Sveučilište u Splitu

FILOZOFSKI FAKULTET

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Preservation, Pedagogy, and Programs: The Application of a Functional Methodology for the Conservation of Intangible Maritime Heritage in the Adriatic

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Mentor: Profesor Joško Božanić

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FACULTY OF HUMANITIES AND SOCIAL SCIENCES

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DOCTORAL THESIS

Supervisor: Profesor Joško Božanić

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Part I. Content, Scope, and Methodology in the Observation of Maritime Intangible Heritage

1.1 INTRODUCTION

Islands are isolated landscapes. Each land surrounded by water has its unique ecological and cultural intricacies developed out of regional abiotic and biotic characteristics and social relationships. The collective inheritance reflects adaptation or innovation within a particular environment, or a borrowing or utilizing attributes of separate groups. Simultaneously, cultural objects develop in reflective qualities of the environment to which the group lives. By incorporating or omitting traits of others, cultural traits become unique within a particular cultural environment (Razak 2007). In *Island Culture Landscape and Seascape,* Pungetti (2012) states, "islands have developed isolated living communities, whether plant, animal or human, separated from, and differing to varying degrees from, mainland communities of the same kind." (Pungetti 2012:52) This isolation changes the relationship that the communities have with the sea as provider or tempest, and the main avenue of connection or separation to other communities and the world at large.

The Adriatic Islands are no exception to the shaping forces that islands provide. In one of the most extensive archipelagos in the world, Adriatic island communities have developed methods of survival, ways of knowledge and technological methods which have helped them to exist in a sometimes harsh and unforgiving, but historically also bountiful, ecological region. From this connection of sea community on the islands and remote coastal communities, several variations of watercraft have been born.

Each archetype vessel on the numerous islands was developed to meet specific community characteristics and needs. Roles the craft was to play, as fishing boat, or ferry, capable of travel on open water or only protected bays, design features have been incorporated into the boat to meet the needs of the inhabitants of these places. The shape, form, and use of the vessels were derived from the cultural and ecological legacies of each particular location.

Map 1: Croatian Coast and Islands.[1]

The cultural heritage associated with these indigenous watercraft has led to describing them as *heritage vessels* (Bender 2014). Elements and characteristics of 'place', meaning the island location where a craft originates, get incorporated into generations of refinement, leading to highly evolved boat structures affording safe travel to and from isolated lands. These are characteristically working craft, engaged in means to sustain life in the remote archipelagos and tied to the economic livelihoods of the island inhabitants.

As a result of globalization, ecological changes, and technology shifts, many of these vessels are at the brink of changes that could forever alter their existence. The vessels, also being a product of their communities, are also

[1] Retrieved from (http://www.oceanblueyachts.com)

[2] Adriatic Maritime Institute (AMI) is dedicated to the preservation of maritime intangible

placeholders for building techniques, navigation practices and weather lore, plus ecological knowledge of forestry, the sea, and cycles of the biome in which island vessels are created and in which they are used.

Current preservation efforts focus on vessel form itself, such as hull shape or sail configuration, treating the vessel solely as a material object. But the vessel's future will be determined by preservation of intangible skills of those capable of bringing heritage vessels onto the sea, and of sailing them just as their communities have done for generations.

This thesis combines several ideas to explicate the preservation of knowledge, pedagogy of preservation. The thesis also examines the implementation of methodologies designed to support communities possessing heritage vessels. Each section addresses intangible aspects of heritage vessels used by the populations that live on the coast or near the sea. The boat itself is essential for the preservation of knowledge as it is the focus in which the knowledge is anchored. The paradox of maritime preservation is that boat cannot exist without the knowledge and likewise the knowledge cannot exist without the boat. The thesis is arranged around this dichotomy.

Beside the philosophical aspects of intangible heritage, the thesis uses the a comparison of two island communities to highlight transitions of the boats symbolic role and technological role. Part III summarizes the state of heritage vessels for two Adriatic locations. The island Murter and the town of Komiža, on the island Vis are used to illustrate economic roles critical to vessel survival. In Komiža, local community members, supported by local governments, are driving a boat revival. This support in turn helps define the identity of the remote island community. By drawing on survey data and information from the registration of vessels dating to the 19th century in Murter, it was found that the number of vessels per capita had not varied by more than 5% in 175 years. Locally, boat owners point to the needs of the community as the primary preservative force, while relationships to the symbolic status of the boat, as a part of the family, or family member, are also important to the boats role in the community.

Going forward, if heritage vessels will continue as part of the local cultural fabric, an essential role for them must be fashioned. Part IV of the thesis

explores the methodology of the maritime heritage trail designed for this task. This multi-faceted approach has been used in around the world to link regional, national and international sites of maritime heritage. A maritime heritage trail in the Adriatic is here proposed as an organizing framework for the tangible and intangible aspects of the maritime heritage along the coast and islands. This framework is meant to unite island organizations and individuals engaged in heritage preservation with marketing and potential resources for small-scale tourism.

Building a relationship between touristic enterprise and intangible maritime heritage creates an experienced-based style of tourism and hands-on education. This gives practitioners and participants the opportunity to practice and experience heritage in a real and active way compared to the passive contemplation of vessel styles or condition. Much of the current direction in tourism development in the Adriatic focuses on commercial beach access and leisure routines. The maritime heritage rail allows for local curation of heritage while providing income for those involved, thus reinforcing its role and survival.

In coming years a shift must occur to preserve the knowledge and vessels supporting it. Without a change in how vessels are preserved, skills required to maintain them will be left to untrained museum professionals. Like endangered animals at the zoo, heritage objects of the maritime trades may end up preserved in cases and behind glass cages, with the intangible heritage of the coastal and island communities will be distant memories and incomplete oral histories.

Switching to a *functional preservation model* allows the heritage vessel to be used in the waters they were designed for, supported by the maritime heritage trail and local cultural preservation programs. Youth education, combined with touristic enterprise creates an economic incentive that allows communities to preserve maritime heritage while prospering from their local cultural resource.

1.2 Literature Review: The Elements of Cultural Heritage

The ocean often provides symbols in which a community constructs and reinforces its sense of cultural identity. (Feinberg 1995, 6)

This thesis involves intangible heritage and practices as well as their interactions with tangible cultural objects, specifically boats and associated, tools, gear, and other implements. The topics are presented within the sub-discipline of maritime anthropology, focusing on the seaside and island cultures of the Adriatic Sea. The work delineates relationships between, on one hand, the intangible cultural heritage of crafts and skills and other immaterial elements, and on the other, vessel design and tools of boat construction preservation. The literature review reflects these two branches of scholarship, principally material culture studies and work on intangible heritage considered as a part of some cultural heritage to be protected and preserved.

Section 1.2.2, Heritage Policy and Material Method, includes the history of material scholarship in social science and the policy of heritage preservation. Section 1.2.3, Curatorial Practices and the Preservation of Culture, discusses transitions in the curation of objects with implications for intangible heritage. This section draws on important museology literature and current trends in the discipline. Section 1.2.4 then describes literature associated with the transference of skilled knowledge and pedagogy with a cultural framework. The final section 1.2.5 on Adriatic Scholarship focuses on scholarship from the region in which the fieldwork took place, i.e. the Adriatic aquatorium. Focusing on the work of several key scholars, the literature review outlines the current state of documentation and preservation effort highlighting scholars whose academic work on the preservation of the maritime reflects their personal embodiment of the knowledge they document.

This thesis argues that the historic vessel must be preserved in the context of its original environment to facilitate the greatest transference of knowledge from one generation to the next. The main idea is to see the boat its self as a functional part of the culture, through which intangible cultural heritage such as

environmental knowledge, craft folklore and skills, are maintained through preservation of the tangible vessel as artifact. The boat in this way serves as placeholder for knowledge conservation. A group's cultural heritage is not made up only of material object and items in the tangible sense but also but also the immaterial aspects; stories and songs, crafts and trades. (Lenzerini 2011) (Bouchenaki, 2003) The material objects are ceaselessly modified and recombined and cannot be separated from the special skills making such changes possible. In the preservation effort vessel and knowledge must be treated equally; as Lenzerini states, these aspects are "*essential components of its intrinsic identity as well as of its uniqueness and distinctiveness in comparison with other human groups*"(Lenzerini 2011:102) The identities of maritime cultures depend on these two pillars for support and have been equally important in preservation effort especially in the last two decades.

Between these two divisions of elemental organization, the discussion of expert knowledge and the transmission of thought and ideas will serve as a bridge, showing the dependence on the objects to show the uninitiated, key points in the production of knowledge. This work draws parallels between the curatorial practices of artifact, and transitional states of the maritime societies of the pacific. This is done in order to describe changes in theory and attitude toward artifact, object, and the curatorial practices of heritage through the last century and the societies, which they intend to represent.

The format for this literature review may diverge a bit from a traditional manuscript. However, this approach is pragmatic and is needed to show the significance of how artifacts and intangible heritage are intertwined and inexplicably tied to the culture of a people. This multi-faceted approach lends to an interdisciplinary structure weaving through the literature use of selected sources that signal changes in the disciplines in which they are aligned. This will be done within the disciplines of anthropological theory, cultural heritage policy, cognitive science, educational psychology, museology, and ethnography, while drawing heavily with comparison from the pacific islands. The goal is to build an interpretive flexibility that allows the wealth of several disciplines to combine to

give a complete vision of the current state of maritime heritage preservation in the Adriatic.

1.2.1 HERITAGE POLICY AND MATERIAL METHOD

This section will cover two district veins in literature concerning the treatment of artifact and its relationship to intangible heritage. First, the history of the preservation of artifacts, especially concerned with its origins in law and policy over the preceding era. This will include literature that highlights the changes in UNESCO's policy in the last 15 years. Secondly, this section will look at the origins of the anthropological theory surrounding the material methodologies that led to creating collections, which are presently housed in anthropology museums and cultural centers around the world. This relevant scholarship is important because these two pillars, law and anthropology, merge in the arena of preservation in current trends. Finally, this section will discuss several poignant examples from the pacific islands with which to frame the importance of artifact in immaterial aspects of cultural identity and the perception of loss when cultural components are under threat.

Presently, in Croatia, there are 14 elements of intangible heritage listed as part of the UNESCO, from *Klapa* or multipart singing to lace making. The preservation of intangible cultural traits and an ongoing examination of preservation practices are essential to determine the efficacy of preservation programs as well as policy implementation from UNESCO and its impact on communities around the world. (Seeger 2009) (Hafstein 2009) The myriad of human experience which is culture, in its ever changing forms, and how to document cultural traits, much less preserve them without impact, has been a problem for the discipline of anthropology for decades. (Bouchenaki 2003) It will be interesting to see a description of the impact of UNESCO's policy of preservation in helping some cultural traits to become a 'valued' while others which do not make the list are set by the wayside. It is understandable that while this was not the intention of the UNESCO policy but it will undoubtedly have such unintended consequences. This thesis aims to examine the methodology of

preservation, its impacts in its various forms, and to propose a novel method of preservation through the maritime heritage trail.

The work that has been done in intangible heritage began as a project of UNESCO specifically, and in response to the protection of national monuments. Heritage preservation in many ways has been born from the policy of laws, stemming originally from those adopted by the French Revolution (Sax 1990). Abbé Grégoire, one of the policy makers in the revolutionary council, was possibly the first to pen memoranda for the proper handling and treatment of art and artifact deemed culturally important during the Revolution.

Abbé Grégoire set the impetus of western preservation movement in motion, which has most recently formed this scholarship and the definition of intangible heritage. Signaled by the keynote address *The Interdependency Of The Tangible And Intangible Cultural Heritage* Bouchenaki (2003) describes how UNESCO, which has been for decades in the forefront of preserving intangible heritage, now has to consider both sides of the spectrum in order to remain true to the cultural legacies of a particular area.

> *Today an anthropological approach to heritage leads us to consider it as a social ensemble of many different, complex and interdependent manifestations. This is now reflecting the diversity of cultural manifestations.* (Bouchenaki 2003:1)

On the other side of this dichotomy, the preservation of material cultural began in the collecting tradition of non-western items from often marginalized or colonized places or peoples (Woodward 2007). Beginning in the time of Cook a curiosity with native flare enticed westerners to envision far off localities that built the romance of wild lands and was part of the colonial dogma. (Kaeppler 1978) As is stated in the *European Appropriation of Indigenous Things*, Thomas (1991), details the history of the collection of non-western items, especially in the pacific, by various individuals with considerable backing by western powers, especially the British and American entities. Incidentally the Pacific Islands and research that has come out of that region for the past 200 years provide an interesting comparison or lens with which to view changes in the discipline of

anthropology and the understanding and curatorial practices of heritage both tangible and intangible.

This use of comparative materialism as methodology (Boas 1920) was used most famously in an effort to objectively order an evolutionary model of society, its development and or its dispersal patterns. While Boas disregarded the linear evolutionary pattern of transformation from a lesser, primitive society to a more highly evolved one, the academic atmosphere of the time played handsomely with the topics of savagery and the linear evolutionary model, of which objects and artifacts were considered proof.

The origins of several strands of discourse in anthropological theory have been founded in one way or another using objects as a cornerstone for interpretation of cultural practice. The museum's role as a facility to house objects has been documented extensively (Stocking 1988). In particular Quimby's (1978) study *Material Culture and the Study of American Life* works to expound upon the premise that objects are there for the anthropologist to unpack and disseminate their meaning through interpretation of the artifact within the museum and academic spheres.

There has been considerable quantitation of studies not only into the shape pattern of objects and their relative characteristics in comparison on a global sphere, as well as to the perceived symbolic meanings though extensive ethnographic documentation. For example Malinowski (1922) focused on extensive field methods and documented what were to be some of the final voyages of the Kula trade. To this day the *Argonauts of the Western Pacific* stands as one of the great ethnographic documents from the Pacific archipelagos. Possibly to do with the to do with the state of world affairs at the time of Malinowski's fieldwork, his work which is perceived now to be somewhat static in approach, as he chose to see cultures as somehow "pure," stopped in time and missed the acknowledgement of the dynamic forces of innovation and transference of knowledge between groups (Lewis 1998). He went on to juxtapose this with other cultures that he saw as in transition in his work in *The Dynamics of Culture Change* (Malinowski 1945).

With this extensive documentation of seafaring and traditional boat building, one can only wonder if the work could be used in rediscovery projects similar to the ones that are underway in other parts of the Pacific. (Finney 1994) (Diaz 2011). This type of ethnographic documentation of the material aspects of a society is critical to cultural preservation. In 2001 it was reported that canoes were no longer being built in the islands.

> *Scoditti, who has been working on the island of Kitawa since 1973, reports that no canoes have been made there for the last several years. Towitara, a master carver of prow-boards, who was probably in his eighties when Scoditti first met him, has died, and no new carvers have been initiated. (Katz 2001:40)*

This has tremendous implications for the people and the society in the islands. Senft (2016) discusses the multi-faceted evacuation of knowledge that is lost with the removal of this keystone aspect of Trobriand society, including vocabulary, use of specific technologies, social events ceremonies and rituals which now are just a part of the collective memory of the society.

This example is and should be a critical comparison to the loss of the knowledge at stake now with the production and transmission of the specialized knowledge of the boat builders in the Adriatic archipelago. With the loss of one of the great boat builders Čiro Burina of Betina in the winter of 2014, the loss of the specialized skills of boat-building and the structural components of the vessel rendered Dalmatian society a little more bare to the elements of globalization and uniformity of modern technocratic society.

1.2.2 CURATORIAL PRACTICES AND THE PRESERVATION OF CULTURE

This section will include literature concerning curatorial practices of objects and artifact. Aligned with testimony on the emotive properties of objects, this format will highlight selected sources that show changes and critical junctures in the inclusion of the local community and repatriation of objects to further community goals of intangible heritage preservation. The focus of this

part of the review is not chronological documentation for the analysis of objects; it is however relevant to juxtapose the historic colonial quantification of artifacts, with the current trends in the repatriation and cultural preservation movements that occurred largely in the response to globalization. This section will explore the role of the museum or more appropriately curatorial practices in the conservation of cultural heritage within the realm of tangible and intangible heritage discourse.

> *As they move among people, things themselves develop life histories that can cut across generational time and interweave with human genealogies.* (Henare 2005:3)

This quote serves to emphasize that the object itself is one that moves between generations and is therefore imbued with a special property of remembrance that can serve to be constantly reinvented. Adams (2007) states "artifacts are able to perform their unique roles in social life precisely because of their potential longevity" (367). The watercraft of the Adriatic forms this ontology as the patrimony of the previous generations. The knowledge associated with the craft themselves are situated in such a way as to unfold the levels of environmental and spiritual knowledge associated with the boats themselves. Skračić (2003) discusses this relationship as the embodiment of saint-like properties around which society itself is organized. Can one object have such a critical importance for the society, and if so how can a museum serve its community by preserving it as an object and a placeholder for knowledge?

To explore this question it is important to look at the ways museums are presently evolving. Henare contends,

> *Museums and their collection have served multiple purposes at once and across time, often mixing agendas which might be disjunctive or completely opposed.* (2005:288)

Henare points out that a collection and an artifact-based study has definite value and while a certain value may be proposed by one scholar or another,

throughout time, the objects themselves speak to those who curate them. It is however intriguing to see the pendulum of curatorial practice swing from an outside colonial perspective to one that is an indigenous project of remembrance and conservation. Switching again to the Pacific for a salient example, Kreps states,

> *Thus pacific museums can serve as models for how aspects of intangible cultural heritage may be better integrated into museums especially indigenous curatorial practices and concepts of cultural preservation, since these too can be considered intangible heritage.(Kreps 2007:231)*

As Kreps points out, switching curatorial practice transfers agency to the holders of the curation. This transference of power firmly places the indigenous museum staff as the ones who dictate the role of the objects, their uses and the interpretation those objects to the outsiders. This would be inevitable given the shift in thought, which places the governing body concerning heritage in the hands of those who create it. This has revealed a subtle if not directed turn toward the self-preservation of intangible arts, which undoubtedly place the curatorial practices in the hearts and minds of those people who have maintained these traditions for centuries.

One of the most notable examples in the use of artifacts came with the induction of the repatriation movement in the late 20th century in the Untied States. Changing this policy led to the return and repatriation of object and artifact to the rightful owners. It also led to a shift in thought in curatorial practices in the American museums.

> *A culture has an ethical right to participate in a museum's interpretation of its community for museum visitors. Because living Indian people have generally not been considered a resource for anthropology collections, museums might continue to hold objects with little, or no, or incorrect catalog information, and perhaps against the wishes of a community. For decades, museums have paid non-Indian consultants to tell us more about*

collections, yet we have rarely afforded Native Americans this same opportunity. (Bernstein 1992:24)

While the enduring legacy of the curation by outsiders has developed the system that is presently in place museums all over the Americas, this change has begun the transition of including natives into their organization. Hooper-Greenhill's (2007) assessment of the post-museum which will "hold and care for objects, but concentrate more on their use rather than further accumulation" follows this thread. The role and purpose of objects are and will be central to the preservation of culture. Another significant title, which also looks at the divisions of the symbolic representation of objects as they traverse the line between functional object and curated art, is James Clifford's (1988) *The Predicament of Culture.* Of particular interest is the chapter on the semiotics of art and artifact that laid the groundwork for the semiotic square used in Part I concerning the functional and non-functional vessels.

If one is to imagine a world where the goals of UNESCO's convention for safeguarding intangible heritage are met, the maintenance and specialized skills associated with those objects will occur in tandem. This is a fundamental shift in not only the way that the museum is oriented, it essentially pivots from outward to inward focus, changing roles from display to integration, utilizing the community as central to the curatorial fabric of the local environment.

1.2.3 PEDAGOGY AND PRESERVATION

This portion of the manuscript will examine literature that explores the role of intergenerational knowledge transmission. This will include sources from education, psychology and cognitive science that look at teaching and learning. In addition, other sources citation will show watercraft's specific role, using Pacific navigation as an example showing the importance of educational formats and accumulation, transmission, and transformation of specialized knowledge within a cultural framework.

When looking at how the process of cultural transmission takes place there is a clear understanding that the cultural uniformity of learning is not the

same in all cultures. Sernberg (2004) states human development "constitutes an incorporating system of social activity that, informed by a cultural system of meanings" The premise that an individual sense of meaning is illustrated by the bounds of the student's particular cultural and natural environment is echoed in Vygotsky's zones of proximal development (ZPD), where the student builds meaning from scaffolding the elaborative steps of processes and through social learning (Cole 1978). ZPD is one of the main tenets of constructivist learning and allows the learner to "learn by doing" (Newman & Holzman 2013). With regard to the passing on of specialized knowledge such as those that have been discussed here, the relevance of ZPD and constructivist methodology are paramount to any other instructional methodology in the preservation of specialized knowledge.

In maritime society, the specifics of navigation, trade, or craft must be performed in and on the locality of its origin in order to be understood. Conversely, the preservation of the craft, trade, or skill, in order to be passed down, i.e. taught to a younger generation should start with the tangible artifacts of instruction. Then the tools, materials, and artifacts of the instruction will hold cultural meaning for the student, which will help in understanding their uses. Methods which are cultural in nature are the transmitted from one to another. In *Cultural Learning*, Tomasello, Krugar and Ratner (1993) describe cultural learning as occurring through three distinct cognitive styles: imitative learning, instructed learning and collaborative learning. All three levels of cultural instruction require at least binary opposition to another knowledge holder situated within the learning environment. Much of the work that takes place onboard a vessel is unspoken tacit learning as discussed in chapter two, which corresponds to Tomasello's imitative instruction. There are portions where instructed and collaborative learning take place.

Again using comparison from Pacific anthropology, in *Traditional Navigation in the Western Pacific: a Search for Pattern* Goodenough and Thomas (1987) look at the Micronesian navigation school as a case study for the transference of specialized knowledge. Here the navigation school is in the boathouse as place of learning. Young navigators are taught the names of stars,

waves, and other environmental knowledge to understand the sea and the navigator's role of orientation and leadership of the crew. Goodenough and Thomas show how the discipline of navigation is taught, focusing on instructional methodologies and break down of topics including the uses of chants and songs to remember elaborate listings of astronomical knowledge. The knowledge is decidedly great, requiring the apprentice navigators to start learning at the age of five or six continuing into adulthood, including spending several years voyaging between islands before achieving the title of navigator.

In the Pacific there has been significant scholarship on celestial navigation including Finey (1976), Ammarell (1999) Fienberg (1988) and Lewis (1994). Ammarell (1999) looks specifically at the transitional nature of navigation and the effect of novel technology on the navigator's methods, such as the impact of the compass on the historic way finding of the Bugis navigators. (Ammarell 1999) This speaks to the rozle of collaborative learning and the transformation of knowledge when novel practices are engaged. Tomasello, Krugar and Ratner (1993) state,

> *Once a practice is begun by some member or members of a culture, others acquire it relatively faithfully, but then modify it as needed to deal with novel exigencies. The modified practice is then acquired by others including progeny, who may in turn add their own modifications, and so on across the generations" (Tomasello, Krugar & Ratner 1993:495)*

This process termed by Tomasello and others as the "ratchet effect" continues in a linear fashion. In some cases and especially in current social movements in heritage preservation in the Adriatic, the resulting force is then formed as pressure from the community themselves to "ratchet back" outside forces and to preserve, conserve, or save some of the earlier knowledge that is being transmitted by new technology. The central tenant defined in this thesis is that the removal of artifacts from their specified location limits the amount of knowledge that can be ordered around the objects themselves. However, if objects are modified or transfigured, or new material or technology is added, then

use of the new object is thus innovated by the cultural group and the knowledge is ordered around the new placeholder. This same reorder of specialized knowledge takes place with the modification of the falkuša discussed in chapter two. The current vessel is not the same as the gajeta of yesteryear. It is modified and changed, however the ordering of environmental knowledge remains intact equally subject to transformation and reinvention.

This is in a large part because the symbolic nature of the form of the traditional craft, esthetically in the place of the craft that was handed down from their fathers, as was the knowledge. The boat, the knowledge, and the emotive force resting together in the constituent parts, entering onto the sea, bringing these parts together to keep the mariners safe in a challenging, but bountifully environment.

1.2.4 ADRIATIC SCHOLARSHIP

> *For many communities the sea is a guide to social history. Places on the ocean often are identified as sites great historical events, both encoding and lending credibility to oral traditions.* (Feinberg 1995:7)

Up to this point a comparative study of the Pacific Islands and United States has been used to illustrate trends in anthropology that are also exemplified in the Adriatic. This quote serves as another example of how island oriented life, in the Adriatic and the Pacific are similar. In island communities orientation toward the sea become a relative form of which group derive meaning from place via the interpretation of place through oral intangible heritage.

Research into toponyms surrounding the names of places and their cultural roles within society is presently underway with the omonastic studies of Bozanić (2011) on the islands of Vis and Palagružic, Marasović-Alujević (2011) on Šolta, Brać and environs, and Vladimir Skračić has done considerable work on the central archipelagos including the Kornati islands within the Kornati National Park. The work of Skračić (1995) is ongoing and extensive. It encompasses the

region including the Kornati islands and Zadar archipelago. Skračić (2002) also tackles social issues and delves into marine protected areas and land use rights. These are just samples of the extensive work that has been done on the topic with these and other scholars publishing dozens of papers detailing oral traditions on the entomology of specific places in the archipelagos.

Contemporary scholarships in the Adriatic, including current trends in social research, reflect much of the discourse that has been discussed in this chapter. For example, Salamon has confirmed rigorous documentation of vessel type shape and structure as well as the construction methods. This is shown extensively in the 16 part monograph series of vessel types published by *More* (2002-2004) However, similar to some of the more recent scholars previously mentioned which work in the pacific aquatorium, scholars from Croatia have heralded the lost of heritage in a very real and significant way. Solomon 2002 states,

> *Teško je vjerovati da se svijest društva koje tako temeljito zanemaruje vlastito brodogradevno kulturno nasljede moœe uskoro značajnije promijeniti, osim, dakako, na lošije; stoga odajem poštu tim barkama i brodovima, tom izuzetnom iskustvu koje zauvijek nestaje.*
>
> *It is hard to believe that the consciousness of society has so thoroughly neglected its own cultural heritage of shipbuilding that it may soon significantly change, except, of course, the for the worse; therefore I offer these boats and ships, this extraordinary experience before that disappears forever.*(Salamon 2002: 110)

It seems that with the imminent loss of culture, the academics that work and live in the region, especially in the islands and coastal communities, are in the process of a multi-dimensional cultural preservation project in several locations. Just as with the projects of vessel documentation, other works involving heritage documentation are occurring, especially in the realm of linguistics, particularly

working in direct interviews of elder members of the community to add to the onomastic catalogs of the islands. Much of this documentation involving the characterizing and history of place names, has come directly from one on one interviews with fisherman and others involved in the maritime trades, in an ethnographic field science approach.

