

Visual Narratives: Exploring the Impacts of, Tourism Development in Placencia, Belize
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Introduction

Environmental change and degradation is taking place at an unprecedented pace in many coastal areas of the world, where the majority of people on the planet reside. In this article we critically evaluate the benefits and challenges of using the visual data collection method photovoice to study and document environmental change, through a discussion of research on the ways rapid large-scale tourism development has altered coastal landscapes in Belize. In Belize, as well as many other small island countries experiencing tourism development, new infrastructure and other manifestations often proceed without input from, design, or control by local communities. Photovoice is a methodological tool that has the potential for researchers working with tourism-based communities to better understand how local people are experiencing and responding to global processes of uneven development, and place their voices and experiences at the center of the analysis.

Visual methods such as photovoice have to date not often been used as a way to communicate findings or promote community empowerment with regards to rapid environmental change. Despite the fact that “community involvement” is typically a required component of tourism development when new industries or infrastructures are put into place in many areas of the world, it is more often

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than not of limited scope and does not represent legitimate participation in decision-making, as plans have already been developed and tacitly approved by regulatory organizations. Photovoice represents a visual method and collaboration tool for those being impacted by tourism development projects to share their concerns, personal experiences, and expertise with more powerful actors. However, we also consider the challenges and limitations of photovoice as a method to document how participants experience a changing environment.

Our research was carried out over a two-month-long period and included photovoice, semi-structured interviews, and participant observation to explore the various ways in which people living in Placencia Village, Belize have experienced change in their environment over the last fifteen years, as well as what forces are believed to be responsible for some of these changes. In the research setting, large-scale tourism expansion is often closely tied to the appropriation of ownership of both lands and resources by foreign investors or transnational corporations such as the cruise ship industry. Smaller scale, family-owned tourism businesses have been a focal point of the local (and national) economy for at least the last three decades, but mass tourism is a recent arrival over the last 5-10 years. This study builds on existing scholarship that highlights the increasing environmental impacts of and negotiations with mass tourism development in Belize and demonstrates the growing need to protect coastal landscapes and livelihoods of long-term residents (Sutherland 1998). Based on the findings of our study we suggest that photovoice and other visual approaches may allow a relatively low-cost and participatory way for local residents and researchers to work together to visually reflect upon and represent the role of foreign investment and tourism expansion in environmental change. As Pfister et al. (2014:37) suggest, “Photovoice involves providing research participants with cameras to self-document their lives.” In a photovoice study of Sudanese women refugees living in Cairo, Johnson carried out “one-on-one photo-elicitation interviews during the final stages of research, and photographers chose a set of their images to illustrate the photostory” they wished to tell (Pfister et al. 2014:37). In this way, photovoice and visual methods can serve many purposes, both individual and

collective, a vehicle for reflexivity and with the aim of fostering creative action or resistance. We argue that photovoice has great potential for collaborative research with individuals and communities experiencing environmental change, but suggest some insights gained from discovering its limitations.

Background

Setting

Placencia Village is located in the Stann Creek district on the southeast coast of Belize. The Placencia Peninsula is home to people sharing diverse cultural and linguistic heritages, that reflects influences from the Caribbean, Central America, as well as its status as a former British colony until its independence in 1981. Belize is a small country with 350,000 people and the major ethnic groups represented on the Placencia Peninsula include Kriol, Maya, Garifuna, East Indian, and Mestizo; other social groups include primarily North American, European, and Canadian ex-pats, as well as mobile long and short-term laborers from Honduras, Guatemala, and other neighboring countries (Sutherland 1998). The Placencia Peninsula is bordered by the Placencia Lagoon to the west and a segment of the Mesoamerican Barrier Reef System to the east. Placencia Village, with an approximate population of 1753 people and 644 households, occupies the southern tip of the peninsula (Belize 2010 Census Report UNEPA). The northern part of the village is an area of intensive tourism, transportation, and residential development, while the southern part of the village is where families with longer-term, multi-generational ties to Placencia and Belize tend to reside and own businesses related to tourism.

Integrating photovoice into environmental anthropology

Photovoice is a participatory action research method that is designed to empower members of vulnerable groups to (1) record community strengths and concerns, (2) to promote critical dialogue and knowledge about community and personal issues, and (3) to reach policymakers (Wang 1999).

