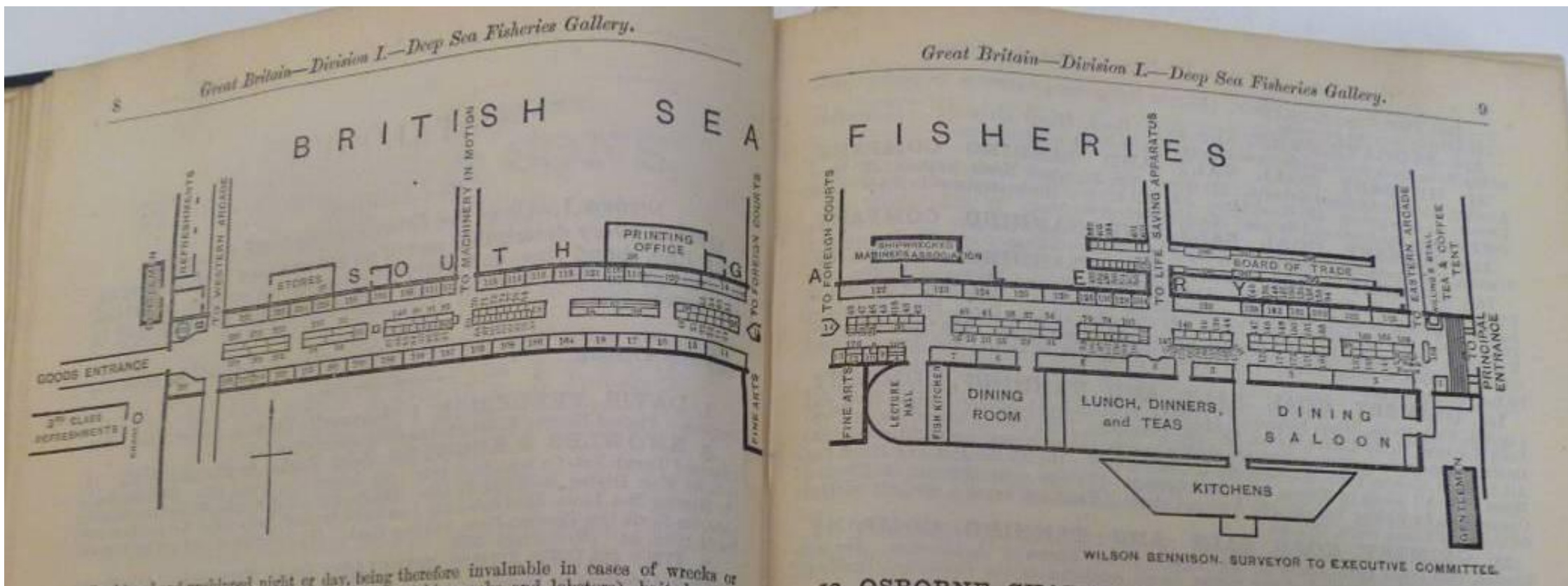


Figure 17 A photo of the layout of displays within the British Sea Fisheries Southern Transept of the International Fisheries Exhibition taken from Clowes, 1884, XII, 8 and 9.

(James Fenner March 2012).





**Figure 18** A photograph showing an aspect of the displays in one of the many galleries of the Fisheries Exhibition 1883. Notice the Grace Darling Coble rowing boat in the foreground. This was part of the *Shipwrecked Fishermen and Mariners' Royal Benevolent Society* Exhibit. (SMD Curatorial Clippings Box 6 The East Coast (Northumberland to the Wash.) Also see <http://www.corbisimages.com/images/Corbis-HU018454.jpg?size=67&uid=51e69829-8369-40e8-985c-dd41a6fc2533> (accessed 24<sup>th</sup> September 2012).

The Exhibition catalogue, in its classification pages, clearly illustrates this further by showing the displaying of models as part of Class I 'The sea fishing practices of all nations'. Under sub-section 3 of Section I it reads 'Fishing Craft of all Nations; Models and Representations of the same' and later under sub-section 8 of Section II it reads 'Boats, Punts, Cobles, Collapsible, Portable etc., in models or otherwise' (Clowes, 1884, XII, xx). This is supported by the accompanying Regulations Pages which states in its third stipulation that:

The principal objects to be admitted are comprised in the annexed classification, which is intended to include all kinds of specimens of fish life, and to illustrate all the modes by which the MARINE and FRESH WATER animals of economic value are captured and utilised, together with the commercial, scientific, social, historic and legislative aspects of such fisheries (Clowes, 1884, XII, Regulations pages, xi).

This is further confirmed by the Annual reports made by the Science and Art Department of the South Kensington Museum during that period (1880-1885). In the



30<sup>th</sup> Report for the year 1882 it explains the origins of the museum's naval model and marine engineering collections:

In the year 1873 the Royal School of Naval Architecture and Marine Engineering which had been carried on at South Kensington Museum under the administration of the college at Greenwich Hospital, and the Admiralty collection of naval models was also removed thither from the Museum. This collection has been largely supplemented by loans from ship building firms &c., and so much show interest attached to them that it was determined to continue their exhibition. At present we have loans from 256 contributors of above 1,550 models connected with every branch of ship building (The Science and Art Department, 1883, xii).

The reference above to the School of Naval Architecture and Marine Engineering was the result of a proposal discussed between the Admiralty and the Council of Education to "establish a school of both naval architecture and marine engineering" and was opened in South Kensington on 1<sup>st</sup> November 1864 (Littlewood and Butler, 1998, 5). To serve as a teaching and reference collection for the School, the Admiralty "took the opportunity to transfer its collection of models of historic ships, marine engines and other equipment from Somerset House (the old Navy Board offices)...to the South Kensington Museum" (1998, 5). As the numbers above in the report of 1882 suggest thousands of models had been transferred by this point, the resultant collections consisting of among many things: lines of ships; lifeboats and life-saving equipment; boats and fighting vessels; modes of construction; armaments; propulsion; masts and rigging; launching methods (1998, 5/6). This rapid increase in collections proved an issue, as within a year the report highlighted the point that there was a drastic lack of space for storage and display as new objects were being acquired (The Science and Art Department, 1885, 204).

In the following year's report under the heading *Collection of Ship Models and Marine Engineering*, it explains:

In this section during the year 1883, some valuable additions have been made. The principal increase comprises fishing boat models presented by several Commissioners of British, Colonial, and Foreign States, on behalf of their countries, who were contributors to the International Fisheries Exhibition, held during the year (The Science and Art Department, 1884, 250).

Intriguingly this statement is supported by Clowes' son Geoffrey who refers to the International Exhibition and the new models being accessioned in the catalogue for his own Fishing Boats Exhibition at the Science Museum fifty years later in 1936.

However the exhibition was not solely about displays and models. Indeed internationally in the exhibitions, mainly through the French *Expositions Universelles*, fine art had always played an important role within each event. Yet by the four exhibitions of 1883 to 1886 (on Fisheries, Health, Inventions and India and the Colonies respectively) it revealed "a lack of enthusiasm for the fine arts" in British exhibitions (Greenhalgh, 1988, 209). But the fine arts, although lacking compared to the Parisian and American events, were far from absent in the Fisheries Exhibition. Situated in a small gallery off the long Southern Transept for British Sea Fisheries (**Fig. 19**), the picture gallery depicted all forms of marine seascapes and piscine art (1988, 209). The British only saw fine art practice being central to their international exhibitions on an occasional basis with the closest to the French model being in the South Kensington exhibition of 1862 (1988, 209).



**Figure 19** An image of the Picture Gallery at the International Fisheries Exhibition taken from F. Whympers's *Fisheries of the World: an Illustrated and Descriptive Record of the International Fisheries Exhibition of 1883, 1893*, Cassell Co. Ltd. p 108.

[http://content.lib.washington.edu/cdm4/item\\_viewer.php?CISOROOT=/fishimages&CISOPTR=33079](http://content.lib.washington.edu/cdm4/item_viewer.php?CISOROOT=/fishimages&CISOPTR=33079)

(accessed October 22<sup>nd</sup> 2012)

Having said this, although paintings may have not featured prominently within the 1883 exhibition, culturally from between the 1880s and the turn of the century numerous marine artists were at work depicting the sea, boats, fishermen and coastal villages in Cornwall. In particular the Newlyn School of artists was active during this period with Walter Langley beginning the trend moving from Birmingham to Newlyn in 1882. For the next two decades his paintings alongside others such as Stanhope Forbes would imbue the essence of the harsh realities of the laborious simple lives of fishermen showing the pain, suffering and hardships of the fishermen, their wives and whole fishing villages as **Figs 20-22** show. As Lubben argues “For late nineteenth-century consumers of art, culture and nature, the longing for a pre-industrial life, imagined to be somehow more complete and abundant than the present, came to be predominantly linked to rural locations” including coastal fishing villages of Cornwall (Lubben, 2001, 14; Deacon, 2001).



**Figure 20** An image of *Never Morning Wore to Evening but some Heart did Break*, Walter Langley 1894.  
([http://stevyncolgan.blogspot.com/2010\\_11\\_01\\_archive.html](http://stevyncolgan.blogspot.com/2010_11_01_archive.html), 2010, accessed 12<sup>th</sup> September 2013)



**Figure 21** An image of *Off to the Fishing Grounds*, Stanhope Forbes 1886.  
(<http://liverpoolmuseums.org.uk/postcards/writeMessage.aspx?coll=49&image=620>, 2011, accessed 12<sup>th</sup> September 2013).





**Figure 22** An image of *The Breadwinners* by Walter Langley 1896. (<http://xaxor.com/oil-paintings/1849-walter-langley-1852-1922.html>, 2012, accessed 12<sup>th</sup> September 2013).

As well as the exhibition and fine art there were also many conferences, inaugural speeches and prize winning essays delivered during the six months period. In four separate volumes to the official catalogue, Clowes had also published the '*Conferences held in connection with The Great International Exhibition*' (**Fig. 23**). "By this date", Greenhalgh explains "academic conferences were staged as a normal part of exhibition practice, an aspect probably conceived of by Le Play" as organiser of the Expositions Universelles of 1867 (1988, 20). Due to the nature, gravity and international scale of the Exhibition it is understandable to see notable figures of natural science present at these conferences. One such figure was Huxley who gave an Inaugural address to the delegates on 18<sup>th</sup> June 1883 as sole Inspector of Salmon Fisheries for the Government. An eminent zoologist and biologist, Huxley was very perceptive when it came to the subject of fish and fisheries:

...on looking at the list of allotted subjects, [for the subsequent papers of the conferences] I find there is yet one important topic unappropriated...and that is the question, whether fisheries are exhaustible, and if so, whether anything can be done to prevent their exhaustion? (Huxley in Clowes, 1884, IV, 11).

The rhetorical question he raised here gives an insight into not just Huxley himself or the Exhibition but also the direction of thinking towards fishing and fisheries generally in that period. Even though there had been successive Royal Commissions on Salmon or Sea Fisheries that had theoretically been concerned with overfishing in the previous fifty years, by the 1863 Commission that Huxley chaired, this approach had not been

taken seriously as “there was no quantitative basis for any of their recommendations” (Ramster, 2000 in Starkey, Reid and Ashcroft, 179). As Huxley sat on many bodies after the 1863 commission which asked similar questions around fish stocks and overfishing his view hardened over a 40 year period that “the act of fishing could not affect significantly the size of natural fish populations” (Ramster, 2000 in Starkey, Reid and Ashcroft, 179). As the state only had the means to implement more rigorous conservation fishery measures, the debates concerning conservation soon included issues around state intervention. As proven by a quote from Spencer Walpole, along with many others, agreed with Huxley’s dictum that “fishermen should be left to pursue their calling: ‘how they like, when they like, and where they like” (Walpole in Clowes, 1884, I, 70). Although concerns were voiced about the Salmon Fisheries, Huxley believed that other fish species supplies were inexhaustible:

I believe that it may be affirmed with confidence that, in relation to our present modes of fishing, a number of the most important sea fisheries, such as the cod fishery, the herring fishery, and the mackerel fishery, are inexhaustible. And I base this conviction on two grounds, first that the multitude, of these fishes is so inconceivably great that the number we catch is relatively insignificant; and, secondly, that the magnitude of the destructive agencies at work upon them is so prodigious, that the destruction effected by the fishermen cannot sensibly increase the death-rate (Huxley in Clowes, 1884, IV, 14).

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**Figure 23** A photo showing the contents page for the first volume of Clowes’ printing of the papers and speeches for the first of many conferences held during the Exhibition (Clowes, 1884, IV, contents page).

Huxley later concludes in his speech that he had tried to focus specifically on the in/exhaustibility of fisheries as it was “of great importance, not only to the consumer, but to the fishermen” (Huxley in Clowes, 1884, IV, 18). Implementing legislative restrictions to conserve the perceived exhaustion of sea fish stocks, however, although a current opinion of others, was to Huxley the “means [of] the creation of a new offence” (Huxley in Clowes, 1884, IV, 18). By this he meant that the already scant livelihood of fishermen would be threatened further by fines or imprisonment just by doing what he, his father and generations of fishermen had done before him. Huxley argued that if there was any doubt concerning the matter then it should be the person who enforced the new law that should be punished and not those who broke it (Huxley in Clowes, 1884, IV, 18).

Alongside matters of fish stocks, fishery conservation and state intervention, another Victorian area of concern was that of the food supplies of the country with fast growing urban populations; an issue which was voiced clearly at the International Fisheries Exhibition and the conferences associated. As Bartrip argues in his article on British Freshwater Fisheries “it is clear that the regulation of freshwater fisheries owed something to the food question. This was because the future of Britain’s food supplies was giving cause for concern and in this context a potentially large supply could not be overlooked” (Bartrip, 1985, 300). The population of England and Wales, Bartrip continues, between 1851 and 1871 had increased from 18 million to 23 million – with the majority of concentrations being in the urban centres although some rural districts did decline. Thus “the background to worries about Britain’s capacity adequately to feed its citizens[,] was [the] ris[e of the] population in the context of constant or dwindling supplies and a relatively underdeveloped technology for the preservation and transportation of food” (Bartrip, 1985, 300). Predominantly, the focal point of the issue was “the availability and cost of meat” resulting in low supplies and consequently high prices (1985, 300). The solution was to import relatively cheap meat from Australia. Although refrigeration methods had been introduced since this point by the 1880s and the Fisheries exhibition, these were very much in their infancy and not widespread in circulation. This therefore was only of limited success with home-reared stocks not increasing in quantities. Although imports had helped, as one article

in *The Times* wrote in 1877 and Bartrip quotes, “they had not filled the gap’ between supply and demand” (1985, 301).<sup>32</sup> Accordingly Freshwater Fisheries regulations, Bartrip surmises, “occurred at the height of concern about Britain’s future food supplies” (1985, 301).

This Victorian notion of dwindling food supplies with ever growing populations and therefore the demands on fishing as a cheap alternative food source is reflected within the volumes of the International Fisheries Exhibition. Although only placed within the context of Freshwater Fish and Fisheries by Bartrip, the Exhibition takes more of a holistic view of the issue, including British Deep Sea Fisheries and general practices surrounding fishing alongside other nationalities. By way of example, within the Conference volumes specifically, in Francis Day’s paper *The Food of Fishes* he concludes that inquiries should be made into new state restrictions on sea fisheries in order that “they can be restored to their original abundance, and afford a cheap and wholesome food to the teeming millions of these isles” (Francis in Clowes, 1884, VI, 293). Another paper by Sir Henry Thompson rhetorically asks:

Fish as Food! [Title of the paper] Is not the fact thus tersely denoted, the essential and practical expression of the entire organisation which this Fisheries Exhibition presents?  
(Henry in Clowes, 1884, VII, 4)

The collective concern of the Exhibition and its Conferences towards food supplies was so great that several schemes and plans were drawn up and presented as prize winning essays. One of these, written by J.J. Cayley and H.H. Bridgman, proposed a scheme for the building of *A Central Wholesale Fish Market for London* on the South Bank of the Thames between Charing Cross Railway and Waterloo Bridges which would create an efficient trade network for fish supplies with rail, road and water links (**Fig. 24**) (Cayley and Bridgman in Clowes, 1884, X, 471/2).

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<sup>32</sup> *The Times* article cited by Bartrip is from 27<sup>th</sup> September 1877





**Figure 24** A photograph of the fold out image of an artist impression of the exterior view of the Fish Market building, a scheme devised to have a wholesale Fish Market in the centre of London. (Cayley and Bridgman in Clowes, 1884, X, Plate 1).

From the outset of the essay, the authors' voiced their concerns regarding rapid increases in the population of the capital and the need for such a scheme:

The supply of so important an article of food as fish to the population of London and its near surroundings, amounting to about 8,000,000 people, may well be regarded as a great national question (Cayley and Bridgman in Clowes, 1884, X, 472).

Supporting the points made by the speakers within the conferences, this example goes further to argue that the food supplies issue and the fish as a cheap food alternative is predominantly a London concern and is of national importance.

It is through these food supply concerns and urban population growths that links could be made to acclimatisation and its scientific amateur experiments (including Frank Buckland). As Lever writes with regards to the Acclimatisation 'Eland' Dinner in January 1860, the founding of the Acclimatisation Society of the UK and Buckland's involvement: "Although, as Burgess (1967) says, the idea of herds of eland galloping across pastures of Britain nowadays seems slightly ridiculous, many people in the mid-nineteenth century genuinely saw it not only as an easy and original way of increasing the supply and variety of food for the poor, but also as requiring little effort to make it as commercial success" (Lever, 1992, 27). However, the exhibition and its conferences showed that acclimatisation practices were not just confined to land animals. The introduction of new international species of fish into British fisheries and inland

waters, as a form of acclimatisation, was one of many methods devised to increase fish stocks as a cheap food resource. For example, in one of the conferences Sir James Ramsay Gibson Maitland discusses *The Culture of Salmonidae and the Acclimatisation of Fish*. In his paper, Maitland argues that:

Food limits the culture of non-migratory Salmonidae, therefore our study must be where to grow it, how to grow it, when to grow it, and what to grow. In lakes some shoal swimming fish is essential to the growth of the large species of non-migratory Salmonidae (Maitland in Clowes, 1884, VI, 49).

His solution is the use of acclimatisation as a tool to include the American Smelt into the food chain to replenish the depleted stocks of Salmon:

Acclimatisation here steps in: either the freshwater Smelt of America or our *Osmerus eperlanus*, which I have successfully hatched and am now rearing in fresh water, if introduced into a Highland loch, for instance, Loch Tay, would enable it to carry a very heavy crop of some of the larger inland species... (Maitland in Clowes, 1884, VI, 49).

In addition to the Victorian ideas of progress and developments and advances in technology, this national concern for food supplies was confirmed as being a focal point reason behind the Fisheries Exhibition. In the *Closing Address of the Exhibition* delivered to the Prince of Wales in the closing ceremony on 31<sup>st</sup> October 1883, Edward Birkbeck (Chairman of the Executive Committee of the International Fisheries Exhibition) concluded that:

The influence of the Exhibition for good is already manifest among the community whose interests it was designed to promote; and we trust that, when our work is concluded, that influence may be definitely and permanently continued (Birkbeck in Clowes, 1884, XIII, 261).

Birkbeck explains and ponders this further:

It is indeed strange that a subject of such vivid interest to us islanders should have remained so long in comparative obscurity (Birkbeck in Clowes, 1884, XIII, 261);

And yet it is the highlighting of that obscurity through the exhibition which Birkbeck praises the Prince for:

We venture to congratulate Your Royal Highness upon having been the head of an undertaking destined, we believe, to bring to a prominence hitherto unattained the infinite resources of the sea (Birkbeck in Clowes, 1884, XIII, 261).

Returning to Clowes' introduction to the catalogue, by way of concluding, Clowes argued that the premise of the Exhibition, Essay Prizes and Conferences was as much about the defence of the natural riches of our rivers and seas against issues of pollution and greed, about the transport and commerce implications of fishing as it was about the economic value. And yet, in his mind, these drifted into insignificance compared with:

...the safe-guarding of our fishermen's lives and the improvement of our fishermen's homes. These are objects in which all nations can cordially co-operate because all mankind is interested in the result; and in no way can our island kingdom more gracefully or beneficially exercise the historic pre-eminence conceded to her upon the seas than by promoting these interests in connection with such an enterprise as that of the International Fisheries Exhibition. (Signed by Clowes on 7<sup>th</sup> May 1883) (Clowes, 1884, XII, xxxviii).

With regards to Clowes' argument about "safe-guarding fishermen's lives", Richard Roper later support's this in his conference paper on *Saving Life at Sea*. In his introduction Roper explains:

The subject has its bearing on the Fisheries, if not very direct or apparent upon actual fishing craft, certainly upon the vessels that bear home the harvest of the sea from the fishing grounds. In any case, discovery and application of the most trustworthy means of saving life and of reducing the perils of the sea to a minimum, must be an object of universal desire (Roper, 1884, VII, 200).

Thus the need to protect fishermen at sea alongside function, efficiency and keeping catches fresh, was of the utmost importance in the developing and adaptability of fishing vessels. The loss of fishermen's lives during this period was made all too clear to the public culturally, ideally portrayed in the pre-industrial works of Stanhope Forbes and Walter Langley and other Newlyn artists in numerous galleries in London.

Following the many printed volumes associated with the catalogue of objects on display, the conferences held and the Prize winning essays by Clowes for the Exhibition, the 13<sup>th</sup> volume concluded proceedings under the title of *The Fisheries Exhibition Literature*. This volume, which included Birkbeck's Closing Address, presented some reports on the contents, logistics and statistical successes of the Exhibition with many issues discussed regarding fishing, fishermen and fisheries. The

first report listed was an official report on the Exhibition as a whole written by Sir Spencer Walpole. Walpole was better known for being a historian and civil servant. By the time of the Exhibition he had been in the government post of Inspector of Fisheries since 1867 alongside Frank Buckland. It was from this collaborative work with Buckland, involving many visits to different regions, which led to the publication of his *Manual of the Law of Salmon Fisheries* (1877). The year before the Exhibition, he was appointed the governor of the Isle of Man by the Prime Minister William Gladstone, a post which he held for twelve years.<sup>33</sup> With this new position on the Irish Sea Island as well as his years of experience and expertise as a Fisheries Inspector, Walpole was extremely well placed to give a report at the end of the Exhibition. One of his observations, under the subheading of 'Fishing Vessels and Fishing Instruments', was the many dramatic differences in the type of boats used in the British Isles compared with that of America. A crucial distinction he argued was the variety of numbers of boat types in Britain was more varied and diverse than those of their American counterparts.

In America - before the menhaden fishery went into steam - there was only one type of vessel in use. In the British Islands almost every locality has its own types of boat, while different kinds of fishing are always conducted in different kinds of vessels. The line smacks, the trawlers, and the drift boats, sailing from the same ports, are all specially designed for the particular industries in which they are intended to take part. No doubt efficiency is secured by the distinction. Every vessel is specially designed for a particular industry. But this very circumstance may probably make the introduction of the purse seine a more difficult matter than it otherwise would have been. A vessel built for drift fishing alone is less likely to be adapted to the seine than a vessel constructed for every mode of fishing (Walpole in Clowes, 1884, XIII, 117).

It is this very point that sums up the essence of the variety of regional and localised boat types in this country, exhibited and depicted at the museum in the collections in model form and of particular focus later in the Shipping Gallery. Although this point of Walpole's may be unjustly critical of American boat types, the desire to show the range and development of designs, shapes and methods in the manufacturing of these sail and engine powered small boats regionally in the British context was one of the

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<sup>33</sup> Sir Spencer Walpole Entry, Oxford Dictionary of National Biography  
<http://www.oxforddnb.com/view/article/36712> accessed 22nd June 2012

driving forces behind the later Small Craft exhibit, adhering to the museum's focus and remit.

However Walpole's commentary also shows that British boats are not adaptable. Each vessel is associated with one purpose, one function and within one or two specific coastal or seascape environments of operation. He concludes the section by reiterating the point:

As a general rule, then, it may be stated that the boats employed in British fisheries seem specially designed for the particular industry in which they engage; and ill-adapted, or imperfectly adapted, for other modes of fishing (Walpole in Clowes, 1884, XIII, 119).

For an exhibition that is promoting national pride for fisheries and the fishing industry on the international stage, this conclusive point is striking. Although praising the variety of British regional coastal fishing vessels compared to the conformity of the American boats, Walpole is also acknowledging the limitations and restrictions of their design for the purposes of specific coastlines and particular species of catch (i.e. pilchards, salmon or oysters) in mind. For general fishing, British boats would be ill suited for multi-use modes of catching fish.

#### **4.4 The Boat model collections post-1883**

Within three decades of the Fisheries Exhibition finishing, seventeen models would enter the institution up until 1914. This expanded a small aspect of the museum's ship model collections that was very much in its infancy. Initially stemming from a bequest from Bompas, other models soon followed and were presented as gifts and loans by individuals and firms culminating in two models from the Ministry of Agriculture, Fisheries and Food by the outbreak of World War I.

As a direct product of the exhibition seven models were bequeathed to the museum by Bompas on his death that year:

<b>(Inventory number) 1883-50</b> - (Castletown boat) Manx Fishing Lugger
<b>Inv. 1883-148</b> - Seine Boat
<b>Inv. 1883-150</b> - Mount's Bay Lugger
<b>Inv. 1883-151</b> - Fishing Lugger
<b>Inv. 1883-152</b> - Peel Boat
<b>Inv.1883-153</b> - Herring Boat
<b>Inv. 1883-163</b> - Tuck-Net Boat

These seven boat models represented three regions: the Isle of Man, Cornwall and Scotland. The Manx Fishing boat model (inv. 1883-50) (**Fig. 25**) was one of the first small fishing vessel models to be accessioned post exhibition. A week after the closure the model was presented to the museum on 3<sup>rd</sup> November on Bompas' bequest.<sup>34</sup> As the label explains:

This is a built and completely fitted model of a Castletown boat. She is typical of the Manx fishing luggers except for her round counter; a pointed stern being more usual. She is rigged with a dipping lug on the foremast and a standing lug, topsail and staysail on the mizzen.<sup>35</sup>

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<sup>34</sup> SMD Z-Archive: Z – 33/7 Temporary register of Ship Models 1883 – Manx Fishing Boat (3<sup>rd</sup> November) and Mounts Bay Lugger (7<sup>th</sup> November)

<sup>35</sup> SMD T/1883-50 Extract of the museum label for the Manx Fishing Boat inv. 1883-50



**Figure 25** A photograph of a Manx Fishing Boat model displayed within its 1963 showcase of the North West Coast in the Shipping Gallery. It was also the first model to be presented to the museum by the late Bompas after the International Fisheries Exhibition and enter the Shipping collections in November 1883. (Inventory No.: 1883-50) Scale 1:24. (James Fenner, November 2010).

Another model representing a vessel of the Isle of Man is the Manx Peel Fishing Boat (**Fig. 26**) which was used “for herring and mackerel fishing. It was dandy-rigged, with mizzen, mainsail, topsail, foresail and jib” and “was typical of the class of boat used by the Manx fisherman until about 1890.”<sup>36</sup> It was subsequently replaced after this date by a modified type of West Cornish lugger linking the model back to the previous two models already discussed.<sup>37</sup>

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<sup>36</sup> SMD T/1883-152 Extracts from the museum label for the Peel Manx fishing boat model (1880).

<sup>37</sup> Ibid.



**Figure 26** A photograph of a Manx Peel Fishing Boat model displayed within its 1963 showcase of the North West Coast in the Shipping Gallery. (Inventory No.: 1883-152) Scale 1:24. (James Fenner, November 2010).

The Pilchard Seine-Boat (**Fig. 27**) was the next model to be accessioned in November 1883 as part of the late Bompas' bequest. "This 'seine' boat" as the museum label explains "was employed in the Cornish pilchard fisheries to carry the very large seine-net which is used to enclose the fish."<sup>38</sup> Interestingly although it was accessioned in 1883, the model is older. In a later version of the label it explains that the model was made before 1883 by Williams of Mousehole and represents a boat that in use then at Sennen Cove, Lands End.<sup>39</sup>

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<sup>38</sup> SMD T/1883-148 Extract from the museum label for the Cornish Pilchard Seine Boat.

<sup>39</sup> SMD T/1883-148 Extract from the museum label for the Cornish Pilchard Seine Boat.





**Figure 27** A photograph of the Cornish Pilchard Seine Boat displayed within its 1963 showcase of Devon and Cornwall in the Shipping Gallery. (Inventory No.: 1883-148) Scale 1:12. (James Fenner, November 2010).

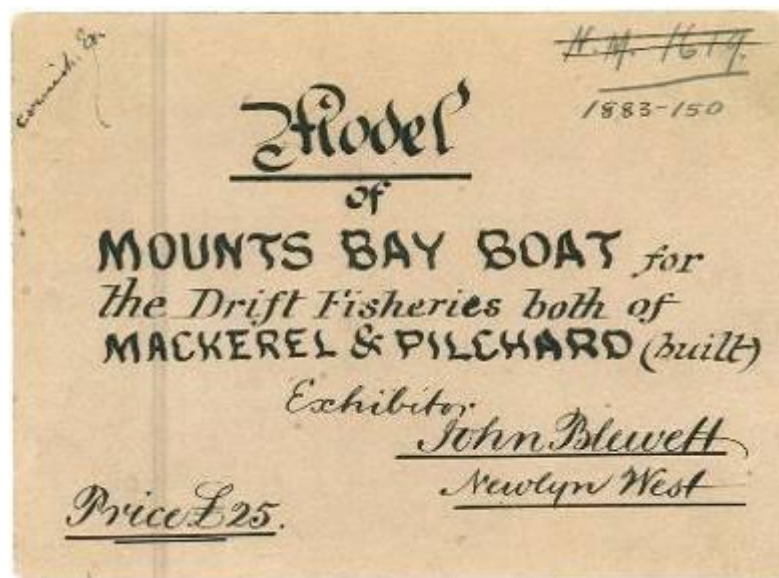
Another boat type from Cornwall, the Mount's Bay Lugger (1880) (**Fig. 28**) model soon followed the Pilchard Seine Boat into the collections. Described as a boat used in the Mount's Bay area close to Penzance, it was "engaged, according to the season, in the herring, mackerel, or pilchard fishery by the aid of drift nets. She is carvel built and flush decked. She carries sweeps in her lumber irons and would have a crew of six men and a boy."<sup>40</sup>

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<sup>40</sup> SMD T/1883-150 Extract from the museum label for the Cornish Mount's Bay Lugger model (1880).



**Figure 28** A photograph of the Mount's Bay Lugger model within its 1963 Map showcase in the Shipping Gallery. It was gifted to the museum on the bequest of Bompas in November 1883 (Inventory No.: 1883-150). Scale 1:12. (© Science Museum / SSPL).



**Figure 29** A scanned image of the original 1883 label associated with the Mount's Bay Lugger model (Inventory No.: 1883-150). Notice that it was built by the exhibitor John Blewett of Newlyn West and was priced at £25. Scale 1:12 (SMD T/1883-150).

This model is also especially interesting as it remains one of the few models from this period that has its original 1883 exhibition label amongst its archival documents. As

**Fig. 29** shows the model was made and exhibited by John Blewett and was on sale for £25 which at some point was purchased by Bompas and consequently bequeathed to the museum on his death on 7<sup>th</sup> November that same year.<sup>41</sup> And yet what is also intriguing about the model is that it is de-accessioned and then re-accessioned into the collections within a year of its original entrance (the re-accessioning happening in 1884).<sup>42</sup>



**Figure 30** A photograph of the Mevagissey Lugger model within its 1963 showcase of Mevagissey Cornwall in the Shipping Gallery. It was gifted to the museum on the bequest of Bompas in November 1883 (Inventory No.: 1883-151). Scale 1:12. (© Science Museum / SSPL).

The Lugger, the third Cornish boat model represented complementing and contrasting with the other two, comes from the Eastern part of the region from the fishing village of Mevagissey (**Fig. 30**). Made in Mevagissey in about 1880, the model “represents the type of boat formerly used in the East Cornish ports for drift fishing. The rig consists of a dipping lug on the foremast and a standing lug on the mizzen.”<sup>43</sup> The label goes onto say how this boat differed from its West Cornish fishing vessel counterparts being generally smaller in terms of the masts, hull and sails. In terms of

<sup>41</sup> SMD Z-Archive: Z – 32/3, Permanent Register of Ships’ models 1864-1891: /3 Science and Art Department South Kensington Museum – models in the Naval Museum 1878-1885

<sup>42</sup> SMD Z-Archive: Z – 32/3, Permanent Register of Ships’ models 1864-1891: /3 Science and Art Department South Kensington Museum – models in the Naval Museum 1878-1885

<sup>43</sup> SMD T/1883-151 Extract from the museum label for the East Cornish Fishing Lugger model (1880).

manpower it was dependent on the season because “when engaged in mackerel fishing, or in the winter pilchard or herring fishing, the crew consisted of five hands; but for summer pilchard fishing only three hands were required.”<sup>44</sup> Again, like the Mount’s Bay Lugger, this model also has its original 1883 exhibition label which tells us that the exhibitor and potentially the model maker was H. Roberts from Mevagissey who was selling it for £20.<sup>45</sup>

The fourth Cornish model the Pilchard Tuck-Net Boat (**Fig. 31**), like the Pilchard Seine boat that was paired to it, was also made by William Williams of Mousehole before 1883 and represents another boat then in use in the Sennen Cove area, Land’s End.<sup>46</sup> “This tuck-net or ‘follyer’ boat” as the label explains “is used to work the tuck-net by means of which, in the Cornish pilchard fisheries, the fish are finally captured after they have been surrounded by the large seine-net.”<sup>47</sup> Naturally, because both this boat type and the Pilchard Seine Boat are from the same part of Cornwall, comparisons are made:

As the tuck-net is comparatively light, the ‘follyer’ boat is very much smaller than the seine-boat, although she shares with her the peculiarity of having the maximum beam near the after thwart.

These boats are carvel-built, usually of English oak, and have the stem and keel strongly shod with iron. The bow is unusually sharp, but unlike the seine-boat, the stern is of square transom form. The boat pulls four oars.<sup>48</sup>

On closer inspection of the accompanying documentation for this model, both it and the Pilchard Seine boat model were originally attributed to the model maker Williams and were purchased by the Science and Art Department of the South Kensington Museum for the Naval Galleries on 8<sup>th</sup> November 1883 at a price of £8. Yet, in later labels, the models were attributed to the late Bompas.<sup>49</sup> This was the last of the seven models that were presented to the museum through Bompas’ bequest.

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<sup>44</sup> Ibid.

<sup>45</sup> SMD T/1883-151 The original 1883 International Fisheries Exhibition label for the East Cornish Fishing Lugger model (1880).

<sup>46</sup> SMD T/1883-163 Paraphrased from the museum label for the Pilchard Tuck-Net boat model

<sup>47</sup> SMD T/1883-163 Extract from the museum label for the Pilchard Tuck-Net boat model

<sup>48</sup> Ibid.

<sup>49</sup> SMD T/1883-163 The original Science and Art Department South Kensington Museum accession form dated 8<sup>th</sup> November 1883



**Figure 31** A photograph of the Cornish Pilchard Tuck-Net Boat displayed within its 1963 showcase of Devon and Cornwall in the Shipping Gallery. (Inventory No.: 1883-163) Scale 1:12. (James Fenner, November 2010).



**Figure 32** A photograph of the Scottish Herring Boat model within its 1963 Map showcase in the Shipping Gallery. It was gifted to the museum on the bequest of Bompas in November 1883 (Inventory No.: 1883-153). Scale 1:12. (© Science Museum / SSPL).

The fifth model of Bompas' collection of seven, stemmed from Scotland. The hull of the Scottish Herring Boat (**Fig. 32**) model, as the museum label explains "is typical of the larger class of Scotch 'Fifie' which is still employed in the North Sea herring fisheries. These vessels belong to the East Coast of Scotland and range from about 55



to 70 ft. long and from 25 to 35 tons register.”<sup>50</sup> In the original 1883 label shown below (**Fig. 33**), the last paragraph gives an indication of a fatal design flaw in the Herring Fishing Boats – the lack of rails or bulwarks – causing loss of life on board vessels operating out of Fraserburgh, East Scotland. This speaks to wider Victorian concerns surrounding the loss of life for fisherman at sea, an issue that Richard Rogers discussed in his paper in one of the many conferences held during the exhibition. The issue is particularly prominent during a period where legislation and acts of parliament began to ensure the safety of fishermen – most notably the Royal Commissions of 1873 and 1884 about safety of Sea Vessels and also the Plimsoll Act of 1876.<sup>51</sup>

The Shipwrecked Fisherman and Mariners Royal Benevolent Society, better known as the Shipwrecked Mariners’ Society, was also active on this issue during the Victorian period. The Society was founded in 1839 with the object of:

giving relief and assistance to the widows and orphans of fishermen; and of mariners, members of the Society, who lose their lives by storms and shipwreck on any part of the coasts of the United Kingdom, while engaged in their lawful occupations; and also to render necessary assistance to such mariners, soldiers, or other poor persons as suffer shipwreck upon the said coasts.<sup>52</sup>

Backed by royalty with Queen Victoria acting as its first Patron, the society helped raise funds for the welfare of sailors and fishermen, set up a system of lifeboats as well demonstrate how vessels could be made safer by building boats. Today it mainly “financially supports incapacitated fishermen and retired mariners and their dependents who need it” and “is one of the largest maritime charities in the UK.”<sup>53</sup>

Returning to the model, the highly negative commentary on the design flaw of the boat type is emphasised fully in the museum label suggesting a drastic need for change. The attention to detail of this flaw and other aspects of this model (along with another model) would result in the winning of a Gold medal for Alexander Taylor (the

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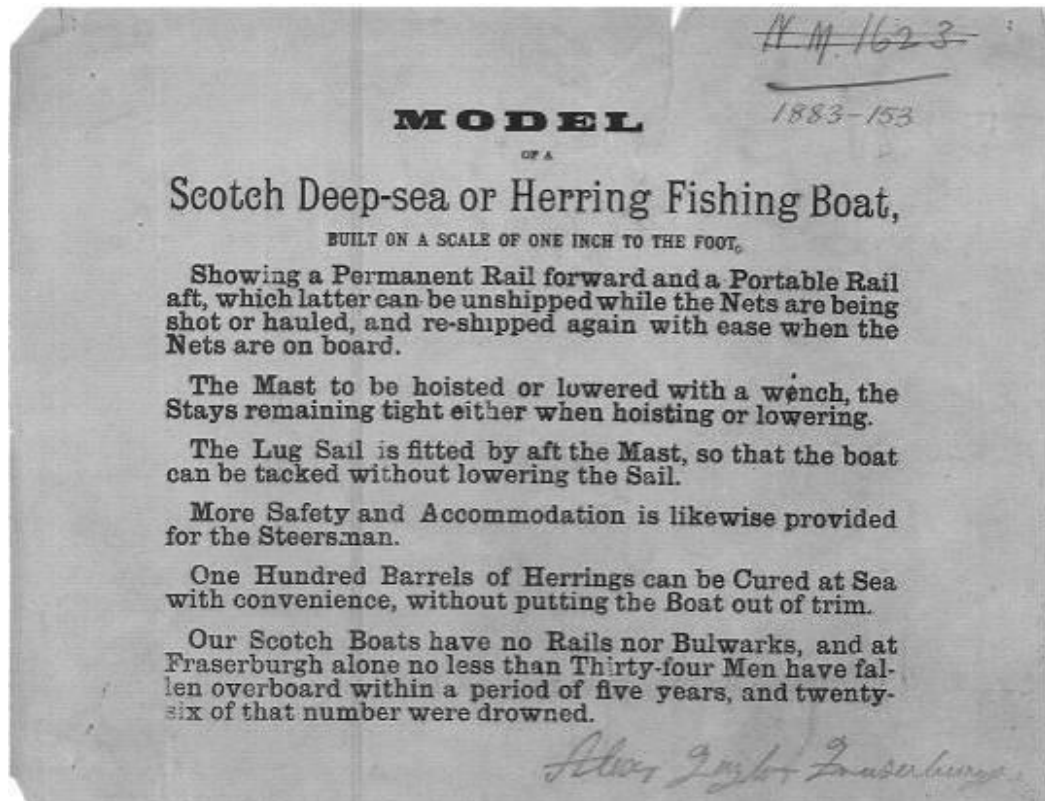
<sup>50</sup> SMD T/1883-153 Extract from the museum label for the Scottish Herring boat model

<sup>51</sup> Samuel Plimsoll’s Merchant Shipping Act 1876 Marjie Bloy, 2002, <http://www.victorianweb.org/history/plimsoll.html>, accessed 30<sup>th</sup> July 2014 ;See Staniforth 1992

<sup>52</sup> The Shipwrecked Society’s official website <http://www.shipwreckedmariners.org.uk/Home/WhoWeAre/History.aspx>, 2011, accessed 30<sup>th</sup> July 2014

<sup>53</sup> Ibid.

model maker) in the *Jury No. 5 Fishing Boats, Ropes and Canvas* Category of the *Awards of International Jurors* (Clowes, 1884, XII, 401).



**Figure 33** A scanned image of the original 1883 label associated with the Scottish Herring model signed by the model maker Alex Taylor of Fraserburgh (SMD T/1883-153). Scale 1:12.



**Figure 34** A photograph of the Fair Isles Skiff from the Shetland Islands displayed in its showcase of Scotland II in the Shipping Gallery. Inventory No.: 1883-402) Scale 1:12. (James Fenner, November 2010).

In addition to the Herring Fishing Boat, comes another representation of a boat type of Scotland, the above (**Fig. 34**) model of the Fair Isles Skiff – a boat type which “until about the middle of the 19<sup>th</sup> century, was generally employed around the Shetland Islands.”<sup>54</sup> As the label explains “its Scandinavian origin is very obvious and, in fact, as late as 1860, the planks for many of the Shetland fishing boats were imported, ready shaped, from Norway.” Added to that skiffs were clincher-built out of fir wood with iron fastenings and along with the single square sail, power was provided from three pairs of 10 ft., oars.<sup>55</sup> The model was presented to the museum as a gift by W. Lawrence and was the last of the small vessels models to stem directly, through Bompas, from the closing of the International Fisheries Exhibition of 1883.



**Figure 35** A photograph of the North Isles Yole from the Orkneys displayed in its showcase of Scotland II in the Shipping Gallery. Inventory No.: 1883-47) Scale 1:12. (James Fenner, November 2010).

Included and alongside those seven post exhibition models associated with Bompas is the above (**Fig. 35**) model of the North Isles Yole from the Orkneys, another Scottish

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<sup>54</sup> SMD T/1883-402 Extract from the museum label for the Fair Isle Skiff boat model

<sup>55</sup> Ibid.



boat type which was employed for fishing off those Isles in about 1880. As the label ascertains although they reflected Viking origins “they displayed greater beam for their length and an altogether fuller stern. In fact, they illustrate the intermediate stages in the evolution from the early Viking ships to the much larger ‘Skaffies’.”<sup>56</sup> It continues explaining the boats distinguishable technical features:

These Yoles were double-ended and clincher-built of Norwegian pine planking on oak frames, with galvanised iron fastenings.<sup>57</sup>

Although attributed to J. Barnett of Kirkwall Orkney who presented it as a gift to the museum in 1883, it transpires fifty years later that the model had had a more intriguing story – one of incorrect identification. In a letter to Laird Clowes on 22<sup>nd</sup> October 1928 Stuart Bruce writes:

You will remember that you questioned if the boom on the main lug of your model of the Orkney ‘Yole’ was correct? We both thought the boom would be in the way in a fishing boat.

I have been making enquiries in Orkney – and find that your model is a North Isles boat, and was made by an old fellow – Maxwell – who is still alive. My friend Rutherford in a previous letter said that Maxwell built her more than 50 years ago.

The South Isles boats are same in built but sprit-rigged so perhaps you might alter your label.<sup>58</sup>

What can also be verified further by looking at the displays, and the accessioned numbers of those models displayed, is that another handful of models in the exhibit were acquired after 1883 and before the beginning of influx of models during the 1920s and 30s. Predating the eventual Small Craft collections of the 1960s by fifty to seventy years these models were acquired sporadically on a more individual basis. They are as follows:

<b>(Inventory number) 1893-215 – Harwich Barge</b>
<b>Inv.1905-106 – Barge 1900</b>
<b>Inv.1905-107 – Ship’s Lifeboat</b>
<b>Inv.1910-42 – Leith Baldie</b>
<b>Inv.1910-81 - Barge 1820</b>

<sup>56</sup> SMD T/1883-47 Extract from the museum label for the North Isles Orkney Yole.

<sup>57</sup> Ibid.

<sup>58</sup> SMD T/1883-47 Extract from a letter from Stuart Bruce to Laird Clowes dated 22<sup>nd</sup> October 1928

<b>Inv.1912-290 – Hog Boat</b>
<b>Inv.1914-309 – Frank Buckland’s Grimsby Trawler</b>
<b>Inv.1914-427 – Oyster Smack</b>

Venturing to South eastern England and those boats linked to the river Thames and ten years after the international exhibition we find the Harwich Sailing Barge (**Fig. 36**). Accessioned on 16<sup>th</sup> October 1893 and purchased from J. Green of Brentford Middlesex,<sup>59</sup> “this constructional model” of a Harwich flat bottom barge was “a type that [was] in general use sailing between London and Harwich or Sittingbourne by the Coast.”<sup>60</sup> The label then delves into the more technical features and attributes of the craft:

The bottom is flat, but the lines are fine at both ends; two leeboards are carried, but these are only used when the barge is sailing light. There is a large hold with two hatchways, and a small forecabin for the two hands, while aft is a separate cabin for the captain.<sup>61</sup>

Keeping with barges and the Thames locale theme we have the Thames Sailing Barge 1900 model (**Fig. 37**). Lent by the barge builders Gill and Sons of Rochester Kent, the model represents the successful racing but also cargo-carrying sailing barge *Thelma*; the original full size vessel being designed and built by the same Gill and Sons in 1901.<sup>62</sup> “She [was] flat-bottomed with full water lines throughout and in general features represents a modern cargo-carrying barge as used on the Lower Thames.”<sup>63</sup>

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<sup>59</sup> SMD T/1893-215 The original Science and Art Department South Kensington Museum accession form dated 16<sup>th</sup> October 1893

<sup>60</sup> SMD T/1893-215 Extract from the museum label for the Harwich Barge constructional model

<sup>61</sup> Ibid.

<sup>62</sup> SMD T/1905-106 Paraphrased from the museum label for the Thames Sailing Barge 1900 model

<sup>63</sup> Ibid. Extract from the museum label



**Figure 36** A photograph of the Harwich Barge constructional model displayed in its showcase of The Thames Estuary in the Shipping Gallery (Inventory No.: 1893-215). Scale 1:24. (James Fenner, November 2010).



**Figure 37** A photograph of the Thames Sailing Barge 1900 model displayed in its showcase of The Thames Estuary in the Shipping Gallery (Inventory No.: 1905-106). Scale 1:48. (© Science Museum / SSPL).

This older museum label goes on to explain that the *Thelma*:

In her first year [of racing] she won both the Thames and the Medway Championship races. The Championship course is usually from Chatham or Gravesend to the Mouse lightship and back. All competitors in these races are required to be genuine freight

barges engaged in trade, using no ballast or false keels, and carrying the ordinary working sails and lee-boards.<sup>64</sup>



**Figure 38** A photograph of the Thames Barge 1820 model displayed in its showcase of The Thames Estuary in the Shipping Gallery (Inventory No.: 1910-81). Scale 1:36. (James Fenner, November 2010). The Thames Barge c.1820, as shown by the model in **Fig. 38**, and stemming from the square sailed Thames Lighters of the 18<sup>th</sup> century, had by the 19<sup>th</sup> century developed a permanent rig for sailing.<sup>65</sup> And yet some of the original features of the hull remained:

To the earlier rig of a spritsail and foresail were added, first a jib, next a topsail and finally a small mizzen stepped on the rudder post; but until about 1840 the original hull of the lighter remained unaltered.<sup>66</sup>

Turning to the Ship's Lifeboat (**Figs. 39 and 40**) model it illustrates the use of the 'quadrant' type of davit (the mechanical arms at the bow and stern of each life boat)

<sup>64</sup> SMD T/1905-106 Extract from the museum label for the Thames Sailing Barge 1900 model

<sup>65</sup> SMD T/1910-81 Paraphrased from the museum label for the Thames Barge c.1820 model

<sup>66</sup> Ibid. Extract from the museum label

which was the patent of the Swedish inventor Axel Welin in 1900.<sup>67</sup> The model was lent and also accessioned into the museum's collections in 1905 by the inventor himself. As the accompanying label for the model explains:

The movement of the toothed quadrant type on the rack gave the davits a horizontal motion outboard so that the boat could be rapidly lowered by the falls.<sup>68</sup>

In other words the horizontal design of the davits meant that a life boat like the one shown could be lowered quickly and safely over the side of a ship in an evacuation.