Turning again to vessel design and construction, from the school of naval architecture Markovina (1995 2005, 2006, 2007) has documented extensively in three parts the ship building tradition from the island of Korčula. The work is exceedingly descriptive including scale diagrams, photos from several angles and details outlining the construction methods to such a degree of accuracy that one could build a vessel straight from the texts. Research into history of shipbuilding also includes the history and genealogy of the builders and the effectual transmission of the Korčulan style of boat-building to Central Dalmatia and the Istrian Peninsula (Markovina 2011). The discussion includes the lineage of the gajeta from Betina which has now been become one of the great centers for wooden boat culture from which a revival is taking place.

In some ways, partially responsible for this revival was the article *Croatian Shipbuilding Heritage: The Betinska Gajeta Between The Past and the Future* authored by Bobananc and Salamon (1998). Since the article was published, the name *Betinska Gajeta* has been applied to the boats built in Betina. This has helped the local boatbuilding economy, by recognizing them as a quality brand forged through tradition. (Skračić 2015)

Projects which come from the school of archeology of the University of Zadar have been done by Kirigin (2009), focusing on proposed navigation strategies of the early seafarers. Also in conjunction with the school of archeology was the documentation and replica reconstruction of the vessel *Condura Croatika* began in 1968. Vessel reconstruction done as project from archaeological evidence is began in 1998. Incidentally a combination of heritage craft and scholarship created the Condora program which employed Čiro Burtina, the master craftsman from Betina to whom this work was dedicated.

Over the last several centuries, vessel design and structure, did not change much with modernization of vessels of the small-scale farmers and fishermen

throughout the region (Bachich 1964). It is interesting to note that the building techniques and materials, planks and iron nails also didn't change that much over the centuries, again pointing to the consistency of the intangible legacy held by the boat builders who live on the island of Murter.

Salamon (2009) has also has also taken the lead in the designing of replicas from the lines of existing vessels, historic artifact and documents. Two projects in particular stand out, the Falkuša of Komiža and the Bracera of Brač. The drawings, sketches, and material research were put together to enable the builder to plan and execute the building of the traditional design using modern cold molded laminates, combining the technical cutting edge polymer construction with a historic and aesthetic skin.

The current scholarship within the disciplines of anthropology, linguistics, and naval architecture has come in many forms, highlighting the intangible heritage of the region. Bozanić (1997) reminds us that the simplicity of the weather can also provide a perspective for us to view culture. He states that in Komža weather forecasting was a skill through which many anecdotes are told. Through the use of oral traditions and poetry Bozanić (2007) adds much more to the present day scholarship of not only the Komižan maritime discourse surrounding the history of the enigmatic vessel the Falkuša, he also lends the elegance of poetry reaching back millennia through the preservation of the Komižan and Lingua Franka languages, which helps to enliven the spirit.

The ethnographic analysis and the anthropological studies which are shown in this literature review have examined where and how the practices that are in some form or other in the process of change due to the pressures of globalization, environmental degradation, or direct knowledge loss. One of the most interesting cases of the preservation of intangible heritage comes from Bozanić and Buljubašić (2012) who describe how the transitory properties of fire, bridge the sacred and profane worlds in the burning of traditional wooden boats during the ritual of Saint Nikolas in Komiža.

> *With the sacrificial object at its center as the intermediary between the profane and the sacred and the symbolic vessel of*

> *the communities fears and desires- the sacrificed boat stand as a prayer and a pledge an act of thanksgiving and most importantly that communication between the earthly and metaphysical world is possible.* (Bozanić and Buljubašić 2012: 22)

The irony of the preservation of a destructive practice leads to a paradoxical dilemma. The preservation of a custom which could lead to the demise of a whole branch of seafaring knowledge, a loss to the heritage in the material sense, but also as an icon, including the immaterial aspects that the vessel supports that have been discussed in this manuscript. To this date several hundreds of boats have been burned at the annual fire that has taken place for centuries.

It is an interesting reference point to ponder what lies before in the previous pages, the preservation of intangible heritage relies on its material support. The decisive turn for Bozanić, a native of Komiža, to insist the burning of the boat is as important as the boat itself, is truth. This truth rests in the hearts of those who curate the ritual, the locals of Komiža. It is not for the outside to decide the value of a seemingly destructive practice. Its intangible beauty resides in the fleeting ashes, heat, and memories of those who knew the boat in its remembrances.

The research cited does not suggest in essence a decolonizing or repatriation project in order to enhance preservation. It instead discusses essential use of these objects within the areas that they presently exist. Each of the sections, materials, curatorial practices, and pedagogy, point to the place in which the objects, in this case boats and their specific design, work within the elements and environments of their localities. For coming generations, the curatorial practices of the these cultural objects will rely on local knowledge of the individuals from within the community in which they reside with the understanding that they to must pass on these methods for them to continue to exist.

Examining practices not only in the Adriatic, but in other maritime communities through the lens of material culture studies has helped to define the role of things and artifacts as cultural place holders around which knowledge and

ideas are organized and the modalities that have shaped the academic discourse. While this topic was organized in a somewhat chronological manner, it was done so to justify transitions in anthropological theory that led to the changes within the discipline and within cultural management agencies, including UNESCO. The positioning of this thesis as an approach to the preservation of maritime intangible heritage that is reliant on the material anchors of its tools, finds not only its root in the preservation of artifact, but also the epistemology of objects themselves and their roles in individual societies.

It is my premise that if the communities in the coast and islands of Dalmatia choose to employ a functional method of preservation of building, sailing and maintaining boats for whatever uses they desire, then the degree of knowledge will greatly increase. Employing the trail methodology, discussed in chapter three, not only locates curatorial centers of these objects in their home location, it also serves to connect them into the functioning economic direction of the region. The policy put in motion with the UNESCO Convention of Safeguarding Intangible Heritage has created an overwhelming source of action for those who are involved in the preservation of culture. This project, as is reflected in this literature review, is multi-faceted in nature. Currently, there is consensus in the discipline on the treatment of material elements and the preservation of intangible heritage in tandem. In situations as with the ones represented here, in the form of heritage vessels and maritime skills that rely on material support, it has been shown that must be managed together simultaneously. In this case, there is limited amount of scholarship on how this would take place. This work is situated between these disciplines. The choice to focus on methodology and pedagogy of preservation has been intentional in hopes to find both place and meaning between documentation and application through the use of functional objects in the preservation of knowledge.

1.3 METHODOLOGY

As an ethnographic document founded from the discipline of anthropology, the research uses recognized field methods through participant observation, formal and informal interview, survey tools, video, and voice recording. Field research for this project began in September 2009 and continues as an ongoing project conducted by the researcher. The Adriatic Maritime Institute[2], founded in 2010, continues to support these ongoing efforts.

1.3.1 PURPOSE AND SCOPE OF THE RESEARCH

This research explores the role of traditional vessels in the preservation of maritime intangible heritage in the maritime communities of the Eastern Adriatic. This undertaking was accomplished by first examining modes of the direct and indirect transference of knowledge though pedagogy and cultural leaning on and around boats, secondly, examining the role of vessels as a form of heritage place holders, and lastly discussing role of preservation of vessels, types of preservation methods, and how they relate to the preservation of intangible heritage. The methods used explored two questions, why do some places in the Adriatic have intact fleets of traditional vessels while others don't, and what are ways that can bolster existing frameworks of heritage preservation into the future? These questions are articulated, then answered though the thesis in three sections.

[2] Adriatic Maritime Institute (AMI) is dedicated to the preservation of maritime intangible heritage traditional boats as a platform for youth development and maritime skills. For a complete listing of 2015 publications about AMI, its programs and awards, see: http://adriatic-maritime.org/review-and-upcoming/

1.3.2 APPROACH TO FIELD METHODS

The primary methodological approach used for this project was participant observation. The analysis was created as an ethnographic document to firmly understand, and to place in context, specifics of the transference of knowledge, and intangible heritage though direct and indirect accounts. Delamont (2007) states that ethnography, fieldwork, and participant observation as part of qualitative research are overlapping terms and because of this are somewhat difficult to define. She states,

> *They can all mean spending long periods of time watching people coupled with talking to them about what they are doing, thinking and saying, designed to see how they understand the world.* (Delamont 2007:206)

The primary activity was centered on several extended voyages aboard traditional sailing vessels with a focus on the transmission of intangible heritage, which include, navigation of sailing, vessel maintenance, weather lore, sail handling, and nautical customs. The participant's activities included: preparation of the vessel, small boat handling, coastal navigation, storytelling, and the care and maintenance of traditional vessels. The fieldwork locations were throughout the archipelago extending from the south in Dubrovnik to the north in the Kvarner region. In and around the island of Muter, interviews focused primarily on vessel ownership and the occupations associated with vessels such as fishing, agriculture, and transportation. In the town of Betina, fieldwork included extended time periods working directly with master shipwrights from the island in the boatbuilding shops that are located on the waterfront. In the Kornati islands, focus was to work with elders and community members involved in substance agriculture, aquaculture, and fishing. In Komiža, fieldwork was conducted on a and around the gajeta falkuša, with community members preparing for the offshore races to Palagruža and expedition around the local islands and costal communities.

Participant observation in these areas involved two modalities. First, was working individually with elders from the community. This modality usually included my peer group, and second, working with groups of young people paired with groups of elders. For example, while being a participant in the regatta Rota Palagruzona, during the first excursion, I accompanied a group of students while in subsequent years, I was an active, working member of the crew of peers and elders. Field methods themselves relied on my long-term position as a member of the crew and as an apprentice shipwright, possessing the skill, knowledge, and interest in perfecting the art of sailing and boatbuilding.

The modality of the participant observation relied my expertise and ability to integrate myself with various crew-members. As I was working alongside the master builders and seasoned sailors, I had to jot brief notes to record specifics that would later serve as the basis of detailed field notes. (Emerson, Fretz, & Shaw 2011). This was necessary, as writing during work time would be considered rude and inappropriate behavior. These notes and the associated conversations became the basis for detailed descriptions of the environment and in particular the particularities of the interactions, boat, part, technique, custom, or experience. Emerson, Fretz & Shaw state, "Nearly all ethnographers feel torn between their research commitments and their desire to engage authentically those people whose worlds they have entered" (2011: 36). They go on to explain that these issues are resolved with full disclosure in the research process. However, as an apprentice or sailor in a work environment, where it was inappropriate to record notes while on duty, I recorded my notes during breaks, in the evenings, and as part of the ships log. While involved in traditional regattas, all crewmembers were completely focused on either preparing for or the actual race process and other activities were strictly prohibited.

The methodology included three levels of interaction to better obtain a coherent registry of interaction. A systematic framework was developed in order to catalog interactions among the participants. The levels were based on approximate age of the participant using myself as a focal point. For example, when working with participants who were between 30 and 50, these were

considered peer based, participants younger than 30 youth based, and over 50, elder based research.

The intricacies of age-based relations formed the base structure for observation. Of particular importance was the dyad between elders and youths. Another level of organizational structure was individual or group, for example was the elder addressing the group or was a group of my peers working with one youth instead? The final approach to the classification of field observation was the directional intent of the action. For this, directionality is stated by the initiation of the communication. This is shown with a '<', '>', or '=' or for a teamwork situation, as '+'. In field notes, the organizational classification is recorded using these symbols. For example, when an elder was addressing the crew, received a (E) elder (I)individual > (Y) Youth (G)group showing EI>YG as a header during the note taking. This organizational classification helped to delineate actions. It helped to show when youth had understood various items, worked together with elders, or done something on their own.

During youth-centric voyages there were two modalities of written notes that were used for evaluation. These were student reflective journals, and the ships log. These methods are similar to the way that student journaling is used in the classroom and youth development settings.

> *Journaling is often used to promote self-introspection, reflection, and change in the client's perceptions, behaviors and cognitions. Similarly, journaling is seen as a viable tool in academia to promote reflection on and articulation of students' thinking and problem solving strategies* (Fogarty & McTighe, 1993:161)

Reflective writings were analyzed to find notes of applied or perceived changes in belief, behavior, attitude or reflection on skill acquisition. Each day students were given journal time where they reflected on the days events. The ships log also served as a group record of skill, achievement, and practice for the students, the log was updated every two hours at the change of the watch while under way and every one hour while on an overnight anchor watch. These writings serve as a splendid source of reflective documentation to note student's

perception toward the expedition and to the experience as a whole. Audio and visual recoding was also employed as a collection tool on several occasions and was accepted and welcomed by the group.

1.3.3 STRUCTURED PARTICIPANT INTERVIEWS

The formal interviews and surveys we conducted with 34 participants on the island Murter during the summer of 2014. Interview subjects were chosen based on boat ownership of traditional vessels. The sample size was chosen as ten percent of total gajeta of leut owners registered in the Murter/ Betina region, and included traditional vessels with MU registration. Formal interviews ranged from 30 minutes to more than 2 hours. The survey was completed and each question and discussion was elaborated on with the survey participant. Surveys were conducted primarily at *Čiro Šver* or Čiro's Shipyard in Betina, however some formal interviews were also conducted during *Latinsko 'idro* or latin sail regattas of the region. Interviewees often enlisted friends and relatives help with the survey and thus often became a group interaction. This helped owners to recall specifics of ownership details and or the history of the vessel.

The survey focused on issues related to traditional boat ownership from the island Murter, and on the cultural meaning of nautically related objects and activities. Questions were oriented in order to elicit the best results leading from strictly quantitative to longer elaborative questions at the end of the progression. (Bernard 2006). The questionnaire focused on three aspects of vessel ownership; history, cost, and cultural meaning. The survey was designed to test the hypothesis that increased boat ownership in Murter was driven by a need for agricultural support vessel and therefore also supported the family, livelihood, and heritage economy of the islands.

Participants often shared direct information, documents, and photos, stories and anecdotes as the boat is source of pride for the family and would include follow up conversations regarding their boat and ownership details as they remembered other stories. Participants also included quantitative data such as amount of money spent on annual maintenance and cost of the vessels.

Qualitative and quantitative data compiled in the surveys was then translated to English and included in the thesis appendix B. The survey is included appendix A with the English and Croatian translations.

Documents for vessel ownership were acquired from the Harbor Masters Office *Lučka Kapitania, or* Harbor Office in Murter from Mr. Branko Rameša, the serving Port Captain. The data collected from *Lučka Kapitania,* focused specifically on two vessel types the leut and gajeta which are the main types of vessels used by families to access agricultural lands in the outer islands. These documents help to show the types of vessel ownership on the island and changes over the last two centuries, showing that the gajeta and leut design has continued to be favored among the inhabitants there. In reflection, the survey was a tremendous tool for the interview process that helped to promote candid dialog among individuals who shared both their pride, and frustrations in boat ownership. In days following the survey, interviewees would often stop to talk and further elaborate on the details of a story.

1.3.4 POSITIONALITY AND TRANSPARENCY - RESEARCHER IDENTITY AND THE ROLE OF ADRIATIC MARITIME INSTITUTE

The ethnographic fieldwork that has been done over the duration of the research period has used the complete participatory approach. The total immersion into Croatian culture began when I met my wife, a native of Zagreb, whose family had been living in Murter since 1980. In 2009, we had opportunity to come to Croatia to live. While still an outsider, I had the fortunate opportunity to be welcomed into these communities somewhat because of my wife's family's networks and also because of my background and interest in the maritime trades and as an accomplished sailor and boat builder. Many of the skills that I had used in previous occupations as boat captain or shipwright allowed me to gain the respect of several of the boat builders and captains in Murter.

Of notable mention was the induction into the Regatta Rota Palagruzona. Several years before the official beginning of my induction to the university of

Split, I began a small sailing program on traditional boats in Kaštela. Specifically, sailing the lateen rigged Leut built in 1885 Slobodna Dalmacija, *Free Dalmatia.* With the help of Professor Bozanić, I had been able to secure the vessel for a summer program for the students of the Maestral Home for Children based in Split. It was here that I discovered the importance of heritage transmission as a part of youth development and began the process of starting a program with the express intent of using traditional boats as a platform for youth development and heritage preservation.

During the first regatta in 2010, which lasted for several days, the crews from several boats sailed together from Hvar to Vis, then to Komiža and on to Palagruza. During this multi-day race, the weather and conditions for sailing were extremely difficult, with winds reaching near gale force and waves of two meters. It was because of our groups handling of the historic vessel that the other crews welcomed me and the students from the Maestral Home for Children into the tight nit and somewhat reserved community of traditional sailors. It was during this ragatta that the elder sailors Captains Tonko Gruje and Jadran Gamulin, and others who had lived and worked their lives on the sea in the Adriatic honored us by accepting us into the group.

Growing out of the participatory experience that was conducted as part of the field research portion was engagement with local community based preservation organizations. While working in the coastal and island communities, I encountered several small NGOs which were in the process of preserving the intangible maritime heritage including Udruga Palagruza based in Komiža, Latinsko ‘Idro from Murter, and Batana House in Rovinj. Through several discussions with other groups on the role of education in preservation of intangible heritage, it was decided that I would work with others to start Adriatic Maritime Institute (AMI). This organization was also part of the basis for the field methods working in specially designed field programs to work with elders and youth together during maritime heritage activities such as agriculture, boat building, sailing, and fishing.

Reflexivity in the research method became an issue as the success of the AMI programs gain notoriety in the region. While as a participant observer, I

relied on being objective, However, as the organizer of a maritime heritage preservation NGO, I became a resource for groups to ask questions about the work with traditional boats in the United states. I also spoke and gave advice freely on the structure of programmatic development to several community based NGO's. These engagements helped to organize several groups in planning and maintaining youth programs. As peers in the field, these groups, Specifically Udruga Palagruza and Latisko Idro have been a source of inspiration for the programs we conduct as partners in AMI programs.

1.3.5 GEOGRAPHIC NARRATIVE AND EXPEDITIONARY METHODOLOGY

The research was conducted in several locations along the western Adriatic coast in areas that have intact maritime traditions and historic importance concerning the intangible maritime heritage, which is prevalent in the region. Several field locations were used along the coast in Dalmatian and the Kvarner archipelagos. This section will outline field work sites from the north to southern locations with narrative to describe textural as well as humanistic elements of the location, its surrounding and the communities and individuals present at the time of the research and on sailing expeditions aboard heritage vessels in the region.

Fieldwork that took place in the north was primarily around Krk and Rab islands. This included significant time on board traditional vessel from Croatia and other vessels that had been brought to the area with shipwright and captain Krešomir Vidas who's family was originally from Crikvenica and now has a boatbuilding shop in Novi Vinodolski. Working in this area also allowed me to have direct contact with several community members from the island of Rab. Specific knowledge of the regions waters as well as specific woods used in the construction of boats and how materials differ from their counterparts in the south because of the environmental influence of the strong *bura* winds that blow down the steep slopes of the Velebit mountains allowed comparison between the builders and sailors of the different region and in general gave a more holistic

account of nautical practices. The ethnography from this region is presented in section two entitled *Intangible Heritage in the Maritime Realm the Pedagogy of Functional Preservation.*

In the central Dalmatian archipelago including the island of Murter, the surrounding regions including the Kornati Archipelago and the *Šibenski otoci*, or islands surrounding the city of Šibenik. Murter served as home-base for the duration of the fieldwork. When I first arrived on the island in 2009, I was introduced to Master builder Čiro Burtina. After this introduction, I began working in his shop and I was able to spend a good deal of time learning the intricacies of Croatian boatbuilding as well as the customs and the ceremony surrounding boats and building.

The official start to the fieldwork was in 2011, the main body of qualitative and quantitative research for section three was done at this location. The boat yard served as a central point of meeting for the islands traditional boat community. Boat owners would come to visit, pass the time, or ask for advice from the master builder. Many formal interviews with an accompanying surveys were conducted on site at the boatyard, where people would regularly come to visit and to spend time. During the winter of 2013, Čiro Burtina regretfully passed away. I finished the remainder of my research surveys during 2014 after his passing. During this time, I came to know other island boat builders, spending many hours speaking with master shipwrights Mile Jadrošić, Ante Fržop and others.

In the town of Murter, work was conducted directly with many families who also had land on the Kornati islands continuing with those who used the traditional boats as a part of the regular agriculture in the offshore locations. Many of which supplemented their income by raising sheep, collecting olives, figs and other fruits from the remote outer islands. The ethnographic study focused on how traditional boats were used and why they were still in favor over more modern vessels.

In 2013, several expeditions out to the Kornati islands were made with the Skračić family from Kravljačica. These trips specifically focused on looking at traditional agriculture and the making of aesthetic oils from grasses. The Skračić

family is involved in an ethno-agriculture business that is focused on the production of sage oil on the big island Kornat. After the summer expeditions and individual based fieldwork with the Skračić family, the following year, it was possible to incorporate the process of making sage oil into a program for the Adriatic Maritime Institute, in a program was called the *Kornati Adventure* for Maestral Home for Children. Working with elders from the village, the students were able to go out into the islands and to produce agricultural products in the way that their ancestors had done in the past. This program has now been incorporated into the basic curriculum for the Adriatic Maritime Institute heritage preservation programs.

The combination of participant observation with the boat builders of Murter and the Islanders and Kornati gives the cornerstone to Chapter Three- The Heritage Economy: *The Role of Symbolism in the Preservation of Technology in Dalmatian Maritime Society*. This chapter endeavors to answer the central question of why in some areas are there are many traditional boats and in other areas there are very few.

In the in the area defined as south central, south of Point Movar, near Rogoznica, to the Paljesac Peninsula. This area encompasses the large islands of Brač, Hvar and Vis. A majority of the field work was done directly with the elders and peers from the village of Komiža aboard the finely fitted sailing vessels the falkuša. The falkuša have a tremendous history sailing to the islands of Palagruža which has been documented as far back as the 12th century. (Gamulin 2000) The islands of Palagruža served as the offshore fishing grounds for the Komižan, which used the specially designed boats to traverse the 42 mile stretch of open waters. During this portion of the fieldwork I served as a member of the crew of Komiža- Lisboa, which was constructed as a replica in 1992 for the world expo in Lisbon (ibid). Working with elders from the community, Captain Tonko Gruje and Jakov Stanojević and Joško Bozanić, I was a member of the crew during five expeditions to Palagruža and also as a project with AMI in 2012 conducted an 4 day expedition with students in the Komizan region. This expedition included staying with Capitan Gruje on the steep north shore of the island in the remote community of Oklučena.

In the Southern Region, working in the islands from the Neretva Valley to Dubrovnik and around the Pelješac Peninsula allowed for a focus on the use of traditional cargo vessels in the islands specifically the *bracera*. From 2012 to 2015, Adriatic Maritime Institute conducted expeditions to re-create the voyages done by cargo vessels in the age of sail and to give youth the opportunity experience the adventure of a cargo voyage using the power of the wind. This expedition enabled these young people to work on the heritage vessel, but also to be a part of something that was both a teambuilding and youth development activity.

During the annual voyages, in many villages, including Lovišče, Vela Luka, Brna and many others, elders from these villages would come down to the docks and tell stories about when they were children and the fruit boats that would come in the summertime to deliver watermelon and other goods.

This type of expedition as the recreation of a historic voyage was also a way to illuminate aspects of a forgotten element of the heritage of a community, which the vessel was visiting. This practice enabled elders to help re-create parts of their life histories and then share them with the young people who were part of the group. Because of this, one-on-one sharing that came from elders to youth. During these events there were several beneficial aspects to this exchange. As a methodological process, the transmission of heritage was observed directly as the older generation told stories directly to the youth that was part of the crew participating in the voyage.

Students were able to experience first hand what it was like to use sailboats such as these in the previous era. Arriving at a port that had originally received vessels such as these, they use encountered elders who shared with them their life histories. When visitors came to the boat, many elders were thrilled to see the youth engaged in this type of activity and shared with them their experiences as kids seeing boats such as these along the docks, parked directly in the spaces they were then standing. From a methodological standpoint with myself as an observer, I was then partially removed from this interaction and the interaction could be called participant facilitator and as such, could help guide the conversations and sharing sessions between the elder and youth participants. In a

discussion of intergenerational sharing in a discussion of some of the losses as a result of modern fragmented society Newman sates,

> *The young experience limited contact with their elder family members who, historically, have been present to support their growth and learning, introduce values and offer wisdom, skills and unqualified love and understanding. Older adults experience limited contact with younger family members who provide contemporary social insights, vitality, unqualified love, support, and new technological skills.* (Newman 2008:31)

The AMI programmatic framework pairs elder with youth, skilled craftsmen who are holders of intangible heritage to enable young people eager to learn and experience new things from a mentor though experiential practice. The utilization of this methodology been founded as means to foster the facilitation of intangible heritage within given programs. Youth development programs and intergenerational mentorship programs both have substantial benefits including reduction of crime (Newman, Flynn & Christiansen 2000) (Cameron and Madugall 2000), Teen Pregnancy (Kirby 2001), Self esteem and self concept, (Quinn,1999) and decreasing the drop-out rate (Barton Watkins & Jarjoura 1997). Catalano, Berglund, Ryan, Lonczak, & Hawkins, (2004) found 15 specific benefits that youth development programs foster in a thorough meta-analysis of positive outcomes of youth development, while DuBois, Holloway, Valentine, and Cooper (2002) propose that these programs have the greatest effect when the practitioners follow "best practices" and when strong interpersonal relations ships are formed. They state that the effectiveness of the programs have greatest results in areas of greatest need.

> *"The strongest empirical basis exists for utilizing mentoring as a preventive intervention with youth whose backgrounds include significant conditions of environmental risk and disadvantage (Ibid:190)."*

For the children from the homes, which AMI has been working, as well as for the elders of the various communities who have seen large population declines since the 60's to the modern era, the exchange of information provides opportunities to share historic events and to participate in meaningful experience. While this study focuses on the functional preservation methodology for the preservation of intangible heritage. It would be of interest to combine further research in the psychological benefits of heritage based, multi generational youth development programs in the Adriatic to look for specific efficacy of these novel practices.

1.3.6 EXPEDITIONARY LEARNING AND INTANGIBLE HERITAGE TRANSMISSION

Over the past seven years, I have had the fortunate opportunity to work with some of the greatest Croatian shipbuilders, sailors, captains, and scholars in the Adriatic. The format of the methodology reflects these diverse relationships. While this method may diverge from that of a standard methodology, this interdisciplinary approach had allowed the freedom to create not only novel methods of encountering, but also testing, understanding, applying, methods that may assist in the transference of heritage from older to younger generations.

