Interpretive Cultural Diffusion and Natural/Cultural Esotericism: Ecotourism and It’s Implications for Sustainable Resource Management, Small-Scale Fishery Development, and the Existential Crisis of the Modern Individual

By
Sam Kaiser
University of Colorado at Boulder

A thesis submitted to the
University of Colorado at Boulder
in partial fulfillment
of the requirements to receive
Honors designation in
Environmental Studies
May 2015

Thesis Advisors:

Krister Andersson, Department of Political Science, Committee Chair
J. Terrence McCabe, Department of Anthropology, Institute of Behavioral Science
Dale Miller, Department of Environmental Studies

© 2015 by Sam Kaiser
All rights reserved
Abstract

Small-scale fisheries (SSF) in developing nations face a harsh variety of internal and external stressors on a global scale. International economic development, population increase, and environmental degradation are among a slew of difficult challenges facing the subsistence livelihoods of individuals in artisanal fishing communities. In order to prevent these communities from facing increased economic and political marginalization, development scholars have formulated a wide range of frameworks, hoping to provide foundational plans for reproducible fishery management. While these plans have had success in defining the variability and case-specificity of SSF management projects, leading authors still agree that plans for economic development and resource conservation are vastly underperforming. One potential economic solution for SSF development is ecotourism, an environmentally conscious brand of tourism that seeks to conserve the local resources and cultural heritage of endemic communities, while promoting their political and economic mobility. In this honors thesis, four case studies from SSF sites in coastal Tanzanian archipelagos are analyzed for consistent themes in the development process. Research is taken from academic literature, online sources, and personal study done in the area. All of these cases have some level of official marine protection, and all of these cases include some amount of tourism development. Results from the case studies indicate that whenever cultural barriers between different stakeholders have to be overcome in the communicative process, development remains gradual, with slow improvements over time. To explain difficulties in the information dissemination process, deep ecology interpretive theory is employed. This realization forms the basis for Interpretive Cultural Diffusion (ICD), an original theory with its roots in deep ecology. This theory helps to explore why overcoming differences in respective cultural frameworks is always a gradual process, with many resistances. Ecotourism development can be promoted by circumventing these obstacles, by avoiding a build-up of cultural resistances through gradual diffusion of ideas, and by engaging local stakeholders, encouraging them to define the development through their own cultural understanding. The paper goes on to illustrate how ecotourism not only benefits from this rationale, but also fundamentally promotes it. By applying popular motivations for ecotourism consumers, one can show that ecotourism provides a platform for local communities and ecotourists to actively share their philosophical foundations with each other, aiding in the cultural diffusion process. Through this, two new types of esotericism are defined in relation to each other, nature esotericism and cultural esotericism. In this relationship, the authenticity that tourists seek is cultural esotericism, the remote culture’s hidden wisdom and traditional perspective. The perspective is rooted in their relationship with their environment, and by this connection cultural esotericism is a manifestation of nature esotericism. Ecotourism simultaneously brings resource conservation, environmental preservation, economic development, and political empowerment to local communities, while providing tourists with a new perspective on existential crises of modern society. The paper then makes recommendations for the future development path of ecotourism programs, seeking to use Integrated Cultural Diffusion as a methodology to avoid conflicts, promote productive collaboration, and generate stakeholder support. Further recommendations for research in SSFs, marine protection, ecotourism development, and deep ecology theory are offered.
Acknowledgements

First, I would like to thank my thesis advisors Krister Andersson and J. Terrance McCabe for their guidance during this process. Both professors offered their time and commitment to me on my first request with no prior association, and this generosity and trust was integral in my progress. Both gave me invaluable direction when I most needed it, shaping the content of this thesis. I want to additional thanks to my third thesis advisor, who has taken it upon himself to manage the schedule and stress of every ENVS seniors writing an honors thesis every year. The ENVS Department would not have the reputation for quality theses that it does without his continual cheer and time management skills, an interesting combination I have yet to see in anyone else. Thank you to David Youkey, my Environmental Ethics professor. Not only did he peak my interest in deep ecology in my first year at CU, but he wrote a recommendation that got me to Zanzibar in the first place. The second recommendation was written by Nordic Studies Department Chair Benjamin Teitelbaum. my closest faculty ally and friend during my time at this university. I cannot thank him enough for his dedication to wonderful classes and student engagement. Theories learned in his classes are foundational in this thesis. I want to thank my Zanzibar comrades for a second time, especially Ali, Iss-haka, Mzungu Price, Ryia, and Said, they made the trip an experience I will be happy to never forget. I want to thank the friends who made my life better during these last four years, including Noah, Gamal, Boneth, Taylor, Drew, Sharif, L, Sophie, Jess, and Hannah. If your name is not on this list, know that I dearly appreciate the time I spent with you. Thanks to the student government and Environmental Center. I would also like to thank a girl named Jamie Woodworth, who makes the world a better place. Finally, I would like to thank my Mom, Dad, and brother for everything they have done for me.
# Table of Contents

Abstract.......................................................................................................................... 2
Acknowledgements........................................................................................................... 3
Background .................................................................................................................... 7
  Sustainability .................................................................................................................. 7
  Biodiversity and Poverty Reduction ........................................................................... 8
  Decentralization and Co-Management ....................................................................... 9
  Small Scale Fisheries (SSF) ....................................................................................... 11
  MPAs .......................................................................................................................... 13
  Ecotourism .................................................................................................................. 14
  Deep Ecology .............................................................................................................. 17
  Esotericism .................................................................................................................. 21
  Coastal East African History ..................................................................................... 21
Case Studies .................................................................................................................. 24
  Misali .......................................................................................................................... 24
  Chumbe ...................................................................................................................... 26
  Mafia ............................................................................................................................ 27
  Menai Bay .................................................................................................................... 28
Literature Review .......................................................................................................... 29
Methods ......................................................................................................................... 45
Results ............................................................................................................................ 46
  Misali .......................................................................................................................... 46
  Chumbe ...................................................................................................................... 49
  Mafia ............................................................................................................................ 56
  Menai Bay .................................................................................................................... 61
Analysis .......................................................................................................................... 65
  Interpretive Cultural Diffusion .................................................................................. 79
  Nature Esotericism/Cultural Esotericism ............................................................... 82
Conclusion ...................................................................................................................... 85
Recommendations ......................................................................................................... 87
Appendix (Maps) .......................................................................................................... 88
Bibliography .................................................................................................................. 94
Introduction

The archipelagos of Zanzibar and Mafia, located off the coast of Tanzania, have rapidly developing tourism industries in an increasingly globalized society (Torell et. al. 2006, Norlund 2012). As this sector emerges as a primary part of the Zanzibari and Mafia economies, national, international, and local forces compete for the rights and access to the resources on which the tourism is based. The rich, unique marine and terrestrial ecosystems are valuable assets for the islands. Beyond their newfound potential for tourism attraction, the coral reefs that ring the island also have traditionally provided food and income for local subsistence fishing communities (Allison and Ellis 2001, Basurto 2005, Cinner et. al. 2012). As foreign tourism developers, international development groups, and regional government forces compete for the rights and access to these assets, the local communities often find themselves without the power to manage their own traditional fishing grounds, unprepared casualties in the chaotic resource grab that comes with globalization (Allsion et. al. 2012). Internally, increased population pressure, lack of infrastructure, and lack of enforcement access laws lead to rapidly declining fish resources. Externally, fisheries are subject to insecurity from global trends, including climate changes and pollution, fluctuations in global economic market, and changes in regional government authority (Delgado et. al. 2003). While these factors are putting small-scale fisheries (SSF) at risk on a global scale, decentralized co-management has emerged as a leading strategy for SSF management that encourages community engagement and brings stakeholder collaboration to the forefront. In co-management programs, the community that directly uses the fishery for sustained livelihood works
with other parties, including governments and international development organizations to facilitate natural resource conservation and economic development (Cinner et. al 2012).

Scholars recognize that SSF users rarely rely solely on volatile fish resources, instead incorporating fishing into a collection of activities that form a subsistence livelihood (Allison and Ellis 2001). Tourism is the fastest developing industry in these islands, and potentially very damaging to local natural, human, and cultural capital (Kaiser 2013). Ecotourism, in contrast seeks to minimize impacts on local environment and culture, while supporting marginalized communities (Gossling and Hultman 2006). Thus, ecotourism can be a new economic opportunity for local artisanal fishing communities, leading to natural resource conservation and development simultaneously. However, without proper planning and implementation, ecotourism can instead create increased inequalities and environmental degradation while doing nothing to assist local populations. Monitoring the state and success of ecotourism development in these vulnerable communities is vital for identifying the potential risks and rewards the industry brings. Doing so is the difference between sustained livelihoods and increased poverty.

In this thesis, I seek to answer the questions, for four SSF sites in Zanzibar and Mafia: To what extent do emerging co-managed ecotourism programs exist? In these cases, has ecotourism adhered to its own guidelines? Has natural resource management and community development benefitted from ecotourism? In my search for common factors, I employ deep ecology theory, delving into existential philosophy. Ecotourism allows us to incorporate these ideas through the tourists’ quest for authenticity. In doing so, I define a strategy for engaging stakeholders on their own terms: Interpretive Cultural
Diffusion. I also reassess the values behind ecotourism, labeling nature and cultural esotericism. For the Misali Island Marine Conservation Area, the Chumbe Island Reef Sanctuary, the Mafia Island Marine Park, and the Menai Bay Conservation Area, the exploration of these theories can help scholars, regional governments, and development organizations chart a path to sustainable natural resource management and economic development, securing livelihoods for marginalized coastal fishing communities while promoting their unique cultural values.

**Background**

**Sustainability**

The World Commission on Environment and Development, commonly known as the Bruntland Commission, offers this definition for sustainability, “development which meets the needs of current generations without compromising the ability of future generations to meet their own needs” (Bruntland 1987). This is often applied to one’s economic and social ability to maintain one’s own quality of life, including health, safety, and relative comfort. It can also be applied to the continued vitality and stability of ecosystems, either localized or on a global scale (Cardinale 2012). Sustainability has grown in the 21st as a cultural and political concept, as a social and philosophical movement, and as a way to interpret economic practices. The University of Colorado is initiating a School of Environment and Sustainability to respond to this movement, and in 2014 CU Chancellor Phil DiStefano stated, “Our goal is nothing less than being the
global leader in sustainability – and that aspiration carries with a great responsibility to advance on all fronts” (ISI 2015). As CU Student Government Director of Sustainability, I have seen sustainability in terms of assessing capitalism growth models, as a platform for political representatives of the state, and as philosophy for the pacing one’s own life. In this thesis, sustainability is related directly to natural resource management in artisanal fishing grounds in developing nations. It is also explored through the lens of eco-tourism, and the nascent industry’s contribution to environmental and cultural conservation. Below, I will explain why sustainable management of natural resources and cultural values in marginal fishing communities is important, and how ecotourism can help us facilitate that sustainability.

**Biodiversity and Poverty Reduction**

Evidence suggests that biodiversity loss negatively impacts humanity in a variety of ways, by degrating the effectiveness of ecosystems functions and lowering overall resource capture through the loss of key functional species (Cardinale 2012). Despite the potential risk of biodiversity loss, the international community has struggled to create tangible, consistent success in the sphere of biodiversity protection (Ratner *et. al.* 2006). As of 2010, biodiversity still shows declines, without that rate of decline slowing. In addition, biodiversity pressures, such as resource consumption, invasive alien species, and climate change impacts have increased (Butchart 2010). This progression exists despite the reality that the world spends an annual US$8-10 billion dollars combatting biodiversity loss (Davies *et. al.* 2014).
It is well established that biodiversity conservation and poverty alleviation are linked in the international aid sphere (Adams 2004). A disproportionate amount of the world’s biodiversity is located in developing nations (Waldron et. al. 2013). This revelation has historically linked environmental conservationists and development aid managers. However, Convention on Biological Diversity representatives continue to cite lack of finances as one of the main issues preventing them from achieving their 2010 goals (CBD 2009). Thus, developing communities, and the international agencies committed to assisting them, must create comprehensive plans that indicate to donors that their aid will be put to the greatest effective benefit if they hope to receive international biodiversity conservation aid. Current academic research suggests that one of the greatest strategies for effective biodiversity programs is incorporating the concept of biodiversity as a public good (Rands et. al. 2010). By establishing this concept, one can increase exposure to biodiversity conservation in terms of human rights. However, to demonstrate the public good of biodiversity, one must bring the benefits of biodiversity to the resource users themselves, establishing incentives for local communities to participate. From this theory stems the rise of community resource management strategies (Cinner et. al. 2012).

**Decentralization and Co-Management**

Current development theory, especially for nations lacking in centralized institutions and advanced infrastructure development, promotes decentralization as a way to engage multiple stakeholders in planning process (Béné et. al. 2009). Through decentralization, governments are transferring management responsibilities from central
agencies to local institutions, like community groups and place-specific development organizations. The prevailing theory is that local authorities will have a deeper understanding of local issues and nuances, and thus can more effectively tailor their policy solutions to the needs of the local community (OECD 2003). Decentralization advocates promise increased public accountability, environmental sustainability, and the empowerment of marginalized communities in the political process (World Bank 2010). Natural resource management projects have a unique way of promoting decentralization, as these natural resources represent a considerable source of revenue and land jurisdiction for emerging local governments (Béné et. al. 2009). This jurisdiction can help local governments garner authority and institutional experience through the management of their own resources. However, local governments rarely start from scratch, and do not operate in a vacuum. Instead, they frequently cooperate with regional governments, business enterprises, international development, aid, and conservation agencies, and other local stakeholders, in a phenomenon known as co-management (Wamukota et. al. 2012). Co-management seeks collaborative agreements between these forces in order to engage multiple stakeholders in ways that benefit each party. It is especially helpful for marginalized communities in developing countries, as international aid agencies can assist newly formed local government groups in their institutional knowledge and management capabilities. A well-organized co-management strategy will help the marginalized community gain political autonomy. Unfortunately, a poorly planned decentralization strategy can exacerbate local inequalities instead, as local groups seize power in the vacuum left by the regional or national government (Béné et. al. 2009). Thus, current literature is focused on identifying specific elements in co-management.
structure that can indicate a responsive and effective development program. This thesis deals with one specific type of common-pool resource, small-scale fisheries (SSF), and suggests a new perspective for identifying why some co-management efforts falter, while other succeed.

**Small Scale Fisheries (SSF)**

The majority of the world’s fishers live in developing countries and work in small-scale fisheries (Allison and Ellis 2001). The United Nations recognizes that these fisheries make vital contributions to national and regional economies, and are an indispensable source of food security and development potential for coastal communities (UNDP 2005). When accounting for individuals directly and indirectly economically reliant on SSF, it is estimated that 200-250 million people subsist on these resource pools, while 40 million people may use the resource directly (Berkes et. al. 2001, Delgado et. al. 2003). It is estimated that 95% of the individuals are involved in activities related directly to the catch, processing, and sale of fish are in developing countries. However, these totals are not reliable, and more research is needed to accurately quantify SSFs’ role in national and regional economies (Béné 2006).