Beginning in the field of public health, the use of photovoice has become prevalent throughout anthropological, qualitative, and environmental research (Baldwin and Chandler 2010; Bennett and

Dearden 2013; Gubrium and Harper 2009; Harper 2009; Johnson et al. 2012) and acts as a powerful tool to promote community involvement. The incorporation of visual methods also contributes to a participatory approach, with the aim of providing participants a stronger role in the research process and shifting the relationship between researchers and the community.

Anthropologist Krista Harper first brought this method into environmental anthropology by using it to investigate the environment and health in a Hungarian Romani community (2009). Since then, this method has also been used by anthropologists to explore social and environmental change in coastal communities on the Andaman Coast of Thailand (Bennett and Dearden 2013) and also as a way to document climate change (Baldwin and Chandler 2010).

The research project described here is an extension of this method for use in environmental anthropology and sheds light on the ways rapid large-scale tourism development is being experienced in coastal Belize. By documenting the ways in which residents have encountered changing environments, this research sought to explore how global and local processes of uneven development intersect in Placencia, Belize using photos taken by residents which then form the focus of individual interviews about the photographs themselves and the larger topic of environmental change associated with tourism development.

Role of Tourism in Belize

Although “backpacker” tourism has long existed in Belize, it became increasingly desirable in the mid-1980s when it was featured on a 60 Minutes segment as one of the “last pieces of undiscovered paradise where one could retreat to a simple lifestyle unspoiled by civilization” (Sutherland 1998, 92). Small-scale tourism continued to flourish during the 1990s as a part of the “Ruta Maya” circuit where low-budget travelers would tour through Yucatán peninsula, Belize, and Guatemala to see Maya archaeological sites, and stay in small budget hotels or family-run lodges on beaches and inland rural areas. Placencia, with its less expensive and more informal accommodations, appealed to this clientele and became one of the stopping points for these travelers. Between 1990-2000 some families hosted tourists in second story apartments in their homes on the beach and in one

and two story motels situated throughout lush groves of mango trees, coconuts, and colorful houses on stilts concentrated on the southern tip of the peninsula. During this decade, smaller luxury lodges catering primarily to American diving or fishing tourists were established along the peninsula, which had an unpaved, very rough road and a sand airstrip. The village was also served by the Hokey Pokey, a small boat taxi service run by a local family from Mango Creek to Placencia Village, a service that continues today.

Although there are differing accounts of when rapid changes started to take place in relation to the scale and intensity of development, many people of Placencia mention Hurricane Iris in 2001 as a significant marker of change in the village (Spang 2014). Others suggest that the introduction of the paved road in 2010 initiated the changes taking place. Many residents also cited the introduction of mass cruise tourism into Harvest Caye in November of 2016 as a major catalyst of change in the village. Regardless of the cause, these transitions have caused the people of Placencia to experience rampant real estate speculation, the escalated cost of goods and services, and new jobs and wealth bringing in Belizeans from other parts of the country and immigrants looking for work (Spang 2014).

Today, Placencia boasts a number of tourist amenities, including coffee shops, internet cafes, the harbor, guesthouses, casual bars, and local restaurants. Souvenir vendors line the 4,071-foot long paved sidewalk that runs through the village selling jewelry, hammocks, baskets, woodcarvings, and paintings. The village also has other features such a gas station, four banks, multiple real estate offices, a post office, a police station, a social security office, and a medical center. Several businesses and grocery stores can be found on the main road. Many people still refer to the village as a “barefoot paradise” because of its casual dress of “no shirt and no shoes” (Vernon 2014). For many, Placencia is still relatively special compared to other places in the Caribbean and is “a place where friendly people live as against a place where people visit” (Vernon 2014, 19).”

Although the increase in tourism development has created some benefits in the village - including improved access to health care, improved roads, greater investment and spending, and more economic development and varied sources of income - there are disparities that exist when it comes to

who has access to tourism profits. With the economic benefits not being distributed evenly, the shifting scale of tourism development has raised concerns about the changing environment, access to resources, and changes in livelihood (Zarger et al. 2016). Many long-term residents expressed concerns that they were losing the small-scale tourism that had historically characterized the peninsula and instead seeing more mass tourism development, a product of growing foreign investment.

