



Spring 2023

The Effects of Climate Change in Guam

Olga M. Zyzanska
Gettysburg College

Brooke R. Ashfield
Gettysburg College

Kate E. Eulberg
Gettysburg College

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Recommended Citation

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Abstract

The purpose of this project is to dive into the harm that climate change has on Guam and its population. The objectives of our project are centered on highlighting the creative resistance of the CHamoru Indigenous community on Guam to established structures of colonialism and militarization during increasing climate crises. This project explores questions such as: How is Guam being impacted by climate change? Is the impact severe and/or immediate? How is the Indigenous community in Guam affected? How does US policy help or harm the island and its Indigenous population? What is being done to protect the island and its Indigenous population? Are there immediate issues of displacement? To answer these questions we utilized existing literature, first hand accounts, and conducted an interview with Dr. Tiara R. Na'puti, an Indigenous CHamoru activist and academic from Guam. In addition to this paper, we created a Storymap to serve as a resource for others researching Guam, the relationship between climate change and the island's history of colonialism and Militarism, and the response of Indigenous communities to this issue.

Keywords

Climate Change, Militarization, Guam, CHamoru, Activism

Disciplines

Environmental Studies | Indigenous Studies

Comments

Written for ES 400: Seminar.

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The Effects of Climate Change in Guam

April 10, 2023

By: Olga Zyzanska, Brooke Ashfield, Kate Eulberg

ES 400 Environmental Studies Capstone

Gettysburg College

Gettysburg, Pennsylvania

Honor Code: I affirm that I have upheld the highest principles of honesty and integrity in my academic work and have not witnessed a violation of the Honor Code - Olga Zyzanska, Brooke Ashfield, Kate Eulberg

Abstract: The purpose of this project is to dive into the harm that climate change has on Guam and its population. The objectives of our project are centered on highlighting the creative resistance of the CHamoru Indigenous community on Guam to established structures of colonialism and militarization during increasing climate crises. This project explores questions such as: How is Guam being impacted by climate change? Is the impact severe and/or immediate? How is the Indigenous community in Guam affected? How does US policy help or harm the island and its Indigenous population? What is being done to protect the island and its Indigenous population? Are there immediate issues of displacement? To answer these questions we utilized existing literature, first hand accounts, and conducted an interview with Dr. Tiara R. Na'puti, an Indigenous CHamoru activist and academic from Guam. In addition to this paper, we created a Storymap to serve as a resource for others researching Guam, the relationship between climate change and the island's history of colonialism and Militarism, and the response of Indigenous communities to this issue.

Introduction

The Pacific Islands face an uncertain future as climate change progresses. The Pacific Islands have experienced disproportionate effects of climate change compared to the emissions of the island. The Pacific Islands produce less than 0.03% of the world's total emissions (Natano, 2022). As a result, Pacific Islanders will face many consequences as climate change accelerates. In Guam specifically, the concerns include, increasing air temperatures, stronger tropical storms and typhoons, declining total rainfall amounts, coral reef bleaching and loss, threats to infrastructure from sea level rise, risks to fresh water, and overall risks to human health and ecosystem diversity (Grecni, et al. 2020). Many studies – ie. Mimura (2013), Vermeulen et al. (2012), and Jentsch et al. (2007) – have supported the claim that extreme events across numerous systems are the effects of climate change. Scientific evidence strongly suggests recent changes in sea levels, weather patterns, fisheries and agricultural productivity in Pacific Island Countries (Barnett, 2001).

Guam has a long history of colonialism, starting with the arrival of the Spanish in 1521 (Rapadas, 2007). The island has a significant native population, as of the year 2020 the Native CHamoru people make up about 33% of the island's population, the next largest group is the Filipino who make up about 29% of the total population (US Census Bureau, 2022). The culture of Indigenous groups are strongly tied to the island itself. Today Guam is the western-most possession of the United States of America, and has been since 1898 (Rapadas, 2007). Guam is one of the non-self-governing unincorporated territories within the US political system (Marsh & Taitano, 2015). As many of the Pacific Islands will become uninhabitable as a direct result of climate change, who will be held responsible? Not only are the islands facing multiple threats, but sea level rise may eventually flood whole islands leaving them uninhabitable. Therefore

being a part of the United States is considered an asset in planning for climate change (Schwebel, 2018). Theoretically the United States would provide aid to Guam and other territories especially faced with the impacts of climate change, but the reality is very different. There is hypothetical protection and funding available in the event of major disaster to US territories but they are behind many of their neighbors in both their perceptions and preparation efforts of the effects of a changing climate (Schwebel, 2018). Another issue related to the designation of territory status, US territories were either outright excluded due to their tertiary sovereignties or due to lack of representation from the Federal Government at meetings (Schwebel, 2018). Due to their lack of representation in Congress, Guam and other territories are cut short on support when facing the effects of climate change.

As a result many people living in Guam will have to face the effects of climate change with limited support from the US government. One section of this project will focus on the history of foreign control in Guam and if its influence has been positive or negative when dealing with the consequences of climate change. The next section will focus on the physical effects of climate change and the displacement that disproportionately harms Indigenous groups. The last section will focus on different efforts advocating for Guam and how art can be used within environmental advocacy.

Objectives

The purpose of this project is to research the harm that climate change has on Guam and its population and present our findings using ArcGIS StoryMaps. Through this project and digital media piece, we seek to: showcase the experiences of the CHamoru Indigenous community in Guam; to question the ideas of Eurocentrism, reparations, and dominant political power during climate crises; and to highlight art activism efforts to protect the island and its people. We hope

to understand the complicated histories that have led to the climate crisis in Guam and to connect this instance back to a larger scale issue in the Pacific Islands as a whole. Some questions we seek to address through this project include:

“What is happening to the island of Guam when it comes to climate change?”

“Is the impact severe and/or immediate?”

“How is the Indigenous community in Guam affected?”

“How does US policy help or harm the island and its populations?”

“What is being done to protect the island and its population?”

“Are there immediate issues of displacement?”

“Who is responsible for responding to the issues faced in Guam?”