Sustainability is defined, in small-scale fishery (SSF) literature, as “the ability of a system to maintain productivity in spite of a major disturbance, such as is caused by intensive stress or a large perturbation (Allison and Ellis 2001). Scholars concede that SSF are grossly underperforming in their potential as drivers of social and economic development. Marine ecosystems are in global decline due to unsustainable fishing
practices, stemming from poverty, high demand for resources, inadequate governance and education, and ineffective incentives to conservation (Grafton et al. 2006). SSF management policies have been ineffective at ensuring a baseline level of sustainable management (Andrew and Evans 2009). This has previously been explained as a failure of fisheries management, implying that the problems associated with SSF are internal and should be analyzed as such. (Andrew 2007). However, fishery communities are vulnerable to a diverse range of external stressors, including broader political and economic drivers of global economies, competition with other resource users, neglect of governments, and biophysical influences like pollution flow and climate change effects, including extreme weather events and (Allison and Ellis 2001; Andrew 2007; Delgado et. al. 2003). In addition to these variables, fisheries in developing nations today are experiencing chronic overfishing as a result of local and global population increases (Andrew 2007). It is this complexity that informs the SSF definition of sustainability. Evidence suggests that local SSF users are consistently poorer managers of their resource when under these pressures to their livelihood (Allison et. al. 2012). While it does not guarantee a successful co-management program, researchers agree that altering access control to a SSF resource can encourage political and social autonomy for communities in developing nations at risk of marginalization. Ideally, these alterations prescribe an increased conservation level of a natural resource while meeting the livelihood needs of the local users. In this way, the designation will help to prevent fish stock exhaustion, decreasing internal stressors, promoting more sustainable local SSF management. Areas that fall under a type of protection are known as Marine Protected Areas (MPAs).
In 2004, at the Seventh Meeting of the Conference of Parties (COP7) of the Convention on Biological Diversity (CBD), world leaders agreed that marine and coastal protected areas are a key strategy for the conservation and sustainable use of marine and coastal biodiversity (Mwaipopo 2008). The Convention on Biological Diversity (CBD) defines an MPA as “any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings” (CBD 2003). Parties pledged to bring at least 10% of global marine and coastal ecological regions by 2012. Unfortunately, by 2006 only .6% of said areas enjoyed this protected status (Mwaipopo 2008).

While MPAs can effectively conserve a natural biome from destructive use, it is important to implement restrictions with local communities in mind. As MPA creation is often a state-led intervention, sustainable livelihoods of local communities can be forgotten. Loss of access to common-property resources can be a destructive force on a marginalized community, disempowering them through the removal of their livelihood (Mwaipopo 2008). Because of this, local users of an SSF consistently cite loss of resource access as a key concern leading to reluctance to implement new MPAs (Kincaid 2014, Levine 2004). It is for that reason that successful co-management is a vital element of the MPA establishment process. Decentralization specifically lends itself to this argument, as local managers will have a better understanding of the needs of the local
community when implementing an MPA (Levine 2004, Berkes 2012, Evan et. al. 2011). So, effective co-management makes the adoption of an MPA easier, while successful management of an MPA will lead to more management experience, the development of local political authority, and can reduce pressures on the fish resources themselves, leading to better local managers. Relying on this symbiosis, one might consider the case of SSF management and resource conservation closed, choosing to focus on specific elements of the access rights and power relations in future research. However, as noted in the SSF definition of sustainability, artisanal fishing grounds are under a range of external stressors outside of the control of the local stakeholders. As current MPA and SSF development goals are not being met, I propose an external consumer demand as an economic alleviation tool. In this thesis, I claim that ecotourism has unique potential to aid in SSF management development and MPA establishment. Not only does it require the collaboration of marginalized local stakeholders, it necessitates their engagement as part of the consumer good. Not only does it promote environmental conservation, it demands it as well.

**Ecotourism**

The Swedish Ecotourism Association (SEF), uses the Nature’s Best certification system, developed from 2000-2002 in collaboration with the United Nations. They define ecotourism through six basic principles. These are:

1. Respect the limitations of the destination-minimize the negative impacts on local nature and culture.
2. Support the local economy.

3. Make all the operators’ activities environmentally sustainable.

4. Contribute activity to nature and cultural conversation.

5. Promote knowledge and respect and the joy of discovery.

6. Quality and safety all the way (Gossling and Hultman 2006).

It is important to note that eco-tourism is not the same concept as nature or nature-based tourism. Nature tourism, defined by the IUCN, includes “all tourism directly dependent on the use of natural resources in a relatively undeveloped state, including scenery, topography, water features, vegetation, and wildlife” (IUCN 1992). While a popular industry, nature tourism can be considered a traditional form of tourism, and does not necessarily include sustainability requirements.

Ecotourism has a specific imperative to maintain a sustainable quality of life for local communities and to protect their economic well-being and unique cultural traditions. Without this focus, ecotourism could be considered a purely environmental preservationist ideal. However, this definition of ecotourism does not include other liberal western values, such as gender and racial equality or sexual tolerance. While these ideals are often incorporated into ecotourism development strategies, ecotourism distinguishes the protection of cultural traditions. The IUCN set the foundation for this distinction by defining ‘sustainable tourism’, the precursor to eco-tourism, as tourism activity that maintains the continuing value of heritage resources. This can include either the natural, environmental resources or cultural resources (IUCN 1992).

Authenticity is a driving factor for tourism to exist as a consumable good. Consumers search for authentic experiences in their tourist ventures, and while this
search is not necessarily the same for each individual, there is a general understanding that an authentic tourist experience will be one in which the tourist glimpses something that is candid, real, and as life exists outside of its role as a tourist attraction. Tourism destinations, then, often seek to downplay the tourism culture, instead promoting the idea that the cultural idiosyncrasies are not staged and not repeated. The authors Ecotourism in Scandinavia postulate on the nature of authenticity, and its role in ecotourism. This desire in the ecotourist is broken down into three categories, the origin, the unique, and existential (Gossling and Hultman 2006).

In the concept of the origin, ecotourism is displayed in contrast to modern, developed societies. They argue that liberal western democracy promotes the notion of accelerating time into fears about the elimination of true authenticity in a globalized society. Because globalization is spreading to the most remote cultures and societies, and seemingly doing so at an increasing rate, tourists fear that soon the authentic cultural experience will not exist, increasing the demand for this experience. In ecotourism, local people, and guides in particular, are expected to have some inherited knowledge brought through cultural preservation and tradition. This knowledge is expected to be an inherited understanding, one that can be effectively demonstrated to the tourist. They may even have knowledge about the nature of a healthy, sustainable relationship with the environment through this background. Because of this, the authors stress the need for professional skill development in local guides (Gossling and Hultman 2006, Andersson Cederholm 2000).

The discussion of local training is continued in the concept of the unique. The researchers maintain that it is not the uniqueness and rarity of the culture or environment
itself that makes a successful ecotourism project, but the personal, authentic, experiences the tourist engages in. They argue that instead of focusing on the unique selling points of a place when marketing an ecotourism venture, one should focus on selling the unique, personal experience the tourist will gain. This includes highlighting the tourist as a valuable, engaged part of the experience, through the tourist’s own uniqueness. Thus, finding inspirational experienced local guides who are willing to interact with a tourist in a specifically revealing and personal way is a vital part of the ecotourism experience.

The third notion of the authenticity of ecotourism is the existential authenticity. Through this, nature is used as a medium for reaching a holistic experience with what could be called ‘the order of the universe’ or ‘the web of life’. Through ritualistic, novel, and framed experiences, the experiencer can find a state of flow, immersing oneself in the surroundings. This can lead to poignant self-reflection, a potentially needed changed from the rigors of the modernized world. With little decisive marketing strategies, ecotourism operators consistently advertise this type of spiritual awakening. This agrees with the other concepts in that ecotourism is more about the individual’s experience, rather than the destination itself (Gossling and Hultman 2006, Andersson Cederholm 2000).

Deep Ecology

Born in the late 19th century, Peter Zapffe applied popular existential theories of his time to ecological philosophy. In his 600 page doctoral thesis Om det tragiske (On the
Tragic), explains that true tragedy is not when the hero fails to save something valuable, but when his/her own exceptional heroism leads to their downfall. He applies this literary metaphor as an explanation for the tragedy of human existence. In his view, humans are fundamentally misguided. Our intelligence has led us to endlessly search for meaning, order, and significance in our lives. Zapffe believes that we will never be able to fully sate this longing, existence as pure matter and inevitable entropic deterioration. He writes, “What we call nature shows neither mortality nor reason; its degeneration is inevitable, and nothing, not even man’s most glorious achievements, can escape final annihilation.” Unfortunately, humans, in their quest to find morality, perpetually drive themselves further and further away from their own best interests. In developing societies, states, and philosophies, we only push ourselves further away from comprehending the insignificance of our existence, exaggerating the struggle. His remedy to this existential pessimism is to preserve what untouched wilderness remains. He concludes that by accepting the unsympathetic reality of natural systems, we can do our best to reconcile our impossible quest. Benefitting from a time period with far fewer people, Zapffe also had the privilege of recommending that humans revel in wilderness whenever possible, without worrying about ecosystem deterioration.

Anre Nass, a Norwegian philosophy professor in the mid-20th century, is known as the father of deep ecology. Nass’ theories are hard to explicitly define, as he left his philosophies open to interpretation on purpose. He argued that when any two individuals communicate, they do not use the same explicit language. Instead, listeners interpret what the speaker is saying, and thus the meaning of the words will change based on the listeners’ interpretation. This interpretation is a subjective product of the listeners’
personal experiences, cultural background, and subconscious worldview. As such, he would not explicitly define terms such as ‘self-realization’, ‘ecophilosophy’, ‘complexity’, ‘diversity’ and ‘symbiosis’. However, he does clearly believe in the intrinsic, objective value of nature. In his philosophy, he rejects the ‘subjectivity of value’ as a valid norm. He claims that we interpret the objective value of nature subjectively. When any individual finds subjective value through interaction with nature, they are interpreting that objective value through their own cultural lens. Therefore, the natural environment has objective value even in the complete absence of the human existence. Nass continues to suggest that frequently, the subjective value of nature and wilderness to people is through our ability to identify with instances in the struggle of life and death. The sobering objective struggle of natural selection helps to put our own impermanence and insignificance in perspective. This identification is a way of rationalizing the existential disquiet that Zapffe describes. Nass couples this with the ecological understanding that the utilitarian greatest benefit to the beings in the Earth’s ecosystem. By promoting our own survival and quality of life above that of other species, we have reduced utilitarian benefit, while disruptive the balance of Earth’s life systems. In this, Nass promotes Malthusian Theory, the original declaration that the growth rate of the human race was fundamentally unsustainable.

In 1998, Paul Shepard final work was published, two years after his death. *Coming Home to the Pleistocene* adds to the theories of deep ecology by proposing the ‘Pleistocene Paradigm’, the theory that existential crises among modern individuals are caused by our longing to reenter our natural ecological niche as a hunter-gathering band society. He argues that hunter-gatherer social organization allowed for the ideal formula
of human interaction, physical activity, time patterns, personal freedoms, and survival necessity. The lifestyle provided by hunter-gatherer organization led to a maximization of our happiness and a conceptual satisfaction with their understanding of place, time, and purpose. In addition, we lived in relative harmony with our environment. Not only were we less disruptive to ecosystems, but we are actually naturally adapted to that lifestyle. Shepard argues that as we began to dominate our ecological niche, eventually transcending traditional ecosystem dynamics, our society developed faster than evolution allows. We now find ourselves outside our ecological niche, poorly adapted to Earth, and poorly adapted to our own society. He notes that remnants of Pleistocene culture can still be found in hunter-gather bands in Africa and Australia. He suggests that humans utilize lessons from cultures less removed from our ecological niche together with our own knowledge of this time period and our natural predispositions to such behavior. It is this wisdom that we seek in traditional cultures. Shepard says that this is the subjective value that humans interpret in nature and the concept of ancient wisdom. The subjective value we glean from experiences in the natural world is not just based on our identification with the struggle of mortality, but in our longing to reenter our evolutionary role. He writes, “A journey to our primal world may bring answers to our ecological dilemmas. Such a journey will lead, not to an impulsive or thoughtless way of life, but to a reciprocity with origins declared by history to be out of reach.” He explains that our modern personal and ecological dilemmas are caused by disconnection from our origins, and experiences in nature can remind us of natural motivations, peaceful temperament, and a sense of purpose (Shepard 1996).
Esotericism

Esotericism contains disciplines engaged in the search for esoteric knowledge. Esoteric knowledge refers to wisdom that one cannot gain through traditional methods of research, but instead must be sought through inner speculation, secret learning sources, and deep understanding. Esotericism can be applied to most religions, but especially evokes images of Buddhist teachings, where only through dedication, sacrifice, and meditation can an individual find peace and enlightenment. Esotericism stands in defiance of the scientific method, which would contend that through imaginative hypotheses and proficient data collection and analysis, the answers to our dilemmas can be identified. While traditional esoteric followings are specifically anthropocentric, I contend that our enjoyment of the natural world is rooted in esotericism. Deep ecology is actually a form of esotericism, as it recommends that individuals seeking harmony with their surroundings should take wisdom from nature. The Pleistocene Paradigm also rings of esotericism, as it speaks of ancient, hidden knowledge in our evolutionary path. In this thesis I will explain how esotericism is actually a key good offered by ecotourism (Von Stuckrad 2005).

Coastal East African History

Before the European expansion, the islands off the Tanzania coastline were already central features of the Indian Ocean trading network. By the 1st century C.E, traders from modern day Yemen, Oman, the Persian Gulf, and western India traveled to
Zanzibar, using it as a convenient marketplace for trade with the African mainland and merchants from exotic locations (Columbia U. 2012). Through this continued trade, Zanzibar has developed a diverse cultural foundation, incorporating Islamic law, religion, and architecture, Indian food and decorative styles, outrigger canoes of Indonesian origin, Western government values, and Swahili language (Walley 2004).

The Tanzanian coastline has experienced many waves of conquest and colonization, adding to its diverse background. The area came under Portuguese control for the majority of the 16th and 17th centuries. Their rule is remembered for violence and for poor integration with the local communities, as they were more interested in plunder and control of the trade profits (Walley 2004). However, trade continued to increase as globalized travel expanded and became safer and more accessible. This main portion of African exports was then comprised of ivory and slaves. When the Omani Sultanate took control of the area in 1698, the Portuguese were expelled. An increased focus was put on spice plantation production, especially cloves (Columbia U. 2012). In 1841, the sultan, Seyyid Said, moved the capital of his Omani Empire to Zanzibar. He implemented further trade routes into the mainland, and encouraged more Arab and Indian traders to immigrate to the islands (Columbia U. 2012). During the period of Omani rule, Zanzibar was at its height of international significance.