Together, these changes illustrate a “complex and shifting socio-economic and political landscape,” wherein the ideas about the scale and types of tourism that are considered desirable are dependent on individual perspectives and social categories such as age, gender, occupation and ethnicity (Zarger et al. 2016). Other issues include concerns over involvement, ownership, access to resources, and increasing costs associated with large-scale development projects on the peninsula such as cruise ship tourism on nearby Harvest Caye (Boles et al. 2011, Usher and Flowers 2011, Zarger et al. 2016). More specifically, a significant number of residents express the need for greater community control over access to information as well as the means to participate in decision-making processes for development projects and resource management technologies impacting the peninsula (Zarger et al. 2016; Wells et al 2016; Prouty et al. 2017).

Methods

Study design

The research described here was a component of a larger NSF-funded project entitled “Impacts of Tourism, Wastewater, and Water-energy Development on Livelihoods and the Environment on the Placencia Peninsula of Belize (NSF grant # 1243510).” The research conducted by an interdisciplinary team of anthropologists and engineers from the University of South Florida explored how local village councils, environmental NGOs, tourism organizations, and other community members experienced change in livelihoods, water resources, and the coastal environment as large-scale tourism rapidly expanded. The mixed methods approach for this larger project included in-depth interviews with 46 adults, 164 surveys, focus groups, and participant observation, all described in more detail in Wells et al. 2016.

As an additional component of the grant, the authors developed a subset of interview questions and a photovoice project to explore the various ways in which local people have experienced change as well as what forces were believed to be responsible for those changes. The initial goals of integrating the photovoice method into a larger multi-faceted research project were twofold: 1) to bring together community members from different stakeholder groups to document the ways in which they have been impacted by tourism and other forms of development and 2) to provide a visual exploration of the ways residents narrate and explain environmental change they have experienced during their years on the Peninsula. The widely-used process for photovoice is to host group meetings, where participants analyze and codify themes as a group, but there is some variation in how the method is used by different researchers. Group meetings did not occur in this study, primarily because participants wished to remain anonymous.

Another initial aim was to create a community exhibit, so as to provide local people a way of providing a counter-narrative to how tourism and development in the area were often touted in a way that interviews alone could not have achieved. Additionally, this portion of this study was motivated by the community's interest and involvement in a concurrent "picture voice" study, run by the larger NSF team, where children's drawings were used to explore children's environmental knowledge and perspectives, suggesting an interest at the local level of documenting environmental change in their landscape (Gonzalez et al. 2019). The initial goals of the photovoice project described here were modified during the course of research and in our discussion section, we consider the strengths and limitations of the approach as well as some lessons learned about implementing it. The study protocol was approved by the University of South Florida Human Subjects Institutional Review Board.

Sampling Strategy

Participants were recruited through purposive sampling to include residents who had lived in the area for more than five years and who were over the age of 18. Purposive sampling was also used to ensure variation in respect to age, gender, race, ethnicity, and socioeconomic background. In-depth interviews (n=12) and photovoice interviews (n=7) were meant to expand on individual experiences

of the environmental impacts of tourism development in Placencia Village. Participants included entrepreneurs, business owners, scientists, tour guides, fishermen, members of village council, caye rangers, groundskeepers, real estate professionals, and retirees. Informed consent was obtained from all participants. The researchers made clear that participation was completely voluntary and that participants could withdraw from the study at any time. Many of the participants had gotten to know members of the larger research team in the past, during previous field seasons, allowing for a level of rapport and general understanding regarding the details of our project. All photovoice and in-depth interviews were de-identified to protect participant confidentiality, audio recorded, and transcribed verbatim. Data collection for in-depth interviews (which included other topics of interest) and photovoice interviews occurred concurrently. Participant observation was carried out and all data for this portion of the project were collected between July 2015 and August 2015. All participants were informed of our role as researchers and understood that we were not there to fix things.

Interview Topic Guide

An interview guide was designed around experiences of environmental change on the peninsula. Under the direction of the PIs on the larger NSF grant, the interview guide was adapted for context. Further, the interview guide was piloted to a member of the village council in Placencia, during which phrasing of some questions were adjusted to improve clarity and ensure language was appropriate for target population. Questions were intended to explore perceived risks and benefits of development on the peninsula, influence of environmental change on livelihoods, observations of how the environment had changed during their time on the peninsula, and perceptions on how continued development will impact the peninsula.

Photovoice

For participants, introduction to the use of photovoice began with sessions conducted by one of the researchers on the nature of the project, basic photography techniques, the ethics of taking pictures, and how to frame an image to get the desired effect. Due to conflicting schedules of the participants, group meetings were difficult to coordinate, so all meetings occurred one-on-one. During

these sessions, the researcher and participant took several photographs together and for participants that expressed the desire, additional time was provided to practice using the cameras. In a couple of instances, participants asserted interest in participating in the study but disinterest in using a digital camera, so offered to provide photos they already had. These were also included in the study.