**Figure 39** A photograph of the Sea Boats display within the River/Sea Boats showcase showing the Cutter, Gig and Ship's Lifeboat models. (Inventory Nos.: 1934-548, 1934-547 and 1905-107) (© Science Museum / SSPL).

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<sup>67</sup> See also the Science Museum Blog 'Oar-some Boats!' <http://sciencemuseumdiscovery.com/blogs/collections/category/transport/water-transport/>, James Fenner, July 2012, accessed 3<sup>rd</sup> September 2012

<sup>68</sup> Extract from the 1960's label for the Ship's Lifeboat (Inventory No.: 1905-107)



**Figure 40** A photograph of the Ship's Lifeboat model showing the 'quadrant' type davits patented by the Swedish inventor Axel Welin. The model was presented to the museum by Welin in 1905. (Inventory No.: 1905-107). Scale 1:16. (© Science Museum / SSPL).



**Figure 41** A photograph of the Leith Baldie from the Firth of Forth displayed in its showcase of Scotland II in the Shipping Gallery. Inventory No.: 1910-42) Scale 1:12. (James Fenner, November 2010).



Returning to Scotland, the Leith 'Baldie' (Fig. 41) model represents one of the noted vessel types that was employed at Leith and Newhaven for small line fishing in the Firth of Forth. "It would appear" the label continues "that these carvel-built boats, with their pointed and almost vertical stem and stern-post, have resulted from the enlargement and strengthening of the older yawls used on the east Coast of Scotland, which until about 1860 were clincher-built open boats, very similar to the North Isles Yawls."<sup>69</sup> This model was purchased for the museum from W.B. Pearsall along with the Thames Barge 1820.<sup>70</sup>



**Figure 42** A photograph of the Brighton Hog Boat model displayed in its own showcase in the Shipping Gallery (Inventory No.: 1912-290). Scale 1: 8. (© Science Museum / SSPL).

The Hog Boats or Hoggies, a modelled example pictured above in Fig. 42, "were the ordinary off-shore, decked, fishing boats of the South Coast, between Eastbourne and Shoreham, during the 18<sup>th</sup> century"<sup>71</sup> as the museum label explains. Due to their excessively wide hulls and their leeboards and spritsails they have in the past been credited "with a Dutch ancestry, but their transom sterns discount this suggestion and it is probable that they represent an essentially English South Coast type."<sup>72</sup> This is

<sup>69</sup> SMD T/1910-42 Extract from the museum label for the Leith 'Baldie' model

<sup>70</sup> SCM MIMSY XG record for inv. 1910-42 and inv. 1910-81

<sup>71</sup> 1912-290 Extract from the label of the Brighton Hog Boat model

<sup>72</sup> Ibid.

further proven, the label argues, by the fact that the light short sprit sails are distinctly an English fashion while the Dutch types differed favouring a heavy spritsail. By the 1830s two-masted undecked luggers were preferred for Newhaven, Eastbourne and Hastings but they still kept the short wide hulls that resembled the old Hog boats.<sup>73</sup> The model was presented to the museum as a gift by Major F.V. Longstaff and accessioned in 1912.

In a later note to Laird Clowes on 28<sup>th</sup> June 1935, the owner and original presenter of the model Major Longstaff, writes:

Bought about 1909 off an old sail maker named Basset at Brighton. The boat is the 'Prince George' registered at Shoreham. The main sail is old, I have a happy idea Basset said the model was 100 years old.

He also gave an indication of the models defects citing that "she had only one lee board", "a bowsprit" and that "the shape of [the] rudder [was] not quite right."<sup>74</sup>

Turning to the two 1914 models, touchingly and ironically Buckland's legacy is lived on in the model of a Grimsby Trawler named after him (**Fig. 43**). As shown below, it was allocated a display case of its own in the later 1963 Shipping Gallery with some accompanying smaller models and was lent to the museum by the Board of Agriculture and Fisheries in 1914. The label reads:

This elaborate model represents the ketch rigged type of boat employed in the North Sea trawling fisheries in 1890.

These Grimsby trawlers were formerly rigged as luggers. By about 1880 the Grimsby men adopted the ketch rig for trawling, being influenced thereto by the fine qualities of the Brixham ketches which about that time began to use Grimsby as a convenient station for reaching the North Sea trawling grounds. The large displacement of this trawler, her deep draught and characteristic lines are typical of the Brixham boats.<sup>75</sup>

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<sup>73</sup> 1912-290 Paraphrased from the label of the Brighton Hog Boat model

<sup>74</sup> SMD T/1912-290 Notes written by the owner and presenter of the Hog Boat model Major F.V. Longstaff dated 28<sup>th</sup> June 1935

<sup>75</sup> SMD T/1914-309 Label to Grimsby trawler model 'Frank Buckland' inv.1914-309



As a catalogue image caption reads, it also transpires that “this superb model was awarded a diploma, highest prize and medal at Fisheries Exhibition, 1883, and is now in the Science Museum.”<sup>76</sup> At 74 tons, an overall length of 82ft and a beam of 20ft,<sup>77</sup> the original vessel was built in Grimsby on 5<sup>th</sup> September 1883 and was followed by several other vessels built predominantly by the boat builder Fred Bell including immediately after it the aptly named *Huxley* on 14<sup>th</sup> February 1884.<sup>78</sup>



**Figure 43** A photograph of the model of the Grimsby Trawler *Frank Buckland* (in its 1963 showcase within the Shipping Gallery) named after the natural historian, pisciculturist and Salmon Fisheries inspector. (Inventory No.: 1914-309). Scale 1:12. (James Fenner, November 2010).

On 30<sup>th</sup> January 1914 Borley, on behalf of the Board of Agriculture and Fisheries, wrote to Parkinson, a Keeper at the Science Museum:

Enclose a duplicate of the list of “exhibits ready” which we discussed on Wednesday. Will you please let me know when you have considered it and we can profitably meet to move a step further? Please also ask me for any necessary details not in the list.”<sup>79</sup>

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<sup>76</sup> SMD T/1914-309 Caption to an image from a catalogue entry for the *Frank Buckland* model. Date unknown.

<sup>77</sup> Ibid.

<sup>78</sup> SMD T/1914-309 A photocopy of the original launch list of those Grimsby Trawlers built by Fred Bell.

<sup>79</sup> SMD Nom. File 267 MAFF – Letter from Borley (Board of Agriculture and Fisheries) to Parkinson (SCM) dated 30<sup>th</sup> January 1914.

The list mentioned was extensive with 17 individual or grouped items. As well listing, under the title '*Fisheries Exhibits now Available for Science Museum*', several specimens from the North Sea – including oysters, fauna, plankton and certain species of fish alongside diagrams, photographs, illustrations, fishing equipment – the first six items were boat models (with three others of fishing equipment):

1. Model of steam drifter (presented by Smith Dock Co.) – already forwarded to Museum.
2. Model of sailing trawler "Frank Buckland" (presented by G.L. Alward, Esq:).
3. Model of Ramsgate smack.
4. Model of a Whitstable smack
5. Model of a section of trawler
6. Model of S.T. Manor

Both the *Frank Buckland* (inv. 1914-309) and the Oyster Smack (inv. 1914-427) models even though they were loans between 1914 and 1977 remained part of the permanent collections at the Science Museum while others were returned to the Ministry.<sup>80</sup>



**Figure 44** A photograph of the Whitstable Oyster Smack model lent to the museum by The Board of Agriculture and Fisheries in 1914 (Inventory No.: 1914-427). Scale 1:12. (© Science Museum / SSPL)

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<sup>80</sup> SMD Nom. File 267 MAFF – In a letter from MAFF to the Science Museum dated 3<sup>rd</sup> December 1996

The Whitstable Oyster Smack model (**Fig. 44**) was the last of the models of the coastal and fishing vessels to be accessioned into the collections before World War I. The model “represents an oyster-dredging boat of the Thames estuary and shows the oyster dredges on the deck. The vessel is cutter-rigged.”<sup>81</sup> The museum label goes on to refer to the more technical detail saying that “the open ports in the bulwarks are for the purpose of clearing the decks of refuse brought up in the dredges”<sup>82</sup> while also highlighting the models flaws and inaccuracies in representing the original vessel type: “The model is not quite accurately rigged. It does not show the runners or a topping-lift, and the mainsail should be loose-footed and fitted with a tack tricing line instead of being laced to the boom.”<sup>83</sup>

Along with the *Frank Buckland* Grimsby Trawler already mentioned, the Oyster Smack was loaned to the museum from the Board of Agriculture and Fisheries as part of “the proposed Fisheries Section at the Science Museum.”<sup>84</sup> The mention of a ‘proposed Fisheries Section’ here was a development in the expansion of the collections. The Board of Agriculture and Fisheries in contact with the Board of Education (the museum’s governing body) wished to take an active role in the development of this part of the museum’s collections for permanent exhibits. Specifically the Board’s desire was “to see the development of a permanent exhibit at the Science Museum, which shall illustrate adequately the magnitude, scope, and methods of the British Fisheries and the various industries related thereto.”<sup>85</sup> Following correspondence in February and March 1914 the interest of the BAF was confirmed with a reply from the museum:

I am directed by the Board of Education to inform you that they welcome the co-operation of the Board of Agriculture and Fisheries in maintaining a good representation of Fisheries in the Science Museum and in the gradual

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<sup>81</sup> SMD T/1914-427 Museum label of the Whitstable Oyster Smack model

<sup>82</sup> Ibid.

<sup>83</sup> Ibid.

<sup>84</sup> SMD Nom. File 267 Letter from the Secretary of the Board of Agriculture and Fisheries Henry Shanning to the Science Museum Director’s Secretary dated 30<sup>th</sup> May 1914

<sup>85</sup> SMD Nom. File 267 Letter from the Secretary of the Board of Agriculture and Fisheries Sydney Olivier to the Science Museum Director Sir Francis Grant Ogilvie dated 27<sup>th</sup> February 1914

building up of a satisfactory permanent Fisheries Section of the Museum collections.<sup>86</sup>

Whether this envisaged expansion of a 'Fisheries Section' was ever fulfilled is uncertain with the interruption of the First World War. However the relationship between the museum and Board of Agriculture and Fisheries continued into the interwar period and beyond the Second World War loaning later boat models to the museum alongside objects for the Agriculture Gallery collections.<sup>87</sup>

Returning to the Oyster Smack model the Board's letter announces that "a model of an Oyster Dredging boat, prepared by the Whitstable Oyster Fishery Company has now been completed. The Company have been requested to consign the model direct to South Kensington."<sup>88</sup> This was confirmed in another letter from The Whitstable Oyster Fishery Company (**Fig. 45**) where it can be seen that they had won seven medals at the Fisheries Exhibition of 1883 (**Fig. 46**) and Gold and Silver medals at the Franco-British Exhibition of 1908.<sup>89</sup> The model was accessioned and given its inventory number on 19<sup>th</sup> August 1914.<sup>90</sup>

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<sup>86</sup> SMD Nom. File 267 Letter from the Science Museum Director Francis Grant Ogilvie to the Secretary of the Board of Agriculture and Fisheries Sydney Olivier the dated 4<sup>th</sup> March 1914

<sup>87</sup> The Board later had incarnations as the Ministry of Agriculture and Fisheries in 1919 and Ministry of Agriculture, Fisheries and Food.

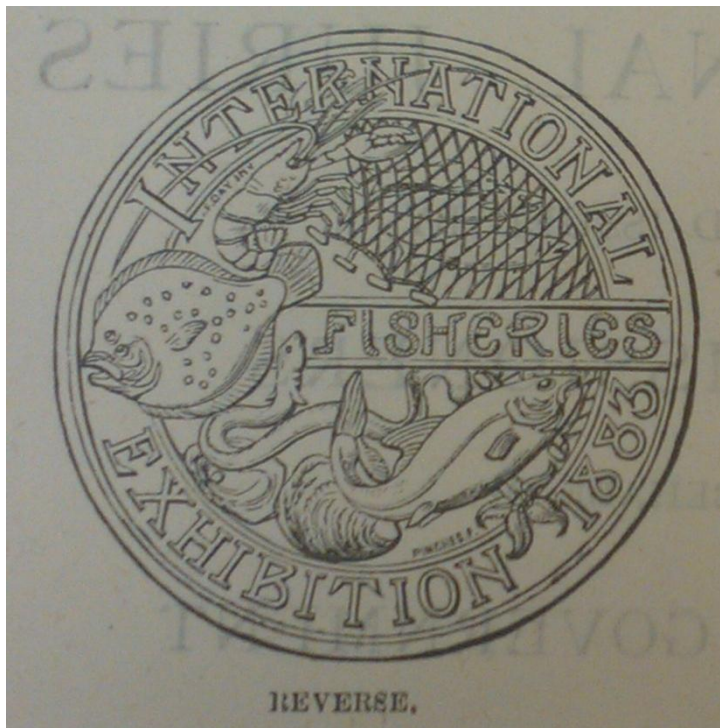
<sup>88</sup> SMD Nom. File 267 Letter from the Secretary of the Board of Agriculture and Fisheries Henry Shanning to the Science Museum Director's Secretary dated 30<sup>th</sup> May 1914

<sup>89</sup> Ibid.

<sup>90</sup> SMD Nom. File 267 Letter from the Secretary of the Whitstable Oyster Fishery Company Coleman to the Science Museum Director Sir Francis Grant Ogilvie dated 3<sup>rd</sup> June 1914



**Figure 45** Image of the letter heading of the Whitstable Oyster Fishery Company indicating the medals they had won at the Fisheries Exhibition of 1883 and the Franco-British Exhibition of 1908. (Nom. File MAFF 267)



**Figure 46** Image showing the reverse of prize medal from the International Fisheries Exhibition, 1883. The obverse side had a relief image of Queen Victoria (Clowes, 1884, Vol. XII)

This example, alongside all the other models for the period after 1883, illustrates the ethos of ‘improvement’ and development of small craft technologies purported by the Prince of Wales in his address at the exhibition. Even though the Prince of Wales admittedly was only referring to this in the context of fisheries and the fishery industry, the ethos of displaying development in technologies would become the remit

of the later Science Museum in tandem with science. What is also evident from these models, is where there is a regional link to a particular boat type, the models have come from these original regional locales and through owners to the museum – a recurrent theme which is also apparent in the subsequent two later periods.

#### **4.5 Conclusion**

The International Fisheries Exhibition of 1883 was the stage on which the beginnings of the boat model collections of the South Kensington Museum (the later Science Museum) were realized. It was through this ‘hive of glass’ nature of the exhibition that the lives of fishermen, technologies and methods used in fishing and the variety of species of fish as well as boats and craft globally were celebrated and recognised. Yet as with other international Exhibitions of the late 19<sup>th</sup> Century/early 20<sup>th</sup>, the Fisheries Exhibition had sinister imperial and patriotic undertones – it was as much a show of British dominance, power and authority as it was of a shared global community with interests in fish and the sea (Greenhalgh, 1988, 3-23).

The exhibition was also testament to the dramatic developments and expanding expertise of scientific thought and practices at South Kensington. It had become “a site for scientific and technical education” and “a...nerve centre” with its branches having ramifications “into every part of England, Ireland, Scotland and Wales”; a locale home to numerous museums and scholarly institutions (Forgan and Gooday, 1996, 464).<sup>91</sup>

Interestingly also is the differences in scale, longevity, purpose and appeal of these handful of models being presented in an International exhibition compared with the temporary exhibition of fifty years and the permanent gallery eighty years later. There was also a commercial and trade-like quality and purpose to the exhibition which did not feature in the later exhibitions; a node in an extensive web of companies and institutions of the piscicultural and industrial worlds.

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<sup>91</sup> “Nerve centre...into every part of England, Ireland, Scotland and Wales” originally taken from *Science and Art*, 1893-94, p. 22, Imperial College Archives E 1/1 1028 in Forgan and Gooday, 1996, 464.

However, the exhibition and indeed the museum's collections and earlier history can also be placed into much broader discourses surrounding the scientific studying of fish cultures and notions of *acclimatisation* as a scientific experimental pursuit during the Victorian era; studies complemented through the work of notable figures like Frank Buckland, Francis Day, Spencer Walpole and T.H. Huxley. Furthermore, the Exhibition as well as being an international venue for fish and fisheries, was also a stage on which national Victorian concerns could be voiced. As has already been demonstrated these included: the state of British fisheries, conservation of fish stocks and the more urgent issue of sustaining the constant demand for cheap plentiful fish for the ever growing urban populations during this period (Bartrip, 1985, 300). This latter issue was perceived as being one of the most crucial "beneficial results of this Exhibition", one which brought "to the homes of the poor the harvest of the waters"; "an undertaking destined...to bring to a prominence hitherto unattained the infinite resources of the sea" (Birkbeck in Clowes, 1884, XIII, 261).

Alongside the political implications of the exhibition and conferences towards state funding of fisheries, national food supplies and fish stocks, the grand event also hinted at cultural changes. As explained earlier, within five years of the exhibition ending artists would be active across Europe painting scenes from rural and coastal environments depicting the idealised pre-industrial age. The Newlyn School was part of this movement and produced notable figures in art such as Walter Langley, Stanhope Forbes and Thomas Cooper Gotch.

Ultimately then, this chapter has told a different story – a narrative that differs greatly from the later periods of the collections' museum history. In the 1880s and early 1900s these earliest models were not seen in the dioramic displays of the 1960s and were not collected as part of an envisaged nostalgic rhetoric of a long gone age of 'vanishing craft' seen with the work of the museum and the Society for Nautical Research of the 1930s.<sup>92</sup> Instead they were models that were representative of current regional vessels at that time presented in an exhibition on Fisheries. Thus the

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<sup>92</sup> A reference to the title used by Frank George Griffith Carr for his nostalgic 1934 book concerning British small boats with the sub-line *British Coastal Types in the Last Days of Sail*.

use and meaning of the miniaturisation of the models had changed between this earliest period and the later episodes. These earliest models were not representative of British Fishing Boats or of a broader British Small Craft collection but of vessels simply used daily in the fishing industries of the 1880s.

So how did the collection develop in size and breadth from this late 19<sup>th</sup>/early 20<sup>th</sup> Century period up to the British Fishing Boats Exhibition of 1936 and beyond? In what ways were the later themes of identities, museum collecting and display and notions of nostalgia envisioned and illustrated in the Science Museum of the 1920s and 30s and reflected in the work of the SNR? It is this later period of the museum's history which I would now like to turn to in the next chapter.



## Chapter 5 – ‘Vanished and vanishing craft’: the collections during the interwar period



**Figure 47.** A detail of the poster for the Science Museum’s British Fishing Boats Exhibition of 1936 (© TfL from the London Transport Museum collection).

The Exhibition which will be opened to the public on July 23<sup>rd</sup> will remain open to the end of August, and will, it is hoped, arouse widespread interest. A romantic era is passing. South Kensington can show that it will not be forgotten.<sup>93</sup>

These words are the last sentences of a document in the Society for Nautical Research’s Coastal Craft Sub-Committee Papers on the Science Museum’s temporary exhibition on British Fishing Boats in the summer of 1936 as the detail image of the poster shows (**Fig. 47**). The one month long exhibition was the culmination of two years of collaborative work between the museum and the Society: gathering information, drawings and making models relating to the hundreds of coastal, fishing

<sup>93</sup> SNR/10/1 – *British Fishing Boats. Interesting Exhibition at South Kensington* document, Coastal Craft Sub-Committee Papers 1936-38, Society for Nautical Research Archives, Caird Library NMM

and river small craft of the British Isles. As the curator Geoffrey Swinford Laird Clowes explained:<sup>94</sup>

The objects of this exhibition are twofold. Firstly, to show the work which has been done during the past two years by the Society for Nautical Research, through its Coastal and River Craft Committee, in collecting accurate information, and particular plans, of those many and curiously diverse types of fishing boats and river craft which still exist in the different districts of England, but which are now, owing to the advent of the motor, rapidly disappearing, and, secondly to emphasize the importance of this work by illustrating how little accurate information we really have of the English fishing boats of the past (Clowes, 1936, 5).

The reference here to ‘rapidly disappearing’ along with other similar phrasing such as ‘vanishing craft’ or ‘forgotten craft’ contribute to this recurring nostalgic notion of a loss of these traditional sailing boats with the introduction of the motor; the typical cultural rhetoric and discourse of loss surrounding the subject during that period of the 1930s. However as we will see later this simplistic view of nostalgia has far more complex connotations for this period and the subsequent Shipping Gallery of the 1950s and 60s.

In addition to this there was a foundational group of models from the late Victorian period which formed the basis for the collection and the exhibition:

In 1883...the Fisheries Exhibition, which was held at South Kensington, besides increasing the national interest in our fisheries, gave occasion for the making of a number of excellent models of British Fishing Boats. As the majority of these were the work of local boat-builders they may be accepted as accurate representations of the various types then in use at our fishing ports.

Fortunately for the nation, the generosity of the late Mr. G. C. Bompas made it possible for the best of these models to be preserved at the Science Museum, where they form an important collection, all the more valuable by reason of the half-century which has passed since the construction of the models. Some of them are shown in the present exhibition (Clowes, 1936, 7).

As discussed in the previous chapter, these seven models had been in the collections of the museum since the end of the International Fisheries Exhibition in November 1883. This reference to old models is important as Clowes explains that, although it is

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<sup>94</sup> ‘Assistant Keeper’ as his position in the museum was then known.

generally difficult to find old plans of boats, sometimes it is possible to find old models such as these 1883 examples. When found the latter, Clowes argues “have the advantage of presenting even to a landsman an accurate impression of the types of fishing boats which may have long passed away” (Clowes, 1936, 5). Combined with the newer commissioned models made during this period, it is clear that this statement emphasizes the perceived nostalgic loss of these boat types and highlights the significance and necessity of accuracy, authenticity and detail in each model.

Although both the museum’s and the society’s goals were the same their approaches were somewhat different:

Concurrently with this work however, and in close co-operation, the Science Museum has in the past few years been working with a similar end in view; but while the Committee has turned its attention primarily to plans, the Museum has endeavoured, in the first instance, at any rate, to obtain models, wherever such are known to exist or are likely to be procurable (Clowes, 1936, 5).

Thus the focus of this chapter is the rich narratives of the gathering of the majority of the coastal, river and sailing boat models at this institution during the interwar period and the culmination of this in the exhibition of 1936. These 60 models, which would later constitute the majority of the ‘British Small Craft’ collections of the 1950s and 1960s, were accessioned and collected for different reasons compared with those of the earlier period already discussed in Chapter 4. In the 1920s and 1930s Clowes was developing the breadth and variety of marine models of the museum to represent as many of the “two hundred types of fishing and coastal craft surviving in the British Isles” as possible under the banner of science, technology and progress which formed part of the Science Museum’s identity and remit.<sup>95</sup> Thus the chapter considers these boat models in terms of the nature of their acquisitional routes; the transference of local and regional knowledge; of craftsmanship, scale and the miniature; and, more broadly, of the local, regional, national, institutional identities (highlighted by confrontations with the National Maritime Museum Greenwich) and the scientific and

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<sup>95</sup> Ed 79/45 *British Fishing Boats. Interesting Exhibition at South Kensington* document. Also see SNR/10/1 Coastal Craft Sub-Committee Papers 1936-38, Society for Nautical Research Archives, Caird Library NMM

technological developments behind each boat types' construction. This is set within the background context of the museum's history during this interwar period.

Before we delve deeper into the model gathering, organisation and build up towards the exhibition of 1936, it would be best to first set the scene and follow the museum's story after the First World War and the expansion of the shipping collections during the 1920s and early 1930s.

### **5.1 The post World War I Science Museum, its staff and the shipping collections of the 1920s and 1930s**

On 7<sup>th</sup> August 1911 the Director of the Science Museum William Isaac Last died and his duties were passed to the Secretary of the aforementioned Bell Committee, Francis Grant Ogilvie (Follett, 1978, 41). Ogilvie remained in his post during the war only to relinquish it to Colonel (later Sir) Henry Lyons in 1920. It was under Ogilvie's leadership that led to changes in administrative arrangements for the responsibility surrounding the collections. Formerly the responsibility of arranging, developing and labelling the collections had rested with two Keepers. Under the new arrangement, introduced at the end of 1913, the responsibilities were divided out into individual museum officers, under the supervision of Keepers. The Keepers in turn had their own collection sections to look after (Follett, 1978, 47). It was this new administration system that would pave the way for Laird Clowes and O'Dea in the future, Assistant Keeper and Keeper respectively of the later water transport collections. An ex-officer from the British Army, when Henry Lyons took over as Director in May 1920 he was presented with a rather depressing set of circumstances. The museum was drastically overcrowded with its collections and cramped for the visitors viewing them. The original 1861 Great Exhibition Western and Southern Galleries were still in use and the building of the East Block sanctioned by the Bell Committee in 1912 had continued slowly during the war but was still not complete. And yet the decade 1920-29 saw the acquisition of 14,340 items with the collections growing progressively rather than explosively since the foundation of the museum in 1909 (Bud, 2010, 261).

However even in these difficult circumstances Lyons was from the outset wanting to improve and develop the museum; unlocking the institution's full potential. He began this revitalisation of the museum with an internal memorandum in August 1922 setting out 'the aim and purpose of the Science Museum.' He explained:

The Museum should afford

Illustration and Exposition of the various branches of Science within its field, and of their Application in Art and Industry,

And should provide

Safe custody for appliances holding honoured place in the progress of Science or in the history of Invention.

In each Collection

Every object must definitely serve the general purpose of the Museum,

The stages in the development of the particular branch of Science or Technology will be illustrated, and the utilization of new ideas emphasized,

Recent advances will be illustrated,

The arrangement adopted should be intelligible, logical and attractive.<sup>96</sup>

It is the sentiment of this memorandum that would be the essence of the Science Museum's remit towards the displaying, collection and education of technologies and science to the public for the next 80 years with the shipping and marine collections being no exception. As Scheinfeldt argues, Lyons' interwar Science Museum "presented the history of science as the cornerstone of the history of civilization, as a history of mankind's largely uninterrupted progress" (Scheinfeldt, 2010, 51). This positioning of the institution during the period was largely down to the influences of Henry Lyons' own background.<sup>97</sup> "The interwar Science Museum" Scheinfeldt explains "was led mostly by men like Lyons who had applied scientific training and skills to public, and, more specifically to military positions and projects" (Scheinfeldt, 2010, 50). Under Lyons' directorship then (as shown in **Fig. 52**), a Science Museum officer occupied a "position of scientific service" like an Army officer would have occupied a military one (Scheinfeldt, 2010, 50). However unlike the armed forces officers who developed destructive and lethal technologies, the Science Museum officers "were

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<sup>96</sup> SMD Z-183/1 *Memorandum from the Director Henry Lyons on the aims and purposes of the Science Museum*, 1922

<sup>97</sup> Sir Henry Lyons Entry Oxford Dictionary of National Biography <http://www.oxforddnb.com/view/article/34651> accessed 27th March 2013

charged with describing a more progressive vision of science and technology”; a sentiment and rhetoric of “public betterment and future progress” that the institution evoked as a ‘peace museum’ after the horrors of World War I (Scheinfeldt, 2010, 50/51).

In other words it was under this technological remit ‘banner’ of the museum that the British small boat model collections were gathered and expanded during this period. This expansion of the collections was helped by the institution’s collaboration with the Society for Nautical Research from 1934 onwards, and was followed later by the opening of the exhibition in July 1936.

In a later memorandum in October 1922 to higher technical staff directly, Lyons set out “the problems, peculiar to a technical museum, relating to the content of the Collections and their presentation to the public” (Follett, 1978, 98). In the concluding remarks of the many pages he argued:

The problems for solution are therefore:-

Given the very specialised character of a technical museum, and the amount of detail which it must contain, how can it be made attractive and instructive for

- (a) The ordinary visitor
- (b) The technical visitor
- (c) The student
- (d) The specialist<sup>98</sup>

Along with the aims and purposes of the museum already discussed, the importance of Lyons’s placing of ‘the ordinary visitor’ at the top, although radical for its time, would not be fully realized at the museum for decades. As Follett explains in his book on Lyons “it is significant that he placed ‘the ordinary visitor’ at the head of the list. The paragraph from the Bell Report on ‘Purposes the Science Museum should Serve’ had categorised visitors to the Museum in much the same terms, but their order was the student, the technical visitor, the special visitor, with ‘the ordinary visitor’ at the end. In placing ‘the ordinary visitor’ first Lyons was much ahead of his time: many years, decades in fact, were to elapse before the museum world generally accepted

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<sup>98</sup> SMD Z-183/1 *Memorandum on the arrangement of Collections in the Science Museum to serve as a basis for discussion*, 1922

that museums were as much for the ‘ordinary visitor’ as for those already knowledgeable in their fields, and began to apply the modern arts of display with him in mind” (Follett, 1978, 98). Follett goes on to say that this was very different from the mindset of museum staff in 1920 who thought only of the scholarly technically minded visitors when displaying collections, leaving the ordinary visitor to fend for themselves and “to make the best he could of the exhibits” (Follett, 1978, 98).

It is into this historical narrative of the museum under the directorship of Lyons that the shipping collections and Laird Clowes can be placed. Born rather aptly in the year of the International Fisheries Exhibition of 1883 in Mitcham South London, Geoffrey Swinford Laird Clowes, as depicted in **Fig. 48**, was a member of the wealthy and influential Laird shipping family (later Cammell-Laird after a merger in 1903) (Scheinfeldt, 2010, 56).<sup>99</sup> It seems appropriate then that Clowes was following, to a little extent, his ancestral routes devoting his time at the museum to the shipping and marine collections.



**Figure 48** A detail of the Science Museum Staff photograph of Geoffrey Swinford Laird Clowes (1883 – 1937) in September 1933. (See **Fig. 52**). (SMD Z-111/13).

The annual report of the Science Museum for 1920 gives insight into the displaying of the shipping collections at the time and some of the problems that Lyons and his staff faced:

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<sup>99</sup> Cammell Laird Website, <http://www.cammell-laird.com/>, accessed 8<sup>th</sup> October 2012

The Collection of Ship Models had become so crowded by the many additions in recent years that it became necessary to remove some of the objects into Store or to make more space by storing other adjacent Collections. The latter plan was adopted, as it was believed that the public would gain more from the proper exhibition of this fine Collection, complete, than from the continued exhibition of several other incomplete collections. Room 12 was accordingly cleared and the ship models were arranged in proper chronological sequence from the eastern end of that room.<sup>100</sup>

Four years later the annual report states that with regards to the water transport collections and the East Block:

The collections which illustrate Water Transport still remain in the same galleries as they have occupied for many years past [The Southern Galleries of the 1862 Great Exhibition], but as soon as the first and second floors of the new building can be handed over, considerable rearrangement will be possible, and certain collections, which have been in store for many years, will again be exhibited, especially that which illustrates the more important types of fishing boat.<sup>101</sup>

It was in this same year of 1924 that Laird Clowes joined the museum's technical staff alongside Mr. Maurice Davy who had joined the museum in 1920 under the direction of the Keeper George Leonard Overton. As the report announced on Clowes' appointment:

The addition of an assistant to the technical staff was authorised during the year, and Mr G. S. Laird Clowes was appointed and placed in charge of the ship and boat models and ship construction collection. This will enable more work to be carried out on the group of collections illustrating Water Transport, which have for long past constituted too heavy a charge for a single museum officer.<sup>102</sup>

For the next thirteen years until his untimely death in 1937, Clowes expanded the ship and boat collections culminating in the exhibition of 1936 alongside the *Rafts, Canoes and Boats* of 1931, the *British Fishing Boats and Coastal Craft* of 1932 and the *Native Boats* of 1933 temporary exhibitions that had preceded it (Follett, 1978, 123; Morris,

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<sup>100</sup> SMD Z-150 Box 1A – *Science Museum: Report of the Advisory Council for the year 1920, 1921*, His Majesty's Stationary Office, 11

<sup>101</sup> SMD Z-150 Box 1A – *Science Museum: Report of the Advisory Council for the year 1924, 1925*, His Majesty's Stationary Office, 5

<sup>102</sup> SMD Z-150 Box 1A – *Science Museum: Report of the Advisory Council for the year 1924, 1925*, His Majesty's Stationary Office, 6



2010, 318). Clowes would later become Assistant Keeper (1<sup>st</sup> Class) of the collections in 1932 along with Davy.<sup>103 104</sup>

This new 'building', the East Block, after sixteen years of delay was completed and opened on 20<sup>th</sup> March 1928 by King George V (see **Fig. 49**); finally the museum had a new building to use for displaying, exhibiting and storing. Since the museum had been displaying temporary exhibitions from 1919 onwards, the East Block was a welcomed addition (Morris, 2010, 212). The multiple temporary (or special) exhibitions held for every subsequent year by the museum increased dramatically after the official opening of the Block; the 1930s were especially prolific in the number of temporary exhibitions shown (Morris, 2010, 212). As far as the ship model collections were concerned the majority of the year 1928 was spent transferring the objects to the new building:

The main work of the Ship-Model Section during 1928 has been the transference of the collections from the old buildings to the three large galleries of the new Eastern Block and their arrangement there. As a result of their excellent lighting facilities, the new galleries provide much less wall-space than the old, while at the same time affording a great increase in wall-case accommodation, and in consequence the rearrangement involved much elimination and re-selection. This has made it possible to establish, in the basement, a small reserve collection of those objects which, although of importance to students, are less suitable for general exhibition.<sup>105</sup>

Although some ship and boat models were accessioned during 1928 including the South Coast Lugger c.1820, the numeracy of them compared to other years may have been reduced because of this collections transfer and reorganisation within the new gallery spaces. The collections were specifically displayed in the new galleries nos. 41 to 44 on the second floor of the new building and were arranged as follows:

41 – Merchant Steamers and Motor-Ships...

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<sup>103</sup> Museum Staff during this period and later into the 1950s and 1960s were graded as follows in descending order: Keepers, Deputy Keepers, Assistant Keepers (1<sup>st</sup> Class), Assistant Keepers (2<sup>nd</sup> Class), Junior Assistants, Technical Assistants, Chief Attendants and Attendants.

<sup>104</sup> Who Was Who online entry for Geoffrey Swinford Laird Clowes [http://www.ukwhoswho.com/view/article/oupww/whowaswho/U207645/CLOWES\\_Geoffrey\\_Swinford\\_Laird?index=1&results=QuicksearchResults&query=0](http://www.ukwhoswho.com/view/article/oupww/whowaswho/U207645/CLOWES_Geoffrey_Swinford_Laird?index=1&results=QuicksearchResults&query=0), accessed 8<sup>th</sup> October 2012

<sup>105</sup> SMD Z-150 Box 1A – *Science Museum: Report of the Advisory Council for the year 1927 and 1928*, 1929, His Majesty's Stationary Office, 28

42 – Sailing Ships: Egyptian, Viking, the Santa Maria...[through to] Nelson’s Victory as a Trafalgar. The Cutty Sark and final development of the clipper ship (see **Fig. 50**).

43 – Small Craft: models of yachts, fishing boats and other vessels. Deep-sea and inshore British Fishing boats. Models of Chinese junks. Development of the lifeboat and river-craft.

44 – Marine Engineering: earliest steamboat experiments, later paddle and screw reciprocating steam engines, marine Diesels, steam and gas marine turbines. “Scotch” and water-tube marine boilers. Marine propellers: Development of the paddle-wheel and screw.<sup>106</sup>

Although this extract from a leaflet is from a much later period – 1961: just before the Shipping Gallery opening in 1963 – it suggests that the shipping collections positioning and location within the museum had not been altered since that move to the East Block in 1928 (see floor plan of East Block in **Fig. 51**) (Anthony, 2010, 92).<sup>107</sup>

**Figure 49** A photograph of HM King George V leaving the Science Museum after opening the new East Block on 20<sup>th</sup> March 1928. (© Science Museum / SSPL)

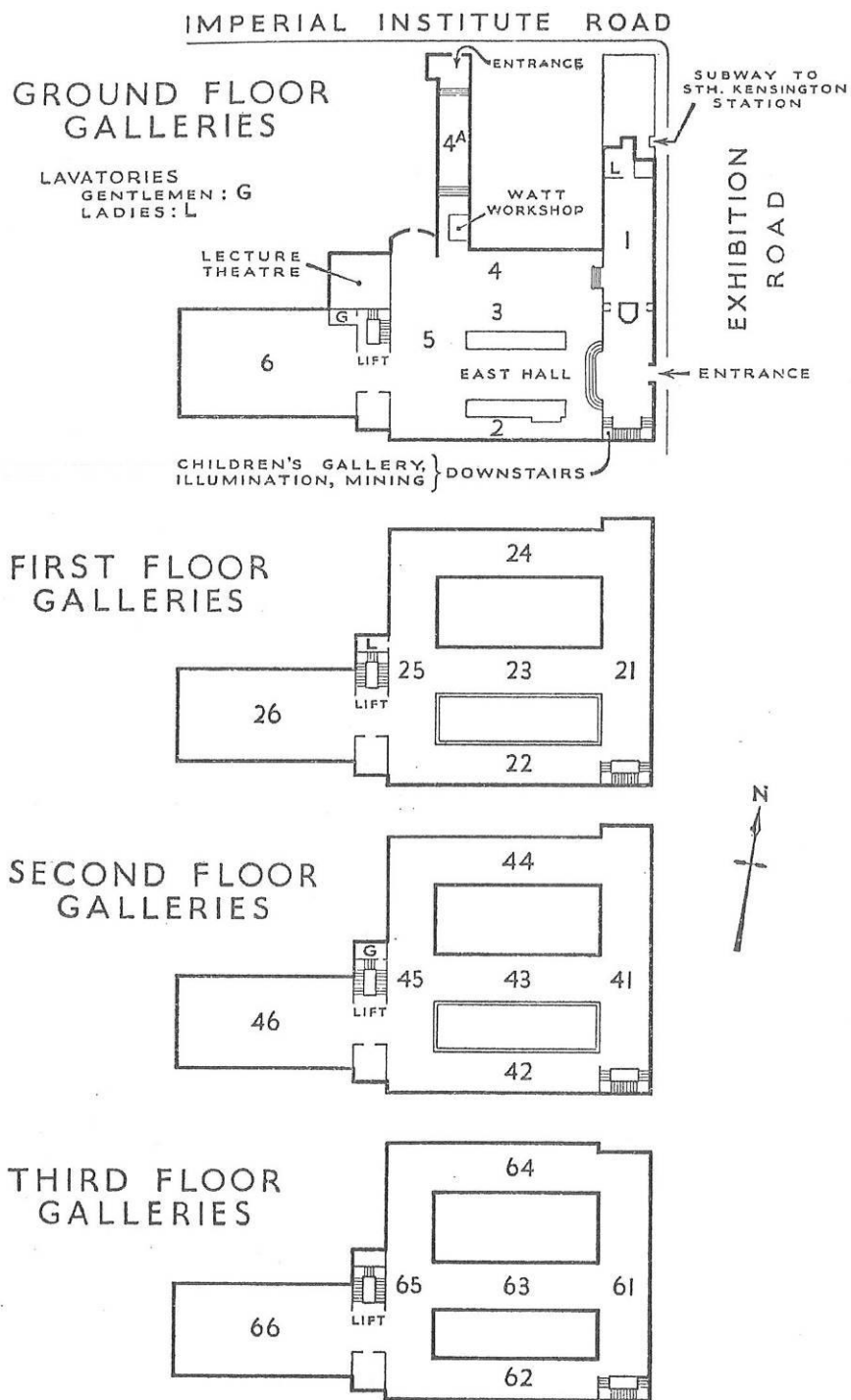


<sup>106</sup> SMD Z-266 Science Museum Leaflet for 1961, Science Museum information leaflets/brochures etc. 1917-1997

<sup>107</sup> There being no visitors leaflets from 1928 in the SMD Z-266.

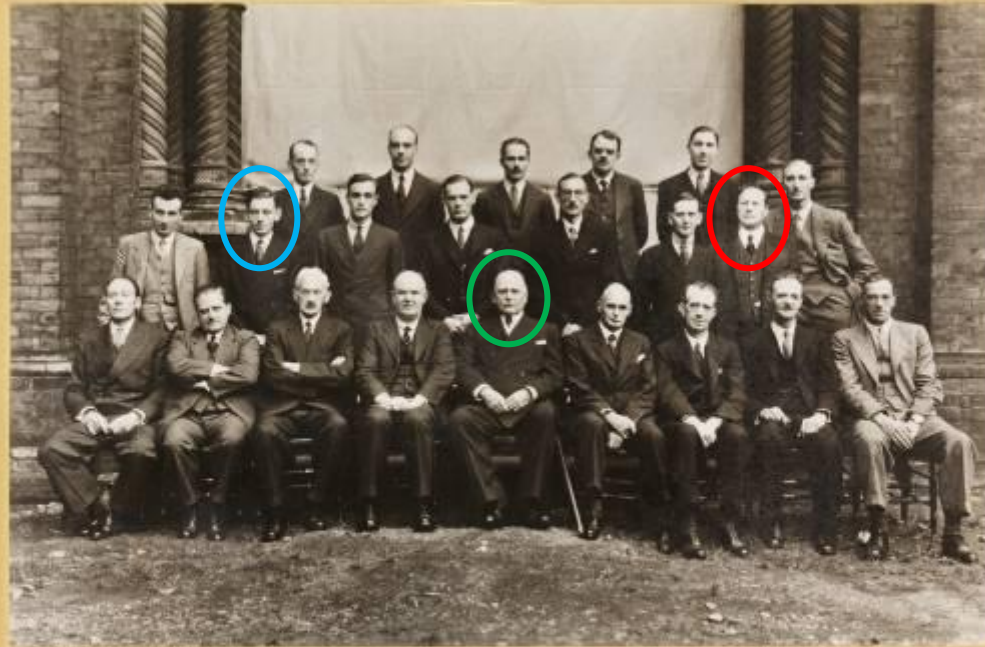


**Figure 50** A photograph of the older location of the ship and boat model collections before the 1963 Shipping Gallery. This is Gallery 42 on the second floor of the then new East Block, 1928 (© [Science Museum / SSPL](#)).



**Figure 51** Floor Plan of the Science Museum in the Outline Guide of the Museum published in 1959, with only the East Block in use and thus unaltered since the late 1920s (Anthony, 2010, 92). The Shipping Collections were displayed in Galleries 41 to 44 with the Small Craft collections being displayed in Gallery 43. (© Science Museum / SSPL)

SCIENCE MUSEUM HIGHER TECHNICAL STAFF – SEPTEMBER 1933.



T. C. DRAWHALL, DR. W. E. PRETTY, F. ST. A. HARTLEY, DR. F. A. B. WARD, DR. W. E. PLUNGER.

H. P. SHRATT, W. T. O'DEA, H. T. FLEDGE, A. STOWERS, A. BARCLAY, G. F. WESTCOTT, F. G. SHINNER,  
C. S. LAIRD-CLOWES.

M. J. B. DAVY, DR. H. SHAW, D. BAXENDALL, G. C. OVERTON, COL. SIR H. S. LYONS (DIRECTOR), DR. E. C. BRADFORD, A. J. SPENCER, E. A. FORWARD, E. LANCASTER-JONES.

**Figure 52** A photograph of the Science Museum's Higher Technical Staff taken in September 1933 showing O'Dea (in blue), Laird Clowes (in red) and the Director Sir Henry Lyons (in green). (SMD Z-111/13) (© Science Museum / SSPL).



As already mentioned Clowes was appointed Assistant Keeper 1<sup>st</sup> Class alongside Davy in 1932.<sup>108</sup> Although his responsibilities to the shipping collections hadn't changed, the promotion increased his activity with the collections; expanding at a much faster rate than previous years. Even though there had been no additions in 1930 and 1931 in '32 six models were acquired with a further nine and 17 over the next two consecutive years respectively.

Having said this, for the already accessioned marine collections, the story was by no means positive. Although the East Block had opened in 1928 and was immediately used for temporary and permanent exhibitions, the majority of the shipping collections were still in the dilapidated Southern Galleries of the 1862 Great Exhibition (built with only a temporary purpose in mind) (Rooney, 1997, 1). As **Fig. 53** below shows a large proportion of the collections were still in this much older, unsafe environment with cramped spaces and ceilings being held up with wooden supports.



**Figure 53** A photograph of the closed Gallery 13 (ship collections) in the South Galleries 1862 buildings in November 1932 before they were moved into the new East Block. Notice the wooden support beams holding the roof (© Science Museum / SSPL).

<sup>108</sup> Who Was Who online entry for Geoffrey Swinford Laird Clowes [http://www.ukwhoswho.com/view/article/oupww/whowaswho/U207645/CLOWES\\_Geoffrey\\_Swinford\\_Laird?index=1&results=QuicksearchResults&query=0](http://www.ukwhoswho.com/view/article/oupww/whowaswho/U207645/CLOWES_Geoffrey_Swinford_Laird?index=1&results=QuicksearchResults&query=0), accessed 8<sup>th</sup> October 2012

Although this chapter is giving much focus to the fishing boat exhibition of 1936, there was a broad range of other temporary exhibitions on show with the museum presenting a variety of subjects during this period. Combining both externally and internally supported technological and scientific subjects, these exhibitions as advocated by the Bell Report of 1912 were “a means of keeping the Museum in direct touch with the movements of the day” (Morris, 2010, 212).<sup>109</sup> Initially these exhibitions had been led by technological advancements and collaboration with industry. Yet by the 1930s the exhibitions were mixture of those types and exhibitions designed to influence public opinion “including personal crusades such as [Thomas] Horder’s Noise Abatement League” (Morris, 2010, 242). Subjects therefore ranged from Modern Astronomy in 1930 to Refrigeration in 1934; from Noise Abatement in 1935 to the trio of Very Low Temperatures, Smoke Abatement and Electric Illumination in 1936 (either side of the British Fishing Boats Exhibition) (Morris, 2010, 318). As shown by Morris (2010) in his chapter in *Science for the Nation* on temporary/special exhibitions, during the 1930s a quarter of the Science Museum’s exhibitions were supported by external industry-representative bodies. The rest were solely created by the museum’s staff or in collaboration with “learned societies and professional associations” (2010, 214/5). Yet in most cases the Science Museum was the instigator in the planning and execution of exhibitions rather than external organisations taking the initiative (2010, 214).

Returning to the museum’s maritime collections there were a select few of nautical temporary exhibitions which were forerunners to the 1936 exhibition within this array of short period monthly-frequent group of Science Museum temporary exhibitions. In July 1931 a special exhibition was opened entitled *Primitive rafts and Canoes and their development into Built Boats*.<sup>110</sup> As the catalogue explains:

Very early in their history all primitive races have felt the need of water transport, for rivers and lakes afforded them the only means by which bulky objects could be moved from place to place without heavy labour. Proof of this may be found even in England,

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<sup>109</sup> SMD Z 108/4 Quoted in the Director E.E.B. Mackintosh’s ‘Special Exhibitions at the Science Museum’ internal memo dated 30<sup>th</sup> March 1939, 1

<sup>110</sup> SMD Box 9 of Curatorial Clippings titled *Misc. Notes relating to Sailing Ships* – Catalogue to the exhibition July 1931

for every town of any size, except a few of the most modern, is placed on a waterway which was once navigable.<sup>111</sup>

Although this exhibition predominantly talks of ancient craft, going on to mention Babylonian, Egyptian, Viking craft and Chinese sampan vessels, it did refer to Welsh coracles. From the margins the catalogue indicates which model or transparency plan is being referred to within the text. It shows that there were more transparencies on display than models.<sup>112</sup> As no coracle or curragh model had entered the collections by this point (the nine recorded arriving later between 1933 and 1937), this gives an important insight into the possible ways in which Laird Clowes intended to expand the collections.

