

# An Exploration of Scuba Diving as Environmental Communication Experiences

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## Abstract

Scuba diving as ecotourism is relevant because there are over one million active divers in the world, and potentially as many more who have taken some form of introductory course to scuba diving. We explore how the certification agencies introducing people to scuba diving include environmental discourses in their socialization and training of new divers. We aim to explore how these engagements communicate about the environment, both pragmatically, in raising awareness of environmental issues and constitutively, in shaping our understanding of the underwater world. We explore both sides of scuba diving: the industry, composed of certification agencies and dive operators; and the diving community, where we explore the experiences and practices of recreational divers. We conclude by offering some suggestions for further research based on this initial exploration.

## **An Exploration of Scuba Diving as Environmental Communication Experiences**

*After getting certified and doing several dives at a local lake, I went on my first dive trip to Roatan, Honduras. I was one of two less experienced divers in the group and a little bit worried about what to expect. My worries went away as soon as I got in the water and saw the reef 50 feet below, full of sunlight and colors. I had expected to see fish, and the bigger the better, but I started figuring out that the smallest critters are unique, colorful, and amazing. I had not expected sea slugs and shrimp to be so visually stimulating! Once on the boat, one of the more veteran divers thanked me for trying to avoid touching the coral. Apparently my efforts have provided him an amusing spectacle as I did all kind of body contortions and even flapped my arms like a bird to try to avoid the coral. My skills have improved over the years, but I still hold on to the two lessons I learned on that dive: to be aware of the smallest creatures and of the impact even the smallest touch can have on sea life.*

This scene is a familiar one to readers who have spent time on a dive trip. Vacation stories like these help create a shared understanding of the scuba diving experience. Tourist practices articulate cultural meaning through discursive representation of specific places (MacCannell, 1976, p. 45; see also Ringer, 1998). As tourists, we ascribe meaning to places through our communication about “sights to be seen.” Our experiences “etch significance onto the landscape” (Crang, 2004, p. 77). Tourism transports us from ordinary to extraordinary through pleasurable experiences that mobilize our powerful social dreams and desires (Rojek & Urry, 1997; Krippendorf, 1987). Tourism activates romantic notions of “exploration, journey, and searching,” stoking “excitement by setting such undertakings in a context of challenge and adventure” (Beedie, 2003, p. 205). As a leisure activity, tourism illustrates the way we choose to see and engage the world.

Tourism shapes our understanding of our environment. Tourist discourse is a mediating force in our perception, interpretation and engagement with the environment (Marafiotte, 2008; Milstein, 2008; Milstein, 2009; Senda-Cook, 2013). Ecotourism is a growing industry that attempts to “provide an experience with nature, to prevent environmental degradation, to connect with people, and to promote cultural and environmental awareness” (Sowards, 2012, p. 175).

Scuba diving as an ecotourism genre is relevant to explore given the number of people engaged in this industry. According to some estimates, there are 1.2 million active scuba divers in the world (Davison, 2007). Davison considers “active divers” as people who have five or more dives a year. The number of people who interact with the dive industry is larger than this estimate, because often people do some form of discover scuba course without getting certified and becoming a diver.

While scuba diving is considered part of the ecotourism genre (Sowards, 2012), this area of tourism is underexplored in communication studies. This paper is an initial exploration into how scuba diving fits within this genre and the potential of this area for communication studies research. We are inspired by Sowards’ (2012) explanation of

how “ecotourism destinations and media materials rhetorically construct ecotourists’ anticipations, experiences, and memories through ethnographic and rhetorical analyses” (p. 175). We draw upon one author’s scuba diving experiences to explore the engagement with nature afforded by this ecotourism genre. Cantrill and Oravec (1996) argue that “the environment that we experience and affect is largely a product of how we have come to talk about the world” (p. 2). Our symbolic constructions of the environment determine and influence our conduct on the natural world. We are interested in how we talk about scuba diving as an environmental practice, and so we layer our interpretation of these experiences with analysis of manuals and documents that explain and aim to influence scuba diving practice. In this way, we aim to explore how these engagements communicate about the environment, both pragmatically, in raising awareness of environmental issues and constitutively, in shaping our understanding of the natural world (Cox, 2010, p. 20-21).