Participants comfortable using the digital cameras were given a week to take between 15-20 pictures and were provided contact information for the research team in case any questions arose. Participants were asked to document how development had impacted the environment in Placencia Village. The prompt was kept intentionally broad in order to allow for participants to document aspects of life that might be outside of the purview of our understanding as researchers. Once participants understood the prompt, no additional training was needed. In addition to the digital camera, each participant was given a notepad and pen to write-down any observations and/or thoughts about either their photographs or the process.

Once the photographs were taken, a second individual meeting was set-up with each of the participants. During this meeting, all images were uploaded to a laptop computer. The participants were provided time to review the images and were asked to select 5-6 photographs that they wanted to tell more about. Once the images were selected, individual discussions were facilitated using the SHOWED method, (numbered below), a process that encourages participants to tell stories about the meaning behind the images they selected (Wang 1999). Thus, the SHOWED questions were used to facilitate the discussion:

1. What do you *See* here?
2. What is really *Happening* here?
3. How does this relate to *Our* lives?
4. Why does this situation or concern *Exist*?
5. How could this photo be used to *Educate* policy makers?
6. What can we *Do* about it?

For the three participants who volunteered to provide existing photographs they had of Placencia Village, they were still asked to select 5-6 photographs that they wanted to tell more about. Once the images were selected, individual discussions were facilitated using a modified version of the

SHOWED method, with participants being asked to reflect on aspects that have changed since the images were taken. Two sets of photographs were from before intensive tourism development began on the peninsula and showed both the changes in the coastal environment as well as to the land itself. The other set of photographs was provided by a participant who had been documenting various concerns she had experienced since moving to the peninsula about ten years ago. These photographs highlight how the physical shape of the peninsula has changed from increasing development, environmental changes and concerns regarding dredging, and evidence of mangrove destruction. These photographs added an additional dimension of how tourism development has impacted the environment in Placencia as the photographs collected ranged from the 1980s to current.

Due to time constraints, difficulty in coordinating individual schedules with people working multiple jobs, and the desire communicated by some participants to remain anonymous and to discuss their experiences individually, as the study proceeded, interviews were not held as a group, but rather individually. There are existing photovoice studies where a similar approach was taken (Johnson et al. 2012). However, individual interviews that focused on images participants either took themselves or shared were generative of many important emergent themes that informed our analysis. Emergent themes were independently discussed with participants. The researchers then synthesized findings based on themes or topics of concern that were dominant across each of the interviews. These themes were then discussed and validated with members of the community and were found to overlap with data collected for other portions of the larger study.

Participant Observation

The goals of participant observation were to understand the various ways in which residents' experience tourism development, and to understand the outcomes that these experiences have had on people in the village. Detailed field notes were reviewed and coded for emerging themes, supplementing the data collected from the semi-structured and photovoice interviews.

Data Analysis

Analysis of the in-depth interviews, photovoice interviews, and fieldnotes were carried out using qualitative data software Dedoose (version 7.6.6). Themes were inductively established based on the research objectives and data collected (Bernard and Gravlee 2015; Wang and Burris 1997). Data for the semi-structured interviews and photovoice interviews were analyzed separately and then mapped together to find the most salient, overlapping themes.

Due to time constraints and challenges with regards to a suitable means to permanently display the photographs, the research team was unable to coordinate a community-wide exhibit for the photovoice project. However, printed photographs and narrative quotes were mounted and provided to the village council to display as they would prefer. Additionally, as a follow-up study to the larger NSF, the research team has plans to continue to work with the community to establish other ways the results from this project could be beneficial, such as a more permanent exhibit or availability of information through a blog or website.

Findings

Beginnings of a “new Placencia”

The current changes facing the peninsula are ones that long-term residents have experienced over time. Placencia-born residents, like Kaylon¹, often reminisced about his memories growing up on the peninsula. *“When I was a kid, all back here, used to run in the bush playing. Foxes, all kinds of animals were running about the village.”* Others described how the area used to be green with lots of flowers and lush jungle (See figure 1), which was a theme that emerged from photos taken by participants.