In 1891, Britain and Germany passed the Heligoland-Zanzibar Treaty, and took colonial control of respective areas of the Eastern African coastline. Germany already had indirect control of the majority of the mainland under the German East African Company, but their inefficiencies and aggressive conduct led to staunch resistance from the coastal Arabs. Through the treaty, Zanzibar was considered a protectorate of the
British, while Mafia remained under German protectorate with the mainland. In 1897, British dispute with the Arab rulers led to the decision to abolish slavery and the Zanzibari slave trade. In the post WWI period, Tanganyika became a British territory under the League of Nations treaty of 1922, and slavery was abolished there as well (Walley 2004). The end of the slave trade, coupled with more consistent European settlements on the mainland like Dar Es Salaam, led to Zanzibar’s gradual reduction in power as a trading hub. In addition, the central port of the Mafia archipelago was transferred to the largest island from the much smaller Chole, shifting their geographic political landscape, too.

In 1961 and 1962, Tanzania achieved independence as a republic within the Commonwealth of Nations, and Julius Nyerere became its first President (Columbia U. 2012). Nyerere would have significant impact on leading Tanzanian political and social philosophy, championing an African culture-centric egalitarian populism (Walley 2004). In December 1963, Zanzibar received independence as a constitutional monarchy under the sultan. Almost one month later, the democratically elected government was overthrown in the Zanzibar Revolution. Orchestrated by a Ugandan mainlander, John Okello, the revolution included a genocidal massacre of ethnic Arabs and Indians. By April of that year, the revolutionary force found themselves unable to govern. Zanzibar united with Tanganyika, forming the United Republic of Zanzibar. Zanzibar is generally underrepresented in the mainland government, but they remain a semi-autonomous region, with their own Revolutionary Government of Zanzibar (Columbia U. 2012).

While Tanzania’s economy developed in the latter half of the 20th century, Zanzibar remained exceptionally isolated under centralized communism. The
Revolutionary Government’s draconian policies with regards to travel and personal freedoms and their penchant for cronyism led to an unpopular regime, including the assassination of the first President Abeid Karume in 1972 (Columbia U. 2012). Their ineffective import/export policies, including the state-controlled clove production, drove Zanzibar into a spiral of poverty. While the Mafia archipelago was still under mainland Tanzania, it received very little oversight and development as a remote corner of the nation. In the early 1990s, Zanzibar and Mafia quickly began receiving more attention due to their potential as tourism destinations. The Mafia Island Marine Park was gazetted in April 1995 with help from the WWF (Andrews 1998). Zanzibar removed their travel restrictions and adopted economic policies more based in capitalism. Zanzibar produced much of its first legislative framework concerning MPAs and national parks in the mid 1990s, in necessary response to the Chumbe Island park project. The main governing documents for MPA more management in mainland Tanzania, and therefore the Mafia archipelago, are the National Environmental Policy and the National Integrated Coastal Management Strategy, passed in 1997 and 2003 respectively (Mwaipopo 2008). Meanwhile, Zanzibar MPAs are managed through the Environmental Management through Sustainable Development Act, passed in 1996, and the Conservation Area, Reserves, Parks, and Sanctuaries Act of 1998 (Kaiser 2013). Today, tourism is Zanzibar’s second largest and fastest growing industry, and the basis for rapid economic development in the archipelago.

Case Studies

Misali
Misali is located at 05°15’ S, 039°36’ E, approximately ten kilometers off the western coast of Pemba Island (Poonian 2008). Pemba is the northern of the two main islands that comprise Zanzibar, the other being Unguja. Misali is 0.9 km² in size. Its landmass is raised Pleistocene coral rag limestone, and is forested. The island system supports productive biomes: seagrass beds, mangrove forests, as well as a 9.4 km ring of extensive coral reef formations that surrounds the island, especially on the western shore. Misali’s reefs host two-thirds of coral genera known to exist in Tanzania, including 42 hard coral genera. These reefs contains over 244 fish species from 43 families. The relatively undisturbed coral rag forest hosts rare endemic species, including the Pemba sunbird (*Nectarinia Pembae*), the Pemba White-eye (*Zosterops vaughani*), the coconut crab (*Birgus latro*) and the Pemba flying fox (*Pteropus voeltzkowi*), one of Africa’s largest bats. In addition, Misali’s west beach, Mpapaini, is a proven nesting ground for the endangered green sea turtle (*Chelonia mydas*) and the critically endangered Hawksbill sea turtle (*Eretmochelys imbricata*) (Abdullah et. al. 2000).

It is estimated that about 1640 fishermen use the island yearly, coming from approximately 29 coastal fishing communities around Pemba. It is further estimated that about 7260 people rely directly on Misali for survival. These individuals come from surrounding villages including the southern shehias of Makombeni, Wambaa, Wesha, and Muambe and the northern Kojani and Micheweni villages (Abdullah et. al. 2000). Fishermen using the grounds are artisanal, using traditional methods such as traps, nets, beach seining, hand lines, gill netting, seine netting, and pointed sticks for octopus. While groups stay on the island for two to three weeks in the high season, there were no
permanent structures prior to the conservation development beginning in 1996. The local fisherman did engage in a certain level of destructive practices, however, including dynamite fishing and the locally invented practice of *kigumi*. In this technique, fishers enter the reef at low tide, surrounding areas with fine-mesh nets. Then, they break the coral reef with bats, scaring the fish into the surrounding nets. Local ecologists consider it equally destructive as dynamite fishing, when done consistently. As a result, fishers had reported a decline in reef productivity prior to the development (Lim 2007).

**Chumbe**

Chumbe Island is located six kilometers west of Unguja, Zanzibar’s most populous island. At 06°17’ S, 39°10’ E, the island is located directly along a major shipping channel between Zanzibar and Dar Es Salaam, only 30 km east of the African mainland, and just 12 km southwest of Stone Town, Zanzibar’s central port and biggest city. Chumbe’s landmass is .22 km² of fossilized coral rag limestone, with dry coral rag and mangrove forest biomes. Pristine coral reef, seagrass beds, and coastal shallows surround the island (Norlund 2013). The coral reef sanctuary contains over 200 species of hard coral from 55 genera, 90% of the species ever recorded in East Africa. Over 420 fish species have been recorded, 50 of which were found between 1998 and 2011 (Dodds 2012). This includes the giant grouper (*Epinephelus lanceolatus*), rarely found in shallow reefs like Chumbe’s, as well as 16 species of butterfly fish (CHICOP 2013). Its coral reefs are the most biologically diverse of any of the Zanzibar MPAs (Norlund 2013). The island is 90% covered by prized coral rag forest, containing approximately 124 identified plant species and 93 recorded bird species. The island serves as a sanctuary for the
critically endangered and endemic Ader’s duiker (*Cephalophus adersi*). The Zanzibar Commission for Natural Resources moved the small mammal there because they could not stop the local populations from poaching them from nearby Jozani Forest Reserve (Riedmiller 1998). In addition, a stable population of 300 coconut crab individuals (*Birgus latro*) lives on the island. Local populations of coconut crabs are quickly disappearing due to their edible meat, and IUCN data is not sufficient to give them a definitive endangered listing (CHICOP 2013).

**Mafia**

The Mafia Island archipelago is located 20 km east of the Tanzanian coastline, and approximately 120 km south of Dar Es Salaam and Zanzibar. The main island, called Mafia, is 48 km long from southwest to northeast, and 17 km at its widest point. The Mafia Island Marine Park is 822 sq. km., and located between 7°45' S and 8°09' S latitude and 39°30' E and 39°54' E longitude, on the southeast side of Mafia Island. It contains four small inhabited islands, Chole, Juani, Jibondo, and Bwejuu. Ecological research in the park has identified over 400 species of fish, 5 species of sea turtle, and 7 species of mangrove (Ruebens and Kazimoto 2003).

Despite a rich natural ecosystem, the Mafia district is one of the poorest and most remote areas of Tanzania. Approximately 42% of the Mafia population lives below the poverty line, and its per capita income is less than half of the national average. The park area itself is home to approximately 23,000 people in 13,000, at least half of which rely on exploitation of the natural resources recognized under the park (Kincaid 2014).
common practices include seaweed farming, and subsistence farming practices, especially the export of coconuts and oranges (Walley 2004).

Unlike the cases in Zanzibar, MIMP is under management authority of the mainland Tanzanian government, with collaboration from the WWF. The park plan was launched under the Marine Parks and Reserves Act No. 29 in 1991. The park itself was established in 1995, and officially gazetted in 1996, when it became Tanzania’s first MPA. It is IUCN category VI, a protected area with sustainable use of natural resources (Kincaid 2014).

Menai Bay

The Menai Bay Conservation Area is located in the southwest region of Unguja. At 467 km², it is the largest MPA in Zanzibar, though smaller than the Mafia park. It contains six small islands, coral reefs, seagrass beds, and mangrove forests (USAID 2006). The islands host coral rag forests, sea turtle nesting sites, and population of coconut crabs (*Birgus latro*). The population of coconut crabs on Pugu’ume were well known to local fishermen, but only recorded in 2013 (Kaiser 2013). Water depth at high-tide average 10m in depth.

The MBCA contains seventeen villages, divided into the west, central, and south districts. The villages are experiencing rapid population growth: census data indicates that the collective population grew from 11,324 in 1998 to approximately 27,000 by 2005 (Shinn 2014). The villages are situated on coral rag with poor farming potential, and are therefore reliant on fishing resources as a source of income. Seaweed farming,
agriculture, shepherding, firewood collection, and craft making fulfills the remainder of their livelihood needs. In addition, some members of these villages are engaged in the tourism trade, which brings 15,000 to 20,000 annually for dolphin watching and snorkeling (USAID 2006). While poverty is common, villagers actually enjoy better access to piped water and sufficient nutrition than the average for Zanzibaris.

In the 1980s, fishery productivity began to deteriorate, leading a village called Fumba to establish a community volunteer monitoring program. This program was specifically designed to discourage dynamite fishing. The dynamite fishing started to become more prevalent because fishermen from nearby Dar Es Salaam would either use the strategy themselves, or contract impoverished islanders to fish for them. The monitoring program generated positive community support, and was quickly spread to five surrounding villages. However, lack of training and resources inhibited successful enforcement. At the request of the villages, the Zanzibari Commission of Natural Resources and the WWF were engaged with a plan to form the Menai Bay Conservation Area. The first collaborative meetings were held in 1995, and the boundaries of the park were gazetted in 1996 (Shinn 2014)

**Literature Review**

In 2001, English SSF scholars Allison and Ellis employed a new framework, ‘the Sustainable Livelihoods Approach’, designed to apply a local community perspective when understanding how to make fisheries management and development policy most effective. Diana Carney originally introduced the concept in 1998, but Allison and Ellis
were the first to bring it to SSF literature (Carney 1998). Their structure claimed that livelihood strategies of artisanal fishers are complex and malleable, focused on adaptability and survival rather than more rigid concepts like sheer economic output. In this framework, the authors acknowledge a variety of existing capitals, modified by access rights, various small and large-scale trends, and disruption. This nuanced approach creates a more comprehensive view of the conditions in which subsistence livelihood strategies are produced. Then, they analyze how those strategies are affecting livelihood security and environmental sustainability. The researchers conclude that preceding SSF management strategies, when hoping to improve quality of life for SSF users, were too concerned with improving the rigid productivity and efficiency of the fishery itself, while fishing in these cases is often opportunistic behavior as part of a subsistence lifestyle. They suggest that recognizing the prevalence of part-time fishers and supporting their complementary income-generating activities, while taking into account the mobility and unpredictability of SSF, will be most beneficial. This new perspective aids developers in their efforts to empower SSF users through access controls, technological improvements, and economic and political authority, while accounting for the flexibility of their livelihoods. Their work is partly responsible for the current SSF development field’s emphasis on alternative livelihood opportunities and is a great example of SSF literature attempting to incorporate the unique qualities of artisanal fishing lifestyles (Allison and Ellis 2001).

Another influential approach to SSF management is the ecosystem approach, which seeks to acknowledge fishing as a significant determinate of marine ecosystem health. SSF scholars use that knowledge to attempt to manage the resource pools in terms
of the overall ecosystem, including the application of conceptual food webs and the identification of key species. By tailoring solutions to the unique qualities of the ecosystems that SSF are, they hope to create effective ecology-based management policies (Marasco 2007). Another paper claims that the ecosystems approach is not enough, as it does nothing to provide measurable incentives for the local users. It proposes an incentives-based approach that specifies community or individual access rights will create incentives for proper resource management from local users, while strengthening their political mobility (Grafton 2006).

A team of researchers in 2012 argued that SSF developers, while focusing on fishing access rights and improved economic efficiency, fail to address key factors that undermine efforts to improve resource conservation and poverty reduction. They contend that SSF users will be more effective managers when their human rights are granted first, while they will be forced to act for more immediate necessity when they are not. They apply the human rights framework supported by the Universal Declaration of Human Rights. Thus, by enabling political and social participation, providing access to health and social services, and ensuring security of property, including homes and fishing gear, SSF users will have a more secure lifestyle, and will be more effective resource managers (Allison et. al. 2012). A similar point was made by a publication in 2006, stating that household surveys and focus groups indicated that poverty and concern over impending malnutrition were directly linked to breaking management standards. As such, programs that take special attention to resources provisions for local users found better compliance and increased community engagement (Tobey and Torrell 2006).
A similarly-focused paper based on Kenyan fisheries suggested that when local fishers felt that they received direct benefits from the conservation efforts, then they were more likely to comply with the fishery restrictions (McLanahan 2014). Other data suggests that when community engagement is open and participatory, charismatic local leadership is on board, and there is two-way community feedback, these strategies find greater success (Dyer and Stinger 2014). However, there is clear evidence that these factors are being ignored in Zanzibari community conservation programs (Salum 2014).

Another group of researchers, including Allison, Béné, Ratner, and led by Neil Andrew, provide a new framework for diagnosis and management of SSF. They contend that while the Sustainable Livelihoods Approach is valuable in its ability to allow managers to consider SSF users lives in a holistic sense, leading to more events identification of the cause of poverty, the approach falls short in its ability to provide a systemic pathway to improved management itself. As a result, they have produced a framework consisting of five elements: the external environment, a diagnosis of threats and opportunities, a management phase comprising the management constituency and process, and finally the outcomes that flow from this system. I argue that this system may find success when prescribing management implementation and evaluation, but that it does little to engage local stakeholders in their own cultural terms. (Allison et. al. 2007).