The process of intangible heritage transmission is delicate as it is nimble, and fleeting. Whether or not the students understand or grasp the importance of their projects is up to student. Engagement in the learning environment as well as willingness to participate enables the process to occur. Using participant facilitation as a method to preserve intangible heritage has been rewarding. Seeing elders who thought that there were no young people interested in their craft or skill and presenting them with local students from their own community who are interested and enthusiastic about learning the techniques and skills creates a particularly exciting atmosphere.

Participant facilitation creates a safe space for elders and young people to work together in some form of craft or skill that is passed on intergenerationally. Through the program development of the Adriatic Maritime Institute we have

helped to pass down skills and trades from elders to students within their own communities thus effectively preserving some form of heritage though the program and the participation in the events on land and at sea in many coastal communities around Croatia.

Part II. Intangible Heritage in the Maritime Realm: The Pedagogy of Functional Preservation

The preservation and maintenance of locally built, handcrafted vessels is costly and time consuming, with skills of construction and operation both esoteric and rare. Functionally, such craft may be unable to fulfill their original missions to fish, carry cargo, or serve as a platform for other maritime trade. With modernization, the loss of local vessels is imminent, as are the skills, songs, work ethic and stories associated with them. This chapter provides a conceptual framework for describing this quickly changing cultural dynamic, focusing on how vessel-related cultural knowledge in Croatia is preserved and transformed through various types of educational and interpretive practices.

NEMATERIJALNA MARITIMNA BAŠTINA:
PEDAGOGIJA FUNKCIONALNOG OČUVANJA

SAŽETAK

Tradicijski brod na jedra sugestivan je i bezvremeni simbol podjednako za ljude s mora i kopna. U Hrvatskoj su povijesni ribarski brod, brod za prijevoz tereta i druge vrste brodova važni podsjetnici na povezanost ljudi s morem. U pomorskim, otočkim i priobalnim zajednicama ta je povezanost naročito snažna, a brod je često i više od simbola: on je sredstvo kojim se kulturna baština prenosi mlađim generacijama.

Poznavanje lokalnoga životnog prostora tijekom stoljeća dovodilo je do inovacija u dizajnu brodova, u skladu s posebnim životnim uvjetima i funkcijama samog broda (ribarenje ili prijevoz tereta). Smještaj broda u luci i njegov radni kontekst obliku- ju praktično i kulturno "mjesto", gdje funkcionalne uloge broda postaju načinima za prenošenje nematerijalnoga znanja o njegovu dizajnu i upotrebi. Oslanjajući se na etnografsku naraciju, ovaj rad daje okvir za razumijevanje pedagogije mjesta i funkcije koja se koristi na primjeru tradicijskih brodova te nudi uvid u izazove s kojima se susreću oni koji su izravno uključeni u očuvanje maritimne baštine.

2.1 INTRODUCTION: PRESERVATION AS A PROBLEM AND A PARADOX

In Croatia, handcrafted small boats of the rowing and sailing type, like the *gajeta, falkuša, leut,* and *bracera*, are unique, as are all indigenous craft. The lateen sail and rotund hull shape, characteristic of boats throughout Croatia from the 16th century onward, is functionally ideal in its local environment. Their ability to be moved easily with oars in light wind, and their capacity to safely transport heavy goods and cargo across open water in a moderate seaway, makes their design ideal. Contemporary construction of these boats, one means of vessel preservation, is made possible through local knowledge acquired through generations of experience involving craft forms and the functions they afford. In this way, the boat itself becomes an embodiment of local knowledge, and is recognized as a heritage vessel. The vessel's design and the associated knowledge of boat operations have developed over centuries, in response to dynamic changes in the coastal environment, technology and community needs. For example, fishermen from Komiža, who used *falkuša*, built removable bulwarks, which are high, mostly temporary planks, *falke*, for open sea passages; arriving in the remote Palagruža, the *falke* could be removed, creating a fishing vessel with a low freeboard, and enabling the *falke* to double as a platform for drying sardines on the rocky uneven shores of the remote archipelago. Such innovations make the craft versatile and well-suited to maritime tasks for the environment in which they are carried out.

This rich context of "place" and boat design also implies a challenge for the future of these vessels and presents a paradox of preservation. The representation of hundreds of years of accumulated knowledge, a craft's intangible heritage, is to be preserved in the tangible form of a sailing vessel. Today this usually means that the form of the craft is expected by many to be preserved as a "relic" or an artifact of a previous era. The challenge of vessel preservation is to combine the "intrinsic" value of the vessel, as a physical object, with its roles as understood by the individual and the society. The challenge of ascribing value to a heritage object should also include transferring this value to

the younger generation, stewards of an intangible legacy.

About ten years ago, UNESCO created the Convention for the Safeguarding of Intangible Cultural Heritage[3] to address these combined issues of material and cultural preservation. The convention shifted traditional priorities from objects to ideas, and from preservation coming from outside the culture of the vessel in which the craft had a role, to within it, thereby including associated practices. The change in focus from a "western" sense of preserving material objects for observation, to repurposing preservation for the retention of skills and knowledge, changed the "how" of preservation. This was a shift from a perspective centered on passive objectification to one that emphasizes active participation, especially intergenerational education and community preservation programs. In this way the UNESCO Convention implicitly recognized, and acted on, the two poles of the "preservation paradox".

To be successful, a change in focus, from vessel as object to vessel practices embodying vessel knowledge, requires preservation practices themselves to be carried out through the context of vessel use, design or maintenance. Captains, sailors, boat builders, fishermen and family members who work and live, or used to work and live near bodies of water hold maritime intangible knowledge. A historic watercraft naturally serves as a situated placeholder for their practice-based knowledge, skills and abilities. Just as the weaver needs a loom in order to create and teach how to make fine garments, sailors and fishermen need to be aboard their craft and on the sea to fully explain their vessels' proper functioning and what they do to make that happen.

In Croatia over the last few decades, fiberglass and factory-made boats have led to a dwindling supply and use of locally-made boats, both on the islands and on the mainland. This shortage of vessels transpires in the present era of globalization accompanied by a growing influence of the mass media and global capital, such as through Croatian coastal tourism, a particularly powerful force. Perhaps in response to cultural homogenization, there has been a renaissance of boat-preservation programs in several places on the Croatian Adriatic. Many

[3] Text of the Convention for the Safeguarding of Intangible Cultural Heritage. Article 2. Available at: http://www.unesco.org/culture/ich/index.php?pg=00006 (accessed 5 November 2013).

communities have formed programs with the goal of preserving local vessels and the associated maritime arts.

For example, on the island of Murter, and other islands in central Dalmatia, there is a wide range of working *gajeta* and restorations of this craft. The Batana House Eco-museum in Rovinj has become a community hub, employing a boat builder to continue the tradition of building a *batana* each year. In Komiža, replicas of the *falkuša*, a traditional fishing boat, continue their annual regatta to the remote islands of Palagruža. Such activities are excellent examples of active preservation of intangible maritime heritage on the Croatian islands and on the mainland.

Other vessel and seamanship programs aim to preserve local cultural and environmental knowledge directly for young people. In these programs (activities such as regattas, sailing schools and youth programs) knowledge is passed down through youth engagement and community action. Social construction of heritage relies on identity and meaning, and, for many, the unique maritime heritage in Croatia associated with the *gajeta* or *falkuša* tangibly embody this heritage. Unfortunately, communities without working vessels cannot be active in the same way. Preserving incomplete maritime "pieces", whether of craft or fishing gear, is not enough to preserve knowledge. This is the paradox, or contradiction, in preserving maritime arts. Groups need the physical vessel as an instrument in order to preserve intangible heritage, but the physical vessel itself cannot be preserved without associated expertise. A programmatic framework that actively engages young people is therefore a key means for creating a community network to value the vessel and preserve its legacy. With intergenerational education, there is preservation of knowledge, and a vessel is necessary as the vehicle for preserving knowledge across generations. The unique maritime heritage in Croatia associated with the *gajeta* or *falkuša* has successfully achieved this dual goal.

The following sections in this chapter explore variants of this preservation paradigm, in which the boat, as a material object, gets used to preserve intangible heritage by understanding how a vessel's functions and cultural contexts are expressed and understood through different preservation practices. The practical

question for boat preservation is how to think about such practices as part of preservation program planning and implementation. The framework described below shows how intangible knowledge of vessel functionality can be preserved through active contexts of boat use, particularly in educational settings. The thesis is that vessel preservation succeeds when a craft's "function" and "place" get mobilized together in the preservation effort. The examples include one of the most iconic vessels in Croatia, the *falkuša*. This unique craft has gone from near total extinction to its current state of active restoration, the creation of several replicas, and the foundation of education organizations dedicated to preserving the skills and lore of the *falkuša's* maritime heritage.

2.2 REBIRTH OF CULTURAL ICONS

By the 1980's, the mechanization of the fishing fleet in Komiža on the island of Vis left many of the traditional *falkuša* unused. At the time, it was thought that only one functional boat was left, named the Cicibela. While moored on the west side of the island of Biševo, the craft was wrecked by a great storm. Residents of Komiža salvaged the boat and placed it in a salt house, which has since become a museum dedicated to Komiža's fishermen. Today, visitors can see the boat there. They may observe the boat, walk around it, and admire the craft in its idle form. Explanatory panels describe how the *falkuša* is sailed and the techniques for fishing. People who remember can still tell stories and reminisce about the feeling or the enterprise that took place on board long ago, but the expert knowledge of weather lore and other maritime disciplines are mostly inaccessible. This knowledge would be even further diminished if the vessel was moved away from its current location in Komiža. Some might argue that exhibiting the Cicibela elsewhere would be a sound preservation choice. After all, there are exhibitions in national museums and watercraft collections all around the world today, including the Technical Museum in Zagreb, with many vessels on display and explanations of craft engineering and uses.

In these places, the models, art, and artifacts are showcased in extra-local contexts. These settings, however well done, create a new symbolic form, of

"another time and place", with the shape, form and tangible character of the artifact well-protected, but missing the subtle expert knowledge formerly used to build or sail it, let alone its purpose or meaning as recollected by individuals who knew the boats in the sea or their port.

Just what is lost when a vessel is in effect displaced from its aquatic home? In the museum and on shore in maritime communities, understanding the form of the vessel is the boat builder and model maker's art. That knowledge is either reconstructed though painstaking research or known directly, through a lifelong commitment to design and construction. The craft of building is a heritage skill, while the object alone is only a partial representation of the accumulated skill and the techniques leading to boat design. The model can be a tool for transmission of intangible heritage, if accompanied by the craftsman or a person who knows the functional aspects of the vessel or other local cultural knowledge.

One approach to preserving this knowledge is provided in Croatia by the author and model maker Luciano Keber, who has documented hundreds of traditional vessel shapes and design features, including many of their local intricacies. This work is recorded in *Tradicionalne brodice hrvatskog Jadrana* Traditional Boats of the Croatian Adriatic, a nearly comprehensive compendium of traditional vessels in Croatia today. Another scholar, Velimir Salamon of the Faculty of Mechanical Engineering and Naval Architecture in Zagreb, has prepared drawings of vessels long since gone. The body of work created by these two scholars and others has been used to memorialize the detailed design of traditional vessels no longer found in boatyards today. Drawings and monographs can be used to create plans which boat builders can in turn use to build replicas of historic craft, thus creating and resulting in a somewhat idealized but functionally complete watercraft. This is how a replica of *falkuša* was created, combining Velimir Salamon's design guidance with details from the Cicibela wreck. This rebuilding task, supported by scholars and institutions, has become the preservation action or "praxis", as the vessels are actively "transported" from idle relic to active icon. The academic and engineering project itself has turned into a source of inspiration and identity for the community where these

indigenous watercraft reside, and a tacit commitment to the reconstructed vessel's future preserved status. Here again, the paradox of preservation is apparent.

The predicament of representing both tangible and intangible heritage is a problem that museums and their personnel have been grappling with for some time, even before the UNESCO convention, as is explicit in the article "Museums and Intangible Heritage: The dynamics of an unconventional relationship" (Alivizatou 2009). While balancing dynamic aspects of culture and heritage in a formal setting is a challenge, there are innovations, such as the eco-museum, with its decentralized exhibition approach, involving re-designation of the community space (Boylan 2006), and "post-museums" which act more as immersive educational spaces than external structures for housing objects (Watermeyer 2012). Creative relationships to combine the tangible and the intangible through museums and community centers will develop over time as priorities shift from objects to culture and heritage, or as objects are appropriated through museum efforts to enable community development and educational programs, which communicate the intangible practices once supported by curated objects.

Even with dual preservation goals in mind, practical or political considerations can mean compromises between the preservation of vessels as objects and their intangible heritage. Over the years following the wreck of the Cicibella, Velimir Salamon worked with Joško Božanić and others from Komiža and beyond to rebuild a replica from photographs, drawings, and lines from the existing *falkuša*. This boat was built and was showcased at the World Expo '98 in Lisbon, and was hence named the Komiža-Lisboa.

The recreation of the *falkuša* has led to innumerable benefits, including sparking a renaissance in the interest in maritime heritage. Over the past decade, two other replica *falkušas* have been built, and recently a historic *falkuša* hull have been located on the island of Hvar and craftsmen have begun a complete restoration and rebuild. The continuity of tradition was revitalized, and has gained national and international attention. However, even after the restoration was complete, much of the public agency focus has nonetheless been on the building and creating of museum structures to house artifacts, with local and

national funds used to create educational panels, not support for functioning watercraft creating programs for youth or for support for boat owners in the preservation-as-use of historic craft.

2.3 THE LIVING VESSEL

After the replica Komiža-Lisboa was completed, the new *falkuša* was brought to Komiža. For more than fifteen years, the boat has served as a functional icon of the community, representing Komiža and Croatia in several counties and in on-water festivities. As another example, it has been the author's privilege to be a crew member on the vessel Komiža-Lisboa during Komiža's Festival of the Sea. The regatta, Rota Palagruzona, recreates a race to the islands that served as historic fishing grounds for the Komižan people for centuries. Palagruža is some 42 nautical miles from the port of Komiža, and is the outermost island group in the Croatian archipelago. Božanić has documented much of the history of the race and the vessel *falkuša* going back to 1593, making this possibly the oldest offshore regatta in Europe.

During this race, and the preparation that preceded it, I saw how the seafaring knowledge was passed down. My crew member role therefore was also that of a "participant observer". The value here is more than academic. Maritime lessons given underway do not typically come with, or even follow, an explicit outline or agenda. The master of the vessel or another member of the crew relates information, using specialized language, only as it is needed. The language of maneuvers, boat parts, wind or weather is used sparingly, and not communicated with a subtle tone.

During the 2012 regatta, I sailed with one of the great captains of Komiža, Tonko Gruje, and with the sail master Jadran Gamulin of Dubrovnik. The learning that occurred on that day was possible only because of the nearly unique, specific circumstances. Had our island destination been different, or the weather conditions changed, so too would have the captain's approach, and therefore the lesson. This pedagogical specificity is typical for many maritime activities, and shows how intangible transmission of knowledge, even on a fully functional

vessel, depends on its local environment. Place and vessel function combine to create an immersive pedagogy through the demands of the race, the vessel, and the interactions aboard. The following narrative report shows how the transmission of maritime knowledge emerged from the elements at hand and in the environment aboard the vessel.

Shortly after the race started, one of the crew brought the compass out to put at the helm. Captain Gruje, who was 76 years old at the time, said he did not need the compass. Palagruža is a lonely rock in the open sea, out of sight of land for at least three hours, but he insisted he would not need any instruments to make the journey.

While they were surprised by this, Gruje then told the crew how he would make it without the compass to find direction. He said: "When you line the point of Stupišće on the south west corner of Vis with the small island Barjak, there is a perfect transit straight to Palagruža". He went on to say: "When you can no longer see the point, keep the wind on the quarter and steer straight using the wind and waves as a guide. Before long Palagruža will come up on the horizon". After the race was over, the young man with the compass called the rest of the crew over. He had left a GPS on in his bag and it had recorded our route. Captain Gruje had sailed a perfectly straight course for the eight hours to Palagruža. That night, looking at the track on the screen, it seemed as though the line was carved from the sea, straight as an arrow.[4]

The sailing transit was true, as was the course given. It is also likely that Captain Gruje himself had learned the sailing directions in a similar fashion years before. No one aboard was aware of the transit marks even though several crewmembers were from Komiža. Navigation handed down from generation to generation was not the only thing they learned. The lessons the younger sailors acquired that day were numerous. The language he used was the dialect from Komiža, technical words barely in use in any other venue. On the *falkuša*, there are many moving parts and fixed components to operate the vessel while underway, and each line and where it is fastened has a name.

[4] Conversations recorded during the 2012 Rota Palaguzona Regatta onboard Komiža-Lisboa and on the shores of Palagruža by the author, 22 June 2012.

When the captain told the crew to tie the line of a given location there was not a conversation about pronunciation, word origin or meaning. The act must be accomplished quickly and efficiently. He also spoke of details about anchoring, names and stories associated with underwater features, and the behavior of the winds as they wrap and spin around Palagruža. As we sailed though an area known as *ždrijelo,* the "throat", he cautioned that the wind would increase in force and shift thirty degrees to the north. We set up for the shift and transferred the sails though the jibe as it came. Lack of this knowledge would have put the crew and the vessel in danger.

The information that Captain Gruje related by the "throat" place name was obvious in its description: the funneling of the wind and current between a narrow passage between the rocks. There has been much scholarship, by Vladimir Skračić, Božanić and others, of such names, and the naming practices which relate historical and environmental data through toponyms. Pedagogically, the importance is that learning the sailors' language occurs by being in the appropriate place and time of its salient use. This contextual organization allows for more complete understanding than strictly empirical knowledge. During this day there were many other subtleties which are difficult to describe using words at all: a firm resolute stare to be intent on the race; or how Captain Gruje grabbed an oar from a younger crew member and with one hand took the long and heavy piece of wood and said "just like a pen", while he whipped the oar back and forth in the water. How a five-meter oar is like a pen I'm unsure, but the crew member got it, and the rowing improved.

Photo 1: *Falkuša* Komiža-Lisboa under sail and oar below the cliffs of Palagruža (photo by Ivo Pervan)

Such examples illustrate the intergenerational aspects of the transmission of intangible heritage, and the dynamic nature of cultural knowledge, layered and intertwined with technology and change in a local setting and its present time. Having the GPS did more than legitimize the sailing directions, it elevated the local knowledge and demonstrated its superiority to modern technology, illustrating how the skills used by the crew and local environmental knowledge can be implemented to help young people fully understand the place and identity of their heritage. Such pedagogical engagement may also help them better negotiate change in their own society.

For the most part, the pedagogy of intangible maritime heritage gets created as part of daily life, in port, the islands, or on the sea, and is delivered in a non-formalized learning environment. Much communication aboard the *falkuša* occurred with a minimum of explicit discourse: how and where to sit or stand on the vessel, what is an acceptable level of communication, and how one should respond when given a command. Such tacit communication has been described by Michael Eraut, UK's leading researcher into how professionals learn in work place settings, as knowledge to be acquired in situations, which is strikingly

relevant to the transmission of intangible maritime heritage.

This is related as the unconscious transference of knowledge of which the user is unaware, which enables rapid, intuitive understanding or response and knowledge embedded in taken-for-granted activities, perceptions and norms (2000:133). Each of these categories relates information in ways that could never be done in an exhibition, book, or presentation.

Tacit knowledge and intrinsic learning are vital to the transference of the type of knowledge used by sailors and fishermen at sea. The preceding examples show that teaching tacit knowledge must occur in the practitioner's area of occupation in order to relate information, through rapid response, norms, and intuitive understanding. In his article on the ritual of boat incineration on the island of Vis, Božanić describes the power of experiences at sea and learning about the inner self. "Sailing was, from the beginning of time an adventure in which one learned what one was made of and gained knowledge of the inner self", an experience, according to Božanić, that was evident from the affective expressions in the faces of sailors and fishermen (Božanić 2012:23). It is this tacit knowledge that is imparted in these moments. The calm and steady captain, whose eyes seem to look to the horizon rather than at the gaze of others on board, is not just being attentive to forces of the sea and air, but epitomizes a moral and ethical understanding of oneself as a seaman and heir to a long tradition. The idea that such ways of human being can be impersonally preserved in a land-based museum building, and not at sea, may be an honorable dedication to the memories to great captains, but unfortunately misses the intangible and essential ties among the vessel, the captain and the crew.

The ideal of preservation shown by the recreation of the *falkuša* illustrates transitions in a vessel's functionality, from wreck to replica, in the preservation process. While the symbol of the *falkuša*, as object, did not change, the restoration of the boat's functionality increased the community's ability to teach language, craft and environmental knowledge to the younger generation. This education is most evident in the training of new *falkuša* captains. One of them, Pino Vojković, originally learned to sail from Captain Gruje and others in Komiža as a teenager aboard the Komiža-Lisboa. He later became captain of the

replica Mikula and has now completed his own replica. His plan is to use that vessel for racing, as in the old days, but also, for tourism, as today's most viable means of support in the Croatian maritime setting. To build a business, he has reappropriated and preserved the legacy in a new economic environment.

2.4 APPROPRIATION OF FOREIGN ICONS

The examples thus far show changes in a preserved boat's functionality from a wreck to a replica through the story of the Cicibela and the Komiža-Lisboa. They demonstrate how intrinsic learning takes place and is best conveyed by an expert, on board a functional vessel in the local setting. We now turn to other ways in which function and place interact in preservation. Just like the *falkuša* with its complicated rigging and demands on the sailors, the sailing vessel Bente Dörte, built in 1929, is another authentic heritage fishing vessel. However the Bente Dörte is not originally from Croatia, but from Denmark. The example shows transitions that occur as foreign vessels are utilized for sail training programs far from their home waters, with the Bente Dörte's pedagogical program showing how this can work in practice.

Since 2009, the Bente Dörte has sailed among the Dalmatian and Kvarner archipelagos, teaching young people and tourists about the sea and history of Croatia. The ship's owner, Krešimir Vidas, is of Croatian origin, and rebuilt the vessel over six years in Sweden. After the boat was brought to Croatia, it has done a number of ecotourism and educational programs throughout the islands. That journey is itself of interest, as part of the dynamic nature of preservation and place; for not only did Vidas learn the customs of boat- building in Scandinavia and bring the knowledge to Croatia, he also brought an artifact, an authentic Danish heritage vessel, with him.

Again as a participant observer, and serving as the vessel's captain for a maritime skills program, it was possible for the author to observe several students learning Croatian maritime heritage aboard the Danish sailing vessel. Students were taught to sail while recreating a historic cargo voyage from the Neretva Valley through the islands, carrying watermelons donated by farmers in the

valley as cargo. Being on a Danish vessel, with Croatian students, teaching the names of lines, spars and sails in the Čakavian dialect[5] made for an interesting juxtaposition of postmodern cultural reality. In this case, the Danish sailing vessel, the Bente Dörte, became a tool for Croatian students to learn, live, and enjoy their waters. While a Danish historian or sailor may see this vessel and wonder why things were not done a particular way or sailed with the Danish tradition in mind, the Croatian students were able to learn Croatian seamanship and intangible heritage through active participation in on-water programs. The Čakavian dialect is the dialect of the Croatian language used along the coast and on the islands. There are many variants of vessel-related vocabulary that can be different from island to island, and the students learned boat terms in this way. So, somewhat paradoxically, even a "foreign" vessel can be an excellent means of heritage preservation.

Photo 2: Bente Dörte loading watermelons in Ploče harbour (photo by James Bender)

[5] For a good description of vessel-related vocabulary and its changes, see Keber (2002).

It is not obvious to casual observers that the vessel is from the North Sea. However, the astute sailor would see that its sheer straight bow and high bulwarks are there to protect the fishermen in big seas, large waves, and strong winds common in northern Europe. Here again, functionality is key to the ability to transmit intangible heritage. If the Bente Dörte was not functional and just served as an object, an item from a distant land, it would be of little use in training or fostering an interest in the skill, the stories and other intangible themes surrounding the craft. The functionality of the vessel, as a stable and spacious melon cargo carrier, provided the platform for this type of education. The appropriation of the object allowed for the transmission of heritage through the actions performed.

With these two examples of functional watercraft, the Bente Dörte and the Komiža-Lisboa, several parallel motifs occur. The recreation of historic voyages expressed aspects of intangible heritage that would have otherwise remained hidden. The role of on-board education was critical to the transmission of knowledge, with all crewmembers being participants and not only observers. Both vessels were piloted based on teamwork and provided the platform for the accumulation of skills and crafts needed to perform sailing maneuvers. The experiential education of being underway on a magnificent heritage vessel regardless of nationality enabled lessons, which young sailors may never even have learned through intrinsic learning.

Lead Psychologist Sanja Beldelov from Maestral home for children wrote in an evaluation letter about the value of the program as observed by her on the first expedition. She states,

> *Svaka minuta je predstavljala novo učenje i novo gradivo koje su morali savladati, a nakon usvajanja znanja i stjecanja vještina osjećali su vlastitu važnost i snagu, te im je to davalo samopouzdanje da idu dalje. Stekli su pozitivan stav prema sebi, bili su zadovoljni sobom, te su se počeli više cijeniti. U težim situacijama, gdje je vjetar pokazivao svoje pravo lice, djeca su imala snage suprostaviti mu se i boriti kao pravi pomorci. Tada su i najviše upoznali sami sebe jer u tim situacijama se sve maske skidaju, nema glume i igranja uloga, razmišljanja što reći u određenoj situaciji i kako se ponašati, postojiš samo ti, more i vjetar kojeg u tom trenutku moraš obuzdati.*
>
> *Nadalje, jedrenje, sunce i more na neki način djeluje terapijski te djecu dovodi do stanja opuštanja i mira, stanja gdje razmišljaju o sebi,*

čine samoprocjenu, uspoređuju se sami sa sobom, ne s drugima i pokušavaju se mijenjati na bolje.

Every minute was accounted for new learning and new material that had to be overcome, and after learning and acquiring skills, they felt their own importance and power, and that gave them the confidence to go forward. They gained a positive attitude towards themselves, were happy with themselves, and of which they began to more self worth. In severe situations, where the wind showed its true face, the children had the power to oppose it and fight like real sailors. Then they began to know themselves, because in these situations are all masks are removed, there is no drama and role play, thinking what to say in a particular situation, and how to behave, you only exist, the sea and wind, which must reined in.

Furthermore, sailing, sun and sea in some way acts therapeutic and children are led to a state of relaxation and peace. The situation where they think of themselves, make self-assessment, compare themselves, not with others and they try to change for the better.