[Figure 1 Goes Approximately About Here]

People described how after the hurricane in 2001, many international investors took advantage of the plummeting land prices and began the process of increasing development. This led to

an escalation in real estate prices—a process that surprised many locals. Virginia, a photovoice participant, had this to say regarding the transitioning landscape after the hurricane:

I thought the hurricane would slow it down. Who would want to invest in land that was just destroyed by a natural disaster? But actually, it accelerated it. Everything was cleaned out so people could see what was there. Property values actually went up. It was like urban renewal. (This is depicted in Figure 2.)

[Figure 2 Goes Approximately About Here]

The view that the hurricane “accelerated” development mirrors the experiences of the effects of the same hurricane (Iris) on Q’eqchi’ and Mopan Maya communities inland who were also impacted by the same storm (Zarger 2009). Although Hurricane Iris is often cited as a major turning point for the accelerated development, it was not perceived as the only process responsible for change on the peninsula. Long-term residents described how the introduction of a paved airstrip in the mid-2000s and then the road in 2010 made travel in and out of Placencia Village much easier.

Other participants focused on the economic factors that they believed propelled this transition. For example, Areli, a Belizean-born villager involved in real estate, described how “five to six years ago” [between 2008-2012] there was an economic recession and that is when she saw the type of demand, desired destination, and lifestyle of the tourist change – with many moving towards a preference for exclusive resorts and vacation packages. This also carried over to the real estate market where the needs and wants of buyers transformed, with many people desiring much larger properties with features such as in-ground swimming pools and gated communities. Figure 3 is an image of the model unit of a resort condo project for the marina. Areli, who selected the photo, described how the landscape was altered for this particular development. Many areas were being cleared, a process that she described as

being a “*new change in development*” where investors were “*changing [the] peninsula in order to make a profit.*”

[Figure 3 Goes Approximately Here]

Although there are differing perspectives regarding the factors that caused the escalation in tourism and housing, one would be hard pressed to find residents who have not experienced changes in the environment that they believed have been caused by development. As one Belizean woman described:

We are losing a lot of our green. We are getting a lot of the lagoons filled in because for real estate, we are like red meat. I mean, the thing is, it has driven up the cost of real estate so much that an average local family, hardworking average local family, can no longer afford to buy property in Placencia, or on this peninsula anymore. The people with money end up coming in and developing the lagoon property. At some point, I can't see our children getting land, so they will have to start moving away.

Today, when you drive from the north end of the peninsula into the village at its tip, the main road is lined with resorts, restaurants, and housing developments. For-sale signs that offer phrases like “the ultimate in beach front living” and “paradise has an address” are positioned on every vacant lot (see Figure 4). According to one woman, a long-term resident of Placencia:

The cement houses keep getting bigger and bigger and bigger. It's like you move down and you see that what your neighbor has built and decide to build an extra floor, to add another 1000 square feet on. And it's like, and it's almost like the foreigners have their middle finger up. It's like, we don't care how you live. This is how we do it. We are going to take over your country. And they do.

[Figure 4 Goes Approximately Here]

Environmental Impacts

Coastal erosion is a significant growing concern to emerge from participant responses focused on how tourism and housing development have impacted the local environment. Dennis, a Placencia-born tour-guide operator, provided the photograph in Figure 5, which depicts what the coastline looked like prior to intensive tourism development taking place. Dennis described how the beach used to be bigger and how the area that we were sitting in, one of the many restaurants in the village, used to be the lagoon.

[Figure 5 Goes Approximately Here]

Although a few participants attributed some of this change to processes such as climate change and seasonal fluctuations, others discussed the various development projects that they believed to be responsible for the erosion on the coast. These may not be the easiest types of changes to document visually, pointing to some of the limitations of photovoice for recording environmental changes. Dredging, the process of removing material from one part of the water environment and relocating it to another came up as a process that is having significant negative impacts on both the lagoon and coast. This type of degradation, unlike rising temperatures due to climate change, is obvious to the observer. Long-term residents, like Kaylon described how, *“A big issue has been at [resorts] where they built seawalls. It’s been causing building on one side and erosion on the next because it disrupted the wave action and water flow. A lot of people complain about it.”*

During one photovoice interview, Charles, a craftsman in the village, described how he moved to Placencia from Belize City many years ago. With limited education and unstable employment opportunities, Charles saw Placencia as a place that offered a low cost of living, less crime, and the potential to generate a livable wage by making crafts from coconut husks. He described how the coastal erosion shown in Figure 6 has impacted the health of coconut trees along the coast, and worried that these changes would impact his ability to make a living. When asked what processes were responsible for the growing concerns of coastal erosion, he stated:

The beach used to be bigger. They say before you do construction you have to do an environmental assessment. Maybe I am wrong, but I suspect that it is all being swept under the rug. Because I am seeing opposite to what the rich people are doing. They say they are going to walk the chalk line and do the right thing. But everyone is breaking the rules for profit and gain.