Since we are not using a traditional science framework for this project, we will explore the themes mentioned above through a review of existing literature, first hand accounts, an interview with an activist and academic from Guam, and examples of art activism.

Methods

[The Collection of Primary and Secondary Sources](#)

A majority of our research was conducted using a variety of peer-reviewed sources and firsthand accounts relating to topics of history, military occupation, climate science, and colonialism. However, in addition to these resources, we performed an interview with Dr. Tiara R. Na’puti. Dr. Na’puti is an Indigenous CHamorro scholar and activist working at the University of California, Irvine; her experience working with activist groups on Guam and her research on the military build-up in the Pacific made her an invaluable contact for our project. Our interview with Dr. Na’puti took place over a forty-five minute video call on the Zoom platform, allowing us to connect with her across the country. We decided to structure the interview by first asking about Dr. Na’puti’s background and expertise, followed by a question from each of us relating to the designated sections of the project. The interview explored Dr.

decline of the Indigenous people (Rapadas, 2007). The legacy of attempting to eliminate the entire native population of Guam had lasting effects for hundreds of years. The census numbers at the time showed a 90% decrease from 40,000 CHamorus, as estimated by a Spanish missionary in the late 1600s, to about 4,000 by the early 1700s and by the mid-1850s, there were only about 3,500 native CHamorus remaining (Rapadas, 2007). After the Spanish-American war, control of Guam was transferred to the United States. In 1898 the 'Treaty of Peace Between The United States and Spain, ceded Guam to the United States (Statham, 1998). The acquisition of Guam occurred under the leadership of Theodore Roosevelt who aimed to broaden the international role of the United States, particularly in the western hemisphere which marked a departure from the isolationism of the nineteenth century (Statham, 1998). Once the US took control of the island the name was changed from Guahan to Guam, to the Indigenous CHamoru people "Guahan means 'we - have' (Hotta, 2008). Not only did the United States take possession of the island but continued the legacy of Spanish colonialism by attempting to eliminate the Indigenous community and culture.

With territory status, Guam has a unique political position within the US government. Three out of the seventeen territories recognized by the United Nations as non-self-governing are unincorporated territories within the US political system (Marsh & Taitano, 2015). Since the acquisition of Guam the United States has enacted several acts. In 1950 the United States approved the Organic Act of the Territorial Government of Guam which instilled a republican form of local government on the island and granted the island's inhabitants American citizenship (Statham, 1998). Even though Guamanians gained American citizenship, they do not have representation in the Federal Government and do not pay Federal income taxes (Statham, 1998).

For some, gaining American citizenship and a new form of government can be seen as beneficial for Guam and as an opportunity for the island and its people.

For others, gaining American citizenship and a certain type of government in Guam can be considered forced assimilation to US culture as well as overwriting native sovereignty and culture. The Federal Government granted Chamorians citizenship to the US government but territories are treated differently than states which suggests that citizens in territories are not yet whole with the people of the United States (Statham, 1998). Although Guam has been granted citizenship by the US government, Guam's status as a territory puts the island in a very different position than a US state. The island's population is excessively small to gain statehood status alone. It has been argued that statehood is not only unlikely, but next to impossible for this reason (Statham, 1998). According to scholar Dr. Tiara R. Na'puti who identifies as CHamoru,

“ The phrase unincorporated territory as the island is actually a different political status than other islands in our same archipelago, (Guam) has had this long history, and it goes back to the US, Japan, and Spain, which over time have had their own imposed control over our lands and our lives and that means things like a political status that affords citizenship without certainty” (Na'puti, 2023).

The imposed control over Guam has granted the island certain privileges but by classifying Guam as a territory the US government has also limited Guam's political power and representation.

Specifically, the lack of sovereignty and political representation has affected the Indigenous CHamoru people. Although the CHamoru people are American citizens, Guam, which is their traditional homeland, is only considered a territory that is 'unincorporated' with less rights than a state (Statham, 1998). By classifying Guam as a territory and by not granting the same political power as allocated to states the US government inherently classified the CHamoru peoples traditional homeland as less than. According to Dr. Tiara Na'puti, “ Guam,

like all of Oceania, has been continuously colonized” (Na’puti, 2023). The CHamoru people are in the impossible situation of living in their homeland without being able to govern and control it independently, while at the same time possessing American citizenship with the rights and responsibilities of such being selectively granted and denied (Statham, 1998). Guam, the homeland of the Indigenous CHamoru people, has been “continuously colonized” by the Spanish and the United States. Guam's position as a US territory when compared to US states, has warranted different treatment and lack of political representation in the US government.

2. Climate Change in Guam

Scientists have known about the physical science of climate change for many years (Grecni, et al. 202; Mimura, 2013; Vermeulen et al., 2012; Jentsch et al., 2007). Climate change has driven an increase in global surface temperatures and other widespread changes in climate, these changes are now happening faster than at any point in the history (Grecni, et al. 2020). Guam sits in a vulnerable position where, despite having contributed very little to the crisis, it will experience the most harmful effects, along with the surrounding islands, before much of the world. The list is long, and not all inclusive, but examines the most severe expectations: increasing air temperatures, strong tropical storms and typhoons, declining total rainfall, coral reef bleaching and loss, threats to infrastructure from sea-level rise, equity considerations for disproportionately harmed groups, human health risks, risks to fresh water, threats to biodiversity, food insecurity, and so on. When considering climate change in Guam it is important to consider how it might impact Indigenous communities especially. According to Dr. Tiara Na'puti, “the long history of who's been in control over time has actually influenced the way, today, we talk about climate change for a place like an island space” (Na’puti, 2023). Climate change not only threatens an important territory for the US military but also the

traditional homeland of the Indigenous communities. The physical impacts described below are disproportionately harming and displacing CHamoru communities; in fact, the three most vulnerable villages on Guam (Agat, Mongmong-to-to-Maite, and Hagåtña) are predominantly populated by ethnic CHamorus.