The paper explores both sides of scuba diving: the industry, composed of certification agencies and dive operators; and the diving community, where we explore the experiences and practices of recreational divers. First we explain scuba diving as an ecotourism genre. Second, we examine the discourse of certification and training manuals. Third, we examine the diving experience as it relates to environmental awareness. We conclude by offering some suggestions for further research based on this initial exploration.

## **Locating Scuba Diving as an Ecotourism Genre**

We suggest most aspects of scuba diving relate to Weaver’s (2002) soft ecotourism, given the scale of the industry and the infrastructure required to provide scuba diving services. Different aspects of scuba diving, such as the training and certification may relate to Weaver’s (2005) comprehensive model of ecotourism. In contrast, resorts, explorations, and diving destinations tend to focus on Weaver’s (2005) minimalist approach to ecotourism.

Unlike some other ecotourism sites that are managed by one organization or agency, we observe that the dive industry is an aggregation of small independent agents. Accordingly, we observe a common goods problem within the dive industry, where the relationship to the ocean and to its conservation is interpreted differently by the different agents, suggest the importance of communication to promote ocean conservation awareness, and explore the role of dive agents in helping develop awareness and regulations. Given its relevance as an ecotourism genre, the scuba diving industry addresses three goals of ecotourism: a) experience with nature and environmental awareness, b) preventing environmental degradation, and c) connecting and benefiting the local population. We explore these goals and suggest how they can be better promoted.

Before addressing the goals of ecotourism, we first locate scuba diving on Weaver’s (2002, 2005) typologies of ecotourism. Weaver (2002) described soft ecotourism as mass scale tourism where the tourists are physically passive, interact with nature for a short period of time, have a low environmental commitment, expect the availability of services, and rely on tour operators and guides.

Scuba diving can be characterized as soft ecotourism given the number of divers going to dive destinations. When a plane lands in Cozumel, a popular dive destination, one can expect that a majority of people on in the plane is there to scuba dive. The same will be the case in other places like Sipadan in Malaysian Borneo, and the Bay Islands in Honduras. As Weaver (2005) notes, the benefits of large-scale soft ecotourism may be offset by the low environmental commitment this type of ecotourism represents. Just as a runner hitting the trail to enjoy a beautiful day outside does not necessarily leads the runner to reflect about nature and develop an awareness, the performance of scuba diving by itself may not necessarily relate to increased environmental awareness.

Weaver (2005) noted that the soft-hard dichotomy represents challenges because both forms of eco-tourism have trade-offs. As a potential solution, Weaver proposed a comprehensive/minimalist dichotomy, where minimalist implies preserving the local ecosystem and promoting a superficial understanding of environmental issues at a global level, and comprehensive reflects a focus on environmental issues on a global scale and a deeper understanding of these issues. Some aspects of scuba diving are framed as promoting the comprehensive, deeper understanding, while other aspects are framed as a convenient, minimalist approach. Specifically, the scuba certification agencies seem to frame environmental awareness within Weaver's (2005) comprehensive model of ecotourism, but do so at a superficial, soft level. This comprehensive awareness is encouraged, but does not seem to be a critical part of the scuba diving training. We now turn to a more specific exploration of certification and training manuals.

## **Environmental Messages in Certification and Training**

An exploration of the environmental discourse of scuba diving must start with the ways that three of the largest certification agencies address environmental awareness in their training: the Professional Association of Diving Instructors (PADI); the National Association of Underwater Instructors (NAUI) and Scuba Schools International (SSI). All three agencies have ocean conservation initiatives; these initiatives are framed as optional. We discuss both how the scuba diver training certifications discuss environmental issues, and how ocean conservation awareness initiatives are introduced to new divers.