Another paper notes the significant overlap between current efforts for African fishery development and the Millennium Development Goals, suggesting that the global consensus around the goals can lead to a renewed focus in these SSF sites. The present the Millennium Development Goals, highlighting their focus on eradicating poverty and hunger, promoting education, empowering women, reducing child mortality, preventing
widespread disease, ensuring environmental sustainability, and creating global partnerships. They suggest that an increased imperative should be put on collaboration between SSF and MDG organizations. As a result, MDG will have applicable case studies by which to fully realize the implications of these goals. Meanwhile, SSF development organizations will improved have intellectual, institutional, and financial resources through which to assess their own efforts thus far and establish new direction. (Heck et. al. 2007).

I content that scholars attempting to apply overarching frameworks to SSF management will discover obstacles when they try to engage local stakeholders in these terms. As such, it is better to identify unique case traits in order to create foundational knowledge on which to build the management policy. However, this is not to say that the idiosyncrasies of each distinct case mean that we cannot create a theoretically informed basis for adaptive governance. As Basurto and Ostrom explain in their 2009 paper, *Beyond Tragedy of the Commons*, self-organization and robust sustainable management is a re-creatable phenomenon. To show this, they establish a list of social-ecological system variables, including governance resource policies, market incentives, and demographic trends, and use data indicators to show why one Gulf of California SSF communities succeeded in implementing policies, while another failed. They conclude that strengthening diagnostic theory is the best way to identify when solutions such as co-management and MPAs will be effective, rather than identifying which solution is generally the best practice (Basurto and Ostrom 2009). Though there is precedent for consistent diagnostic framework and management adaptations in the field of SSF
management, I continue to argue that managers will be discouraged when trying to explain their theoretical framework to the actual resource users.

An analysis of emerging access controls in Mexican SSF communities along the Gulf of California judged how one community’s implementation of a marine tenure system and informal access laws led to effective resource conservation and management. The Seri fishing community, when under threat from increased resource exploitation by outside fishers, was granted official territorial rights to their traditional grounds. After acquiring these rights, the Seri community was able to effectively manage their resources, establishing enforced access controls, removing the structure of inequalities by which permit-owning middlemen took advantage of the artisanal fishers, and forming community institutions around these goals, leading to improved community authority. As a result, local resource populations improved and are now sustainably maintained, while nearby fish resources continue to decline (Basurto 2012).

Unfortunately, establishing local community access to SSF is not an automatic recipe for successful resource management. Blake Ratner analyses the failure of fishery reform in Cambodia, which occurred in response to an ineffective lot system that marginalized local fishers and benefited middlemen ‘rent-seekers’. As population increases increased pressure on the system, public outcry led the Cambodian government to remove the lot system for an open-access policy. However, while community access was created, community management was not, leading to poorly-monitored illegal fishing and extreme exploitation as users competed for the remaining resources in the commons. Ratner suggests that this could have been avoided by implementing appropriate legal authority with clearly assigned management responsibilities for the local communities, by
creating mechanisms of accountability for resource managers including government officials and community leaders, and by allowing the community managers productive resources through which to justify the management and conservation efforts (Ratner 2007). Other literature written by Basurto supports this suggestion. One of his papers, published in 2010, claims that communities improve chances of successful resource management by adopting strong institutions, the stronger the institution and the earlier the adoption the better. After weighing these factors, it is the carrying capacity of the resource that determines whether the resource pool will crash or not (Basurto and Coleman 2010).

Research on whale-watching ecotourism in communities along the Baja Peninsula in Mexico found that the ecotourism program, while providing income for the local communities, was poorly regulated, promoted no institutionalized conservation strategies, and did not lead to lowered exploitation of the local fish populations (Young 1999). However, this program did not include any form of MPA or community management plan. The program did not follow the tenets of the UN promoted definition of ecotourism, and could more accurately be described as nature tourism. The researcher did note that local community figures were beginning to informally organize around the recognition that the whale populations had to be sustainably managed in order to preserve the industry.

A study on a community-based ecotourism management program in Ventanilla, Oaxaca, Mexico, indicated that the community was receiving benefits from the local ecotourism program. Ecotourism was economically important to the community, participation and sharing of benefits was distributed equally, and local sea turtle
conservation had improved. However, the program was conditioned by the minute size of the community (<100), and the reality that they were not previously reliant on a complex SSF. The paper recommends exploration of more ecotourism development for the community, more integration for women and children, and the establishment of policy guidelines for the area (Foucat 2002).

A graduate dissertation, defended in 2008, expressed optimism at the potential for ecotourism to aid in rural community development in the Tonle Sap Great Lake flood plain in Cambodia. While the Tonle Sap Biosphere Reserve was established in 1997, management has grown increasingly difficult as population growth, lack of economic alternatives, lack of local public services and infrastructure, lack of ownership rights and access laws, social and economic inequalities, and other environmental and political insecurities intensified environmental pressure in the fishery dependent communities. It found sufficient natural and cultural attractions in the area to support ecotourism, and local community responses suggested positive perceptions to ecotourism development when compared to natural resource management by itself. However, the author noted a significant lack of infrastructure, especially tourist accommodations, but also including local education, legal and institutional framework, stakeholder collaboration, local capacities, natural resource use and access conflicts, and general security. They also recognize the extreme vulnerability fisheries face from internal and external pressures, and note that tourism can both be affected by these changed and can be a volatile market itself. The study concluded that infrastructure and community awareness was currently not developed to the point where the implementers of an ecotourism could prevent the negative potential of ecotourism, including restricted access to fisheries and therefore
reduced livelihoods, disparity in economic benefits, increased disturbance of natural resources, and increased dependency by local communities on outside developers.

However, the study suggests that if six principles are followed in a long-term ecotourism development plan, ecotourism could potentially provide the natural resource conservation and economic development needed to ensure sustainable livelihoods for the Tonle Sap communities. These 6 principles are: integrated planning and policy development; systematic management plans; community involvement; stakeholder awareness and concern generation; stakeholder participation and partnerships; and government support programs (Baromey 2008).

More literature links the success of ecotourism and community incentives. Literature based in Chinese ecotourism sites found that economic benefits led directly to pro-environmental behavior. The research suggests that the underlying causes for this changes stemmed from cognitive social capital rather than structural capital. That is, the individuals engaging in pro-environmental behavior had changes in their values and ideology and were not simply adapting to changes in nearby institutions (Liu 2014).

An article published in the Journal of Sustainable Tourism argues that more focus must be put into the mid and long-term economic viability of ecotourism projects. They claim that ecotourism must be integrated into sustainable development policy, that ecotourism products need to adapt to consumer demand, including national branding campaigns, and that experienced high-level tourism managers can increase the effectiveness of new programs. They also note the value of promoting the unique ‘heritage’ of cultures as a product of the ecotourism experience. This recommendation
agrees closely with the authenticity explanations presented in *Ecotourism in Scandinavia* (Picard 2014; Gossling and Hultman 2006).

*Wisdom in the Open Air* is a compilation of primary and secondary sources on the Norwegian roots of deep ecology. The book follows the chronological development of existential nature esotericism and its impact on Norwegian society. I use this book for its passages from founding Norwegian philosophers Peter Zapffe and Arne Nass. I utilize Nass’ ‘interpretive theory’ in my explanation of Interpretive Cultural Diffusion, and explain how the ecotourism industry has developed through the cultures’ relationships with the objective value of nature (Reed and Rothenberg 1993).

*Coming Home to the Pleistocene* is considered Paul Shepard seminal text. The book incorporates his previous scope of research into the ‘Pleistocene Paradigm’, the theory that modern individual and societal crisis are actually founded in our drift from our natural ecological niche and behavioral patterns. I use this theory to complement Nass’ understanding of nature’s subjective value to humans.

Books 3 and 4 from the CABI Eco-tourism Series are used for background research. Book No. 3, *Indigenous Ecotourism*, a database on global indigenous ecotourism programs, is used for its overview of ecotourism as well as its short paragraphs on the relevant case studies (Zeppel 2006). Book No. 4, *Ecotourism in Scandinavia* covers a wide range of topics including Swedish certification programs and influence on indigenous Sami populations, but it is used here for an official definition of ecotourism and for its insights into the psychology behind customers in search of ecotourism (Gossling and Hultman 2006). When summarizing the existential values of ecotourism, *EcoTourism in Scandinava* draws heavily upon interviews conducted by
Erika Andersson Cederholm in her dissertation, *The Attraction of the Extraordinary – Images and Experiences Among Backpacker Tourists*. Based on informal interviews with Swedish travellers, the values behind backpacking subculture are compiled into three concepts of authenticity, the other, the unique, and the existential. These types of authenticity are a preliminary effort to understand the philosophical imperative that drives ecotourism as an economic good (Andersson Cederholm 1999; Gossling and Hultman 2006). These sources lead to a heavy impetus being placed on the quality of local tour guides, as they are integral to the tourist experience and must act as ambassadors of their own culture. This focus is echoed by ecotourism literature produced in 2010: *Tour Guide Training: A Model for Sustainable Capacity Building in Developing Countries*. The paper reports the findings of a project monitoring the development, delivery, and outcomes of the training programs for tour guides in developing countries. In addition to stressing this importance, the paper recognizes that interpretive guiding sits at the heart of ecotourism (Weiler and Ham 2010). They use the definition made by Tilden, in which “interpretation is an educational activity aimed at revealing meanings and relationships to people about the places they visit and the things they see and do there” (Tilden 1957). This understanding of interpretation is very similar to the one used by Arne Nass. Either way, literature supports the idea that the exchange and mutual interpretation of cultural values is an integral part of ecotourism.

The MIMCA does not have an abundance of supporting literature, but existing documents provide a sufficient amount of information on the early development of the program. Most information comes from *Misali Island, Tanzania – An Open Access Resource Redefined*. This resource details the past, present, and future development
elements that went into the protection of Misali Island. The document includes the management planning sequence, pattern of fisherman use of the resources, and description of the island’s natural features. The paper was created and presented at the Conference of the International Association for the Study of Common Property (Abdullah et. al. 2000). Additional information is provided through A Situational/Status Analysis of the Misali Island Project, Pemba, Zanzibar. In it, logistical objective framework is developed and analyzed. Specific attention is paid to tourist arrival rates. Lim proposes a series of solutions that could increase the overall effectiveness of the MIMCA (Lim 2000). Additional biological and topographical information is taken from an analysis of coral reef recovery around the Misali area. The research suggests that coral recovery from a 1998 bleaching event was enhanced specifically in the Misali non-extraction zone. In addition, there is a supposed piece of literature on the effects of ecotourism on the livelihoods of the local Misali users, published in 2015. While evidence of the research is online, repeated attempts to contact the Database of African Theses and Dissertations proved unsuccessful.

Early documentation of the CHICOP project comes from Sibylle Riedmiller, the project founder and funder. Riedmiller drafted papers detailing the growth of the project from two international conferences in 1998 and 2000. The documents are partially used as proof for the economic viability for sustainable non-profit ecotourism resorts in developing countries. They have specific insight into the early obstacles the CHICOP faced during their development (Riedmiller 1998; Riedmiller 2000). More recent examination of the park comes in the form of Chumbe Island Coral Park – governance analysis, in which a team of researchers worked with CHICOP staff to produce robust
documentation of CHICOP’s governance structure for the journal *Marine Policy*. The document recounts the project’s organizational structure and creates a comprehensive list of incentives provided for the local and regional communities, including economic, educational, legal, and community incentives (Norlund 2013). Another paper is primarily concerned with Chumbe Island’s exceptional multi-level education program. The paper provides readers with a detailed account of CHICOP’s alternative livelihoods training program and their partnerships with community and government stakeholders (Dodds 2012). Much of the information of Chumbe’s current state can be found in CHICOP’s 2013 status report. The sophisticated report goes over goals and values, CRS dimensions, flora and fauna, ecological monitoring programs, outreach, research projects, and devotes a considerable amount of attention to the multi-leveled environmental education proceedings, especially their school challenge program (CHICOP 2013).

The information regarding the Mafia Island Marine Park is largely taken from *Rough Waters: Nature and Development in an East African Marine Park*, published by Christine Walley in 2004. The book recounts the political struggles surrounding Tanzania’s first national marine park in the Mafia Island archipelago. Walley gives a first-hand narrative of indicative events in the park’s planning process. She relates these events to coastal East African culture, including historical narrative, community identity, and conceptions of nature. Her research brings valuable insights for understanding the idiosyncrasies of the Tanzanian and coastal village cultural framework. She concludes that the implementation of the park was far from ideal, leading to continued marginalization of the local people and inhibiting actual conservation. (Walley 2004). An overview of the interactions in the MIMP is provided in *The Social Dimensions of*
Marine Protected Areas: A Case Study of the Mafia Island Marine Park in Tanzania, produced for International Collective in Support of Fishworkers by researchers at the University of Dar Es Salaam. The paper focuses on the interactions of the local artisanal fishers with the marine park, including records of violation of the MPAs restrictions. It proposes an overview of the local fishers’ rights and responsibilities that have yet to be realized (Mwaipopo 2008). Greg Andrews reinforces Walley’s account of administrative headaches and ineffective framework implementation in the park. He contends that the formal top-down management of the park, based on an international paradigm of conservation, was less effective than using pre-existing conduits to focus more on actual implementation and pragmatism. However, he admits that the manageable size and level of community support demonstration the MIMP valuable object of focus for the conservation development, though it is ultimately inefficient (Andrews 1995).

The WWF commissioned a report on the MIMP in 2003 as part of the Marine Protected Area Management Effectiveness Initiative. Researchers generated a broad range of indicators for data collection, spanning ecological, economic, and social factors. Their main conclusions were that biodiversity and species abundance in the reef was improving, but that distribution of information regarding the management of the park and the nature of the coral reef ecosystem was less than ideal. They suggest more effort directed at engaging the local stakeholders in the planning process. Some reef areas were both popular tourist spots and the base fishing ground for some villages. This is concerning as tourists expect the tourist spots to be non-extraction zones. They also expressed the need for more ranger patrols and noted that the park was not economically self-sustaining, requiring continued donor funding (Joseph et. al. 2003). More recent
documents indicate notable improvement in the effectiveness of the park. Researchers performed a comparative ecological analysis of the prevalence and quality of the blackspot snapper (*Lutjanus fulviflamma*) in the MIMP and outside in an intensively fished area with no protections. Results showed vastly more abundant and larger individuals in the MIMP, supporting the park as a conservation strategy (Kamukuru 2004). A study from 2013 collected responses from local fishers, who consistently indicated that the park was helping to increase their catch, especially the no-take areas. It also showed that those fishers who’s familiar type gear was not restricted by the park regulations were more supportive of the conservation goals, and that fishers would often reflect the views of the peers in their village communities (Kincaid 2014). A paper in 2015 suggested that local communities in Tanzania have regularly found issue conceptualizing MPAs due to insufficient time put into educating user-stakeholders. They claim that discrepancies between community rule and park rule structure were inhibiting engagement. In addition, local user felt antagonized through their misconception that the parks were primarily about prohibition, rather than sustainable resource use. The authors suggest that the MIMP, as the first MPA in Tanzania, suffered from a delayed development rate because of these misunderstandings (Katikiro et. al. 2015).