The sea level rise has averaged 3.4mm per year on Guam since 1993 (about 0.13 inches per year) (East-West Center, 2020). Sea-level rise has been gauged using TOPEX/Poseidon and Jason-1 satellite altimeter missions (beginning in Jan. 1993), along with various high quality tide gauges on a number of the islands in the Pacific Ocean (installed in the '70s and '80s by the Tropical Ocean Global Atmosphere project) (Church, et al. 2006). Sea-level rise can lead to challenges with coastal flooding, erosion, and salt-water intrusion into coastal aquifers. Those living along the coast are facing risks to their homes, infrastructure, and freshwater resources that threaten their ability to remain in these areas. Sea level rise threatens about 9000 people in Guam (Hauer, et al. 2019). The island is expected to experience an increased number of high-water days, which are characterized as days where the water elevation at the tide gauge exceeded the value associated with a twice-a-year return interval (East-West Center, 2020). High-water days lead to the erosion of buildings, roads, piers, and vegetation that local communities rely on.

The number of hot days (days where the temperature is above 88 degrees Fahrenheit) is expected to continue increasing, leading to an estimated 257 days per year by the end of the century (East-West Center, 2020). Guam has already experienced an increase from just 5 days a year in the 1950s, to 36 days per year in the 1990s (East-West Center, 2020). As temperature and extreme heat days rise, vulnerable populations including children, elderly, and outdoor laborers will see increased risk and harm. Those risks to vulnerable communities include a higher rate of heat stroke in children, rising food prices and energy bills (from cooling) which make it difficult

to survive in low-income households, older adults and persons with disabilities, and high risks to outdoor laborers (East-West Center, 2020). This change in temperature threatens the livelihood of countless Guamanians across the entire island.

Along with extreme heat comes changes to the rainfall on Guam. Rainfall is a significant resource of freshwater for the entire island, making it essential. The overall expectation is that Guam will be much drier throughout the year, experiencing more drought and a decrease of 12% of rainfall during the rainy season in the next 50 years (East-West Center, 2020). Drought conditions on Guam are conducive to wildfire ignition/spread and stress on crops and ecosystems. Despite the decrease in annual rainfall, Guam is expected to experience a high frequency of extreme rainfall events, including tropical cyclones, which can result in increased runoff, flooding, and erosion (East-West Center, 2020). Typhoons, tropical storms, and tropical depressions (all together referred to as tropical cyclones) can bring intense winds, torrential rainfall, high waves, and storm surges. Guam lies within one of the most active regions for tropical cyclones in the world, and this is only expected to increase in severity. These extreme events are happening at a high rate annually and will continue to get more intense as climate change progresses. As storms rise in intensity, terrifying risks to the people of Guam, their homes, infrastructure, water resources, and land are severely threatened and underprepared.

While the island itself will experience a great deal of severe threats, so will its surrounding ocean. For one, the global sea surface temperature has increased since 1880; average sea surface temps were higher than the long-term average around Guam between 2010-2015 (East-West Center, 2020). The increased frequency of heat stress leads to coral bleaching. Between 2013 and 2017, Guam experienced a long-term bleaching event caused by this increased heat stress which led to the bleaching of more than a third of Guam's shallow corals

(East-West Center, 2020). Along with increased temperature and coral bleaching will come an increase in ocean acidification. These events and their threats of further intensity are devastating to the ecosystems around Guam, and therefore to Guam's natural resources surrounding, and on, the island.

According to the Report for the Pacific Islands Regional Climate Assessment for Guam specifically there have been two approaches proposed for the mitigation of climate change (Grecni, et al. 2020). The first is scenario planning, which involves the creation of several potential scenarios that might develop in the future (Grecni, et al. 2020). The second is adaptive management, in which scientists evaluate, and adapt management practices to the effects of climate change (Grecni, et al. 2020). Some effects of climate change experienced in Guam, occur slowly and are more difficult to address. Many islanders have faced relocation due to the loss of arable land, increased nuisance flooding, and other severe events (Schwebel, 2018). The effects of climate change are experienced first by island nations such as Guam. As Dr. Tiara Na'puti mentions, nation states are some of the biggest contributors to these problems and the ways that they have imposed political boundaries or political structures upon areas, not just Guam" (Na'puti, 2023). Guam is especially threatened by climate change because it is an island with limited land threatened by rising sea levels.

Some islanders believe that because Guam is a territory of the United States, the government will take action to protect the island from the effects of climate change. In one study by Schwebel (2018) one participant stated, "because we're (Guam) a US Territory they're going, if it's big huge disaster does come in it will get taken care of by the United States. Another local mentioned that the US has enough funds if there was an emergency in Guam, " (the US has) huge sources of government revenue and this security that you (islanders) have been a totally

part of the US". According to the interviews conducted by Schwebel (2018) some participants were more optimistic about their connection with the United States and their ability to aid Guam in efforts to mitigate climate change.

On the other hand some participants in the study conducted by Schwebel (2018) have adopted a more pessimistic view of the United States ability to aid Guam with the mitigation of climate change. Another caveat of Guam's territorial status is that the island cannot receive international funds. In the study by Schwebel (2018) another participant stated, "Territorial status is a good thing and... a bad thing sometimes when we want to be engaged more in these other networks and we can't because the US Department of State" would have to do that (Schwebel, 2018). Climate change is intertwined with Guam's political position. Dr. Tiara Na'puti also mentions, "We're not a country, we're not a nation, we're not a 'this'. We're not a 'that'. Right? And that means, like, federal US funds are not often available"(Na'puti, 2023). The issue with climate change mitigation is also intertwined with the current climate change policy.

Unfortunately the US is one of the most powerful nations in the world, and does not have strong national policy on climate change (Schwebel, 2018). As of 2021 the Biden administration has reentered the Paris agreement, perhaps this can strengthen the national policy on climate change (Maizland, 2021). Some believe that the US will aid Guam as it tackles the effects of climate change. The American territories in the Pacific sit within the margins and periphery of climate-change planning within the United States and are behind many of their neighbors in both their perceptions and preparation efforts of the effects of a changing climate (Schwebel, 2018). Therefore Guam's connection with the United States may limit the island's climate change mitigation strategies and policies.