### **Professional Association of Diving Instructors (PADI)**

Created around 1966, PADI is probably the largest scuba certification agency in the world. The training book developed in 1999 for PADI's basic certification does not contain a chapter on environmental conservation. Nevertheless, the chapter on diving environment does contain one section where the need to reduce our impact to the environment when diving is emphasized. The learning objectives for that section relate to understanding passive and active interactions with aquatic animals and understanding that "fish and game laws exist to assure a continuous supply of these animals for the future" (p. 134) and a recommendation to "collect only what you can eat" (p. 135). These encouragements view nature as a resource. Kinsella (2007) notes that the ordering and control accomplished through enframing obscures the mutually constitutive relationship between humans and nature, and in doing so, diminishes the possibilities for authentic human existence" (p. 194). And so manuals that articulate

diving as an entreaty into the ocean as standing reserve prevent an understanding of how divers are part of this ecosystem and thus how they may influence action.

PADI's instruction for new divers thus contains a minimalist approach to conservation. PADI's Project Aware Foundation reflects a more comprehensive approach. If you look for them hard enough, PADI's home page has links to "Project Aware." Partnered with PADI over two decades ago, "Project AWARE Foundation is a growing movement of scuba divers protecting the ocean planet – one dive at a time" (<http://www.projectaware.org/about-movement>). The comprehensive approach toward engagement and understanding of environmental conservation is optional, through the foundation, rather than a central part of the socialization (required training) of new PADI divers. Kinsella (2007) argues that "both representational and constitutive models of communication contribute" to views of nature as standing reserve or passive resource (p. 194). He suggests possibilities of opening up communication by increasing awareness of our own position as resources within the ecosystem. As we move onto another type of certification rhetoric, we consider the pragmatic function of these manuals in mobilizing diver awareness.

### **National Association of Underwater Instructors (NAUI)**

Developed around 1960, NAUI is the second largest certification agency, and the agency the first author is most linked to as an active instructor. Similarly to PADI, NAUI places environmental conservation as one the sections of the "Diving Environments" chapter. The learning objective related to that section is "by the end of the lesson the students will be able to describe how you can make a positive impact on the environment" (NAUI Scuba Diver Instructor Guide). Although the learning objective seems to be comprehensive, the topics themselves focus only on what happens during a dive. In addition to the positive impact and knowing the regulations included in PADI's training, the section does cover collecting plastic trash you may find during a dive, as well as the negative effects of plastic on sea life.

NAUI's focus on environmental awareness in the training of new divers goes a little bit further than PADI's toward a comprehensive view of ocean conservation. However, the issue of plastic still focuses on the local activity of scuba diving and collecting trash or avoiding directly throwing trash, and not on the more global issue of recycling and the effects of recycling in ocean conservation. The NAUI homepage has a green button at the top of the page linking it to its Green Diver Initiative. Additionally, the rotating banner includes two pictures and links to the Green Initiative. According to its website, the Green Divers initiative mission is "To promote and encourage through purposeful activity the education of the general public to safely preserve and conserve the quality of our underwater environment" (<http://www.naui.org/GreenDiver/MissionStatement.aspx>).

Similar to PADI's Project Aware, NAUI's Green Initiative also reflects a comprehensive approach focusing on global ocean conservation issues. Cox (2010) emphasizes a rhetorical perspective that focuses on "purposeful and consequential efforts to influence society's attitudes and behavior through communication" (p. 58). At this point, given its optional nature, NAUI's Green Initiative does not demonstrate a

sense of purpose in encouraging sustainable behavior on the part of divers. A green button on a website does not carry over to the experience of divers in the water.

## **Scuba Schools International**

Founded in 1970, SSI is potentially the third largest certification agency in the world. SSI's online training promotes environmental awareness through a comprehensive frame that contrasts with the minimalistic frames of the other agencies. Every module in the SSI online training begins with a quote related to the underwater experience. For example, the module focusing on the underwater world begins with the following quote: "One thing we cannot escape — forever afterward, throughout all our life, the memory of the magic of water and its life, of the home which was once our own — this will never leave us." — William Beebe ([http://www.divessi.com/online\\_training](http://www.divessi.com/online_training)). Beebe's words demonstrate the constitutive power of communication - that our experiences in the underwater world do not leave us - and so certification discourse might draw on the imprint the underwater world leaves on divers to urge conservation behavior on land.

The objectives of the module discussing the underwater world states "Scuba Schools International believes that the more you know about the aquatic world, the better diver you will be and the more you will respect and appreciate its value." ([http://www.divessi.com/online\\_training](http://www.divessi.com/online_training)).