My knowledge regarding the existence and quality of ecotourism and resource conservation in the Menai Bay Conservation Area comes from *It Takes a Village: Turtles, Trials, and Tribulations in the Menai Bay*. This research, collected in 2013, is focused on the necessity and potential for ecotourism as a solution for resource conservation and economic alleviation. It includes an assessment of the existing ecotourism on Uzi Island, interviews conducted with Menai Bay fishermen on their
perceptions of resource conservation and sea turtle poaching, and an account of the
differences between MPA policy and reality on Pugu’ume Island. The paper notes
significant failings in the enforcement of the MCBA and claims evidence of corruption in
their MCBA Office (Kaiser 2013). Another paper from the same study aboard program
confirms a lack of understanding by park residents, lack of enforcement, and increasing
economic pressure on local users. It reports overcapacity in populous parts of the Menai
Bay, and increasing pressure to fish decline fish stocks. It also explains the concept of
muhali, disappointment experienced by the local communities when development plans
do not see fruition and they are not informed of the reasons why (Colbert-Sangree 2012).
USAID has drafted two valuable documents concerning the governance of the Menai
Bay. The *Menai Bay Governance Baseline* contains valuable ecological and social data,
and assesses the trajectory the project’s management (Torell *et. al.* 2006). The other
document is more focused on dolphin tourism industry around Kizimkazi, a village on the
east side of the bay. This industry is a significant tourist aspect of the bay as a whole, but
practices are far from ecologically sustainable. The author lists tourist safety, congestion,
lack of driver training, lack of regulation enforcement, damage to coral reef and dolphin
populations, lack of stable market infrastructure, and lack of trust between boat operators
and conservation management as the main obstacles to sustainable tourism. She
recommends the establishment of a tourist information center responsible for tourist
management, education, and safety, trip management, and financial regulation in order to
bring institutional reliability to the industry. In addition, the creation of a dolphin access
permit issued to tourists could create a legal, credible way to generate revenue for the
management of the tourism program (Gautam 2010). In *The Rhetoric and Reality of*
Community Empowerment in Coastal Conservation: A Case Study from Menai Bay Conservation Area, Tanzania, Jamie Shinn assesses whether the World Bank’s Marine and Coastal Environment and Management Project actually achieved the goals proposed in its rhetoric. The project sought to establish local community engagement and inclusion through community meetings and goal setting. Local responses indicated that lack of accountability for the regional government officials, who were in charge of the project funds, mitigated any feeling of inclusion from the local representatives. Despite the point of engaging local stakeholders in the solution generation process, the communities still felt like the alternative livelihoods solutions implemented by the regional government had little relation to the actual needs of the community. Thus, the paper deems the US$61 million project a failure (Shinn 2014).

Methods

This study considers current academic research on small-scale fishery sustainable co-management and development to identify a framework for successful resource management. This framework seeks to incorporate ecotourism as a potential development solution in four case studies. A literature review is produced from SSF, ecotourism, and deep ecology research, and supplemental information is compiled from African cultural history. The SSF are in the Zanzibar and Mafia archipelagos, off the Eastern coast of Tanzania, where there is an official MPA of varying size and effectiveness and ecotourism development in some capacity. Data are collected from available information on each case study, spanning the genesis of each MPA up to present day. This includes
environmental protection, robustness of ecotourism industry, and local community benefits. This data also includes information collected through personal study in Zanzibar in Fall 2013. In order to analyze ecotourism as an effective solution in these cases, this study asks, for each SSF: To what extent has the development process and effectiveness of the existing MPAs benefitted from ecotourism? The results from this query is then applied to the question: How can ecotourism be implemented and improved in the Menai Bay case study in order to make MPA and SSF management more effective? The qualitative assessment of this effectiveness is considered in terms of the ecotourism industry’s principles, the existing academic framework of empowering SSF co-management, and the cultural values of the African coastal communities themselves. Deep ecology theory plays an integral role in the formulation of the ideas. Theory is then generated on the validity of ecotourism as a viable development and protection solution in the cases, and this theory is applied to the academic communities current understanding of effective SSF co-management. Suggestions are made for further research in the eco-tourism, SSF co-management, MPA development fields, and deep ecology.

Results

Misali

The Misali Island Conservation Project was established in 1996. The project is unique in that community actors were largely responsible for the call to protect the island.
In the 1980s, Misali was identified as a potential tourist destination, and European companies competed to acquire the land. In 1993, the Revolutionary Government of Zanzibar leased the island to a private company for tourism development. However, this decision was quickly met with staunch, organized opposition from the local community users. The fishing villages, working with international conservation groups and the Ministries of the Environment and Tourism, were able to convince the government to reverse its commitment (Abdullah et al 2000). The community employed unique arguments to garner support for their stance. The argument that an offshore mass tourism resort on Misali would cripple the terrestrial community-owned Pemban tourism industry was an integral economic consideration. While this had its impact in the government, the root of the community’s outcry was that Misali Island had been, since before modern recordings, a place of great religious significance to the local community. Individuals would travel to the island to ask for favors, health, and wisdom from the spirits, and witch doctors, and later Islamic leaders, would use the island to perform religious rituals and to speak to higher powers. It was this deep belief that spurred the villagers’ unexpectedly extreme resistance to development (Kaiser 2013). Once the parties had agreed not to lease and develop the island, enough community energy was generated to prompt discussion over an alternative plan for Misali. It was through this sequence that the Marine Island Conservation Project was established in 1996.

In 1996, the first concerted management of Misali began. It came with the intention of establishing an autonomous, sustainable conservation area, allowing full involvement from local communities. The project was managed by the Zanzibar Commission for Natural Resources, backed by a UK conservation consulting firm called
the Environment and Development Group. This group was able to operate with funds from the European Union. The consulting firm performed stakeholder analyses and consultations that were vital for developing a zoning plan with a strong economic foundation. They used natural resource management principles to create a plan that would balance user need with necessary environmental restrictions. While fishermen in Zanzibar are consistently averse to fishing restrictions, the fear of losing the grounds completely to foreigner hoteliers pushed them to support the conservation area. On May 22, 1998, the Misali Island Marine Conservation Area (MIMCA) was established. The MIMCA is written in the Ministries’ of Forestry and Fisheries legislation. The plan calls for a central Management Committee, composed of resource users, government representatives, and other pertinent representatives (Abdullah et. al. 2000).

The co-management of Misali operates under the institutional framework of the Misali Island Conservation Association (MICA). The association includes 12 local communities and 34 fisherman association groups. The Misali Island Management Committee is the main governing body for direct management of the MIMCA. It meets every six months, and is composed of 15 members. Nine of the members are fishermen representatives of district committees, representing the local communities. An individual titled the Misali Manager chairs the committee. In 2000, this individual was a fisheries officer. In 1999, MICA held its first elections. Through this process, the Misali Manager was also elected to be the first Director of MICA (Abdullah et. al. 2000). The Zanzibar Commission for Natural Resources supervises MICA and the Management Committee. Also in advisory roles at some point in the development process were CARE
International-Tanzania, the Islamic Foundation for Ecology and Environmental Sciences, and WWF (Lim 2007).

The MIMCA covers 21.58 km$^2$, 20.68 km$^2$ of marine area, plus the 0.9 km$^2$ of terrestrial area. 90% of the conservation area is designated as extractive use zone. In this area, legal fishing is always permitted, while illegal methods such as dynamite, cyanide, and *kigumi* are prohibited. 1.4 km$^2$ along the west side of the island is given special protections as a non-extractive use zone. In this area, activities such as diving, snorkeling, boating, swimming, and scientific research are permitted, while natural resource extraction, including fishing, is not. This area contains some of the most productive coral reef, and the beach along this area is a proven nesting site for Green and Hawksbill sea turtles. Two areas have been designated as fishermen camping areas, while rangers stay at a station on a rotational basis. However, the island is allowed no permanent residents (Poonian 2008).

**Chumbe**

When Chumbe Island was first identified as a potential site for a privately owned marine park in 1991, no inhabitants lived on the island. Fishing of the western fringing coral reef was low, as few local boatmen could afford the engines and petrol required to go to the farthest islands in the area. Boats were generally not even allowed on the western side, as they would obstruct the Dar Es Salaam fishing channel. To further detract from the island’s fishing potential, the Zanzibari military routinely conducted
shooting range exercises on the nearby Chukwani coast. Therefore, few consistent users had to be displaced (Riedmiller 1998).

Chumbe Island Coral Park Ltd. (CHICOP) was registered in 1992, and began negotiations with the semi-autonomous Revolutionary Government of Zanzibar to establish and manage the privately owned nature reserve (CHICOP 2013). By this time, CHICOP staff, led by primary investor and project initiator Sibylle Riedmiller, had already gazette the island and formulated a proposal for the marine park. A German national, Riedmiller had over 29 years of management and donor aid consultation experience in the area, as well as experience in education aid, diving, and marine biology. She provided approximately half of the US$1.2 million investment that financed the project from 1991-1998. Another quarter of those funds came from small donors grants, and the remaining amount was the opportunity cost of over 50 volunteers with professional experience who offered their time to contribute to the project (Dodds 2012).

When CHICOP was created, workers immediately engaged former fisherman from adjacent villages, training them as park rangers (Riedmiller 1998). Resident marine biologists and education experts trained these rangers so that they could perform ecological monitoring programs, effectively communicate the rules of the MPA to local trespassing villagers, and interact with tourists. Baseline flora and fauna species censuses were produced in 1993 as part of the training exercises (Riedmiller 2000).

While local outreach and ecological surveys progressed, the internal bureaucratic process behind the protected area languished. No policy or legal framework existed in Zanzibar for conservation areas until 1997, and there was no precedent to establish NGOs until 1995. Thus, CHICOP was often presented as an investment in a permanent tourism
facility. However, the Revolutionary Government at the time supported permanent
tourism facilities with high rates of investment, and were skeptical of the Eco-tourism
project. By 1992, the Zanzibar Investment Promotional Authority (ZIPA) approved the
project, and CHICOP was registered as a limited company. Under this registration,
CHICOP was defined mainly as a tourism venture, rather than a method for ecological
conservation. However, it was not until 1994 that the Ministry of Agriculture, Livestock,
and Natural Resources approved the Chumbe Reef Sanctuary (CRS) under the
management of CHICOP. Chumbe’s CRS was then the first MPA ever established in
Tanzania or Zanzibar. By 1995, the Chumbe Island landmass was designated as a Closed
Forest Habitat (CFH) (CHICOP 2013). That same year, building permits from the Port
Authority for the ruined lighthouse were finally completed, more than three years after
the investment had been approved. CHICOP produced a management plan in 1995,
giving them authority from 1995-2005. This plan was renewed in 2006 for the next ten
years, and is currently in effect. Through this process, three local villages and seven
discrete government departments were involved in the process, but CHICOP insiders
credit the Department of the Environment for their decisive support (Riedmiller 2000).
Because of the lengthy bureaucratic process, investment costs rose from the initial
US$200,000 projected by a 1991 feasibility study, to the US$1.2 million total mentioned
above. Conservation studies had to be duplicated, construction project had to be
maintained, and education programs were lengthened (Riedmiller 2000).

Initial investment costs rose much higher than the founders intended, but
CHICOP continue to successfully transform the island. Forest and marine nature trails
were established in 1993. A base library of educational material was also produced
during this time (Riedmiller 1998). Invasive rats (*Rattus rattus*) were eradicated in 1997. This program created the space necessary for the creation of the Ader’s duiker sanctuary, also established in 1997. From 1997-98, the lighthouse was rehabilitated, and turned into a Visitor’s Center (Redimiller 2000).

Seven visitors’ ‘eco-bungalows’ were built from 1995-1997. Solar panels and rainwater catchment provide energy and water. The installation of compost toilets reduces water consumption and prevents sewage runoff into the nearby MPA. Greywater is recycled through sand filters and garden irrigation. Sand, water, and building materials had to be imported to the all-coral rock island. These challenges were compounded by a regional energy crisis that created shortages of fuel and cement from 1994-97 (Riedmiller 1998). Regardless of these challenges, CHICOP persevered, and Chumbe Island has completely funded its operational overheads since 2000. A baseline of 40% yearly occupancy is needed to support the park, and since occupancy rates often reach 86% annually, the park is sustainable even when the tourism industry slumps (Norlund 2013).

CHICOP operates with a sophisticated governance framework. They collaborate with an community advisory committee made of village, government, and university representatives. Within the organization, there are four main departments: Resource Protection, tasked with coordinating ranger and researcher activities, Visitor Experience and Enjoyment, which oversees community education programs and hospitality staff, Facilities, Operations, and Maintenance, which is concerned with on-island operations, and Administration, many of whom work at the headquarters on Unguja (Norlund 2013). Their 2006-16 Management Plan employs 17 objectives, relating to conservation, education, ecotourism, socio-economic asset flow, and management/governance.
CHICOP releases quarterly and yearly progress reports on park management and business operations to all pertinent government departments.

The Chumbe Reef Sanctuary (CRS) contains .33 km$^2$ of coral reef, coastal shallows, seagrass beds, and pelagic water on the western shore of the island. Demarcation buoys mark the boundaries of the zone. The CRS is classified as an IUCN Category II protected area, as recreational, educational, and non-extractive research activities are permitted (Norlund 2013). The rangers carry out consistent monitoring programs, falling under the categories of Seawater Temperature, Coral Reef, Seagrass, and Humpback Whale programs. Coral Reef monitoring includes sea urchin and crown of thorns tacking and removal, and the Humpback Whale program is part of a regional program established in 2008 (CHICOP 2013).

The local rangers are tasked with patrolling the CRS, and when local fishermen trespass, the unarmed rangers peacefully explain to them the ecological significance of the coral reef sanctuary, including the biological properties of the coral itself. Data suggests that compliance has increased steadily throughout the existence of the MPA (Riedmiller 2000). From 1994-95, a contingent of fishermen from a Stone Town suburb called Malindi attempted organized resistance to the MPA. 15 boats dropped anchors in the CRS at the same time in protest. Some threats aimed at the rangers were recorded, and the rangers’ mooring station was sabotaged once. However, no physical attacks were ever recorded. Because the rangers were locals, few incidents like this occurred. In addition, Chumbe rangers gave assistance to 110 fishing vessels between 1993-96, including engine, sail, and hull repair, provisions of food, water, and shelter from bad weather, and radio access (Riedmiller 1998).
In 2000, CHICOP established a robust Environmental Education (EE) program, directed at providing experiential learning incentives for schoolchildren. The program set up one-day excursions for local classes to come to Chumbe, often providing students with marine biology, ecology, and environmental protection programs that do not exist in their traditional lessons. Teachers were also able to receive this basic training, and bring the lessons back to the classroom. By 2011, over 850 teachers, with 5000 schoolchildren in tow, were able to visit the island (Dodds 2012). The program is funded entirely by tourism revenue (CHICOP 2013). In 2001, the Zanzibar Ministry of Education accepted their guide on the coral reef as an official teaching aid. In 2006, the program was expanded with the Chumbe Challenge Environment Award. Through this contest, environmental clubs at nearby schools compete with two environmental projects, one on school grounds and another in the local community. By developing a program, performing an eco-audit, drafting an environmental statement, and completing a project, school clubs had the chance to win the yearly award. For instance, the 5th annual Chumbe Challenge, held from 2011-12, had 9 school clubs reach the final judging. 70 individuals attended the ceremony, and Maugani Secondary School won the award with tree nursery and food crops garden program. They also received gardening tools, and a one-year contract with a private recycling collection company (CHICOP 2013).