Within climate change mitigation in Guam Indigenous voices are not taken into account. Dr. Tiara Na'puti mentions, “These ideas of what nation states are doing to combat climate change now are still not really considering the voices and the perspectives of people from Pacific Island places.” (Na’puti, 2023). Climate change is likely to spur large numbers of people to move either between or within countries (Busby, 2008). Even if islanders choose to move to the United States or other countries they would be forced to leave behind their homeland and cultural practices. This issue of lack of representation and limited political power has taken away islanders sovereignty over their own island. Dr. Tiara Na'puti has also stated, “The narrative is that island places need to be able to make their own, you know, laws, and determine their own policies for climate change, especially when the environment and the climate are only thought about in relation to a developed place”(Na’puti, 2023). Overall the issue of the United States providing support to Guam when it comes to climate change mitigation still carries the legacy of colonization and the lack of representation for the inhabitants of Guam.

3. Military Occupation and Displacement

The colonization of Guam has also been beneficial to the United States military. With the acquisition of Guam the US gained a stakeholder in the Pacific and strengthened its military position. Guam has been greatly affected by the United States military as it was ruled by the for over 50 years and still occupies nearly one-third of the island (Statham, 1998). For the US military, Guam plays a critical role in the deployment of forces should conflict arise in the Pacific (Hotta, 2008). Climate change also threatens the military operations in Guam. Climate change could necessitate emergency evacuation of U.S. citizens or damage U.S. assets and operations (Busby, 2008). Military operations in Guam also contributed to the continuous colonization of the island.

Guam's complicated history with military occupation and colonial power is central to the experiences of the Indigenous CHamoru population on the island. The longstanding fight for land sovereignty is founded on the use of Guam as a political spearhead, rather than a place with its own Indigenous population, culture, and biodiversity. CHamoru relationships to military occupation and colonialism have been portrayed in a light which emphasizes a sense of helplessness for the Indigenous communities, depicting them as true patriots who need saving. This relationship, in reality, has been characterized by displacement, misrepresentation, mischaracterization, extinction of culture and language, destruction of sacred spaces and homes, and broken promises of sovereignty. In concert with the military presence on Guam, CHamoru communities are increasingly harmed by corporate interests and the physical effects of climate change on the island. The Indigenous population on Guam is expected to experience an increase in attacks from all sides, leading to a severe displacement in a both physical and social/cultural sense. The three largest factors: corporate interests, military occupation, and the climate crisis, are interconnected in their foundations of colonialism, Eurocentric rhetoric and ideology, and the hegemony and power dynamics that naturalized the mistreatment of Guam and its Indigenous population.

As military presence increases, CHamoru communities are continuously prevented from accessing their homelands, sacred sites, and other significant resources. As Dr. Na'puti puts it, "Currently the US military, just on the island of Guam, which is the southernmost of our archipelago, the US military has declared control and occupies about 30% of our land (See Appendix, Figure 2),. That's really, really important because that occupation has led to the physical displacement of people from particular places." (Na'puti, 2023). The biggest factor in the relationship between US military occupation on Guam and the CHamoru population is

sovereignty. “Guam and Chamorros represent a critical juncture of prospective forms of sovereignty in an increasingly messy neo colonial and territorial arena.” (Perez, 2005). There was increased military land acquisition on Guam throughout the 1970s, but this was happening for decades beforehand. Despite the introduction of the CHamoru Land Trust Act of 1974 by the Twelfth Guam Legislature, which would enable the lease of GovGuam land to landless CHamorus, the act would not suffice; it did not even go into effect for eighteen years because of “the questioning of the bloodlines of the Chamorro people by the US government.” (Perez, 2005). Put best: “Other types of movement, namely forced movements, have been dealt with quite differently, often using sterile language that classifies them as “relocations” and “resettlements”. The language used to discuss these particular movements articulate the reality such colonially imposed disruptions to Micronesian lives have yet to be recognized for what they truly are: displacements, dispossessions, evictions, removals, forced migrations, and alienations.” (Viernes, 2008). The ability for the United States government to question the validity of a CHamoru bloodline and delay their own attempt at reparations for displacement is indicative of its colonial presence and impact on Indigenous sovereignty.

The village of Sumay is a prime example of the displacement of CHamorus from their homes and sacred spaces to make way for military occupation. The village was home to countless people, predominantly CHamoru, before the bombings by American planes that destroyed the village in the weeks leading up to the invasion of July 1944. Soon after, a US Naval base would take its place, leaving behind only one marker of the famous village’s existence: a graveyard. Still standing behind the gates and walls of the naval base, the graveyard, which once housed over 150 grave markers, is a shrine to what once was. “For the fifty or so markers that have survived time, war, and typhoons, their inscriptions, some in the native tongue

Chamorro, others in Spanish and English, speak of eras that have come and gone in Guam's long history." (Viernes, 2008). Though the base allows visitors to the graveyard on events like All Souls Day, the families and descendants of those that lie in the only remaining piece of Sumay are shut out and kept away. "Access to the cemetery and permission for Chamorros to maintain graves according to custom, however, continue to be subject to the whim of whatever commander is charged with overseeing naval operation on Guam." (Viernes, 2008).

"Sumay is in the name of the village, but it's not called that anymore. It's called 'Big Navy' because it's the Navy's base, right? A lot of people know that village, or that area, but they don't really relate to that place as much. They might not know as many stories because you can't really go there. People aren't really talking about it as much, and so people have done the revitalizing work of, like, documenting those stories. But I think at the level of culture, displacement does something in your physical, and emotional, and, you know, just everyday orientation to a space. And then, you know, it does have a disconnection component, not just from that physical part." (Na'puti, 2023).

Sumay represents just one example of the displacement that has physically, socially, and culturally harmed Indigenous CHamoru communities on Guam; it is the culmination of a long history that places Guam and its people at the center of a war it had no stake in, of Eurocentric colonial power dynamics that still influence the island today, and as mischaracterized and ignored for generations.