Charles believed that sharing the accounts of long-term residents of the village could have the ability to disrupt the current narrative that exists regarding the realities of environmental changes in the village. He asserted:

We going to use the same weapon that started this in the first place. The weapon is advertising. Same way we advertise tourists that come here, we could advertise about this; the thing that they don't want to talk about. This is what people don't want to talk about. (see figure 6)

[Figure 6 Goes Approximately Here]

In addition to the issue of coastal erosion, long-term residents also had concerns regarding how the marine environments have been impacted by the increase in tourism development. In informal conversations with fishermen on the peninsula, they described the loss of biodiversity that they have experienced in the marine environments. Many described fishing in the lagoon as children and being able to see dozens of lobsters from the boat and how “*you don't see that anymore.*” Participants also described how the destruction of mangroves – which not only serve to stabilize the coastline but also attract fish and other organisms seeking food and shelter from predators – has threatened the biodiversity found in the lagoon and coast.

What once used to be considered a “sleepy little fishing village” and “backpacker tourist destination” has transitioned into an economy that is based primarily in large-scale tourism. For many, the ability to sustain economic livelihoods through tourism is now being threatened as the scale and

intensity of development continue to expand. This sentiment is articulately captured in the photovoice image (Figure 7) and interview with Charles where he asserted:

The reality is the environment is being destroyed, people are spending money to put up structures and they are not worried about the environmental damages because everybody wants to grab, grab, grab. Everybody just wants to have a big house to touch the sky or something. Everybody want the perfect view. And it is not a good thing for us who is from here. I am seeing a... It's not healthy, I'll just put it like that.

[Figure 7 Goes Approximately Here]

Although attempts have been made to bring light to the fact that environmental regulations are not being enforced, they have not resulted in any change being made by the developers or owners, or regulatory institutions and policies. When asked what processes are responsible for the changes that have been experienced in the village, many participants cited the lack of enforcement of policies and regulations. This is particularly evident when it comes to tourism development on the peninsula, but not an aspect that lends itself to visual documentation. Natalie had this to say about what she had experienced during her time on the peninsula:

I think that for whatever reasons we are getting developers who are coming down here who don't care about the environment. They just care about their profit. They take their money and they bring it down here and they are going to do what they are going to do. And a lot of things are things that they could never do where they come from. And the government of Belize is allowing them to do it.

In an interview with Virginia, a long-term resident of the village, she explained how when she built her house she was guaranteed that, “all properties [are] only supposed to be developed 16%.” Several years after building her house, however, developers came in and started building right on top of her. She described the process of going to the Central Building Authority in Belize City and how she was given the run around until she eventually gave up. In an interview with Emitt, a local

fisherman, a similar sentiment was expressed in the ways that certain laws are evaded. He asserted, *“In our country there is a law that we Belizeans should own 49 and developers should own 51. I don’t see that taking place.”*

Long-term residents also expressed concerns over the lack of enforcement when it comes to the environmental regulation of marine resources. During an interview with Meredith, a long-term resident in the village, she asserted that the *“rules about dredging and mangroves are neglected [due to] political decisions. [People] get a permit to cut 1 acre and [they] cut 3 acres instead. Nobody is here to stop them. The environmental damage down the road is going to be tremendous.”*

Many people discussed the lack of enforcement by environmental organizations as well as building authorities when it comes to what is being constructed on the peninsula. Although there are inspectors that come to the peninsula before a permit is granted, many people believed that a significant amount of corruption occurs within this process. Some long-term residents felt that these workers are often underpaid and alleged that they may receive cash bribes from the international developers and expatriates. In general, participants expressed empathy for the workers—stating that they were just doing what anyone would do to provide for their families. Participants did however, express resentment towards the governmental agencies that they felt were responsible for these processes and lack of regulation enforcement.