The module clearly has a focus on ocean conservation, and encourages divers to "always dive as a visitor, as the guest that you are" (SSI Online Training Module). When teaching about marine life, the module states, "One of the most exciting things about exploring under water is that many life forms in water environments have not yet learned to fear us (and hopefully will never have to)" ([http://www.divessi.com/online\\_training](http://www.divessi.com/online_training)). As we'll discuss in the section on diving experience, marine animal's fear of humans is a critical element in the diving experience. While describing divers as guests in the ocean, this online training attempts to encourage responsible behavior, but this strategy also reifies the dichotomy between humans and nature. Rogers (1998) warns about a "cultural amnesia regarding our immersion in natural systems" (p. 259). To think about divers as outsiders in the ocean is to ignore the interconnectedness that is at the very root of humanity's influence on the rest of the natural world.

Similarly to PADI's, the homepage link to SSI's environmental initiative, Mission Deep Blue, is not directly visible, but can be found scrolling down or going through the extensive dropdown menu. Mission Deep Blue is in German, but can be somewhat reliably translated by some web browsers. The link to Mission Deep Blue's mission leads to a page with a 29 minute-video discussing shark finning, turtle conservation, and reducing plastic use. Although the video is in German, the very graphical nature of the video drives the message, and some parts of the video also have subtitles in English.

Part of the Google translation of the mission reflects the diver's role in ocean conservation: "For the people on the surface of the oceans appear to be healthy. But we divers know how it looks like under the blue surface. It's damn close to twelve." (<http://ocean-ranger.org/startseite/unsere-mission>). Similar to PADI and NAUI, SSI

environmental foundation also promotes a comprehensive view of ocean conservation. Mission Deep Blue seems to provide a stronger, more urgent message regarding ocean conservation than either Project Aware (linked to PADI) or Green Diver initiative (linked to NAUI).

This exploratory analysis on how the socialization and training of new divers promotes environmental awareness by the three largest certification agencies indicates that environmental conservation is important, but not critical enough to be included in the training of new divers. In terms of training, the focus is on environmental conservation during the dive, a minimalistic approach. Although the ocean conservation theme is infused throughout SSI's training, the percentage of divers trained by SSI is considerably small compared to PADI and NAUI. Nevertheless, all three agencies are linked to ocean conservation initiatives divers can join if they wish. These initiatives provide a more comprehensive approach, but do so to a smaller number of divers, those that dive regularly throughout the year and identify themselves as active divers.

This diving certification discourse offers an opportunity for increasing awareness of the impacts of diving on ocean life. The manuals and websites warrant further examination to understand how they pragmatically increase awareness of environmental issues and influence and potentially change divers' behavior. As producers of ecotourism discourse, the certification agencies shape the way we see the underwater world and our role in it. How this discourse shapes the diving experience is an important question in understanding both the educational and transformative power of diving as an environmental practice.

## **The Diving Experience**

In this next section we discuss the diving experience based on trips of one of author. In numerous trips, we are able to see the distinction among Weaver's characterizations of ecotourism. Through these stories, we hope to draw upon Milstein's (2008) idea of marine life "speaking" in hope that we can tap into "wider nature-human stories of environmental relations or providing justification for a progressive shift in governmental policy" (p. 190). In offering the stories of various experiences, we hope to demonstrate the range of environmental communication practices in various diving sites around the world.

Resorts at diving destinations tend to focus on Weaver's (2005) minimalist approach to ecotourism because their environmental efforts and awareness campaigns tend to be specific to their local environments. The pelagic and fluid nature of ocean life makes ecotourism efforts difficult. Unlike some other ecotourism land sites that are managed by one organization or agency, the dive industry is an aggregation of small independent agents.

These diverse dive operators may have different interpretations of the role they play within diving and their role toward the ocean. Accordingly, there is a common goods problem within the dive industry because all these dive operators need to abide by rules in order to reduce the impact of scuba diving on the environment but have the incentive to go break a couple of rules, such as not disrupting marine life, in order to keep their customers happy.