Another temporary exhibition followed a year later which involved the British model boats, as the opening paragraph of an article from the magazine *Ships and Ship Models* from December 1932 reads:

A temporary exhibition, illustrating the Fishing Boats and Coastal Craft of Great Britain, was opened in the entrance hall of the Science Museum at South Kensington on Saturday, November 19<sup>th</sup>, and will remain on view until the middle of February, 1933.<sup>113</sup>

It goes on to say that these craft used to be locally built possessing features pertaining to the needs of the local conditions and often reflecting the origins of past builders. With the coming of the oil motor for propulsion: "it is high time" it argues, "to collect and preserve some record of these many interesting and specialised types of boats before they disappear entirely and this exhibition has been arranged in order to stimulate interest in this subject."<sup>114</sup> The exhibition was based on 30 models on display selected from the large collection of small craft exhibited in another gallery alongside 60 photographic transparencies and detailed plans. More importantly though the article highlights that "the arrangement [was] geographical" with East Anglia, for example, being represented by sailing drifters of Yarmouth, trawlers of

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<sup>111</sup> SMD Box 9 Curatorial Clippings Ibid.

<sup>112</sup> Ibid.

<sup>113</sup> SMD Nominal File 4082/9/1 'An Exhibition of Models of British Coastal Craft' article from *Ships and Ship Models*, December 1932, 119

<sup>114</sup> Ibid.



Lowestoft and wherries and keels of the Broads; and barges, lighters, bawleys and peter boats illustrating “the many craft peculiar to the Thames Estuary.”<sup>115</sup>

In 1933, soon after this museum staff photo was taken (**Fig. 52**), Henry Lyons retired as Director and from this point onwards Col. E.E.B. Mackintosh took over as his successor, leading the museum through to the end of the Second World War (Follett, 1978, 39).

## 5.2 Nature of Acquisition

As there are rich accessional and communication histories associated with the models of this interwar period it is understandable that the nature of acquisition routes of the collections are both broad and varied. In these many examples we can not only see the physical nature of the boat models themselves but are also able to follow their acquisitional history. As Alberti puts it: “the collection thereby includes not only things in their material form, but also the legacy of their acquisition route, and of the people involved” (Alberti, 2009, 91). Thus the ‘acquisitional routes’ of the models within the Science Museum were not just those commissioned by the museum. Some were presented as gifts; others as loans from an individual or other institution; others purchased off owners and others as bequests in the event of an individual’s death. Of the 60 models that came into the collections between 1920 and 1938, the number of models for each acquisition route is as follows (**Fig. 54**):

Acquisition Route of models	Nos.
Commissioned	22
Gifts	13
Loans	3
Purchases from owners/auctions	20
Bequests	2

**Figure 54** A table showing the number of models associated with each type of acquisitional route into the museum’s collections.

<sup>115</sup> SMD Nominal File 4082/9/1 ‘An Exhibition of Models of British Coastal Craft’ article from *Ships and Ship Models*, December 1932, 119

### **5.2.1 Commissioned models**

By way of example, in 1932 a model of a Norfolk Beach Yawl (inv. 1932-466) (shown below in **Fig. 55**) entered the collections as a commissioned model purchased by the museum. As the museum label explains: “As long as Sailing Ships were in general use, Beach Yawls were employed to supply and tend vessels lying in Yarmouth Road. They were in use from Winterton, in Norfolk, as far south as Southwold.”<sup>116</sup> Made by the model-maker Mr Hall, the accurate model below was one of three that the skilful Norfolk craftsman made for the museum during the 1930s. His attention to detail and his accurate recording of lines of other models are clear in the correspondence. He contacted Clowes in late 1931 confirming that he would make the Norfolk Beach Yawl model:

I promised you a year ago I would let you know whether I would build you a model of Norfolk Beach Yawl sorry to have kept you waiting so long but if it's not too late perhaps you will be good enough to let me know as I am unemployed. I can get particulars from the model at Southwold Reading Room and can start almost-at-once.<sup>117</sup>



**Figure 55** A photograph of the Norfolk Beach Yawl in its 1963 Norfolk and Suffolk showcase in the Shipping Gallery. (Inventory No. 1932-466) Scale 1:24 (© Science Museum / SSPL).

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<sup>116</sup> SMD T/1932-466 Extract from the 1930s Science Museum’s Label for the Norfolk Beach Yawl model (Inventory No. 1932-466).

<sup>117</sup> SMD Nom. 2616/3/1 An extract from a letter from Mr Hall to Laird Clowes dated 28<sup>th</sup> December 1931

The Reading Room that Hall is referring to here is the Sailor's Reading Room in Southwold, on the Norfolk coastline south of Lowestoft. "This 'Room of Rest and Recreation' for Southwold sailors" as its website explains, "was built in 1864 in memory of Captain Rayley, a Naval Officer at the time of the Battle of Trafalgar who had died in 1863. In the mid 19th century Southwold beach and harbour were filled with fishing boats and it was their masters and crew who were the founding members."<sup>118</sup> Hall combined his visits to the reading rooms with photos of lines that Clowes had sent him by way of a frame of reference when making the model but unfortunately couldn't work with them.<sup>119</sup> Naturally Hall had a closer look at the Southwold Yawl model:

I saw Mr. Clarke and he says the model is absolutely correct to scale but I found mistakes (did not tell him so [sic]). This model is built ¾ inch to foot.<sup>120</sup>

In the same letter he explains that he has persuaded Mr. Clarke to lend him ½ inch to foot scaled blue prints of the yawl from the reading room providing Hall gives them a donation. Hall ends the letter confidently with:

Again I would say you need not fear but my work will be carried out and finished off very much better than the Southwold [sic] model.<sup>121</sup>

As a jovial 'P.S.' he writes at the bottom:

Before I reached Southwold [sic] they had taken away the lines of model which hung on the wall. It was good to see their faces when I told them I had a copy of their lines at home.<sup>122</sup>

In the summer of 1932 Hall contacts Clowes again giving him an update:

I am pleased to inform you the Yawl is very nearly completed. I made a trip to Southwold [sic] yesterday to get the position of the rigging and I shall not be ready for a week or two as I want the paint to get well set and hard when everything is all furnished. Will let you know on which date I shall bring it as I don't like the idea of sending it as is liable to get damaged. I could not help noticing the difference in the two

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<sup>118</sup> Sailor's Reading Room Southwold Website

[http://www.southwoldmuseum.org/Sea%20pops/readingroom\\_popup.htm](http://www.southwoldmuseum.org/Sea%20pops/readingroom_popup.htm), accessed 12<sup>th</sup> October 2012

<sup>119</sup> SMD Nom. 2616/3/1 Summary of a letter from Mr Hall to Laird Clowes dated 25<sup>th</sup> January 1932

<sup>120</sup> SMD Nom. 2616/3/1 Extract from a letter from Mr Hall to Laird Clowes dated 25<sup>th</sup> January 1932

<sup>121</sup> Ibid.

<sup>122</sup> Ibid. 2

models as the one in Southwold has only 10 timbers in the entire length where as ours has got over 60 and several other things I will paint out when you see it.<sup>123</sup>

Clowes later informs the museum about his desperate need to find a Beach Yawl model in a memorandum to Mr Overton:

Mr. W. H. Hall of Oulton Broad, from whom we have already bought models – made by him – of a Norfolk Wherry and of a Norfolk Keel, has constructed an excellent model – on a scale 1:24 – of the Beach Yawl which until two years ago used to lie on Southwold Beach. In this work he has had the advantage of a detailed plan taken off some years ago and photographed...and he has also examined another of these boats, which still existed at Kessingland.

I have examined the model and find it to be very well made, while it is fitted complete with masts, sails and oars.<sup>124</sup>

Clowes also explains his reasoning behind the value of the model to the museum's collections even though it would result in higher cost implications for the institution:

He asks £40 for this model and although this is excess of the prices paid for the other two models, I consider that it is very fair and reasonable in view of the much greater work involved in a built up model of an open boat – the other two models have most of the internal work covered and involve much less detail.

In addition to its permanent value in the museum, it will be a very useful addition to the forthcoming show of British Fishing Boats and small craft, for I know of only one other model of an East Coast Beach Yawl and that is of distinctly inferior workmanship.<sup>125</sup>

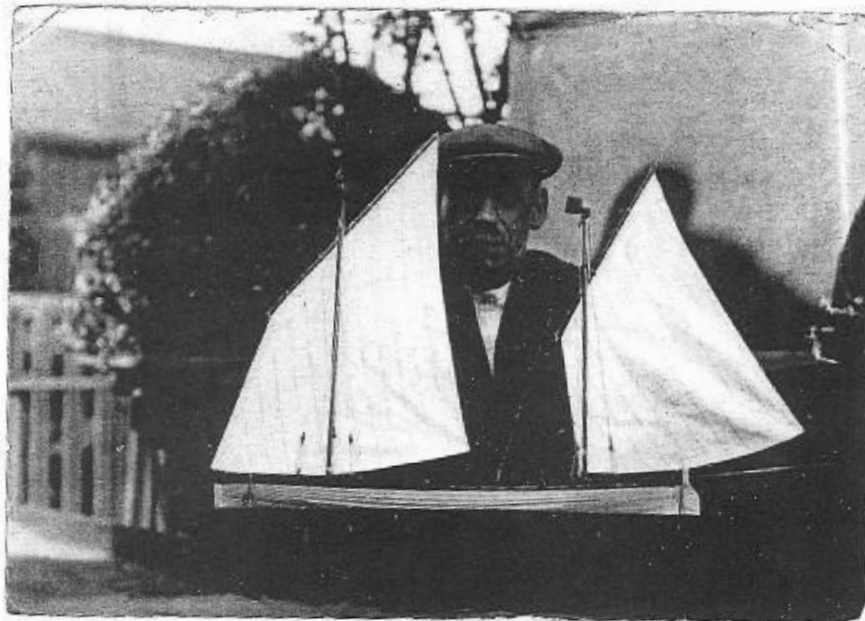
Clowes' mentioning of the "forthcoming show of British Fishing Boats and small craft" is a reference to the *British Fishing Boats and Coastal Craft* temporary exhibition of 1932. The model, shown in **Fig. 56** with its maker and owner Mr Hall, was received and accessioned into the museum's collections on 8<sup>th</sup> September 1932.

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<sup>123</sup> SMD Nom. 2616/3/1 An extract from a letter from Mr Hall to Laird Clowes dated 11<sup>th</sup> July 1932

<sup>124</sup> SMD Nom. 2616/3/1 An extract from a memorandum from Laird Clowes to Overton dated 25<sup>th</sup> August 1932

<sup>125</sup> Ibid.



**Figure 56** A photograph of Mr W. H. Hall holding his model of a Beach Yawl (Inventory No. 1932–466). (SMD T/1932-466).



**Figure 57** A photograph of the Sheringham Crab Boat in its Norfolk and Suffolk 1963 showcase in the Shipping Gallery. Inventory 1935-214. Scale 1:9 (© Science Museum / SSPL)

Another example of a commissioned model for the museum was the Sheringham Crab Boat which entered the collections in 1935 pictured above in **Fig. 57**. As the label explains, these double-ended craft were used off the north coast of Norfolk between Wells-next-the-Sea and Cromer. The model is made of oak, the same material used for

the original full-size vessels of the late 19<sup>th</sup> Century.<sup>126</sup> From the letters of correspondence in 1934/35 we get a wonderful story of how the model was made, paid for and eventually displayed by the museum.

Colonel Mackintosh (the then Director of the museum) writes to a Major Philip Hamond explaining his gratitude for the latter's interest in the making of such a model:

I am most grateful to you for the help you gave to Laird Clowes...and for the interest you have taken in the model of the crab-boat which I hope to get for this museum.

We are trying gradually to get models of all our coastal small craft, while they still exist and accurate models can be made.<sup>127</sup>

Later in the letter, it transpires that Mr Robert Emery would be making the model on behalf of Maj. Hamond.

A month later Mackintosh, by way of encouragement for the model maker, encloses £5 to be used by Hamond "...at [his]...discretion."<sup>128</sup> Hamond's use of the money soon becomes apparent when Mackintosh opens another letter a week later with "Many thanks for undertaking to dole out £5 'in pints' for the model of the Sheringham Crab Boat."<sup>129</sup>

In early 1935 Laird Clowes contacts Hamond asking for an update: "...I am writing to ask...as to how Curly [Robert] Emery is getting on with his model and with the beer. We very much hope that the beer is adding strength and accuracy to his hand."<sup>130</sup> The beer must have helped because after some delays the completed model was brought to the museum at a cost of £10 paid to Maj. Hammond and Mr Emery and accessioned

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<sup>126</sup> SMD T/1935-214 1930s label for the Sheringham Crab Boat (inv. 1935-214)

<sup>127</sup> SMD Nominal File 4289/13/2 Letter from Col. Mackintosh to Major Philip Hamond dated 15<sup>th</sup> October 1934

<sup>128</sup> SMD Nominal File 4289/13/2 Letter from Col. Mackintosh to Major Philip Hamond dated 5<sup>th</sup> November 1934

<sup>129</sup> SMD Nominal File 4289/13/2 Letter from Col. Mackintosh to Major Philip Hamond dated 16<sup>th</sup> November 1934

<sup>130</sup> SMD Nominal File 4289/13/1 Letter from Col. Mackintosh to Major Philip Hamond dated 13<sup>th</sup> February 1935

into the collection on 13<sup>th</sup> May 1935. A direct letter to Mr Emery from the museum Director soon followed this, showing his appreciation:

I want to thank you personally for the obvious loving care and first class workmanship which you have put into the model – it is an excellent and delightful piece of work.

Now that the model is safe in the National Collections for all time, I hope it will give you comfort and satisfaction to feel that your handiwork will be preserved and will show future generations what Sheringham Crabbers were like, long after the boats have perhaps disappeared or been altered out of all recognition.<sup>131</sup>

### **5.2.2. Models gifted to the museum**



**Figure 58** A photograph of the Narrow Canal Boat model (foreground model) in its 1963 Devon and Cornwall showcase in the Shipping Gallery. (Inventory No. 1934-199). Scale 1:12. (© Science Museum / SSPL).

Alongside those models that were commissioned and purchased by the museum, there were those that were presented as gifts to the institution. The Canal Boat, in **Fig. 58**, was given to the museum in 1934. “This model”, the label explains “is typical of the standard canal boats used on the “narrow boat” canals of England.”<sup>132</sup> Mr. Frank Husband-Clutton, a fellow member of the SNR, writes to Clowes on 4<sup>th</sup> March 1934 about the model:

Perhaps you will remember that I spoke to you about the model of a narrow canal barge at the S.N.R. at the Salters Hall. I shall be in London on Wednesday 7/3/34 and if convenient to you can bring it with me. As it is 5’10” OA [overall length] I don’t want to bring it to London and have to carry it about more than can be helped. I shall arrive at Kings Cross at 10am and if convenient to you I will go straight to the Science Museum.<sup>133</sup>

<sup>131</sup> SMD Nominal File 4289/13/4 Letter from Col. Mackintosh to Emery dated 24<sup>th</sup> May 1935

<sup>132</sup> SMD T/1934-199 Extract from the 1930s Science Museum’s Label for the Narrow Canal boat model (Inventory No. 1934-199)

<sup>133</sup> SMD Nom. 4942/1/1 Extract from a letter from Mr Frank Husband-Clutton to Clowes dated 4<sup>th</sup> March 1934



Clowes replied four days later:

I think that we were somehow interrupted at the Salter's Hall, and I am still not quite clear as to what your model represents. You say it is a narrow canal barge. If that is one of the "narrow boats" used on canals we have a model on a very much smaller scale, but I should imagine that your model 5ft. 10ins. long, if well made, provides very much more detail and shows the whole method of construction. If that is so, your model on a scale of 1 in. to a foot would be of the greatest possible value to us, and I can say with confidence that the Museum would welcome the opportunity of preserving it for future generations.<sup>134</sup>

Husband-Clutton replied confirming that it indeed was a model of a narrow boat "of 1" to 1' evidently built by someone who knew how. It is somewhat broken round the gunwale, but can be repaired."<sup>135</sup>

In a letter to Husband-Clutton, Clowes explains about the model that the museum already owned:

I have examined the model most carefully and I think that from the fact that it is fully built up, it would be of considerable interest to us here. Our interesting model is hollowed out from a block, and I have never seen a built up model of a 'narrow boat' before. Before we can put it on exhibition, however, the model requires a good deal of repair and I am rather afraid that this will mean that there will be considerable delay before I can show it, for we have recently acquired a number of interesting models in like condition. If however you do not mind the delay I shall certainly recommend its acceptance by the Museum as a gift from you.<sup>136</sup>

The model was accepted as a gift into the museum's collections on 25<sup>th</sup> April 1934.<sup>137</sup>

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<sup>134</sup> SMD Nom. 4942/1/1 Extract from a letter from Clowes to Mr Frank Husband-Clutton dated 8<sup>th</sup> March 1934

<sup>135</sup> SMD Nom. 4942/1/2 Extract from a letter from Mr Frank Husband-Clutton to Clowes dated 9<sup>th</sup> March 1934

<sup>136</sup> SMD Nom. 4942/1/2 Extract from a letter from Clowes to Mr Frank Husband-Clutton dated 19<sup>th</sup> March 1934

<sup>137</sup> SMD Nom. 4942/1/2 Memorandum confirming accession of the Narrow Canal boat model dated 25<sup>th</sup> April 1934





**Figure 59** A photograph of the River Severn Coracle in its Coracles/Early Irish 1963 showcase in the Shipping Gallery. Inventory 1936-657. Scale 1:3 (James Fenner, November 2010)

This model of an Upper River Severn coracle **Fig. 59** was made by Harry Rogers, a coracle maker from Iron Bridge and represents a basin-shape type used on the upper part of the river for fishing and ferry boat work.<sup>138</sup> The rounded shaped coracle is mainly used around Iron Bridge and is framed with interlaced withies.<sup>139</sup> The model was accessioned into the collection as a gift on 24<sup>th</sup> October 1936 two months after the end of the *British Fishing Boats Exhibition*.<sup>140</sup>

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<sup>138</sup> SMD T/1936-657 1930s label for the River Severn Coracle inv. 1936-657 and SMD Nominal File 6127/1/1 Science Museum Memorandum on the River Severn Coracle model (inv. 1936-657) Laird Clowes 24<sup>th</sup> October 1936

<sup>139</sup> SMD T/1936-657 Ibid.

<sup>140</sup> SMD Nominal File 6127/1/1 Inventory Confirmation of the River Severn Coracle model dated 24<sup>th</sup> October 1936

### 5.2.3. Loaned models



**Figure 60** A photograph of the Cutter (in the foreground) and Gig (in the background) models in their 1963 River and Sea Boats showcase in the Shipping Gallery. (Inventory Nos. 1934-548 and 1934-547).

Scales 1:24 and 1:12. (© Science Museum / SSPL).

As well as gifted and commissioned entries into the collections, models also came as loans. The Cutter and Gig models shown above in **Fig. 60** were presented to the museum by a Lieut. Colonel Harold Wyllie along with two other naval models.

As their respective museum labels read the Cutter model:

...represents a large service cutter, one of the general utility boats carried by a warship at the beginning of the 20<sup>th</sup> century. Like all ship's cutters, it is clincher-built and it is very much heavier, both in design and construction than a gig.<sup>141</sup>

Whereas the Gig model's label explained:

This model represents a Captain's gig such as was used in the Navy at the beginning of the 20<sup>th</sup> century.

It is a carvel-built boat and pulls six oars, three on each side working in revolving rowlocks.

<sup>141</sup> SMD T/1934-548 Extract from a 1930s version of the Science Museum's Label for the Service Cutter model (Inventory Nos. 1934-548)

Gigs were lightly built and were designed on fine lines for speed. The stern was transom-built, with an almost vertical stern-post.<sup>142</sup>

Correspondence began with Clowes writing to Wyllie by way of reminder:

This is just a reminder that you are going to let me have the extreme dimensions of the 18-gun sloop model, so that I can send a man with a suitable box to collect it.<sup>143</sup>

After receiving the models at the museum, Clowes wrote to Wyllie:

Thank you so much for the loan of the models, which arrived here in excellent order... So too the 6-oar gig and 14-oar cutter, and I am delighted to find that they are accurate models. Ships boats models so often represent ideas rather than actual practice.<sup>144</sup>

#### **5.2.4. Purchased models**

The South-Coast Lugger c.1820 pictured overleaf in **Fig. 61** is an interesting model of the collections. Unlike most of the other models before and after it that were purchased for the museum off model makers or presented as gifts or loans, this object was purchased for the museum through an auction with no knowledge of the previous owner or model maker. As the label explains the contemporary model:

represents one of the larger type of three-masted fishing luggers used on the South Coast of England at the beginning of the 19<sup>th</sup> century.<sup>145</sup>

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<sup>142</sup> SMD T/1934-547 Extract from a 1930s version of the Science Museum's Label for the Captain's Gig model (Inventory Nos. 1934-547)

<sup>143</sup> SMD Nom. 3807/1/2 Extract from a letter from Clowes to Lieut. Colonel Wyllie dated 5<sup>th</sup> May 1934

<sup>144</sup> SMD Nom. 3807/1/5 Extract from a letter from Clowes to Lieut. Colonel Wyllie dated 1<sup>st</sup> October 1934

<sup>145</sup> SMD T/1928-228 Extract from the 1930s Science Museum's Label for the South-Coast Lugger (Inventory No. 1928-228).



**Figure 61** A photograph showing the South-Coast Lugger c.1820 model in its 1963 modelled scene in the Map showcase in the Shipping Gallery. (Inventory No. 1928-228). Scale 1:9. (© Science Museum / SSPL). In an internal museum memorandum dated 26<sup>th</sup> March 1928 Clowes writes to the Director Henry Lyons:

May I have authority to bid up to 30 guineas for a model of a three-masted lugger which is being sold at Steven's tomorrow (Tuesday).

It is a very well built and finished model of a type of English fishing-boat which is now obsolete. From the point of view of development it occupies an intermediate position between our Yorkshire three-masted lugger (decked) of 1800 and our two-masted Cornish lugger (undecked) of 1880.

Mr Overton has seen the model and agrees that it would be a desirable acquisition.<sup>146</sup>

As well as explaining the objects entrance into the museum's collections, the above extract also gives insight into the reasoning behind the purchase i.e. being able to show the historical development of the craft types of these regions and their differences. The model was eventually purchased by Clowes at the auction for £17 and was accessioned into the collection on 28<sup>th</sup> March 1928.<sup>147</sup>

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<sup>146</sup> SMD Nom. 68/12/1 Memorandum from Clowes to the Director Henry Lyons dated 26<sup>th</sup> March 1928

<sup>147</sup> Ibid.



**Figure 62** A photograph of both the larger (on the left rigged with sails) and smaller versions of the Thames Peter Boat in model form in their 1963 Peter Boats and Dobles showcase in the Shipping Gallery. (Inventory Nos. 1932-172 and 1929-615). Scales 1:12 and 1:9. (© Science Museum / SSPL). Another example of a model purchased from the museum from a model owner is the larger Peter Boat model illustrated above on the left in **Fig. 62**. Its label reads:

This model represents one of the Peter-boats commonly used for net fishing on the Thames as late as the middle of the 19<sup>th</sup> century.

While the much larger and more seaworthy “Bawleys” fished in the wider parts of the estuary, Peter-boats – running up to 23 ft. in length – were employed inshore in the mouth of the Thames and as high up as London Bridge, while above this, their place was taken by a smaller form of peter-boat, 12 ft. or even less in length.<sup>148</sup>

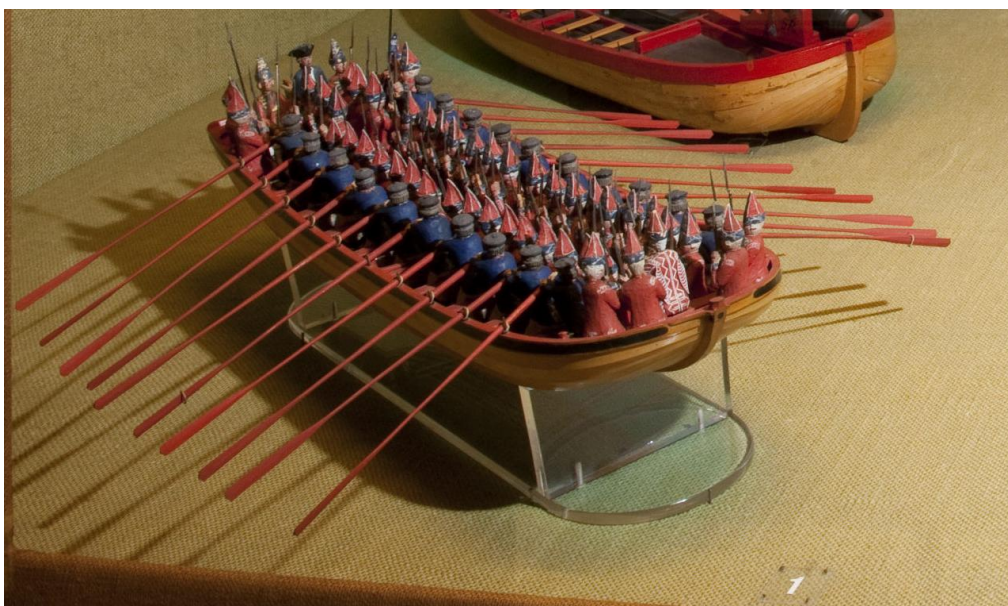
The model was purchased for the museum from a Mrs. Eda Seys in April 1932.<sup>149</sup>

<sup>148</sup> SMD T/1932-172 Extract from the 1930s Science Museum’s Label for the larger Thames Peter-Boat model (Inventory No. 1932-172).

<sup>149</sup> SMD Nom. 4244/1/1 Memorandum confirming accession of the larger Thames Peter-boat model dated April 1932



### 5.2.5. Requested models



**Figure 63** A photograph of the Launch for Landing Troops (c.1780) in its Military landing craft 1963 showcase in the Shipping Gallery. Inventory 1938-627. Scale 1:24 (© Science Museum / SSPL)

The above model (**Fig. 63**) is a contemporary one which represents, as the museum label explains: “a type of craft produced during the late eighteenth century for landing troops, horses or supplies on open beaches in connection with amphibious operations.”<sup>150</sup> Space could be made within the hull to adapt it for carrying horses. The naval personnel consisted of twenty seamen each pulling an oar commanded by an officer while a detachment of redcoat troops formed the landing party.<sup>151</sup> The model, along with the launch of 1800 (pictured overleaf in **Fig. 64**), was bequeathed by Mr F.C. Ihlee as part of a larger private collection of 30 models he owned which was given to the Science Museum in his will. Ihlee died in 1938, the year after Clowes. Ihlee approached Clowes as far back as 1930<sup>152</sup> and was still quite persistent some years later. In this time frame of 8 years both Clowes and his successor Lieut. Commander Hutchison would be invited down with their wives for the weekends to visit Ihlee at his home in Peterborough to inspect the collection:

While I was staying with Mr Ihlee this weekend I took the opportunity of again examining his collection of contemporary models of 18<sup>th</sup> century British Warships. The

<sup>150</sup> SMD T/1938-627 1930s label for the Launch for Landing Troops (1780) inv. 1938-627

<sup>151</sup> Ibid.

<sup>152</sup> SMD Nominal File 2661 taken from a letter from Lieut-Commander Hutchison (Clowes successor) to Mr Abbott (Ihlee’s solicitor and legal representative of his estate) dated 10<sup>th</sup> December 1938

collection consists of more than 30 models, the majority of which are dockyard models of the 18<sup>th</sup> century, in first class condition.

Some years ago Mr Ihlee told me that he intended to leave this collection of ship models to the Science Museum on behalf of the nation, and I find he persists in this intention. He apparently is inclined towards the Science Museum on account of research work which has been done here on the history of sailing ships, the care with which the models here are preserved and displayed, and the popularity of the Museum with the general public as shown by the number of visitors.

He has no active interest in the Greenwich scheme, primarily because he considers that Greenwich is an impossible situation for a National Museum.<sup>153</sup>

The memorandum also referred to two “skilled mechanics” that Ihlee “permanently employed.” Although this was a dismissive statement it transpires from a much later source by a granddaughter relative that these two men were Mr Read and Mr Beard, employed by Ihlee (known as ‘Lord’ Ihlee) to renovate the models he bought and collected. Ihlee included the workshop, tools and both men as part of the bequest but Mr Read and Mr Beard could not be employed by the museum to renovate the Shipping model collections due to lack of funds and Civil service bureaucracy.<sup>154</sup> After both Clowes’ (1937) and Ihlee’s (1938) deaths the National Maritime Museum directly approached Mr Abbott (Ihlee’s solicitors) about the probate and the will to see if some or all of his collections could be given to Greenwich rather South Kensington as part of the ongoing dispute between the two institutions. Abbott contacted Lieut-Commander Hutchison (Clowes successor) about the matter to which he replied:

As regards the purport and intention of their letter, I can only imagine that, being aware of Mr Ihlee’s Collection, they wished to ascertain whether they could acquire any of the models and that they were, possibly, unaware of Mr Ihlee’s bequest of them for this museum. As you are aware, it was always Mr Ihlee’s intention and wish that they should be preserved in the Science Museum as their final resting-place, on account of the Collections already existing here and their easy accessibility to a large public. As long as 1930 he had informed Mr Laird Clowes, my predecessor, of this and later put it in his will.<sup>155</sup>

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<sup>153</sup> SMD Nominal File 2661/2/3 Science Museum Memorandum for Ihlee’s ship models collection including 1780 Launch for Landing Troops inv. 1938-627 from Clowes to Davy dated 14<sup>th</sup> October 1935

<sup>154</sup> SMD Nominal File 2661 Email correspondence between Ms Read and the ScM Curator Mr Fitzgerald dated 12<sup>th</sup> February 2001

<sup>155</sup> SMD Nominal File 2661 taken from a letter from Lieut-Commander Hutchison (Clowes successor) to Mr Abbott (Ihlee’s solicitor and legal representative of his estate) dated 10<sup>th</sup> December 1938



**Figure 64** A photograph of the Launch for Landing Troops (c.1800) in its Military landing craft 1963 showcase in the Shipping Gallery. Inventory 1938-638. Scale 1:24 (© Science Museum / SSPL)

The above model as the museum label reads:

Represents a type of carvel-built landing craft designed during the Napoleonic Wars primarily for conveying troops. It is probably of slightly later date than the adjacent model of a somewhat similar form of clincher-built craft, but in addition is equipped with a carronade for use against hostile forces.<sup>156</sup>

The collection, including the above two models, was accessioned in to the museum in late 1938, the last small craft models to enter the institution before the Second World War.

### **5.3 Craftsmanship**

Alongside the variety of ways these models entered the collection, by looking at the many letters of correspondence and other archival material, other aspects and themes emerge relating to the craftsmanship, scale, authenticity, accuracy and methods of manufacture of the models.

#### **5.3.1 Locality, authenticity, accuracy and detail**

In conjunction with elements concerning model making (that of scale, methods and material used) a few examples of models also give an indication of a dilemma that Clowes faced when gathering these models: the sacrifices made to accuracy and detail

<sup>156</sup> SMD T/1938-638 1930s label for the Launch for Landing Troops (1800) inv. 1938-638



if a model is authentically local or a model is finely detailed and very accurate but has been made in another part of the country outside the boat type's locale. As Clowes put it himself in the catalogue to the 1936 exhibition:

It is true that a model made from plans is frequently more strictly accurate in form and in proportion than a model made by a man who has sailed the boat in question, but on the other hand it is liable – unless the plans are unusually elaborate – to lack those details of construction and of rigging, which are most typical of the craft of that locality (Clowes, 1936, 5).

Clowes' superlative solution to this was to have a model made by a local fisherman or sailor using plans and line drawings drafted by skilled naval architects. However this was very much the ideal and not that feasible in reality:

But since the local man, to be of value, must be both a trained model-maker and a man of knowledge of the local fishing craft, such an ideal can seldom be attained (Clowes, 1936, 6).



**Figure 65** A photograph of the smaller Irish Curragh from the Aran Islands (middle) in its Ireland 1963 showcase in the Shipping Gallery along with the other curraghs. Inventory 1935-508. Scale 1:6 (James Fenner, November 2010)

A good illustration of this issue surrounding the collection is the model of the smaller Curragh used in the Aran Islands, off the West Coast of Ireland pictured in the middle

in **Fig. 65**. This type is much smaller than its adjacent examples but is built with the same vertical bow with a heavy frame for seagoing purposes.<sup>157</sup> On 18<sup>th</sup> September 1935 Mr Robert Plenderleith from the Technological Department of the Royal Scottish Museum Edinburgh wrote to Laird Clowes:

I am sending under separate cover a model of a 'coragh' such as is used at the Aran Islands.

This model was left here for our examination by Professor D'Arcy Thomson of St Andrews University who asked that it should be forwarded to you later.<sup>158</sup>

A week later the model had arrived at South Kensington along with a letter from Thomson himself:

I sent you the little Aran Currach last week, through the R. Scottish Museum. It is a gift! So don't look too hard in its mouth. [sic]

I can hardly say I'm disappointed, for after all it's much what I expected; but it obviously doesn't come up to your standard for exhibition purposes. The young man who made it can do no better with his present outfit; but with a little help in the way of tools and wood he might soon do a great deal better.<sup>159</sup>

Thomson also offers to make a full sized curragh for the Science Museum but Clowes declines the offer saying the museum did not have space for it on gallery. Highlighting scale as a fundamental element and need of models to successfully depict the development of small craft technologies and construction, Laird writes: "if a full-size boat is on the floor of the gallery, it requires a great deal of room around it before people can appreciate either its form or method of construction."<sup>160</sup> Crucially Clowes also stressed another point in his reply to Thomson. Comparing the model with another that had already been acquired by the museum (inv. 1934-689), Clowes writes "As a native made model it is of considerable interest, and it brings out certain points which are by no means apparent in the existing model here." He adds "It is very curious how with models of craft in somewhat primitive parts one has to choose between locally made models which are much too rough and models made by outsiders which are much too sophisticated."<sup>161</sup>

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<sup>157</sup> SMD T/1935-508 1930s label for the Irish Curragh from the Aran Islands model inv. 1935-508

<sup>158</sup> SMD Nominal File 5383 Letter from Mr Plenderleith of the Royal Scottish Museum Edinburgh to Laird Clowes dated 18<sup>th</sup> September 1935

<sup>159</sup> SMD Nominal File 5383 Letter from Prof Thomson to Laird Clowes dated 23<sup>rd</sup> September 1935

<sup>160</sup> SMD Nominal File 5383 Letter from Laird Clowes to Prof Thomson dated 25<sup>th</sup> September 1935

<sup>161</sup> Ibid.

In a later memorandum to Davy, Clowes suggests the purchase of the model so that it might be placed side by side with the other model and the labelling can reflect the comparison of a model made locally in Ireland and the other (more refined) made externally in England:

This model of a 'Currach' from Arran, which, on my suggestion, Professor D'Arcy Thomson had made for us during his recent visit to the Island, is unfortunately of somewhat rough workmanship, but, on the other hand, being made by an actual builder of these craft, it exhibits certain points which are not shown in the existing model here – made in England.<sup>162</sup>

Consequently Thomson's model was accessioned into the collection on 4<sup>th</sup> October 1935.<sup>163</sup>



**Figure 66** A photograph of the Portland Lerret in its 1963 showcase in the Shipping Gallery. Inventory 1938-461. Scale 1:16 (© Science Museum / SSPL)

As a further example the model, shown above in **Fig. 66**, was made by Major Castle-Smith who also made Lamu Dowhs models for the Africa boats of the Foreign Craft collections and the Deal Galley for the British Small Craft collections. “This unusual

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<sup>162</sup> SMD Nominal File 5383/1/1 Memorandum of the Aran Island Curragh model dated 25<sup>th</sup> September 1935

<sup>163</sup> SMD Nominal File 5383/1/1 Inventory Confirmation of the Aran Island Curragh model dated 4<sup>th</sup> October 1935

type of six-oared open beach boat” the museum label explains “was formerly employed in considerable numbers for fishing off the Chesil beach. The form was evolved as best suited for launching and beaching in all weathers on the steep slopes of the exceptionally large shingle which is a feature of the Chesil Bank.”<sup>164</sup> The hull was clincher-built with a wide beam and was double ended. As each of the oars for each side of the boat were different meant that they could not be interchanged and the shape of the hull meant that no rudder or sail was ever carried.<sup>165</sup> In an internal museum memorandum to Mr Spratt, J.K.D. Hutchison (the successor as Assistant-Keeper after Clowes’ death) wrote:

Major Castle-Smith visited me today and brought in, on approval for long loan, a model of a Portland Lerritt [sic]. This is a very fine piece of workmanship on a scale of 1/16. It represents an almost extinct type peculiar to the Portland Chesil Beach. The lines were taken by Major Castle-Smith from the shell of an old boat of this type now rotting on the beach. This object will make a further interesting addition to the collection of British Fishing craft and I would strongly recommend that the loan be accepted.

The owner wishes the model...to be exhibited for the duration of the Model Engineering Exhibition at Horticultural Hall and will bear the expenses involved.<sup>166</sup>

Castle-Smith’s mention here of the Model Engineering Exhibition is a reference to the annual exhibition of models which began in 1907 and is now in its 106<sup>th</sup> year; sponsored by and in conjunction with *Model Engineer*, *Model Engineers’ Workshop* and [www.model-engineer.co.uk](http://www.model-engineer.co.uk).<sup>167</sup> The *Model Engineer* has been dubbed the premium UK model engineering magazine that has been published for over a hundred years. “Content” the magazine web pages explain “includes constructional articles, interesting articles on engineering related topics and many other varied subjects about models and model engineering” and the annual exhibition is a visual event extension of the magazines subject matter.<sup>168</sup> The same web page also describes the most recent exhibition in December 2013 at Sandown Park Racecourse amounting to a: “three day extravaganza [which included]...the work of some of the best model

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<sup>164</sup> SMD T/1938-461 1930s label for the Portland Lerret inv. 1938-461

<sup>165</sup> Ibid.

<sup>166</sup> SMD Nominal File 4253/3/1 Science Museum Memorandum for Portland Lerret inv.1938-461 Mr Hutchison dated 11<sup>th</sup> August 1938

<sup>167</sup> <http://www.modelengineershow.co.uk/> 2013, accessed 17<sup>th</sup> September 2013

<sup>168</sup> <http://www.model-engineer.co.uk/> 2013, accessed 17<sup>th</sup> September 2013

engineers in the country and further afield, many competing for Gold, Silver and Bronze medals as well as the esteemed Duke Of Edinburgh Award.”<sup>169</sup>

As well as illustrating the locale authenticity of the model, as shown in **Fig. 67**, we can see a figure (possibly Castle-Smith himself but the image is not credited to him) taking the lines (or hull shape) of the boat in preparation of him making the model.<sup>170</sup> This also indicates the effort taken by Castle-Smith (and possible associates) on the acute attention to detail in the model – an accurate manufacture quality that the museum desired. The Portland Lerrit model was eventually received at the museum and accessioned as a permanent loan on 11<sup>th</sup> August 1938.<sup>171</sup>

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<sup>169</sup> Ibid.

<sup>170</sup> SMD T/1938-461 Notes and images from Castle-Smith

<sup>171</sup> SMD Nominal File 4253/3/1 Inventory Confirmation for Portland Lerrit inv. 1938-461





**Figure 67** An image of photographs of an individual (possibly Major Castle Smith) taking lines of a rotting Portland Lerrit on Chesil Beach. He used these lines to make the model. (SMD SMD T/1938-461).

### **5.3.2 Scale, methods of manufacture and materials used**

The model of the Brixham Trawler *Valerian* (shown in **Fig. 68**), the original full size vessel being built by Mr Upham, Devon in 1923, is a prime example of the challenges brought on by the making of something miniature.<sup>172</sup> The model was made and presented to the museum by the owner: Mr T. N. Dinwiddy. As a letter [dated 17<sup>th</sup>

<sup>172</sup> SMD T/1935-155 1930s Science Museum Label for Brixham Trawler (Inventory No. 1935-155)

February 1933] to Dinwiddy from Laird Clowes states: "...you may decide to undertake the making of a scale model of a Brixham Trawler. I sincerely hope that you will do so, for I need not explain to you how much I regret that this Museum contains no satisfactory representation of one of those splendid boats among its large collection of models of British Fishing Boats."<sup>173</sup> In a much later letter from Dinwiddy to Clowes, the former suggests the 'Valerian' – "one of the big sloops" – as the best typical example.<sup>174</sup> In that time he was able as he puts it "...to measure and record her lines – working in a sea of anti fouling paint!"<sup>175</sup> It is from these line drawings, as a frame of reference, that it was possible for him to build the model.



**Figure 68** A photograph of the Brixham Trawler *Valerian* in its Devon and Cornwall 1963 showcase in the Shipping Gallery. Inventory 1935-155. Scale 1:24 (James Fenner, November 2010)

During the making of the model, in later correspondence, Clowes was helpful in recommending certain materials and techniques to have the eventual desired effect on certain features of the model. In a letter dated 19<sup>th</sup> March 1934 he suggests to Dinwiddy to use water paint over oil, use a particular type of cordage for the hull and

<sup>173</sup> SMD Nominal File 4494 Letter from Laird Clowes to Dinwiddy dated 17<sup>th</sup> February 1933

<sup>174</sup> SMD Nominal File 4494 Letter from Dinwiddy to Laird Clowes dated 27<sup>th</sup> November 1933

<sup>175</sup> SMD Nominal File 4494 Letter from Dinwiddy to Laird Clowes dated 27<sup>th</sup> November 1933

for the sails “...use the fine linen which has been sold in great quantities under the name of aeroplane linen.”<sup>176</sup> Clowes went on to explain the methods used for dyeing sail canvas to the right colour by redyeing and washing the fabric. The importance of scale also came into the construction process with Clowes insistent on his preference of a scale of “1:24 as being the smallest in which all details, both of hull and of rigging can be properly shown.”<sup>177</sup> This shows firstly that Clowes was very knowledgeable about different boat types and modelling but more importantly that his authority and expertise as a curator extended beyond the physical boundaries of the museum. In the case of the commissioned making of the Brixham Trawler model he could give precise instructions about how the model should be made and what it should look like. The question of scale here and for other models was of the outmost importance for Clowes. As James Roy King observes “scale can enter richly into the experience of both the viewer and the creator of the model...A very small scale will blur detail or render detailing impossible, and too large a scale may commit the modeller to a level of detailing impossible to carry out in reasonable time” (King, 1996, 12). After two years since the outset, Dinwiddy confirmed that model was complete and it was accessioned as a gift into the museum’s collections on 25<sup>th</sup> February 1935.<sup>178</sup>

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<sup>176</sup> SMD Nominal File 4494 Letter from Laird Clowes to Dinwiddy dated 19<sup>th</sup> March 1934

<sup>177</sup> SMD Nominal File 4494 Letter from Laird Clowes to Dinwiddy dated 17<sup>th</sup> February 1933

<sup>178</sup> SMD Nominal File 4494/1/12 Confirmation of Brixham Trawler model’s accession into the collections.





**Figure 69** A photograph showing the Norfolk Wherry model in its 1963 modelled scene in the Norfolk and Yorkshire showcase in the Shipping Gallery. (Inventory No. 1927-822). Scale 1:16. (© Science Museum / SSPL).

There were also other examples where the importance of scale to Clowes was crucial to the successful making of a model commissioned by the museum. If you consult the letters and memorandums of correspondence attributed to the Norfolk Wherry model (shown above in **Fig. 69**) a clearer, more powerful narrative of scaled modelling and methods of manufacture emerges. In a letter dated 28<sup>th</sup> June 1927 Mr Leonard Walker replies to Laird Clowes:

I have been making enquiries regarding a model of a wherry. A Mr Darby of Oulton Broad [Yacht Owner and Agent] who did my houseboat also builds models and he could get in touch with a certain Mr Hall at Reedham now elderly who used to build Trader Wherries, and who has a model and possibly drawings which Mr Darby could borrow to make a model wherry for you if you still require one.<sup>179</sup>

<sup>179</sup> SMD T/1927-822 An extract from a letter from Mr Leonard Walker to Laird Clowes dated 28<sup>th</sup> June 1927

It transpires that Laird Clowes is delighted at the news and in his response details the specific requirements for the model:

What we want is a model of a trading wherry of as early as possible, untouched by later outside influences. As those which I have seen are about 50 ft. long, a model on a scale 1:24 (half an inch to a foot) would suit us best, but it would be kind of you if you would impress on Mr. Darby that accurate scaling in all proportions is of the first importance to us.<sup>180</sup>

The reference to 'untouched by later outside influences' is interesting here. It not only gives an indication of Clowes' own personal knowledge but it also implies that he wishes to have an exact model which will be a true representation of that particular boat type for that particular region and environment. He concludes with more specifics saying:

Meanwhile however I should be only too glad if Mr. Darby would take the matter up at once and let me have an estimate. A properly framed and planked model is most desirable, but failing that we might consider a model with a block-hull, although in that case it would probably not be worth going in for a model on a larger scale than 1:48 (half an inch to a foot).<sup>181</sup>

As with the Brixham Trawler model the notion of scale is very prominent here with Clowes knowing the right measurements and proportions for the model to be as accurate as possible. Although Clowes insisted on the scales 1:24 and 1:48 for models commissioned and other gifted or loaned models entering the museum, the range of scales within the collection did differ considerably dependent on the type of craft being represented.

The method of manufacture in the model is also of interest here as it indicates the two main possible techniques of making a boat model either from the one block of wood or plank by miniature plank, strut by strut built the same way as the original full-sized vessel. The Norfolk Wherry model, made at a scale of 1:16, was later accessioned into the collections in September 1927 at the cost to the museum of £20.<sup>182</sup>

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<sup>180</sup> SMD T/1927-822 An extract from a letter from Laird Clowes to Mr Leonard Walker dated 29<sup>th</sup> June 1927

<sup>181</sup> Ibid.

<sup>182</sup> SMD Nom. 2616/1/1 Memorandum from Clowes to the Keeper Mr Overton dated 6<sup>th</sup> August 1927



**Figure 70** A photograph of the Scottish Motor 'Fishing-Skiff' in its Scotland I 1963 showcase in the Shipping Gallery. Inventory 1935-524. Scale 1:24 (James Fenner, November 2010)

For this model in **Fig. 70** the museum label reads, "represents a modern 'Fishing-Skiff' built at Campbeltown, Argyllshire, and fitted with a Diesel engine, driving one screw."<sup>183</sup> Laird Clowes wrote to its owner and maker Mr A. G. Arnott saying that he was very interested in it and thought "the model would be of considerable value in the collection of models of Fishing Boats which we have in this Museum."<sup>184</sup> Clowes asks whether the museum could have it on loan for display after the current exhibition that it was in had finished. Arnott replied that the model was at the Model Engineer Exhibition but he would be very happy to loan it to the museum afterwards: "It gives me great pleasure that a model of mine should be thought good enough to be seen in the Science Museum."<sup>185</sup> Arnott also wanted to, in the long term, sell the model saying "the interest to me lies in the making of a model and overcoming the difficulties, rather than in possession once it is completed."<sup>186</sup> Although the model had been accessioned as a loan on 8<sup>th</sup> October 1935<sup>187</sup>, much negotiating surrounding the model's value eventually resulted in it being bought by the museum for £30 to be

<sup>183</sup> SMD T/1935-524 1930s label for the Scottish Motor 'Fishing Skiff' model inv. 1935-524

<sup>184</sup> SMD Nominal File 5386 Letter from Laird Clowes to Arnott dated 21<sup>st</sup> September 1935

<sup>185</sup> SMD Nominal File 5386 Letter from Arnott to Laird Clowes dated 25<sup>th</sup> September 1935

<sup>186</sup> Ibid.

<sup>187</sup> SMD Nominal File 5386/1/1 Inventory Confirmation of the Scottish Motor Skiff model dated 8<sup>th</sup> October 1935

used for permanent display.<sup>188</sup> During this negotiation Arnott wrote to Clowes arguing the unique quality of his model:

The model is not quite the same as exhibition models in general. Usually they are carved from the solid and are left solid or have sides a great deal over scale thickness, the surface fittings and overall outside dimensions only being to scale. Now in the case of my model the form of construction is correct and to scale and the method also is the same as the prototype...I have not seen any model in your marine section made in this way...I claim therefore that as a model it is much more true to prototype than any exhibition models I have seen.<sup>189</sup>

Although not claiming any superiority in skill compared to other model makers, Arnott does go on to say that his “idea and method is more correct than most, and therefore has it value in my opinion. A museum of your standing cannot look only to a glossy and correct outside appearance.”<sup>190</sup> Along with the Norfolk Wherry model already mentioned, the methods used for the Scottish Motor Fishing Skiff model indicate that the framed and planked approach is more effective than carving the model from an entire block of wood. Arnott, although showing provocatively his assessment of other craftsmen and their models already in the Science Museum’s collection compared with his own skills, highlights the competitive nature of model making, a pursuit which King argues “reflects a human interest in perfection and meticulousness that (when under rational control) is one of the most valuable of all human qualities...” (King, 1996, 23).