Sanja Bedalov, dipl. Psihologinja
Dom za djecu "Maestral", Split
Podružnica "Miljenko i Dobrila", K. Lukšić
August, 2010

Photo 3: A young cadet confidently steers Bente Dörte just after dawn on the way to the Neretva Valley (photo by James Bender)

The value experience for the participants is noted through increased self-esteem and an appreciation for the environment in which the voyage takes place. A possible research agenda therefore could include changes in self and environmental efficacy in the participants, in relation to the authenticity of the experience and the level of intangible transmission that occurs. AMI continues this with pre- and post trip evaluation methods and with journals which are clues to the efficacy of the programs however more work could certainly be done.

Sailing aboard a heritage vessel, within its historic locality and with a master of that lineage, provides an experience that honors the lineage and the indigenous knowledge that has accumulated in that place. The experience strengthened intergenerational bonds in the community through the preservation of valuable environmental and technical oral tradition, which are a measurable outcome of such experiential learning as shown through student journals and pre and post trip surveys.

2.5 ON PLACE AND FUNCTION OF HERITAGE VESSELS

As indicated in the introduction, two characteristics are central to the community status of a vessel and the opportunities it provides for a younger generation to learn about the cultural and ecological environment in which they reside: these are the vessels' functionality and its cultural context or "place". These two terms summarize the vessel's role in the maritime society, relevant to the methods for preservation. In comparison, the exhibition of coastal craft in the Technical Museum in the nation's capital, Zagreb, does little to preserve intangible heritage, while the presentation of the Cicibela in Komiža helps to preserve identity, and serves as a reminder and record of the past for local people to use. The vessel still falls short in that it does not convey the tacit knowledge accumulated in a non-traditional learning environment. Changes in place orient the vessel to its cultural heritage, but will vary depending on how the vessel and the "exhibition" venue are coordinated. The Bente Dörte example is of a functional heritage vessel far from home, nonetheless serving in Croatia as a

training ground for the Croatian heritage. In the case of Captain Gruje and Pino Vojković, the young apprentice and now captain, heritage was preserved as part of the new captain's economic reality of contemporary Croatian maritime tourism. No simple formula should be expected for preservation outcomes because of the ways in which place and function may merge in heritage preservation.

The remarkable narrative of the rebirth of the *falkuša* exemplifies how communities can facilitate these transitions, with restorations and replicas erected from wrecks or historical memories. As the derelict vessel becomes understood and as a restoration project or a model becomes a working replica, new life is brought to the participating group through acts of recreation.

The heritage object comes into being as attendant stories, customs and rituals are utilized for the vessel's rebirth into the community. Conversely, as an aging boat becomes idle, or the heritage craft is removed from its local environment, opportunities to use the vessel for education or other programs are missed. Preservation of function and place is also a dynamic process, and may progress or decline.

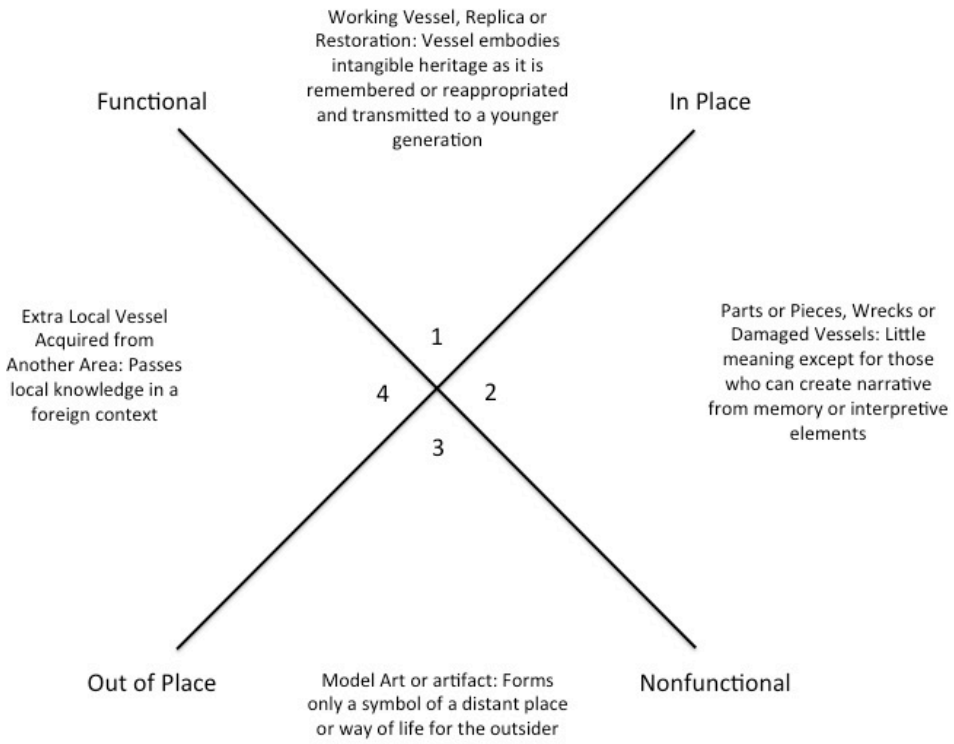

Figure 1: Semiotic Square of Heritage Watercraft. (Adapted from Clifford 1988)

These transitions can be understood by appropriating a semiotic, or symbolic, framework to visually delineate how local watercraft play different community roles and preserve intangible heritage. Using Algirdas Greimas's notion of a semiotic square (Figure 1), the two key terms, function and place, are placed along with their opposites. This means that a vessel may be considered as *functional* or *non-functional*, and *in place* or *out of place*.

For preservation purposes, the square summarizes the several ways in which function and place interact both in reality and in terms of their symbolic meanings. As the vessel is seen by community members and preservationists as "residing" in one quadrant or the other, from "functional, in place" to "non-functional, out of place", the perceived relationships change, along with cultural meanings and intangible transmission for the group to which the vessel belongs. The orientation of the vessel within the framework is delineated vertically, with the highest level of intangible transmission occurring on heritage vessels when ideally operated in their home waters. In contrast, vessels forfeited though idleness creates missed opportunities that retard heritage preservation objectives.

2.6 CHALLENGES AND THE FUTURE OF VESSEL PRESERVATION

The monetary and human resources required to build even a small locally-made boat are immense, with the costs reaching over twenty-thousand euros. Once the building process is complete, another economic level of preservation is introduced, including maintenance, upkeep, storage, training skilled operators, and the creation of opportunities for young people to learn vessel sailing and maintenance skills. Those activities may be as simple as taking friends or family out for the afternoon paid for by family budgets, or more substantive activities like those created by community organizations relying on agency funding. Preservationist skills therefore include establishing nonprofits, grant writing, and youth development, all of which may be difficult for aging fisherman and boat builders to acquire. Creating momentum to plan such projects also requires charismatic vessel representatives who speak for the project and how it serves

cultural preservation. Until recently, vessel preservation and community engagement in maritime activities remained just out of the scope of most municipalities, and regional or national funds for vessel preservation are still rare or non-existent.

One place where the creation of a programmatic framework supports local boats is on and around the island of Murter in central Dalmatia. Found here is a large contingent of traditional sailing craft, with the island being home to many small boat shops and wooden boat shipyards. Each year the *Latinsko 'idro*[6] Regatta attracts nearly 100 wooden lateen rigged sailing craft from the surrounding islands for the festival of St. Michael. The group proclaims, *Latinsko 'idro* is not a boat, not a regatta, not a tourist fest... *Latinsko 'idro* is a reminder of a lifestyle and of the spiritual world. *Latinsko 'idro* is a synthesis of all the actions and methods, knowledge and crafts, all the sea skills and testing, of spirit and believing, of everything intertwined in this area.[7]

This heritage tradition has found its way into the modern era through a regatta, a festival, an action, and involving the participation of seaworthy functioning craft in the region where they were traditionally used. Again, place and function are aligned to give structure to intangible transmission.

The community-building work done by the *Latisko 'idro* organization has inspired several other regattas locally and regionally. Because the functionality and cultural context are intact, the vessel serves as the main conduit of transmission of intangible maritime heritage. Work needed to prepare the vessels and crews is passed down generationally, supporting a relatively large local economy of sailors, boat builders and fishermen. In Murter, there are as many as eight shipyards and additional small boatbuilding shops, as well as riggers, and even blacksmiths. Aided by the economic benefits of regional synergies, these activities jointly support the large fleet of *gajeta* and *leut* that frequent the islands. In turn, the local economic value of the boats maintains occupations

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[6] *Latinsko* '*idro* is a phonetic spelling of the term *latinsko jedro* which means lateen rigged sail, or "sailing boat" pronounced in the local dialect, emphasizing locality, and identity of the boats and racers through pronunciation.

[7] Šibenik Tourist Board "Regatta Latinsko Idro Murter September" Available at: http://www. sibenikregion.com/en/manifestacije-rss-en/438- regatta-latinsko-idro-murter-september (accessed 15 November 2014).

associated with the craft and the intangible heritage of the community.

Such a process is difficult to develop and maintain. To preserve a large fleet of heritage vessels requires a great deal of social and economic capital. While the regatta is a focus for owners, and much preparation goes into boat preparations, many owners struggle to find the money needed to maintain their boats.

Presently, the Croatian economic situation is bleak, and for many, especially young people, boats are not the economic tools they used to be. Fish stocks seem to dwindle and owners with heritage vessels have not yet been able to catch the eye of the tourists that come to the islands in the summer. In past years, local vessels were used to carry goods and people to and from the Kornati archipelago, an area primarily used for agriculture and fishing grounds near the island of Murter. People in the islands made their living from fishing and caring for sheep and olives. Today, for some island residents, annual income is derived from tourism through restaurants, apartment rental, and modern boat charter. Reduction in fish stocks, relative abundance, and other environmental factors have also changed the dynamics of maritime operations

Photo 4: Gajeta and Leut approach the down wind mark during the regatta Latinsko ‘idro (photo by Mladen Ščerbe)

Recent policy changes have also affected island communities. Over the past two decades the Kornati archipelago has come under the jurisdiction of the National Parks, and the new designation and management created changes in the lives and the livelihood of the inhabitants. In 2012, National Park staff made fishing illegal within park boundaries, threatening the basic survival of the island communities.[8] An appeal was made, citing basic human rights to acquire food, and the ban was lifted. This action shows the National Parks staff's detachment from the local communities they govern. While the law may have been well intentioned, and may have targeted larger boats that fish for the restaurants, many subsistence fishermen were affected. [9]

Economic change in what people can do to make a living, and policy change as to what is allowed in the National Park boundaries, can result in a loss of functionality. Without purpose in the community or in coastal society, the vessel is vulnerable to change. As time goes on, the *gajeta*, a heritage craft with a continuous line age dating back hundreds of years may not disappear, but possibly, without protection, it will be changed into a symbol of what it used to be. It could become an exhibition for the national park or a static demonstration to be shown to visitors or as a brand for regional tourism. These are some of the forms the vessel could take if change is made to the object and its functionality is removed.

More generally, *Parks and Peoples: the Social Impacts of Protected Areas* by West, Igoe, and Brockington, chronicles over 20 years of studies on the demarcation of land and marine-protected areas, and how communities must adapt their uses to newly-designated categories. While direct displacement is not often explicit in the founding of the park, and may create more land for subsistence activities and social needs, restriction in other areas such as hunting, grazing, and fishing activities may lead to "conflict, economic loss, and destroy local land tenure systems" (West, Igoe, & Brockington 2006: 259).

[8] Ministry of Environmental and Nature Protection, (2012). "Announcement". Available at: http://www.mzoip.hr/default.aspx?id=12984 (accessed 15 December 2013)

[9] At the time of this publication, May 2016, the ban on fishing has been reinstated, and there and there is no discussion as to when it may be removed

Challenges that threaten the existence of community economic structures also threaten the survival and the associated objects and intangible heritage needed to preserve them, including watercraft activities. The *gajeta* is the symbol of Murter, and its picture is ubiquitous as a brand for local restaurants, apartments, and other tourist venues. The image of the lateen rigged sailing vessel appears on signs, cards and brochures of the island, however little support is given for the difficult task of maintaining and preserving heritage vessels. The boat itself is also a fully functional vessel used by family members to transport goods and gather food on the land on the islands. In order to preserve the heritage of the community, including its consumer "branding", community value must be placed on active participation of on- water activities that engage youth and otherwise facilitate transmission of cultural and environmental knowledge.

Preparing for change should come on the local and regional levels. Networks supporting local vessels, which have worked successfully in other areas, could become a source for the tourist enterprise. In China, for example, heritage preservation accomplished through economically viable cultural tourism is now a significant strategy. Li Wei cites five development strategies that preserve intangible heritage and help local economic development: festivity development, hands-on experience model, central zone model, industrial development, and collective representation (Wei 2013:45). Each of these strategies adds value to the community.

The *Latinsko 'idro* regatta already uses festivity development, but other models can be implemented. For example, the community may create a hands-on experience for tourists to sail or learn about the vessels or designate a central place to go to see heritage vessels in the harbor or on the *riva*, the main waterfront street, as an attraction. To gain political support, such activities may be described, as Wei puts it, as "industrial development" and explain the marketing of intangible heritage as an "emergent cultural industry" (ibid:45). To keep such practical methods from displacing preservation goals, Wei depicts a museum for intangible culture that is not based on passive objectification of objects but on active participation and community involvement. Each of these methods potentially helps to preserve and increase heritage value as they are

shared with the outsider. Here again we can see the dynamic of place and function, now in the context of preservation policy and its economics. In Murter, much of the groundwork for this has already been done, and similar activities, tailored to their local contexts, should be useful elsewhere along the Adriatic coast.

2.7 CONCLUSION

Nautical heritage in Adriatic remains an immensely rich part of the coastal life. Stories, songs, customs and ritual, as well as work ethic and an embodiment of cultural identity often accompany the vessels that have historically been used along the coast. In Croatia, as in many other parts of the world, cultural traditions and historic objects are in danger of being lost or forgotten. This occurs for many reasons, including the lack of resources, the disinterest of the younger generation, and changes in local technology and economies. Through a series of examples, we've argued that the interplay between material vessels and immaterial skills essential to their use is a central feature of heritage preservation.

The material side includes tools and associated devices for fishing or other functional tasks, and the immaterial side includes methods or knowledge involving navigation, seasonal patterns, ecological and environmental relationships, weather lore and so forth. This dual perspective on heritage preservation creates a depth of knowledge rooted in the community and grown though direct intergenerational education. The cultural dependence of the tangible and intangible nautical heritage implies that historic maritime objects and traditions have to exist side by side. As a strategic concern, the vessels' cultural relevance and meaning is changed when its functionality shifts from a working vessel to a museum artifact, from functional use to a non-functional aestheticism, or from the context within the local culture to the object's removal to a place of arbitrary locality. The way in which these observations meld with current preservation strategies, including those of UNESCO discussed earlier, reveals challenges in economic and value identification for communities that

have heritage vessels and struggle to keep them up without the aid of government agency participation.

In conclusion, the relationship of public policy to the realities of maritime life may not be easy to reconcile. While demands on fishing and ecological habitat increase, so does economic pressure. Most commonly, tourism is identified as the common thread between groups and public agencies, and between ecological and economic needs. However, the commodification of intangible heritage is not without its issues. Besides the basic challenges of how to treat and sell culture to outsiders, there is a further dimension that exists in the dynamics and change that occurs when culture is marketed, since "not only can tourism affect a community's daily life patterns and habits, it can induce a set of dynamics that will alter the social construction of the community" (George 2013:282). An important future topic is to explore this intersection of Croatian culture, tourism and the roles of community inclusion in environmental and economic policy decisions and planning.

Arguably, without a consolidation of priorities, preservation of intangible heritage may be missed in the list of concerns for agencies and their community partners. To create programs that preserve heritage vessels, several subtle shifts must occur. First, the value of these objects needs to be recognized; not solely for the symbolic value of the icon of the vessel, but for the intrinsic value of the medium of on-water education and other active forms of cultural preservation in coastal communities. Secondly, the preservation of these vessels must be made a priority, with support to local stakeholders to access program funds, possibly in ways that historic building preservation is made possible for families living in traditional houses. Similar programs exist for restoration of some historic landmarks, such as *spomenička renta* (monument annuity), which is a tax used to support the preservation of "immovable" cultural heritage such as buildings and monuments found in many municipalities.

The same process of validation, protection and financing could be applied to "movable" and "intangible" heritage along the coast.[10] Lastly, because Croatia

[10] From the Croatian Chamber of Trades and Crafts. Available at: http://infos.hok.hr/faq/c_porezi_i_ carine/c9_spomenicka_renta/ (accessed 1 February 2014).

has one of the largest and most intact heritage watercraft collections in the Mediterranean, the necessity of its survival will be a source of pride for all countrymen and European citizens as well. The current risk to maritime heritage is that each day, many locally-built craft fall into disuse, and with idleness comes a loss of heritage, which, like the material vessel, cannot be rebuilt from rotten timbers. However, if shifts in preservation policies suggested here occur, the future of Croatia's maritime fleet, and its historic preservation, will have more than a fighting chance.

Part III. The Heritage Economy: The Role of Symbolism in the Preservation of Technology in Dalmatian Maritime Society

In two localities in Croatia, Komiža and Murter, unique processes of maritime preservation are underway. On Murter, the inhabitants possess and maintain more heritage vessels than any other area in the Croatian archipelago, while in Komiža, the revitalization of an almost extinct breed of vessels has taken hold. In other areas around the country, heritage vessels may be seen as a relic of the past with little social or economic value. In Murter, and Komiža vessel status is elevated, symbolically creating social and economic forces that change the role of heritage vessels, enabling their preservation or reconstruction through social memory. Cultural preservation programs and tourism inevitably will play a significant role in the future of vessel preservation, thereby creating a new economic dynamic that could be a revenue source for future generations. That revenue will help ensure the legacy of heritage craft, even as relationships between program participants and maritime practitioners can lead to problematic issues of authenticity. Policy decisions should support programs that empower boat owners and community member in forms of cultural tourism which allow for training of operators, vessel preservation and the intangible heritage they support.

3.1 INTRODUCTION

> *Many people (inhabitants of Murter) combined sailing with fishing and farming according to the seasons and weather conditions, as they had done in the earliest time and continue to do today. (Bachich 1970:139)*

Several elements arise from this passage written 45 years ago and there has been little change in the truth of the remark. The inhabitants of the island Murter, to this day, resiliently command their leut and gajeta, the locally hand crafted rowing and sailing vessels in and around the islands, just as they have for hundreds of years. The combination of agricultural, fishing, and transportation activities demands that a boat be versatile, able to haul livestock or stones, serve as a good fishing platform or transportation worked lightly under oar and sail. These combinations of abilities and versatility of the boat have been the sustaining features of these two specific boat types in Dalmatia. Even during the most difficult times, these boat and their unique designs have not been replaced. The design, its conventional ability, and the fact that it has been built to suit the local conditions, allows these heritage vessels to be well suited to their role and function in the local environmental conditions and economic atmosphere.

The technological changes such as the invention of the combustion engine and the mechanization of net technology made the large cargo sailing ships, and fishing fleets, such as those in Komiža obsolete, but did not affect the smaller vessels. The gajeta and leut common in Murter were unique because they were a 'family boat' and the large economic forces at play such as competition for international markets did not seem to have much direct effect on the smaller local subsistence agricultural economies along the coast as they did with the induction of larger commercial vessels. It is this type of resilience that allowed the local boats to survive while the advent of the steamship decimated the sailing fleets of the larger shipping and commercial trade companies.

Over time the role of heritage vessels in Murter has changed. The boat itself has persisted in and through changing economies and political structures,

while the ways in which the people of coastal communities have understood it's meaning has changed in several ways over time. As an icon, the vessel design was not altered; all the while dynamic forces of currency, labor and politics shaped the ideals of those who took them to sea. The vessel itself, its design, materials, and way of building haven't changed very much in the last several centuries, however the symbolic narrative has. Today current economic and social forces continue to shape the heritage boat's role and position in Dalmatian society and will do so through the future.

Photo 1: Gajeta Cicibela- built 1938. Betina, Murter (photo by James Bender)

The symbolic narrative of heritage vessels in the Dalmatian islands has changed over time as have the discourse of culture and class during the periods of transition from traditional to modern society. While examining reports from participant observation in the Dalmatian islands during 2009- 2014, which culminated in a 2014 interview and survey of 34 boat owners from the island Murter, many of who are also land owners in other parts of the archipelago,

several themes were shown to have significant importance for the residents of the islands. Each of these topic areas come under the broad heading of household economics and will include time, money or trade, and status in regards to the 'family boat's' role.

Using specific examples from ethnographic data, participant surveys, and individual interviews each of these sub-topics will be discussed to show how the changing vessel narrative has been formed. In addition, possible dimensions of vessel preservation and the owners themselves bring the value of the recognition of these heritage vessel icons in the future to light. Current cultural preservation programs and tourism relies on these artifacts to be representative of Dalmatian identity. Understanding how the vessel is viewed by many as 'a member of the family' or even a 'holy boat' will be critical to creating policy that helps to preserve these vessels in the future.

The survey and respondent data (appendix A) was collected over a three-month period in the summer of 2014. Using the Murter case study, comparisons relate the symbolic importance of heritage vessels around the archipelago, some of which have been completely lost, and others that are in the process of symbolic resurrection, for example, on the island Vis, in the town of Komiža, where the replicas of the falkuša are in process of total revival.

To understand the changes in the vessel's role over time using the parameters set for this chapter, it will be important to delineated changes that were made in regards to the technological advances in history. Again it is important to note that these are strictly concerning the gajeta and leut, the small rowing and sailing type used by families throughout the islands of central Dalmatia. These demarcations will be set in order to chronologically enumerate transitions in society and will correspond to the advances in engineering and infrastructure that comes with modernization. The improvement of technology from the outside, and the innovation of its enterprise had, and continues to have a direct economic effect on society in the islands and surrounding areas.

Understanding the role of technology in a historical context, for example the hybridization of motorized sailing craft, and examining the intersection of technology and preservation in the present time, for example heritage vessels

made from modern composite materials will further illuminate aspects of the vessel's present and future role in Dalmatian society as an icon and economic tool.

The terms heritage and tradition are understood in the cultural context of the Dalmatia somewhat differently than the academic sense. Heritage, *bastina* represents the body of artifacts and knowledge associated with a craft or object. For the purposes of this thesis, I use *heritage* in place of *traditional* when discussing the boats and vessels for several reasons. In English, "traditional boats" has been used to describe boats that have design elements characteristic to an era before WWII. For example the Master Mariners Organization in San Francisco[11] only allow pre-war design as a prerequisite for their members. This is characteristic of the largely gaff rigged and full keel sloops, schooners and ketches common to that time. In Croatia however, the term traditional boat is not used and they are mostly called either wooden boats, *Drveni Brodovi,* and called by their type: *gajeta,* a 5-7 meter double-ended open boat and *leut* a 6-10 meter double ended decked boat.

Secondly, in order to not confuse the term *traditional* as a classification of an era with the boat itself, the term "heritage" will be used to describe the vessel while traditional will be used in conjunction with "modern" to further delineate movements in society and shifts that have been made in the lives and livelihoods of the inhabitants that use or have used heritage vessels. In this case traditional can be characterized by the preindustrial era which was typified by subsistence activities in the island including agricultural and fisheries, while modern refers to the mechanization era of the industrial and post industrial age which begins with the adoption of the combustion engine and continues to the present day. The polarity of these terms also allows them be used as variables in the semiotic square that can further illuminate certain aspects of boat design and function in Dalmatian maritime society.

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11 Mater Mariners Mission statement is "to foster participation in yachting and the preservation of well designed, properly constructed and well maintained classic and traditional wooden sailing craft" Retrieved From http://www.mastermariners.org/MMBA/about/membership/

Philosophically, the preservation of technology represents a paradox. As mentioned in the previous chapter, the paradox of intangible preservation is that in order to preserve intangible knowledge, the preservation of the tangible vessel must be intact, functional, and in its host geographic arena. Herein is presented a further paradox of preservation. That is, if the knowledge is to be preserved, so too must the technology be preserved to the same level of skills and attributes or era that the particular group aims to protect. For example, the fittings on the gajeta and leut as well as the tools and hardware used in its construction are specialized and are crafted locally by the island's blacksmiths, a trade that has long since expired in other parts of the world. While in Murter, the preservative effect of the maritime heritage has allowed an earlier version of metal smithing to persist. If knowledge associated with a specific task is significant and important for the group, then the tools and the economic enterprise associated with that task adhere to the function of the knowledge, which ensures the constancy of the heritage.

The continuity of heritage has relied on an economic need, for example agriculture in the outer islands surrounding Murter that are only accessed by boat. Olive orchards are hard to reach and require vessels that can carry several tons, these types of boats are not available commercially, but the gajeta and leut fill this role handily. Meanwhile agriculture and local economics in the islands are changing. Today flocks of sheep roam the hills and the landowners no longer take wool or make cheese with these livestock, because it is not cost effective. Fish stocks are dwindling and regulation in the newly formed Kornati National Park threaten to limit fishing permanently.[12] In the future, with the changing economic atmosphere, the vessel must find a niche or be left by the wayside.

The commodification of cultural resources i.e. heritage vessels, can form significant economic value. The changing economy in the islands has and continues to shift toward tourism creating revenue mostly for apartment owners and restaurants. During the survey more than 90% of the respondents said that

[12] Text from the law on fishing in Croatian. Retrieved From http://faolex.fao.org/docs/html/cro21066.htm

they were interested in working with tourism however less that 5% actually did have revenue that was tourism related.

Photo 6: Gajeta Falkuša Komiža~Lisboa, Komiža, Vis (photo by Vislav Torre)

Risks associated with the creation of cultural programs for tourism have been noted by several scholars, including Haelwood and Hannam (2001) who point to difficulties and compromise in the presentation of cultural tourism especially to do with the idea of authenticity. Jerome (2008) states that discrepancies in definition of the term authenticity go back to the first official using in the UNESCO World Heritage in Convention of 1977 which outlines guidelines of historic sites. The attributes of the UNESCO's "authenticity" include aspects of intangible heritage which are much more difficult to define and include; use, function, traditions, language, spirit, and feeling.

Community based cultural preservation programs that are managed by the local inhabitants would be one way to help ensure that that knowledge base is passed on with the local definition of "authentic" in its various forms. For

example, the creation a web based platform that allows boat owners to be in direct contact with tourists could be a possible solution to bridge the gap between tourist and boat owners eliminating the marketing and manipulation of local symbols by outsiders.