Discussion and Conclusions

The analysis component of this research included identifying the main patterns presented in the photovoice interviews and contextualizing them with the findings from the semi-structured interviews (Gubrium and Harper 2009; Schensul and LeCompte 2016). Further, photovoice interviews, semi-structured interviews, and field notes from participant observation were coded and triangulated to provide additional insight. Photovoice was a valuable research method in this project because it allowed participants to direct the research agenda in ways that were meaningful for them. The themes discussed above were explicitly linked to images that participants had chosen. The broad nature of both the photovoice prompt and discussion questions in the SHOWED method allowed for

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participants to have more control over not only the discussions that were had but also in the themes that were identified in the data. This brought into focus the profound changes they had experienced since being in the village in ways that interviews alone would not have facilitated.

As a whole, the findings suggest that long-term residents of Placencia Village have experienced significant change to their environment that many attribute to being connected to the scale and intensity of development that started occurring after Hurricane Iris in 2001. Further, many participants asserted that much of this change is at least in part a result of lack of regulation enforcement and inequitable decision-making processes related to land and resource ownership. This was perhaps most clear in the historical photographs that were provided by the participants, suggesting an active acknowledgement and engagement with these processes. One participant asserted that she started taking photos any time she left the village from the local airstrip, noticing how drastically the actual shape of the peninsula was changing, and reflecting on who was responsible for that change each time. This prompted her to begin taking pictures of development on the cayes offshore, where it was clear that environmental regulations were not being followed. Some of these images were used in correspondence with the Department of Environment, where some small successes were made in holding developers to regulation standards. Another participant used historical photographs as a way of highlighting how building restrictions on the peninsula were not being followed by showing what the area around her home looked like 20 years ago and what it looked like now, citing regulations that were in place to prevent this overcrowding. This participant also described attempts at fighting these violations, although these attempts were not successful.

One key theme we found through our fieldwork is that the beginnings of what residents term a “new Placencia” began to occur in the early 2000s. Although Hurricane Iris is perceived to be the main driver of this accelerated development, other factors also contributed, such as the airstrip and paved road into the village. The culmination of these factors led to what many described as “rampant real estate speculation” and had the effect of changing the type and demands of tourists coming into the village. Some participants also shared historic photographs they had taken over the years and we

explored other visual historical records available on the peninsula and these sources resonate with villagers' experiences of the timing and reasons for loss of mangrove coastlines, reduction in access to beaches and offshore cayes, and infrastructural development.

Another key concern that many Placencia residents expressed is the observation that the majority of environmental impacts they witnessed have resulted from the intensity and scale of tourism development on the peninsula. The most commonly cited concerns were in regards to coastal erosion, dredging, and changes to the marine environments. In addition to the general observations that residents had regarding the short and long-term impacts to the environment, many also asserted how these changes were impacting other aspects of life in the village, such as livelihoods or tensions between longer-term and shorter-term residents. Participants described how community members ranging from craftsman, to fishers, to tourist guides, to hoteliers were being affected.

Through the process of taking photographs and recounting stories of the timing, scale, and scope of environmental change, participants also remarked to us often about why these changes were happening as well as how they or their neighbors were responding to the changes. In this way, photographs provided not only a way to visually document change they had experienced, but also acted as a way to reflect on root causes of those changes and what might happen in the future. We found that the perspectives people shared about their own photographs allowed them to discuss more specific changes that had taken place in particular places, as opposed to a more traditional interviewing practice that simply asked for personal reflection. In this way, visual methods were instrumental to the research process and the specificity of the results, which has the potential to be very applicable for studies that are more directly applied or engaged in nature such as providing policy recommendations or collaborating with activist groups.

Finally, an important aspect of local experiences that were emphasized is the connection that participants made between environmental changes and the lack of enforcement of related policies and regulations. Examples given by participants included a lack of regulation regarding the type and size of structures that were being built, land ownership distribution (Belizean vs non-Belizean), and

unchecked destruction of mangroves and coral reefs off the cayes. Despite environmental impact assessments being required by law, participants described how the inspectors coming into the village had little incentive or resources to enforce regulations and point to the need for these processes to be better regulated by national government. Although the role of regulatory factors in mitigating degradation of local ecologies is not immediately something that might be “visible,” incorporating a visual method provided an opportunity for people to consider the biophysical manifestations of the lack of enforcement of environmental regulations in the landscape and tell specific stories they had to share. In this way, we suggest that taking and sharing photographs uncovered different aspects of local experience that interviews alone may not have exposed.