#### **5.4 1934: Frank Carr, The Science Museum’s collaboration with the SNR and the rise of the National Maritime Museum**

The work of Mr Frank Mason as a marine artist needs no introduction, but it may be of some interest to explain how this book came to be written, for it has been written with a definite object in view. The drawings forming its principle feature were originally intended as pictures purely and simply of the old types of coastal craft the artist knew so well, but which at the time were rapidly disappearing or, indeed, had already disappeared. Now, some years afterwards, it is realised that they are something more than decorative marine pictures merely, for with their technical accuracy they form a valuable pictorial record of those vanished and vanishing craft (Carr, 1934, ix).

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<sup>188</sup> SMD Nominal File 5386/1/7 Letter from Arnott to Clowes dated 19<sup>th</sup> February 1937

<sup>189</sup> SMD Nominal File 5386/1/5 Letter from Arnott to Clowes dated 19<sup>th</sup> November 1936

<sup>190</sup> Ibid.

This paragraph is from the opening of Frank George Griffith Carr's (1903-1991) volume entitled *Vanishing Craft – British Coastal Types in the Last Days of Sail* published in 1934. His mentioning of Frank Mason as a well known marine artist is not just a passing comment. As well as illustrating Carr's volume (illustrated by the Essex-Brighton Smacks and the Scottish Scaffies and Zulus respectively in **Figs. 72 and 73**), Mason (1876-1965) had by this point already made a name for himself with other artwork. Among his many accomplishments this included posters for the LNER (London and North East Railway) between 1927 and 1932 as well as many marine and nautical pieces. Later during World War II he was selected by the Royal Navy to produce recruitment posters culminating in the famous "The British Navy guards the freedom of us all" poster.<sup>191</sup>

In the introduction Carr sets out his nostalgic fervour for the many sailing craft which he believes have vanished and are vanishing with the introduction of marine motor power. He then systematically devotes the following chapters to particularly chosen regional boat types which he believes are under threat or are already disappearing.

"We live in a world of change," Carr goes on to say "and that change is nowhere more marked than in the coastal craft of the British Isles" (Carr, 1934, ix). He argues that the development of steam has had a disastrous effect on large deep-water sailing ships resulting in many books being written and yet while this is good it has led to "one rather serious consequence" which is:

The big sailing craft have been brought so much before the public eye, that the little ships on the coast have not received their fair share of attention. Doubtless, when the small craft of the days of sail and oar have all vanished, the same interest will be shown them (1934, ix).

However Carr believes that when that time comes for the small coastal boats it will be too late to gather the necessary information.

The big ships always kept logs; they were built from lines; their sail plans were set out: large firms with famous names built them; and their movements were recorded in the press of the country...But the little craft that sail the home seas round – how different is

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<sup>191</sup> Taken from *The Illustrative Art of Frank H. Mason* by Gordon Howsden, 28<sup>th</sup> June 2009, from Steve Holland - <http://bearalley.blogspot.com/2009/06/frank-h-mason.html>, accessed 8<sup>th</sup> November 2010

their lot! Built by eye in the yards of obscure local builders; manned by simple fisherfolk or sailormen, able to do anything with a marline-spike but baffled by a pen; rigged and equipped by craftsmen learned in rope and canvas, caring little for paper and ink (Carr, 1934, ix/x).

“What chance is there,” he demands “of permanent records of these vessels surviving unless the effort is made now, while there is still time to collect the information? These craft are vanishing with extraordinary rapidity, before the advance of the marine motor. Inevitably, they are doomed” (Carr, 1934, x).

Carr goes onto explain that during the moving of the second reading of the National Maritime Museum Bill on the 18<sup>th</sup> July 1934 in the House of Lords, Lord Stanhope spoke about the urgent need for the work to be done in his speech: “Unless ships’ lines, drawn by an expert, are produced in the next few years and sail plans and constructional details recorded, we shall know no more about these ships which have sailed our waters for many generations than we know about the Greek trireme” (Carr, 1934, x). Carr concludes this brief introduction with the reasoning behind the volume: “It is the hope of arousing further interest in the small craft that this book is written” (1934, xi). It is this perceived ‘loss’ and ‘disappearance’ of these small boats, vividly illustrated here by Carr and Mason, that seems to be the recurring sentiment of the interwar period. This nostalgic sentiment for small craft is also captured vibrantly in this little poem taken from a cutting from an undated issue of *Yachting Monthly*:

‘Forgotten Craft that slipped away...’

There were busses, there were bawleys, boms and billyboys,  
Cobles, keels and skillingers, peter-boats and hoys,  
With yuffers, mules and wharmels, sploshers, pinks and yawls,  
Vanished craft of yesterday that no one recalls.

There were nickies, too, and lerrits, galley-punts and gigs,  
Jagers, seals and bilanders, and mumblebees and brigs,  
With scaffies, cats and zulus, dandies, snibs and snows  
Forgotten craft that slipped away, a fleet that no one knows.

From a rhyme of Old Ships [Anonymous]<sup>192</sup>

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<sup>192</sup> SMD Box 3 of Curatorial Clippings titled *The East Coast (Thames Estuary to Cromer)* – ‘Forgotten Craft that slipped away...’ poem, undated cutting *Yachting Monthly*



Framed and surrounded by Winston Megoran's illustrations of some of the boat types mentioned in the anonymous verses, the poem captures the extensive range of craft known historically within the British Isles and now 'lost' in the country's heritage and common knowledge. Supporting the work of Frank Carr and the SNR, the two verses of the poem enforced the need and urgency to record all these boat types as part of the nation's maritime identity before they are forgotten (**Fig. 71**).



**Figure 71** An image of the 'Forgotten Craft that slipped away...' poem showing all the illustrations of the boat types the verses mention taken from an undated cutting from *Yachting Monthly*. (SMD Box 3 of Curatorial Clippings titled *The East Coast (Thames Estuary to Cromer)*)

“The Society,” Carr explains “...is alive to the danger that the work of collecting full information may be left until it is too late. The subject of the Surviving Coastal Craft was chosen for the Annual Lecture in 1934” (1934, xi). Carr’s mentioning of the Society’s Lecture series here is a reference to a paper he presented in 1934 to its members entitled: Surviving Types of Coastal Craft of the British Isles at Salters’ Hall, London.<sup>193</sup> He also mentions that: “A sub-committee has been appointed to deal with the matter, and this is already hard at work” (1934, xi). It is this that I would like to address next.

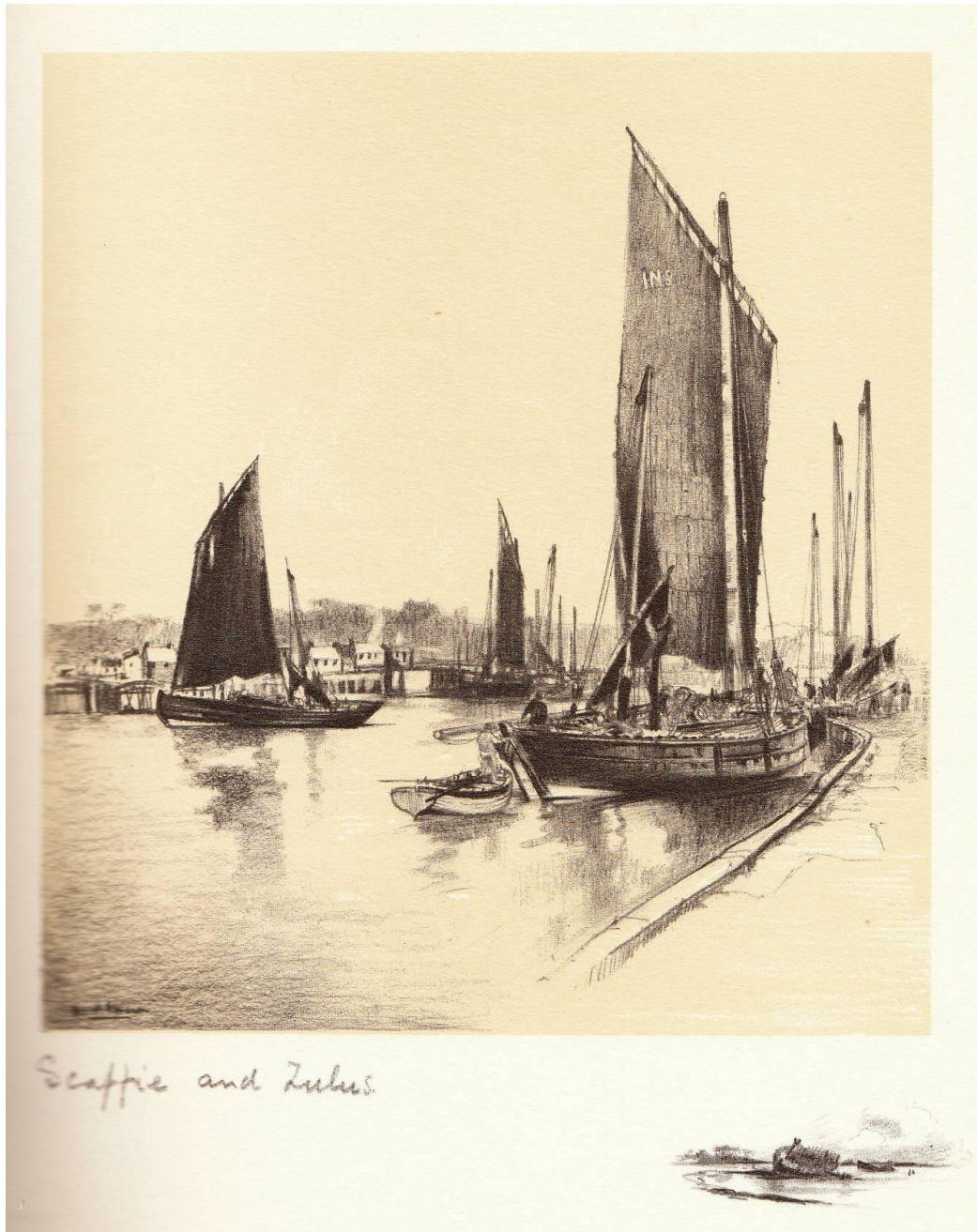
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<sup>193</sup> SNR/2/50 SNR Annual Report 1960 List of Lectures 1931-1960, p.48





**Figure 72** Frank Mason's image of Essex Smacks-Brighton, one of many illustrations that Mason executed for Carr's *Vanishing Craft* volume (Carr, 1934, 54). Both this image and the next give the nostalgic 'loss'-like sentiment and nuances of Carr's argument in the book – and therefore no doubt more effective means of a medium of illustration for this than a photograph.



**Figure 73** Frank Mason's image of a Scaffie and Zulus, one of many illustrations that Mason executed for Carr's *Vanishing Craft* volume (Carr, 1934, 54).

The Society for Nautical Research was founded in 1910 “to encourage research into matters relating to seafaring and shipbuilding in all ages all over the world, into the language and customs of the sea, and into other subjects of nautical interest.”<sup>194</sup>

On 3<sup>rd</sup> April 1934 the newly appointed Coastal Craft Sub-Committee of the Society for Nautical Research had their first meeting in Laird Clowes’ office at the Science Museum:

A meeting of the Sub-Committee was held on Wednesday, 3<sup>rd</sup> April, 1934, in Mr Laird Clowes’ room at the Science Museum. Mr Hornell was appointed Chairman; Mr Carr Secretary.<sup>195</sup>

There they discussed the collection of publishable articles on coastal craft for the Society’s publication *Mariner’s Mirror*. The Society’s quarterly journal, since its foundation, has been “internationally recognised as the pre-eminent English-language journal on naval and maritime history, nautical archaeology and all aspects of seafaring and lore of the sea. The journal covers a wide range of history, from Bronze Age ships to nuclear submarines, and nautical matters such as hydrography, navigation and naval logistics.”<sup>196</sup> In particular they thought that these articles should appeal to wider audiences and give suggestions on how to ‘take-off’ lines from these disappearing craft:

Seeing that, although methods of taking off the lines of vessels are well known to naval architects, the publications in which they are contained are not readily available to or within reach of many persons who are in a position to give material assistance in the compilation of details concerning British Coastal Craft, it appears desirable that directions for taking off lines, simplified to the utmost, be prepared and published in the *Mariner’s Mirror*.<sup>197</sup>

In addition to more details concerning *Mariner’s Mirror* articles on the matter – including inviting member’s and non-member’s to contribute – some other additional recommendations were made:

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<sup>194</sup> The Society for Nautical Research’s Website – the Society’s history page <http://www.snr.org.uk/history.htm>, accessed on 17<sup>th</sup> October 2012

<sup>195</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council*, First Report presented to the Council of the SNR 30<sup>th</sup> May 1934, 12

<sup>196</sup> The SNR’s Website – *Mariner’s Mirror* web page <http://www.snr.org.uk/pages/top-mast/article-abstracts> accessed on 16<sup>th</sup> September 2013

<sup>197</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council*, First Report presented to the Council of the SNR 30<sup>th</sup> May 1934, 12



1. Appeal to members for photographs and information – stressing “the importance of securing photographs from the greatest possible number of positions, showing as much as possible of the shape, construction and rigging of the vessel photographed.”
2. Article In Mariner’s Mirror on taking off lines
3. Engagement of Naval Architect; and contingency fund
4. Appeal to non-members for assistance - “it was decided that this could be best made by an article in The Times after the publications re lines in the Mariner’s Mirror, but before the summer holidays if possible.”<sup>198</sup>

The members of this sub-committee also made further more anxious recommendations:

1. The publication in the Mariner’s Mirror of the Bibliography of local types already prepared as an essential starting-point, and to avoid otherwise inevitable duplication of information already available. It was further decided to recommend the Colonel C. L. Spencer’s suggestions be adopted that the Bibliography should be extended to include sets of lines already existing in Museums; but not models, owing to the great difficulty of authenticating these.
2. The Sub-Committee recommend that Commander H. Oliver Hill, working with Mr Carr, be asked to contribute the first article in the series, to be on Mevagissey luggers; and that the Sub-Committee would supervise the article with a view to making it a pattern of subsequent articles in the series. It is further recommended that members contributing articles be strongly urged to include all local terms; details of the uses to which the craft were put; and all available historical information about them.<sup>199</sup>

With the SNR’s Sub-Committee’s initial intentions clearly stated here it supports Clowes’ points in the introduction to the 1936 exhibition catalogue that: “while the Committee has turned its attention primarily to plans, the Museum has endeavoured, in the first instance, at any rate, to obtain models, wherever such are known to exist or are likely to be procurable” (Clowes, 1936, 5).

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<sup>198</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council*, First Report presented to the Council of the SNR 30<sup>th</sup> May 1934, 13 and 14

<sup>199</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council*, First Report presented to the Council of the SNR 30<sup>th</sup> May 1934, 14

The sub-committee's next meeting was held in the Librarian's Room in the House of Lords on Thursday 28<sup>th</sup> June.<sup>200</sup> As well as updating the committee, the Society's Council and indeed all its members on the progress of the publishing of articles in the *Mariner's Mirror* on taking lines of coastal craft and on the advertisement in *The Times* and the Museum Association's *Museum Journal*, the sub-committee had made more arrangements in the gathering and collecting of craft plans and 'the taking off the lines.' The sub-committee proposed 'local representatives' in certain regions to relate gathered information back to the committee and the society:

It was felt very strongly by the Committee that a system of local Hon. Secretaries for Coastal Craft was essential, who would be in touch with local conditions, would know or would get to know local boat-owners etc., and who could organise local research. They could also report interesting craft in drydock, or about to be broken up, and generally keep the Society in touch with coastal craft developments. A somewhat similar system exists in the Society of Antiquities. It is recommended that the whole coast-line be divided up into districts, for each of which some suitable member of the Society could make himself responsible. Where no member is to be found, it is recommended that some local enthusiast on small craft be appointed as a Local Representative. Examples where this would be very valuable are to be found at Blakeney and at Plymouth.<sup>201</sup>

Following the proposed *Times* letter advertisement, it was also hoped that the local regional press could be approached through the Press Association as well as the aforementioned local representatives if approved.<sup>202</sup> The particular individuals they had in mind were:

Major E. R. Cooper – Norfolk and Suffolk

Mr. Grahame E. Farr – Bristol district

Commander H. Oliver Hill – Hampshire; South Devon and South Cornwall

Lord Merthyr – South-West Wales

Mr. Francis T. Wayne – Northern part of West Coast of Scotland

Mr. H. C. Willis – Kent; South Coast; and Sussex<sup>203</sup>

The sub-committee's report went on to say they had gathered plans and lines from certain individuals since the last meeting:

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<sup>200</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council*, Second Report presented to the Council of the SNR 31<sup>st</sup> October 1934, 25

<sup>201</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council*, Second Report presented to the Council of the SNR 31<sup>st</sup> October 1934, 27

<sup>202</sup> *Ibid.* 28

<sup>203</sup> *Ibid.* 27

- (a) From Commander H. O. Hill. Lines of five Mevagissey luggers of different dates, and of one Polperro fishing boat.
- (b) From Mr. C. P. Hinman of Bristol. Lines and sail-plan of an iron-built Dank's bow trow, built 1860
- (c) From Colonel C. L. Spencer. Four ½ models and a sail plan of Annan fishing boats; casts of two of the models have been made, which are now in the Science Museum.
- (d) From Mr. F. T. Wayne. Lines of a small scaffie and a small fifie; west coast types.
- (e) From Mr. H. C. Willis. Lines, constructional plans, sail plan and full details, of Rye or River Rother sailing barge.<sup>204</sup>

The committee had also consulted Yacht clubs to help with the project and had some warm responses:

The Royal Cruising Club and the Cruising Association have both promised their hearty support and co-operation, will devote space in their journals to the appeal of information and volunteers of taking off of lines. They will also hold a small stock of the Article on taking-off, to sell and distribute to their members who desire them on the behalf of the Society, if the Society should so wish. The Little Ship Club has asked Mr. Carr to give a lantern lecture on the subject on November 28<sup>th</sup>. The members of these three Clubs between them cover the whole of the British coasts in the course of each season's cruising, and it is felt that their co-operation is of great value.<sup>205</sup>

In conjunction with this the Yachting Press had already been notified and was very willing to help: "The Yachting Monthly has already promised its fullest support; the rest of the yachting press, when approached, will doubtless afford the work all the assistance required."<sup>206</sup>

Although this aforementioned *Times* appeal advertisement for boat types never materialized during the summer of 1934, Carr had already made this possible earlier in the year after his aforementioned Society Lecture at the Salters' Hall London. On 22<sup>nd</sup> February in the same newspaper, an article entitled *Coastal Craft* and with the subheadings *Vanishing Grace and Beauty* and *Plea for records of types displaced* announced:

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<sup>204</sup> Ibid. 29 and 30

<sup>205</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council*, Second Report presented to the Council of the SNR 31<sup>st</sup> October 1934, 28

<sup>206</sup> Ibid. 29

A proposal for a combined and energetic attempt to compile full records of the surviving types of British coastal craft was advanced yesterday by Mr. F. G. G. Carr in a lecture before the Society for Nautical Research. The lecture was given at the Salters' Hall, and Admiral Sir George Hope was in the chair.<sup>207</sup>

The article goes on to say that Mr Carr had made a list of more than 200 local types of craft with 86 of these appearing in photographs on the screen while the lecturer made a circuit of the British Isles, "beginning with the barges of London River and ending with the toshers of the Port of Ramsgate."<sup>208</sup> "The vessels," it continued "he described and pictured were all distinctive and often beautiful. Their names alone had an attractive sound – such names as the Medway Doble, the Leigh Bawley, the Yorkshire Billyboy, the Peterhead Fifie, the Banff Zulu, the Isle of Man Nickie, the Galway Pookhaun, the Severn Trow, and the Selsey Galley."<sup>209</sup>

And yet, echoing the anti-modernity discourses within Carr's own *Vanishing Craft* volume that same year, "the advent of the motor had had a devastating effect on the surviving types of coastal craft of the British Isles...the beauty and grace of sail and oar must give way to the noisy, smelly, vibrating efficiency of the marine engine."<sup>210</sup> However Carr did not blame the fishermen for this change saying that it was inevitable "when beauty and grace often went hand in hand with so much hardship and toil."<sup>211</sup>

With the help of the SNR and lines and constructional and sail plans published in the *Mariner's Mirror*, Carr wanted:

To see such details collected of how they were built, rigged, painted, and handled as would enable a stranger 200 years hence to turn to the pages of the *Mariner's Mirror* and find there sufficient authentic information to build and sail a full-sized replica or

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<sup>207</sup> The Times, Thursday 22<sup>nd</sup> February 1934 from The Times Digital Archive [http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1 TTDA\\_0\\_CS152250966&dyn=13!xrn\\_1\\_0\\_CS152250966&hst\\_1?sw\\_aep=univnott](http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1 TTDA_0_CS152250966&dyn=13!xrn_1_0_CS152250966&hst_1?sw_aep=univnott), accessed 18<sup>th</sup> October 2012

<sup>208</sup> The Times, Thursday 22<sup>nd</sup> February 1934 from The Times Digital Archive [http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1 TTDA\\_0\\_CS152250966&dyn=13!xrn\\_1\\_0\\_CS152250966&hst\\_1?sw\\_aep=univnott](http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1 TTDA_0_CS152250966&dyn=13!xrn_1_0_CS152250966&hst_1?sw_aep=univnott), accessed 18<sup>th</sup> October 2012

<sup>209</sup> The Times, Thursday 22<sup>nd</sup> February 1934 from The Times Digital Archive [http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1 TTDA\\_0\\_CS152250966&dyn=13!xrn\\_1\\_0\\_CS152250966&hst\\_1?sw\\_aep=univnott](http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1 TTDA_0_CS152250966&dyn=13!xrn_1_0_CS152250966&hst_1?sw_aep=univnott), accessed 18<sup>th</sup> October 2012

<sup>210</sup> Ibid.

<sup>211</sup> Ibid.

perfect model. That information would be better than a perfect model made now, for it could be spread world-wide, whereas a model could be seen only at one place.<sup>212</sup>

The article concluded that Carr “suggested the formation of a sub-committee of the society to organize work, and an appeal to nautical enthusiasts to supply all the information and photographs they could.”<sup>213</sup>

In the midst of all these activities of the SNR and its sub-committee, came the beginnings of the National Maritime Museum at Greenwich. The installation of the museum took place between September 1934 and its royal opening in April 1937 as exemplified in **Figs. 74 and 75**.



**Figure 74** The Royal Opening of the National Maritime Museum in April 1937 with the Royal Family walking through the colonnades at Greenwich (far left: the Museum Director Callendar, King George VI and in the centre: Princess Elizabeth with her mother Queen Mary (NMM, Image No. C9138\_2, <http://www.rmg.co.uk/about/history/national-maritime-museum/opening-of-the-national-maritime-museum-1937>, accessed 27<sup>th</sup> March 2013)

Before this the museum’s potential Director Sir Geoffrey Callendar, along with the future trustees, the museum’s founder and naval collector Sir James Caird and the

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<sup>212</sup> The Times, Thursday 22<sup>nd</sup> February 1934 from The Times Digital Archive [http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1\\_TTDA\\_0\\_CS152250966&dyn=13!xm\\_1\\_0\\_CS152250966&hst\\_1?sw\\_aep=univnott](http://infotrac.galegroup.com/itw/infomark/220/943/198291415w16/purl=rc1_TTDA_0_CS152250966&dyn=13!xm_1_0_CS152250966&hst_1?sw_aep=univnott), accessed 18<sup>th</sup> October 2012.

<sup>213</sup> Ibid.



help of the SNR, had fought to get support for the museum from the government since 1927. This had culminated in a Bill of Parliament introduced by Lord Stanhope and later endorsed by the MP William Ormsby-Gore (the First Commissioner of Works). The National Museum Bill, as it was called, had two readings, the second of which Ormsby-Gore gave on 29<sup>th</sup> June 1934 (Littlewood and Butler, 1998, 71).



**Figure 75** The Royal Opening Speech given by King George VI on 27<sup>th</sup> April 1937 (NMM, Image No. H1080 <http://www.rmg.co.uk/about/history/national-maritime-museum/opening-of-the-national-maritime-museum-1937>, accessed 27<sup>th</sup> March 2013)

Due to the vagueness of the NMM Act, once it was passed, there were some consequent repercussions. “During the years between 1927 and 1939 the NMM’s rivals in the field of collecting had not only expanded their collections but also increased in popularity” (Littlewood and Butler, 1998, 107). While referring to the Imperial War Museum here, the Science Museum meanwhile had “built up a huge shipping section which by the 1920s included models of over 300 sailing ships, around 400 steamships, 400 small craft and about 300 marine engines and boilers; in addition the museum possessed collections of nautical instruments, astrolabes and pictorial material – paintings, prints, photographs – connected with the sea” (Littlewood and Butler, 1998, 107).<sup>214</sup>

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<sup>214</sup> Also see *Standing Commission on Museums and Galleries, First Report* (HMSO 1933) and *Second Report* (1938).

Bearing this in mind it is understandable that this caused some contention between the two institutions. In the second reading of the Bill, Ormsby-Gore argued that amongst the national museums there was “nowhere where one can study the history of national maritime adventure and development” (Littlewood and Butler, 1998, 108).<sup>215</sup> Mackintosh, the Science Museum’s new Director after Henry Lyons, as well referring testily to Ormsby-Gore as ‘*accoucher*-in-chief’ to the NMM, defiantly responded that the history of Britain’s ‘national maritime adventure’ was on display for all to see in the Science Museum where there were three galleries dedicated to illustrating in precise and accurate detail the development of sea-going craft (Littlewood and Butler, 1998, 108).<sup>216</sup> Mackintosh believed that the National Maritime Museum “should concern itself with that aspect of maritime history which was not represented at South Kensington, namely the ‘sentimental or aesthetic side (portraits, relics, etc.)’, leaving the rest to the Science Museum.”<sup>217</sup> Callendar, however, thought different saying “that ‘sea science’ could not be taught under the auspices of the Board of Education and that Greenwich should have the bulk of the naval models then at South Kensington. He kept a weather eye on the collections, although neither he nor Mackintosh pursued the matter at this point” (Littlewood and Butler, 1998, 108).

The defiance shown by Mackintosh here and the continued dispute over the shipping collections and NMM’s remit that caused the contention between the two institutions for the next fifteen years, shows as ever the Science Museum’s stance on the development of technologies during this period. As has already been seen this was an institutional position which could be traced back beyond the museum’s foundation and which had been nurtured and reiterated during Lyons’ early years of directorship in the 1920s.

### **5.5 The *British Fishing Boats Exhibition of 1936***

...in view of the great interest evinced by the general public in boat-model making at the present time, the efforts that the Society is making for the preservation of records of the various types of British coastal craft would be very materially assisted if a public

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<sup>215</sup> See also WORK 17/186 Hansard, paragraph 1496, 29<sup>th</sup> June 1934.

<sup>216</sup> ‘*accoucher*’ is the French word for mid-wife.

<sup>217</sup> See also WORK 17/186 Hansard, paragraph 1496, 29<sup>th</sup> June 1934

exhibition of models and plans could be arranged. Model makers and ship lovers would assuredly appreciate an exhibition of this description.<sup>218</sup>

This extract is from a letter from James Hornell, Chairman of the Coastal and River Craft Sub-Committee of the SNR, to the Director of the Science Museum on 25<sup>th</sup> May 1936. Hornell goes on to explain that the Society did not have the means to carry out such a scheme and so the Science Museum was approached about the matter. Although the collaboration work between the museum and the SNR had been ongoing since 1934, it was not until the spring of 1936 that the proposal for a joint exhibition was suggested. Hornell adds:

No place in London is so [sic] appropriate for the purpose as is the Science Museum. The wealth of beautiful models of fishing boats in your galleries would provide material for the more attractive section of the exhibition while the plans furnished by our society would appeal to the model maker and all those with interest in the technical aspect of fishing boat design.<sup>219</sup>

Mackintosh replies saying that he accepts the proposal and suggested the setting up of a small committee to start deciding the details of the exhibition with Laird Clowes as the museum's representative. In terms of timing during the summer Mackintosh goes onto explain:

The Very Low Temperatures Exhibition, now on view here, closes on the 30<sup>th</sup> June: a period of two to three weeks will be required for dismounting this exhibition and mounting your exhibition. It would be possible to hold the exhibition of Fishing Vessels from about the third week in July until the end of August.

I'm afraid the exhibition gallery must be clear during September to allow for the rather difficult mounting of the Smoke Abatement Exhibition, which opens on October 1<sup>st</sup>.<sup>220</sup>

An opening ceremony was discussed and arranged for the 22<sup>nd</sup> July 1936, with the exhibition being opened by Lord Macmillan and chaired by the Earl of Stanhope. The exhibition ran until 31<sup>st</sup> August to make way for the Smoke Abatement Exhibition in

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<sup>218</sup> SMD Ed 79/45 British Fishing Boats Special Exhibition – letter to Mackintosh from James Hornell (Chairman of the Coastal and River Craft Sub-Committee) SNR 25<sup>th</sup> May 1936

<sup>219</sup> Ibid.

<sup>220</sup> SMD Ed 79/45 British Fishing Boats Special Exhibition – letter response to James Hornell (SNR) from Mackintosh 27<sup>th</sup> May 1936

October.<sup>221</sup> The exhibition was notably advertised with the Science Museum poster below in **Fig 76**.<sup>222</sup>



**Figure 76** An image of the British Fishing Boats Exhibition Poster 1936 designed by Beath working on behalf of London Transport. (© TfL from the London Transport Museum collection)

Advertisements for the exhibition were also found within the papers of the SNR. In a document explaining the event and gallery opening it reads that the exhibition:

Comes at a particularly opportune moment in the maritime history of this country; a moment when far-reaching changes are taking place in our fishing and coastal fleets.

It is a matter of real regret to lovers of sail and oar that the introduction of the marine motor should be bringing about the rapid extinction of the grand old types, which are

<sup>221</sup> Ibid.

<sup>222</sup> William Beath also known as John Fleming (1913-1991) was a Scottish born artist who produced poster advertising like this for London Transport during the 1930s. The posters were generally to do with museum exhibitions and updates on extensions to the London underground network (© TfL from the London Transport Museum collection).

now being superseded by modern motor craft, built to a few comparatively standard designs.<sup>223</sup>

It goes on to explain that 120 models and plans are shown on display filling the entire gallery space with “specimens of craft from all coasts of the British Isles.”<sup>224</sup> This included both sailing and rowing propelled boats but mostly consisted of types to do with every variation of fishing. Also in addition to these plans and models of vessels that still exist, “there are also some of craft long extinct.”<sup>225</sup>

“Owing to local conditions, influences and traditions,” the document continues “there are wide variations of design among these craft; very much wider, perhaps, than the layman appreciates” and the designs would also depend on the kind of fishing that the craft would be used for i.e. drift-net trawl or line-fishing.<sup>226</sup> The text concludes that it hopes that there will be widespread interest.

The Exhibition led to the publishing of an accompanying catalogue which included an introduction from Clowes along with the full list of the 127 items (each with its exhibition label) on display that consisted of plans, line drawings and models of various types of British sailing craft; the full contents of which is illustrated in the table below in **the Appendix** (Clowes, 1936, 9-28).<sup>227</sup>

As was mentioned at the beginning of this chapter, Clowes explained in the introduction to the catalogue the reasoning behind the exhibition was twofold: firstly to show the collaborative work of the Science Museum and SNR; secondly to show “how little accurate information” was available surrounding these various coastal vessels of the British Isles at this time (Clowes, 1936, 5). Clowes goes on to duly explain that accurate models could only be crafted if the correct detailed knowledge – in the form of plans and line drawings – were available. Naturally because of the vocational localized character of the building of the original full size vessels, such plans

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<sup>223</sup> SNR/10/1 *British Fishing Boats Interesting Exhibition at South Kensington* document NMM. Also found in SMD Ed 79/45

<sup>224</sup> Ibid.

<sup>225</sup> SNR/10/1 *British Fishing Boats Interesting Exhibition at South Kensington* document NMM. Also found in SMD Ed 79/45

<sup>226</sup> Ibid.

<sup>227</sup> 34 of the 127 items were plans/line drawings as contributions from the SNR

were in short supply. Those that did exist were drafted by naval architects, which Clowes proceeds to give a little historical background with reference to Frederick Henry Chapman (1936, 6).<sup>228</sup> This then links it to the similar thorough work of the Small Craft sub-committee of the SNR including help from Frank G. Carr and P.J. Oke (Clowes, 1936, 6-8).

Thus the combination of both the plans and line drawings of boats and the models within the exhibition, Clowes hoped, would illustrate to every visitor “the extraordinary variety in type of the Fishing Boats in different parts of our coasts” (Clowes, 1936, 8). Explanation of this variety of over 200 coastal types is problematic Clowes explains, as there were instances of different boats working under similar conditions in ports geographically close together; while conversely other examples show the same type being employed in completely remote areas from one another “while in between these districts, the vessels are totally different” (1936, 8).<sup>229</sup>

Having said this Clowes was also aware of the exhibition’s limitations:

Doubtless in many instances we are insufficiently informed as to the local conditions, geographical and hydrographical, which have determined these differences (1936, 8).

More conclusively Clowes felt that through the variety of many examples within the exhibition:

It is difficult to escape from the conclusion that the real cause of difference lies in the ancestry of the men who used these boats, and in the past history of the community (1936, 8).

By the end of the exhibition, interest from the public had certainly come into fruition as the Science Museum’s Report for the Advisory Council for that year showed:

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<sup>228</sup> An English naval architect who published his *Architectura Navalis Mercatoria* in 1768 which had illustrative plans of the English Herring Buss, the English Hoy, a Norfolk Yawl and Thames Wherry amongst the examples.

<sup>229</sup> SMD Ed 79/45 British Fishing Boats Special Exhibition – *British Fishing Boats. Interesting Exhibition at South Kensington* document.

Albeit summer time, with many lovers of the sea and boats out of London, the exhibition attracted over 44,000 visitors, and the small edition of 1,000 copies of the informative catalogue was completely sold out.<sup>230</sup>

With the closure of the exhibition came the need to emphasise that the work of recording information regarding the small craft of the nation had not stopped and had to be continued. The potential for future collecting of such information was very apparent and of paramount importance in the eyes of Clowes: "it is felt...that much may be yet learnt from the collection and examination of accurate details of the great variety of fishing boats which are still to be found round our coasts" (1936, 8). Thus this was further acted upon in the 7<sup>th</sup> report of the Coastal and River Craft Sub-Committee of the SNR on 18<sup>th</sup> November 1936. It explained that to mark the end of the exhibition, the BBC had put on air a broadcast talk which was on: "the old types of coastal craft and the society's work thereon, together with an appeal for information. This talk was delivered by Mr Weston Martyr on the Regional programmes on August 21<sup>st</sup>."<sup>231</sup>

Weston Martyr (1885-1966) was an avid sailor and yacht racer having served on many merchant and steam ships since the age of 15. By the 1920s and 30s he had given up the marine life and become a writer and delivered many talks on the radio.<sup>232</sup> The talk for the exhibition was advertised in *The Radio Times* on 7<sup>th</sup> August 1936:

RED sails in the sunset are all very well to croon about but they become a rare phenomenon every year. The Yorkshire cobs, the Portland Lerrits, the Shetland sixerns, the Deal luggers, the Falmouth quay punts, and the rest of over two hundred different types of fishing craft are rapidly giving place to a few standardised types of motor vessels. The varied local types were all built by tradition, their properties judged by the eye rather than by accurate measurement. So no plans exist. Before the march of progress sweeps them finally from our shores, allow Weston Martyr to take stock of them for you on August 21. He has had first hand experience of them; and listeners

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<sup>230</sup> SMD Z-150 Box 1A *Science Museum Report of the Advisory Council for the year 1936, 1937*, His Majesty's Stationary Office, 9

<sup>231</sup> SNR/3/101 – *SNR Sub-Committee on Coastal Craft: Report to the Council, Seventh Report* written by Frank G. G. Carr and presented to the Council of the SNR Coastal Craft Sub-Committee 18<sup>th</sup> November 1936

<sup>232</sup> Who Was Who online entry for Weston Martyr

[http://www.ukwhoswho.com/view/article/oupww/whowaswho/U57649/MARTYR\\_Joseph\\_Weston?index=4&results=QuicksearchResults&query=0](http://www.ukwhoswho.com/view/article/oupww/whowaswho/U57649/MARTYR_Joseph_Weston?index=4&results=QuicksearchResults&query=0), accessed 28<sup>th</sup> February 2012

who remember his sailing stories, recounted in such series as ‘Enterprising Holidays’, know that he can turn his experiences into excellent entertainment.<sup>233</sup>

As one of the many temporary exhibitions during the interwar period, the British Fishing Boat Exhibition as a reflection of the identity, beliefs and culture of the museum was far removed from the advances in technology and collaboration-with-industry rhetoric of the first Science Museum special exhibitions (Morris, 2010, 212). Instead the exhibition highlighted a grander purpose and principle of the museum (one shared with the SNR) in that it “offered to the establishment...a way to influence the public” in the need to recording and preserving the British Isles small craft and fishing boats heritage before it was lost forever (Morris, 2010, 242).

#### **5.6 Clowes’ death and the continuation of the dispute with the NMM**

Unfortunately Laird Clowes’ achievements with the expansion of the collections and the success of the subsequent 1936 exhibition were cut short by his death in July 1937.

In tribute to him the report for that year read:

The Museum has suffered a severe loss by the death in July of Mr G. S. Clowes. He was for 13 years the Assistant Keeper in charge of the Shipping and Small Craft Collections. A wide knowledge, combined with personal charm, had made him a much sought-after consultant on these subjects.<sup>234</sup>

The post was consequently filled by Lt. Commander J. K. D. Hutchison who joined the museum that year.<sup>235</sup> However this was also short lived as, with the advent of war, Hutchison was enlisted in 1939, promoted and later died of an illness before the end of the conflict on 17<sup>th</sup> July 1944 (**Fig. 77**).<sup>236</sup>

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<sup>233</sup> BL Micro Film Reel 25: 7/8/36-18/12/36 *The Radio Times Vol: 52 Issue 671 – 7th August 1936* P.5

<sup>234</sup> SMD Z – 150 Boxes 1A – *Science Museum Report of the Advisory Council for the year 1937, 1938*, His Majesty’s Stationary Office, 6

<sup>235</sup> SMD Z – 150 Boxes 1A – *Science Museum Report of the Advisory Council for the year 1937, 1938*, His Majesty’s Stationary Office, 6

<sup>236</sup> Royal Navy Casualties of World War II, 2009, [www.naval-history.net/xDKCasAlpha1939-45Ho.htm](http://www.naval-history.net/xDKCasAlpha1939-45Ho.htm), accessed 9<sup>th</sup> February 2012





**Figure 77** An image of the memorial plaque dedicated to the Staff of the Science Museum who gave their lives during both World Wars. Note Lt. Commander Hutchison's name is second from the bottom. (James Fenner, March 2013)

Clowes' death resulted in the dispute with the newly opened National Maritime Museum coming "to a head in late 1937" (Scheinfeldt, 2010, 56). In November a request was sent to the Chairman of the Standing Commission on Museums and Galleries, Lord Stanhope, from representatives from Greenwich asking for aid in the disagreement (Scheinfeldt, 2010, 56). The Standing Commission in turn asked the Science Museum to submit a memorandum stating "its position on the matter" (Scheinfeldt, 2010, 56). Dated December 1937, the paper set out "the Science Museum's long-held historical view of the ship models collections" (2010, 56):

The aim of the Collections is to illustrate the history, development and purpose of the ship as a structure and as a machine i.e. to represent the principles of ship and boat construction, and of marine engineering, in order to illustrate the history and development of transport on water...from the earliest times to the present day [and] are international in character...The Ship-Model Collections of the Science Museum are therefore more concerned with the technical than with the romantic or purely historical aspect.<sup>237</sup>

<sup>237</sup> SMD Ed 79/71 *Memo on the Water Transport Collections at the Science Museum, with particular reference to Ship-Models* December 1937, 1 and 2

The paper continued, saying that it rejected the view that there were any serious overlaps between the two institutions, reminding the Standing Commission that: “it is normally assumed that the newcomer makes itself conversant with the scope of the established museums.”<sup>238</sup> Later in the concluding remarks, the paper sums up the differences in remit of the two institutions:

It will be seen, therefore, that the activities of the Science Museum and the National Maritime Museum will be progressively divergent as time goes by; the one basing its collections on technical achievement and touching closely the life of the people by its encouragement of vocational study; the other recording “the history of our national maritime adventure.”<sup>239</sup>

As Scheinfeldt argues on the institution’s activities in peace and war, this was probably the last unsuccessful statement of the “Science Museum’s earlier hopeful vision” (Scheinfeldt, 2010, 56). Within a few months the Standing Commission had judged in favour of the National Maritime Museum, sending most of the Science Museum’s ship models to Greenwich soon after. In the end, it seems that the Science Museum had reckoned correctly that it was a choice between “a history of progressive and peaceful technical achievement on the one hand, and ‘romantic’ history of national commercial and military superiority on the other” (Scheinfeldt, 2010, 57).

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<sup>238</sup> SMD Ed 79/71 *Memo on the Water Transport Collections at the Science Museum, with particular reference to Ship-Models* December 1937, 2

<sup>239</sup> *Ibid.*, 5

The Standing Commission had chosen the latter and yet even by this point, with the run-up to the Second World War, the Science Museum “had already started to turn away from the ideals of the ‘peace museum’” – ideals that were still being made manifest in the shape of the Small Craft exhibit as recently as its opening in 1936 (Scheinfeldt, 2010, 57). In 1938-39 the museum by contrast staged a special exhibition titled *Science in the Army* which, collaborating with the War Office and the British Army, “set out ‘to illustrate the partnership between the British Army and Science in order to show the essential technical training and research needed for a modern army.’”<sup>240</sup> The exhibition stressed “the unique superiority of British military science” and yet absent, Scheinfeldt argued, was “any notion of human unity through scientific progress” (2010, 57). *Science in the Army* was very simply a recruitment exercise and yet these notions of science’s use in war and the military continued into the post-war period in the Science Museum with the first special exhibition *German Aeronautical Developments* in 1946; although this no doubt was to promote the spoils of war as well as be educational (Morris and Fischer, 2010, 319).

Thus the 1936 *British Fishing Boats* Exhibition could be argued to be not only a representation of peaceful means of showing technology and science for the museum in this period, but also one of many exhibitions during the 1930s that illustrated the increased interest the institution had for its nautical and naval collections by way of protest and resilience to the new museum at Greenwich. As Scheinfeldt explains the Science Museum’s “Special exhibitions highlighting *Native Boats*, *The R.M.S. Queen Mary*, *British Fishing Boats*, *Chinese Junks* and *The Centenary of Transatlantic Steam Navigation* all took place in the years between 1934 and 1939” - a high concentration of maritime technological exhibitions in the space of five years (Scheinfeldt, 2010, 55 and 56; Morris and Fischer, 2010, 319). Furthermore the Standing Commission’s decision to be in favour of Greenwich in 1938 had a dramatic effect on the Science Museum and its collections. It had encouraged a new direction for the museum in a post-war climate from 1945. Although the museum would later still be exhibiting and displaying peaceful industrial, domestic and space exploration sciences and

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<sup>240</sup> Science Museum Annual Report for 1938 in Scheinfeldt, 2010, 57

technologies during the late 1940s, 50s and 60s, more emphasis was given to military aspects of science through the museum's collections and exhibitions. These military influences were particularly clear within the acquisitional additions made to the transport collections; and the Shipping and Small Craft collections were no exception.

## **5.7 Conclusion**

The collection of 60 boat models gathered between 1920 and 1938, as well as showing the breadth of variety of types of small boats that are historically associated with this country, heralded a new depiction and function of the coastal, inland and regional fishing craft of the British Isles. Amounting to the majority of what would later be called the 'British Small Craft' collection and exhibit within the Shipping Gallery, these models speak to wider debates concerning: craftsmanship of the miniature; representation of regional and local developments in technologies of fishing craft; as well as illustrative of regional and national identities.

Harking back to both Cosgrove, Roscoe and Rycroft's (1996) and Matless' (1998) arguments earlier with regards to landscapes and British identity, it is these local/regional identities (and subsequently the identity of the nation) that are envisaged through the lens of the models and consequently the types of craft they represent. The boat models represent claims of 'cultural authority', as symbols of self-identification and 'different ways of living' (1998, 12). They therefore can also be used as 'vehicles' through which particular landscapes, coastal-scapes and seascapes can be depicted.

Furthermore the nostalgic framing and sentiment of this interwar period also conjures up the perceived potential loss of this coastal maritime heritage with the 'advance of the motor' – the driving force that brought the expansion of the collection to a climax (Carr, 1934, x). Yet this misplaced rhetoric of loss of sailing and coastal craft could not be further from the truth; in many cases those craft considered to be

erased forever in the 1920s and 30s are still present and representative of certain boat types today on our coastlines, on inland waterways and in regional museums.<sup>241</sup>

Ultimately during the 1920s and 1930s, the Science Museum was defining itself by claiming and developing its identity as a national progressive museum institution of science and technology as set out by Sir Henry Lyons in 1922. This, among other areas of its scientific remit, was partially shown through the expansion of its shipping model collections. The emergence of the National Maritime Museum challenged and threatened these principles and yet, through the contention between the two museums, the Science Museum was able to define itself further – a distinguished and polarised identity far removed from the depiction of ‘our national maritime adventure’ seen at Greenwich.<sup>242</sup> However, these self-defining nodes did come at a price. No longer could the museum be seen as a ‘peace museum.’ With the outbreak of a Second World War, came the realisation that the Science Museum could not shy away from military sciences and technology anymore; a crucial change which would in turn have a dramatic effect specifically on the Shipping Gallery of the post war period.

For the small boat collections Lyon’s 1922 vision was illustrated in the opening of the British Fishing Boats Exhibition of 1936. Like other temporary exhibitions held at the museum during the tail end of the 1930s, the boat models exhibition (alongside its industry and technological advancement themed counterparts) wished to present the public with the scientific and technological heritage of the British Isles. Yet unlike Metallurgy or Television, this exhibition – in the same ilk as Noise Abatement and Smoke Abatement – was a means by which the Science Museum could sway and influence public opinion. With the help of the SNR’s Coastal and River Craft Sub-Committee, the museum was able to emphasise the need to preserve the sailing coastal boating heritage of the country in the advent of the motor engine.

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<sup>241</sup> See National Maritime Museum Cornwall Falmouth <http://www.nmmc.co.uk/> and Scottish Fishery Museum Anstruther <http://www.scotfishmuseum.org/>, accessed 27<sup>th</sup> June 2014

<sup>242</sup> SMD Ed 79/71 *Memo on the Water Transport Collections at the Science Museum, with particular reference to Ship-Models* December 1937, 5

In the end the public persuasive nature of these inter-war temporary exhibitions, as argued by Morris, meant that "...the Museum and its curators could show that the Science Museum was more than just a museum...and that it was a powerful means of communicating with the public about technological and other issues 'in socially important areas'" (Morris, 2010, 243).

Now that the coastal craft and shipping model collections were well established and expansively developed by 1939, how did this translate into the later and final phase of the museum story: the creation of the Shipping Gallery of the 1950s and 1960s? In what innovative ways did O'Dea reuse the Small Craft Collections and display them in a new themed gallery as part of his 'war on boredom'?<sup>243</sup> How did the purpose of the models in this last empirical phase of the museum differ from the previous two periods? It is in the next post war chapter where the creation of O'Dea's 1950s and 1960s Shipping Gallery will be discussed and where these questions will be answered.

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<sup>243</sup> SMD Z 183/2 *Sunday Times*, 3<sup>rd</sup> February 1963. Also see Rooney, David, 2010, 167 in Morris, P.J.T., 2010

Chapter 6 – ‘A war against boredom’: the Sailing Ships Gallery  
1946-2012



*Interior with Model Chinese Junk*

**Figure 78** An image of the interior of the Sailing Ships Gallery showing the large model of the Fuzhou (Foochow) sea-going Chinese Junk (inv. 1936-347) drawn by the artist Paul Sharp for the book *In The Science Museum*. (Riemsdijk and Sharp, 1968, 106).

A war against boredom is being waged at the Science Museum...Instead of row upon row of glass cases, planes are suspended in mock flight from the roof of a hangar...and ships and boats are displayed in the form of real ocean-going liners.<sup>244</sup>

<sup>244</sup> SMD Z-183/2 *Sunday Times* 3<sup>rd</sup> February 1963; Also see Rooney, 2010, 167.