The combination of these two strategies, community-based preservation of intangible maritime heritage and community-based cultural tourism brings together a holistic form of preservation that allows all parties to participate on an even level with limited outside manipulation. This methodology would bring together several groups; tourists, vessels operators, builders, riggers, blacksmiths, and young people to communally, and economically create a path forward for the vessels that will support preservation of the tangible and intangible heritage of the islands.

3.2 ECONOMICS AND THE SYMBOLIC NARRATIVE OF HERITAGE CRAFT

In certain areas around the Adriatic archipelago, the gajeta and leut have been left to rot in large numbers while in others, people hold on dearly to the ones that are left. The conservation, construction, and maintenance of these boats require a high degree of accumulated skills that are passed on generationally. Many of these trades are disappearing rapidly because the preservation of these vessels tends to be very costly and time consuming with little or any economic gains to be made for the owners of boat. In some areas the islanders have chosen to preserve the boats and heritage while in other areas the skills and know-how associated with these boats and boat building has fallen to the wayside.

To understand the forces at play in the preservation of heritage vessels, one must understand why some member of society choose to extend themselves socially and economically to maintain heritage vessels, while others choose a separate path, one that chooses to leaves these fragile icons to their demise. Over the past 200 years on the island Murter, the number of gajeta has steadily risen with the rise in population. Registration documentation shows that per-capita boat ownership in Murter has remained stable for the past 175 years. This is

contrasted with other areas where no heritage vessels remain and the fleet has been replaced entirely with modern fiberglass motor vessels.

Looking historically, in the records of the year 1840, in *operators dell'Est censuario commune di Morter*, states that that 138 gajeta were held by locals with non-commercial registration. (Skračić 2003:34). It is important to note here that non-commercial or non-fishing registration does not mean that the vessels were not used for fishing or commercial enterprise, but it more refers to company ownership rather than private family ownership. In 1857, the first census year after 1840, in Murter, there were 1084 inhabitants. This equates that, in Murter, there was one gajeta for every 7.8 inhabitants.

In the 2011 census, the population was 2,044, including 19 residents of the Kornati. Comparing the data from the 1840 census and the 2011 data, we find that the number of registered gajeta increases to a total of 188 with non-commercial registration and the population increases to 2044, therefore there is one gajeta for every 10.8 inhabitants. However, if the total number of vessels registered is expanded to include leut, the other versatile family boat of which 62 were registered in 2014, then we see that brings the total to one vessel for every 8.1 people. Furthermore the inclusion of the vessels registered for fishing would bring the total to 304 registered vessels for 2044 inhabitants this then pushes the total to below the 1840 levels with one boat for every 6.7 inhabitants.

Figure 2. Vessel / Population per capita 1840 and 2014

Year	Population	Vessel Type	Registered	Commercial	Total	TOTAL/PER CAPITA
2014	2044	Gajeta	188	21	209	Gajeta 188/ 10.1 Gajeta/Leut 250/ 8.1
2014	2044	Leut	62	33	95	TOTAL Gajeta/ Leut/ Comercial 304/6.1
1840	1084	Gajeta	135		135	Gajeta 135/ 7.8

Whether the count is inclusive of gajeta; gajeta and leut; or all commercial and regular registered gajeta and leut at 10.8, 8.1, or 6.1 inhabitants per vessel respectively, the increase in population plus the increase in number of boats is significant, and shows the resilience of this type of craft over a 175-year period.

The inclusion of vessels for fishing raises several interesting questions concerning the adoption of new technology and the transfer of ownership. The development of new techniques for fishing has required the boat building industry to respond with several different types of hull form other than gajeta in order to haul large nets and operate machinery to be competitive in the fishing industry. The remaining commercially registered gajetas have been transferred and renewed by the owners over the years and have essentially remained a "family vessel" while not participating in the fishing as the registration says.[13] The vessel's registration can be functionally little more than a bureaucratic process in which the owners choose to negotiate while the uses of the gajeta itself whether commercially licensed or not, vary greatly. However, in 1840, when the survey was taken this ambiguous registration may not have been the case.

The accommodation of equipment and deckhouses on the vessel and the literal transformation of the boat from one vessel type to the next shows ways in which the gajeta has changed to meet the needs of the family on several levels, one of which is the addition of cabins and superstructure, which make the boat more comfortable and eliminate the possibility of sailing.

Looking at the architectural enhancement of the vessels form or shape illuminates meaning behind the changes that have taken place in the vessel and what they symbolize in Dalmatian society. Each structural change shows advancement in technology and the utilization of the structural element in order to be the most efficient tool for the required task. In order to understand the conversion and or removal of cabin superstructure, it also requires an understanding of the value judgment of the owners and supporting family

[13] The gajeta owned by the Burtina/Papeša family, whose shipyard is a hub for gajeta restorations and maintenance in the Betina village is commercially registered for fishing, but serves the family in many ways, other than fishing, as do many such gajeta. Incidentally, the family also owns a large trawler that is also retired from the fishing trade.

network and the symbolic function of the vessel as it expands from an economic tool and is elevated to “member of the family” and beyond.

Photo 8: Historic gajeta with modern cabin and super structure.
(Photo http://www.burzanautike.com)

The inhabitants of Murter during almost two centuries have had a similar vessel design serving as the functional link between the outer islands and the main island. The number of vessels per-capital fits squarely in with the per-capita population of the island in these two time points. On Murter, the building and maintaining of these vessels have created a significant economic force. The small vessels are specifically family owned and maintained thus creating a structure of economic support that allows the vessels to persist. The social, economic, and political structures in place continue to help the vessel remain as a keystone in which knowledge and heritage are arranged in and around the islands.

In the “Nature of Technology”, Brian Arthur describes the domains of technology that develop, as emergent, enabling, and mature technology, illuminating not only the economics of the structural support of the technology as it is developed and maintained, but also the stages of technology as it grows and matures within these support structures. (Arthur 2009:151) Several parallels can be drawn between the relational stages and economics on the island Murter.

Since the gajeta first arrived on the island from a shipbuilder from Kortula, Paško Filippi who emigrated to Murter in 1745, it has been the dominant form of seafaring vessel. (Markovina 2012:240) The *enabling domain* was present as the design was altered to suite the needs of the inhabitants of the Murter aquatoruim, tools and techniques were passed on to other builders and trades were developed to support the vessel. The *mature domain* was reached when the mechanization of the fishing fleet eliminated the commercial need for the small fishing vessels however the gajeta and leut did not disappear as is seen with other mature technology.

Presently, in Murter, this technology could be considered beyond these three stages, as the effect of preservation counteracts the innovative strategies of the modern development, and the gajeta continues to persist not only as an earlier form of the modern vessel but also as a symbol of a earlier way of life. The heritage vessel has departed from the linear trajectory of technological advances and achieved an ideological status as "member of the family" given to it by the inhabitants of the island communities.

For residents of Murter, it seems as though valuing heritage over technology becomes a relevant, as it does in many areas around the world where technology is replacing traditional lifestyle. As this value judgment occurs, so to does arise a community structure that supports the heritage object or trade. This heritage economy becomes evident when looking at the economic role the craftsman play on the island.

In Murter, boatbuilders and other maritime tradesmen form a significant section of the islands occupations. Looking at the economic contributions of the 304 gajeta and leut owners boat owners, an average of €1000 per boat per year (see appendix a), in annual maintenance nets over the €304,000 per year being spent. This calculation does not include the boat owners who take their boats to Murter because of the reputation of the skilled craftsmen there. This is solely intra-island expense metric. The heritage vessel economic domain supports a wide array of facilities including shipyards, chandleries, and metal working shops.

The specialized knowledge associated with the maintenance of the vessels has now even sparked a school for wooden boat building.[14] The University of Split in the Faculty of Marine Engineering started the project. Each summer a group of bright students from around the country have the opportunity to work with the craftsman of Murter learning the tools of the trade and the associated heritage. This is unprecedented as an engineering school, not only because it was created to support a technology that is more than 275 years old, but also because of the preservative effect it will have on the island's intangible heritage of boat building, sailing and other maritime arts. The university collaboration in Murter legitimizes and justifies the viability of the economic domain of "vessel preservation" to be essential now and in the future.

3.3 TECHNOLOGY AND TRANSITION: STRUCTURE AND METHOD OF VESSEL CONSTRUCTION

There are two distinct technological transitions that outline three phases that occurred with regard to these boats. The first was the addition of the diesel engine, then the fiberglass construction technique. On each side of these transitions there are societal changes that accompany the innovation of technology. The early gajeta and leut were motorless, relying on the wind and weather patterns that were critical for transportation of goods and people to and from the islands. The mariners had to know the specifics of weather forecasting and local conditions. Going as far back as Greek and Roman times, Kirigin and others (1998) state the navigation in the Adriatic relied on local knowledge and voyages were undertaken during specific seasons.

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[14] Faculty of Marine Engineering vision statement: *Ljetna škola kao mjesto okupljanja i usavršavanja visoko motiviranih mladih ljudi, te priprema za karijeru u maloj brodogradnji. Doprinos čuvanju i proučavanju hrvatske brodograđevne baštine.* Summer school as a meeting place and training of highly motivated young people, and to prepare for a career in small shipbuilding and to contribute to the preservation and study of Croatian shipbuilding heritage. Retieved from: https://www.fsb.unizg.hr/atlantis/upload/newsboard/04_07_2013__19232_Program-LJETNA_SKOLA_MALE_BRODOGRADNJE.pdf

While this navigation was mostly concerned with early exploration, the local movement of agricultural goods also required carful concerns with weather. Forecasting then played an important part as it does with all mariners, even today with state of the art engineering and navigation. Knowledge of safe harbors for dangerous wind conditions and sailing routes empower the mariner and are made known only though experience. This type of local knowledge can be used like charts and GPS are today.

Much of this knowledge is passed down and transferred generationally. For example Tonko Skračić, whose father and father before him were sailors and worked the land in Kornati, is an experienced and expert local sailor. His family gained the name "*Treva*" which is a type of sail that was used in on the engineless gajeta. On one recent voyage with in the summer of 2014, Tonko and myself were making the transit between Betina on Murter and the island Zlarin in a newly constructed leut. The weather was unstable with many approaching fronts.

Photo 10: Tonko "Treva" Skračić on transit to Zlarin in unstable weather. (photo James Bender)

He explained that the advancing fronts and the thunderstorms "*Neverin*" have a curl on the lip of the system. This curl, called the eyebrow "*obrava*", is the dangerous area as the front approaches. As we sailed through the *Murtersko More* (Murter Sea) with several frontal bands that passed, each one was assessed and route was altered to brace for approaching wind that could not be seen. However his forecast proved true, and the pronouncement of the *obrava* coincided with the gusts of wind and the ones without the steep sides and streaking lines on the cloud were much more tame.

Without an engine, relying on the wind and the environmental conditions requires a greater deal of attention to weather before embarking on even a short voyage. The advent of the engine allowed the sailor to traverse open bodies of water with a certain degree of security, thus eliminating a good portion of the uncertainty in the equation. With the engine, the sailor can also say accurately how long a voyage would take by calculating the known speed of the vessel under power. This speed/time estimate is relevant and shifts time from an unknown to a known variable. As a result, the duration of the voyage was no longer reliant on the environmental forces at play in the wind and weather systems.

This early technology could be temperamental and require mechanical skills in order to keep the engine running. Mechanical knowledge can be compared with the skills of rigging, sail repair or boat building, all of which were needed to make a safe voyage, but, in this case, the engine is no longer unified with the environmental factors as are, for example, sail propulsion and the wind. The success or failure of the voyage was no longer reliant on the master's ability to understand and predict the changing environmental conditions.

In central Dalmatia, the gajeta and leut easily adopted the new mechanized propulsion. When existing heritage vessels were fitted with engines the design itself did not change much. A small box was built in the center of the boat and the addition of the engine did little to affect the buoyancy. The design was and is used to carry large amounts of cargo from 4-6 tons. The engine weighing ¼ ton did little to offset the total cargo or space capacity.

In other areas, for example, in Indonesia, the addition of the engine proved to have a dramatic effect on design. (Salam 2008) The fine entry and deep keels of the sailing vessels gave way to large rounded hull that favored cargo carrying capacity. In the 1970s, when the transition from sailing to motorization took place, other problems occurred when the vibration of the engine and possible misalignments of equipment shook the planks right off the frames and several vessels were lost. Since the retrofitting of the engine proved fatal for several sailor and fishermen, the shipwrights altered their construction techniques and the problem was eliminated in future boats' designs[15].

In Dalmatia, the family boats were fitted with engines without design alteration and the improved technology allowed for ease of transportation immediately. Sailors were able to travel up wind. This eliminated rowing, and mariners that were becalmed avoided long hours or days of waiting for wind so they could get home. If the sail and mast were left in place, the boat could be used either way, as a sailing or motor vessel. By retaining design integrity and just adding the engine to the existing frame, the auxiliary powered sailing vessel allowed the boat owners to utilize both forms of propulsion, environmental and mechanical, essentially allowing them to participate in two knowledge systems simultaneously.

The combination of sailing rig with the modernization of the engine made the small boats more versatile for the islanders. If there was good wind then they could sail, if becalmed then they could motor. The economic benefit meant using less fuel and the added social benefit of retaining the skills of sailing was equally important. In other areas particularly with the larger ships the design changes significantly altered the shape and structure of the boat so that it was no longer practical to sail. With the motor, the distances were now easily achievable in a known quantity, making the trip to the outer islands in 3-4 hours.

In the 2014 surveys on the island of Murter, 68% of the respondents reported never taking down the mast. When asked about this key fact, they all

[15] During ethnographic fieldwork Indonesia Jan–Aug 1997 boat builders talked about the changes when the engine was added. A sailor reported he was adrift for three days before being picked up by a passing boat after his retrofitted schooner sank.

responded with pride. There was a period when many boats took the mast down, fully embracing the modern era while others kept the mast. In 2006, with the formation of an annual regatta by the organization Latinsko ‘idro, in order to participate in the race, many boats replaced their mast or refitted cabin tops to accommodate the sails.

Now, with a resurgence of interest in the skills of sailing, the ones who always kept the mast in place felt as though they never lost them, while others had to retrofit their boats and relearn skills. The respondents with cabin enclosures who did not replace the mast to participate in the regattas seemed also to have no interest in sailing either, as if they had embraced modernity altogether and for them there was no going back.

Theories of modernity have been the subject of many sociologists including Durkheim, Marx and Webber. Particularly Giddens (1991) explores the thought and theory of post-traditional society in the work *Consequences of Modernity*. The phase changes that took place on Murter with the addition of the engine aligns closely with what Giddens delineates as traditional, and post-traditional. The addition of the engine as described earlier changes the islander’s perception and relation to time and to the environment. In the traditional society, the main areas of time and space are closely linked to the environment, season, and to the natural changes that take place. For example, speed for a sailor on a windy day will be greater than a calm sunny day even though one may think of the weather as ‘bad.’ The addition of the engine and the reliability of the boat changed similar features in Dalmatia as it was doing around the world; creating a schedule and a temporal framework that could be organized to fit the demands of growing consumerism.

Specific to the central Dalmatian islands, as shown through the survey, a majority of boat owners chose to leave both mast and engine in place. By choosing to keep the mast in place, the environmental knowledge of sailing, the weather lore, and place-based geographic understanding were still relevant. The islanders were able to effectively bridge the gap between two eras, the traditional and modern, effectively creating room for both to coexist.

A more recent technological occurrence that marks the introduction of the second phase of societal transformation was the advancement of fiberglass manufacturing of boats. This change was probably the single most important technological advancement that succeeded in the replacement of the local fleets. Not only did the newer material come ready made for an owner to pick up and put into the sea, thus eliminating several months of waiting while a boat was being built by hand, it also eliminated the annual maintenance period.

A fiberglass boat could be pulled from the water, scraped, cleaned and painted in one day and returned to the water the next, while the gajeta and leut need at least one week and several hours each day of painstaking labor. During this time, each plank is assessed for rot, the seams between planks checked and evaluated, new caulking replaced and then repainted. With the wooden boats, all surfaces must be covered, painting not only the bottom, as with a fiberglass boat, but also the entire boat inside and out, as the wood, without proper care will surely rot.

Again as discussed in the first transition with the advent of the engine, the modern era accompanies the displacement of environmental knowledge (Giddens, 1991). This becomes evident with the advancement of these techniques. The wooden boatbuilder must select planks and ribs from trees based on where they grow and how the grain is situated. This knowledge comes from a deep understand of geographic and environmental conditions.

On one occasion, in 2013, I accompanied a crew that needed to replace a mast for a 70' ketch that was in the north of the country. The mizzen mast was rotten and had to be taken out, and a replacement needed to be found. The owner, local shipwright Kresomir Vidas, had known of a forest that was planted specifically for the purpose of growing trees to be used for the building of masts and spars. The spruce trees, which were planted close together, forced each seedling to fight its way up for sunlight. This meant they would grow straight and tall spiraling up to become stout masts. We went to this forest and selected a tree that would replace the 12-meter mast.

Many parts of the boat are selected in this way. The builder knows a place where the wood from the trees has a particular shape. The turns and curves of the

frames and stems collected from branches that have theses shapes. Patterns are used and pieces examined as the boats grow as much out of the forest as they do from the sea.

The fiberglass boats also changed the manufacturing method. The mold and plug for these types of boats only had to be made once. After that, the skill of building, design, shape and placement of curves was replaced with the knowledge of glues, layering of material and compression forces of plastics. For the builder of fiberglass boats, the only limiting factor is curing rates of the glue and the availability of the molds. As each one is removed the next one is started and several can be produced in a very short time. The boat making process becomes quicker and more efficient with the ability of a small shop to produce hundreds per year. Also time spent on annual maintenance is reduced for the owner. Respondents discussed the role of time for maintenance as one of the main things they have difficulty with.

Maintenance of heritage craft is not only time consuming but costly as well and requires a knowledgeable shipwright to perform assessment and replacement of planks if need be. In talking with the residents of Murter, the average annual cost for maintenance is a little over €1000 and consumes one week's time minimum. During 2013, the average annual income for Croatian citizens was €11,035.[16] This places the annual boat yard service in preparation of the gajeta at roughly just under one tenth of the average annual salary of an individual, a significant proportion. Despite these difficulties, the cost and extra time associated at present, the gajeta and leut are still the vessels of choice for the inhabitants of Murter.

Before the modern era, the reversion to a secondary technology has been extremely rare. Historically, technological advancement leads society in a particular direction. Innovation of a technique, design change, or creative assessment helps the maker, or object to perform work efficiently. In Murter and in other areas where cultural significance is valued over slight economic gains, the role of preservation leads the group to hold technology to a specific time

[16] Retrieved from: http://data.worldbank.org/country/croatia

point in order to maintain connection to a way of life that has or is in the process of disappearing.

In some cases, the reinvention of an earlier technology, particularly sailing vessels, has been found to create a sort of nationalist symbol in which culture and identity can be organized around. The vessel symbolically supports an earlier or remembered and even contrived idea of cultural identity of the group or its inhabitants. Linnekin (1983: 246) found that in the islands of Hawaii, that the heritage sailing canoe project of *Hōkūle'a* expanded upon a hodgepodge of practices, some of which were from distant islands, like the kava ceremony and others that had only been recorded in engravings from the early Anglo explorers and had no other record in native oral tradition. The form of the vessel, the mythic voyaging canoe that no longer existed in Hawaii, was utilized as a symbol in a response to a perceived loss of identity from other groups that lived on or around Hawaii. The creation of the project empowered the Hawaiians to feel a connection to the land and livelihood of the original inhabitants as a sort of cultural revival.

While in Murter the inhabitants never lost the skills, knowledge, or ability to maintain and sail their boats, other island communities in Croatia have had to recreate them. The most prominent example of the resurrection of the traditional vessel in Croatia comes from the island Vis in the town of Komiza. This is the story of the falkuša, the 10 meter open fishing vessel. While the Falkusa is also considered a gajeta and is called that by the inhabitants of Komiza, due to the shape and unique features of this boat there are none like it anywhere in the Adriatic or the world. The falkuša carry high removable bulwarks that enable it to be converted from a safe offshore sailing vessel to a nimble low freeboard vessel able to retrieve nets with efficiency and grace.

The revival of these vessels has had immediate success, and, though the race to the far off islands of Palagruza, also invokes a sort of symbol of cultural identity for the inhabitants of Komiza. The falkuša, which no longer fish the waters around the islands, are particularly photogenic, and have a fast and seaworthy character. Here also, the boats serve as a cultural symbol around which identity can be supported. The structural component of the sailing vessel upholds

not only knowledge, but also the values and ethics of hard work, bravery, and seamanship, symbolically though cultural memories, as well as though the perceived and verified endurance of the ancient boat race.

Mentioned in the previous chapter, the last remaining traditionally rigged falkuša was wrecked in a storm, and then was preserved in the town's museum. The case of the recreation of the replica falkuša is an interesting juxtaposition of a traditional vessel made with modern techniques. The goal of the Profesors Bozanić and Salomon and other involved in the project was to build a functional falkuša so that the knowledge base of fishing and sailing could live on, however, the method used to build the replica falkušas were done using modern cold molded building techniques and composite manufacturing, thus combining the best of boat worlds; a heritage vessel that is made with modern materials.

Komiža was not, and had not been a town of boatbuilders, historically the boats were built on the island of Korčula. The town of Komiža was founded on fishing and the tools and element that Bozanić and his group were interested in preserving were the boats and associated skills, songs and stories. The knowledge base for this these skills were and are as in Murter intact remaining with few of the local captains and have been successfully transmitted over the past 20 years since the beginning of this project. However the skills needed for the building of the falkuša where not readily available in the historic sites where they had been built on the island of Korčula. The group decided to use the modern building techniques, which would enable the boat to be shipped to festivals and be more stable out of the water that the standard plank on frame construction

Similar to the way that the addition of the engine in a sailing vessel allows for a hybridization of tradition skills in modern times and essentially allows for a dualistic notion of identity in a modern and traditional sense, so does the heritage vessel built with modern materials. The goal of preservation is still available to the practitioner and the enduring intangible heritage is relatively safe for future generations.

3.4 THE DUAL NATURE OF TECHNOLOGY AND IDEOLOGY

Specific symbols in the preservation of technology serve the communities to enhance life and meaning for those who use them. Art and icon merge to form ascending meaning for those are able to understand and relate the intricacies and pleasure of the practice as a tool, method, or way of life. Meaning is built as knowledge is arranged around them; just as the heritage vessel in Murter has become a "member of the family" for some, Skracic (2006) states that it has become a "holy boat" for others.

The preservation of technology has never been done in such large number as with the preservation of transportation. All around the world are classic car races and boat races, and the island of Murter is no exception. These enthusiasts race in older boats that are slower than high tech racing boats or speed boats, but the symbolic value of their craft is intact.

One way to examine the role of technology in the central Dalmatian archipelago is using the semiotic square analysis (Figure 2). The square again proves to be a useful tool in examining the terms that can be unpacked to understand the forces at play in the role of heritage vessels in Dalmatian maritime society. The axis of the square is defined by the terms in opposition to themselves, juxtaposed with a relevant but comparative set of terms. In the previous chapter I used functional, non-functional and in place- out of place as the terms to define the preservation of intangible heritage. While in this section, we are using the square to describe the forces that allow the vessels to persist with traditional tools, knowledge, and elements in modern times.

The opposing terms used will be *traditional* / *modern:* and *preservation* / *innovation*. The term *traditional* refers to time period that is characterized in Dalmatia by the non-mechanized subsistence agricultural period in distant and recent history, referring to a way of life that can best be understood in opposition to the second term *modern.* The term *modern* also can be understood in opposition, however the characterization of the modern age illuminates the changes that have occurred since the introduction of mechanized or technological era.

The placement of the terms *traditional* and *modern* is meant define the ends of a chronological spectrum. The delineation helps understand how the object or icon fits in the spectrum of historic context in the present time, as a horse and carriage on a busy highway might seem out of place, likewise a hovercraft on a farmer's field, illustrating traditional and modern respectively.

The terms *preservation* and *innovation* also are related in a spectrum and can be understood in opposition to one another. These two terms can be described as forces. The force of preservation tends to hold an object or an icon to a particular time period. For example, in the United States enthusiasts of the open cylinder engines often have meetings or come to fairs run and display their non-oiling engines. They have chosen a particular time period and a type of technology that they favor and arranged clubs, meetings, and journals to preserve knowledge and parts of the obscure mechanisms. The force of innovation leads the object or design into the many variations that build on efficiency or need. For example the telephone evolved from a large box to a small powerful communication device as powerful as a computer, and the force of innovation continues to pull it to the next emergent stage.

In this square, each quadrant outlines a specific type of watercraft that can be shown in their specific forms. Movement of the ideas in a vertical axis of the square shows a progression of vessel type from the most preserved and traditional of the heritage vessel type, located in the first quadrant to the most modern, innovative vessel with an experimental design that is innovative in all aspects of form and materials and may only be a distant relative of the earlier design, hardly distinguishable, only sharing the similar function of the earlier vessel in the third quadrant. For example, in the first quadrant, the historic replica *Kurnatarica* which was based on painstaking research, built without engine and not only showcases traditional methods of sailing, but also fishing equipment, winches and other gear as well and was built using techniques present at the time for example plank-on-frame construction. In the third quadrant, the most advanced form of vessel found in this region is the rigid bottom inflatable. This lightweight fast boat is the preferred mode of transportation for those who have the means to have the latest craft.

The role of innovation illustrates the advances as they are built on themselves and new models replace older ones as minute problems are solved in order to relieve some deal of inefficiency. On the other hand preservation's aim is to combine a minimum of technological advances in an existing form as to serve as a placeholder for an ideal of a certain time or place.