All of the harm placed on Guam and its Indigenous communities are centered in a singular power: colonialism. Eurocentric power structures that sought domination and development of their worldviews and ideologies perpetuated the factors that most heavily influence the climate crisis today; directed the engagement, power, and funding of the military; and displaced, ignored, and harmed the CHamoru peoples on Guam. Colonialism is the epicenter of military, corporate, and environmental impacts on Guam and the displacement and lack of sovereignty that CHamorus face today. "These territories continue to struggle in the face of cultural erosion, land acquisition, and ambiguous political status. Self-determination in the form

of self-government remains the cornerstone of their parallel sovereignty movements.” (Viernes, 2008). “Displacement of population on the community means, really, there's a loss. I would say, you know, that displacement has meant a loss of a connection to land in a particular kind of way; or [loss of] place in a particular kind of way. And so, that has an impact on culture,” (Na’puti). CHamoru communities are present by their resilience in the fight against these hegemonic structures: through their knowledge and emphasis on language, culture, resources, and self-determination, CHamoru communities have made great stands. It is clear that the center of this fight is ancient CHamoru history, cultural continuity, and “the ongoing centrality of land to Chamorro culture”. In other words, CHamoru sovereignty is the heart of the fight against the colonial power structures that perpetuate issues of the climate crisis, displacement, and threats to CHamoru life.

4. Art and Activism

As our previous sections on history and physical displacement have outlined, the response to climate change on Guam is a complicated issue; the entrenchment of the island in colonial structures and military presence looks to disadvantage the island’s ability to respond to the issues that these powers heavily contributed to, and perpetuate today. The question, then, is how do the citizens of Guam effectively fight back and protect their land, culture, and future? In conjunction with traditional methods of activism, some individuals and organized groups have turned to more creative means of activation; poetry, essay writing, storytelling, physical and digital art, and performance art have become important instruments among the citizens and supporters of Guam in the fight for climate change action. However, it is important to recognize that the issue of climate change cannot be tackled alone. Ideas and structures such as militarism, colonization, and sovereignty are deeply interconnected in this issue. To separate them would be

a disservice to the individuals and groups activating in support of their home. This section seeks to emphasize the importance of addressing this issue through creativity and intersectionality, and will showcase six examples, three individuals and three groups, activating in support of their land and culture.

Individual Action:

In response to issues of climate change, colonialism, militarism, and sovereignty, several individuals have activated through creative means in support of Guam and the people inhabiting it. Three such individuals who have conducted important efforts of activism include: Julian Aguon, Dr. Craig Santos Perez, and Dr. Tiara R. Na'puti.

Julian Aguon is the founder of Blue Ocean Law, and an experienced Indigenous human rights lawyer who is originally from Guam (Aguon, 2021). In November of 2021, Julian Aguon wrote a piece called "To Hell With Drowning". It is dedicated to the people living in Oceania and acknowledges that more than science is necessary to win the fight against climate change. For Julian, the art of storytelling is the perfect medium to properly and effectively communicate the reality of the situation that these island nations are facing. Thus far, the issue has been addressed and written about in such broad terms, that papers, articles, and essays on climate change lack the intimacy that the situation requires (Asarnow & Contreras, 2022). However, he notes that the process requires delicate balance. It requires gaining the trust of the people whose stories you are trying to tell, and proper explanation of the situation without alarming the reader and sending them into a downward spiral on the futility of the issue (Asarnow & Contreras, 2022). In addition to "To Hell With Drowning", Julian Aguon recently wrote No Country For Eight Spot Butterflies, a manifesto/memoir that seeks to integrate cultural teachings to the climate change narrative (Aguon, 2021) .

Another individual who has been influential in the conversation intersecting climate activism and art is Dr. Craig Santos Perez. Dr. Perez is an Indigenous CHamoru (Chamorro) from Guam who is known for his literary work in poetry and publishing and his work in activism and environmentalism (Perez, 2021). Currently, Dr. Perez teaches creative writing, eco-poetry, and Pacific literature at the University of Hawai'i, Mānoa. In addition to his teaching career, Dr. Perez is the author of two spoken word poetry albums, five books of poetry, a number of critical essays, and a monograph surrounding the topic of climate change and its relationship to the topic of Indigeneity (Perez, 2021). In his book *Navigating CHamoru Poetry*, Dr. Perez addresses the complex relationship between CHamoru poetry and external cultural and social factors that have influenced Indigenous people throughout the years. In his book, he also recognizes that contemporary CHamoru poetry is a powerful tool of activism and protest that has been used to inspire and empower people to fight against external forces like militarization, colonialism, and missionization, which have influenced cultural identities for centuries (Perez, 2021).

Dr. Tiara R. Na'puti is another individual who has done influential work in the realm of activism in support of Guam. Dr. Na'puti is a CHamoru scholar from Guam currently living in California. She is an assistant professor at the University of California, Irvine whose research focuses on the military buildup in the Pacific and how it has influenced issues of political status, sovereignty, and climate issues in the region (National Humanities Alliance, 2022). While Dr. Na'puti is not necessarily an artist, her work with organizations like Independent Guåhan, who employ methods of art and traditional cultural expression in their outreach, speaks to her relevancy in this conversation. In addition to the work that she has accomplished in previous years, Dr. Na'puti served as a primary source for this project. Her perspective on militarization in the Pacific and over a decade of experience with groups on Guam gave us crucial insight into the

intersectionality and complexity of the climate change issues on the island. In our interview with Dr. Na'puti, she explained that art is an incredibly powerful tool in this fight because, “ ... the arts are demonstrating that creativity is the way to challenge what would otherwise be pretty boring and pretty, young and pretty unimaginative structures...” (Na'puti, 2023). The boring, young, and unimaginative structure that Dr. Na'puti is referring to colonialism; the rigidity and simplicity of colonialism can be effectively challenged by the creative efforts of the people and cultures that it has either oppressed or affected in some way. However, it is crucial that this fight continues on in future generations; and a great way to do this is to use the arts as a way to connect younger generations to important cultural practices and modes of expression (Na'puti, 2023). To continue this engagement with the younger generation, organized bodies and coalitions like Independent Guåhan, Protect Guam Water, and Micronesia Climate Change Alliance are crucial.