Although people working in the dive industry are expected to be stewards and role models of environmental conservation, sometimes these dive leaders may be the ones to engage in behavior that may disrupt this conservation. For example, during a dive in a location where scuba diving is just starting to develop as an industry, the dive leader proceeded to hunt for lobsters in the middle of our recreational dive. Once on the boat the two crew members briefly discussed whether or not we had been out of the protected reserve, said “oops” and proceeded to invite the two client divers for an egg and lobster breakfast at the shop.

In order to attract client divers, some dive operators may explore the boundaries of what is legal versus what is environmentally appropriate. For example, dive boat operators are increasingly accommodating divers who use spear guns when scuba diving. In our humble view, the regulations have not caught up with the increasing number of divers who take spear guns on scuba diving trips. On a trip to a wreck in the Gulf of México, one of the authors observed how the boat crew accommodated the trip for the two divers who were spearfishing, and how one of those two divers shot the one amberjack fish that hanged around the wreck before other divers in the group could interact and take pictures of it.

On another trip to the Channel Islands, one of the authors also observed how the crew of the boat arranged some of the dives to be outside the marine reserves so some of the divers could hunt. One of the authors and his dive buddy were slowly approaching a sheephead, a beautiful and relatively large fish with pink and black stripes that hangs out on kelp forests and usually is not afraid of divers. The plan was to let the sheephead circle us and take pictures of it. However, we noticed there were a couple of divers with spearguns and before we could take a picture, one of these divers had already shot three of these fish and there were no more sheephead to observe on this dive.

This is where communicating awareness becomes an important part of scuba diving as an ecotourism genre, because dive operators have an incentive to attract divers by promoting hunting or disrupting behaviors. The business side of scuba diving motivates dive operators to give the clients what they want, which in some cases is more hunting and collecting than it would be appropriate, as long as it is legal. Even if they do not collect, sometimes dive leaders handle and even pass around small wildlife so their divers can enjoy it, and then we just put it back, even though we may have already disrupted something about that critter’s life. In the deep blue of the sea, interpretations of the regulations become murky.

To offset those incentives for increased disrupting activities, some diving locations are protected areas regulated by national governments. The regulations vary from restricting hunting and collection, to limiting the number of divers allowed in the reserve or park, to charging a conservation fee per diver. For example, in Sipadan, in Malaysia, divers register in advance, pay a fee, and there are a limited number of divers allowed per day. This is similar to the Point Lobos state reserve in California, where divers pay \$10 and only 30 divers are allowed per day. While there is no limit to the number of divers in Cozumel, there is a marine reserve fee of 27 Mexican pesos per diver. Regardless of the fees or limits to number of divers, all protected areas ban any collection or hunting.

The dive community does play a role in developing and promoting regulations, the creation of marine reserves, and environmental activities designed to preserve the local environments. For example, in October 2012, a young diver in Puget Sound, Washington killed a giant pacific octopus from a local diving site. The death of the giant pacific octopus created outrage among the local diving community. Because the diver had not done anything illegal and there were no fines or prosecution, local dive shops publicly threatened to ban the young diver from their establishments and protests started growing online. Several months later, this and several other dive sites around Puget Sound have been designated as marine reserves where now giant pacific octopuses are protected (Seattle Times blog, August 2, 2013).

Similarly, the diving community in Cozumel recognized that diver traffic to the reefs was having a negative impact and developed MUSA, an “underwater museum” with statues that would attract divers and reduce the number of divers going to the natural coral reefs. This initiative, and several others promoting the development of artificial reefs, helps reduce the footprint the diving community has on natural reefs (Shani, Polak, & Shashar, 2012).

Although most resorts and dive operators focus on their specific locations and have a minimalistic approach to ocean conservation, the exception may be megafauna like sharks and manta rays. In land-based ecotourism, megafauna that may attract people to certain destinations are site specific (Weaver, 2005). An example of this megafauna is the Tanjung Puting National Park in Indonesia where visitors can experience orangutans (Sowards, 2012). Because this megafauna is site-specific on land expeditions, ecotourism relying on mega-fauna is minimalistic (Weaver, 2005).