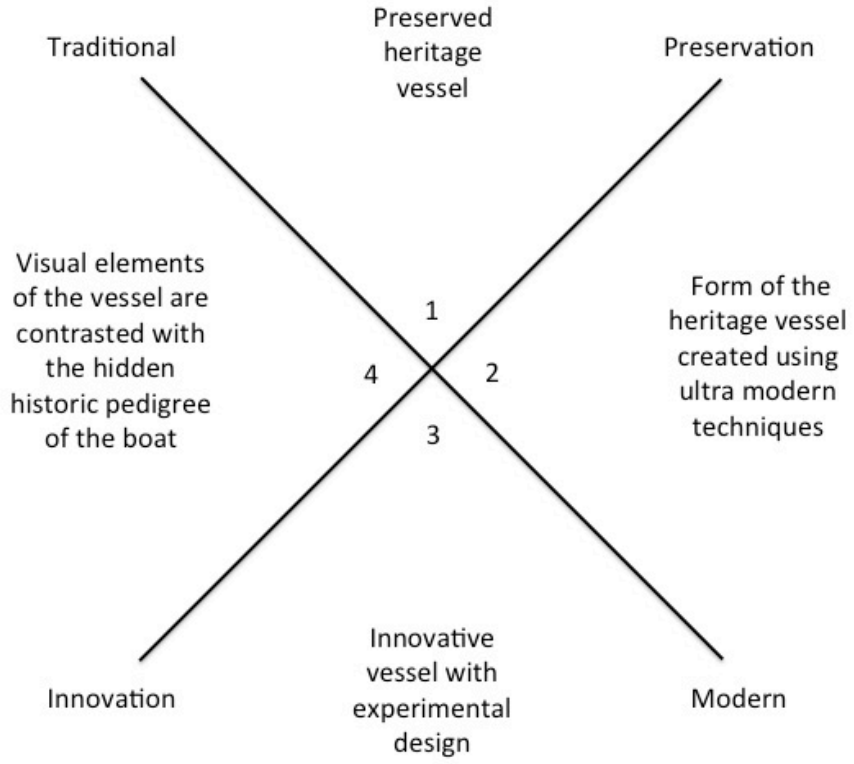


Figure 2. Semiotic Square of Vessel Technology.

While the vertical axis of the square delineates the rise of technology going from a specific point in history in which the vessel is to be placed, for example 1740, the date that is listed as the introduction of the gajeta to Murter, to the present day. The transverse axis illustrates a spectrum of observable values, illuminating the ideals held by the owners and organizations that build and maintain the examples listed in the hybridized craft the second and fourth quadrants (Figure 2).

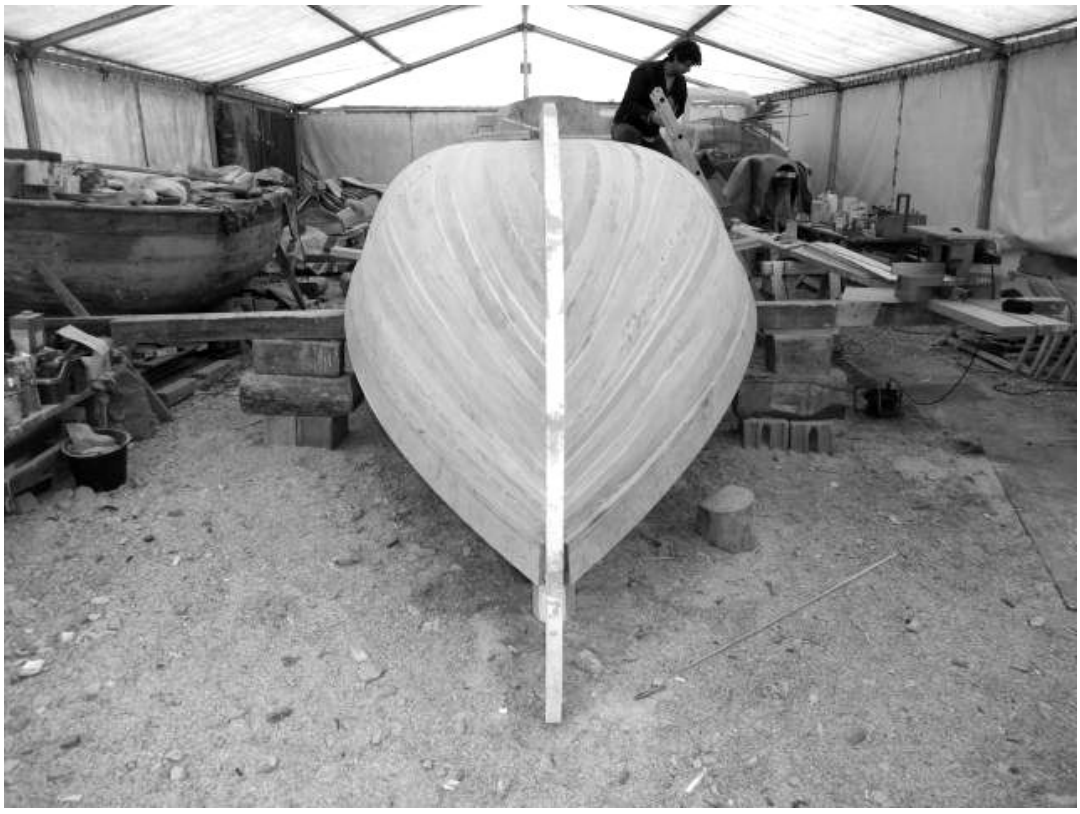


Photo 9: Gajeta falkuša built using cold molded lamination techniques (photo: http://www.betinskagajeta1740.hr)

Both of these examples incorporate the modern or innovative techniques combined with historic elements, however they are added to either the observed or hidden areas of the vessel. For example, the recent replicas of the falkuša were made to have the form of the heritage vessel, but are created using ultra modern laminated techniques using hi-tech glues and epoxy bonding coated in fiberglass. They represent a sort of compromise of material, but not function. For all practical purposes the vessel is an actual replica in all ways except under the skin. Even the most careful observer would be pressed to find any evidence of high tech materials, but they are there.

In addition, the motor is a piece of technology, as well as radar, GPS and all other electronics that can be hidden safely away while on exhibition of the boat as an actual historic replica. In this way the replica become a hybridized modern craft that exhibits the qualities of heritage though its function. The combination of *modern / preservation* is evident in the second quadrant.

In the fourth quadrant, the visual elements of the vessel are contrasted with the hidden historic pedigree of the boat. This is found in examples of the many gajeta and a recently discovered falkuša[17] that have a retrofitted cabin top that disguise the real identity of the vessel under the cover of bulkheads, dodger and companionways. The owners, usually fishermen, occupationally the same as their predecessors, spend a great deal of their life on the sea and the added protection of the cabin enclosure alleviates some of the hardship from weather, and protects them from sun exposure. The traditional craft, however authentic, like the workboat, with innovative cabin design and other experimental structure and technology in place, thrusts forward and seeks to bring the gajeta or other historic craft into the 21st century, so too does the replica vessel made with ultramodern techniques.

3.5 THE HERITAGE ECONOMY AND THE COMMODIFICATION OF CULTURAL RESOURCES

Thus far in the chapter, it has been shown how the role and symbolic status of heritage craft in Murter has been critical to the survival of this type of technology and a discussion how the revival of craft such as the falkuša exhibit similar notions of symbolism though community identity building projects which support cultural narrative as do the gajeta and leut. The elevation of symbolic status has allowed for a value to be ascribed to the heritage craft in these coastal communities can be measured through community's perception of that object as it that preserves them.

For generations, in Murter, the heritage vessel has fulfilled a role and a need, and that need is in the process of changing. The vessel as a sturdy form transport to the islands for agriculture and fishing is in the process changing due to shifts in economy, environment, and policy; such as regulation on fishing and the dwindling fish stocks. The creation of the Kornati National Park, formed in 1980, has turned attention from the agricultural way of life to one that includes

[17] The falkuša *Jegulica* was recently found on the island Hvar and has now begun the process of reconstruction and restoration, and a second falkuša *Vinka* was located in the island Drvenik and will begin restoration in summer 2016.

support services for international and Croatian tourists. Shifting occupations in the islands point to tourism as the main income generator at least in the summer months.

In Croatia in 2014, total travel and tourism revenue reached 27% of GDP[18], much of which comes from sun seekers on the coast, headed for the islands in search of the crystal blue waters and sunny beaches of the Adriatic. The report also stated that 29% of Croatia's employment came from that sector. In the Kornati islands finding the intersection between culture and tourism has been a notion that for many is hard to navigate.

The satellite agricultural communities in the relatively close sphere surrounding Murter are places that are somehow removed from mainland life. When the residents travel to the islands, several differences become evident. There is no or very little telephone reception here, there are no cars, and land transportation is difficult. There are no shops or stores. The food that is eaten is gained from fishing or limited to what the residents bring or harvest from the land. As these houses also serve as second houses for the inhabitants, this creates a further extension of a separate but parallel life and lifestyle that exists.

In these places, residents are in contact with the agronomic system that has been in place for centuries and too, like the sailing boat, are closely tied to the environmental conditions and accumulated knowledge. Similar to the way that the sail and the motor allows the residents to participate in two separate systems of maritime knowledge, the island house provides access to the stories, songs, and work ethic, the intangible agricultural heritage of earlier generations. Outsiders seeking to experience the "real" Croatia though ethno-tourism also may value these traits.

Up to this point there has been very little ethno-tourism in the Kornati islands and the heritage vessels do little more than adorn the brochures of tourist pamphlets and restaurant signs. This would make a happy conjunction of the need for skilled ecologists and the agriculturalist who as previously stated share a grater connection with the environment based on the cultural intangible heritage

[18] World Travel and Tourism Council report on Croatia. Research on the total contribution of travel and tourism in Croatia 2014 GDP. Retrieved PDF from: www.wttc.org

of the lifestyle of the outer islands, however the assumption that the heritage craft and their operators can suddenly burst onto the market and start bringing visitors out to remote communities to witness authentic village life is unrealistic. If anything the heritage craft must compete in the market for footing that allows even a portion of the vessel to work.

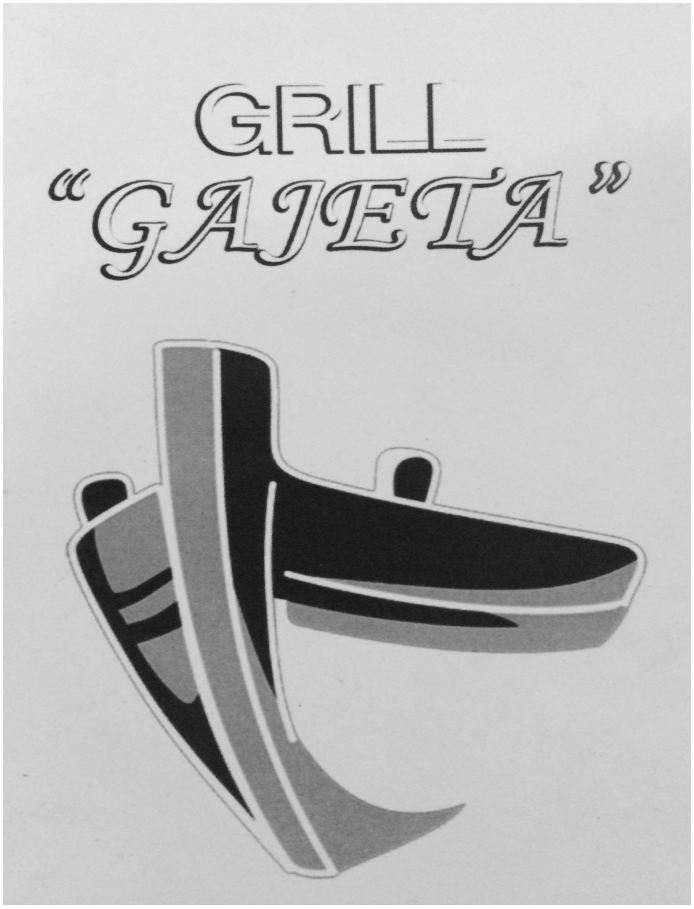


Photo 9: The gajeta image used for restaurants illustrates the cultural connection to the heritage vessel as a key symbol for tourism.

Presently there are very few, if any, opportunities for tourist to alight on such excursions even though tourist in Murter sit, stare, and mingle amongst the docks where the boats are up to 20 gajeta and leut are tied along the main promenade. For example in the inner harbor in Murter, several restaurants and cafes surround the dock and people eat dinner while looking at the wooden craft

in various sizes and colors and must walk past them to board the underwater harbor tour.

Departing every 30 minutes, the submarine styled glass bottom boat takes tourist around to show them the marine flora and fauna, day and night. In the summer months the restaurants are packed and especially at night the sub sea tour, which is recognizable brand and attraction that exists on many Dalmatian islands, has a line of people patiently waiting for their turn. Larger passenger ships, modern inflatable craft, and sailing craft and speedboats provided by rent-a-boat enterprises fill the waterways while heritage craft struggle to save money for annual maintenance, and do little or no tourism. It is as if the whole economic structure of the tourism industry has managed to side step this one aspect of maritime life.

Tourism has been thought of as a way to gain revenue in rural areas for some time (Ribeiro and Marques, 2002). The strategy known as Integrated Rural Tourism (IRT) for development in remote regions brings in revenue by capitalizing on existing natural features and cultural resources. Crawly and Gilmore state IRT's objective is to "promote environmental, economic, and sociocultural sustainability in tourism and to empower local people and thereby contribute to the sustainability of the wider rural system." (2008 p. 318)

However, this discussion does not include areas where the tourist are already present, but the cultural resources are disregarded. In this case, application of IRT in order to bring revenue and a role to heritage vessels and their operators requires a rethinking of the way in which tourist are engaged needs to be directed with local cultural resources in mind in order to ensure their survival. However lessons learned from the IRT method could serve as a structural framework for development and would ensure a holistic approach.

Through examination of this method applied to the case study of Murter finds that strengthening several factors could create an avenue heritage vessels and other rural economic enterprise to making their way into this economic domain. A community-based leadership structure among owners, economic support, training in skills associated in marketing and tourism would be of great assistance to the rise of the heritage vessels in the tourism marketplace.

The idea of vessel ownership, where each master must prepare and maintain their boat so that they can be ready for the needs of the family is one that permeates the culture. Vessel ownership is not a simple undertaking. Owner's pride and responsibility, as well taking the needs of others in the family is considerable. If the boat was to be ready to be used in tourism the owner would need to be able to reconcile all these factors for the gain of profit. There is also an issue of fairness, which boat would be first, how would the tours be arranged.

Capitalizing on existing organizational structures in the island's boating organizations or *Udrugas* would be necessary to the implementation of a leadership structure that would allow for fluidity. One where owners could come and go, and align themselves in a structure earn a share in the tourist revenue while not compromising the responsibility to family members when need arises to go to the islands.

Briedenham and Wickens (2003) discuss the clustering of activities in rural tourism as an appropriate method. Idealizing this notion could not only capitalize on existing tourism networks but also expand the types of activities and cultural offerings presented in the islands. Having a centralized leadership structure, or hub that is managed by each of the island's *udrugas* could be a unique opportunity to deliver tours to the islands, harbor cruises, and onshore activities and products, some of which could be the agricultural products produced by the families themselves.

Some form of centralized leadership or community organization would also help in the training for touristic enterprise. Workshops, sessions, and coordination of outside speakers to come to facilitate projects in tourism would be a vital step for organizers to undertake so that the members of the group would gain the skill necessary to work in the tourist trade.

The last and most critical aspect of development of this type of ethno-tourism in an already busy marketplace, and is a barrier to heritage vessels becoming a touristic enterprise is investment. Investment is key to any business and while the heritage vessels in Dalmatia are maintained and each year thousands of euros go to the upkeep of the boats, there has not been an investment in the boats themselves as the island's cultural resource. Just as the

sub sea tour required an initial investment to create the business, so too would an initial investment have to be made to build the infrastructure that would allow tourists to, find, book and go out on heritage vessels.

One way to do this would be through direct booking though an online platform. The boat owner would create a profile and the website would list several such owners in the area. The local tourism board would help to disseminate the address so that visitors could book tours and pay online. In the online business model, legitimacy and trust would need be built instantly and the boat operators would be held responsible for their role as providers. (Hoffman, Novak, and Peralta 1999) The decentralized booking procedure would be facilitated though easy to manage web application and be in line with the bottom up approach of IRT. Several websites in Croatia already use this method successfully especially with the booking of apartments hotels and accommodations.

In an article describing World Bank projects on indigenous lands in Argentina, Verner (2009) cites that in 75% of project funded were to develop cultural touristic enterprise. It is obvious that around the world and in Croatia that cultural tourism is and will continue to be a major source of investment. It is also understandable that there are challenges associated with investment cultural tourism. On the other side, if the role of the heritage vessel is not maintained as an economic force in the islands, then it will cease to operate. In order to help local the boat owners continue to maintain the vessel as piece of cultural heritage, then a role in the modern touristic economy will be critical.

The World Bank article also states several principals in which enable the indigenous inhabitants to successfully manage these programs. These are in line with the IRT best practices and include; indigenous sovereignty of lands and territories, inhabitants must receive full benefits from the tourism transactions, programs are under indigenous management, the should be monitoring of tourism's environmental and cultural impacts. The government also has a role in

which they support indigenous groups for planning, and capacity building to help to build empower indigenous to take up the key decision making roles[19].

During the summer of 2013 and 2014, I had the opportunity to conduct a program that characterized many of these and the IRT attributes. However, the program was not for tourist from abroad, they were local students who were engaged in a heritage preservation program with the Adriatic Maritime Institute an *udrudga* whos mission is to promote the preservation of maritime skills using heritage vessels as a platform for youth development.

Photo 10: Student collecting figs in the Kornati Island (photo James Bender)

The family of Zvonko and Luce Skračić in the village of Kravljčica on the island of Kornat, are one of the few families who still work the land. The family makes oil from the natural grasses, namely sage, that grow in the hills of the remote islands. This product is sweet aromatic oil that has innumerable uses. The students sailed out to the island to help with the agricultural work, to learn about the environment, and practice maritime skills, sailing an engineless gajeta though

[19] Retrieved from: http://siteresources.worldbank.org/INTCHD/Resources/430063-1250192845352/EnBreve144.pdf

the archipelago. It is hard to register the value of this experience; sailing and engineless boat, fishing for sustenance, working the land, collecting herbs and berries. It is all relevant several reasons, especially for young people; the connection to the land, the break from electronics, a creating a source of identity for the students. As noted in Part II the end result is a notable amount of self-efficacy as observed by the attending psychologists that remained with the students when they returned to the mainland. It also benefited the community by placing a value on the heritage trades that serve a source of pride for the inhabitants of the village which became evident though discussions with village members after the program was complete.

For the students, the visit provided them with a glimpse into an alternative lifestyle, where not only was the pace of life different, but also the schedule. The ability for instant gratification was removed and was replaced with work and labor that brought tangible results like food or a product at the end of the process. The preservation program was successful for all participant and practitioners. Each of the students left with a gift that was not present before. They got a chance to live a traditional lifestyle that they may not have even known still exists and the Skracic family were empowered in their ability to share the experience of island life and gained economically for their service. Our heritage tour in the Kornati islands shared several relevant parallels to the touristic operations. The comparison and acknowledgement that heritage preservation program perform similar services is relevant in the discussion furthering the economic role cultural enterprises.

There has been a continuing discussion of the commoditization of culture and the ongoing packaging of cultural tours for consumption by tourists and other group who arrive to various locations around the world as noted by Halwood and Hannam (2001) in regards to perceived Viking culture and with Bunten (2008) in Alaska. In *Sharing Culture or Selling Out,* Bunten relates a story of a Tlingit tribe member relating the historic events of a battle with Russian soldiers. The story is told to outsiders and related in a manner that objectifies them and "exotizes" thier position. "Through self-exotization as the other, difference itself becomes a commodity that tourist can consume."(Butner 2008, 357) I would like to suggest

that the education activities that were happening in the island were very similar, except the villagers were trying to bridge the gap between the student in order to identify themselves as "same".

Through the process of learning the trades from the inhabitants on the islands, the students became integrated as contributing member of the community. This self-conceptualization of the "sameness" related to a task or objective was helped by a determinate identity of Croatian or Dalmatian as they took part in tasks as their ancestors participated. As an instructional methodology, the relative spectrum of identity of sameness helped to motivate the students. By belonging, the education aspect and social aspects were reinforced and the end result was increased cooperation in the task at hand.

This necessity of sameness, in the Kornati experience, allowed the students to have a greater degree of motivation to do what they previously thought to be difficult. Once they were able to justify their actions with the additional level 'learning about their ancestors way of life' the actions were easier to complete. Additionally, the villagers also liked teaching the students, and their perceived "sameness" was built in to the intrinsic strategies of the educational pedagogy used by the instructors.

In *Defining Tradition: Variations on the Hawaiian identity*, Linnkin (1983) discusses a definite tone of nationalism surrounding the Hōkūleʻa sailing program. This perceived nationalism might have come from the necessity of sameness required to formalize the education and to mentally prepare for a voyage that in recent history was deemed inconceivable. The conceptualization of sameness with their ancestors in the Kornati experience as in the Hōkūleʻa expedition was built around ones identity and this sort of pedagogical awareness was harnessed as a motivational strategy for the members of the crew.

Going forward, the acknowledgement of 'sameness' and 'otherness' are going to be important in the creation of cultural education and tourism programs. As Croatia enters into the European Union, these cultural hot spots undoubtedly will be acted upon by the economic forces of tourism though commodification and preservation and though educational and revitalization projects. Caring for, creating, and reviving cultural practices, tools and objects will be at constant odds

with the ideas of functionality, authenticity, and meaning in the local, national and international contexts. Creating space so that local heritage can exist must be nurtured alongside other economic revitalization programs otherwise large-scale industry will surely retain the complete market share.

3.6 CONCLUSION

The heritage vessel's place in society, when it is seen as a fundamental part of the structural family unit, has helped to uphold a way of life that has disappeared in other islands along the Dalmatian coast. Exploring areas where preservation has been current to the present day, in Murter with their gajeta and leut, and ones one that are in the process of resurrection Komiža with the falkuša, allow for differences to be understood.

During the transition to modernity, the role of the heritage vessel influenced societies' relationship to the environment through the mechanization of the vessel. However, in Murter the preservation of the mast and sailing skills allowed the inhabitants of the region to maintain and curate a large body of accumulated maritime skills and knowledge. The gajeta and leut have, with the successful hybridization of new technologies, kept the place of the heritage vessel secure until very recently. While in Komiža, the mechanization of the fishing fleet and increased competition from international markets led to its idleness. In Murter, the boats design and versatility created an economic role for the vessel that could not be replaced by any other watercraft.

The elevated symbolic status of the vessel when seen as a family member has, in Murter and the surrounding areas helped with its preservation. The economic demands placed on the family to maintain the boat has been justified through its role, economically valuing its heritage over a new easier type of transportation. The vessel, being built by a family member who may be living or passed away, further retains connection to the vessel. Of the respondents surveyed 61% of the boat owners built the boat themselves or reported personally knowing the builder, again elevating the importance of the vessel within the symbolic sphere.

For local inhabitants, relationship with the areas of land around the island of Murter including the Kornati islands and Modrave represent an inherent need for the families to have and maintain the vessel as the link to the land and agricultural economies they support. This also has shown a dualistic lifestyle to emerge. The remote lands represent agricultural, traditional, and preservative, while and the main island represents the modern and technological.

This type of relationship with the land also provides an environmental aspect that is not present with boat owners in other areas of the country. The agricultural practices that have remained in place also help to insulate the changes that happen in the modern society on the main island of Murter and the mainland along the coast. The preservative effect of this economic value then translates into an ongoing project of local groups and organization to facilitate the production and upkeep of the vessel and associated heritage.

Through this discussion, it has become evident that three stages of preservation specific to vessels and other heritage trade objects exist. These become apparent as economic forces act by valuing the cultural artifact through the process of preservation. These stages are intact, transitional and conceptual.

Intact cultural artifacts have the tools, elements, and knowledge in place, however require maintenance through education and intergenerational transmission. Murter with the gajeta and leut is an example of an intact preservative phase. The fleet will be intact, however, without additional support through the present era of globalization and ecological transitions, the vessels and associated knowledge and skill may be difficult to maintain. Creating an economic role for the vessels will be critical for their survival. Valuing heritage, locally and internationally can create a niche in tourism. Through following best practices from IRT strategies will help to disseminate value to local inhabitants in an already burgeoning global market.

The transitional cultural artifacts have part of the knowledge intact but the tools and element need to be recreated and can vary on a spectrum from intact to conceptual depending on how much knowledge is remembered. The falkuša and the fisherman of Komiža are an example of this. The body of knowledge is present intangibly though living memory, however there is only one remaining

historic falkuša, and three replicas. The symbolic importance of the falkuša is critical here for the revitalization if the fleet. Since the first replica was built, the boat has become a national symbol of the heroics of the sea. Rebuilding of transitional phase heritage objects such as falkuša require more capitol and greater support initially than do intact phase objects however once the tools and elements are in place IRT objectives with support of local government must be utilized in order to rebuild the role of the object.

Lastly, the conceptual cultural artifact has no tools, elements or knowledge intact and must be borrowed, recreated, and scaled to the purpose of the group. While an example of this may be a recreated form, such as through an archeological find, the local living memory does not include stories and or remembrance of its heritage. For example the Hawaiian canoe project. Groups can appropriate these objects, but care must be taken in order to ensure authenticity of the associated heritage reconstruction that in turn helps to shape the identity of the group.

Each of these demarcations relates a particular skill, trait or livelihood that has been present in the society in the near or distant past. The preservation or revitalization of these relies on the need of the society to preserve this technique, trade, or vessel. Ensuring preservation also means ensuring the economic role of the trade or discipline.

In order to make certain that a tool or a vessel will persist in its functional integrity, it must be economically viable for the group that aim to plan its preservation. There must be value ascribed to knowledge, i.e. heritage, that in turn can ensure the survival of the techniques.

The combination of programs directed locally, in the form of heritage preservation and externally through tourism provides a new role for heritage vessels. The preservation programs directed at local inhabitants require the necessity of "sameness" in its pedagogy and commoditization of heritage in tourism requires forms of "othering" to enliven experiences for outsiders. The building of symbolic value of an intact, transitional, or conceptualized artifact may be subject to commodification of cultural enterprises and has be said to build nationalistic symbols in order its maintain value (Pretes, 2003). It is not the role

of the outsider to judge the perceived meaning of preservative efforts, only to acknowledge that these efforts are necessary for the survival of the cultural heritage in an increasingly homogeneous or fractured global cultural sphere.

PART IV. The Maritime Heritage Trail: Repurposing an Existing Interpretive Strategy for the Preservation of Intangible Heritage

In the Adriatic, the importance in tourism of the small rowing and sailing boats, like the gajeta and other heritage vessels, is clearly relevant, as icons of heritage boats adorn brochures, logos, with their names bequested to hotels and restaurants. As a symbol, the gajeta stands for the heritage of the islands, and the ethics of the place; these constitutean intangible treasure which highlights the lifestyle of the agriculturalist society. However, the distinct experience of the gajeta, or other local boats as a relevant form of tourist activity is largely missing in the offerings of local tourist information centers and nature parks where they reside. This paper outlines a heritage trail interpretive strategy, which would create a network supporting small local tourist venues that showcase intangible maritime heritage of the coast and islands. The methodology creates an alterative to what is primarily leisure-based tourism that Adriatic counties like Croatia are experiencing in all but the largest cultural monuments and ecological reserves which provide avenues for community-based ecological management in remote regions.