Organized Action:

While individual action is incredibly important for helping to promote interest and visibility as well creating the space to start conversations on the issue of climate change on Guam, organized efforts are important for building support and community and keeping up momentum surrounding the issue. Three groups that have worked hard to build a sense of community and promote resistance and activism through traditional and creative means include: Independent Guåhan, Protect Guam Water, and Micronesia Climate Change Alliance.

Independent Guåhan is a group that is focused on “empowering the CHamoru people to reclaim their (our) sovereignty as a nation” (Independent Guåhan, 2023). Their push for sovereignty was born out of recognition of their relationship with colonialism, specifically by the United States, and how these relationships have left them trapped economically, spiritually,

politically, and mentally (Independent Guåhan, 2023). Independent Guåhan has been active since 2016, but in 2022, they released a new project to spotlight CHamoru art and young artists and their interpretations and relationships with colonialism, sovereignty, and the land; this project is called the Kulo' Zine. The Kulo' Zine is a digital art project that was intended as a call to action to promote decolonization and CHamoru self-determination (National Humanities Alliance, 2022). The word Kulo' refers to a conch shell; the blowing of the Kulo' has been a cultural means of activating the CHamoru people for millennia (Independent Guåhan, 2023). The digital collection of photography, paintings, drawings, poetry, and short written works is a stunning and emotionally evocative way of connecting activism and cultural relevance.

Another group that is using art in addition to traditional methods of activism is Protect Guam Water. This organization believes in creating a future where younger generations sustain cultural traditions and have the ability to connect with the land and ocean in a way that keeps traditional knowledge systems alive (Nihi! Guam n.d.). In order to support this connection to culture and the environment, the organization created Nihi!, a growing production house that originally started out as a filmed series (Nihi! Guam n.d.). The use of Nihi! to involve younger generations and promote the passing down of knowledge and culture is exactly the kind of work Dr. Tiara Na'puti claimed to be important in our interview with her. Not only has Nihi! been an important educational tool that affirms CHamoru identity through song, chants, and skits, but it has been a means of community building.

The Micronesia Climate Change Alliance (MCCA) is a larger organization that has also used art to promote engagement with younger generations. They are a grassroots network of individuals and smaller organizations that focuses on community-centered solutions to climate change issues in the Pacific (Micronesia Climate Change Alliance, 2023). In February of 2022,

the MCCA organized a youth activity called “Telling Tales with Trash” and employed the help of Guamanian artist, Marcial Pontillas to act as a consultant for the project. The project itself is a competition among students on Guam to create art pieces using waste products. In addition to engaging the children through the art, their pieces were shown to the public during Earth Month – April – as a way to generate awareness around environmental issues (Micronesia Climate Change Alliance, 2023).

Engaging younger generations and fostering a sense of community through organized action is crucial to movements fighting issues of colonization, militarization, and climate change on Guam. Through the use of art and creative activities, organizations like Independent Guåhan, Protect Guam Water, and Micronesia Climate Change Alliance have been able to promote their ideals and gain momentum and awareness in their movements. It is impossible to fight the structures that have oppressed Guam through individual action or organized action alone; both systems need the other to truly invoke change in a creative way. Creativity is new, flowing, and life-giving. As long as these individuals and organizations continue to use it in protest of boring, yet oppressive, structures, movements can't be stagnated or killed.

Conclusion

As we have mentioned throughout this paper, the issue of climate change cannot be addressed in isolation. It is a complex issue that is interwoven with other oppressive structures that have roots in colonialism and militarization in the Pacific. However, even in spite of this, individuals and organizations on and off the island have found creative methods of challenging these structures. By integrating traditional knowledge and cultural practice through art and activism, the people of Guam have found ways to engage younger generations and highlight community strength and action so that the fight for a sustainable future might be achieved. We

would like to end by recognizing the insufficiency of this project in encompassing the full scope of the issue at hand, but hope that the product of our research might be used to engage a broader audience and encourage their exploration of the groups involved.

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Appendix:

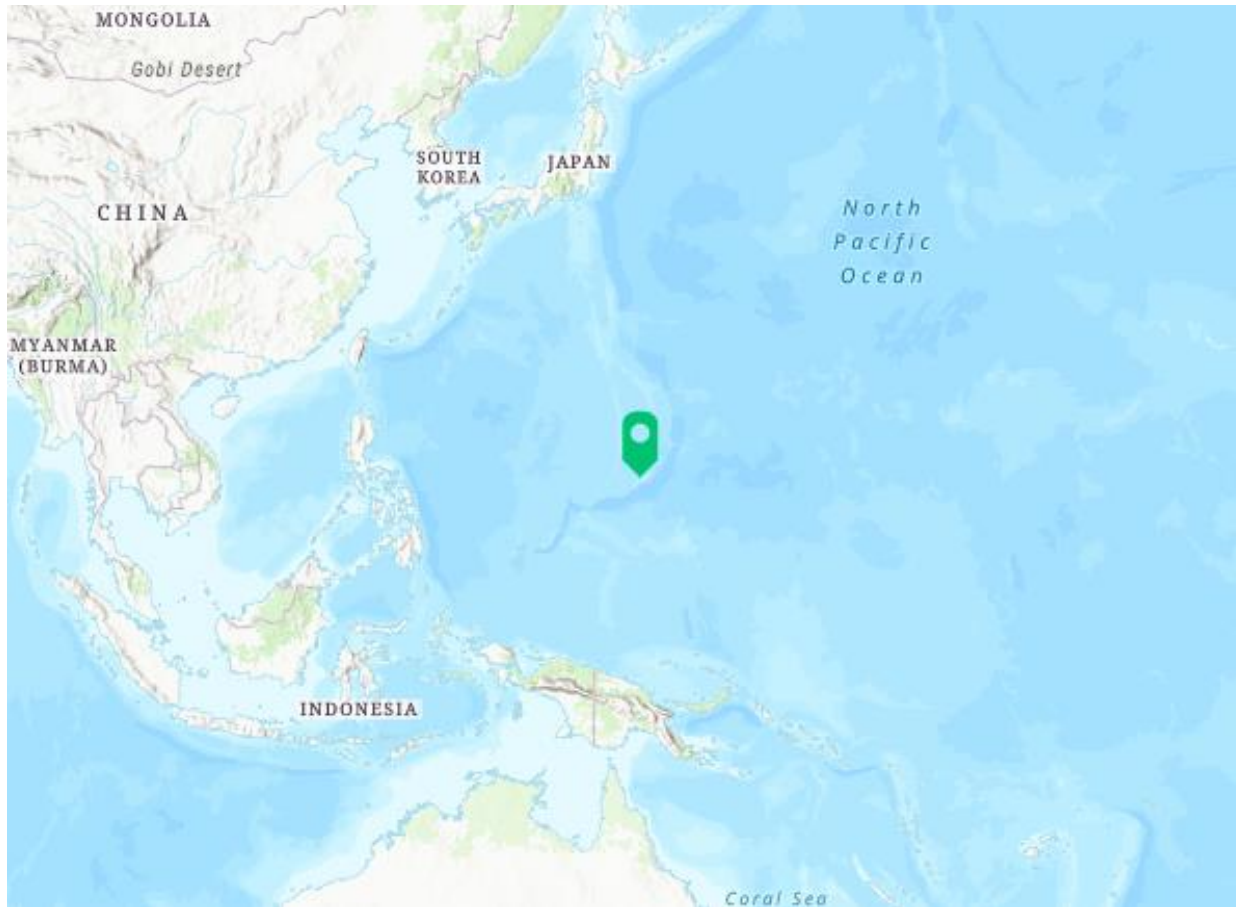


Figure 1: Map of Guam (marked) and surrounding countries created with ArcGIS StoryMaps.

Military Bases in Guam

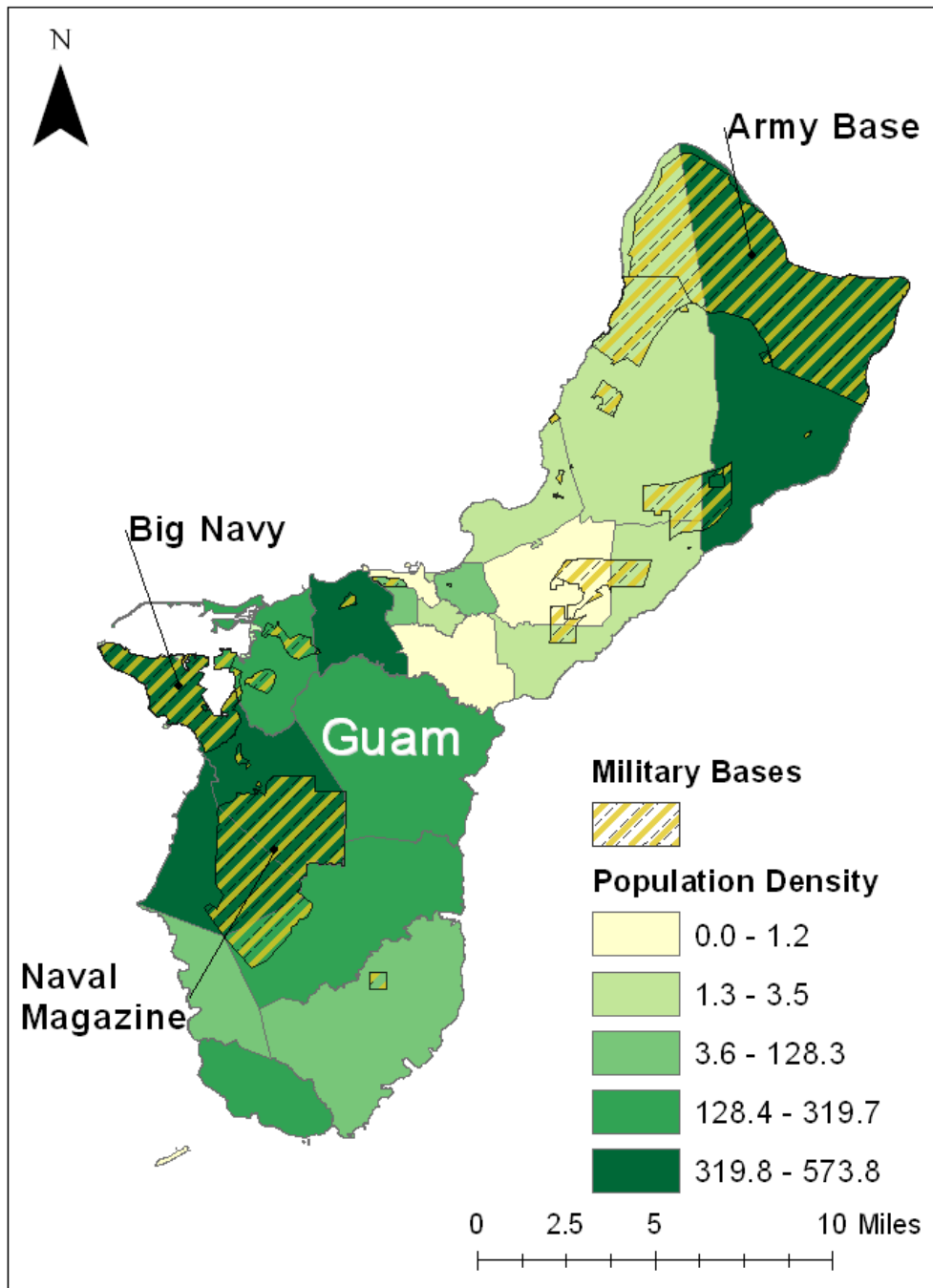


Figure 2: Map of military bases in Guam created with ArcGIS (Guest) (Menegus, 2019) (National Centers for Coastal Ocean Science, 2018)

Interview Transcript - Dr. Tiara Na'puti

TN: OK. Yeah, that sounds good. Well, why don't we start with you all?

OZ: Yes, I could start. So, for my section of the project, I'm working on the, like, the political side of things. So, I guess if you could answer, like, do you believe that Guam's status as a US territory will help the island with climate change mitigation, or do you believe that Guam has been left behind?