In contrast, megafauna in ocean expeditions usually consists of animals that are pelagic in nature (they roam the open oceans and travel great distances) and can be found on different parts of the world, such as whales, sharks, and turtles. Ironically, given the special characteristics of ocean life, mega fauna expeditions provide dive operators the opportunity to engage in a more comprehensive ecotourism that fosters deep understanding and awareness. For example, the briefing before a bull shark dive in Playa del Carmen includes a video on shark conservation that also addresses the myths of sharks as dangerous predators of humans. In this instance, like all other interactions one of the authors has had with sharks, the experience reinforced the idea that sharks are more likely to be afraid of us than trying to eat us. Because the dive leaders feed the sharks on this dive, we were expecting several hungry sharks to swim by us. Instead, we got one lone shark swimming tentatively to get the food; it did not even come close to us at any point. The stingray that beat the shark to the food a couple of times seemed considerably less timid. An explanation we got for why we did not see many sharks was that they had done a research dive earlier in the day, and they had poked the sharks with some measurement instruments. Apparently sharks, or “eating machines,” as they are represented in media and movies, will forego a free meal to avoid the discomfort of being poked by a needle.

These experiences call for a new approach to listening to the ocean to understand the impact that humans have on the environment. Salvador and Clarke (2011) advocate what they call the “weyekin principle,” an “embodied critical rhetoric”

that “attends to the corporeal experience of the nonhuman world so as to articulate the symbolic-material tensions obscured by predominant systems of meaning” (p .243).

Some of these experiences with the non-human world oftentimes highlight the impact humans have had on their environments. When we travel to join scuba diving expeditions, we usually create expectations framed as sublime, exotic, or adventurous based on promotional materials (Sowards, 2012). As Sowards notes, the discrepancy between our expectations and our experiences “provide an opportunity for self-reflection and awareness” (p. 183), which in this case may highlight the need for environmental conservation. An example of this discrepancy between the expected sublime and reality is expecting to see healthy coral reefs that have all sorts of colors and all kinds of life around them and finding that the coral has died, there are no small critters living around it, and the only thing you see dead coral that basically looks like rocks underwater, giving those dive sites a depressing and eerie look. Similarly, heightened awareness also sets in when you get to a remote, exotic location expecting to experience a pristine place untouched by civilization and instead see the ocean wildlife swimming through patches of trash. The experience one of the authors had encountering a big monitor lizard swimming in a river in a remote island in Malaysia was certainly dampened when the lizard had to zigzag across trash and what looked like soiled diapers and bathroom tissue.

One of the common themes the experience of diving communicates about our relation to nature is the change to diving environments in the last three decades. When one interacts with those who have been diving for decades, it is common to hear stories about how abundant marine life was just two or three decades ago. Ocean explorer and conservationist Silvia Earle has repeatedly mentioned how in the 1960s and 1970s people operated under the assumption that the ocean’s abundance was inexhaustible (Earle, 2009). She then relates how when we started exploring it, we realized we were taking more than the ocean could replenish. Similarly, those who have been diving for decades around the California coast have passed on stories about how it was common to see blue sharks while diving in places like Monterey Bay in the 1980s. The villain in these stories is usually overfishing. Nevertheless, these stories also contain a glimmer of hope, as divers start sharing that these blue sharks are making a comeback and sometimes, if you are very lucky, can be spotted in southern California.

As Sowards (2012) notes, ecotourism expectations may also be framed as dangerous adventures. That would be the case of joining an expedition searching for sharks in open water. The discrepancy between the expectations of a “dangerous adventure” and the reality of spending days sitting on a boat hoping that you actually see a shark at some point may shape the experience and heighten the awareness of the state of the oceans. In this particular case, one of the authors ended up sitting around on a boat for 33 hours before encountering one small blue shark. When the shark finally showed up, the explorers in the expeditions were told to wait for the shark wrangler to get in and get the shark acclimated before going in, otherwise they would scare the shark. Once the shark was acclimated, we actually saw it being manhandled a couple of times by people eager to say “I touched it,” and being poked in the eye a couple of times with a GoPro video camera with one of those long poles. One of the authors clearly remembers thinking about all the things the shark was enduring just to

get some food, apparently is it true there is no such thing as a free lunch. The discrepancy between the expected “dangerous adventure” and the reality of sitting around on a boat for days just to see one lone shark being manhandled certainly can raise awareness of us, and not the sharks, being the dangerous predators.