It is at the local, community level where
successful trail networks begin.
–Brandywine Conservancy, *Community*
Trails Handbook, 1997

4.1 INTRODUCTION: THE CONCEPT OF A HERITAGE TRAIL

The Croatian coast and islands from the south at the border with Monte Negro to the northern border with Slovenia spans more than 1777 kilometers. Croatia has more than 1200 islands. When the coastlines of the islands and mainland are combined, this 5,790 km makes ¼ of the Mediterranean total. 66 islands have settlements of varying sizes, each with a rich cultural diversity that can be found along the way. Different coastal region and islands have distinct cultural traits that can be seen, in speech, as on the island Vis where the inhabitants of Komiža and Vis town use a different common dialect, and dress and food are also distinctive for each settlement in the archipelago.

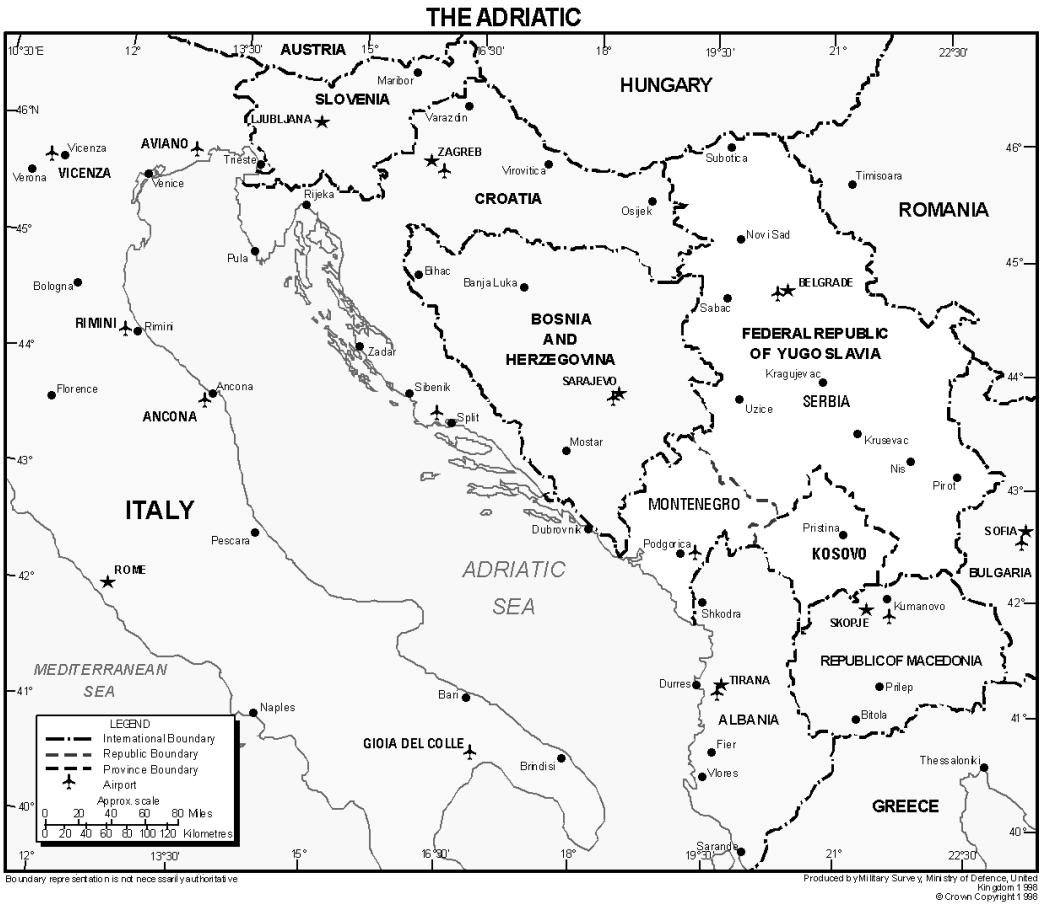
The differences in culture can also be found in the varying types of rowing and sailing boats found along the coast, heritage vessels[20]. Each locality has developed its own type of distinct watercraft, as with the two types of small sailing boats, the *gajeta* from Murter and Korčula, the small cargo boat, *bracera* from Brač, the offshore fishing vessel, *falkuša* from Komiža, and the utilitarian skiff, *batana* of Rovinj. There are many more types of vessels that exist and are still being used along the coast, but these are just a few of the more prevalent examples.

To this point in the thesis it has been shown how each one of these vessels represents a craft that has been born from the local environmental conditions, as well as the economic role and purpose the vessel holds within the society. The shapes, materials, and technology that integrated these environmental and

[20] The term 'heritage' is used in place of 'traditional' vessels as it is a more appropriate term that the fits with local nomenclature of boats as part of heritage or *baština.*

societal forms have created a diversity of craft that is unique not only in the Adriatic, but also in many bodies and waterways around the globe.

Presently, there is not one unifying museum in Croatia such as a national museum that represents the maritime cultural resources of the entire country, and undoubtedly this would be difficult with such a broad range of groups to represent accurately. This would also be counterproductive to the preservation of intangible heritage. Removing a vessel from its locality would inhibit the intergenerational transition of intangible heritage, which is passed down within the locality of the vessels functional role as was discussed in Part II.



Map 2: The Adriatic Region proposed area for an Adriatic maritime heritage trail (graphic retrieved from: http://www.mapcruzin.com/free-maps-serbia/airfields.adriatic.gif

It is for this reason that the Adriatic maritime region would be an excellent candidate for a national theme trail. A string of relevant sites along the coast and in the islands would allow the boats and the associated heritage to be curated by the local inhabitants, who have for centuries have built and operated

these vessels in the places where the intangible knowledge seafaring and maritime ecology has accumulated.

The heritage trail is a methodology that would allow the linking of maritime sites like these areas, which have small fleets of heritage vessels that exist within their locality. The preservation of the vessel, and the cultural heritage surrounding it, combines not only the preservation of artifact, but also the conservation of the environment and relevant trades like blacksmiths, and woodworking, and associated arts like poetry, dance, and cuisine where they reside.

The maritime heritage trail would link these sites of coastal and island heritage. This would benefit local groups in several ways. While one historic vessel or heritage site along the coast would not be considered a proper tourist destination, the heritage minded tourist would more likely be attracted to an experience that could be expanded to an itinerary of heritage sites around the islands, complete with self-guiding resources and community-based infrastructure. By providing a support network, unifying marketing and messaging, and providing training for local groups, a trail network would bring resources into the hands of the often overlooked populations which are in the most need of support. Furthermore, the network would also inspire international cooperation, as it could be expanded in other countries in the Adriatic and Mediterranean.

A network that allows partner organizations access to a larger marketing and branding would help to create an influx of tourism to these sites, many of which are in the process finding ways to support their cultural resources though local preservation programs and cultural tourism. This in turn would place economic value on living heritage. This valuing, symbolically or economically, of heritage is essential for trades and arts to prosper within the society that supports them. The maritime trail would help these organizations to link with one another at the same time provide a means for a heritage tourist economy to thrive in an already busy tourist industry along the coast and island of the Adriatic.

The decentralized approach of the trail methodology would also allow the local organizations the autonomy to build, guide, and prepare their sites

respectively of one another, thus following best practices for Integrated Rural Tourism (IRT). Local governance was highlighted in the research of Crawly and Gilmore (2008), who found this to be as a key factor for success in IRT. While the coastal maritime region is not necessarily entirely rural, borrowing from the best practices of this community-based structure would allow urban and rural partners equal benefit.

Each site on the heritage trail route could have several activities prepared for the visitors to participate during their visit. An indoor museum paired with boat rides, as well as dance and arts would create not only an interesting presentation for visitor, but also provide opportunities for young people to be involved in the planning and preparation of such activities such as the practice of sailing, steps of a dance, or notes of a song to be learned. Through the process of preparation for the event or activity, the intangible aspects would be passed down to the younger generation, similar to the way folk dance is preserved in national and international competition. The dance steps, songs and music are preserved and showcased in regional meetings.

Utilizing the maritime heritage trail methodology would be a way to allow tourists to experience living cultural resources of boatbuilding, sailing and fisheries, as well as a way to preserve the local intangible and ecological heritage associated with the vessels that they support. Integrating local parks and preserves this would create a connection with the local ecological resources, as well as strengthen the cultural dimensions to the conservation area in which the community is based. This in turn would create opportunities for the heritage vessels to operate in the aquatorium for which the vessels were built, thus forming a natural partnership.

The intent of this iteration of the heritage trail would be to unify several rural sites, parks, hotels, and existing tourist infrastructure, in order to pool resources and create a theme that the maritime tourist would recognize at each venue, benefiting the localities that they represent. Being focused on living cultural resources as well as existing heritage craft not only helps to preserve the trades associated with maritime arts, but also helps to unify local coalitions in the common goal of preservation and conservation. Locating the preservation effort

within its local environment creates a dimension of ecological integration that would not be present in other localities.

4.2 TYPOLOGY OF MARITIME HERITAGE TRAILS

The use of maritime trails is prevalent in several countries including the United States, specifically with the implementation of maritime trails in Florida, South Carolina, and the Great Lakes region. Many of these trails have the purpose to bring together several elements of marine cultural resource management, specifically shipwrecks and objects, which are deemed to be a part of the cultural resources of the state or the nation. However, other types of trails, paths, walks, and routes come in many themes around the world. There are several thousand such trails that exist in varying forms. Nature trails, harbor walks, and historic routes all share similar attributes, which must be taken into consideration when planning. These factors are the mode in which the visitor travels, the scale of its objectives, and possible integration into local trails (Silberg1994).

The US National Parks and the Department of the Interior have declared guidelines that encompass the handling of such sites and built cultural resources; *The Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for the Treatment of Cultural Landscapes.*[21] This document is organized into four parts, preservation, rehabilitation, restoration, and reconstruction. Each section illustrates how to apply these four treatments to cultural landscapes in a way that meets the standards; the cultural landscape approach. National bodies, such as the federal government, responsible for management of the trails, must follow these guidelines in order to ensure the highest level of artifact conservation. Integration into the common theme must be met to ensure consistency throughout the distance of the path.

In two particular states, New Jersey and Maine, the maritime trails focus on shore-based maritime artifacts and culture resources with a more social or

[21] The US National Park Service guidelines http://www.nps.gov/tps/standards/four-treatments/landscape-guidelines/index.htm

environmental approach. The New Jersey Coastal Heritage Trail retains a network of sites that run along the coast and barrier islands. The wide range of sites include, wildlife refuges, lighthouses, historic marinas, maritime museums, and historic sailing vessels. It also includes areas relevant to living heritage, for example, sailing vessels, shipbuilding, and fisheries sites still in service (Seabold and Leach 1991). Maine's Down East Fisheries Trail combines museums, fish hatcheries, and scientific institutes with maritime trade locations and harbors, highlighting the region's rich history of fishing and aquaculture.

Map 3: New Jersey coastal heritage trail. (graphic retrieved from http://www.nps.gov/parkhistory/online_books/nj1/images/fig0.jpg)

Maine's Down East Fisheries Trail website states that marine resources sustain the culture and economy of Maine and "the trail builds on these local resources to strengthen community life and the experience of visitors".[22] The combination of a community building exercise, which helps to present the fisheries economy in a positive light, while enhancing the experience of the visitor are social aspects that the Maine and New Jersey trail projects would share in common with the proposed trail for the Adriatic maritime region.

Just as the adoption of similar guidelines used by the US National Parks and partner entities regarding the preservation of cultural landscapes, approved guidelines could be used by member organizations in Adriatic region. While there are no specific guidelines to support the conservation of intangible heritage with regards to trails in the US, the Convention for the Safeguarding of Intangible Cultural Heritage presented by UNESCO[23] could provide additional direction for the conservation and protection of the aspects of the proposed trail's intangible treasures.

Artifacts and cultural heritage sites should integrate into the cultural landscape providing the visitor and local providers with the opportunity to not only present local heritage as 'built' in the way of preserved, rehabilitated, restored, or reconstructed buildings or objects, but also as living practices that are taught and learned within the local cultural sphere. The combination of these two avenues of tangible and intangible presentation allows the visitor and community members to best experience and preserve the local cultural fabric within the dynamics of this multinational cultural exchange, which is tourism.

4.3 METHODOLOGY OF IMPLEMENTATION

In the philosophical approach, the creation the trail project can be said to traverse the line between the preservation of local tangible and intangible

[22] Down East fisheries Trail. Project of Maine Sea Grant. Retrieved from: http://www.downeastfisheriestrail.org

[23] General Conference of the United Nations Educational, Scientific and Cultural Organization hereinafter referred to as UNESCO, meeting in Paris, from 29 September to 17 October 2003, at its 32nd session retrieved from: http://www.unesco.org/culture/ich/index.php?lg=EN&pg=00022

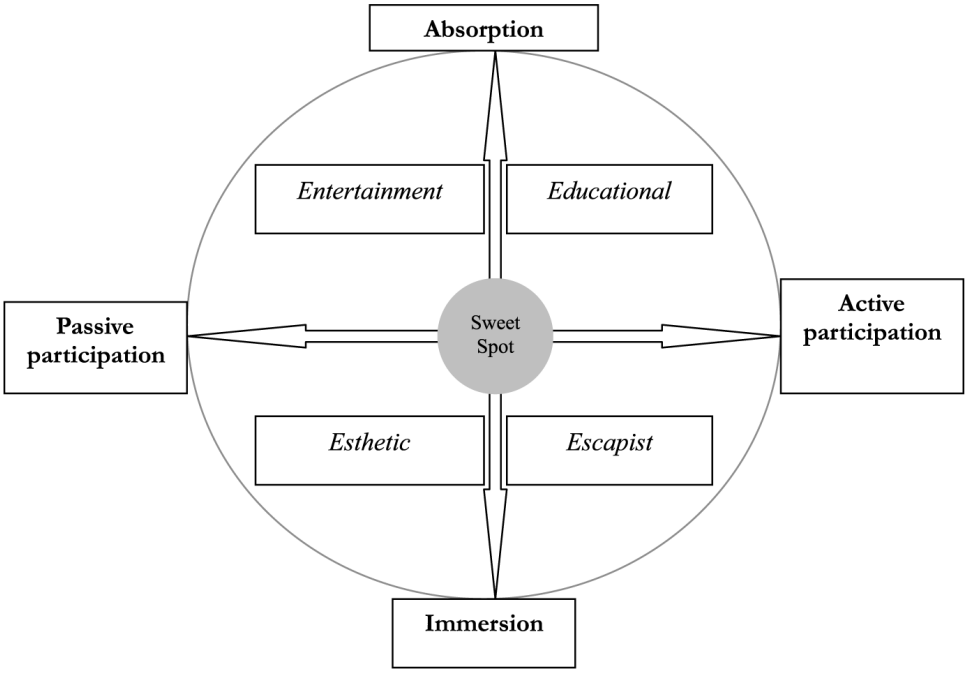
heritage, and creation of tourist offerings, with the best possible approach formed by having equal emphasis on each side of the equation. Strengthening local sites and offerings will serve to entice the tourist to visit. For example, during the boat races and festivals on the island Murter, there is a significant draw for tourists to come during these weeks in the fall when the normal tourism has dropped significantly. The role and purpose of the race is primarily for locals to participate, but tourists and photographers come from far and wide to see the magnificent fleets ride the wind. By focusing internally and making a festival to help preserve local intangible knowledge, the people of Murter have also enlivened the town during a slower period, thus lengthening the shoulder season of the tourist economy. To understand this interaction between local inhabitants and extra-local visitors a further discussion is required.

To facilitate the development of a heritage trail effectively, a discussion must include what these offerings are, who views them, and how they will be presented and understood by the people who present them. The term tourism was first used in the late 17th century. Since then, tourists have made it a point to visit every place on the globe, some in the name of adventure, others in leisure and even more in the name of academic research, such as the anthropologists and biologists. The ease of mobility and recent inclusion of technology has continued do develop this market making it today a more than 900 billion dollar industry (Fîntîneru 2014).

There has been significant research in to the study of tourism. In the *Anthropology of Tourism*, Stronza (2001) states that the research can be divided into two halves; one that focuses on the impacts of the locals and the other that investigates the origins of tourism itself. This seems to be a common theme, not only the research, but also in the methodology of the creation of the destinations for tourism itself. The focus seems to be entirely one sided. Stronza states "exploring only parts of the two-way encounters between tourists and locals, or between "hosts and guests," has left us with only half-explanations."(2001:262) It is with this in mind that the formation of a maritime heritage trail must be created following this dialectic.

In his review of the literature, Stronza states that the research itself has been somewhat contradictory. In some cases local values diminished, while others were strengthened. Some areas were more robust following influx of tourist economy, while others became dependent on tourists for their livelihood. Stronza shows that there are multiple forces at play not just between tourist and communities, but also between the positive and negative effects of participants and facilitators. While it is not possible to make a one size fits all program on a national level, it is important to build on the current research and examine best practices in the formation of community-based touristic enterprise.

Figure 3



Source: Adapted from Pine and Gilmore (1998)

The research of Pine and Gilmore (1998) shows a three level evolution of the interactions between providers and consumers though engagement. The interactions can be said to operate from product, to service, then to experience. Pine and Gilmore concluded by focusing on interactions between providers and participants, engagement and outcomes were more substantial when the providers created an experiential mode for the exchange to take place. With the 'product,'

the interaction can be cursory just allowing enough exchange to complete the task, while 'experience' is a more holistic approach to interaction that happens on multiple levels. Experience is defined in four distinct realms (Fig. 3), and creates value for both provider and customer.

Hayes and MacLeod (2007) employ this insightful methodology to analyze English heritage trails of which a random 10% sample size of the approximately 1300 heritage trails in the UK were evaluated. The conclusion is reached that the heritage trails are being produced and packaged as products rather than services or experiences. Heritage trails have potential to enhance the visitor experience, but are often left short by not using an integrated strategy that employs all aspects framed by the Pine and Gilmore model.

> *Trails that are developed to incorporate both educational and entertaining themes and materials and which immerse the participant in the story have potential to hit the 'sweet spot' at the center of the Pine and Gilmore model and become truly compelling experiences rather than being simply functional products. (Hayes and MacLeod 2007, :50)*

This type of integrative strategy not only enhances visitor experience, but also bolsters local preservation efforts though the practice of an inclusive experiential program that encompasses several aspects of local lifestyle, culture, and identity. For example an experiential model could include a visit to a local museum, followed by a fishing expedition with local fisherman on a heritage vessel, culminating in the opportunity to eat the fish just caught, and hear local songs stories or poetry about the sea. Each of the participants, the tourist and provider, is engaged in the production of the experience. The experiential model creates a proactive approach to changing the relationship in tourism in the local arena from passive providers to active facilitators, which would encourage the preservation of local intangible heritage.

In the formulation of tourist offerings, the destination is key for enticement of the traveler to come to distant places. In the past, this idea of a

destination has been inclusive of the 'products' that the tourist would like to 'consume' not the 'experience'. The term destination further expresses representation of a static approach to tourism. Arrival at the destination is a pause in the itinerary, which by all practical purposes is completely dynamic in nature.

To fully understand and engage the traveler, they must be redefined as people in motion. The trail methodology encourages the traveler to see the trail as a continuum of places, events, and experiences, and therefore engage in a deeper manner. These distinctions can further help to eliminate the processes of viewing tourism as a product rather than an experience. The creation of the trail as a functional body in which the tourist is engaged helps to further this production of dynamic tourism rather than static observation. The richness of experience as opposed to than passive viewing of an object provides the facilitator opportunities to 'remember' parts of intangible heritage and therefore is an act of preservation. Each place itself can be wrapped in experience. The hotel, or restaurant, activity, or museum, each part can create authenticity from the very fabric of the cultural existence of the place and its tangible and intangible relics.

In earlier research, Cohen (1979) had already defined the experiential mode of tourism as one of five modes that tourists use to engage the citizenry and environment of foreign lands. Revisiting Cohen's tourist modality or typology can help to define an appropriate methodology for the creation and collaboration of the trail atmosphere.

The five modes as described by Cohen (1979:183) are:

Recreational mode
Diversionary mode
Experiential mode
Experimental mode
Existential mode

The recreation mode is most akin to the type of tourism that Croatia experiences on the beaches, bays, and islands at the present moment. Although as Cohen describes the diversionary mode is similar to recreational tourism but has a

certain brand of escapist modality for those who wish to come to 'forget' the life that they live and enjoy the foreign diversion, through the beach, fun and sun and includes a passive observation of 'viewed' culture.

The experiential mode describes tourist who travel namely to seek out 'authenticity' in the foreign context. Cohen states, it is "the novelty of the other landscapes, life ways, and cultures which chiefly attracts the tourist" (ibid:188). This is most akin to the Pine and Gilmore model.

The fourth designation of tourism is experimental. This chiefly describes travelers who are seeking out religious centers and may be for all practical purposes as Cohen describes 'drifters' seeking to redefine their own identity though the experience of others.

While the Cohen typology of tourism may help to understand these modes, it is important to note the Pine and Gilmore model of experience includes escapist and entertainment modes in the formulation of the experiential model, and have for the most part synthesized Cohen's modality into one composite mode of 'experience'. When the experiential mode is applied to tourism, the traveler and facilitator may use varying degrees of each modality to create or bring to life the mode in which the travelers seeks.

The fifth typology, the existential mode, does not fit as neatly into the Pine and Gilmore characterization. In the Cohen model, the existential mode is used to describe travelers who are not seekers, but for all practical purposes are aligned fully in such a way that they identify completely with the group in which they are visiting.

Existential tourism, as Cohen described, is typified by the tourist who returns to visit their home land of seeking out their roots, or as González (2008) shows, is someone one who is interested in the skills of an area with the intent on learning those skills so they can be transported back to their home or locality. By looking at a similar example from Spain, and a case study of Japanese tourists coming to learn Flamenco Dance, González found that the emphasis on intangible tourism, allows the tourist to seek out 'authenticity' in the local sphere and take the experience back to their home. This 'transported' authentic

knowledge can then be utilized in local sub-cultures that demand authenticity from its participants.

The employment of these characteristics in the existential tourism model could be used equivocally in the maritime tourism, allowing those interested in boats, boat building, and maritime arts to seek out the masters of the trades which have utility back in the home sphere.

Recent trips by the crews of Croatian heritage vessels, falkuša and gajeta to the large festivals of Brest France 2008, and 2012, as well The Gulf of Morbihan 2015 provides evidence for the capacity crowds which draw of more than 700,000[24] visitors to these 'existentially' motivated celebrations of maritime life from around the planet. Similarly styled events could be fashioned along the maritime heritage trail route with festivals and events that have outreach mechanisms to enliven the authentic heritage that already exist along the coastal waters of the Adriatic drawing spectators and tourists with like minded intentions.

The idea of authenticity is foremost in this typology of tourism reaching the highest degree when the intangible knowledge is learned from an authentic master of the craft of any discipline. The focus in existential tourism shifts from one that is created with the tourist in mind such as tours that highlight local sights and museums, to an internal focus on authentic self-identity, which is attractive for those who are witness to it, or hope to gain experience. The authenticity of the intangible aspects of the culture is then shown in the public realm, thus glorifying the individual authenticity of the local intangible heritage. For example a maritime skills program where participants learn to tie knots from an experienced fisherman or learn woodworking from a master shipwright.

The active participation in the heritage event, as an experience, allows the visitor to take part as a participant observer. The preserved heritage becomes the attraction and the destination is created through the authentic event. The facilitator recreates the knowledge through the presentation, act, or being.

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[24] The 2012 Breast Nutical festival had over 2000 historic ships and over 700,000 visitors from 30 counties. Retrieved from: Http://kacicronhite.com/blog/brest-france-largest-wooden-boat-gathering-in-the-world-feat/html

Tourism with a focus on the authentic acts can be created in and through the creation of the maritime trail. The experiential, and existential tourist can be enticed by the linking several 'authentic destinations' around the country. Furthermore, the intangible heritage of a region can be preserved in a global sphere by simply valuing the identity, customs, and culture of a local region in an increasingly homogenous multi-national realm. The uniqueness of place becomes the attraction, and the preservation becomes tied to the economics of the experience for the visitor along a route, engaged in authentic acts in sites that are presently involved in the preservation of local intangible heritage.

4.4 CONSIDERATIONS IN DEVELOPMENT

There are several important factors to consider in the development of a trail that will serve to unify an experience for visitors along the coast and islands of the Adriatic with a theme of maritime heritage. These factors include the facilitation and governance, scale and method of transportation of trail visitors, and integration into local sites, which include an already successful national and regional park system.

Governance by local stakeholders that can guide the direction and interpretation of the experiences for visitors and planning that is aligned within a national framework integrating to existing facilities, parks, interpretive, centers and hotels are two of the keystone features of trail development (Hayes and MacLeod 2007, Silbergh 1994). This alignment serves to unify, while the local governance can help to facilitate ownership of the idea within the local context and builds identity and brand of that locality. These symbols can be used later in the marketing materials and presentation of the site, and/or region as they are integrated into the international trail system.

The line between governance and planning is however difficult to quantify. Hayes and Macleold (2008) state that with the fragmented nature of trail governance, it is important to have an umbrella organization for what local stakeholders are incapable or unable to achieve on their own. Hayes and Macleold state a governing organization could provide "advocacy to policy

makers, advise on best practice, develop umbrella branding, raise public consciousness, undertake benchmarking and develop practical evaluation methodologies" (Hayes and Macleod 2008:72). This is somewhat contradictory to best practices followed by integrated rural tourism as shown by Crawley and Gilmore (2008) that state, "IRT draws on concepts relating to alternative development in emphasizing a bottom-up approach that involves local stakeholders centrally" (Crawley and Gillmor 2008:318). Finding a balance between governance and planning, local and extra-local, through participation from the onset is critical for success.

If local stakeholders are not involved in the initial policy and decision making, then the outcomes will reflect that lack of intrinsic ownership. One remedy for national governance could be a rotating committee that has local stakeholders who hold office for certain term, while others are elected by the governing body to serve in roles and positions in a decentralized method of national and international governance with quarterly meetings to unify objectives and strategies of implementation in a timely manner.