The project managers seek to provide the local community with measurable incentives as part of the eco-tourism resorts mission. Of the forty-three employees, 95% are Tanzanians. 40% of the workforce are women, and a third of the employees are directly involved in conservation management and education. Local fishermen are pursued for ranger positions specifically. In addition to promoting alternative livelihoods,
CHICOP encourages food security by spreading awareness of Chumbe’s role as a fish nursery. In research conducted on Unguja in 2005, 94% of artisanal fishers said that they believed that spillover fish populations from Chumbe were increase nearby yields (Tyler 2006).

CHICOP supplements this program with a variety of other outreach activities, including 2-3 community workshops per year and a peer education program, which has trained 23 individuals as peer educators since 2011. These initiatives are designed to bring environmental training back to the general Zanzibar population. CHICOP also sponsored an environmental radio program in May and June 2012. At the end of each show, a quiz was distributed, and the winner would receive a day-trip to Chumbe. Finally, CHICOP distributes its case study through environmental protection conferences, including the Tanzanian Wildlife Research Conference, the International Conference and Sustainable Tourism in Developing Countries, located in Zanzibar, and the WildAid Marine Protected Areas Conference in San Francisco, USA, all in 2011-2012 (CHICOP 2013).

Chumbe Island consistently garners recognition and awards for their ecotourism program, including Trip Advisor Traveler’s Choice Awards for #1 in Service and a World Responsible Tourism Commendation for Water Conservation, both in 2013 (Chumbe 2015). It has overwhelmingly positive reviews on travel advisory websites, and is preeminent tourist attraction on Unguja (TripAdvisor 2015)(I-escape 2015)(Kaiser 2013). Prices for overnight stay are US$280 in the busy season, US$260 in the off-season, and US$90 per person for a day trip. Only seven parties can stay at the island at
one time, and with an 86% yearly occupancy rate, booking is competitive (Chumbe 2015).

**Mafia**

Mafia’s marine park was Tanzania’s first effort at establishing an MPA, and by this quality alone is a valuable case for developers. In addition, it was the country’s first attempt at establishing a park that legal incorporates the people who live there (Walley 2004). The collision of differing worldviews from the local communities, the regional government officials, and the international aid managers gives us crucial insight into the obstacles that can be faced when establishing these programs when not fully prepared.

The MIMP was implemented from the start as a top-down approach. The park fit into the agendas of international organizations and the Tanzanian government: growth of Tanzanian capitalist markets and strengthening of foreign exchange rates in both platforms. However, local community support was high at the program’s initiation. They were specifically concerned with the increase in dynamite fishing, and were enthusiastic at the possibility of job creation in the area. The park, as written in the general management plan, was “for the people and by the people”. Local communities were originally engaged in meetings in 1991, but the process of appointing government official to the Board of Trustees and establishing other institutional arrangements meant that the villages were not brought to assembly over the development again until 1995. At this time, the community groups were concerned over the lack of information they were receiving (Andrews 1998). This was exacerbated by rumors that the Regional
government was seeking to move the park headquarters to Kilidoni, outside the park on Mafia’s main island. In this location, it would have been easier for people on the mainland to travel to and from the headquarters, but it made it much harder for the local artisanal fishing populations to advocate for themselves (Walley 2004).

The WWF partnered with the Tanzanian government to help implement the MIMP. However, the aid workers and the regional officials soon found themselves in opposition to each other over issues surrounding engagement and advocacy of the local communities. The Tanzanian Ministry of Tourism, Natural Resources, and the Environment would appoint an acting warden to run the project, and the WWF appointed a technical advisor to assist. However, dialogues between the groups revealed that the WWF was under the impression that the technical advisor and acting warden were on equal authoritative footing, while the Tanzanian officials believed that WWF staff was under the supervision of the government authority. In addition, other conflicts increased tension, including corruption allegations against the acting warden. The opposition can be symbolized in their different opinions on the location of the park headquarters. The WWF refused to alter the original plan to have the headquarters within the park borders, camping on the grounds, while the regional government stayed in Kilidoni. This conflict would lead to the eventual replacement of the WWF technical advisor (Walley 2004).

Despite these issues, progress on the park continued. The WWF procured a high-speed patrol boat to address dynamite fishing. The local people named the boat ‘Ukombozi’, roughly translated to deliverance or liberation. Some illegal fishers were successfully apprehended by this technique, reinvigorating community optimism.
In addition, villagers complained that the MPA/ecotourism development was exacerbating local tensions. Inequalities stemming from selective hiring for the MPA meant that the most obvious financial benefits were felt by individuals, rather than the community as a whole (Walley 2004).

The General Management Plan was launched in 2000, with eight key objectives:

- to conserve biodiversity and ecosystem processes;
- to promote sustainable resource use and rehabilitate damaged resources;
- to ensure community participation in management, and community access to resources;
- to develop appropriate ecotourism;
- to promote community education and information sharing;
- to develop underutilized resources;
- to conserve the cultural resources of Mafia Island; and
- to engage in monitoring and research (Mwaipopo 2008)

The park has a zoning plan, categorizing areas into three levels of protection. In core zones, no extractive resource use is permitted. This is less than 5% of the area of the park. There are six specified-use zones in the park. Only resident fishers can use these areas, and some fishing practices, such as seine-net fishing, are prohibited. This makes up 15-20% of the park. In the general use zone, natural resource regulations apply, but fishing is permitted with the purchase of a permit (Joseph et. al. 2003). Nineteen permanent MPA
staff members run the park, in the licensing and enforcement unit, the community and conservation unit, and the finance and administration unit.

Engagement and effective management continued to improve, though in the mid-2000s a series of problems will still prevalent. These include tourism-fisher conflict and coral mining, though the last recorded incidence of dynamite fishing occurred in 1998. Assessment of the park also stressed the need for more staff dedicated to community education and engagement (Joseph et al. 2003). While all villages possess a copy of the general management plan, the documents are in English, leading to very poor awareness of the strategy. By 2008, the park was unable to generate enough ecotourism to become economically self-sufficient. Funds during the 2006-2007 fiscal period came from the Tanzanian government in the Marine and Coastal Environment Management Program and the Norwegian Agency for Development Co-operation (Mwaipopo 2008).

Local communities participate through village liaison committees and village enforcement units. While the village liaison committees are designed to promote local user advocacy, the top-down management structure means that there function mainly as receiving units for the MIMP’s plans. Village government units elect the members village liaison committees. The liaisons enjoy closer communication and more support in terms of facilities, equipment, and training. They also received monthly allowances from donor funding until 2005. This has led to some resentment of the liaisons from the village governments. Village enforcement units work directly with MIMP rangers on patrols. These units increase the agency of the rangers, though interviews indicate that the locals view the patrols as a duty or task rather than an obligation to their environment. Through
this, they are often reluctant to report on those from their own local communities (Mwaipopo 2008).

Gear exchange and alternative livelihoods programs were offered as ways to provide additional revenue to the local communities. Alternative livelihoods most often take the form of beekeeping, seaweed farming, and crafts production. Gear exchange programs allow fishers to exchange prohibited gear for park-appropriate alternatives. The prevailing sentiment among local fishers are that these program have been more imposing than welcome, and oversights in the implementation process lead to frustrating inequalities and technicalities on which individuals receive benefits and which do not. For instance, hook-and-line equipment was not prohibited by park regulations, and so fishers using that gear found themselves economically disadvantaged. This kind of oversight leads to recorded disillusionment with the park program (Mwaipopo 2008).

International tourist number steadily increased throughout the 2000s. Approximately 3/4ths of the tourists that visit Mafia go to the MIMP. This industry generated US$90,000 in revenue in 2006. There were four tourist lodges in the MIMP area by 2007, and a new diving center was under construction. Despite this development, local community advocates question the actual benefits experienced by the residents. Inequalities of employment opportunities lack of participation in control of funds, and stressors such as new state taxes lead to this uncertainty (Mwaipopo 2008).

However, local community realization of improved fish resources has spread overtime. By 2013, 94% of fishers asked stated that the core zones did help fish populations regenerate (Kincaid 2013). This belief is supported through ecological
research, as a study in 2004 recorded vastly improved populations of blackspot snapper \((Lutjanus fulviflamma)\) in the MIMP compared with similar areas outside the boundaries.

**Menai Bay**

The Menai Bay Conservation Area (MCBA) development timeline began when the Commission of Natural Resources invited the WWF to assist them in the designation of an MPA in 1994. The park was officially gazetted in 1997. The goals of the programs are listed below:

- Protect the marine ecosystem and improve resource yields through management systems that include active local community participation
- Involve local communities in planning, implementation and monitoring of the natural resources of Menai Bay
- Increase awareness of conservation through educational and public awareness programs
- Support biological and socio-economic research and monitoring to provide the basis for rational management (Torell *et. al.* 2006)

The MBCA is listed as IUCN VI, and there are no non-extraction zones. However, the implementation of a patrol boat at Kizimkazi, set to respond on the call of local fishers, quickly lowered incidences of dynamite fishing. Radios were distributed to village groups. The local fishermen were expected to be accountable for calling the patrol boat because the park was formed specifically to target mainland fishers from Dar Es
Salaam, who were thought to be the main users of dynamite. In fact, some mainland fishers considered the implementation of the park a direct attack against their livelihoods (Torell et. al. 2006). Because the patrol boats are located on the east side of the bay, villages on the Fumba Peninsula in the west complained that response to their calls was slow and unreliable. Still, between 1997 and 1999, 167 fishermen were brought to court in twelve separate incidents (Levine 2004).

Management of the MBCA is broken into three tiers. District Authorities transmit information to the District Conservation Committees, and these committees relay the information to Village Conservation Committees. Likewise, concerns about the implementation of the park are sent to the regional government from the Village Conservation Committees through their District Committee counterparts. This information chain is largely ineffective, and communities in the Menai Bay often cite a lack of trust in the MCBA (Shinn 2014).

Ecological problems continued to be exacerbated in the bay. Damage to coral reefs, mollusk populations, and mangrove forests continues. Meanwhile, increased population pressures, lack of education and infrastructure, poverty, and poor enforcement lead locals to break conservation guidelines to fulfill their need for livelihood (Shinn 2014). Local stakeholders were not engaging in the program, prompting the World Bank to invest in the Marine and Coastal Environmental Management Project. This investment sought to engage local users in a productive capacity. It also helped them develop Community Mitigation Action Plans, directed towards facilitating alternative livelihoods. However, lack of communication between planning groups led to the little impact from the World Bank plan.
Dolphin tourism is a preeminent tourism industry in Kizimkazi. Approximately 5000 trips in this category are taken annually, about 6% of all trips taken by tourists in Zanzibar. A US$3 entry fee is supposed to be collected by trip organizers for the villages in the MCBA, but these fees are rarely collected. The tourism itself does not reflect the values of ecotourism; attention is not paid to safety, and the dolphins are not treated with the level of respect needed for healthy interactions. Boat operators receive little of the revenue-generated form the industry. A study in 2005 found approximately 165 jobs associated with the dolphin tourism industry (Gautam 2010).

In 2013, I conducted social and ecological research in the Menai Bay Conservation Area. My experiences suggest that lack of accountability, lack of stakeholder engagement in their own values, and community disappointment at unfulfilled promises, called *muhali*, has led to a largely unsuccessful MPA.

Research conducted in Uzi village in the Menai showed a distinct lack of trust in international developers and regional government forces. Respondents often mentioned promises of grant funds and program development for ecotourism that never came to fruition. One man left some of his land in untouched condition, letting the coral rag forest grow. However, he said that he was promised payment through a type of reforestation or carbon offset development fund, and that this money had never come. Now, he was considering re-cutting the acreage in order to make productive farmland. This is an example of the *muhali* felt by the villagers. More experiences continued to indicate that participants in the project did not identify with the goals of the park. When I sought a research permit to travel to Pugu’ume, mid-level officials in the Menai Bay Office continually dodged our efforts to engage in conservation and secure the permits.
Eventually, I received a phone call, asking for a US$150 bribe. This is despite the fact that promoting research is one the central goals of the MBCA. Further proving the regional office’s lack of accountability, we eventually chose to go to the island with no permit, as the officials had no enforcement structure anyway (Kaiser 2013).

When on Pugu’ume, one of my first sights was a sign, stating that the MCBA was a conservation area, and that littering was not permitted. The sign was entirely surrounded by trash, resembling a small dump, and the area was filled with rats. When on Pugu’ume, we discovered multiples pieces of evidence suggesting sea turtle poaching. The most prominent exhibit was a fully-grown adult green sea turtle that I found in a small lagoon, hidden from me specifically by fishers from Dar Es Salaam. When I returned to my colleagues with this information, the fishermen immediately removed the sea turtle, displaying their knowledge of the conservation area rules.

Fishermen in the Menai Bay agreed that fish stocks were rapidly declining, leading to further, less lucrative fishing trips. They were concerned that fishermen from nearby Dar Es Salaam were increasingly using the Menai Bay for fishing, and that they did not have the same respect for the sustainability of the resources. They believed that these fishermen still used dynamiting and bottom trawling as techniques. They suggested that these fishermen would bribe the regional office when needed.

My experience with the dolphin tourism at Kizimkazi reflected the findings of Gautam. Boat operators chased the dolphin groups in an unsafe manner, endangering swimming tourists and evoking evasive behavior from the dolphins. Boats drivers were unaware of safety measures, and the area was overcrowded and unregulated. While tourism in the Menai Bay is popular, true ecotourism is scarce. While Uzi Island had the
beginnings of an environmental and cultural based tour program, international advertising needs to be improved to bring a level of revenue to the community. The infrastructure for secure tourism was not present, a significant inhibitor to tourism. The production of local goods had potential to engage individuals through their crafts, but the goods were not yet connected with the low tourism stream. Regardless of the development of ecotourism as a livelihood alternative, the reality is that the protection laws in the Menai Bay were not being enforced consistently or effectively (Kaiser 2013).