Taken from the *Sunday Times* 3<sup>rd</sup> February 1963, this extract reports the openings of both the Sailing Ships and Aeronautics Galleries that year. Within a month of this, the Sailing Ships Gallery was open to the public, with Aeronautics following soon after in July.<sup>245</sup> Both permanent galleries were the creations of William T. O’Dea, then Keeper of the Sailing Ships and Aeronautics Department, who was tasked with filling the large exhibition spaces of the newly completed Centre Block.

Continuing the museum narrative from the interwar period, this chapter will tell the institutional post-war story of the Science Museum. This will incorporate discussions surrounding the expansion of the museum’s building of the Centre Block, the development of the Sailing Ships Gallery as an exhibition space and the use of dioramas as display methods for the small craft models. It will also set the British Small Craft models in the broader setting of the gallery’s collections of foreign small craft (**Fig. 78**), battleship and sailing warship models, marine engines and navigational equipment. The last items to enter the British model boat collections will also be consulted.

More broadly this chapter will illustrate the third and final phase of the small boat model collections, highlighting the origins of the exhibit as a displayed collection of modelled ‘Small Craft.’ In doing so, it will speak to wider debates concerning post war British cultural identities, the depiction and evocation of miniaturised land/sea/coastal scapes, illustrate the historical and contemporary developments in small boat technologies and show the Science Museum as an institution of science and industry in the 1950s and 60s.

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<sup>245</sup> These were the original titles for both galleries. They were eventually rebranded as *Shipping* and *Flight* during the 1990s.



## 6.1 O’Dea, the *Electric Illumination* Exhibition and the beginning of his career at the Science Museum



**Figure 79** A detail of the Science Museum Staff photograph of William T. O’Dea (1905 – 1981) in September 1933. (See **Fig. 52**). (SMD Z-111/13).

The Sailing Ships Gallery’s story can be traced back to November 1930, when William Thomas O’Dea (**Fig. 79**) began his career at the Science Museum. Lancastrian born in 1905, O’Dea had a background in electrical engineering.<sup>246</sup> On 15<sup>th</sup> December 1936 he opened a temporary exhibition entitled ‘*Electric Illumination*’ (**Fig. 80**) (Rooney, 2010, 158). With support from the Electric Lamp Manufacturers’ Association (ELMA) – “a trade cartel that controlled most of the British lamp supply network” in the interwar period – O’Dea was able to create an innovative exhibition space in the entrance hall of the East Block (**Fig. 81**) (Rooney, 2010, 158). As David Rooney explains “bright, brash and brilliant, the exhibition was a deliberate attempt to popularise the latest products of industry and technology in an interactive, hands-on-display that promised,

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<sup>246</sup> Who Was Who entry for William Thomas O’Dea  
[http://www.ukwhoswho.com/view/article/oupww/whowaswho/U167706/O%E2%80%99DEA\\_William\\_Thomas?index=2&results=QuicksearchResults&query=0](http://www.ukwhoswho.com/view/article/oupww/whowaswho/U167706/O%E2%80%99DEA_William_Thomas?index=2&results=QuicksearchResults&query=0), accessed 11<sup>th</sup> October 2012

according to Lord Rutherford, the nuclear physicist who gave the opening speech, to be 'of great interest not only to scientists, but to every man, woman and child.'"<sup>247</sup>

Rooney goes on to describe what a news reporter would have seen wandering around the exhibition: "he observed scale models of London's Bush House and St. Paul's Cathedral, showing floodlighting schemes at the push of a button...He saw the effects of coloured lights on flowers, textiles and pictures, and decided which sort of lamps provided the most pleasing 'look' in a domestic room. Shop windows vied for his attention with historical sequences of lighting technology..." (Rooney, 2010, 158). This was O'Dea's first exhibition, where we glimpse his curatorial methods – the modelled artificially lit window displays that would heavily feature later in his Sailing Ships and Aeronautics Galleries of the 1960s. Young O'Dea's work here hinted towards a new form of curatorship – displays which both entertained and informed visitors.

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<sup>247</sup> *The Times*, 16<sup>th</sup> December 1936 from Rooney, 2010, 158.



**Figure 80** An image of the poster of the *Electric Illumination* temporary exhibition held at the Science Museum between December 1936 and April 1937 curated by O'Dea (© TfL from the London Transport Museum collection).



**Figure 81** A photograph showing the inside of the *Electric Illumination* exhibition on the ground floor of the Entrance Hall in the East Block of the Science Museum 1936/7. Notice how the gallery's natural light has been blocked in order to create the required "darkness and drama" for the exhibition (Rooney, 2010, 163). (© Science Museum / SSPL)

Yet the building in which the *Electric Illumination* Exhibition was housed, the new East Block, had been designed in the 1910s and had not been opened until 1928. With its grand tall ranked windowed frontage and sides, the original intention of the new building was to use daylight to better envisage the glass cases of objects on display. However, eight years later the 1936 exhibition "demanded darkness and drama" to help captivate its audiences and so the space was "modified to suit the new requirements" with "daylight shaded and artificial lighting ushered in" (Rooney, 2010, 163). Thus the use of light and darkness in this exhibition not only illustrated O'Dea's pioneering schemes of exhibition design; it also "'throws light' on aspects of the physicality of the Museum and its relationship with the content on show" (Rooney, 2010, 159). It is in the *Electric Illumination* Exhibition that we first see O'Dea's curatorial practices at play: methods and techniques of display that would come to the fore in the museum post war in 1945.

## 6.2 The beginnings of the Centre Block, The Festival of Britain 1951 and the Post War Science Museum

On 14<sup>th</sup> February 1946 the Science Museum reopened with a temporary exhibition entitled *German Aeronautical Developments* housed in eight of the twelve galleries opened – the other four were used for permanent exhibitions (Parsons III, 2010, 76). As Parsons explains, “it was a scientific and educational display, which, despite the title, also covered British, American and other international developments” (2010, 76). Taking the precedents set by the Imperial War Museum, the exhibits were designed to present captured Axis equipment and advanced Allied technologies “to aid the training of Allied military and government personnel” (2010, 76). The importance of the exhibition, Parsons emphasised, is that “it was the first large-scale public exhibition of the material culture of the Second World War in Britain” and like the later Sailing Ships and Aeronautics Galleries “was another clear example of the Museum’s ability to construct exhibitions that highlighted contemporary technology” (2010, 76/77). After the Second World War, like other national museums, the Science Museum ‘picked up the pieces’ left by the bombing of London and gathered back its far flung collections stored in country houses. As explained by Parsons “The years immediately after the end of the Second World War were a flurry of activity at all of the National Collections. Each museum was trying to, at the minimum, return to its pre-war position” (2010, 77). However, unlike other national museums, the Science Museum had experienced little damage and “did not sustain a direct hit” on its East Block during the six years of war (2010, 76). The heaviest damage inflicted on the museum’s buildings was on the already condemned old 1862 Southern Galleries. “The war took care of the old galleries,” Parsons continues “and, because they were not repaired, the Museum was pushed down the list of priorities, behind all the museums that sustained significant war damage” (2010, 78). Therefore by 1948 “the condition was ‘well-nigh desperate’ for the Science Museum” to have work begun on the construction of the Centre Block (2010, 78).<sup>248</sup>

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<sup>248</sup> Originally taken from the Standing Commission on Museum and Galleries 3<sup>rd</sup> Report, 1948, *War Years and After*, p.26

Salvation came to the Science Museum in the form of the Festival of Britain when the museum was approached by the Festival organisers in the hope of gallery space for their exhibition of Science. Described as a ‘tonic to the nation’ by the director, the festival aimed to boost the post war stricken national morale of Britain, reflecting on the country’s heritage whilst also promising the public with glimpses of the technological and scientific advances of the future (Anderson, 2007, 107; Addison, 1985; Conekin, 1999). Through the promotion and presentation of future developments such as power stations, television, hydro-electric power, aviation and shipping, the festival addressed Britain’s problem of maintaining its “industrial and cultural potency” (Short, Gilbert and Matless, 2003, 6).<sup>249</sup> With the institution’s promotion of all forms of science and technology, the Festival offered a golden opportunity to illustrate these remits further. “The Festival,” Becky Conekin argues “combined a somewhat fanciful vision of a modernist future with a more or less realistic appreciation of the potential of science to transform everyday life” (Conekin, 2003, 63). The festival, like the museum, wanted to “represent science itself as fun and accessible to everyone” (Conekin, 2003, 63/64). However in order to achieve this joint venture the museum needed a new building.

In August 1948 the Director Dr. Herman Shaw wrote to the Ministry of Works suggesting a compromise that involved the building of part of the Centre Block giving the Festival organisers 200,000 square feet of extra space. This was on the proviso that the building would revert to museum ownership after the festival had ended (Rooney, 2010, 164; Anderson, 2007, 113). Although met with initial rejection from the Ministry, the compromise was eventually agreed and in 1949, the museum had started the build. The architect brought in was Mr Welbury Kendall ARIBA from the Ministry who would later design the British Museum’s Microfilm Department (1951), the Natural History Museum’s Library (1960) and the V&A’s Library (1965).<sup>250</sup> The Festival, although a catalyst for the building of the Centre Block, brought with it, its

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<sup>249</sup> Originally taken from the 1947 Central Office of Information publication *Something Done: British Achievement 1945-47* HMSO London

<sup>250</sup> RIBA Library, Grey Books, Entry for W. Kendall ARIBA; ‘New Block to Science Museum, South Kensington – Extension Required to House Festival of Britain Scientific Exhibits’, 18<sup>th</sup> May 1951, *The Builder* Vol. 180, 710

own time constraints resulting in a partly finished building as an article from *The Builder*, from May 1951 explains: “As it would not have been possible to complete the whole of the Centre Block in time for the Festival the present construction is confined to the basement, ground and first floors, with a temporary roof over the central well.”<sup>251</sup> Shaw never saw the partially completed building as he died in May 1950 and was replaced by Dr. Sherwood Taylor.<sup>252</sup> In November 1950 the building was ready for the Festival.



**Figure 82** An image of the Lord Nelson Bar on board HMS *Campania* during the Festival of Britain in 1951. Notice the mural hanging on the back wall.

(<http://www.ribapix.com/index.php?a=wordsearch&s=item&key=Wczo0OjZaGlwljs=&pg=33&toselecti on=yes>, 2013, © RIBA/ribapix.com, accessed 29th May 2013)

In addition to the Festival sites on the South Bank and in South Kensington, official and unofficial events took place elsewhere in the country. Amongst these was a sea travelling exhibition. Housed in a converted decommissioned World War II aircraft carrier HMS *Campania*, between 4<sup>th</sup> May and 6<sup>th</sup> October 1951, the buoyant exhibitions travelled around the coastlines of Britain visiting ports such as Southampton, Newcastle, Bristol, Belfast and Glasgow amongst others. At each of these ports she “docked for a period of between ten days and two weeks” open to

<sup>251</sup> Ibid. 707

<sup>252</sup> SMD Ed 79/180 Report for the Advisory Council covering the years 1940-1951, 3.



visitors (Conekin, 2010, 127). Replicating elements of the exhibitions of London, the floating galleries on board illustrated to visitors Britain's use of the land and the sea with particular emphasis on the latter. Adorned with patriotic nautical features, the vessel was also complete with 'The Lord Nelson Bar' for visitors (**Fig. 82**). Behind the bar was a commissioned mural by the artist Alan Sorrell, divided into five panels, which was titled '*Working Boats from Around the British Coast*' – a section of which is shown below in **Fig. 83**. As Alan Powers explains the themes of ships, boats and the sea featured heavily within the Festival "partly because of their decorative and dramatic appeal, and partly in response to a romantic sense that they define English character, while at this period also playing an important and varied role in national economic life" (Powers, 2013, 303). Of the fifteen boat types depicted in the mural, nine were represented in model form within the Science Museum's collections by 1951, the majority being acquisitioned in the 1920s and 30s.<sup>253</sup> Although there is no direct evidence of Alan Sorrell visiting the Science Museum and seeing the small craft collections prior to him painting the mural, it is interesting how much of an overlap there is between the two mediums.



**Figure 83** An image of part of Alan Sorrell's '*Working Boats from Around the British Coast*' mural from the bar on board HMS *Campania* during the Festival of Britain 1951.

(<http://jamesrussellontheweb.blogspot.co.uk/2013/02/a-lost-world-rediscovered-20th-century.html> 2013, accessed 29th May 2013)

After 5 months, in September 1951 the Festival ended leaving the Science Museum in full possession of the partly completed Centre Block. Its first permanent gallery in the

<sup>253</sup> This is very much an approximation based on closer examination of photographs of the mural (see Powers 2013, 301-310) and a personal database record of all the small craft models from the Science Museum.



new building was the Agriculture Gallery (**Fig. 84**). Influenced by the display techniques and methods of O’Dea, the gallery was the first to have dioramas “deployed on a major scale” since their introduction into the institution in the 1930s Children’s Gallery (Nahum, 2010, 180).



**Figure 84** A photograph showing the Agriculture Gallery which opened in 1951. (© Science Museum / SSPL)

It is through *Electric Illumination*, the ‘Exhibition of Science’ during the Festival and the Agriculture Gallery after, that we envisage O’Dea’s ‘bright spark’ within the institution. As David Rooney writes, “O’Dea...had manoeuvred his way through global and local politics to get his world view stamped indelibly into the bricks and mortar of the Science Museum” (Rooney, 2010, 167). O’Dea’s curatorial signature were also translated and ‘stamped’ onto the ‘bricks’ of the Sailing Ships and Aeronautic Galleries in the 1960s.

The museum, for the next ten years (1951-61) while the Centre Block was being completed, would be a hot-bed of discussion and disagreement between Keepers and the Director over the layout of galleries within the new building. One aspect of that internal discussion which caused the most disputes was curatorial ownership of the

top/third floor. The two contenders – O’Dea and his Aeronautics Gallery against Calvert and his Astronomy Observatory – fought to win the Director’s approval (Rooney, 2010, 169). In the end O’Dea won, following the death of the Director Sherwood Taylor in January 1956 and consent from Sherwood’s successor, Terence Morrison-Scott. With the demolition of the old 1862 Western Galleries, came the urgent need to rehouse the Science Museum’s aeronautical collections which in turn gave the impetus for the Ministry of Works to complete the building of the Centre Block (Rooney, 2010, 169). Consequently as David Rooney explains “on Morrison-Scott’s departure in 1960 to run the Natural History Museum, the Centre Block was finally under construction, and was handed over to the Museum for fitting-out in September 1961” (Rooney, 2010, 169). In short, after fifty years delay from its origins in the Bell Report (1912), the institution finally had its new building: it’s Centre Block.

### **6.3 The post-war boat models before the opening of the Sailing Ships Gallery 1947-1961**

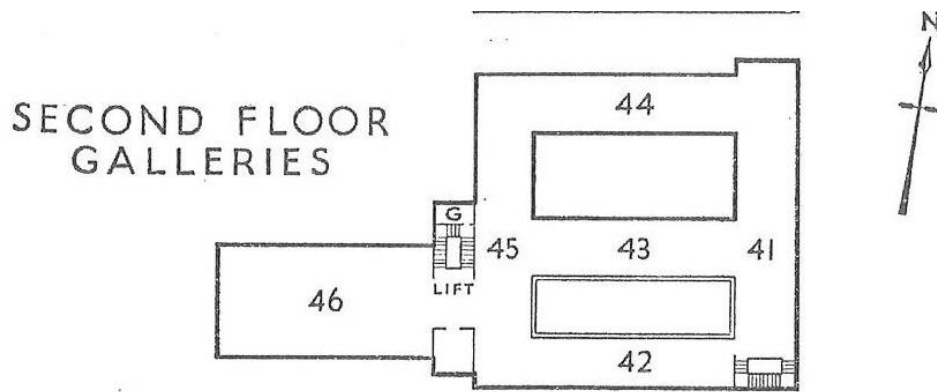
Although the majority of the small boat models had been accessioned into the collections during the interwar period, in a post war museum some additions were acquired between the late 1940s and early 1960s. Now under the Keeper leadership of O’Dea, Department V (Sailing Ships and Aeronautics) was expanding its *repertoire* in terms of collections, restoration, display and expertise. As explained in the Advisory Council Report for 1940-51 under a sub-heading ‘Small Craft’ within the section on Department V, the collections had suffered due to restrictions in space:

The compression of space for the Small Craft Collections after the war was greater than for the Sailing Ships Collections, and about 40 percent of the Chinese Junks – when the Section was opened to the public again in 1946 in Gallery 43.<sup>254</sup>

Since the destruction of their original home in the dilapidated old Southern Galleries after the war, the sailing ship collections were housed in Galleries 41-46 until transferred to the new Centre Block in 1962 (**Fig. 85**).

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<sup>254</sup> SMD Ed 79/180 Report for the Advisory Council covering the years 1940-1951, 25



**Figure 85** Floor Plan detail of the second floor of the Science Museum’s East Block taken from the Outline Guide of the Museum published in 1959. The Small Craft collections were displayed in Gallery 43 between 1946 and 1962 (Anthony, 2010, 92).

While housed in the East Block, the collections also appeared through the new medium of television. In an entry in the Annual Report for 1952 it read:

Assistance was given in the production of a series of television broadcasts to children by the loan of a selected group of models from the Small Craft Collection, and by the provision of technical information regarding the vessels represented.<sup>255</sup>

Consulting files at the BBC’s Written Archives Centre, the story becomes clearer. Utilising nine models from the museum’s Sailing Ship and boat model collections, three 10-15 minute children’s programmes were planned for Sunday’s Children Hour in August and September 1952.<sup>256</sup> Like the later dioramas this shows that the museum of the 1950s was conscious of using new methods of dissemination and display in order to pass on the technological knowledge of the small boat collections to public audiences including children.

<sup>255</sup> Ed 79/180 Report for the Year 1952, 19

<sup>256</sup> BBC WAC T2/140 Children’s Programme ‘Sailing Ships’ 1952 File 1 – Letter to Ms Meek (BBC) from Seligman July 1952. The second programme on 7<sup>th</sup> August used the ‘Rattling Jack’ Lugger and Irish Coracle models from the British Small Craft collections for its topic of ‘queer craft’ from around the world (BL HUS 050 *The Radio Times* Vol. III Sunday 7<sup>th</sup> September 1952). All three programmes were broadcast from the BBC’s site for filming children’s programmes: Studio D at the Lime Grove Old Rank Film Studios in Shepherd’s Bush (Briggs, 1995, 218/219).

Turning back to the collections, four models and one full sized craft entered the collections during this period and they are as follows:

<b>(Inventory number) 1947-31 – WWII MLC 20 Landing Craft</b>
<b>Inv. 1953-6 – Rob Roy Canoe (1865)</b>
<b>Inv. 1955-14 – Full-size River Teify Coracle</b>
<b>Inv. 1961-86 – Maid-Mary Sonya Canal Cruiser</b>
<b>Inv. 1961-32 - North West Coast half-model of Southport Fishing Boat ‘Jenny’</b>

The first to enter the collections in 1947 was the representation of the World War II Motor Landing Craft (numbered MLC 20), pictured below in **Fig. 86**. Made by John I. Thornycroft and Co. Limited (a shipbuilding firm), the model represents “the twin-screw landing craft ‘L.C.M. 20’, built in 1942...and used by the invasion forces of the British Navy in the Second World War.”<sup>257</sup>



**Figure 86** A photograph of the model of MLC 20 in its Landing Craft display in the Shipping Gallery. The model was made by John I. Thornycroft and Co. Limited and was presented to the museum in 1947.

(Inventory No.: 1947-31) Scale 1:24. (© Science Museum / SSPL)

The label goes on to explain the technical details of the craft:

<sup>257</sup> SMD T/1947-31 Museum Label for LCM 20 WWII Landing Craft.

The vessel was of shallow draught, suitable for running ashore on beaches. It was provided at the bow with a hinged ramp, which could be lowered by means of a power winch on deck, for the rapid unloading of vehicles, troops and equipment.<sup>258</sup>

On 22<sup>nd</sup> February 1947 Director Shaw wrote to John I. Thornycroft and Co. Ltd. reminding them of their affiliation with the museum dating back to 1935 with the presentation of some torpedo-boat models. With this in mind Shaw wrote:

In the circumstances, I should very much like to continue this most attractive series of Thornycroft models by the addition of some representative naval craft of the Second World War period.

I venture to enquire, therefore, whether it would be possible for you to render available for exhibition here, either as presentation or loan, the models of the M.T.B. 49 and of the M.L.C. 20 which formed such an attractive feature on your stand at the recent Shipwrights' Exhibition.

These models would, I am sure, attract great popular interest at the Science Museum, and would be of real educational value, especially to our younger visitors and potential seamen of the future.<sup>259</sup>

John I. Thornycroft and Co. Ltd. replied that the M.T.B. 49 model was unavailable but that they were happy to loan them the L.C.M. 20.<sup>260</sup> With approval pending from the Admiralty, the model was lent to the museum for a period 'not less than six months' on 2<sup>nd</sup> April 1947.<sup>261</sup> This model was the last to be added to the 'Landing Craft' display of the Small Craft Exhibit. This addition is particularly important contextually for the post-war period. Entering the collections two years after the end of the war and three years after these landing craft were used on the Normandy Beaches on D-Day, the model would have anchored the remembrance of the war very clearly within the minds of visitors to the gallery on its opening in 1963.

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<sup>258</sup> SMD T/1947-31 Museum Label for LCM 20 WWII Landing Craft.

<sup>259</sup> SMD Nom. File 1718/6/1 Letter from Director Dr. Shaw to Messrs. John I. Thornycroft and Co. Ltd. 22<sup>nd</sup> February 1947

<sup>260</sup> SMD Nom. File 1718/6/1 Letter from Messrs. John I. Thornycroft and Co. Ltd. to Director Dr. Shaw 4<sup>th</sup> March 1947

<sup>261</sup> SMD Nom. File 1718/6/2 Signed acquisitioned form for the L.C.M. 20 model dated 2<sup>nd</sup> April 1947

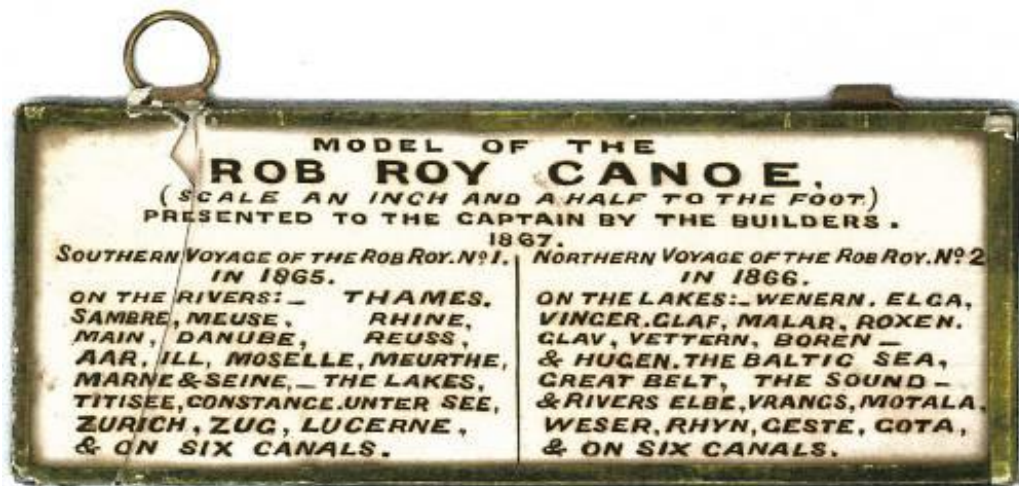


**Figure 87** A photograph of the Rob Roy Canoe in its River/Sea boats display in the Shipping Gallery. It was presented to the museum by Professor Macgregor-Morris in 1953. (Inventory No.: 1953-6) Scale 1:8. (© Science Museum / SSPL)

The second model to enter the collections was the 'Rob Roy' Canoe (1865), pictured above in **Fig. 87**, presented by Professor Macgregor Morris in 1953. As the label explains this model represents:

An original form of decked canoe designed by Mr. J. Macgregor, M.A., and in which he made a remarkable journey of about 1,000 miles, chiefly on the lakes and rivers of Central Europe.<sup>262</sup>

The rivers and lakes that John Macgregor navigated in 1865 and 1866 were explained further in the model's original glass and framed label in **Fig. 88**.



**Figure 88** An image of the original 1867 label for the Rob Roy Canoe model, which was presented to Captain John Macgregor by the boat builders, shows the rivers and lakes he traversed. (Inventory No.: 1953-6) Scale 1:8. (T/1953-6)

<sup>262</sup> SMD T/1953-6 Museum Label for the 'Rob Roy' Canoe (1865).

It transpires that the model had come into the institution's ownership through Sherwood Taylor. In an internal memorandum to O'Dea on 8<sup>th</sup> December 1952 the museum Director wrote:

I visited Prof Macgregor Morris...who showed me and is willing to present a Model of the Rob Roy Canoe (1/3 Scale) presented to the Captain (i.e. John Macgregor his father-in-law) by the Builders...The model, to my eye at least, was exact but the mast may have been broken off.<sup>263</sup>

The model was accepted into the collections on 11<sup>th</sup> March 1953.<sup>264</sup>

In 1955 the museum accessioned another inland water vessel. However, this was not a model but a full sized coracle (as shown in **Fig. 89**).

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<sup>263</sup> SMD Nom. File 9070/1/1 Internal memorandum from the Director Sherwood Taylor to O'Dea dated 8<sup>th</sup> December 1952

<sup>264</sup> SMD Nom. File 9070/1/1 Letter from Sherwood Taylor to Prof Macgregor Morris dated 21<sup>st</sup> January 1953; Also SMD Nom. File 9070/1/3 Signed acquisition form for the Rob Roy Canoe model dated 11<sup>th</sup> March 1953





**Figure 89** A photograph showing the full-size Coracle from the River Teify in its Coracle/Early Irish display in the Shipping Gallery. The model was presented on loan to the museum by the Board of Trade. (Inventory No.: 1955-14) (T/1955-14) (James Fenner, November 2010)

In the original hand written draft of the label it explains:

This interesting form of craft has an extremely long history, and is still used, to a limited extent, on some Welsh rivers for salmon fishing.

The above example is constructed with a framework of withies and hand fashioned laths, covered with dressed hide, and was made by a well-known local craftsman.<sup>265</sup>

In an initial letter written by Sherwood Taylor to the Board of Trade on 17<sup>th</sup> December 1954 it read:

<sup>265</sup> SMD T/1955-14 Original hand written draft of museum label dated 8<sup>th</sup> March 1955



I shall be glad to accept the following which, I understand, you are prepared to transfer on the basis of an indefinite loan:- A Teify Coracle; model of the G.W.R. locomotive 'North Star', 1837 and a model of a G.W.R. Diesel Rail Car.<sup>266</sup>

Once agreed the coracle, along with the two train models, was accessioned into the museum's collections in February 1955.<sup>267</sup>

Three years later the Science Museum returned the train models to the Board of Trade but the coracle was kept:

With reference to your letter of the 18<sup>th</sup> September, I have been asked to confirm that we do wish to retain the Teify Coracle.

This is one of the most interesting of our small craft exhibits and attracts a great deal of attention from our visitors throughout the year.<sup>268</sup>

The inclusion of this full-size coracle resulted in a change in the design of the display cases:

The acquisition from the Board of Trade of a full-sized example of a Welsh coracle led to the development in an adjacent wall case of a specially designed display unit in which a selection of models of other coracles are included.<sup>269</sup>

The Maid Mary-Sonya 'Maid' Line Cruiser model was the next to enter the collections. As shown below in **Fig. 90** in its Canal Craft display, the cruiser model was displayed in comparison with the traditional working canal narrow boat.



**Figure 90** A photograph showing the Mary-Sonya model in its Canal display in the Shipping Gallery. The model was presented as a gift from 'Maid' Line Cruisers Ltd. in 1961. (Inventory No.: 1961-86) Scale 1:12. (© Science Museum / SSPL)

<sup>266</sup> SMD Nom. File 270/27/1 Letter from Sherwood Taylor to Mr Crawley Exhibition Branch of the Board of Trade dated 17<sup>th</sup> December 1954

<sup>267</sup> SMD Nom. File 270/27/1 Letter from Mr Lebeter (Keeper of Transport and Mining) to the Board of Trade dated 10<sup>th</sup> September 1958

<sup>268</sup> SMD Nom. File 270/27/1 Letter from Mr Frawley (Museum Inventory Section) to Mr Whitby of the Board of Trade dated 16<sup>th</sup> September 1958

<sup>269</sup> SMD Z-150 Box 1B, Report for the year 1955, 24

As the museum label explains:

This luxury six to seven berth canal cruiser was built by 'Maid' Line Cruisers for their hire fleet in 1959. She is of all wood construction, with mahogany planking on oak frames. Being built for canal cruising it follows that she is narrow of beam (1/6 length) [sic].<sup>270</sup>

The preliminary request for such a model came from a letter written by O'Dea to the 'Maid' Line Cruisers Ltd. (**Fig. 91**) in February 1960:

With the completion, in the near future, of the Science Museum centre block it is proposed to re-arrange the ship model collections in accordance with the latest display techniques. With this in view, we are at present trying to fill some of the more obvious gaps in these Collections.

The section relating to small craft does not include an example of a Cabin Cruiser, and it is considered essential that the series should represent current practice.

Perhaps your Company might be prepared to present or lend us a scale model of a modern cruiser.<sup>271</sup>

By way of response Captain Munk (Managing Director of 'Maid' Line Cruisers Ltd.), sent O'Dea the brochure and recommended "...something after the style of a boat of our 'Maid Mary-Sandra class.'"<sup>272</sup> In May the Maid Mary-Sonya cruiser had been decided as the most suitable example and Mr Trollope was assigned the task:

Mr Trollope was down yesterday to inspect our canal cruiser 'Maid Mary-Sonya' and to take the necessary measurements etc. I understand that he is commencing to make the model very shortly.<sup>273</sup>

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<sup>270</sup> Science Museum label for the Mary-Sonya model taken from the Canal display, early 1960s

<sup>271</sup> SMD Nom. File 9878 Letter from O'Dea to 'Maid' Line Cruisers Ltd. dated 8<sup>th</sup> February 1960

<sup>272</sup> SMD Nom. File 9878 Letter from Captain Munk ('Maid' Line Cruisers Ltd.) to O'Dea dated 22<sup>nd</sup> February 1960

<sup>273</sup> SMD Nom. File 9878 Letter from Captain Munk ('Maid' Line Cruisers Ltd.) to O'Dea dated 4<sup>th</sup> May 1960



OPERATORS OF THE "MAIDS" FLEET, THE LARGEST FLEET OF HIRE CRUISERS ON THE THAMES & CANALS, BOAT BUILDERS, SALES, REPAIRS, MOORINGS, SLIPPING, MEMBERS OF THAMES BOATING TRADES ASSOCIATION, THAMES HIRE CRUISER ASSOCIATION, ASSOCIATION OF PLEASURE CRAFT OPERATORS ON INLAND WATERWAYS, SHIP & BOATBUILDERS NATIONAL FEDERATION, INLAND WATERWAYS ASSOCIATION & BRITISH TRAVEL & HOLIDAYS ASSOCIATION.

On Admiralty & V... Office Lists. Approved Contractors to the Crown Agents.  
Southern Electric Waterloo, to Surbiton, thence 602 Trolley Bus to the Dittons Terminus  
The Yacht Station is in Ferry Road.

The word "Maid" is registered as a Trade Mark as applied to cruisers, launches, etc.

9878/1  
"MAID" LINE  
CRUISERS LIMITED

(Successors to H. Hammerton & Sons, Established 1860)

DIRECTORS: CAPT. L. R. MUNK, ASSOC. L.H.A. (AND SECRETARY) M. MUNK, F. V. MUNK

MAIN BASE & HEAD OFFICE  
FERRY YACHT STATION  
THAMES DITTON · SURREY

Telephone: Emberbrook 1078 (Three Lines)

Alternative Turn-Round Points at Reading (Upper Thames), Braunston (Grand Union & Oxford Canals) and Stone (Trent & Mersey Canal).

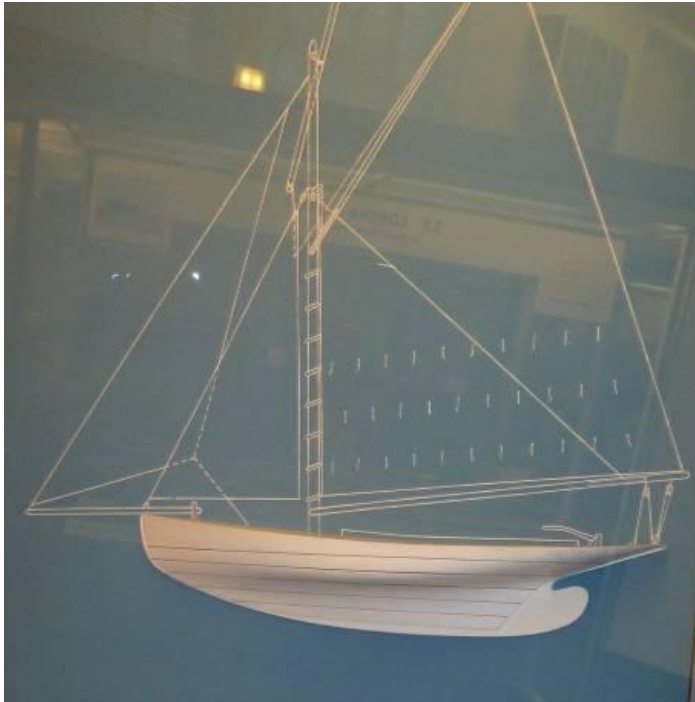
**Figure 91** An image of the letter heading for 'Maid' Line Cruisers Limited from the letters of correspondence between Captain Munk and William O'Dea 1960-1963. (Nom. File 9878)

A year later, after O'Dea enquired about the progress on the model, the model arrived at the museum and was accessioned into the collection on 18<sup>th</sup> May 1961.<sup>274</sup> Again this places the models and the wider displays into a broader post war context. Although the inclusion of the Mary-Sonya cruiser model in the canal diorama would be seen as illogical amongst the other working fishing boat examples, the addition of the leisure cruiser rather than a leisure narrow boat hinted towards dramatic changes within British society in the use of inland waterways during the 1960s. With the establishment of the Inland Waterways Association in 1946 under founders such as Tom Rolt, Charles Hadfield and John Betjeman, came the need to restore, conserve and maintain Britain's network of canals post war for public enjoyment.<sup>275</sup> By the 1960s canals and other waterways were no longer solely used for commerce purposes; a growing interest was also pursued in visualizing them as recreational spaces. Thus the inclusion of the cabin cruiser suggests the museum's interest in presenting then modern craft of leisure and "current practices" alongside historical working examples on Britain's waterways.<sup>276</sup>

<sup>274</sup> SMD Nom. File 9878 Letter from O'Dea to Captain Munk ('Maid' Line Cruisers Ltd.) dated 8<sup>th</sup> May 1961 and Science Museum Inventory document for Maid Mary-Sonya dated 18<sup>th</sup> May 1961.

<sup>275</sup> The Inland Waterways Association Website: <https://www.waterways.org.uk> 2013 accessed 27<sup>th</sup> Jan 2014.

<sup>276</sup> SMD Nom. File 9878 Letter from O'Dea to 'Maid' Line Cruisers Ltd. dated 8<sup>th</sup> February 1960.



**Figure 92** A photograph of the half model of the North West Coast Southport Fishing boat 'Jenny' in its North West Coast and Isle of Man display in the Shipping Gallery. (Inventory No.: 1961-123) Scale: unknown (James Fenner, November 2010)

The last object to enter the collections before the opening of the Sailing Ships Gallery was the above (**Fig. 92**) half model of the North West Coast Southport Fishing boat 'Jenny'. The accompanying museum label reads: "The half model on the right of the display is the builder's model of the Southport fishing boat 'Jenny' (1902)."<sup>277</sup> These fishing vessels sailed from Conway to the Solway Firth during the late 19<sup>th</sup> and early 20<sup>th</sup> Centuries and "were of the one almost uniform type."<sup>278</sup> This meant that they were "cutter-rigged, carvel built vessels with a cutaway stern and raking stern post."<sup>279</sup> The model was presented by the Science Museum's Research Assistant William Bathe and entered the collections on 7<sup>th</sup> September 1961.<sup>280</sup>

'Filling the gaps' and adding to the variety of boat types represented in model form, these five and those that followed, as well as revealing the development of coastal fishing boats and military landing craft in a holistically historical sense also presented the contemporary – vessels that would be recognised on the rivers, coastlines and waterways of the UK by a visitor of the 1950s and 1960s.

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<sup>277</sup> SMD T/1961-123 Museum label for the half model of the North West Coast Southport Fishing boat 'Jenny'

<sup>278</sup> Ibid.

<sup>279</sup> Ibid.

<sup>280</sup> SMD Nom. File 261 Science Museum Inventory document for the half model of the North West Coast Southport Fishing boat 'Jenny' dated 7<sup>th</sup> September 1961.

#### 6.4 The Completed Centre Block and the creation of the Sailing Ships Gallery

Within four years of the end of the Festival of Britain, proposals were being devised by the Keeper's of each department for their specific collections in preparation of them being housed in the Centre Block. On 28<sup>th</sup> April 1955 Sherwood Taylor confirmed in a memorandum to O'Dea that:

The Advisory Council has now appointed a committee to discuss with us further the Sailing Ships Collections, as a follow-up to their inspections of the Collection a year or so ago. Will you therefore please prepare a paper on the future development of the Collection...This seems an opportunity to put your ideas of how sailing ships should be shown in the Centre Block.<sup>281</sup>

By September O'Dea had completed this document and put it into internal circulation. Titled 'Proposals for the Display of Sailing Ships and Small Craft in the New Centre Block', it explained the background:

When the sailing ships and small craft collections were considered by the Advisory Council at the meeting of April, 1954, it was explained that over-crowding and unworthy methods of display had been forced upon us by lack of space made worse by the demands of interested visitors for comprehensive exhibited collections. The hope was then expressed that when the new Centre Block of the Museum became available it might be possible to do justice to a collection that should lend itself admirably to modern display treatment. Some experiments were put in hand as indications of types of detail treatment that might be adapted for individual exhibits or sets of related exhibits. Space in the projected Centre Block was then allocated tentatively and a scheme of general exhibition was worked out on the assumption that reasonable funds would be available for the display work required.<sup>282</sup>

In more general terms it went on to explain the shape, size and layout of the gallery space. The gallery was 250 feet in length by 100 feet in width and had a central display area of 38 feet wide and 250 feet long equalling 9,500 sq. ft. (**Fig. 93**).<sup>283</sup> Although amounting to 1,400 sq. ft. less display space than before the war for the sailing craft collections, O'Dea still argued that "there [was] considerable student interest in the

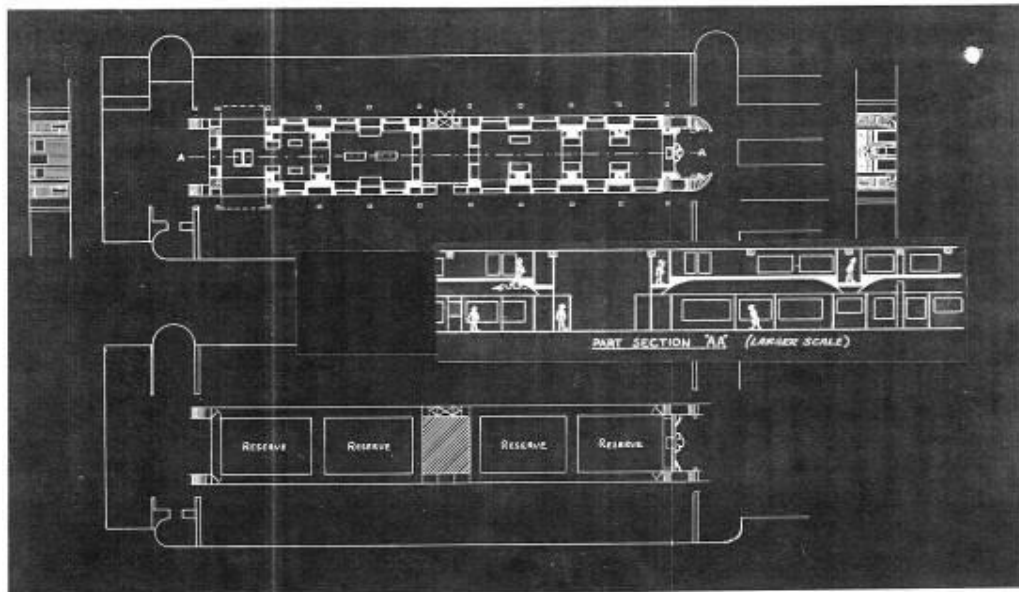
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<sup>281</sup> SMD Ed 79/144 Sherwood Taylor to O'Dea dated 28<sup>th</sup> April 1955.

<sup>282</sup> SMD Ed 79/144 'Proposals for the Display of Sailing Ships and Small Craft in the New Centre Block', O'Dea, September 1955

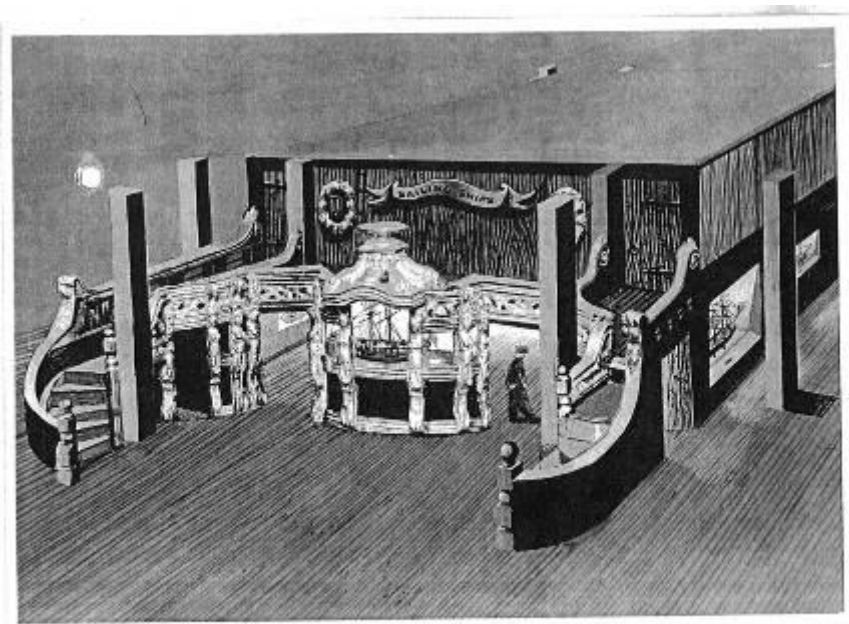
<sup>283</sup> SMD Ed 79/144 Points 2 and 3

subject...and it is highly desirable if space is to be thus restricted, that there should be reserve collections readily available.”<sup>284</sup>



*Fig. 1.*

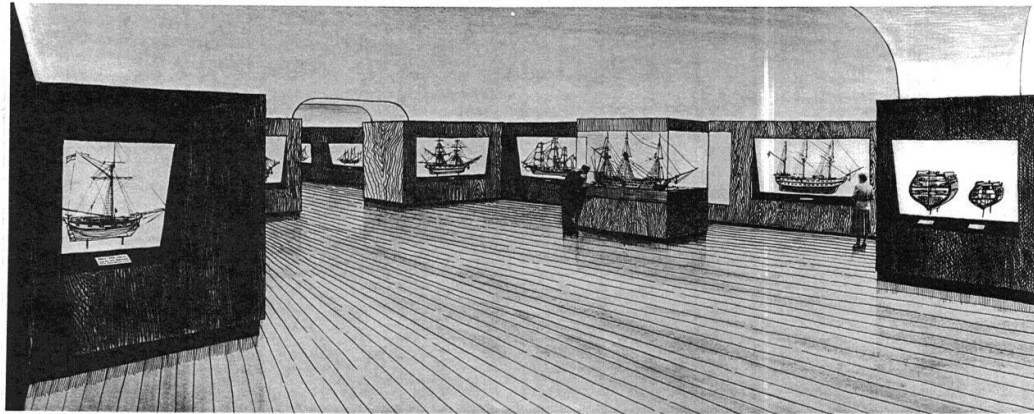
**Figure 93** (Fig.1 of document) An image of the plan for the new Shipping Gallery. (SMD Ed 79/144.)



*Fig. 3*

**Figure 94** (Fig 3 of document) An image of the proposed “...impressive entrance...” for the central display area of the new Shipping Gallery themed on the forecastle bulkhead of the model of H.M.S. Prince 1670. It never went beyond the planning stage and was replaced by the ‘Ocean going liner top deck’ theme. (SMD Ed 79/144.)

<sup>284</sup> SMD Ed 79/144 Points 2 and 3



*Fig. 2.*

**Figure 95** (Fig.2 of document) An image of the proposed display area on the inside of the central display area for the 17th and 18th Century Men-of-War models. (SMD Ed 79/144.)

O'Dea then expanded on what the central display area would look like once completed (as illustrated in **Figs. 94 and 95**):

The external appearance of this long, rectangular box-like area would be relieved by outwards facing display windows along the gangways [i.e. the mezzanine level]. An impressive entrance could be made by adapting the forecastle bulkhead details of H.M.S. Prince, 1670 which is our oldest and best contemporary dockyard model.<sup>285</sup>

The reference to HMS Prince here (inv. 1895-56) concerns a model of the 17th Century First-rate warship, during the reign of Charles II which was launched at Chatham in 1670, as shown in **Fig. 97**. Although in principle, the 'Prince' themed central display area sounded striking to the potential future visitor, O'Dea's elaborate plan for this section of the gallery never happened. It is uncertain in the empirical record why the theme of an ocean-going liner top deck was chosen instead as is visible below in **Fig. 96**. However it is possible that the former theme was considered too costly by the Director and the Advisory Council.

<sup>285</sup> SMD Ed 79/144 'Proposals for the Display of Sailing Ships and Small Craft in the New Centre Block', O'Dea, September 1955 Point 5





**Figure 96** A photograph of the figurehead/cannon/anchor focal point of the Sailing Ships Gallery taken in 2010. Notice the white railing and wooden panelling of the Ocean going liner motif. (© Science Museum / SSPL)

An alternative possible reason is that it was simply an aesthetic choice by the museum's senior staff. Comparing **Fig. 97** with **Fig. 96** above, the glaring differences between themes is very noticeable. O'Dea's original idea of HMS Prince may have been considered too ornate an image to be the central focus of the new gallery. A slicker and contemporary theme was needed to promote the historical but also modern developments in ship design and marine technologies that the museum was exhibiting through its collections. Furthermore, although on the decline after the increases of commercial jet flights, oceanic travel by luxury liner such as the *Queen Elizabeth* and later *QEII* in the 1950s and 60s was still fashionable. Although not proven empirically, it is possible then that the ocean going liner top deck theme was imitating the popularity and sophistication of luxury marine travel on board the 'floating palaces' during that period (Reiger, 2005, 158-192).





**Figure 97** A photograph of the model of H.M.S. Prince (1670). Its top deck forecastle would be the basis for O’Dea’s themed gallery as set out in his proposal of September 1955. In the end this idea did not happen and was replaced with the ocean-going liner top deck theme. Scale 1:48 (© Science Museum / SSPL)

O’Dea’s concerns in the proposal document then turned to the display methods used that would fill these “outwards facing display windows”.<sup>286</sup> He elaborates:

A great deal of detail work would be necessary both to determine what should be exhibited in the main collections and what put to reserve. Additional detail work is involved in deciding the differences, for example, between the treatment of rigged and unrigged models; or in the treatment of single models or of groups of models to the same scale, where such are available. A few experiments of a simple kind have already been made to indicate what may be possible.<sup>287</sup>

By way of example, Points 9 and 10 of the document illustrate two figure pairs 4 and 5 and 6 and 7 as depicted in **Figs. 98 and 99**. In these points O’Dea explains that “two unrigged models” are shown “as [they are] present[ly] displayed and [then] as they might be shown against a background made by enlarging a contemporary print” while

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<sup>286</sup> SMD Ed 79/144 ‘Proposals for the Display of Sailing Ships and Small Craft in the New Centre Block’, O’Dea, September 1955 Point 5

<sup>287</sup> SMD Ed 79/144 ‘Proposals for the Display of Sailing Ships and Small Craft in the New Centre Block’, O’Dea, September 1955 Point 8

the other pair of figures “show how a group of model coracle[s], all to the same scale, can be made much more interesting and instructive by simple re-arrangement.”<sup>288</sup>

O’Dea expands on this notion further in the next point: “Tentative schemes have also been worked out for the treatment of groups of fishing vessels in scenic settings, and of the very large Chinese junk models.”<sup>289</sup> The reference to ‘scenic settings’ here alludes to what would eventually be the use of dioramas and modelled landscape scenes as a form of display within the British Small Craft exhibit and in the rest of the gallery as a whole.