As we explored the diving experience, we noted the need for communication given the aggregation of resorts and operators that may have different interpretations of their roles as stewards of the ocean commons. The challenge posed by these different interpretations is increased by the incentive to push the legal and environmental limits to keep and attract customers. Communication also plays a role in how the diving community organizes to promote more stringent conservation regulations and marine reserves, as illustrated in the diving community’s achievement of more stringent regulations to protect giant pacific octopus in the Puget Sound area.

The diving experiences not only rely on the discourse of the dive industry, but also on the “corporeal experience of the nonhuman world” (Salvador & Clarke, 2011, p. 243), and how the contrast between the corporeal experiences and our expectations provides an opportunity for awareness (Sowards, 2012). In scuba diving, the dissonance between expectations and experiences manifest themselves in instances such as diving in sites where the corals have died, expecting a pristine place and seeing it full of trash, and simply not seeing the fish and marine wildlife that used to be there just a couple of decades ago. These dissonances create the opportunity to reflect on our relationship to the marine environment.

## **Conclusions**

We have explored the dive industry as certification agencies and dive operators. The frames used by certification agencies and dive operators relate mostly to a minimalist approach to ecotourism. Although the certification agencies promote a comprehensive approach on a global scale, this approach is not a required part of the socialization of new divers and is usually left at the discretion of the specific instructor and most likely of the new divers themselves. The discourse of certification agencies and experience of diving demonstrates the power of identification through diving education. Milstein (2011) suggests integrating an ecocentric lens with the powerful individualizing lens of identification. “This ecological-individual dialectic provides a both-and focal point, emphasizing both entity and collective, and providing a restorative way to further mediate ecocultural perception and practice” (p. 3). Sowards (2006) argues that “to connect to the non-human world is effective and important in destabilizing the artificial boundaries between culture and nature” (p. 59). Scuba certification agencies represent a duality because they are cultural institutions for the diving community that, at the same time, connect to the non-human marine world.

We explored the experience with nature afforded by engaging in scuba diving and how these engagements relate to environmental awareness. Just as in the case of other ecotourism where the experience itself communicates (Milstein & Kroløkke, 2012; Sowards, 2012), the performance of scuba diving itself represents the experience of nature and plays a role in how this experience shapes environmental awareness. This paper is an initial exploration, but suggests to us that such integrated approach to communication is important because scuba diving industry regulations diverge sharply

from practice. Environmental communication scholars have a lot to add to the discussion of how scuba diving's pragmatic communication can increase awareness and mobilize divers about environmental issues. Moreover, the constitutive function of the experience of scuba diving is understudied and presents a rich area of communication research that can seek to discover how diving practices shape our perspectives and understanding of our role within and impact on the natural ocean environment.

Future research should consider how scuba diving activities may replace other activities that harm the environment, while also taking into the account the footprint created by the scuba diving industry. In terms of benefits to the local population, we explore how diving may change or inhibit the culture of the local population, as well as the economic and infrastructure benefits of diving to the local population. What is needed is a broader approach towards the dive community that includes the experience of diving in the discussion of how the practice of diving relates to environmental awareness and preservation.

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Dive tourism is a special interest tourism that offers SCUBA (Self-contained Underwater Breathing Apparatus) diving as a primary activity during a vacation stay. SCUBA diving activities require special outfit that comes with some additional equipment such as cylindrical tank that stores compressed oxygen gas, mask and foot fins. A SCUBA diver can stay underwater longer than other forms of dives. This activities requires theoretical courses and specialized training to acquire the. This is an Open Access article distributed under the terms of the Creative Commons Attribution License 4.0, which p Scuba diving is an underwater swimming activity involving the use of self-contained underwater breathing apparatus (SCUBA). School scuba diving activities generally can be classified into two types: an introductory scuba activity with training in the use of scuba equipment in a pool, basic scuba theory and, possibly, an introductory dive in open water. scuba training towards the achievement of a recognised scuba diver qualification. These guidelines apply to the type of introductory scuba activity. Any scuba diving beyond an introductory activity, or where students are working toward scuba qua