Analysis

What can experiences from Misali, Chumbe, and Mafia teach us about proper SSF management and development and resource conservation in the Menai Bay? In this section, I will compile the results of these four case studies, identifying the unique success and failures of each site. Each site has can tell us specific lessons about the value and limitations of different elements of MPA and ecotourism programs. While the prevalence of ecotourism at each site sets the foundation of our analysis, it is important to contextualize the industry in terms of the sustainable livelihoods of the end users. This means that upholding the goals of ecotourism, conservation of local culture and environment, are even more important than the prevalence of actual tourists. I will then explain how in these cases, the potential management and conservation frameworks are limited by cultural differences, using deep ecology as a conceptual framework. I will go on to elucidate how ecotourism encourages parties to overcome these limitations. I will present my theories: Interpretive Cultural Diffusion and Cultural Esotericism, and explain
how the philosophy of ecotourism incorporates these ideas into a flexible development solution that can be adapted to SSF development plans on a global scale.

On Misali, the MIMCA has generated enviable grassroots support from the direct resource users. To explain this, one can cite lessons from the genesis of the program. Zanzibari government agencies sought to lease Misali to international tourism developers. However, Misali Island had been, since before modern recordings, a place of great religious significance to the local community. Individuals would travel to the island to ask for favors, health, and wisdom from the spirits, and witch doctors. Later, Islamic leaders would use the island to perform religious rituals and to speak to higher powers. It was this deep belief that spurred the villagers’ unexpectedly extreme resistance to development. Once the parties had agreed not to lease and develop the island, enough community energy was generated to prompt discussion over an alternative plan for Misali. It was through this sequence that the Marine Island Conservation Project was established in 1996. Because community leaders had engaged in the conservation and development plan with their own traditional understanding and cultural values at the center of the discussion, generating local user engagement and support was a relatively effortless process.

The same philosophy is apparent in the shrewd argument made to the Zanzibari government. Proponents of the MPA argued that offshore tourism development from international proprietors would cripple the growth of the budding inland Pemban tourism industry, taking revenue away from Zanzibari citizens and the greater economy. By putting the tourism in the hands of the local populations, with the understanding that the
local culture and natural resources would be conserved, the government would be simultaneously supporting the local economy, culture, and environment. In this way, the need for the MPA was explained in the conceptual framework of the government officials themselves. Though the local populations and the regional government did not interpret the project in the same way, both stakeholders could comprehend its value in their own conceptual framework.

Misali has the lowest tourism traffic of the case studies explored in this study. However, with the goals of resource conservation and sustainable livelihoods development in mind, the argument can be made that the value of tourism to the Misali area is different for each site, especially in the understanding of the local communities. With the least population pressures, the Misali Island SSF had the slightest need of economic alleviation from a new industry. Instead, the local populations’ understanding of the project goal was to prevent development on the island, preserving its spiritual value. The ecotourism was incorporated into the plan merely to generate buy-in from the regional government. Even with minimal tourism revenue, the goals of ecotourism are still being fulfilled. Through supporting the local culture and environment resources, the MIMCA is a positive example of locally driven ecotourism development.

Chumbe Island shows us what can be achieved when the cultural foundation of the management personnel of an ecotourism and conservation need a minimal amount of new education to realize their eventual goals. CHICOP Ltd. purchased Chumbe with the complete understanding that they would develop the island into an international ecotourism destination with associated environmental protection. While the development
team benefitted from the program’s designation as a private company, the true value derived from this was conceptual harmony around the ideas of globalization, resource conservation, inherent natural values, and international development efforts. By exploring CHICOP’s path to ecotourism exemplar, one can recognize that whenever the company’s philosophical framework came in conflict with other stakeholders, obstacles were encountered. However, whenever CHICOP focused on the careful diffusion of cultural values and understanding to stakeholders, the development prospered.

Chumbe’s value as a case study is limited by the reality that no local communities relied on the Chumbe reef system as a SSF resource. Heavy traffic from the Dar Es Salaam trading route and military trainings in the region discouraged fishing, and no population previously lived on the island. This already eliminates a huge task in cultural education, as their no local stakeholders support or oppose the development. This highlights the significance that cultural conflict has in ecotourism and resource conservation development. However, there were still other dubious stakeholders for the CHICOP team to convince. Documents from Chumbe’s early implementation process are focused on the economic viability of privately owned ecotourism programs. They consistently lament the frustrating reluctance with which the Zanzibari government considered the park’s values. There was no legal precedent for an ecotourism venture, and the government supported tourism facilities with high rates of investment. CHICOP concealed their true intentions, presenting their mission in terms of business rather than environmental protection. Though they were ultimately successful, three years passed between CHICOP’s registration as a company and the completion of Chumbe’s protection legislation. The bureaucratic slowdown increased investment costs from an
initial US$200,000 projection to US$1.2 million from 1991-1998. While frustrated with the Zanzibari government for this slowdown, the CHICOP leadership praises the Department of the Environment for their continual support. Most of the government needed time to consider the goals and values of environmental protection and then incorporate this perspective into their pre-existing conceptual framework. The members of the Department of the Environment were already familiar with resource conservation and environmental protection through the institutional effort spent in the department’s creation, and thus became CHICOP’s allies. While an obstacle in CHICOP’s development, the value of the information disseminated to the government should not be understated. Three local villages and seven discrete government departments were involved in the process, and by trailblazing cultural collaboration with these stakeholders, the Chumbe leaders contributed to the development of the archipelago overall.

Despite complications with the Zanzibari government, CHICOP still enjoyed enormous benefit from a private management team educated in the developed world. Analysis of their governance reveals sophisticated mission visioning, well-defined departments and hierarchies, and integrated ten-year plans including community outreach and education, economic development, and natural resource monitoring. When comparing the internal structure of the CHICOP business with the MIMCA, the influences of training in a developed society in CHICOP leadership are apparent. While the initiator and primary funder of the project, Riedmiller, came with almost three decades of management and donor aid experience, she did not develop the program by herself. Educated leaders with environment protection and community development embedding in their worldviews worked with Riedmiller to create the program that exists
today. This understanding allowed the internal cooperation that built the Chumbe Island Reserve to exist.

Although they did not have to directly interact with any local communities living permanently in their reserve, Chumbe leaders display astute understanding of cultural diffusion in their interactions with local fishermen. As soon as the Chumbe project began, CHICOP began training and employing local fishermen as the park ranger staff. The management understood that when fishermen eventually protested the restrictions around Chumbe, individuals with a relatable cultural background would placate them effectively. If told not to fish by the managers themselves, the chasm of differences in cultural experience and worldview would leave the fishers feeling disgruntled and alienated by the program. The spread of environmentalism itself could suffer through this negative reaction. Instead, fishermen-turned-rangers are tasked with kindly but firmly explaining the environmental values behind the park’s designation to trespassers. The trespassers can either leave, or learn important information about resource conservation. In addition, rangers provide assistance to local artisanal fishers, including boat repair, food and water provisions, and access to communication devices. This attitude shows the local fishers that the Chumbe program identifies with their unique challenges and means them goodwill. As a result, Chumbe records indicate a decline in trespassing incidents and an increase in compliance. CHICOP overcame a potential obstacle with their unique approach to protecting their designated territory, transforming a cultural clash of interests into a productive learning opportunity.

Chumbe managers did not have further imperative to cooperative with local communities, as Chumbe was originally uninhabited and legally under the control and
protection of CHICOP. Despite this, CHICOP has made every effort to interact with local stakeholders, facilitating a regimen of education programs. They are praised for their continued dedication to disseminating the values of resource conservation and environmental protection, especially to young Zanzibari students. School challenges, radio contests, and educational field trips serving over 5000 children by 2011 have spread environmental values through the islands. Specific educational legacy was achieved in 2001, when the Zanzibar Ministry of Education accredited their guide on coral reefs as a recommended teaching aid. This commitment has served Chumbe’s reputation as a productive and informative part of the Zanzibar community. This may have helped CHICOP avoid some cultural obstacles through generation of goodwill. However, the educational focus indicates CHICOP leadership’s perceptive understanding of cultural diffusion through education, and its value for environmentalism.

While avoiding the majority of obstacles presented by stakeholders with different worldviews, CHICOP prospered from its members’ inherent understanding of values projected through liberal democracy in a developed society. Such such understanding led to the sustainable infrastructure on Chumbe, including solar energy generation, rainwater catchment, compost toilets, greywater recycling, and locally sourced construction materials. While these features have measurable environmental benefit, they also seek to bolster Chumbe’s international business reputation for consumers. Potential customers for Chumbe largely share the developed cultural context of the program leaders, and Chumbe uses this knowledge to create an effective international presence. Chumbe advertises resort-like solitude, safety and competency, and quality service, in addition to the underlying environmental tenants. As a result, Chumbe enjoys an 86% annual
occupancy rate, far higher than the level needed to sustain the entire operation.

Developing community-led MPA/ecotourism efforts are unlikely to have the same depth of understanding into the nuances of the international tourism market. In this case, the shared cultural background of the managers and tourists is to the economic benefit of CHICOP.

The Chumbe Island Coral Park can be credited with advanced management structures, unrivalled community education programs, successful environmental protection, and a productive tourism business through their expertise working with and around the cultural frameworks of various stakeholders. However, the Chumbe Project may not qualify for a complete ecotourism program. CHICOP does little to preserve and encourage local cultural values themselves. Through the dissemination of developed society’s institutional background, their environmental ideals, and approach to management, education, and business, Chumbe’s efforts may actually be diluting the cultural idiosyncrasies of the Zanzibar archipelago. Ecotourism values specifically call on the protection of unique cultural values when running programs in developing nations. However, Chumbe appears to be a paragon in the industry. This inconsistency raises questions about the nature of ecotourism. What is the specific value of a local culture in ecotourism? Why must local cultures be preserved? With no local community to manage Chumbe, can the program be identified as ecotourism? I contest that Chumbe is an incomplete example of an ecotourism program. Before unpacking the inherent value of these endemic cultures, I first identify to the specific values of the coastal East African culture. Accounts of the stakeholder struggles in the Mafia Island Marine Park give us an
encompassing overview of the experiences that have shaped the cultural framework for artisanal fishers in coastal Tanzania.

In contrast to Misali and Chumbe, the Mafia Island Marine Park development project spans multiple islands and contains more conflicting stakeholders, including regional governments, international aid groups, and local communities. As a result, Mafia gives us valuable information from the intense struggles produced in the development process. The obstacles that the WWF and regional government experienced while trying to implement the MIMP illustrate a fundamental nature about the development of conservation protection plans. In both cases, administration experienced significant difficulties when trying to engage local community stakeholders in the collaborative planning process, regardless of the local users initial level of enthusiasm to contribute. While one might argue that it is the larger size of Mafia and Menai that makes oversight of these areas more difficult, user groups for the cases expressed distinct confusion and dismay at the boundaries of the MPAs themselves. In Mafia specifically, representatives of the local communities stated that the boundaries were in some way incorrect (Mwaipopo 2008). One would contend that a team of regional government officials and WWF experts made the boundaries with the goals of maximizing potential for efficient enforcement, resource conservation, and tourism attraction, while conceding enough area for local users to maintain their livelihoods. While the parties that designed the boundaries were satisfied by the plan’s ability to achieve the goals that they created, the boundaries did not incorporate the understanding, goals, or conceptual framework of the local communities that actually live there. Thus, the boundaries disagree with the local
users traditional understanding of the fishing grounds, creating a conceptual dissonance. This confusion limits local stakeholder engagement, and forms a contradiction between collaborators that generates participant outcry and discontent. The sense of distrust between the Mafia Island local users and regional government officials is based on these conceptual understandings, including disagreements over the most valuable place for the park headquarters, and whether the local populations were competent stewards of their surrounding ecosystem.

Conflicting objectives continued to exacerbate tensions during the development process. While the WWF and the local communities agreed with the original plan to locate the park headquarters within the actual boundaries of the park, regional government forces sought to move the headquarters to the most accessible town in Mafia, Kilindoni. The regional government found that Kilindoni would provide the easiest access and relative comfort for mainland officials, while the opposition valued the engagement of local authority. The regional government felt that the local community opposition spawned from their lack of education and resulting poor understanding of the goals of the park, while the local populous considered the regional officials corrupt and self-interested. Special attention should have been paid to collaborative decision-making in order for the forces to share some level of trust. Instead, locals users started to seem malcontent when they professed continued frustration with the development.

This sentiment was generated when the park plans failed to agree with the conceptual worldview of the local communities. As with the boundaries of the park, the fishers struggled when the development seemingly ignored their own understanding of the park goals. For example, the general management plan was distributed to the local
communities in a quest for stakeholder engagement. However, the documents were written in English, causing the information to be largely ignored by the locals who could read the papers. The park chose to hire individuals from the communities, seeking to bring economic opportunities into the area. However, through the process of hiring some individuals while being unable to engage everyone exacerbated internal relationships within Chole village. This is because this action ignored values fundamental to the Mafia islander view of community. This framework is based on a variety of historical qualities that promoted a sense of egalitarian poverty among the villages. The islands practice sheria law because of the influence of Omani rulers. This means that inheritance is divided among children, spreading wealth equally. To complement this, Tanzania’s first president Julius Nyerere sought to promote a new worldview, socialism based on community and family values. He saw this dedication to familial groups as the core of African egalitarianism, which he called ujamaa. While this philosophy is not widely incorporated into the daily lives of the Mafia villagers, the sense of community kinship that it was based on, jamaa, is very frequent. The sense of familial egalitarianism gives rise to jealousy at those with more prosperity than they have worked for. This jealousy is called wivu. When individuals would gain money working on MIMP development, prevalence of wivu meant that communities were quick to judge those individuals poorly, excluding from the familial egalitarianism. Worse, this sense of community is founded in consensus building, so negative rumors towards one of these individuals could lead to their exile from the community. This process increased negative sentiments towards the park development.
Meanwhile, parts of the development that engaged the users within their cultural framework produced the best results for engagement. The community named the patrol boat. The *Ukombozi*, ‘Deliverance’, led to the arrest of dynamite fishers, and at its implementation produced the best response from the communities since the project’s commencement. Not only was the patrol boat adopted conceptual by the community through the naming process, the pragmatic action of actually patrolling the waters agreed with the daily lives of the villagers, who could more easily recognize legitimate action in the MIMP than framework and goal setting for future action. They understood the project in terms *wenyeji*, the self-identification as the inhabitants, protectors, and rightful owners of their own land and water. This identification promotes action rather than planning, and was the foundation of the villagers conceiving of the park as ‘theirs’. While the regional government officials thought of themselves as the leaders of the project, the villagers’ conceptual framework meant that as the true inhabitants of the area, the project was their responsibility. This worldview suggests that local users will be more engaged if they are the ones to actively patrol their own waters. Instead, this misunderstanding of ownership led to resentment between stakeholders.