Before concluding O’Dea also suggests that the reserve collections amounting “to at least 40 per cent as much as we have on exhibition in the sailing craft collections” would be displayed in the “simplest manner” as “their attraction would be to students for whom the important factor would be their immediate availability.”<sup>290</sup> The importance of the student as a targeted audience by O’Dea alongside the public in general is particularly interesting to note as it harks back to the Science Museum Director Sir Henry Lyons’ memorandum from 1922 on prioritising audiences: “the ordinary visitor” and “student” over “the specialist.”<sup>291</sup>

Ultimately O’Dea believed that the Sailing Ship collections, like Agriculture four years before:

Would again result in a display of great interest to the professional museum world and of great attraction and service to the public.<sup>292</sup>

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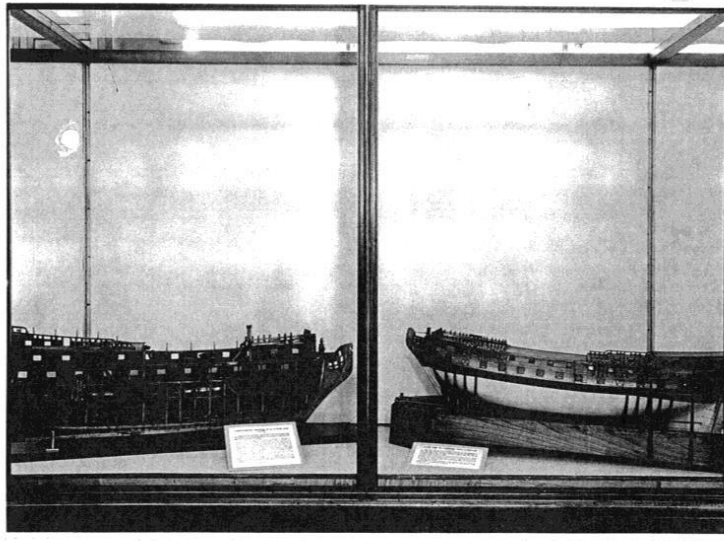
<sup>288</sup> SMD Ed 79/144 Point 9 and 10

<sup>289</sup> SMD Ed 79/144 Point 11

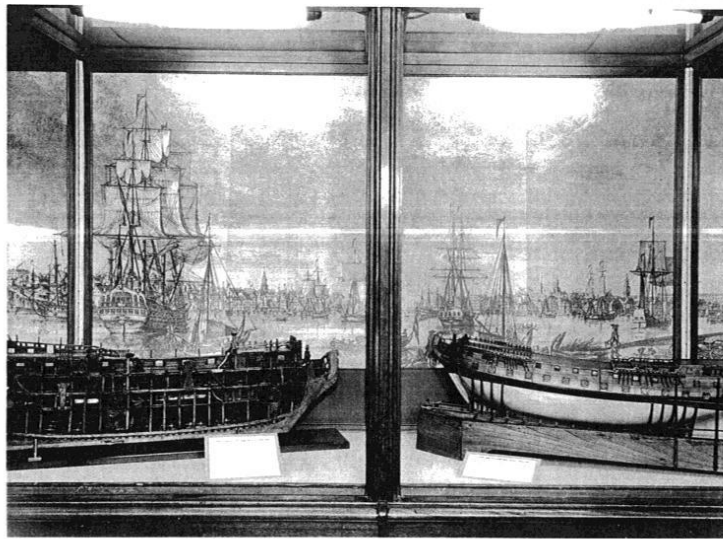
<sup>290</sup> SMD Ed 79/144 Point 12

<sup>291</sup> SMD Z-183/1 *Memorandum on the arrangement of Collections in the Science Museum to serve as a basis for discussion*, Sir Henry Lyons, 1922

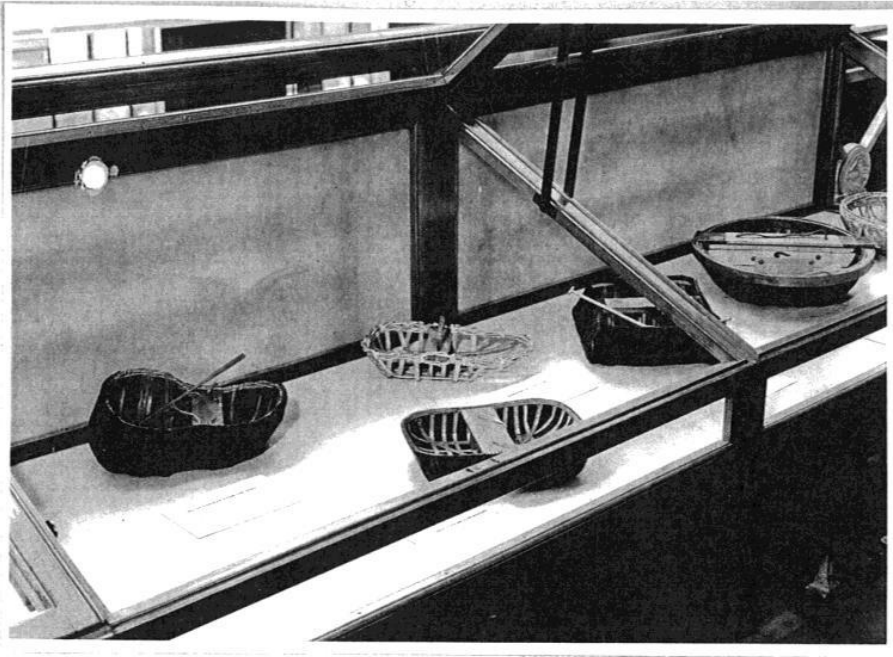
<sup>292</sup> SMD Ed 79/144 ‘Proposals for the Display of Sailing Ships and Small Craft in the New Centre Block’, O’Dea, September 1955 Point 14



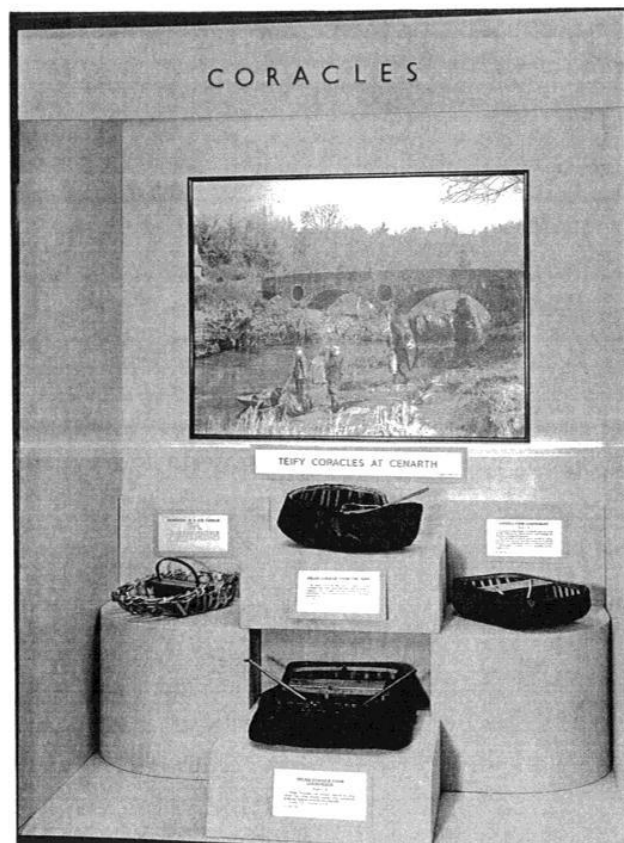
*Fig. 4*



**Figure 98** An image of the two unrigged models of Men of War as they were then displayed compared with how they may be displayed with an enlarge contemporary background print. (SMD Ed 79/144.)



*Fig. 6.*



**Figure 99** An image of the coracle models as they were displayed and then which was “made much more interesting and instructive by simple re-arrangement.” (SMD Ed 79/144.)

The departure of the Director Morrison-Scott in 1960 to run the Natural History Museum and the desperate lack of space for the aeronautical collections applied the pressure to the completion of the Centre Block. In September 1961 the new building was handed over to the museum to be filled with its collections (Rooney, 2010, 169).

As the Earl of Halsbury wrote in the report for the Advisory Council for 1961:

It is gratifying to record that occupation of the Centre Block commenced during the year. The first collection to be moved was Aeronautics and we were pleased to see in our latest visit to the building that excellent progress had been made in the difficult task of displaying this Collection in its new gallery.<sup>293</sup>

By the end of the following year the new Sailing Ship's Gallery was also partially filled with ship and small boat models, navigational equipment and marine engines as recorded in the Advisory Council report for 1962:

Details have been given in previous Reports of the considerable amount of highly skilled work involved in preparing this Collection for exhibition in the Centre Block. This work was nearing completion at the end of the year in readiness for the opening of the new gallery to visitors at the end of February 1963.<sup>294</sup>

### **6.5 The origins of dioramas at the Science Museum and the use of dioramic displays within the British Small Craft Collections in the Sailing Ships Gallery**

In each of the boat models for the Children's Gallery, made to show the evolution of the built boat from the log, one or more human figures were placed to give the scale and also to show the method of working the boat; the success achieved suggests that the addition of similar figures to some of the models in the main galleries would enable the public to appreciate more readily the size and purpose of the boats represented.<sup>295</sup>

This extract is from the Advisory Council Report for the year 1931 on the opening of the Science Museum's Children's Gallery in December (**Fig. 100**). The new gallery, as Bunney explains "was a combination of working models showing scientific principles in action, such as time measurement and lifting apparatus, and dioramas showing the development of subjects such as transport and lighting" which included the use of some small boat models (Bunney, 2010, 197). Far from the traditional display

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<sup>293</sup> SMD Z-150 Box 1B Earl of Halsbury, Chairman of the Advisory Council, 1<sup>st</sup> June 1962, Report for the year 1961, 1

<sup>294</sup> SMD Z-150 Box 1B Report for the year 1962, 13

<sup>295</sup> SMD Z-150 Box 1A, Report for the year 1931, 32; Also see Bunney, 2010, 205

techniques of glass cases this was the first signs “of new approaches and influences” within the museum towards methods of exhibiting (Nahum, 2010, 178).



**Figure 100** A photograph of the Introductory Gallery (later renamed Children’s Gallery) on its opening in the basement of the East Block in December 1931. Notice ‘the brightly lit miniatures in their darkened room’ (Insley, 2008) following the Ghislaine Lawrence ‘narrative form’ of display. (© Science Museum / SSPL)

Dioramas as a notion is summarised in the work of Jane Insley. Insley describes a museum diorama as “...a form of 3D model, showing a scene, an event or a landscape, which has been commissioned for a particular exhibition purpose” and explains that there are two main forms (Insley, 2008, 27). First there are ‘painted models’ which are scenic backgrounds that give context to actual scale models; and second there are ‘modelled paintings’ which are complete modelled scenes. “Owing to the skewed perspective that often characterizes modelled paintings, objects that appear free-standing may not, in fact, remain upright outside this type of diorama.” The challenge for the artists and craftsmen involved in producing habitat dioramas (i.e. dioramas with realistic backdrops for natural history specimens), she suggests, was to go from a life-sized foreground scene to the distant horizon in a matter of a couple of feet. A similar challenge would have confronted artists creating historical human dioramas, especially with issues such as perspective.

For the Science Museum, the display method changes came in the 1920s. Andrew Nahum explains that during this period “retail window dressing and shop display techniques became an admitted influence on Science Museum exhibits” (Nahum, 2010, 178). As Ghislaine Lawrence illustrates further, as a new method of a more narrative approach, this had a dramatic change to the layout of exhibitions. “The cases or exhibit elements, previously laid out according to the aesthetics of the museum interior, were now often arranged in linked alcoves and bays to represent the ‘chapters’ in the story being told” (Lawrence, 1994, 73). Lawrence, however, explains that this “narrative form” wasn’t educational in the way of learning skills (1994, 73). Instead it was an education “in the sense of the transmission of generalised, propositional knowledge – in short for selectively informing people, both children and adults” (1994, 73). A new form of exhibition like this, originally devised to make the subject matter of a particularly museum educational for children, “could be and soon was used to inform about almost any subject at all” (1994, 73).

Insley, in her recent work, has discovered that the 20<sup>th</sup> Century use of dioramas in South Kensington dates back to 1924 (even though dioramas and panoramas existed as concepts in 19<sup>th</sup> Century European theatre long before this) and consequently the “extraordinary effect they had in brightening the galleries of the Imperial Institute” (Nahum, 2010, 179). The Institute’s director Sir William Furze had first noticed the value of models and figurine landscapes at the British Empire Exhibition at Wembley in 1924-6 and made contact with the artists responsible. He had then “invited the artists...to undertake scenic model-making for the displays in a rather unprepossessing exhibition space” (2010, 179).<sup>296</sup> For the next three decades, headed by Raphael Roussel, a studio of independent artists supplied and served the Science Museum with a series of dioramas to help illustrate many new galleries (2010, 179). It is amongst these artists, post-1945, that the dioramas, modelled scenes and painted backgrounds of the showcases of the British Small Craft Exhibit were created. Just like O’Dea intended for his *Electric Illumination* Exhibition in 1936, Insley surmises that the appeal of dioramas to visitors is “the lure of the brightly lit miniature in a darkened room”

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<sup>296</sup> Also see Insley 2008

(Insley, 2008; Nahum, 2010, 179). Nahum takes this further by advocating that “there is something intriguing and quite mysterious in the encounter with a model which we empathise with but do not fully understand” (Nahum, 2010, 179).

Ludmilla Jordonova alternatively suggests that “the idealisation present within a ‘model’ indicates clearly a kind of longing that is implicit...in models as material objects” (Jordonova, 2004, 448; Nahum, 2010, 179). Nahum simply concludes that “our viewing of a model whether as child or as adult, allows us to ‘own’ the scene briefly in a way in which we are powerless to do in the real world” (Nahum, 2010, 179). Therefore the appeal and extensive use of dioramas by the Science Museum during the interwar period and later 1950s lay “partly in the human attitude to small things, coupled with an appreciation on the part of curators that this [wa]s a strongly emotive way to provide context for items from varied types of collections” (Insley, 2007, 200).

Thus by the post war years, “museum exhibitions began to be held on subjects which would have been inconceivable to many curators of a previous generation” (Lawrence, 1994, 73). It is through visits to Sweden, by O’Dea and Welbury Kendall (the architect of the new Centre Block), that gave inspiration to the Agriculture Gallery and those that followed it including the group of six dioramas created for the chemistry collections and installed in the Gas Gallery which opened on 25<sup>th</sup> May 1954 (1994, 180/181; Insley, 2007, 200). Although within the small scale context of the museum’s displays, this Swedish visit and the subsequent galleries and display designs produced as a result of it, are emblematic of the broader influences of continental modernism at work in Britain during the period. Factions within the British cultural elite championed the “European-inspired discourses of planning and design” while others countered these continental influences opting for “British or English versions of commerce and culture” (Conekin, Mort and Waters, 1999, 19).

It was within this wider continental modernist design cultural setting of the 1950s and 60s and specifically in these various dioramic projects within the museum during the period, that Roussel and his art skills came into their own. Roussel was instrumental in the many dioramas that framed the Agriculture Gallery including the Medieval



Ploughing scene (as shown below in **Fig. 101**). As a consequence of shop window influences in the 1920s “...the association with prominent architects and designers with the Festival of Britain made it evident that the bar had been raised [at the Science Museum], and that design was now an almost expected component of modern display” (Lawrence, 1994, 182).



**Figure 101** A photograph of Raphael Roussel touching up his Medieval Ploughing diorama in 1953 classified by Insley as a ‘modelled painting.’ (Insley, 2008) (© Science Museum / SSPL)

With the formation of the Sailing Ships gallery, “the core of the...gallery used a second generation of diorama-style artists for the backgrounds to the finest of the model boats, with a developed, pared-down form of display requiring a similar set of skills to make them effective” (Insley, 2008, 29). However “by this time, Roussel was in his seventies and his natural successor was Dunstan Mortimer. Both artists were also employed over several decades by the Royal Scottish Museum (now the National Museums of Scotland) on four dioramas in their Egyptology gallery” (2008, 29). The protégé Mortimer’s work for the Science Museum:

included splendid models featuring the road interchange at Brent Cross in North London (**Fig. 102**), the building of the M1...and a spectacular model of the steel works at Port Talbot, in addition to the atmospheric backgrounds to the Sir Frederick Maze collection of Chinese junk models in the shipping gallery (Insley, 2008, 29).

For the purposes of O’Dea’s Sailing Ships Gallery, of the display cases depicting dioramas and other art work, these were executed by at least three individuals: Mr Gordon Whatman, Mrs Jenny Clements (prior to her marriage she was known as Ms. Jenny Haynes/Haines) and Roussel’s Mr Dunstan Mortimer. Little remains within the museum’s archives on these artists but it is still possible to reflect on their work to some extent.



**Figure 102** A photograph of Dunstan Mortimer’s Brent Cross Interchange diorama, 1969. (Insley, 2008)

(© Science Museum / SSPL)

Priority was accorded to plans by which it is hoped to revolutionise the Sailing Ships, Small Craft and Docks and Harbours Collections. Several models have been made in cardboard from Ministry of Works plans to facilitate planning and to assist discussions with the architect. The advantages of having an ‘illustrator’ on the departmental establishment are increasingly appreciated as the tempo of Centre Block planning increases.<sup>297</sup>

The above extract is taken from the Advisory Council report for 1956 and highlights the institutional realisation of the importance of ‘illustrators’ in the design of dioramic showcases who were crucial in the completion of the gallery as a whole. The next year’s report proved that progress had been made:

A scheme has been prepared for re-grouping the small craft and displaying them to better advantage in the Centre Block. Differences in scale and in the finish of models introduce many difficulties which only the proposed new division into primary and reserve displays can solve. The use of figures to illustrate scale, place and period is envisaged and several of these have been commissioned during the year.<sup>298</sup>

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<sup>297</sup> SMD Z-150 Box 1B Report for the year 1956, 24

<sup>298</sup> SMD Z-150 Box 1B Report for the year 1957

For the Small Craft Exhibit the modelled landscape scenes came in different forms but would be loosely termed under Insley’s definition as ‘painted models’; rather than the fully complete ‘modelled paintings’ such as the Roussel’s Medieval Plough scene. The displays and models contained within them can thus be categorised as the following:

1. Complete full three dimensional dioramas – including foreground, figurines, models and backdrops
2. Modelled foreground landscape scenes – landscape foreground scenes that include the model and figurines without a backdrop
3. Painted/Photographed backdrops– a painted or blown up photograph scene mounted behind the models of the case without any modelled foreground landscape scene. The models are generally positioned on the floor or on purpose built ledges within each showcase.

No matter which of these mediums was used the institution knew the significance of using such new methods:

There is growing realisation of the importance of attempting to make the display attractive to the eye: attractive in a double sense, i.e. drawing the eye to that which is essential in an exhibit and also attracting the visitor by the beauty of the presentation.<sup>299</sup>

The table below shows each showcase and gives a brief description of the nature of that display following the three categories:

<b>Showcase</b>	<b>Nature of display</b>
1 – English Smacks and Yorkshire Cobles	Painted and Photograph backdrops
2 – Trading Schooner and Yorkshire Lugger	Painted backdrop
3 – Grimsby	No diorama or backdrop; just models in showcase
4 – Norfolk and Yorkshire	Smaller diorama for Norfolk Wherry; other

<sup>299</sup> SMD Ed 79/180 Report for the Advisory Council for the Year 1952, 36

	models just in showcase
5 – Peter Boats and Dobles/Norfolk and Suffolk	Modelled foreground landscape for Medway Doble; Modelled foreground of Sheringham Crab Boat. All other models just in showcase
6 – Thames Estuary	Painted Backdrop
7 – Canal Craft	Complete showcase diorama
8 – Brighton Hog Boat	Painted Backdrop for Hog Boat
9 – Hastings	Complete showcase diorama
10 – Devon and Cornwall	Painted Backdrop
11 – North West Coast	Modelled map foreground of North West Coast of England with models on top
12 – Scotland I	Just models in showcase
13 – Scotland II	Painted backdrop for Shetland Sixern; other models just in showcase
14 – Coracles and Early Irish	Full size Coracle plus models in showcase
15 – Ireland	Complete showcase diorama
16 – Coastal and Fishing Craft and Map	Map of British Boats of the British Isles plus models in showcase
17 – Mevagissey Cornwall	Complete showcase diorama
River/Sea Boats	Painted Backdrop for River boats; Sea boats in wooden niche inset

Portland Lerret	Complete showcase diorama; three other scenes in same revolving case – not on show
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Before delving into individual examples from the British Small Craft displays, it is important to show how these displays were made. In an article, Gordon Whatman explains the methods used. In order to achieve “a new concept of display techniques” it had to be agreed at the planning stage that:

If any progress in museum display was to be made it was essential for the designer to deviate from the conventional, and produce a series of technical displays, well lit, easily maintained and of high instructive value.<sup>300</sup>

Whatman further argues that this required a “flexibility, objectivity, and an ‘un-museum like’ approach, based upon the logical needs of the models.”<sup>301</sup> The first stage was a general discussion concerning a particular group of boat models. From these discussions it was concluded that “whenever possible, the boats should be placed in front of settings associated with dressed figurines of the period and constructional details shown in photographs.”<sup>302</sup>

Alongside the many initial consultations with museum staff, the next stage was to “construct a scale mock-up of the proposed exhibit” with a scale of 2 in. = 1 ft. made, in three dimensions, predominantly out of cardboard as illustrated below in **Fig. 103**.<sup>303</sup>

The advantage of these mock-ups was that:

It enabled extensive experiments to be made with lighting, eye levels, covering materials, positions of labels, etc, without associated loss of time in alterations on the full size display.<sup>304</sup>

Once the design was agreed by all those involved the completed mock-ups were sent directly to the craftsmen in the Museum’s Workshops.

This method proved very successful, the craftsman scaling up from the original, translating it into blockboard, and always being able to refer back to the completed display in model form.

<sup>300</sup> SMD Z-183/2 ‘A New Gallery in the Science Museum’ article by Gordon Whatman LSIA (Licentiate of the Society of Industrial Artists and Designers), journal and exact date unknown (c.1963), 1

<sup>301</sup> Ibid.

<sup>302</sup> SMD Z-183/2 ‘A New Gallery in the Science Museum’, Whatman, c.1963, 2

<sup>303</sup> SMD Z-183/2 ‘A New Gallery in the Science Museum’ article by Gordon Whatman LSIA (Licentiate of the Society of Industrial Artists and Designers), journal and exact date unknown (c.1963), 2

<sup>304</sup> Ibid.

This system disproved the necessity for working drawings and allowed the craftsman to solve his problems in his own individual way, provided, of course, he kept to the original design of the exhibit but enabled the creative momentum to be sustained even at the constructional stage.<sup>305</sup>

The resultant degree of efficiency of this system was clear:

This co-ordinated channelling from the initial idea to the completed display enabled seventy-four settings to be finished with a minimum of site alteration.<sup>306</sup>

However Whatman concludes that the success of the 'gallery project' was "the direct relationship to the close dovetailing of the group consisting of: Head of Department of Sailing Ships, Research Assistant, Workshops, Art Assistants and Designer."<sup>307</sup>



**Figure 103** An image of Jenny Clements and Gordon Whatman making the cardboard mock-ups for each of the displays of the Sailings Ships Gallery dated in the early 1960s. Notice the many variety of display mock-ups already constructed above them on the shelves and also of the advertising poster for the gallery in the background. (© Science Museum / SSPL)

<sup>305</sup> SMD Z-183/2 'A New Gallery in the Science Museum', Whatman, c.1963, 2

<sup>306</sup> Ibid.

<sup>307</sup> Ibid.

Along with the diorama artists mentioned, Miss Barbara Campbell was also hired by O’Dea to create most of the figurines placed within these Small Craft scenes and for individual models. Ranging from 2-9 inches in height each and at a minimum of £6-12 apiece, Campbell produced several figurines for O’Dea between 1957 and 1962.<sup>308</sup> Interestingly Campbell’s figurines, although individually detailed in the face, are always presented partially hidden or facing away from the glass of the showcase suggesting a consistency in style and skill in her work. O’Dea’s earliest recorded request of Campbell within the archives was on 19<sup>th</sup> July 1957:

Two 5 ½" – 6" figures ‘Wild Irish’ 1685        £12

Two 5" figures, Clovelly herring fishers 1886   £12.<sup>309</sup>

The mention of ‘Wild Irish’ figurines here is a reference to two historically dressed modelled Irishman that were added to the Wicker boat model c.1685 (inv. 1936-337). The model, found in the Coracles and Early Irish display, was based on the testimony and drawings of Captain Thomas Phillips – a military engineer stationed in Ireland in 1685 – who witnessed such ‘wild’ men in these craft. A copy of the drawings was a backdrop to the model and the originals are at the Pepysian Library Cambridge.<sup>310</sup>

Three months later Campbell was contacted again for another commission, this time three larger figures for three different models for the Foreign as well as British Small Craft collections: “figure (3 5/8" high) for Raft from Formosa, figure (2" high) for English Hoy (1768), figure 3" high for Brixham Trawler ‘Valerian.’”<sup>311</sup> Many other transactions between Miss Campbell and the museum followed. Each showcase and each figurine had a dual purpose: not only be instructive showcases for the visitor but displays which would also “attract the eye and raise spirits.”<sup>312</sup> By the end of 1962, Campbell had also made two Cornish fishermen for the Mevagissey display, eight Scottish fishermen for

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<sup>308</sup> SMD Nom. File 9521

<sup>309</sup> SMD Nom. File 9521/2/1 Letter to Campbell from the museum commissioning her to make figurines for the ‘Wild Irish’ and Clovelly herring boat models dated 19<sup>th</sup> July 1957

<sup>310</sup> SMD T/1936-337 1930s label for the Wicker boat model c.1685

<sup>311</sup> SMD Nom. File 9521/3/1 Letter to Campbell from the museum commissioning her to make figurines for the Raft from Formosa, English Hoy (1768) and Brixham Trawler ‘Valerian’ boat models dated 17<sup>th</sup> October 1957

<sup>312</sup> SMD Ed 79/180 Report for the Advisory Council for the Year 1952, 30

the Scotland displays, five Hastings Fishermen for the Hastings scene, one 9" figure for the Brighton Hog Boat and six smaller figures for the Deal Pilot boat.<sup>313</sup>

### 6.5.1 Complete dioramas

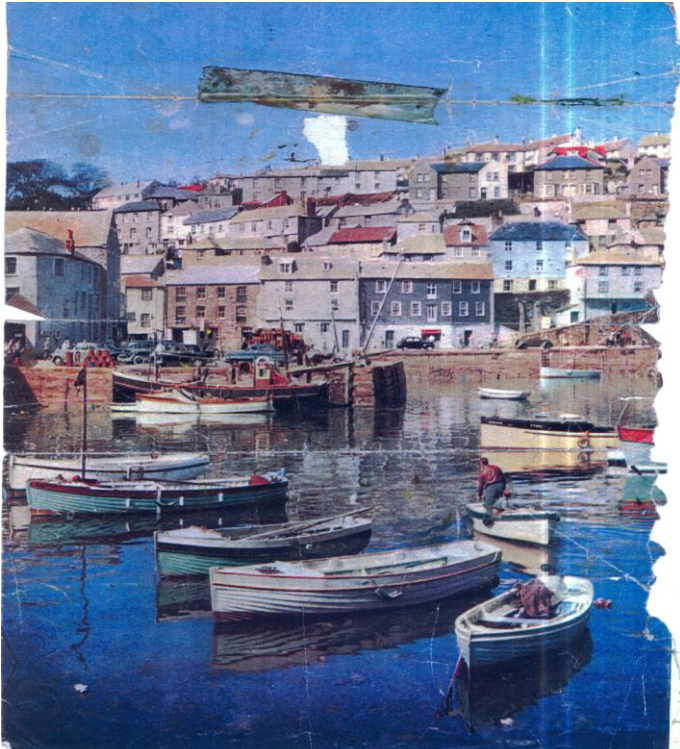
Out of twenty showcases displaying the British Small Craft Collections, five of them would be termed dioramas. Predominantly completed by Clements and Mortimer, these displays were constructed between 1959 and 1963. The most striking of these dioramas is the Cornish Mevagissey display situated on the Mezzanine level (see **Figs. 104 and 105**). Depicting three models in a modelled harbour bottom foreground, the scene highlights the successful usage of overlapping layers to create the best three dimensional effects (**Fig. 106**). Jenny Clements had done this by placing a 'jetty' in the middle ground while two fishermen are chatting to the fore to give a better sense of the full size nature of the boat types being represented.



**Figure 104** A photograph of the Mevagissey display on the Mezzanine level of the gallery. The scene was created by Jenny Clements in 1963. (© Science Museum / SSPL)

<sup>313</sup> SMD Nom. File 9521 Invoices from the museum to Campbell dated between 14<sup>th</sup> July 1961 and 5<sup>th</sup> June 1962 for the completion of 22 figurines for numerous models and dioramic scenes within the British Small Craft displays.





**Figure 105** An image of Mevagissey, the Cornish Fishing village, taken as a cutting from a magazine. It is possible that Clements may have used this colour image as inspiration for the showcase. Date of image and original source unknown. (SMD Curatorial Clippings Box 5 – South Coast)

In a letter to Mrs Clements, O’Dea informs her that:

I have your quotation of 3<sup>rd</sup> April for completing the Mevagissey display at a cost of £33. As discussed with you we should wish to supply most of the materials to ensure continuity with what has already been done and we should expect you to complete the job in 3 weeks from 9<sup>th</sup> April.<sup>314</sup>

Following this letter, O’Dea requested the £33 wages for Mrs Clements for the commissioned work (this included the “...painted back ground of Mevagissey 10ft x 5ft and preparation of inner harbour. And preparation of base 10ft x 5ft giving shingle effect etc.”).<sup>315</sup> Within a month of this the diorama was complete.

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<sup>314</sup> SMD Nom. File 9958/4/1 Letter from O’Dea to Jenny Clements dated 3<sup>rd</sup> April 1962

<sup>315</sup> SMD Nom. File 9958/4/1 Memorandum giving an estimate of the Mevagissey Display including dimensions from Mrs Clements to O’Dea dated 3<sup>rd</sup> April 1962



**Figure 106** A photograph showing the Mevagissey dioramic display from inside the case. This was created by Jenny Clements in 1962/3. Notice the three dimensional effect of a jetty, two fishermen figurines in the foreground and the imitation of a muddy harbour bottom with the tide out. (James Fenner, September 2012)

But her work for the gallery and the exhibit didn't stop there. As O'Dea shows, in a memorandum to the Director, she also was help to other artists on site:

Following our discussion I have seen Miss Haynes who is willing to give the necessary assistance to Whatman over the next 2 weeks for a fee £15. She should be able to get a display setting for hastings luggers out of the way under his guidance, thus releasing space for other items already being built in workshops.<sup>316</sup>

As shown in **Fig. 107**, like the Mevagissey scene, Clements and Whatman again utilised the three dimensional affects by overlapping the white boards of the background to resemble the rocky chalk face of the White Cliffs of Hastings and the South East coastline. In the middle ground two of the boat models are propped up on the shingle while a third is being pulled ashore by two men and a third steers the vessel in.

<sup>316</sup> SMD Nom. File 9958 Memorandum to the Director from O'Dea dated 2<sup>nd</sup> March 1961



**Figure 107** A 1960s photograph of the Hastings dioramic scene including five figurines, breaking waves on a pebble beach and the overlapping layers of the famous White Cliffs of the South East Kentish coastline (© Science Museum / SSPL).



**Figure 108** This photograph was taken by Mr F. Wise in Hastings in September 1950 and with other images like it, inspired the construction of the Hastings diorama by Whatman and Clements in March 1961. (SMD Curatorial Clippings Box File 5 – South East Coast).

Whatman and Clements' ideas for this display were influenced heavily from Hastings beach photographs taken by Mr F. Wise for the museum a decade earlier. The aforementioned white cliffs and the buildings at their base in this scene, as shown in **Fig. 107** above, mimic the shape and outline of the cliffs in the black and white photograph (**Fig. 108**).





**Figure 109** A photograph of the Canal display created by Whatman and Clements in June 1961 depicting both the traditional working narrow canal boat alongside the modern canal pleasure cruiser. (© Science Museum / SSPL)

Another diorama which Whatman enlisted Clement's help was the Canal Craft display (**Fig. 109**). Now newly married, Mrs Clements was paid a further £50:

To finish off model of canal lock in the Western Galleries under general supervision of M. G. H. Whatman and to the satisfaction of Mr. W. T. O'Dea of the Science Museum.<sup>317</sup>

Showing both a traditional canal craft and a modern 1960s cruiser in the foreground the scene depicts a canal lock complete with houses and figurines. As well as showing how a lock system works this diorama highlights a comparison between the old and the new craft that traverse British waterways.

Along with Jenny Clements and Gordon Whatman, Dunstan Mortimer also contributed to the displays of the British Small Craft exhibit. Two attributed to him that appear within the archival record were the Norfolk Wherry Winter Scene and the Ireland display shown in **Figs. 110 and 111**.

<sup>317</sup> SMD Nom. File 9958 Memorandum to Clements dated 7<sup>th</sup> June 1961



**Figure 110** A photograph of the Norfolk Wherry model in its dioramic winter scene by Dunstan Mortimer in August 1958. This is part of the Norfolk and Yorkshire showcase. (© Science Museum / SSPL)

On 9<sup>th</sup> August 1958 Mortimer was asked to paint a “Winter Scene [of the] Norfolk Broads” for the Norfolk and Yorkshire display.<sup>318</sup> The scene depicts a model wherry hugging the bank of a river or lake in the wetlands of Norfolk while being steered by a lone figure at its’ stern.

Four months later on 10<sup>th</sup> December 1958, Mortimer was commissioned to paint an ‘Irish Maritime Scene’ (**Fig. 111**).<sup>319</sup> The scene shows an Irish curragh being pushed away from shore under sail while a woman figure watches and two paint other curraghs on the beach in the foreground. Consulting the curatorial clippings Mortimer had experimented with an initial mock-up painting of what the scene may look like as proven in **Fig. 112**. Although it differs in layout compared to the completed article many aspects of the scene are still present taken from the initial artwork. Yet, like the other dioramic scenes, there is a broader cultural significance to the imagery of this scene. Numerous notable painters during 19<sup>th</sup> and 20<sup>th</sup> Centuries had captured the West coast of Ireland in their work such as William Henry Bartlett, Edwin Hayes and

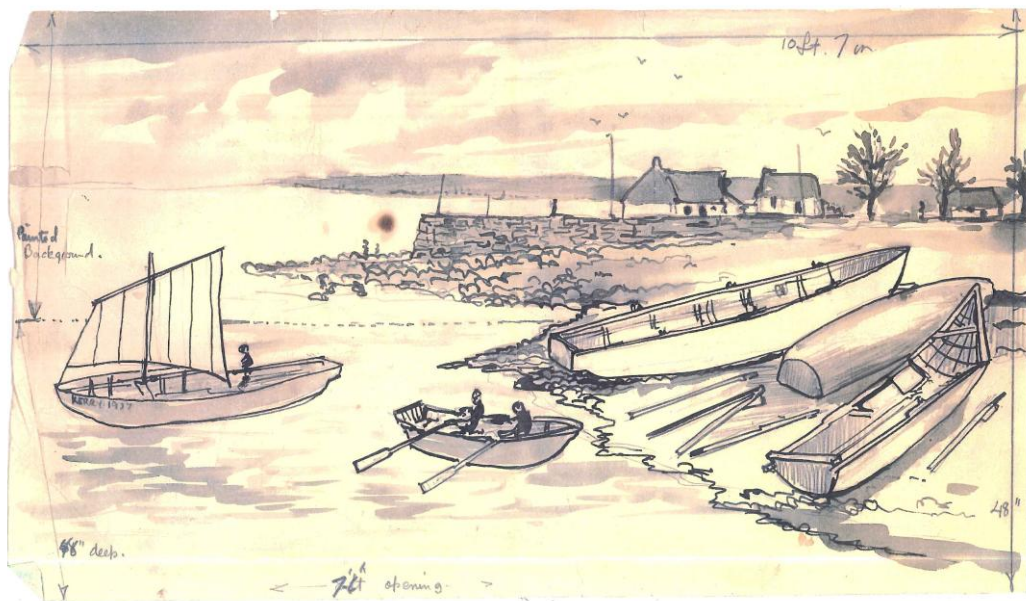
<sup>318</sup> SMD Nom. File 9961 Invoice addressed to Mortimer dated 9<sup>th</sup> August 1958

<sup>319</sup> SMD Nom. File 9961 Invoice addressed to Mortimer dated 10<sup>th</sup> December 1958

Frank McKelvey. The Irish coastline has also been encapsulated in film with Robert J. Flaherty's 1934 *Man of Aran* – a documentary depicting the harsh realities of life for fishermen and their families on the island off the mainland. Although it cannot be concretely proven, it is almost certain that Mortimer, other artists and museum staff were influenced by such broader cultural references.



**Figure 111** A photograph of the completed Ireland dioramic display by Dunstan Mortimer. The figurines are cruder compared to those created by Campbell suggesting that they could have been made by Mortimer himself. (James Fenner, November 2010).



**Figure 112** The above painting is an initial mock up of the display case for Ireland. The original subject matter is a coastal settlement in Co. Kerry, Ireland from 1937. (SMD Curatorial Clippings Box File 4 – Scotland and Ireland).

Another prime example of a full dioramic landscape scene is that of the Portland Lerret; the remnants of a group of four scenes within the one revolving showcase (**Fig. 113**). On 20<sup>th</sup> August 1962 Dunstan Mortimer sent a letter asking for confirmation from O’Dea of a commission “to paint and model 4 diorama backgrounds in revolving case supplied.”<sup>320</sup> The four backgrounds were listed as follows:

1. Deal Galley. Shingle beach with painted background showing dunes and old Deal (1850) in distance.
2. Chesil Bank. Shingle beach. Bank and Dorset seascape background. Present day.
3. Morcombe [sic] Bay (1900)  
Coast scenery with Lakeland Mills in far distance.
4. Mersey Pilot Cutter  
Modelled hard with background showing harbour mouth and open sea. Cutter in background being painted.

For the sum of £100<sup>321</sup>

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<sup>320</sup> SMD Nom. File 9661 Letter from Mortimer to O’Dea, dated 20<sup>th</sup> August 1962

<sup>321</sup> Ibid.



**Figure 113** An image showing the inside of the revolving case containing the Portland Lerret diorama on the mezzanine level. Here are two of the other three which were no longer on show: 3- the Deal Galley (on the left) and 4- the Mersey Pilot Cutter (on the right). (James Fenner, July 2012).

Excluding the Portland Lerret model, the Deal Galley model was also made and lent to the museum by Major-Castle-Smith in 1935.<sup>322</sup> As the museum's label explains:

These open boats were long in use in The Downs, both for putting pilots on board and also for taking out the mails. They were designed to be fast under sail and also to be convenient for boarding ships under way. It is said also that when employed in smuggling it was often possible to evade a preventive vessel by dragging these light galleys over the Goodwin Sands.<sup>323</sup>

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<sup>322</sup> SMD T/1935-549 1930s museum label for the Deal Galley

<sup>323</sup> Ibid.





**Figure 114** An image of the Deal Galley model in its dioramic scene as part of the four dioramas for the revolving case (c.1960s) (inv. 1935-549) Scale 1:18. It was the first of the four created by Dunstan Mortimer in 1962 for the showcase on the Mezzanine floor. (© Science Museum / SSPL)

Playing with the original 1930s description from the museum label, it is the boat type's legal, rather than its underworld, function of piloting that Dunstan Mortimer's diorama encapsulates above in **Fig. 114**. The pilot is handing his boxed top hat to a boy on the beach while the other men row the man ashore in the breaking waves after returning from a ship. In the background the shoreline extends into the horizon with other buildings visible that represents 'Old Deal (1850).'<sup>324</sup> The display is concave in shape in order to heighten the illusion of perspective for the scene and to dim the chances of the viewer seeing the foreground modelling join the painted backdrop.

The second diorama in the series of four was the Portland Lerret on Chesil Beach (**Fig. 115**). The model sits on a shingle modelled beach with lapping waves. Interestingly, unlike other scenes, Mortimer chose not to include figurines, trusting that the painted backdrop and foreground alone would be sufficient to create the desired illusion, depth and perception of the scene. Again the join of the foreground and backdrop is hardly visible; paints, shades and moulding were employed to disguise the connection. It is unclear within the museum's archives, but at some point it was decided that the

<sup>324</sup> SMD Nom. File 9661 Letter from Mortimer to O'Dea, dated 20<sup>th</sup> August 1962

revolving case was not working effectively and so the Portland Llet scene became the permanent display for the showcase while the other three scenes were dismantled.



**Figure 115** An image of the Portland Llet on Chesil Beach, Dorset in its own showcase on the mezzanine floor of the Sailing Ships Gallery. It was the second of four displays within the same 'revolving case'. (© Science Museum / SSPL)



**Figure 116** An above image of the hidden third diorama and backdrop in its segment of the revolving case for the Morecambe Bay Prawner 1900 (inv. 1934-693) Scale 1:24. (James Fenner, September 2012)

The third scene, pictured above in **Fig. 116**, was of Morecambe Bay for the c.1900 Prawner model. Again the model has since been removed but its position within the diorama can still be visible. The fourth and final scene for the showcase, of the Mersey Pilot Cutter, was partially hidden from view as shown in **Fig. 117** so it was only possible to photograph an aspect of the scene before its removal. The image of a lighthouse on the end of a harbour wall corroborates with the very brief description given to Mortimer by O’Dea which explains that it had a “background showing [a] harbour mouth and open sea” and that the model of the cutter was “in [the] background being painted.”<sup>325</sup>



**Figure 117** A detail of the partially visible fourth revolving case diorama – Mersey Pilot Cutter harbour scene showing the lighthouse at the end of the harbour wall. (James Fenner, July 2012).

This display as a whole is of particular interest as it hints at O’Dea’s experimentation with new forms of accessible interactive and visually arresting displays. Furthermore it also highlights the existence of other small craft boat models that are no longer accessioned. More importantly however, collectively these four scenes embody the essence of the historical geographies, variety of the regional technologies of British small boats and indeed coastal identities of this project. As the 1960s museum label for the display puts it:

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<sup>325</sup> SMD Nom. File 9661 Letter of confirmation from Mortimer to O’Dea, dated 20<sup>th</sup> August 1962; Also see O’Dea’s reply on 22<sup>nd</sup> August 1962.

The four examples in this display have been chosen to illustrate how small craft design is related to local preferences as well as the nature of the coastal waters, landing conditions and the manner in which the duty of the boat is best discharged.<sup>326</sup>

### 6.5.2 Modelled foreground landscape scenes



**Figure 118** An image of the Medway Doble model in its modelled landscape foreground scene complete with fisherman and gull. Scale was as much a difficulty when creating such scenes as it was to manufacture the models themselves. (© Science Museum / SSPL)

Above in **Fig. 118** is the model of the Medway Doble in its modelled foreground scene. The fisherman is leaning over the side of his boat on the mud flats of the Kentish river, taking out the last of his catch from the 'wet-well.' A seagull watches from a mooring post eagerly awaiting the chance of snatching a fish. The date and author of this scene is unknown but what is certain is that achieving the correct scale proved just as difficult in making these scenes as it had been to make the boat models initially. Bathe, in a conference paper on the new gallery given in 1961, explains that in some cases this resorted to some drastic solutions:

In this display showing small craft of the Thames estuary there is a realistic setting for the Medway doble model and as the scale of this model is very different to that of the other two a scale human figure and a sea gull are included. I might add that there was some argument about the size of a sea gull and the Museum illustrator ended up in the Natural History Museum with a stuffed sea gull to measure.<sup>327</sup>

<sup>326</sup> SMD T/1935-549 1960s museum label for the four diorama revolving display case and the Deal Galley model

<sup>327</sup> Insley, Jane 2012 pers. comm.. – Miscellaneous document found in curator's office. William Bathe slide presentation tour guide on the new Sailing Ship Gallery dated 1961





**Figure 119** An image of the Sheringham Crabber Boat in its modelled foreground scene complete with six fishermen, shingle beached with ‘wet’ pebbles and a rusty anchor. (© Science Museum / SSPL)

Another notable example of the foreground modelled scene is of the six fishermen and the Sheringham Crab Boat model (**Fig. 119**). Here again, the shingle beach motif is used as the figures struggle to heave the boat ashore. Like other scenes within the exhibit the attention to detail was refined – in this case the addition of a rusty anchor, seaweed, a buoy and crab pots.

### 6.5.3 Backdrops

In addition to the complete fully three dimensional dioramas and modelled foreground scenes, several larger cases displaying multiple models were illustrated further by contextual photos and painted backdrops fitted to the back board of each case.

In some cases, photography was adopted as a display medium. As illustrative below, in the Yorkshire Coble display (**Fig. 120**) a half model was incorporated into an old 19<sup>th</sup> century photograph, overlapping a boat being rowed in the foreground. Again broader cultural references can be drawn from this backdrop. Although the museum label gives no indication as to the photograph’s providence or date, it is clear that with the half model, the scene shows cobbles in use in the confines of Whitby harbour on the Yorkshire coast.



**Figure 120** The half model of a Yorkshire Coble superimposed on top of an old 19<sup>th</sup> Century photograph.  
(© Science Museum / SSPL)

Alongside the use of photographs as a backdrop, the British Small Exhibit also had partial or full showcase painted backdrops. One worthy of note is the image of a lighthouse and the sea in **Fig. 121** – a scene which gives visual context to the back of the larger Devon and Cornwall showcase. Measuring 12 ft. by 6 ft. it was the creation of Dunstan Mortimer who was first approached in November 1958. He was tasked with:

Painting [a] Marine View of the Wolf Rock Lighthouse, 12 feet long by 6 feet deep, on canvas supplied, including mounting and stretching. [At a cost of] £20.<sup>328</sup>

Soon after the artwork was complete showing the famous lighthouse on its rocky outcrop commanding an open blue calm sea. Mortimer would have many more commissions for the museum including the Thames Estuary backdrop and Robinhood's Bay on the Yorkshire Coastline for the Yorkshire Lugger and Schooner models display.<sup>329</sup>

<sup>328</sup> SMD Nom. File 9961 Invoice addressed to Mortimer dated 19<sup>th</sup> November 1958

<sup>329</sup> SMD Nom. File 9961 Invoices dated 23<sup>rd</sup> March 1960 and 6<sup>th</sup> August 1959 respectively

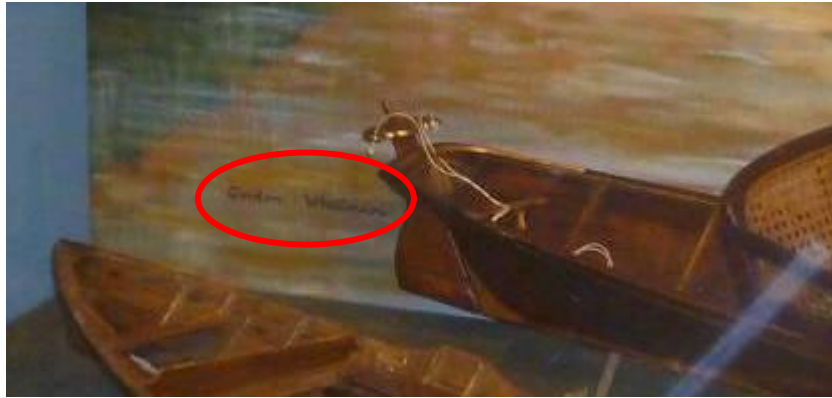


**Figure 121** A photograph of the painted backdrop of the ‘Marine View of the Wolf Rock Lighthouse’ by Dunstan Mortimer for the Devon and Cornwall display. (James Fenner, November 2010).



**Figure 122** An image of the Shetland Sixern model with its painted backdrop of a windswept Shetland coastal beach scene behind it, an artwork for part of the Scotland II display which Jenny Clements completed in 1962. (James Fenner, November 2010).