Another method that has been described to be the balance between the local and extra-local management style is termed adaptive co-management. Berkes (2004) describes this methodology, which is used in community-based conservation (CBC), for the local management of ecological resources in parks and preserves. It is typified by a diligence of members to build and nurture trust though an adaptive methodology that allows stakeholders to evaluate and modify management structures, build on existing partnerships, and employ tactics that utilize the strengths of the entities which are involved in the relationships. This methodology is dynamic, as is the trail. It requires movement and evaluation by the teams involved.

In a *Strategy for Theme Trails*, Silbergh and others (1994) outline objectives that theme trail should achieve as well as seven development strategies the trail, once it is formed, should follow. This thorough outline includes several ideas already mentioned concerning development of rural touristic resources especially to do with the ideas of IRT. Silbergh states the design should "facilitate the discovery (education) and enjoyment (entertainment) of local

heritage assets by both local and by visitors" (1994:125). This objective also relates the emphasis stated in the earlier section by explicitly stating the 'local' in the touristic enterprise.

As Silbergh describes, the trail should be planned strategically and integrate local infrastructure, hotels, restaurant, parks, museums, visitor centers, and align with other local trails. For example the immensely popular walk on the walls of Dubrovnik can be integrated to a maritime heritage trail, as the maritime theme is expressly relevant since the walls were built to protect from invaders from the land and sea. Marketing materials and economic strategy should be considered from the onset that includes a unifying theme and milestones to achieve in the forecast of economic objectives of traffic and participation.

As with any geographic project the ability to scale is critical. Hayes and Macleod (2008) in a review of management difficulties with large-scale heritage trails found there are several potential pitfalls in the management of the collaborative efforts. The difficulties include the lack of ownership on the local level (Leask and Barriere 2000), difficulties in the coordination of a variety of stakeholders (Government of South Australia 2002), the management of conflict between different user groups (Murray and Graham 1997), and the monitoring and evaluation of trails (Leask and Barriere 2000, Government of South Australia 2002). Each level of scale has a its own unique set of challenges and is compounded by the challenges from above and below in the local, national, or regional arenas. Clear guidelines and objectives are critical in the communication with partners and development of unifying strategies. Therefore scaling of the project is an important consideration in the planning phase.

For an Adriatic maritime heritage trail, scale should be set to national levels, then combined with the heritage trails of the countries that share the body of water, making this and international collaboration. National focus would be on uniting site partners and creating a governing body and according administrational development. Locally, spur trails could be proposed and integrated, and local partners would work together to merge into the unifying theme as the traveler goes from one area to the next.

Any mode of transportation should allow visitors to the country to come to all parts of the trail. By car or boat, by foot or bicycle, the traveler to Europe, the Adriatic or the Mediterranean would recognize the trail as a destination. For example, a traveler who has visited the Mare Nostrum Trail which links sites along the Phoenician ring in Syria, Lebanon, Italy and Malta[25] could spend additional time in the Adriatic. This would help to facilitate international marketing of heritage tourism by highlighting linked trails in different countries thereby helping the local preservation efforts abroad and locally simultaneously.

In design, an Adriatic maritime heritage trail would be well suited to the already boat-oriented charter guest, which could conceivably be interested in visiting the maritime heritage sites along the coast and islands. *Strategic Goals for the Nautical Tourism Development Strategy 2009-2019,* states that the, "attractiveness of contents ashore, cultural offer as an important factor of tourist and nautical offerings" (Republic of Croatia 2008:8). It would be of interest to present a further study of the tourists that sail along the coast reviewing their interest and outcomes through their visit. The Croatian Bureau of Statistics stated as cited in Perko (2011) that in 2010 there was 327,631 charter guests and 58,394 arrivals of foreign yachts and boats were registered.[26] A short survey of level of interest in local maritime culture would not only gage the level of interest, but also could help shape the route and attractions for visitors.

There are several collections along the coast, which represent a large body of cultural resources preserved by maritime museums. They are located in many cities including Split, Dubrovnik, Rijeka. There are also several smaller museums that focus on island specifics, such as the Fisheries Museum on the island of Vis in Komiža, Batana House in Rovinj and a new museum in Betina, dedicated to the gajeta on the island of Murter. Aside from resources that are curated in some form or another, there are the local cultural resources in a network of organizations, trades, and occupations, which vary tremendously, but still fall under the term of maritime heritage. Shipyards, heritage vessels, boatbuilding

[25] Mare Nostrum –Retrieved from: http://www.euromedheritage.net/intern.cfm?menuID=12&submenuID=13&idproject=46
[26] Nautical Tourism, Capacities and Operation of Nautical Ports retrieved from: http://www.dzs.hr/eng/publication/2009/4-4-5_1e2009.htm

shops and other represented trades are important, while dance and singing groups, as well as poetry and visual art, all support and have been born from the maritime trades, as art and the trades in island and coastal life are closely linked. The description of the sea in words from the sailors and fisherman, the lament of the song, and the dance of the return are all closely tied to the culture and identity of place and the sea that surrounds them. Combining these aspects in a multifaceted experience for nautical visitors would undoubtedly create a unique voyage for the maritime tourist.

4.5 CONCLUSION

The Adriatic coast and island represents a large body of cultural knowledge and artifacts that are classified as maritime heritage. Merging these artifacts into a string of gems that a tourist could visit along the coast or islands represents a methodology that would allow these unique features of land, landscape, and knowledge to be presented in their environment in which they reside. This methodology allows for the preserving of the heritage from the populations that have built and maintained them in a form of community-based heritage management.

Combining site and existing infrastructure allows for local stakeholders to be inclusive in the process, represented in the governance, and helps to create economic incentive for the younger generations who will be caretakers of the knowledge, art, artifacts and territory in which they reside. Creating a cultural landscape that includes of all aspects of the cultural sphere also combines the land and ecological heritage of the given region.

The proposal for an Adriatic maritime heritage trail would include types of sites such as lighthouses, ships and shipwrecks, museums, and other tangible artifacts around the country, while supporting intangible heritage through locally facilitated cultural preservation programs. In some maritime heritage trails, the sole purpose is to showcase artifact sites, with secondary activities such as restaurants and harbor tours and hotel, the social aspects, to be provided as a parallel, but removed from the trail itself. This is similar to what Hayes and

MacLeold (2008) conceive of as the product-based conceptualization. In this iteration of the maritime heritage trail, a priority of intangible heritage is made with the community-based trail design forefront in the conceptualization. Utilizing this method would put people in the center, and artifacts and museums come to the aid of the story being told, emphasizing the experiential model of touristic development as shown by Pine and Gilmore (1998).

In reviewing nautical tourism, it is clear that the ecological aspects in the Adriatic are the primary attraction for the visitor. Again the Croatian Ministry of the Sea states, "nautical tourists find most attractive the areas under different categories of protection" (Republic of Croatia 2008:7). It is almost as if the act of preservation and demarcation of a particular area then entices the tourist to visit. These types of areas include various parks and preserves as well as local conservation disticts and nature monuments. This statement represents an already decided shift in preservation of ecological diversity and has for the last 30 years created a vast number of parks and reserves that entice tourist to visit.

The combination of cultural and ecological heritage creates a more holistic story of the land and people in the environment together. Croatia is unique as many of the nature parks have inhabitants and communities that reside within park boundaries. For example, Kornati, which receives the highest number of nautical visitors per year (ibid.:7), is also home to one of the richest maritime heritage locations along the coast. With several hundred heritage vessels registered, monthly festivals, and local agriculture supported through the use of heritage craft, the Kornati islands are not only rich in ecological heritage, it is also brimming with the cultural intangible heritage that has been the focus of this thesis. Creating avenues to highlight the cultural ecology of specific parks could be another method of this multi-faceted methodology, which would allow all stakeholders to benefit from the creation of a large-scale trail network.

Again borrowing from community-based conservation and adaptive co-management, a multi-faceted park plan could include cultural eco-tours where locals are invited to take part in the interpretation of the parks ecological resources, as well as decision-making processes. For example in Kornati, park staff could allow local guides to do harbor tours in historic craft and discuss the

local ecological knowledge and stories of the place, islands, and the region, thus merging ecological and maritime heritage and valuing local infrastructure and heritage which in turn elevates status of the individuals involved.

The trail as a combination of these elements provides the structure and properties that integrate multiple aspects, and when combined together create a truly unique maritime heritage experience. One that the emphasis is not solely on the tourist, tangible artifacts, and ecological treasures, but includes community members and the preservation of intangible and ecological heritage of the region for future generations.

5.0 CONCLUDING REMARKS

The idea of preservation in the maritime realm is a complex, multi-dimensional subject with many aspects presenting dualistic meaning, sometimes in opposition to one another, and other times relying on each part to represent its meaning. For example, 'authenticity', has subjective and objective narratives. The 'authentic' experience has different meaning for the outsider as it does for the visitor or tourist. Also 'material' preservation and 'knowledge' preservation are linked in a way that one without the other cannot exist. Lastly the idea of preservation of technology can hardly be shown without the linear framework of 'time' in arrangement with the other icons that have come before and after the object. Placing an object frozen on timeline allows a reference for the practitioner or to begin to explain the object's position, role, and history in its community. While grappling with these aspects of preservation several unifying topics emerge.

Through the discussion of the role of the heritage vessels, it is possible to show the importance of 'function' and 'place' in the present time and begin to explain authentic meaning for the groups that have used, and will use the vessel throughout history, and into the future. It is these groups, and in this place, that the functional vessel has emerged and in which the 'authentic' knowledge, maritime skills, and heritage has accumulated surrounding its tangible frame. The communities who reside on or near the sea and are familiar with its evolution, understand how the heritage vessels have formed from the need to perform some specific societal functions, and what these functions mean, are best equipped to be the one to preserve and interpret this knowledge and the objects associated with them rather than outside groups or national bodies.

The preservation of these objects and the preservation of knowledge are two entirely different concepts. While in the curation of a preserved object the function and location of the tangible material can be explained in an informal manner, as on an information board or recording to explain to the passive observer its meaning and relate understanding. The observer will experience the sight and description, but the deep meaning of the object cannot be understood without an actual experience presented in its natural environment. This analogy is

similar to studying animal behavior in a zoo. One can hardly expect to understand the full behaviors of the captive tiger, or any of the other great cats in a closed breeding structure; for that understanding the animals must instead be observed in their native habitat of the savannah.

A great deal of maritime heritage preservation efforts focus preserving objects rather than the intangible aspects of knowledge that these objects represent. Maritime heritage does include these objects, and relies on them, but removing them from their native habitat, or functional location, diminishes the possibility for the transmission of intangible heritage, which includes the ideas, stories, songs and lore; that body of cultural knowledge that is tied to the vessels themselves. It is when the functional object, the boat, is in the location of its creation that the deep meaning of the objects' role, and place within the environment, community and culture, comes into view.

The modes of teaching and learning are relevant here, as the form of curation required to extend the intangible aspects of maritime heritage, cannot be conveyed in a passive sense. The constructivist instructional approach as described by Bruner (1991) is one where the learner creates understanding through personal experience and interaction with external environment. This is a student-centered method that uses learning by doing, or an experiential model. It is contrasted with an instructor-focused 'ex cathedra' approach where the student is a passive receptor of knowledge and the instructor there to explicate meaning to the group. In the case of intangible heritage much of the learning required to perform tasks come in the variety of intrinsic knowledge that is transmitted though tacit learning as described in chapter 1. Entwistle (2000) contrasts the two methods stating surface learning is "matter of memorizing and reproducing knowledge in ways acceptable to the teacher." Deep learning creates "personal meaning by transforming information and ideas in terms of their own previous knowledge and understanding" (ibid:4). In the case of the curation of intangible heritage, the need for a constructivist instruction to allow for deep learning to transpire is most evident.

The previous chapters have built upon several themes that outline the current state of preservation in the Adriatic and define elements necessary for

their existence in the past and into the future. The guidelines set in order to have the highest level of intergenerational intangible heritage follows as shown in the semiotic square in chapter 1 (Figure 1) The *in place/functional* vessel supports the highest level of intangible knowledge being passed down. The need for an economic role of the vessel is clearly shown as not only the reason why the gajeta from Murter has survived in great numbers up to this point, as shown in Part II but, also the symbolic role as a *član obitelji* or family member, supports the preservation of the vessel. This meaning, economic or otherwise which the local island community has created has helped in its preservation. This has allowed for the conservation of the great numbers of these vessels. The preservation of the gajeta has occurred though defining and redefining a relevant purpose for the vessel in the society in which it resides.

This brings about the question of the importance of authenticity. Authenticity and functionality in this domain can be used interchangeably. In regards to preservation of intangible heritage, functionality is paramount to authenticity. An objects authenticity can be on a spectrum from truly authentic to symbolically authentic. The importance that the tools are functional for the educational process to occur, and the passing of knowledge to occur generationally, is more relevant than the object or the tangible aspects of the lesson itself.

For example, the terms used on the boat can be learned from the use of a model, with each line in its proper place, and even the knots used could conceivably be passed on, but the movement of the vessel in varying wind conditions needs to be learned on the boat in the sea. The importance here is the educational aspects of the voyage, not the authentic nature of the boat, or the model. The important feature of the program is only that the intangible aspects are being portrayed.

Creating a methodology of curating the intangible aspects of maritime heritage, one that allows participants to learn and understand the meaning of this knowledge, is a challenge. The first step in meeting that challenge is to present a functional vessel in the place in which it resides. The methodology of the maritime heritage trail allows the geographic flexibility, which can serve to unite

several island and coastal regions, which are in process of maintaining local maritime, ecological, and cultural knowledge for future generations. Synthesizing a vast array of topics, the maritime heritage trail as a methodology serves to unite several areas in the maritime region while allowing the participants to independently develop, curate, and manage the body of knowledge and artifacts that have been acquired throughout the centuries.

Utilizing this framework would put people in the center, and artifacts and museums would align to help build on the ideas, knowledge, and lore of the story that is being passed down. It is a fundamental shift in the nature of heritage curation. Each member of the larger organization would be responsible for its own heritage and the viewer is an active participant in the process rather than a passive observer of the object itself. If the preservation of intangible maritime heritage is one that the local society values, then the methodology of functional preservation should be adopted and linked to other member organizations along a route that chooses similar conceptual ideas.

Looking to the future, the curation, preservation and education activities surrounding heritage vessels in the Adriatic can be supported by such a network. However, each of these categories cannot be separated from one another. The education of the younger generation cannot occur without the physical object in which to perform the task and understand the meaning. The curation of the objects provides a role for the community within the modern tourist economy that is present along the coast. Lastly, youth education and cultural tourism can provide meaning for the community members and outsiders who visit or live in the region that the programs serve. The Adriatic coast and islands is a rich and bountiful region with a cultural legacy that retained many of its historic maritime craft, a collection that has few rivals. The preservation of these objects implicitly ties knowledge, lore, and heritage together. Utilizing the functional methodology of preservation will ensure the conservation of this legacy and safeguard intangible maritime heritage for future generations.

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Appendix A : Heritage Watercraft Survey- English.

Personal Info

1. Name
2. Address
3. Email

Vessel Info

4. Boat type
5. Number
6. Where do you keep the boat?

History

7. When was the boat built?
8. How long has your family owned this boat?
9. Where was the boat built/ who was the builder?
10. Is this yard still working?
11. What was the original payment?
12. Is there a particular story associated with this boat?
13. Have there been any modifications to the boat? Engine/ fiberglass

Maintenance and Expenses

14. When was the last extensive refit?
15. How long did the refit last?
16. What did you replace during the refit?
17. What do you estimate the annual expenses to maintain the boat?
18. How much do you spend on the following?

    Paint- Lift- Brushes and other tools-
19. How much do you spend to keep the boat where it is tied?

    Registration- Insurance- Slip/ marina/ vez-

Use and function

20. What do you use the boat for?

    Fishing Recreation Transport Tourism
21. Does your family have land in Kornati or Modrave?
22. Which location?

23. Do you get any money from the use of the boat?
24. How much do you get annually?
    From Fishing-
    From Transport-
    From Tourism-
25. Has the amount you have earned with the boat changed in the past 10 years? Please describe the changes that have occurred.
26. Is it difficult for you and your family to maintain and keep the boat?1-10 (one being easy and 10 very difficult)
27. Do you ever think of selling the boat?
28. What keeps you from selling?
29. Please describe any other reason why this boat is important to you or your family.
30. Do you have an interest in working with tourism to help subsidize your vessel?

Heritage Watercraft Survey- Croatian.

Anketa o povijesti obiteljskih plovila

Osobni podaci

1. Ime i prezime
2. Adresa
3. email

Podaci o brodu

4. Tip broda
5. Registarska oznaka
6. Gdje se brod nalazi (vez)?

Povijest

7. Koje je godine brod izgrađen?
8. Koliko je dugo brod u vašoj obitelji?
9. Gdje je brod izgradjen / kod kojeg brodograditelja (u kojem škveru)?
10. Da li je to brodogradilište još otvoreno?
11. Koliko je brod koštao? Kako ste platili?
12. Postoji li posebna priča (povijest) vezana uz brod?
13. Da li je brod modificiran (ugrađen motor / plastificiran (fiberglass)?

Održavanje i troškovi

14. Kada ste izvršili zadnju veću obnovu?
15. Koliko dugo je obnova trajala?
16. Što ste promijenili tijekom obnove?
17. Koliko, prema vašoj procjeni, iznose godišnji troškovi održavanja broda?
18. Koliko trošite na slijedeće:

    Boju-

    Dizalicu-

    Četke/ostali alat-
19. Koliko trošite na:

    Vez-

Registraciju-

Osiguranje-

Marinu / vez-

Upotreba (funkcija) broda

20. Za koje potrebe koristite brod:

    Ribarenje-

    Rekreacija-

    Prijevoz-

    Turizam-

21. Posjeduje li vaša obitelj zemlju u Kornatima?
22. Na kojoj lokaciji?
23. Imate li ikakve financijske koristi od broda?
24. Koliko godišnje zarađujete od:

    Ribarenja-

    Prijevoza-

    Turizma-

25. Da li se iznos koji godišnje zarađujete brodom promijenio u posljednjih 10 godina? Opišite promijene koje su nastupile.
26. Koliko je teško vašoj obitelji održavati brod na ljestvici od 1-10 (1 vrlo lako, a 10 vrlo teško)?
27. Da li ikad razmišljate o tome da prodate brod?
28. Što vas sprječava da brod prodate?
29. Opišite bilo koji drugi razlog zbog kojeg brod ima posebno značenje za vašu obitelj.
30. Da li biste bili zainteresirani upotrebljavati brod u turističke namjene kada biste dobili državnu potporu?

Appendix B. Notes from Watercraft Survey

1. *Brod je član obitelji*
   The boat is a member of the family.

   Gajeta je tradicija, ljubav naših očeva i naših djetinjstva, dar i baština
   Our gajeta is tradition; love of our fathers and part of our childhood; it is a special gift and our heritage

These sentiments were echoed time and again in the Murter survey and was a testament to the attitudes of the islanders need for the boat to be around so that they could engage it the agricultural activities on the outer islands. To describe the boat and remove the object from its position in the community the meaning would be lost al together. Of particular interest was the answer to question #29 (see the answers in table below).

29. Opišite bilo koji drugi razlog zbog čega brod ima posebno značenje za vašu obitelj.	**29. Describe any other reason why the boat has a special meaning for your family?**
Brod je u funkciji zajedništva obitelji i prijatelja	*The boat represents a unity of our friends and family*
"Gradio ga je otac"	*It was built by my father*
"Sam sam ga radio"	*I built it by myself*
Gajeta je tradicija, ljubav naših očeva i naših djetinjstva, dar i baština	*Our gajeta is tradition; love of our fathers and part of our childhood; it is a special gift and our heritage*
Život na otoku bez broda nije potpun	*Life on the island is not complete without a boat*
Najviše ima tradicionalno značenje	*It is part of tradition*

Berba maslina	*Olive harvest*
Uspomene, ljubav prema drvenim brodovima	*Memories, love for our traditional wooden boats*
Posjedi na Kornatima	*Property on the Kornati Islands*
Ostavština oca	*Inheritance from my father*
Čitava povijest vezana uz Cicibelu"	*The whole history of Cicibela*
Tradicija (obiteljska i zavičajna), osjećaj da je ovakav brod kulturna baština	*Tradition (family and home), feeling that this boat is part of our cultural heritage*
Koristimo ga za regate latinskog jedra	*We use it for the regatas of Latinsko jedro*
Sentimentalna ljubav	*Sentimental love*
To je napravio moj otac	*It was made by my father*
Svake godine ga koristimo oko 3-4.000 sati: *1) idemo u Kornate* *2) ribarenje* *3) jedrenj* *4) da idemo na plivanje*	*We use it every year for 3-4.000 hours to:* *1) go to Kornati* *2) go fishing* *3) sail* *4) go for swimming*
Tradicijski ribolov i ophođenje posjeda na Kornatima"	*Traditional fishing and going to our property at Kornati islands*
Brod je član obitelji	*The boat is a family member*
Dio obitelji	*It is a part of our family*
Sastavni dio obitelji	*It is a crucial part of our family*
Kao član obitelji	*It is like a family member*
Živo naslijedje. Drago mi je da mogu da doprinesem našem nasljeđu i budem dio njega	*It is live heritage. I am happy that I can contribute to our history*

Zbog održavanja posjeda	*So I can maintain our property (in Kornati)*
Djed mi ga je ostavio u naslijeđe	*I inherited it from my grandfather*
Od djeda je	*It belonged to my grandfather*
Za prijevoz do otočnih posjeda	*We use it for transport to our island land*
Nekad smo ga koristili za poljoprivredu, a danas za rekreaciju	*It used to be used for agriculture, but now we use it for recreation*
Zato što mi ga je sagradija dide	*It was built by my grandfather*
Otočka tradicija	*Island tradition*

2. *Sadašnji brod građen je 2 godine. Majstor ga je radio doma noću, poslije svakodnevnog rada u brodogradilištu u Betini. Polovina cijene broda isplaćena mu je na početku gradnje (da može kupiti drvo), a ostatak je isplaćen kad je brod bio dovršen. Iznos mi je sada nepoznat. Za registraciju je prikazivano kao da je moj otac sam radio brod, a majstor Krešimir Skračić je potvrdio da je brod napravljen stručno. Ovako je napravljen stoga što majstor nije imao prijavljenu firmu-obrt, već je radio "na crno", a i da se ne bi platio porez. Na brod je odmah ugrađen motor.*

The boat we are using now was made in two years. The boatbuilder mad it at home and night after his regular work. Half of the price has paid at the beginning so he could buy the wood and the rest was paid when the boat was finished. When we registered my father was an official boat builder and the master Krešimir Skračić confirmed that it was made according to regulation these were the ways because the boatbuilders at these time didn't have register businesses and it was not possible to pay the taxes. The boat when it was made be installed the engine.

In Question #9: *Gdje je brod izgrađen / kod kojeg brodograditelja (u kojem škveru)?* Where was your boat built? With which boat builder or shipyard? 15% of respondents reported having built the boats themselves or made them at home. A further 12% reported family members that build the boat now passed away bringing the total of home built boats to 27%. This is an important factor for the inhabitants of Murter and Betina as the boats themselves are built at home with the help of family members. This greatly reduces the monetary costs of boatbuilding to only the price for lumber and finishing materials.

3.	*Prijašnji brod, stara betinska gajeta, gradjen je bio u Betini kod majstora Ljube Urode1937. godine. Bio je dug 7 metara, a plaćen je u maslinovom ulju - 700 kg. Imao je samo 2 vesla. Jedra, jarbol i dokaporte su kupili kasnije.*	*Our old family gajeta was made in 1937 by Ljubo Uroda and it was 7 meters long. The family paid in 700 kilos of olive oil. It had only two oars. Sails, mast, and the hatch boards were bought later.*

This narrative is indicative of the barter economy that happened between craftsmen and farmer in the earlier periods before modernization. Goods exchanged for services allow each of the participants to work and receive payment for services rendered.

6. Epilogue

In the six years I have been working in Croatia in various programs, I have seen a continuous shift in the prevalence of on water education programs that focus on the preservation of maritime heritage. I am fortunate to have worked with so many great groups and organizations. In 2009, when I first arrived, I started working with Outward Bound Croatia whose work is focused on youth development in outdoor education. With this group, we planed and initiated one of the first traditional sailing youth programs with the leut Slobodna Dalmacija. In the summer of 2010, we participated in the race Rota Palagruzona.

Since that time, I have seen the rise of many local *latinsko 'idro, or* Latin sail organizations. I have had the opportunity to talk and work with many individuals that are in the process of building maintaining vessels with the sole purpose of preserving local cultural heritage. Many of the organizations especially Udruga Palalgruza in Komiža have big plans combining the documentation of vessels as well as the education of youth.

As an outsider, I feel lucky to have made such great friends though this process of researching my thesis and building and maintaining connection with local organizations. This has also let to the founding of my own organization *Jadranski Pomorski Institut* or Adriatic Maritime Institute, (AMI) with the express intent to help organizations around Croatia and in the Adriatic build and maintain programs to educative youth using heritage vessels as a platform for youth development.

The Adriatic Maritime Institute has been a venue for several programs including Kornati Adventure, Watermelon Voyage and the River Odyssey. Each program has a focus on the preservation of intangible maritime heritage. The Kornati adventure which pairs students with a local family in the remote islands to take part in subsistence agriculture using the gajeta as the main form of transport. The Watermelon Voyage uses a traditional cargo vessel, bracera Gospa od mora, to move several tons of watermelon down the coast. This recreates the cargo voyages that moved produce to the islands since before the times of the regular ferries and refrigerated trucks. The river odyssey is completed on the

banks of the inland rivers. In this program, students pursue a boatbuilding project, building a river skiff, then take it down stream on an expedition though the cities of the student's region.

In each of the expeditions, AMI collaborates and develops its programs with local organizations that share the same goals. The framework of the program design incorporates local partners for each of its individual activities. Each network creates a support group for the students in all of their tasks. The role of Adriatic Maritime Institute is to organize our 'local heroes' to work together with the youth for its region. Each of these organizations works directly with young people using the skills of boatbuilding, sailing, and learning about the ecology of the region. The whole group facilitates the life skills training and preservation of heritage though working directly with elders as role models and educators.

In the coming years, I hope that our goals of helping to organize local efforts to preserve maritime heritage is bolstered by the national and international effort to create a network of organizations with similar goals. This will enable governmental support of small-scale heritage preservation efforts and help to bring these big ideas to the forefront of societies conciseness. The combination of rigorous academic work along with preservation activities for youth has enabled many organizations to build great program models. Combining these efforts in the Adriatic will surely be of benefit to the region, nationally and internationally.