Overall, this project aimed to document the process of environmental change experienced by local participants. The photographs provided a way for participants to visually document the substantial ways in which their environment is changing in tangible terms. However, the visual component is also a means to discuss a counter-narrative to what is often marketed to tourists as “paradise.” What is it like to live in paradise and have some of the most beautiful and productive parts of it be destroyed? Furthermore, the perspectives shared allow for reflection on what is already being done or might be done in the future. Having participants provide existing photographs promoted a novel way for participants to reflect on changes that have been personally felt in the village. Reflecting on the images and memories dating back to the 1980s highlighted the unintended consequences of historical and current decision-making practices related to land and resource ownership. This points to the need for greater enforcement of regulations and more equitable decision-making practices related to land and resource ownership. The use of visual methods in this study suggests it is one productive tool for documenting environmental impacts that could be shared with local or national organizations to provide a rationale for greater investment in organizational staff and adjustment of priorities to better enforce regulations. Additionally, visual methods act as a powerful way to potentially promote community empowerment by giving local participants more control over how research is being done, what images are shared with a larger public, and how their stories are being documented and shared beyond Belize.

There were limitations and constraints to this study, which could be addressed in the future as the body of literature on incorporating visual methods into environmental research expands. The first limitation to consider is the cost associated with photovoice. Due to the limited number of digital cameras available and time commitment involved from participants, the sample size for the photovoice component of this project is relatively small. This challenge may change in the future as more residents in the study area now have cell phones with higher quality cameras than they did when the study was carried out. Additionally, the ability to host group meetings and analyze and codify themes together was not compatible with participants wanting to remain anonymous, requiring us to modify this component of the photovoice approach. It was unclear what physical location might have been best to display the images permanently, and time constraints of the project were also limiting in achieving the goal of a community exhibit. However, publicly displaying photos in future projects could be an important component when considering the ways in which visual methods can be used to promote policy change and environmental regulation enforcement. Further, although all participants who decided to participate in the project felt comfortable with the process, recruitment was at times difficult, as several people expressed hesitancy in taking a stance on environmental change that was considered to be too political in the village. Several people provided anecdotes from previous experiences that highlighted the potential negative reputational impacts of expressing views or opinions that were considered contentious in nature. For this project, expressing views that could be perceived as against development could have had negative impacts on livelihoods for not only participants, but also their families. In this way, publicly displaying photos that might be easily identified or attributed carried real risks and these are factors that researchers should consider in selecting visual methods and their final outcomes.

It could be argued that the photovoice study that was ultimately carried out might be considered more concordant with photo-elicitation, where photographs are used as a way to stimulate discussion between participants and the researcher. However, with photo elicitation, the researcher often decides which photos to discuss, while photovoice places that control with the participant themselves-which is what was done in this case. In this project, the value to researchers and

participants was the fact that taking and talking about the photos generated particular stories and reflections that people shared as they documented environmental change in their landscape. Although conversations about the impacts of development and thoughts on the environment occur with regularity in many spaces in Placencia, there is still a lot to lose by being connected to actions that are considered too political with regards to these topics. Through this project, we have learned that ensuring communities and individuals participating in photovoice projects feel comfortable requires significant trust and rapport between the researcher and participants, active involvement by research participants at all stages of the research process, that participants consider what it means to be a political actor in these spaces, and of course, extended time in the field to carry out these processes with care and integrity.

Despite its challenges, visual methods can be a valuable research tool for environmental anthropology and in efforts to conceptualize landscape change in a way that privileges the voices and stories of those experiencing that change, as opposed to other means of documenting change such as aerial maps or satellite images that are more often accorded more significance. This method provides a novel approach for participants to share their perspectives with researchers and create their own narrative on the direct and indirect environmental and social impacts of tourism development. Finally, visual methods provided an opportunity for researchers and the community to shed light on politics that are often hidden behind the spectacle of rapid large-scale tourism development so that participants have space to represent their own experiences.

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Figure 1 Image of Placencia Village prior to Hurricane Iris late 1980s



Figure 2 Image of Placencia Village post-Hurricane Iris 2001.



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Figure 3 Image of model unit of resort condo project for marina 2015.



Figure 4 Image of current real estate development in Placencia Village 2015.



Figure 5 Image of Placencia Beach late 1980s.



Figure 6 Image of Placencia Beach 2015.



Figure 7 Image of development in Placencia 2015.



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ⁱ Pseudonyms have been assigned to each semi-structured interview and photovoice participant

Author