Pictured above in **Fig. 122**, sits the example of the Shetland Sixern model along with its painted background behind it. Depicting a windswept pebbled beach in the Outer Hebrides this image tries to replicate this vessel type in its natural environment of Shetland, with other similar boats lined up along the shore edge. As a signature in the bottom right hand corner of the work denotes, Jenny Clements was again the artist behind this scene which she completed for the museum in 1962 and other examples of signatures can be seen below in **Fig. 123**.



**Figure 123** Photos showing Gordon Whatman's signature (in red) in the bottom corner of the River Boats/Sea Boats display, Jenny Clements signature (in blue) from 1963 in the Mevagissey display and the light hearted touch by Clements of 'Jenny's Way' (in yellow) on the Canal Display. (James Fenner, November 2010).

Regardless of the dioramic method's success with visitors or which artist was associated with each display, the museum was clear in its reasoning as to what it wanted the dioramas to promote:

Dioramas, modelled in perspective, and scenic backgrounds for scale models fulfil the function of placing the science or industry in its native scene, and at the same time giving the imagination wings to take it out of the Museum gallery.<sup>330</sup>

<sup>330</sup> SMD Ed 79/180 Report for the Advisory Council 1952, 30



## 6.6 The geographical regional order and coverage of the British Small Craft displays

Once the dioramas were complete and placed in their respective showcases, a clearer picture emerged of the variety and coverage geographically of regions represented in boat models and miniature landscapes. Although these displays featured particular coastal and river scenes of the British Isles, there was only one place in the exhibit where the national variety of small craft was fully visualized in the one showcase: the map of the British Isles.

Situated on the mezzanine level, the Map of 'Coastal and Fishing Craft' for the British Isles, in **Fig. 124**, dominates the large display case. Complimenting the four models from four regions of the country, the map was created by Jenny Clements who was given the brief:

Map with pictures and lettering indicating fishing craft locations as discussed with Mr. W.T. O'Dea of this Museum.<sup>331</sup>

The Map was received at the museum in 16<sup>th</sup> February 1961 at a cost of £21.<sup>332</sup>

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<sup>331</sup> SMD Nom. File 9958 Letter to Miss J. Haines dated 12<sup>th</sup> September 1960

<sup>332</sup> SMD Nom. File 9958 Confirmation of the map being received at the museum dated 16<sup>th</sup> February 1961



**Figure 124** A photograph of the Map of the Boats of the British Isles painted by Jenny Clements in February 1961 for the first larger showcase for the British Small Craft Exhibit on the mezzanine level.

(James Fenner, November 2010).

Depicting some examples of the boat types around the British Isles, the map highlights 20 painted images mostly linking to the models of the exhibition. However, some boat types are shown which are not exhibited in model form such as the Belfast Pookhaun or the Morecambe Prawner (a model no longer on display). Once more this map appears much later in the showcases, long after the first thirteen cases. From a modern museum perspective this seems odd; a summary map such as this would be expected at the beginning as part of the introduction interpretation of the exhibit. However the map was placed in the first British Small Craft case of the Mezzanine, three quarters through the exhibit. Although the reasoning is unclear and the archival

evidence unforthcoming, it is possible that this map was meant to give the visitor a reminder of the boat types they had already seen.

The map also hints towards a more fundamental point of the displays: their order, layout and geographical coverage. As illustrated below in the plans of the gallery the Small Craft Collections were immersed in a much wider selection of historical and contemporary maritime objects which included marine engines, navigational equipment, warship models and docks and diving (**Figs. 125-127**). Although the exhibit could not incorporate all of the '200 hundred types' that Laird Clowes and Carr believed existed in the British Isles, the coverage of small craft types was still extensive.

However, on first impressions the order of regions in the showcases seems irregular and scattered, rather than geographically following the coastal circumference of the UK. With no formal beginning to the exhibit the choice of routes was left open to the visitor; the viewer being able to see the displays in no particular order, at their own pace and in their own time. This perceived lack of a more traditional museum linear narrative journey suggests that the viewer's attentions are diverted elsewhere, drawn to something else. Therefore the lack of a geographical order in the displays points towards the exhibit encouraging the visitor to have a better understanding of the regional variety of small boats, the numerous vernacular designs and technologies that that entails and the array of functions that these boat types carried out in the coastal and inland waters of the British Isles.

Yet it could be seen that, although there is no overall geographical logic to the order over both levels, the displays are arranged in predetermined groupings conducive to the variety of developed craft in particularly rich regions or alternatively a specific singular craft type. For example, on the ground floor of the gallery the rivers of the South East are represented by the Medway Peter Boats and Dobles/Norfolk and Suffolk and the Thames Estuary displays which naturally precedes another case on British waterways – the craft of canals. This is then followed by the Hog Boat from Brighton and concluded with the Hastings diorama. As a further example, at the end of the second row of cases on the gallery main floor, two cases are paired to represent an

overview of Scottish craft while a further two showcases display currachs and coracles of Ireland (with some examples from Wales and the South West).

Turning to the mezzanine the showcases here dealt with small craft in more general terms (**Fig. 127**). Besides the Map showcase, these displays included the revolving case of the Portland Lerret already discussed and the diorama of Mevagissey. Directly after the Map showcase is a singular display case that depicts Arctic and oceanic craft. As these do not form part of the British Small Craft collections, they are not included in the research. The two remaining cases, like the Canal Craft case on the level below, were attributed to British craft that served a particular function or a specific water environment: military landing craft and river/sea boats respectively. The random selection of all these mezzanine level showcases links back to O'Dea's original suggestion that this additional partial floor be used for 'reserve collections.'<sup>333</sup> This is further proven by the display of more Foreign Craft, 19<sup>th</sup> century Warship, Tea clipper sailing ship models that fill the other showcases on the mezzanine.

In addition to the models on display on the mezzanine were two full size vessels suspended from the ceiling, level with the gang way and either side of the central display area of the gallery. On the left side hung the winning Cambridge Rowing eight from the Cambridge-Oxford University Boat Race of 1934; on the right was the suspended 1930s Pixie little motor launch for a yacht. Initially there would have been an original 1829 Oxford boat displayed to the right of the Cambridge boat presenting, as the labels reads "a great contrast" to the latter, however this older boat was removed at a later date.<sup>334</sup> Built by Messrs. Sims of Putney, measuring 63ft in length and a width of 2.1ft, the Cambridge Eight won the 1934 race in 18 minutes and 3 seconds. It was presented to the museum by C.R.L. Adrian-Vallance in 1936. The Pixie, on the other side of the central display area, was an aluminium motor tender for a luxury yacht and was powered by an inboard 'Watermota' engine. Measuring 9ft by 3ft and 6 in. it was purchased by the museum from Reverend D.M.H. Gill in 1977. Both

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<sup>333</sup> SMD Ed 79/144 'Proposals for the Display of Sailing Ships and Small Craft in the New Centre Block' by O'Dea dated September 1955

<sup>334</sup> SMD T/1936-464 1960s Museum label for the Cambridge Rowing Eight 1934

objects are interesting in that they not only complement the models on display and differ in the fact they are full-size as opposed to miniature, but they are also representatives of pleasure craft. Alongside the full size coracle on the level below and some particular individual models, these boats indicate the recreational and leisure uses of small craft in an otherwise working boats orientated collection.

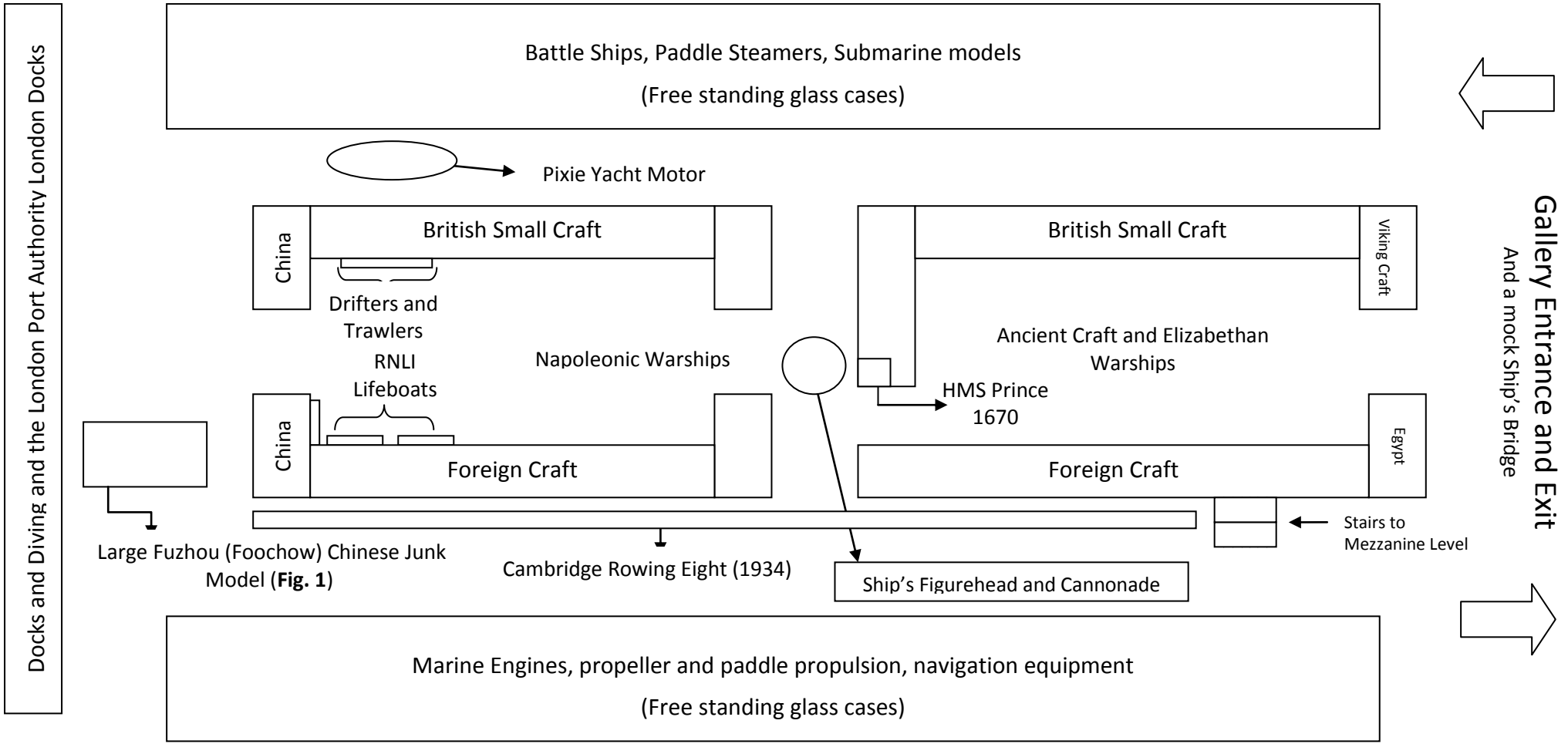
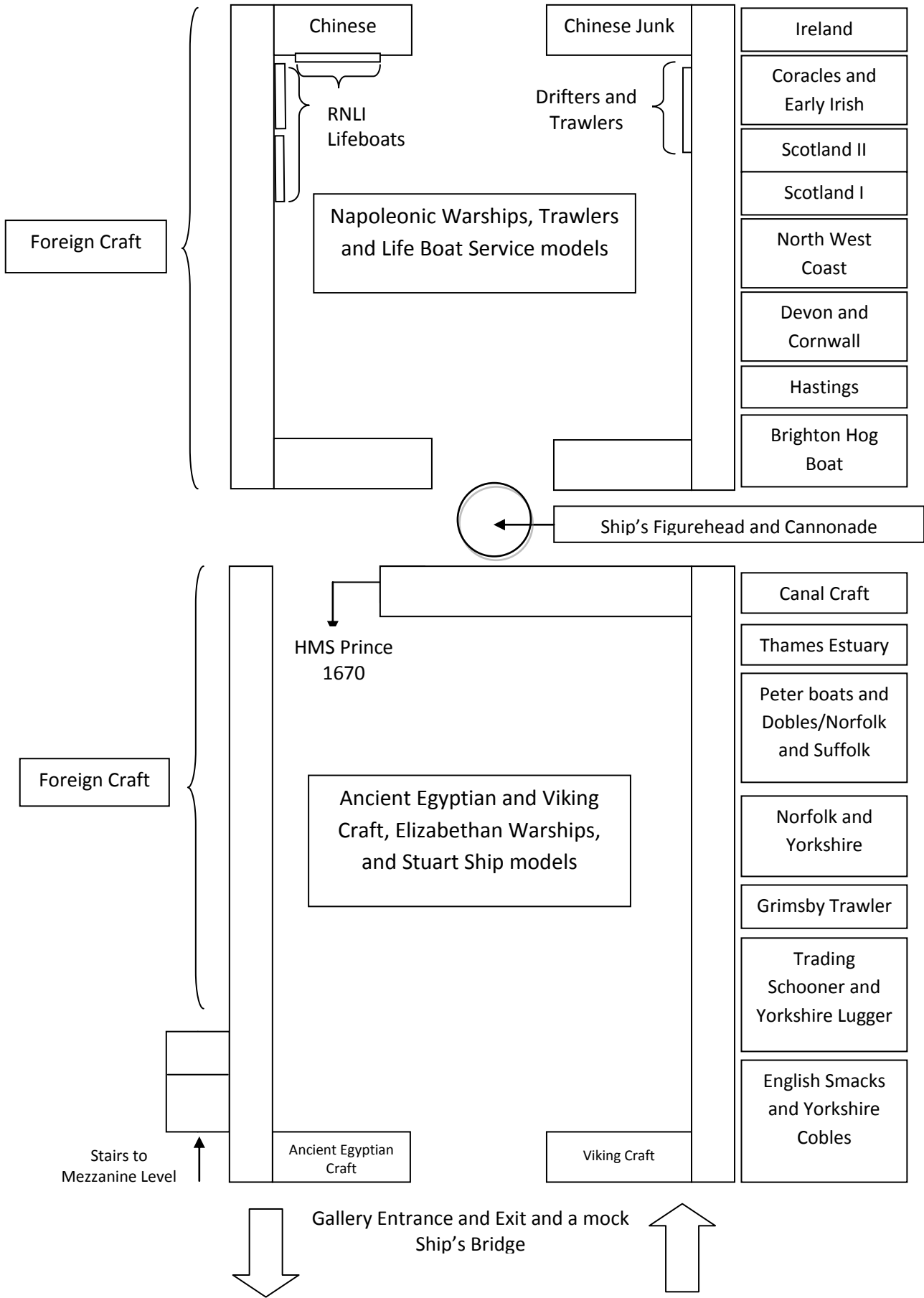


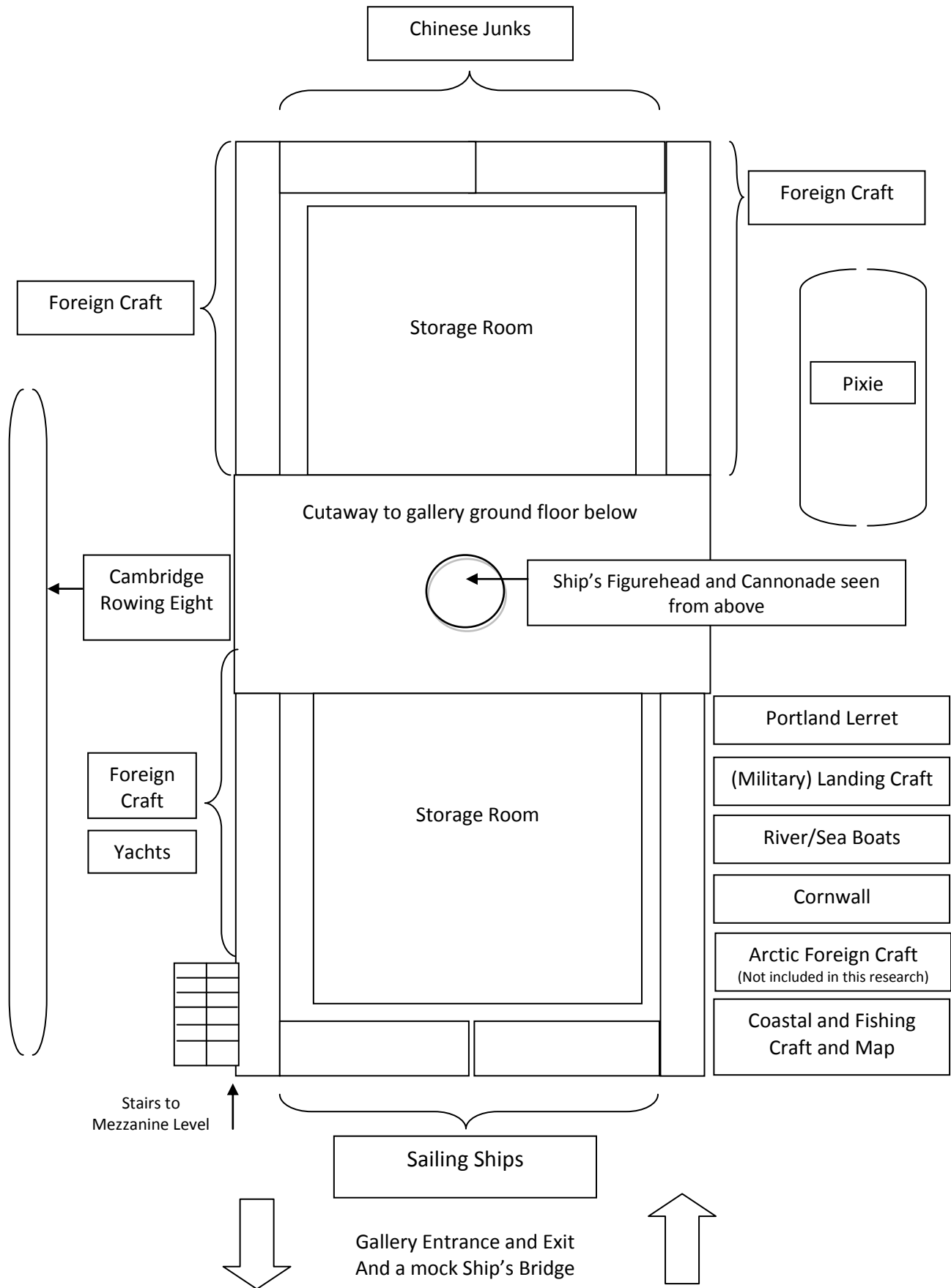
Figure 125 A plan of the entire Sailing Ships Gallery showing the layout of all of the collections on display (James Fenner 2013).

**Figure 126 Central Display area of the Sailing Ships Gallery – Ground Floor (James Fenner 2013)**





**Figure 127 Central Display area of the Sailing Ships Gallery – Mezzanine Level (James Fenner 2013)**



## 6.7 The opening of the Sailing Ships and Aeronautics Galleries in March and June 1963

The new display of Sailing Ships and Small Craft was opened to the public on March 1<sup>st</sup> after an informal evening private view the day before. An evening function of this kind was an innovation which proved successful as a very large number attended.<sup>335</sup>

Eight years since O’Dea’s proposal for the sailing ships and boat models, the collections were finally on display in a purpose built gallery space of their own. Reiterating the quote that opened this chapter, just before the opening of the Shipping Gallery, the *Sunday Times* announced in a preview article of 3<sup>rd</sup> February 1963 that:

...a war against boredom is being waged at the Science Museum...Instead of row upon row of glass cases, planes are suspended in mock flight from the roof of a hangar...and ships and boats are displayed in the form of real ocean-going liners. The man who is waging the war is a 58-year-old Lancastrian keeper at the Museum, Mr W.T. O’Dea. He considers the traditional museum in Britain ‘awful.’<sup>336</sup> (Figs. 128 and 132)

O’Dea expanded on his museum display beliefs when he invited Raoul Engel (*Discovery Magazine*) to view the galleries as they were being completed. The journalist records O’Dea’s response on viewing both the Aeronautics and Sailing Ships in March 1963:

“This conception,” he told me with a smile, waving an arm at the nautical motif (A ship’s deck and rails) just being completed, “would probably have shocked my Victorian predecessor half to death; to even contemplate the need to please the public was heresy! Well, then, we’re heretics; we’ve frankly set out to please and stimulate non-specialists; we want them to enjoy themselves, as well as learn. As for serious students, and specialists, they’ll always have their comprehensive collections to go to. But for the others, the bewildered parents dragging their kids around on a Sunday, and casual visitors in for an hour or two, we’ve designed displays with the greatest care.”<sup>337</sup>

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<sup>335</sup> SMD Z-150 Box 1B Report for the year 1963, 15

<sup>336</sup> SMD Z-183/2 *Sunday Times* 3<sup>rd</sup> February 1963

<sup>337</sup> SMD Z-183/2 ‘A new look at the Science Museum’ article by Raoul Engel, *Discovery Magazine*, March 1963, 2



**Figure 128** A 1960s photograph of the inward facing showcases within the centre display area of the Sailing Ships Gallery on its opening. Notice the figure head, anchor and cannonade in the distance. This arrangement was the focal point of the gallery. (© Science Museum / SSPL)

For O’Dea, the ‘war had been won against boredom’ as the new gallery boasted a rich array of objects on display that were linked to all elements of the historical and contemporary marine that was in the name of science and technology. Bar the British Small Craft models, in the central display area foreign craft, yachts, sailing warships and ancient craft in miniaturised form representing a variety of time periods and nationalities were also exhibited in a mixture of dioramic and painted backdrops displays, as illustrated in **Figs.128, 129, 130 and 131**.

Alongside the range of displays mentioned above additional British boat models were placed within the inner room of the central display area directly under the mezzanine level. Behind the Chinese junks at the far end of the central display area were the large models of trawlers and drifters displayed in a showcase of their own. Set within a clear Perspex ‘sea’ at the waterline, the models and their trailing nets along the sea bottom are presented to the viewer to demonstrate the net methods used when catching shoals of fish at sea (**Fig. 129**).

Opposite this display on the other side of the inner part of the central display area are the lifeboat displays. With partial dioramic scenes and loaned models from the RNLI, the showcases promote the developments of the Lifeboat service highlighting some of its historic equipment.



**Figure 129** A 1960s photograph showing the Trawler and Drifter models 'afloat' in their Perspex 'sea' demonstrating the different methods of net catching shoals of fish. (© Science Museum / SSPL)



**Figure 130** A 1960s photograph showing the two levels of the Sailings Ships Gallery. Notice the white metal balustrade and wooden railing on the mezzanine and the narrow stairway. It highlights the nautical theme of the gallery with the imitation of the top decks of an ocean going liner. (© Science Museum / SSPL).

**Figure 131** On the right hand side of the gallery, stood free standing cases of the museum's collections of larger models of battleships and submarines of the 19<sup>th</sup> and 20<sup>th</sup> Centuries on display including World War II examples. (© Science Museum / SSPL)



**Figure 132** A 1960s photograph of the Aeronautics Gallery on its opening in July 1963. Like the Sailing Ships Gallery on the floor below, O'Dea's display ideas were innovative and ambitious. Here the planes hover above the floor, hanging from the hangar-like ceiling alongside the raised walkway for visitors. (© Science Museum / SSPL).

Worthy of particular note as part of the Foreign Craft (with global coverage) collections are the gallery's models of Chinese Junks. Several miniatures were presented to the museum between 1931 and 1936 by Sir Frederick William Maze (Inspector General of Chinese Maritime Customs, Shanghai) including an Upper Yangtze River, Hai-nan Sea going and a much larger Fouchou Sea-going type.<sup>338</sup> As shown in the plans (**Figs 125-127**) these models were placed at the back of the gallery at the end of the central display area. Like the Grimsby Trawler amongst the British Small Craft examples, the junks were sizeable in scale with some being 5ft. in length and the largest the Fouchou (Foochow) junk placed on a free standing raised plinth of its own (**Fig. 78**) measured 7 ft. In conjunction with representations of European craft such as the Portuguese Muletta or Dutch Hoogar and African types such as the Lamu Dhow, it proved a versatile assortment of the world's smaller vessels on display.

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<sup>338</sup> SMD T/1931-1115 Upper Yangtze River Trading Junk; T/1935-100 Hai-nan sea going Junk; T/1936-347 Fuzhou (Foochow) sea going junk





**Figure 133** Photographs showing the front and back of the mock Ship's bridge that used to mark the entrance to the gallery. (© Science Museum / SSPL)

In addition to the numerous boat, battleships, submarines and ship models (**Figs. 128-131**) and working marine engine displays, there was a continuation of the ship theme immortalised in the centre display area. Dominating the entrance to the gallery was a mock ship's bridge (**Fig. 133**) complete with numerous navigational equipment such as radio antennae and gyro compasses attached to the roof and walls. Inside the theme was continued with more large objects and a painted backdrop of a port that could be viewed through the 'ship's square windows.'

Although the gallery was open to the public, and the Aeronautics gallery following three months later, there were still some aspects of both subjects that needed representation:

There still remains a considerable amount of work to complete both these galleries but the unrestricted priority on the use of workshop facilities that was necessary in order to meet the opening dates can hardly be claimed for items such as docks and harbours, diving, airship construction and aircraft wing sections. These will follow in due course...<sup>339</sup>

Within two years of this, the anticipated 'docks and harbours' section was under way with the commissioning of a large model of the Port of London from the Port of London Authority and the restoration of a contemporary Chatham Dockyard model. However the diving displays were still yet to materialise<sup>340</sup>:

A new diving section has been planned. Most of the exhibits were acquired some years ago, but labour shortages are still holding up the work. An outside artist with personal experience of deep-sea diving is making on every large background. Much experiment has been necessary to arrive at effective solutions to many of the problems involved.<sup>341</sup>

A year later delays had slowed down the completion of the diving section but it was hoped to be finished in 1967.<sup>342</sup>

In addition, both new galleries received more lime-light than just newspaper articles. The exhibitions also had some interest from television. As the Advisory Council report for 1963 explains:

Associated-Rediffusion ran two half-hour television programmes on these new galleries. The subject was a tour of each during which members of the Department explained exhibits to a commentator.<sup>343</sup>

A script of a recorded guided tour of the gallery, although not for the television programmes, sheds further light on what a visitor to the gallery would have seen. As there is no date or author attributed to the document it is possible that it might have been O'Dea. Beginning with the line: "This Gallery is devoted to the history and

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<sup>339</sup> SMD Z-150 Box 1B Report for the year 1963, 15

<sup>340</sup> SMD Z-150 Box 1B Report for the year 1965, 14

<sup>341</sup> Ibid.

<sup>342</sup> SMD Z-150 Box 1B Report for the year 1966, 16

<sup>343</sup> SMD Z-150 Box 1B Report for the year 1963, 15. Associated-Rediffusion was a London and South East broadcasting company credited with being the forerunner to ITV.



construction of Sailing Ships, and the case, the illuminated case immediately in front of you shows the ships of ancient Egypt” the author proceeds through some of the showcases highlighting significant historical developments in the construction of ships.<sup>344</sup> Finishing with a section on the Elizabethan galleon model, the speaker concludes:

That is as far as we are able to go with this present recording, but we hope that you will be able to stay long enough to find for yourself the other treasures in this particular gallery.<sup>345</sup>

The gallery’s richness in contents proved to be worthy of mention in Riemsdijk’s 1968 book on the museum:

The whole Museum is of outstanding importance to the historian *tout court* as to the specialist in economic, industrial and scientific history...A collection which relates to every period of written history (and to most parts of the world) is that of sailing ships and small craft (Riemsdijk and Sharp, 1968, 107).

The praise for the gallery does not end here. By way of comparison with Riemsdijk’s text, a catalogue was produced by the museum on the opening of the gallery. Furnished with colour plates of individual models from the collections, the book methodically goes through 75 models of Sailing Ships, British and Foreign Small Craft. In the introduction Bathe boasts:

The Sailing Ship and Small Craft Collection at the Science Museum contains models which by their range and variety of type make it perhaps the most comprehensive in the world.

A series of scale models of ships is undoubtedly the best and most convenient method of illustrating the progress of the science of Naval Architecture, of showing the developments in structure and form of the ship which have taken place in each century, and of depicting the influence of different geographical environments on these developments (Bathe, 1966, 1).

Bathe, beginning with the Ancient Egyptians and following the linear history of marine technological development through the models, argues that as an art form, ship model making has existed for 4000 years. Later he concludes in the introduction to the British

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<sup>344</sup> Insley, Jane 2012 pers. comm.. – Miscellaneous document found in curator’s office. Recorded tour guide script on the new Sailing Ship Gallery, author unknown (possibly O’Dea), exact date unknown but likely to be March 1963, 1

<sup>345</sup> Ibid., 6

Small Craft section that the collections of the Science Museum and books written on the subject make it:

Possible to obtain a wealth of information on a theme which to the people of an island nation should be of great interest (1966, 97).

### **6.8 The last models added to the collection after the opening of the Sailing Ships Gallery 1963-1980**

Although the Sailing Ships Gallery was now officially opened to the public in 1963, a few additional models were acquired up until 1980:

<b>(Inventory number) 1963-238 – Boom Sail Barge c.1900</b>
<b>Inv. 1965-401 – Loch Fyne Skiff</b>
<b>Inv. 1971-455 – Broadstairs Fishing Punt ‘Invicta’</b>
<b>Inv. 1971-456 – Yarmouth Lugger</b>
<b>Inv. 1972-125 – Devon Crabber ‘Excel’</b>
<b>Inv. 1975-521 – Thames Skiff</b>
<b>Inv. 1980-274 – Mersey Flat ‘Bedale’</b>



**Figure 134** A photograph showing the Boom Sail Barge c.1900 in its Thames Estuary display within the Shipping Gallery. (Inventory No.: 1963-238) Scale: unknown (James Fenner, November 2010)

The first of these models was the 'Boom Sail Barge c.1900' (illustrated above in **Fig. 134**). The model, tucked away in the Thames Estuary Display as shown, was presented to the museum by Mr. J. W. Welham. It becomes clear in the museum label that this example of a sailing barge differs from other types:

Towards the end of the 19<sup>th</sup> century larger sailing barges came into use, capable of making short sea voyages in addition to the usual coastal trade.

When compared with the somewhat smaller sprit-sail barges, they were designed with more freeboard and greater sheer, the main sail was extended by a gaff and boom instead boom instead of a sprit and mizzen mast and sail were considerably larger.<sup>346</sup>

In his original letter written to William Bathe (Assistant Keeper to O'Dea), the owner, Mr Welham, explained how he had a model in which they might be interested:

Now sir I have a model at home of a Boomey Barge...It's a complete model in every way and is in excellent condition in a case. These type of craft have been associated with London, and all [the] East Coast, and Channel Ports, as well as Foreign also.<sup>347</sup>

It becomes apparent that the model is not welcomed at home and would be best shown on display elsewhere:

You see my wife won't have it hang up anywhere, it's such a shame to have such a lovely model tucked away out of sight, where it could be on show to the Public as one of hundreds of craft like it that used to trade regular up the London River. I am writing this in the hope that you would care to accept it as I would be pleased to know that it would be on view to the Public.<sup>348</sup>

On 20<sup>th</sup> September 1963 Bathe replies thanking Welham for the offer but suggests seeing the model in person at Welham's home in Ipswich before making a decision.<sup>349</sup>

Consequently in another letter in October 1963 O'Dea thanks him for the model on it being accepted into the collections saying that it "...will make an interesting addition to our display of spritsail barges."<sup>350</sup> The model had been accessioned the day before on 30<sup>th</sup> September.<sup>351</sup>

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<sup>346</sup> SMD T/1963-238 Museum label for the Boom Sail Barge c.1900 model

<sup>347</sup> SMD Nom. File 1141/1/1 Letter from Mr Welham to Bathe dated 15<sup>th</sup> September 1963

<sup>348</sup> Ibid.

<sup>349</sup> SMD Nom. File 1141/1/1 Letter from Bathe to Mr Welham dated 20<sup>th</sup> September 1963

<sup>350</sup> SMD Nom. File 1141/1/1 Letter from O'Dea to Mr Welham dated 20<sup>th</sup> October 1963

<sup>351</sup> SMD Nom. File 1141/1/1 Science Museum Inventory document for the Boom Sail Barge 1900 dated 30<sup>th</sup> September 1963



**Figure 135** A photograph showing the Loch Fyne Skiff in its Scotland II display within the Shipping Gallery. (Inventory No.: 1965-401) Scale 1:32 (James Fenner, November 2010)

After a two year gap, the next model to be acquisitioned was the Scottish Loch Fyne Skiff 'Bonnie Jean' pictured above in **Fig. 135**. Made and owned by Mr Arthur Godfrey, it was presented by Mr Cooke on Godfrey's behalf to the museum on 1<sup>st</sup> November 1965. Godfrey was prepared to sell the model to the museum for £25 and Bathe justified the payment of the cost in an internal memorandum: "As this type of Scottish fishing boat is not represented in the Small Craft collection, I recommend purchase at this very moderate price."<sup>352</sup> Within a couple of days, on approval from the Director the model was purchased by the museum and entered the collections. Mr Godfrey was duly noted by Bathe of the good news:

With reference to your model of the Loch Fyne skiff 'Bonnie Jean', which was brought to this Museum by Mr. Cooke, you will be pleased to hear that the Director has approved the purchase of the model at the price quoted by you of £25...I am particularly pleased

<sup>352</sup> SMD Nom. File 2678/1/1 Internal memorandum from Bathe to O'Dea dated 1<sup>st</sup> November 1965

to have this excellent little model as it illustrates a type of fishing boat which is not at present included in our Small Craft collection.<sup>353</sup>

In 1971 two models – the Broadstairs Herring Punt ‘Invicta’ (**Fig. 136**) and the Yarmouth Lugger ‘Everest’ (**Fig. 137**) – were bequeathed to the museum on the death of Edgar James March and were accessioned into the collections. As the models were accessioned together I will discuss them jointly. March originally approached the museum in October 1954 writing to the Director:

I am making a new will and I should like to bequeath to the Science Museum two of my models which I consider are worthy of inclusion in your collection of old fishing craft.

One is a superb model of the Broadstairs herring punt ‘Invicta.’ Launched at Margate by Huggetts, boatbuilder, 22<sup>nd</sup> March 1883, model made by the owner W.W. Banting between Saturday October 20<sup>th</sup> 1883 and Saturday March 29<sup>th</sup> 1884, according to a hand-written label under the base...The second model is the Yarmouth lugger ‘Everest,’ Y.H. 172, made by C.J. Saunders c.1850-59 and is similar to that of ‘Fisherman’, Y.H. 256, No 34 in the Museum Handbook ‘British Fishing and Coastal Craft’, by G.S. Laird Clowes, 1937, Inv. 1936-73 and now no longer in the museum, I believe.<sup>354</sup>

In reply the Science Museum Director Sherwood Taylor wrote:

I wish to thank you for the very generous offer contained in your letter of the 30<sup>th</sup> October, to bequeath to the National Collections models of the Broadstairs herring punt ‘Invicta’ and of the Yarmouth lugger ‘Everest,’ Y.H. 172. These I am confident, will prove most interesting additions to the Small Craft collections, and I have great pleasure in accepting your offer.<sup>355</sup>

Seventeen years later the bequest was carried out on the death of March on 22<sup>nd</sup> July 1971.<sup>356</sup> By October the models had arrived at the museum and a letter was written to Mrs March:

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<sup>353</sup> SMD Nom. File 2678/1/1 Letter from Bathe to Mr Godfrey dated 5<sup>th</sup> November 1965

<sup>354</sup> SMD Nom. File 4742/1/1 Letter from Mr March to the Director Sherwood Taylor dated 30<sup>th</sup> October 1954; Accompanying Percival Marshall and Co. Ltd. Brochure promoting March’s ‘Three Maritime Titles.’

<sup>355</sup> SMD Nom. File 4742/1 Letter from the Director Sherwood Taylor to Mr March dated 8<sup>th</sup> November 1954

<sup>356</sup> SMD Nom. File 4742/1 Letter from Mr Brown of Lloyds Bank Limited (March’s Executor of his estate) to the Science Museum Director dated 20<sup>th</sup> August 1971

I am now writing formally to acknowledge the safe receipt of the two models – the Broadstairs herring punt ‘Invicta’, and the Yarmouth lugger ‘Everest’ bequeathed to the Science Museum by your later husband.

As your husband described to us in his letter nearly twenty years ago, these two models are beautifully made down to the smallest detail and we are very happy indeed to add them to the National Collection.<sup>357</sup>



**Figure 136** A photograph showing the model of the Broadstairs Herring Punt ‘Invicta’ in its Thames Estuary display in the Shipping Gallery. (Inventory No.: 1971-455) Scale 1:24 (© Science Museum / SSPL)

The museum label for the Broadstairs Herring Punt ‘Invicta’ explains that these types: “...fished for herring and sprats in the autumn and winter, whilst the summer months

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<sup>357</sup> SMD Nom. File 4742 from the Keeper Gerald R.M. Garratt to Mrs March dated 14<sup>th</sup> October 1971



were occupied in taking visitors for sea trips.”<sup>358</sup> The label gives further details concerning the technical information of the craft:

The hull is clinker built, and the punt is shown fitted with a summer suit of sails, consisting of a loose-footed mainsail on a gaff of 12ft. long, a standing lug mizzen with a yard 6ft. long and an outrigger 8.75ft. long. Other gear includes a staysail, a jib and a spinnaker. In the winter a reduced rig was carried.<sup>359</sup>

Contrasting with the motor powered vessels within the later additions of the collection, the above label highlights the technical features attributed to this clinker-built sailing craft. Like the labels of preceding models in the previous chapters, the text here discusses the rigging, the types of sail and shape of the hull in a scholarly and scientific manner; paying close attention to nautical terminology to emphasize between a vessels design, its function and uses and the natural coastal environments in which it works.



**Figure 137** A photograph showing the model of the Yarmouth Lugger ‘Everest’ in its Grimsby display in the Shipping Gallery. (Inventory No.: 1971-456) Scale 1:48 (James Fenner, November 2010)

Turning to the second model that March bequested into the collections, the Yarmouth lugger ‘Everest’, the museum label reads:

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<sup>358</sup> Science Museum label for the Broadstairs herring punt model ‘Invicta’ taken from the Thames Estuary display, early 1970s

<sup>359</sup> Ibid.

This model, dating back from about 1860, shows the 'Everest' a Yarmouth drifter of that period, in the act of hauling in her nets.

The vessel is of the type known as a Yarmouth lugger. The hull is clinker built with a vertical bow, a raking stern post and transom, and a square overhanging counter.

These vessels were rigged as two-masted luggers, with a large dipping lug-sail set on the foremast and a small standing lug-sail on the mizzen, which was stepped well aft...<sup>360</sup>

Again like the model above it illustrates the technical features of the lugger as a means of presenting the regional technological developments in the design and crafting of coastal working boat types. The model's depiction of the miniature figurine 'crew' "in the act of hauling in her nets", for example, is indicative of the boat's function emphasizing the vessel's design, rigging and shape through the nautical terminology.<sup>361</sup>

Yet March was not just a contributor to the museum's boat model collections. An expert in coastal craft of the British Isles and author of five books including *Spritsail Barges of Thames and Medway* (1948), *Sailing Drifters* (1952) and *Sailing Trawlers* (1953), March wrote in the preface of his second published volume:

For generations the cliffs around our coasts have seen the warm-coloured sails of fishing boats stealing out from little harbours bound for grounds which have yielded their silver harvest since Time was.

These fleets have now sailed beyond the horizon of man's sight, never to return, and seem likely to vanish into the gloaming of forgotten things unless some record be made whilst it is still possible to contact those who knew them (March, 1952, vii).

Reminiscent of Carr's work 20 years before, this volume and the other four books March wrote during the 1950s conjure up nostalgic images of a long gone age of sailing coastal craft. Again like Carr, March had direct contact with the Science Museum and was an SNR member. Both men presented models to the museum and helped staff in gathering further information on many boat types. In *Sailing Drifters* March gives an authentic account of the lives of fishermen as no written records existed. Even though time was already against him he had been fortunate in the old fishermen who have told him their stories:

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<sup>360</sup> Science Museum label for the Yarmouth lugger model 'Everest' taken from the Grimsby display, early 1970s

<sup>361</sup> Ibid.



Time has had a flying start, and now it is impossible to work to windward of him, but fortunately a few fishermen, who have long since passed man's allotted span, have seen my signals, borne down to my assistance, and in penmanship a joy to read have told me of days, fifty, sixty, nay seventy and more years ago. One and all, even those who at the end of a long and arduous life have sought refuge in the almshouse, speak with affection of the days of sail. Many a man has said to me "They were happy days" (March, 1952, vii).

March's justification for the volume and the research was clear: the untold harsh and dangerous realities of a fisherman's life needed to be told. "To gather the fruits of the earth" he argues, "calls for toil and sweat, but to garner the harvest of the deep needs blood and tears" (March, 1952, viii). However March did limit the size of his book by confining his research to:

Principle fishing stations, leaving the smaller ports, such as Hastings, etc., where beach boats were used, to a subsequent book. Throughout I have endeavoured to obtain my information first-hand from the few surviving old men who can recall the days of sail in its prime, and their names are mentioned in the text (1952, viii).

March concludes the preface with a reflective hope of his research and the volume in the last paragraph:

The threads that make up the warp and weft of my canvas have thus come from many sources, and if a few of the bolts are not so strong as I could wish, I hope they will suffice to carry some record of the old sailing luggers and drifters into that future which seems destined to be purely mechanical; and if my efforts help to preserve the memory of the splendid men who manned them, my task will not have been in vain (1952, ix).

March's volumes here, alongside the other four works he wrote, continue the nostalgic resonance of Carr's work twenty years before. In fact set within a "purely mechanical" future in fishing craft March's nostalgic rhetoric in these volumes resonates even more than Carr's; a sentiment which is further acknowledged by his contributions to the museum's collections.



**Figure 138** A photograph showing the model of the Devon Crabber 'Excel' 1971 in its Devon and Cornwall display in the Shipping Gallery. (Inventory No.: 1972-125) Scale 1:24 (James Fenner, November 2010)

In 1972 a contemporary model entered the collections: the Devon Crabber 'Excel' 1971 (as shown in **Fig. 138** above). Presented as a gift by MAFF's representative Mr Maurice Browse, this model (as the museum label explains) represented the type of vessel:

Used for crabbing in the English Channel and works up to forty miles offshore. With a crew of four, 400 crab pots can be hauled per day.

The 'Excel' was built at Appledore in 1971 by Hinks & Sons, and is fitted with a diesel engine giving a speed of 9 ½ knots. Her equipment includes radar, radio transmitter, auto pilot and an echo sounder.<sup>362</sup>

Illustrated by the label, this model and the vessel it represents, is clearly indicative of it being the most technologically advanced and modern vessel within the collections. Placed within its display case on Devon and Cornwall coastal craft it highlights the stark contrasts in development of the boat technologies for the region compared with that of the earlier 19<sup>th</sup> Century types.

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<sup>362</sup> Science Museum label for the Devon Crabber model 'Excel' taken from the Devon and Cornwall display, early 1970s

Three years later, the model of a Thames Skiff (depicted below in **Fig. 139**) arrived at the museum. The model was owned by Mrs Dorothy Thomas and came into the collection (as Bathe explains) with the help of Frank Carr:

Mr Frank Carr, former Director of the National Maritime Museum, telephoned and described a top quality model of a Thames Skiff.

Mrs D.S. Thomas...the owner of the model wishes to present it to the Science Museum.<sup>363</sup>

The model was then arranged to be collected in the Museum's van at the end of October to which Mrs Thomas, agreed with the added request that "I do want this boat to be 'on display,' not just stored away somewhere."<sup>364</sup> Within a week the model had arrived at the museum and was accessioned.<sup>365</sup>



**Figure 139** A photograph of the model of the Thames Skiff in its River/Sea Boats display within the Shipping Gallery. (Inventory No.: 1975-521) Scale 1:4 (© Science Museum / SSPL)

Once the model was installed it became clear why its inclusion was important to the collection of river boats on display. As its museum label explains:

This is a built and accurately fitted model of a pair-oared Thames pleasure skiff. These boats were usually clinker built with ash timbers planked with cedar, and had oak gunwales and thwarts. A mast with a single lugsail could be fitted.<sup>366</sup>

<sup>363</sup> SMD Nom. File 6731 Internal memorandum from Bathe to staff dated 10<sup>th</sup> October 1975

<sup>364</sup> SMD Nom. File 6731 Letter from Bathe to Mrs Thomas dated 14<sup>th</sup> October 1975 and Mrs Thomas' reply dated 22<sup>nd</sup> October 1975

<sup>365</sup> SMD Nom. File 6731 Science Museum Inventory for the Thames Skiff model dated 29<sup>th</sup> October 1975

<sup>366</sup> Science Museum label for the Thames skiff model taken from the River/Sea boats display, 1975



**Figure 140** A photograph of the Mersey Flat ‘Bedale’ model in its North West Coast display in the Shipping Gallery. This was the last model to enter the Small Craft collections and be placed in the exhibit (Inventory No.: 1980-274) Scale: unknown (James Fenner, November 2010)

The last model to enter the collections in 1980, a hundred and fifteen years after the first, was the Mersey Flat ‘Bedale’ shown above in **Fig. 140**. “This model,” as explained by its museum label “is of a barge type which was common on the Mersey and its tributary until 1950s. Although sailing Flats were also built and successfully run, this particular craft had to be towed by a tug.”<sup>367</sup> The ‘Bedale’ specifically “was built in the 1890s and was finally broken up at Runcorn in 1975.”<sup>368</sup>

In 1972 the museum had been approached by Dr. G.F. Howard with regards to drawings and plans of Mersey flat craft and the offer of making a model of this boat type. In his reply to Dr Howard, Bathe (now Assistant Keeper) wrote:

Many thanks for letting me see the progress on your excellent drawings of the Mersey ‘flat’ Bedale.

A set of the completed drawings would certainly be a most welcome and valuable addition to the series of small craft plans, particularly if you would allow the Science Museum to make photographic reproductions of the drawings available to the public. I

<sup>367</sup> Science Museum label for the Mersey Flat ‘Bedale’ model taken from the North West Coast display, 1980

<sup>368</sup> Ibid.

think the drawings should show the Bedale as a sailing 'flat' but an additional sheet showing the later alterations would be useful.

With regards to your very kind offer to make and present a model of the Bedale to this museum, as we have so few representations of North West small craft, a model of the 'flat' would indeed be an important addition to the collections. A scale of 1:24 would be most suitable for the model.<sup>369</sup>

In January 1973 Bathe receives the drawings of the Mersey 'flat' Bedale and soon after they are followed by the photographic negatives in June.<sup>370</sup> By way of response Dr Howard wrote in reply:

It is most gratifying to know that my photographs of flats are of such interest...You may like to know that I have taken such detailed measurements of the 'Sir R. Peel' as its rotten state would allow and will make a dimensioned plan of the vessel as I did for the 'Bedale'. And as regards that latter vessel, I expect to start on a 1:24 model in about a couple of months time when I have completed a small restoration job.<sup>371</sup>

After eight years considerable delay from the initial offer, the model entered the collections in 1980 – the last item of the British Small Craft exhibit.

While the interwar period and the post war era both had their share of sailing craft and fishing boat populist literature under authors such as Carr and March in which the museum models culturally sat, further more extensive research was taken in a volume published in 1983. Titled *Working Boats of Britain* the book traces the research of Eric McKee who travelled around the UK between October 1973 and June 1978. Off the back of funding from the National Maritime Museum through a Caird Library Research Fellowship, McKee recorded the size, shape and construction of vessels he came across and how these boat designs were shaped by their environments, landscapes and function. As he explains in the opening of the preface:

This book is about simple boats and not complex vessels. It is about their many shapes, as they are found in Britain, and is concerned with how the waters, landscapes and climate of this land, together with its inhabitants and their motivations and talents,

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<sup>369</sup> SMD T/1980-274 Letter from Bathe to Dr. Howard dated 29<sup>th</sup> June 1972

<sup>370</sup> SMD T/1980-274 Letters from Bathe to Dr. Howard dated 16<sup>th</sup> January and 19<sup>th</sup> June 1973

<sup>371</sup> SMD T/1980-274 Letter from Dr. Howard to Bathe dated 2<sup>nd</sup> July 1973

have influenced them. Finally, it is about the fashion or way in which these boats have been built and used, in so far as this also affects their shape (McKee, 1983, 9).