Various other cultural clashes continue to negatively effect stakeholder engagement in the park. Tourists seek pristine reefs, and claim that local fishing populations encroach upon the purity of the environmental experience. Meanwhile, local fishers argue that those same areas, and some of the areas designated no-take zones, are their traditional grounds. Fisher who use gear that was banned through the park regulations also display more negativity towards the development. The experience of the
park is disruptive to their worldview, and their conclusion is that the goals do not reflect their livelihoods.

Over time, stakeholder engagement has slowly improved. I contend that with the passing of time came the slow transmission of ideas between stakeholders. Though the lack of frequent meetings between regional government officials and local users delayed this process, the interaction that did happen eventually spread mutual understanding about the project. As proof, local users in 2013 consistent state that the core zones in the park lead to improved fish catch. Thus, the argument is made for perseverance with these projects.

The Menai Bay Conservation Area is, of these studies, the closest to being a ‘paper park’. That is, a park only in theory and legislation, but not in enforcement and practice. Regional government officials and local village units have little to no level of collaboration, and villagers report feeling of muhali or disillusionment at continued promises for economic and social benefits that never come. Information regarding the conservation of the resources is poor, and fisherman compliance is low. Conflicts from the existing MPA practices still do indicate conflict of interests when the park is perceived to impact the livelihoods of the fishers. For instance, the original village that instigated patrols was Fumba, but the return some of the lowest rates of belief in the effectiveness of the MCBA. This is because the patrol boats are located at the opposite end of the park near the in-park local headquarters, and response to the opposite end is rarely timely. The fishermen make their livelihood with their gear, and since no program exists to continuing providing working gear for the resource users, the fishers find no
reason to support the MCBA. Dolphin watching tourism boat operators also act in interest of livelihood. They break dolphin watching safety guidelines in order to secure the closest interaction with the dolphins. However, saturation of that area means that the dolphins are always fleeing from the overcrowded tourism fleet. MCBA officials also have not been engaged in a way that connects their livelihoods to successful management. Instead, the government officials often use the position to collect bribes from illegal practice fishermen. They do this not out of malice for the environment, but as a means to sustain their quality of life.

I contend that in the Misali, Chumbe, Mafia, and Menai Bay case studies, development consistently prospers when time is taken to engage stakeholders on the basis of their own cultural framework. At Misali, grassroots community support spawned from the local stakeholders’ valuation of the island as a spiritual place. When engaging the government, supporters promoted the overall economic impact of the potential development options instead. The local users and the CHICOP enjoys superior management structure and mission visioning from the educated background of the project initiators. By training local fishermen as representatives of the park, Chumbe was able to enforce the boundaries while generating community understanding. At Mafia, misunderstanding between the various stakeholder goals led to exacerbated tensions and slowed development. However, the active process of the patrol boat engaged the villagers on their own terms. Over time, the various cultural frameworks of the stakeholders began to be understood by their counterparts through persistent collaboration, and local community buy-in increased. In the Menai Bay, practices that engaged the local users in
terms of their own livelihoods resulted in community support. When this quality fails to be achieved, local users decide that the park does not have their best interests at heart.

**Interpretive Cultural Diffusion**

I assert that the consistent obstacles faced by ecotourism developers in the case studies when attempting to transmit information mired in cultural context can be understood through the lens of deep ecology. As deep ecology theory states, when two individuals communicate, the listener receives an interpretation of the speaker’s message, based on their unique background. As such, persuasive communicators have always taken into account the differences between user and listener, aligning the message with the way the audience understands the world. The audience will have an easier time incorporating the new information when it fits into their pre-existing worldview. The individual listener can only assess and evaluate so much revelatory information at one time.

Scholars have devoted significant time and effort in applying a range of frameworks to SSF management. The Universal Declaration of Humans Rights, Millennium Development Goals (MDG), and other management process frameworks allow us to consider the dynamic, diverse SSF management dilemmas from a variety of perspectives. These conceptual frameworks are especially valuable for engaging those already most familiar with these concepts. For instance, defining an ecotourism/MPA project in terms of the MDG is an intelligent strategy for attracting the interest of project investors and international agencies that already understand development and resource conservation in terms of the MDG themselves. As interpretive theory explains, these
stakeholders will understand the project in their own cultural framework and personal experiences. I contend that SSF management research has failed to thoroughly explore the practice of creating management frameworks specifically on the terms of the local resource users themselves. Instead, managers bring sophisticated, comprehensive co-management structures to local communities that are completely unprepared to comprehend the structures themselves.

One exception to this oversight is the Sustainable Livelihoods approach developed by Allison and Ellis in 2001. Their research explains that prior SSF development literature was focusing on the economic output and capitalistic efficiency of the fishing grounds. What the researchers did not understand was that the fishery resources were not the sole economic venture for these subsistence communities. Allison and Ellis showed that fishing was in fact a part of a larger livelihood, one that includes farming, herding, and any other practice families can use to support themselves. They sought to use this understanding to help developers in SSF management conceive of the fishery as one part of a set of factors that made up the livelihoods of subsistence fishers. This approach should be commended for its clarity in understanding that the nuances of the lives of the SSF users themselves determine the effectiveness of the conservation management. Rather than applying one’s own framework to SSF management, local stakeholders will be consistently more engaged when the development process is based on the terms of their own lives, experiences, and cultural background.

Through this framework, I unpack the concepts behind Interpretive Cultural Diffusion. The theory argues that when representatives of two different cultures are faced with one another’s ideological framework, evaluation and integration of concepts can
only develop at a gradual pace. The more dissimilar these cultural frameworks are, the harder the mutual education will be. This is because both representatives can only interpret the information that the other individual is attempting to transmit. The deeper the fundamental differences in the cultural context of the two representatives are, the more the interpretation will be imprecise, incomplete, or misunderstood. For instance, when CHICOP staff tried to institutionalize resource conservation legislation through the Zanzbari government, the bureaucratic process was unexpectedly slow. In order to speed up the process, they presented the Chumbe development project as a primarily economic plan. In this way, CHICOP modified the proposed goals of their project so that the regional government could interpret the project in terms that were already familiar within their cultural context. While Chumbe Staff was experienced with conceptualizing resource conservation and biodiversity protection as important values, the Zanzibari government had to integrate these new ideas into their own worldview. CHICOP actually did a great service for future resource conservation managers by initiating the diffusion of these ideas. The next conservation managers would find the government more open to these values, having already integrated them into their foundational knowledge. From local users responding poorly to park lines that do not agree with their own topographical understanding of the area, to the impressive grassroots support generated by communities around Misali when their sacred island was threatened by international developers, this theory holds consistent. When stakeholders are allowed to interpret ecotourism development projects within their own cultural context, their engagement and participation in the project improves. When stakeholders are forced to consider new contexts, frameworks, and ideologies, the development stalls or becomes less effective.
Of course, when seeking to create effective co-management strategies, one must transmit information across cultural barriers, in order to promote local social and political autonomy, natural resources conservation, and the economic value of ecotourism. This information will flow from representatives of one culture to another, through interpretation.

By incorporating Integrated Cultural Diffusion into SSF development and MPA programs, one can engage local stakeholders in the most effective manner, leading to effective projects. However, there is a specific type of development that does more than create economic incentives for resource conservation and local user engagement. Not only does it reap the benefits of Integrated Cultural Diffusion, it promotes it as part of the supply and demand. This development is ecotourism. In the remaining analysis, I contend that Integrated Cultural Diffusion is actually embedded within ecotourism, providing a platform for marginalized communities to promote and express their unique cultural values. I argue that tourists are paying for Integrated Cultural Diffusion as a product. It is sought after by tourists because of their subconscious belief in the wisdom of cultural esotericism. This newly recognized esotericism has specific benefits for tourists in their quest for authenticity, and for development managers in their quest for effective, efficient implementation regimens.

**Nature Esotericism/Cultural Esotericism**

It is curious that ecotourism guidelines specifically call for the preservation of local cultural practices and values. Ecotourism makes sense as a solely conservation
based field. However, the integration of the protection of local cultures in ecotourism has never been in question. Perhaps this is because many areas with rich biodiversity and exotic species are located in developing countries with unique, distinct cultures. Both the environment and these populations have received fewer disturbances from global development. Both the ecosystems and these remote cultures are valuable tourism attractions. But the connection between the two within ecotourism goes deeper than the geographic association. Remote cultures derive their value from a sense of authenticity. This authenticity is not based upon the culture itself, but actually derived from the perceived authenticity in nature. Nature’s authenticity is the subjective value professed by Arne Nass in deep ecology. The remote culture’s authenticity is the subjective value explored by Paul Shepard in the Pleistocene Paradigm. In this way, the value of the natural ecosystem and a culture are inexorably linked through authenticity. When tourists search for authenticity in a culture they perceive as ‘traditional’, ‘untouched’, or ‘harmonious’, they are actually perceiving that culture’s relationship with nature. I call these values nature esotericism and cultural esotericism, and argue that cultural esotericism is simply an expression of nature esotericism.

While seeking hidden wisdom in the environment has not been referred to as nature esotericism previous to this paper, I believe it is the perfect expression for this phenomenon. In fact, nature esotericism is more ingrained in our culture than previous types of esotericism like Buddhist philosophy or Aryan cultism. Thus, according to Integrated Cultural Diffusion, it should be easy for me to explain. The concept of ancient, hidden, secret wisdom that can only be found through enlightenment in nature is a prominent idea in Western culture. Books titled *Nature’s Secret Message: Hidden in*
Plain Sight and Speaking with Nature: Awakening to the Deep Wisdom of Earth are easy to find on amazon.com. John Muir, founder of American preservation theory, stated, “Keep close to Nature’s heart…and break away, once in a while, and climb a mountain or spend a week in the woods. Wash your spirit clean” (Young 1915). The works by Zapffe, Nass, and Shepard are clear examples of scholars attempting to describe specific reasons for nature esotericism. In the earliest evidence of human cultures, hunter-gatherer shamanistic groups would promote the value of animal spirits, what we now call eco-cosmology (Shepard 1996). It is this nature esotericism that drives tourists to natural locations and adds underlying currents or spirituality to the sustainability movement.

Shepard theorizes in the Pleistocene Paradigm that modern problems, including existential crises, can be solved by turned to our evolutionary roots to a time when humans lived in harmony with ecosystems around us. This harmony evokes a sense of belonging and, if not providing us with an answer to the existential question, allows the question itself to fade in importance. This is the basis for nature esotericism. Remote cultures are considered to have connections with their environments and ancient spiritual wisdom that transcends what we can receive from a modern progressive society. This is because these cultures have conceptual framework that is the least removed from the Pleistocene Paradigm, while modern global society is the farthest removed. This is how I define cultural esotericism in terms of nature esotericism. When ecotourism literature explains the value of authenticity in the concepts of the ‘Origin’, they are valuing the hidden wisdom and spiritual of remote culture specifically through these cultures’ more complete understand of nature esotericism. They are considered to have a close, intimate, spiritual relationship with their surroundings, and it is that understanding that modern
tourists search for. As a Swedish ecotourism advertisement states, when referring to a potential authentic experience, “the guide has extensive knowledge of this particular wolf family. He is also in command of the art of howling…guaranteed to raise the hairs on your neck” (Gossling and Hultman 2006). What this is advertising is the cultural esotericism based in their understanding of the wisdom of nature.

This conceptual path can be utilized for a sense of identity or to put perspective into your worldview, but in ecotourism, it is the product. Current ecotourism practices put a lot of pressure on smart, compelling, and confident local guides to represent the unique qualities of their respective cultures. These ambassadors must find a way to represent their unique culture in a way that engages customers from developed nations through Interpretive Cultural Diffusion. While this is an issue demanding further research, it highlights the unique benefit of ecotourism: it allows a marginalized community an opportunity to promote their unique worldview as the foundational product of the development. Recognizing this, we can see that if proper care is taken to engage local stakeholders ecotourism development, one can make the local community’s conceptual framework the foundation for the development of the project, as it will be the foundation of the product. This incentive is appealing to stakeholders interested in resource conservation, economic development, or the empowerment of marginalized stakeholders.

Conclusion

Proper SSF fishery management can lead to resource conservation and economic, social, and political empowerment of otherwise threatened communities. SSF users need
ways of supporting their livelihoods other than fish resource extraction for MPAs to function correctly. Ecotourism can provide economic opportunity for these local communities, while actively protecting natural resources and unique cultural traditions. Ecotourism, MPA, and SSF development will benefit in efficiency and effectiveness by employing Interpretive Cultural Diffusion. Interpretive Cultural Diffusion is based in deep ecology, a type of nature esotericism. When searching for authenticity through ecotourism, tourists are searching for cultural esotericism, hidden knowledge in the wisdom of traditional cultures. This hidden knowledge is actually nature esotericism, and the wisdom of these cultures is derived from their understand of their environment. Recognizing cultural esotericism as the product of ecotourism encourages local communities to promote their own culture. When stakeholders are able to promote their own culture in the ecotourism development, Integrated Cultural Diffusion will increase in rate of progress. Then, MPA, SSF, and ecotourism development will be more successful. Finally, the nature that brings us the value we strive to understand will be preserved, leading to health, happiness, and sustainability. If you have gotten this far in this paper, and still do not understand the way these theories intersect, then I both am, and am not, impressed. In this case, hopefully the direct summary located in this section can elucidate this thesis for you. I would not be too concerned, as you will only understand these theories as fast as Integrated Cultural Diffusion allows, and I have dedicated much more time than you through this process.
Recommendations

Future research can take a variety of forms. Applying Interpretive Cultural Diffusion to other case studies around the world may reveal the best type of information to disseminate when engaging stakeholders in MPA or SSF development. More research needs to be done on the idiosyncrasies of Eastern Tanzanian culture in order to best engage the local users and regional agencies on terms they can comprehend. Research could be done specifically on local community understanding of ecocosmology, or their perceptions of the values of Western culture. More research needs to be done on regional government agent motivations, in order to reduce corruption. More ecological research in the islands will undoubtedly procure new populations of endemic species and more sea turtle nesting sites.

Integrated Cultural Diffusion with regards to ecotourism also raises another question. A colleague of mine questioned, does the transfer of ideas between these cultures help the marginalized community institutionalized their ideology? Or does it erode the authenticity of the culture? This is concerning, both for the inherent esoteric value of the culture, but also for the erosion of its value as a product. While modern culture may have less tradition than isolated ones, I do not believe that our culture is any less authentic. Cultural esotericism may fade, but nature esotericism does not. Modern progressive global society has produced the deep ecology paradigm after all, which seems to suggest that losing our sense of belonging in nature is not inevitable.
Appendix (Maps)

African Coastline

Tanzanian Coastline

- Pemba
- Unguja
- Mafia
African Coastline

Misali Island

MIMCA – no online picture record of boundaries
Chumbe Island

Chumbe Island Reef Sanctuary
Mafia Archipelago

Menai Bay
Mafia Island Marine Park
Menai Bay Conservation Area
Bibliography