In total McKee, recording his travels through a diary and photographs, covered nearly 16,000 miles and took 400 photographs during the fellowship years. “As well as looking at boats and boatyards, harbours and beaches” he writes “it was possible to improve my knowledge of the topography of the coast of Britain” (1983, 10). It is this point which is particularly interesting in McKee’s work and sets it apart from the previous two authors: the topographical and geographical nature of the landscape and seascape which shaped specific regions in the design of their boats. McKee addresses this in chapter 2 of Part I - ‘Influences of surroundings’. He writes: “Before a boat can operate, she must have come to terms with the limitations imposed by the climate, land and seascape” (McKee, 1983, 19). He then provides some examples indicating our types of shoreline (lee; exposed; sheltered and weather shores), combined with wind direction, which shape particular designs of boats. As well as climate, geography and topography he refers to other influences such as population densities and the sourcing of timber. The function and work of boats is another area covered by McKee. In the following chapter ‘Work for boats’, before explaining some examples, he argues:

A boat has to be really needed if the effort of building her is to be justified, nor will she be replaced once the need ends. It is the initiation, alterations and ending of these needs that has, does and will change the shape of a boat. Finding out what these needs might be in Britain should help us understand her boats (1983, 29).

Thus compared with the earlier works of Carr and March and others like them, McKee’s approach promotes a more up to date systematic survey of the working boats of Britain.

## **6.9 Conclusion**

Once the Gallery was open, and with the exception of a few additional models and objects added to the collections, little else changed within the museum space for the next fifty years. Unlike Aeronautics which was “reworked in the mid 1990s”, Sailing Ships was never updated for modern audiences (Nahum, 2010, 188). It was with the closing of the Shipping Gallery in 2012 and its removal, which heralded the end for extensive displays of small boat models at the museum.



**Figure 141** An image of O'Dea taken before he left the Science Museum in October 1966. He had been offered the Directorship at the Ontario Science Centre in Toronto. (Rooney, 2010, 166 and 170; also see [http://www.ukwhoswho.com/view/article/oupww/whowaswho/U167706/O%E2%80%99DEA\\_William\\_Thomas?index=2&results=QuicksearchResults&query=0](http://www.ukwhoswho.com/view/article/oupww/whowaswho/U167706/O%E2%80%99DEA_William_Thomas?index=2&results=QuicksearchResults&query=0), accessed 11<sup>th</sup> October 2012)

Ultimately O'Dea pictured above in **Fig. 141** had been given the 'best bits' of the Centre Block significantly influencing the Science Museum's buildings. Both the Aeronautics and Sailing Ship Galleries had the tail-tail signs of O'Dea's curatorship; techniques of display which harked back to his first exhibition *Electric Illumination* in 1936. However his ambition had not stopped here – hence his two failed attempts for the directorship in 1956 and 1960 (Rooney, 2010, 170). In the end, at the age of 61 and after three long decades, he left the museum heading overseas for a more lucrative position in Toronto and becoming the Director General of the new Ontario Science Centre (Rooney, 2010, 166 and 170).

Although dioramas as a display method may be archaic from a modern museum perspective, for the Science Museum they had been the mainstay of exhibitions since the 1930s. Thirty years on they were still being utilised under supervision from staff like O'Dea. Appearing in many of the institutions galleries and exhibitions, both

permanent and temporary, they captivated audiences; intrigued children and were 'attractive to the eye.' As a medium of display, they were not attempting to give the *trompe l'oeil* approach of natural history habitats as Wonders (1993) pertains, but instead convinced, deceived and enticed the visitor into the historical scene depicted. As reported by the Advisory Council in 1952 discussing dioramas, this allowed "the imagination wings to take it out of the Museum gallery" beyond the physical boundaries of the museum.<sup>372</sup> More simply as a diorama, each scene allows us as the visitor a very brief ownership of a scene within an imagined miniaturized world which we are unable to do in the confines of reality (Nahum, 2010, 179). Furthermore James Roy King argues that:

If models are indeed representations of the larger material world in which we live, modelling itself may serve as an epitome of all the ways that a variety of individuals make contact with the world (King, 1996, 8).

While the collections and museum labels allude to many historical craft along with several contemporary types, in many respects the dioramic scenes depict these craft in more modern present day terms. It is this point, and the elaborate methods used to display the models, that are the crucial differences between this period and the previous two discussed in prior chapters. The focus of the gallery, along with its ocean going liner top deck aesthetic theme, was to depict the historical and more importantly the modern developments in ship technologies and marine engineering. Here there were no concerns for the fishing industry or the plight of fishermen as there had been in 1883, nor was there a perceived nostalgic loss of boat types characteristic of the 1930s. Instead, was a gallery space which epitomised the remit of the Science Museum, but more broadly spoke of post war interests, patriotisms and identities of people "of an island nation" looking to the future (Bathe, 1966, 97).

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<sup>372</sup> SMD Ed 79/180 Report for the Advisory Council 1952, 30



## Chapter 7 – Conclusion: Red Sails in the Sunset



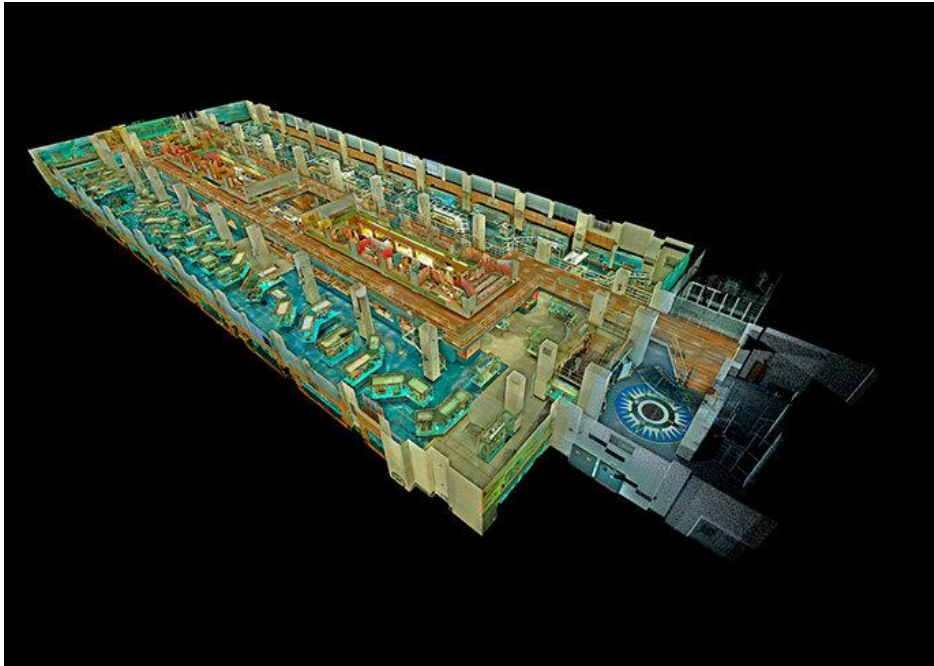
**Figure 142** A photograph showing the bare Sailing Ships gallery during its installation in the then new Centre Block c.1962. The ship's figurehead and the 1934 Cambridge Rowing Eight can be seen in the foreground (© Science Museum / SSPL).

This thesis has illustrated and given a historical and cultural geographical account of the British Small Craft displays and models held within the Science Museum London. In doing so it has told the hidden stories behind the collection, individual objects displayed and how the large group of museum objects and the gallery integrated into the broader heritage and longer institutional narrative of the museum (**Fig. 142**).

In May 2012, after nearly fifty years of being open to the public, the Shipping Gallery was closed to visitors. The closure set in motion the gradual removal of the entire contents of the gallery to make way for a new communications gallery – Information Age – due to open in late 2014. The British Small Craft models were among 1800 objects decanted from the space and are now stored in the Science Museum's small

objects storage facilities at Blythe House in Kensington Olympia. Larger objects such as the Cambridge Rowing Eight from 1934, the ship's figurehead and the marine gas turbine were transported further afield to the museum's large objects facilities at Wroughton outside Swindon.

Although the gallery's removal was part of a broader long-term master plan of revamping the museum for visitors ten to fifteen years in the future, the museum was also conscious of preserving and recording the exhibition space's heritage as part of the institution's wider display and collections history. During the removal objects and their displays were professionally photographed and their individual electronic computer database records were updated. The photographing of the displays – some including modelled scenes – was particularly important as the backdrops and dioramas were not registered inventory objects like the boat models themselves. Consequently, with concerns over health hazards such as asbestos and lack of storage space, the backdrops and dioramas were destroyed, leaving the photos as the only lasting tangible evidence of their existence in the showcases.



**Figure 143** A frozen image of the virtual tour of the Shipping Gallery showing the whole of the exhibition space in intricate detail. The gallery was laser scanned before the 1800 objects were removed making a digital video tour record of one of the Science Museum's longest serving exhibition spaces (<http://www.digitalartsonline.co.uk/news/motion-graphics/science-museum-reveals-3d-model-of-shuttered-gallery/>, 2013, accessed 29th January 2014) (© Science Museum / SSPL).

However, the Shipping Gallery's legacy and its lasting imagery and layout were not just confined to the museum's own collections documentation or to the in-house photographic record. Before the 1800 objects were removed from the space, a virtual three-dimensional shape of the gallery was digitally mapped. Using the latest 3D point-cloud scanning technology this project was the result of collaboration between ScanLAB Projects, University College London's Photogrammetry, 3D Imaging and Metrology Group and Centre for Digital Humanities and the museum itself. During the gallery's removal the team took 275 laser scans of the space creating two billion precise measurements. Using just 10% of the extensive original raw data from these scans, a 3D virtual tour video was published online in July 2013 (**Fig. 143**).<sup>373</sup> Narrated by the Transport Curator David Rooney the video flies through the gallery giving the viewer a guided tour of the virtual exhibition space. The tour is augmented by some highlighted examples of prominent objects from particular aspects of the gallery space that had been on display, giving a true sense of the range and variety of the Science

<sup>373</sup> See the Science Museum's webpage for the 3D point-cloud model video of the Shipping Gallery, July 2013, [http://www.sciencemuseum.org.uk/about\\_us/history/shipping.aspx](http://www.sciencemuseum.org.uk/about_us/history/shipping.aspx), (7 minutes duration), accessed 29th January 2014

Museum's extensive marine collections. As Rooney explains in the introduction to the video, the pioneering nature of the project meant that the scan has presented the space "...in an entirely new way. A unique permanent record of a unique historic exhibition."<sup>374</sup>

Later, the video pans left along the linear stretch of British Craft displays on the main floor of the space to show some of the models and dioramas. Rooney explains that the gallery was not just about big oceanic liners and warships; it was also about showing small craft: "the anonymous handmade boats people used around the world just to get by."<sup>375</sup> "By making these models," he continues, "we were trying to preserve a lost way of life."<sup>376</sup> The video also makes reference to the gallery's dioramas by highlighting the Admiralty Board 1677 diorama made by the museum's workshop, showing King Charles II and Samuel Pepys among the figurines surrounding the tiny model of a Stuart era warship's model. Focusing on the ship's figurehead in the centre of the gallery, Rooney reflects that "at its heart this gallery was all about people," a sentiment which is certainly illustrated through the internal and external discussions surrounding the design of the gallery, the history of aspects of marine engineering and the model makers and donors involved in the expansion of the British Small Craft exhibit.<sup>377</sup> At the end of the video Rooney explains that the gallery presented the old, new and ever-changing developments in ship and marine technologies through the longevity of fifty years. Harking back to the 3D display methods and techniques proposed by O'Dea in the 1950s and 60s, the video and the new laser/computer technologies used in its production resonate with Rooney's final words: "I can't help thinking that if my predecessors had access to this sort of kit they would have done remarkable things with it. I can't wait to see how this technology develops. These guys have made a time machine."<sup>378</sup>

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<sup>374</sup> Rooney, 2013, 3D video narration - 1 min from the beginning

<sup>375</sup> Rooney, 2013, 3D video narration - 3 mins from the beginning

<sup>376</sup> Ibid.

<sup>377</sup> Rooney, 2013, 3D video narration - 5 mins 55 secs from the beginning

<sup>378</sup> Rooney, 2013, 3D video narration - 6 mins 43 secs from the beginning

The virtual world created by the laser scans and video is a modern testament to the gallery, showing the exhibition space's past vibrancy, range of objects, marine-themed mediums of display and commitment to showing all aspects and developments of maritime engineering old and new. The fly-through tour encapsulates a new nostalgic rhetoric for the gallery, one that gives a lasting image of a long serving permanent exhibition. Acting as the modern equivalent to the recorded guided tour of the gallery in 1963, the video fifty years later commemorates the passing of the gallery while looking forward to the museum's future with new collections on show with the space being transformed "to make way for some new stories."<sup>379</sup> In some respects the video also successfully combats the continuing issue felt within museums as observed by MacDonald in that they "labour against their own physicality" (MacDonald, 2002, 30). The sweeping gliding nature of the virtual camera through the gallery space breaks through this barrier and partially alleviates the notion that "the objects and architecture of museums do not lend themselves to the visions of science or of the visitors that museum staff wish to materialise" (2002, 30). Through their technological advancement, the scans are themselves a new form of public display of science, creating a virtual world that epitomises scientific progress while harking back to older museum methods of exhibition.

Through this pursuit of acquisitional stories in the museum's archives the thesis has drawn out answers to the research questions proposed earlier in the Introduction. Archival material gathered from the Science Museum's Documentation Centre has shown how the boat model collections were developed and expanded over a hundred and fifty year period at the institution. Historical documents highlighted the key players involved such as Laird Clowes, O'Dea and the diorama artists; the internal and external correspondence the museum had with the outside world over the models; and, for the 1960s Shipping Gallery, presented the processes by which the dioramic scenes were produced as well as showing where the British Small Craft exhibit as a

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<sup>379</sup> Insley, Jane 2012 pers. comm.. – Miscellaneous document found in curator's office. Recorded tour guide script on the new Sailing Ship Gallery, author unknown (possibly O'Dea), exact date unknown but likely to be March 1963, 6; Rooney, 2013, video narration - 6 mins 27 secs from the beginning

whole sat within the wider national and international focus of the marine gallery space.

This research, through historical documents, has shown how the models and the diorama displays were shaped by external actors. The work of the Society for Nautical Research and numerous cultural references regionally and nationally has anchored the models and displays in a wider coastal and vernacular register. Through the aesthetics of the displays themselves and their corresponding archival papers, the models and their showcase settings reflected iconographic representations of local and regional identities, certain geographical coastal settings, sites and landscapes of an island maritime nation; with influences for the models and dioramas coming from photographs, paintings, documentary film, magazines and populist marine literature.

In turn, these archival stories showed that Laird Clowes and O’Dea, through their curatorial work and exhibitions, intended to convey a message to the public about our nautical heritage. Through their innovative and yet assumed curatorial practices and their resultant respective 1930s exhibition and 1960s gallery, both curators were in some way influencing public opinion in their pursuit of emphasising the importance of preserving and reflecting on, a national record of past and future maritime technological and scientific advancements and developments (Morris, 2010, 242).<sup>380</sup>

The models have additionally reflected and visually articulated changing depictions of the island maritime identity of the British Isles. As the main chapters have shown the models in their varied uses in a Victorian International Fisheries Exhibition, a 1930s temporary exhibition and later as part of a permanent gallery within the Science Museum’s historical site has illustrated the nation’s island focused concerns over a prolonged period. In each historical period of the Science Museum’s Small Craft narrative the models have obtained new meanings and symbolism. From voices raising concerns over the fishing industry and food shortages, to the nostalgic

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<sup>380</sup> Laird Clowes, for example, placing models alongside SNR boat lines and plans while thirty years later O’Dea requesting the accessioning of more modern post war models, his designs of the marine themed gallery and his judgement and approval of layouts for British coastal dioramas.

resonance of a bygone sailing age of coastal craft and to an acceptance of past marine technologies while looking to the future, the models have visually epitomised culturally the national concerns and issues of each period respectively through museum display. Therefore through these different time periods the models as craft objects communicated various meanings pertaining to notions of technology, place and culture of a maritime island nation.

Yet the research has also been limited in its scope. Naturally the richness of the Science Museum archives has shaped this research and the thesis is a reflection of that richness. But if the research were to be extended, then the model boat collections and their displays could be placed within a wider context of other regional museums, other heritage institutions and broader cultural references that could be followed in greater detail.

In summary, the doctoral research presented in this thesis has shown a cultural and historical geography of small craft and imagined modelled landscapes through the prism of model boats and museum displays. This cultural-historical geography, considered within a national museum's institutional narrative and in the context of the many ways in which knowledge production was practised, has sought to get closer to the model makers and diorama artists within the museum showcases. This was done to improve the way we visualise and understand the vernacular technologies, craftsmanship and hidden regional identities at work within the displays. The research has shown how the museum has always had a close association with its maritime collections, from the institution's foundation to the present, with the British fishing craft models specifically being used for a variety of international, temporary special and permanent exhibitions over a 150-year period.

Yet the aim of this study has been more than just the telling of a museum story. It has also unpacked some of the many social and cultural references at play within the maritime heritage consciousness of the British Isles in the mid-twentieth century, through the symbolism and regional identities imbued in these miniature models of small boats. It has also shown that a historical geography of the sea, the ship or of the

public understanding of science does not need to be solely associated with oceanic vessels historically and contemporarily; rather that it can also include the smaller unknown craft of coastal and inland waters. In doing so it paints a closer, more intimate geographical imagination of the sea and of coastal landscapes.

In addition this thesis has presented the models and displays as a public perception of science and as a representation of marine vernacular technologies, while at the same time considering them through notions of competing qualities and detailing of craftsmanship and as part of broader artistic museum aesthetics. In doing so the research has connected a coastal maritime geography, through the models, with science and craftsmanship historically and contemporarily (through notable works such as Finnegan, 2005; Withers, Higgit and Finnegan, 2008, Withers, 2001 and Thomas, Harvey and Hawkins, 2013).

However, the research has not eschewed the human element in its approach. In fact through the correspondence and discourses, both internal and external, within the Science Museum's archives it is clear that the boats, the models, the displays and the rest of the Shipping Gallery have, as argued by Rooney earlier, been about people at their heart.<sup>381</sup> It is through the interactions of the museum with the outside world, via key actors such as William Clowes, Geoffrey Swinford Laird Clowes, Frank Carr, William O'Dea and others, that have produced these local and regional identities in the making of public viewable scientific knowledge. As emphasised by Bud the museum through its collections exposed "not just the presuppositions of the Science Museum as an institution but also those of the cultures which sustained the Museum" expressing "the values and aspirations of the funders, audiences and staff within the institution who were recreating it on the ground" (Bud, 2010, 251).

Ways of making knowledge accessible to the public continue to evolve. The fly-through tour of the laser scanned virtual world of the gallery presents the exhibition space as it was, giving the viewer a taste of the range and variety of exhibits that were

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<sup>381</sup> Rooney, 2013, 3D video narration - 5 mins 55 secs from the beginning



once on show. Through its execution, the tour hints towards new methods of display in museums. While O’Dea could be seen as the vanguard of a new form of curatorship, with expansive ideas for exhibition design with the dioramas and themed galleries of the 1950s and 60s, this virtual tour video could be seen as the modern equivalent of a diorama – capturing images of historical scenes through lasers and computers instead of paint, wire meshing, plaster, metal and wood. The fly-through experience embellishes the diversity of the gallery space, giving visitors the freedom to explore the nature of the layout. In a way, although the tangible form of the Shipping Gallery maybe gone, it does have an intangible afterlife in this research and more importantly in the virtual online tour video.

By understanding the cultural-historical geographies of small craft through the attractive, and mimetic dioramic displays, and combining this understanding with knowledge of the collaboration of science, art, museums, marine technology in their manufacture, the boat models as hidden object stories become part of a richer tapestry of maritime and museum geographies. Viewed as emblematic sites, the models, “cut through the culture, polity and economy” of a long period of the museum’s history, emphasizing regional and national identities combined with notions of science, technology and modernity (Matless, Short and Gilbert, 2010, 256). Through the interwar and post war exhibitions and gallery, the models – as maritime symbols – amplified the notion of British modernity as being a series of compromises and contestations; “a balancing act between innovation and tradition” (Conekin, Mort and Waters, 1999, 20).

It is through this museum story then, that the models and displays effectively present a new avenue for cultural-historical geography: a vernacular and coastal geography which contributes to broader notions of maritime identities of an island nation in mid-twentieth century Britain.

# Bibliography

## Primary Published Sources

- Bathe, B.W., 1966, *Ship Models: Sailing Ships and Small Craft*, A Science Museum  
Four-in-One-Book, Her Majesty's Stationary Office London
- Birkbeck, E., 1884, *Closing Address of the Exhibition*, in Clowes, Vol. XIII, William  
Clowes and Sons Ltd. London
- Bompas, G.C., 1885, *Life of Frank Buckland by his Brother-In-Law George C.*  
*Bompas*. 5<sup>th</sup> Edition, Smith, Elder and Co. London
- Burgess, G.H.O., 1967, *The Curious World of Frank Buckland* John Baker Publishers  
London
- Carr, F.G.G., 1934, *Vanishing Craft – British Coastal Types in the Last Days of*  
*Sail*, Country File Limited, London
- Cayley and Bridgman H. H., 1884, *A Central Wholesale Fish Market for London*, in  
Clowes, Vol. X, William Clowes and Sons Ltd. London
- Clowes, G.S.L., 1936, *Special Exhibition of British Fishing Boats* H.M.  
Stationary Office
- Clowes, W., 1884, *Handbooks of The Great International*  
*Fisheries Exhibition London 1883 Part I Vol. I*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Handbooks of The Great International*  
*Fisheries Exhibition London 1883 Part II Vol. II*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Handbooks of The Great International*  
*Fisheries Exhibition London 1883 Part III Vol. III*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Conferences of The Great International*  
*Fisheries Exhibition London 1883 Part I Vol. IV*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Conferences of The Great International*  
*Fisheries Exhibition London 1883 Part II Vol. V*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Conferences of The Great International*  
*Fisheries Exhibition London 1883 Part III Vol. VI*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Conferences of The Great International*  
*Fisheries Exhibition London 1883 Part IV Vol. VII*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Prize Essays of The Great International*  
*Fisheries Exhibition London 1883 Part I Vol. VIII*, William Clowes and Sons Ltd. London

- Clowes, W., 1884, *Prize Essays of The Great International Fisheries Exhibition London 1883 Part II Vol. IX*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Prize Essays of The Great International Fisheries Exhibition London 1883 Part III Vol. X*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Prize Essays of The Great International Fisheries Exhibition London 1883 Part IV Vol. XI*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Official Catalogue and Jury Awards of The Great International Fisheries Exhibition London 1883 Vol. XII*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Official Reports and Statistical Tables of The Great International Fisheries Exhibition London 1883 Vol. XIII*, William Clowes and Sons Ltd. London
- Clowes, W., 1884, *Analytical Index of The Great International Fisheries Exhibition London 1883 Vol. XIV*, William Clowes and Sons Ltd. London
- Day, F., 1884, *The Food of Fishes* in Clowes, Vol. VI, William Clowes and Sons Ltd. London
- Huxley, T. H., 1884, *Inaugural Address by Professor Huxley*, in Clowes, Vol. IV, William Clowes and Sons Ltd. London
- MacLeod, R.M., 1968, Government and Resources Conservation: The Salmon Acts Administration, 1860-1886. *Journal of British Studies*, 7, (2), 114-150
- Maitland, J.R.G., 1884, *The Culture of Salmonidae and the Acclimatisation of Fish* in Clowes, Vol. VI, William Clowes and Sons Ltd. London
- March, E.J., 1952, *Sailing Drifters – The Story of the Herring Luggers of England, Scotland and the Isle of Man*, Percival Marshall and Co. Ltd. London
- Riemsdijk, J. and Sharp, P., 1968, *In the Science Museum*, Her Majesty's Stationary Office London
- Roper, R., *Saving Life at Sea*, in Clowes, Vol. VII, William Clowes and Sons Ltd. London
- The Science and Art Department, 1883, *30<sup>th</sup> Report of the Science and Art Department of the Committee of Council on Education with appendices* [for 1882], South Kensington Museum, Eyre G. E. and Spottiswoode W. and Her Majesty's Stationary Office
- The Science and Art Department, 1884, *31<sup>st</sup> Report of the Science and Art Department of the Committee of Council on Education with appendices* [for 1883], South Kensington Museum, Eyre G. E. and Spottiswoode W. and Her Majesty's Stationary Office
- The Science and Art Department, 1885, *32<sup>nd</sup> Report of the Science and Art Department of the Committee of Council on Education with appendices* [for 1884], South Kensington Museum, Eyre G. E. and Spottiswoode W. and Her Majesty's Stationary Office

- Thompson, H., 1884, *Fish as Food* in Clowes, Vol. VII, William Clowes and Sons Ltd. London
- Walpole, S., 1884, *The British Fish Trade* in Clowes, Vol. I, William Clowes and Sons Ltd. London
- Walpole, S., 1884, *Official Report on the International Fisheries Exhibition* in Clowes, Vol. XIII, William Clowes and Sons Ltd. London

## Secondary References

- Addison P., 1985, *Now the War is Over a social history of Britain 1945-51*, British Broadcasting Corporation London UK
- Agnew J., 2011, Landscape and National Identity in Europe: England versus Italy in the Role of Landscape in Identity Formation in Roca Z., Claval P. and Agnew J. (eds.), *Landscapes, Identities and Development*, Ashgate Publishing Limited Farnham Surrey UK, 37-49
- Alberti S., 2009, *Nature and Culture – Objects, disciplines and the Manchester Museum*, Manchester University Press UK
- Alexander E.P., 1979, *Museums in Motion: an Introduction to the History and Function of Museums*, Altamira Press Nashville USA
- Anderson R.G.W., 2007, Circa 1951: The Festival of Britain, the Exhibition of Science and the Science Museum in Greenaway F., *Chymica Acta*, Jeremy Mills Publishing Ltd. London, 107-124
- Anthony S., 2010, Ambition and Anxiety: The Science Museum, 1950-1983 in Morris, (ed.), *Science for the Nation*, Palgrave Macmillan London UK, 90-110
- Ashmore P., Craggs R. and Neate H., 2012, Working-with: talking and sorting in personal archives, *Journal of Historical Geography*, 38 (1), 81-89
- Aubin D., 2003, The Fading Star of the Paris Observatory in the Nineteenth Century: Astronomer's Urban Culture of Circulation and Observation, *Osiris*, 18, 79-100
- Bailey A., 1996, Progress and preservation: the role of rural industries in the making of the modern image of countryside, *Journal of Design History*, 9, 35-53
- Bailey C., 2006, Rural industries and the image of the countryside in Brassley P., Burchardt J. and Thompson L., (eds.), *The English Countryside between the Wars: Regeneration or Decline?* Boydell, Woodbridge UK, 132-149
- Bartrip P., 1985, Food for the Body and Food for the Mind: The Regulation of Freshwater Fisheries in the 1870s, *Victorian Studies*, 28 (2), 285-304
- Belk, R.W., Sherry M. and Holbrook, J.M., 1991, 'Collecting in a consumer culture' in Pearce, S. M. (eds.), 1994a, *Interpreting Objects and Collections*, Routledge London UK, 158
- Bennett, T., 1995, *The Birth of the Museum – history, theory, politics* in MacDonald S., 2002,

*Behind the Scenes at the Science Museum*, Berg Oxford

- Boon T., 2010, Parallax Error? A Participant's Account of the Science Museum  
c.1980-c.2000 in Morris, (ed.), *Science for the Nation*, Palgrave Macmillan London UK, 111-135
- Brace C., 1999, Finding England everywhere: regional identity and the construction of national identity, 1890-1940, *Cultural Geographies*, 6 (1), 90-109
- Briggs A.S.A., 1995, *The History of Broadcasting in the United Kingdom: Sound and Vision 1945-55*, Vol. IV, Oxford University Press UK
- Buckland, 1861, in his paper on the acclimatisation of animals, *Journal of the Society of Arts* 9:19-34
- Bud R., 2010, Infected by the Bacillus of Science: The Explosion of South Kensington in Morris, *Science for the Nation*, Palgrave Macmillan London UK, 11-40
- Bud R., 2010, Collecting for the Science Museum: Constructing the Collections, the Culture and Institution in Morris, *Science for the Nation*, Palgrave Macmillan London UK, 250-272
- Bunney A., 2010, 'Beyond the Children's Gallery: The Influence of Children on the Development of the Science Museum' in Morris, (ed.), *Science for the Nation*, Palgrave Macmillan London UK, 194-211
- Burton A., 2000, *Local Fisheries Administration Since 1888* in Starkey, D.J., Reid C. and Ashcroft N., (eds.), *England's Sea Fisheries – The Commercial Sea Fisheries of England and Wales since 1300*, Chatham Publishing London UK, 174-179
- Conekin B.E., 2003, *'The autobiography of a nation': The 1951 Festival of Britain*, Manchester University Press UK
- Conekin B.E., Mort F. and Waters C., 1999, Introduction in Conekin B.E., Mort F. and Waters C. (eds.), *Moments of modernity: reconstructing Britain, 1945-1964*, Rivers Oram Press London UK, 1-21
- Conekin B.E., 1999, 'Here is the Modern World Itself': The Festival of Britain's Representations of the Future in Conekin B.E., Mort F. and Waters C. (eds.), *Moments of modernity: reconstructing Britain, 1945-1964*, Rivers Oram Press London UK, 228-246
- Connery C.L., 1996, The oceanic feeling and the regional imaginary, in Wilson R. and Dissanayake W., (eds.), *Global Local: Cultural Production and the Transnational Imaginary*, Durham and London UK, 284-311
- Cosgrove D., Roscoe B. and Rycroft S., 1996, Landscape and Identity at Ladybower Reservoir and Rutland Water, *Transactions*, 21 (3), 534-551

- Daniels S., 1993, *Fields of Vision: Landscape Imagery and National Identity in England and the United States*, Polity Press Cambridge UK
- Daniels S., DeLyser D., Entrikin J. N. and Richardson D., 2011, Introduction in Daniels S., DeLyser D., Entrikin J. N. and Richardson D., (eds.), *Envisioning Landscapes, Making Worlds – Geography and the Humanities*, Routledge London UK, xxvi-xxxii
- Daniels S. and Cosgrove, D., 1988, Introduction: iconography and landscape in Cosgrove D. and Daniels S., (eds.) *The Iconography of Landscape*, Cambridge University Press UK, 1-10
- Deacon B., 2001, Imagining the Fishing: Artists and Fishermen in Late Nineteenth Century Cornwall, *Rural History*, 12, 159-178
- della Dora V., 2007, Putting the World into a Box: A Geography of Nineteenth-century 'Travelling Landscapes'. *Geografiska Annaler*, 89 (4), 287-306
- Driver F. and Rose, G., 1992, Introduction: Towards New Histories of Geographical Knowledge. in Driver F. and Rose, G., (eds.) *Nature and Science: Essays in the History of Geographical Knowledge*, Historical Geography Research Series No. 28, Royal Geographical Society London UK, 1-7
- Duclos R., 2004, The cartographies of collecting in Knell, S., (ed.) *Museums and the Future of Collecting*, Ashgate Publishing Limited Farnham Surrey UK, 84-101
- Finnegan D.A., 2005, Natural history societies in late Victorian Scotland and the pursuit of local civic science, *The British Journal for the History of Science*, 38, 53-72
- Follett D., 1978, *The Rise of the Science Museum under Henry Lyons* Oxford University Press UK
- Forgan S. and Gooday G., 1996, Constructing South Kensington: the buildings and politics of T.H. Huxley's working environment, *The British Journal for the History of Science*, 29 (4), 435-468
- Gagen E., Lorimer H. and Vasudevan A., 2007, Practising the Archive: some introductory remarks in Gagen E., Lorimer H. and Vasudevan A., (eds.) *Practising the Archive – Reflections on Method and Practice in Historical Geography*, Historical Geography Research Series No. 40, Royal Geographical Society, London UK, 1-8
- Gilbert D., and Preston R., 2003, 'Stop being so English': Suburban Modernity and National Identity in the Twentieth Century in Gilbert D., Matless D. and Short B. (eds.), *Geographies of British Modernity*, Blackwell Publishing Ltd. UK, 187-203
- Greenblatt S., 1991, *Marvellous Possessions: the Wonder of the New World*, Oxford University Press UK
- Greenhalgh P., 1988, *Ephemeral Vistas – The Expositions Universelles, Great*

- Exhibitions and World's Fairs, 1851-1939*, Manchester University Press UK
- Hasty W., 2011, Piracy and the production of knowledge in the travels of William Dampier, c.1679-1688, *Journal of Historical Geography*, 37 (1), 40-54
- Hasty W. and Peters K., 2012, The Ship in geography and the Geographies of Ships, *Geography Compass*, 6 (11), 660-676
- Haraway D., 1984, Teddy Bear Patriarchy: Taxidermy in the Garden of Eden, New York City, 1908-1936, *Social Text*, 11, 20-64
- Hooper Greenhill E., 1992, *Museums and the Shaping of Knowledge*, Routledge London UK
- Hopwood N. and Chadarevian S., 2006, *Models – The Third Dimension of Science*. Stanford Univeristy Press USA
- Insley J., 2008, Little landscapes: dioramas in museum displays, *Endeavour*, 32, (1), 27-31
- Insley J., 2007, Little Landscapes, Little Laboratories: the Chemistry Dioramas at the Science Museum in Greenaway F., *Chymica Acta*, Jeremy Mills Publishing Ltd. London, 199-208
- Jones O., 2010, 'The Breath of the Moon': The Rhythmic and Affective Time Spaces of UK Tides in Edensor T., (ed.), *Geographies of Rhythm*, Ashgate Publishing Limited Farnham Surrey UK, 189-204
- Jordonova L., 2006, Material Models as Visual Culture in Hopwood N. and Chadarevian S, *Models – The Third Dimension of Science*, Stanford Univeristy Press USA, 443-451
- King J. R., 1996, *Remaking the World – Modelling in Human Experience*. University of Illinois USA
- Knell S., 2004, Altered values: searching for a new collecting in Knell, S. (ed.) *Museums and the Future of Collecting*, Ashgate Publishing Limited Farnham Surrey UK, 1-46
- Lambert D., Martins L. and Ogborn M., 2006, Currents, visions and voyages: historical geographies of the sea. *Journal of Historical Geography*, 32 (3), 479-493
- Latour B., 1990, The force and reason of experiment in H. Le Grand (ed.) *Experimental Inquiries: Historical, Philosophical, and Social Studies of Experimentation in Science*, Kluwer Academic Publishers Dordrecht Netherlands, 48-79
- Lawrence G., 1996, 'Museums and the Spectacular', *Museums and Late Twentieth Century Culture*, Transcripts taken from a series of lectures given at the University of Manchester October – December 1994, 69-80
- Lever C., 1992, *They Dined on Eland – The Story of the Acclimatisation Societies*, Quiller Press London UK
- Linebaugh P. and Rediker M., 2000, *Many-Headed Hydra : The Hidden History of the Revolutionary Atlantic*, Beacon Press Boston USA

- Littlewood K. and Butler B., 1998, *Of Ships and Stars: Maritime heritage and the founding of the National Maritime Museum, Greenwich* The Athlone Press London
- Livingstone D.N., 2002, Reading the Heavens, Planting the Earth: Cultures of British Science. *History Workshop Journal*, 54, 236-241
- Livingstone D.N., 2003, *Putting science in its place: geographies of scientific knowledge*, University of Chicago Press USA
- Lorimer H. and Philo C., 2009, Disorderly Archives and Orderly Accounts: Reflections on the Occasion of Glasgow's Geographical Centenary, *Scottish Geographical Journal*, 125 (3-4), 227-255
- Lowenthal D., 1991, British national identity and the English Landscape, *Rural History*, 2 (2), 205-230
- Lubbren N., 2001, *Rural artists' colonies in Europe 1870-1910*, Manchester University Press
- MacDonald F., 2006, The last outpost of Empire: Rockall and the Cold War. *Journal of Historical Geography*, 32 (3), 627-647
- MacDonald S., 2002, *Behind the Scenes at the Science Museum*, Berg Oxford
- MacDonald S., 2011, Collecting Practices in MacDonald S. (ed.) *A Companion to Museum Studies*, Blackwell Publishing Oxford UK, 81-97
- Matless D., Short B. and Gilbert D., 2003, Afterword: Emblematic Landscapes of the British Modern in Gilbert D., Matless D. and Short B. (eds.), *Geographies of British Modernity*, Blackwell Publishing Ltd. Oxford UK, 250-257
- Matless D., 1998, *Landscape and Englishness*, Reaktion Books Ltd, London UK
- Matless D., 1990, Ages of English Design: preservation, Modernism and Tales of their History, 1926-1939, *Journal of Design History*, 3 (4), 203-212
- McKee E., 1983, *Working Boats of Britain: their Shape and Purpose*, Conway Maritime Press London UK
- Merriman P., 2005, 'Operation motorway': landscapes of construction on England's M1 motorway, *Journal of Historical Geography*, 31 (1), 113-133
- Morris P.J.T., 2010, Introduction in Morris, *Science for the Nation* Palgrave Macmillan London
- Morris P.J.T., 2010, 'An Effective Organ of Public Enlightenment': The Role of Temporary Exhibitions in the Science Museum in Morris, (ed.), *Science for the Nation*, Palgrave Macmillan London UK, 212-249
- Morris P.J.T., and Von Fischer, E., 2010, Temporary (Special) Exhibitions, 1912-1983 in Morris (ed.), *Science for the Nation* Palgrave Macmillan London UK, 317-323



- Morrissey J., 2014, Identity and the Nation in Morrissey J., Nally D., Strohmayer U. and Whelan Y. (eds.), *Key Concepts in Historical Geography*, Sage Publications Ltd. London UK, 64-80
- Nahum A., 2010, Exhibiting Science: Changing Conceptions of Science Museum display in Morris, (ed.), *Science for the Nation*, Palgrave Macmillan London UK, 176-193
- Naylor S., 2005, Introduction: historical geographies of science – places, contexts, cartographies, *The British Journal for the History of Science*, 38 (1), 1-12
- Ogborn M., 2002, Writing Travels: Power, Knowledge and Ritual on the English East India Company's Early Voyages, *Transactions of the Institute of British Geographers*, 27 (2), 155-171
- Osborne M.A., 1994, *Nature, the Exotic, and the Science of French Colonialism*, Indiana University Press, Indianapolis USA
- Parsons III T., 2010, The Science Museum and the Second World War. in Morris, J.T.P. *Science for the Nation – Perspectives on the History of the Science Museum*, Palgrave Macmillan London UK, 61-89
- Pearce S.M., 1994a, The urge to collect. in Pearce, S. M. (eds.) *Interpreting Objects and Collection*, Routledge London UK, 157-159
- Pearce S.M., 1994b, Collecting reconsidered. in Pearce, S. M. (eds.) *Interpreting Objects and Collections*, Routledge London UK, 193-204
- Powers A., 2013, 'Alan Sorrell: *Working Boats from Around the British Coast*, Mural of the Nelson Bar, HMS Campania, 1951' in Powers, (eds.), *British Murals and Decorative Painting 1920-1960: Rediscoveries and New Interpretations*, Sansom and Company Bristol UK, 301-310
- Ramster J., 2000, *Fisheries Research in England and Wales, 1850-1980* in Starkey D.J., Reid C. and Ashcroft N. edit., *England's Sea Fisheries – The Commercial Sea Fisheries of England and Wales since 1300*, Chatham Publishing London UK, 179-188
- Rieger B., 2005, *Technology and the culture of modernity in Britain and Germany 1890-1945*, Cambridge University Press UK
- Rooney D., 2010, 'A Worthy and Suitable House': The Science Museum Buildings and the Temporality of Space in Morris, (ed.), *Science for the Nation*, Palgrave Macmillan London UK, 157-175
- Rooney D., 1997, The events which led to the building of the Science Museum centre block 1912 – 1951, *Science Museum Papers in the History of Technology No 7*, Science Museum London UK
- Rose G., 2007, *Visual Methodologies: An Introduction to the Interpretation of Visual*

- Materials*, Sage Publications Ltd. London UK
- Ryan J., 2006, 'Our home on the ocean': Lady Brassey and the voyages of the *Sunbeam*, 1874-1887, *Journal of Historical Geography*, 32 (3), 579-604
- Scheinfeldt T., 2010, The First Years: The Science Museum at War and Peace in Morris, (ed.), *Science for the Nation*, Palgrave Macmillan London UK, 41-60
- Sharp R. and Taylor M., 2004, *The Z-Archive Index*, Documentation Centre, Science Museum
- Short B., Gilbert D. and Matless D., 2003, Historical Geographies of British Modernity in Gilbert D., Matless D. and Short B. (eds.), *Geographies of British Modernity*, Blackwell Publishing Ltd. Oxford UK, 1-28
- Sorrenson R., 1996, The Ship as a Scientific Instrument in the Eighteenth Century, *Osiris*, 11 (2), 221-236
- Staniforth, M., 1992. 'Shipwrecks: images and perceptions of nineteenth century maritime disasters' in Hinton, P. (ed.) *Disasters: image and context*, Sydney Studies, 45-63.
- Steedman C., 1998, The spaces of memory: in an archive, *History of the Human Sciences*, 11 (4), 65-68
- Steinberg P.E., 2001, *The Social Construction of the Ocean*, Cambridge University Press UK
- Stewart S., 1984, *On Longing – Narratives of the Miniature, the Gigantic, the Souvenir, the Collection*, John Hopkins University Press, Baltimore Maryland USA
- Sturken M. and Cartwright, L., 2009, *Practices of Looking: An Introduction to Visual Culture*, Oxford University Press UK
- Thomas N.J., Harvey D.C. and Hawkins H., 2013, Crafting the Region: Creative Industries and Practices of Regional Space, *Regional Studies*, 47 (1), 75-88
- Thomas, N.J., Hawkins, H., Harvey, D.C., 2010, The geographies of the creative industries: scale, clusters and connectivity. *Geography*, 95, 14-19
- Weil S.E., 1999, From Being about Something to Being for Somebody: The Ongoing Transformation of the American Museum, *Daedalus*, 128 (3), 229-258
- Williams W.M., 1958, *The Country Craftsman*, Routledge London UK in Thomas N., Harvey D.C. and Hawkins H., 2013, Crafting the Region: Creative Industries and Practices of Regional Space, *Regional Studies*, 47 (1), 75-88
- Withers C., Higgit R. and Finnegan D., 2008, Historical geographies of provincial science: themes in the setting and reception of the British Association for the Advancement of Science in Britain and Ireland, 1831–c.1939, *The British Journal for the History of Science*, 41 (150 Pt 3), 385-415
- Withers C.W.J., 2002, Constructing 'the geographical archive', *Area*, 34 (3), 303-311

Withers C., 2001, *Geography, Science and National Identity: Scotland since 1520*, Cambridge University Press UK

Wonders K., 1993, *Habitat Dioramas - Illusions of Wilderness in Museums of Natural History*, Almqvist and Wiksell, Uppsala Sweden

## Appendix

A table showing the full contents of 127 items in the British Fishing Boat Exhibition at the Science Museum in 1936 (Clowes, 1936, 9-28).

### “List and Description of Exhibits

Plans contributed by the Coastal and River Craft Committee of the Society for Nautical Research are marked with an asterisk.”

Nos.	Model/Line Drawing
1	A Contemporary Drawing of English Fishing Boats about 1650
2	A Hoy for Burden (1717)
3	Lines of a Deal Cutter (1762)
4	Lines of a Chatham Wherry (1758)
5	Lines of a Folkestone Cutter (1800)
6	Lines of a Fowey Cutter (1805)
7	Lines of the ‘Lottery’ Smuggler
8	Lines of a Cutter Rigged Packet
9	Plan of Bristol Customs Cutter (1859)
10	Lines of a Newcastle Packet
11	Plan of a Southampton Fishing Hoy (1804)
12	Plan of a Berwick Smack (1804)
13	Plans of a Smack (1830)
14	Contemporary Model of a Yorkshire Lugger
15	Model of a Humber Keel
16	Plan of an English Herring Buss (1768)
17	Plans of an English Well Vessel
18	Plans of a Norfolk Yawl in 1768
19	Plans of a Thames Wherry
20	Plans of an English Hoy (1768)
21	Plans of a Newcastle Ballast Lighter
22	Plans of an English ‘Chalk Barge’
23	Model of a Herring-Buss (c. 1584)
24	Plans of Dockyard Yacht Tender (c. 1800)
25	Plan of the ‘Chaleur’ Schooner (1768)
26	Plan of the Cutter ‘Sprightly’ (1778)
27	Plans of Two Cutters built at Dover in 1806
28	Old Draught of a Coble *
29	Contemporary Model of a Fowey Revenue Cutter
30	Model of a Norfolk Wherry
31	Lines of a Newcastle Keel
32	Plan of a Tyne Wherry *
33	Plan of Fenland Punt *
34	Plan of Waterman’s Wherry from Gravesend
35	Plan of old Sailing Boat from the Isle of Man
36	Sail Plan of an old type of Plymouth Hooker *

37	Plan of a Portland Lerret *
38	Sail Plan of a Cowes Ketch *
39	Model of a 'Ness Yole' from the Shetlands
40	Lines of a Shetland Sixern *
41	'Scaffie Yawl' from Portknockie *
42	Lines of a Loch Fyne Scaffie
43	Model of a North Islea Yole from the Orkneys
44	Model of a Leith 'Baldie'
45	Model of a Scottish 'Zulu'
46	Model of a Sheringham Crab Boat
47	Old Model of a Thames Peter-Boat
48	Model of a Grimsby Trawler (c. 1890)
49	Plan of 'Fifie' from the West Coast of Scotland *
50	A smaller 'Fifie' found on the West Coast of Scotland *
51	Plan of the Billy-Boy 'Aimwell' (1883) *
52	Plan of a Sheringham Crab Boat
53	Model of a Yarmouth Lugger (c. 1860)
54	The Lines of a small Lowestoft Trawler (1919)
55	Lines of a Lowestoft Smack *
56	Lines of a 'Dandy-Rigged' Drifter from Lowestoft *
57	Contemporary Model of a Barking Smack
58	Contemporary Model of a Brighton Hog-Boat (1797)
59	Sail Plan of a Small Lowestoft Trawler
60	Plan of a Lowestoft Shrimper
61	Plan of a Beach Yawl
62	Model of an Aldborough Sprat Boat *
63	Model of a Beach Yawl
64	Plan of a Fenland Barge *
65	Plan of a Harwich Bawley
66	Plan of a Norfolk Wherry
67	Model of a Bawley
68	Model of a Hastings Lugger
69	Plans of a Coastal Ketch
70	Original Lines of a Polperro Gaffer (1904)
71	Original Plan of a Mevagissey Lugger
72	Original Lines of a River Fal Fishing Boat
73	Plans of the Brixham Trawler 'Valerian'
74	Plans of a Hastings Lugger
75	Plan of a Wye Barge
76	Model of a Yorkshire Coble
77	Model of a Connemara Hooker
78	Taking off the Lines of a Boat
79	Plans of Old Boats found at Lake Windermere
80	Model of a Brixham Trawler
81	Plans of a Colchester Oyster Smack
82	Plan of a Thames Sailing Barge
83	Sail Plan of a Boom-Sail Barge
84	Model of a Hasting Punt
85	Plan of a Rother Lighter *
86	Sail Plan of Hastings Lugger *

87	Plan of a Hastings Punt *
88	Plan of a Spithead Wherry
89	Model of a Mevagissey Lugger (1880)
90	Plan of an Itchen Ferry Punt *
91	Plan of a Lugger from Beer *
92	Original Lines of Plymouth Trawler "Erycina" *
93	Not listed
94	Model of a Deal Galley
95	Plans of a Plymouth Hooker *
96	Plans of a Gaffer from Polperro *
97	Lines of Fishing Boats published as part of a report on Fishing Boats presented to the House of Commons in 1849 x 9 Plates. Plate 1 – Penzance Fishing Boat and Yarmouth Fishing Boat
98	Plate 2 – Deal Lugger and Peterhead Fishing Boat
99	Plate 3 – Yarmouth Fishing Lugger and Hastings Fishing Lugger
100	Plate 4 – Two proposals for a decked (like a Mounts Bay Lugger) and undecked fishing boat (like a Wick Fishing Boat)
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102	Plate 6 – Isle of Man Fishing Boat and Lowestoft Deck Boat
103	Plate 7 – Newhaven Fishing Boat and Aberdeen Fishing Boat
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106	Plan of a Seine Boat from Hallsands *
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114	Model of a Mounts Bay Lugger (1880)
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127	Model of a South Coast Lugger (about 1820)