TN: Well, I'll start by saying that the political status issue is imposed. It is the colonial political status and it's really important for people to think about climate, I would say climate change, or planetary health, or some of these other big global ideas that nation-states are talking about in a particular kind of way without often recognizing that nation-states are some of the biggest contributors to these problems and the ways that they have imposed political boundaries or political structures upon areas, not just Guam, but like all of Oceania, a lot of Oceania and a lot of these other places that are continued- we would say continuously colonized- that has- that has done the- I think the structural behind the scenes and very upfront depending on where you're looking at it - that has done the thing that would be considered leaving someone behind, OK? So when I'm using that phrase of what you just said Olga, because, uhm, these ideas of what nation-states are doing to combat climate change now are still not really considering the voices and the perspectives of people from Pacific Island places. I'm saying places because Pacific Island nations doesn't even really capture it, so- so many of us are still colonized, right? The colonial political status- and I use the term colonial on purpose- for a place like Guam, was imposed by the United States without our voice or our consent. OK? And so being considered, what's the phrase, 'unincorporated territory' as the island is- is actually a different political status than other islands in our same archipelago. So the US nation-state has had this long history, and it goes back to, you know, the US, Japan, Spain, right? There's all these - and then even in other parts of the archipelago, Germany - there's all these other nation-states that over time have had their own impose control over our lands and our lives and -and that means things like a political status that affords citizenship without certain rights. Without, again, asking that first question of like, did the people want to be a part of US in the first place? So, yes, that all still ties to climate change because now as a place like an unincorporated territory, there's certain things that- that impose designation- prohibits the island from doing because we're not a state. We're not a country, we're not a nation, we're not a this, we're not a that, right? And that means, like, federal US funds are not often available in a certain kind of way, alright, which they would be if we had a different political status or the consideration for how our land is used is not receiving the same types of oversight that it would be if the US military wasn't declaring control over 30% of our lands right? So when we talk about climate change, we have to talk about those- I mean, sometimes I'm like I, I really actually have to tell you 4000 years of history. I don't have time. But that long

history of who's been in control over time has actually totally influenced the way today we talk about climate change for a place like an island space and then the leaving behind of ideas really unfortunate because it almost makes it sound like and I don't think this was your intention, but I do think a lot of times the narrative is that island places need to be able to make their own, you know laws and determine their own policies for climate change- And that's true- But sometimes, to understand those laws and policies in terms of what's happening with the environment and the climate are only thought about in relation to a “developed place” - I'm putting on scare quotes because I know you're recording audio but. Like a developed place or a- a- a- a bigger nation, like those at the UN that make those decisions, right? And I think that's unfortunate because we have long histories and that longer history that I'm not going to tell you for 4000 years of taking care of the environment, of understanding the ebbs and flows of climate and of recognizing use, right? And thinking about land and- and really, the- the- all the elements of the- of the environment, right? Air and water are- are non-human relatives- as relatives, as ancestors, so, if you think about the ocean and you think about the air and you think about the birds or the trees as a relative, then that has a totally different way of approaching the way we might consider building something, destroying something, replacing something, what counts as progress, right? That these extractive industries, unfortunately, that are contributing so much to the climate crisis as we know it now are- are actually destroying the environment in a way that makes sense if you don't appreciate the environment as a holistic approach and as a- as a living global thing that we all need to protect, right? So, you know, we're zooming in from very different physical locations, right? Now, but we- we really have a lot more in connection through waterways and through our Airways. It's not like what happens in one part of the archipelago is not going to affect the other parts, right? We see these islands as connected and we see our people as connected and we see our animals as connected, right? So then we have to think about that and I think I've veered off a lot from your original question about being left behind. But yes, I think that in- in asking the question about like political status. Or how a place is controlled, you know outwardly than climate action that's not in response with the peoples of those places and the ways that we might think about the environment as interconnected, then it's always going to be left behind, really. It's going to be always trying to play a catch-up game and we're always going to lose.

OZ: Yeah, that's a lot of good information. Thank you.

BA: Yeah, I'm- I think- and this kind of ties is my- my section is about displacement specifically of Chamorro communities. Can you talk a little bit about how that affects the response to climate change and know that it's like it comes from both climate impacts, but also U.S. military bases and other factors. So, if you could talk about like what that displacement means for both culture and then also the response to climate change.

TN: Sure. So I started to allude to this, but currently the US military, just on the island of Guam, which is the southernmost of our archipelago, the US military has declared control and occupies

about 30% of our land. Now, that's really, really important because that occupation has led to the physical displacement of people from particular places. So, you know, there's one area that is called Sumay, Sumay Village, and that area is really actually only accessible by going into the military base. So if you don't have base access- or the base privileges as they call them- oftentimes if you don't have that access, you can't see that place, and so, just imagine living your life and trying to, as in your community and just being told, like you can never go past this wall, right? That's where your family was raised, that's where, you know, there's like the best mango trees. That's where whatever- But you can't go there. And then another piece of that displacement that has already happened over time is that it really does impact the way that you think, right? So, so- people just presume that that area is closed off, right? So if you're not active military- if you don't have someone in the [family]- and I mean there are a lot of military families there so, a lot of people do, you know, the communities do have access to the base. But it's not really the same as if it wasn't part of a base, right? So before the military occupation, one could just go there and it would be very different. Like just to be able to walk around in a- in an environment, urban or otherwise, and have free access without having to think about going into a base to get access, right, that changes the way that we orient to place. So displacement of population in the community means, really, there's a loss. I would say, you know that displacement has meant a loss of a connection to land in a particular kind of way, or place in a particular kind of way, and so that has an impact on culture, right? Like, I was just talking about how, you know, in- in different ways of thinking and in the Chamorro way of thinking, you know, we think about our connection to place through our language, and so, you know, displacement also means we lose that tie. Sumay is the name of the village, but it's not called that anymore, it's called Big Navy because it's the Navy's base, right? A lot of people know that village or that area, but they don't really relate to that place as much. They might not know as many stories because you can't really go there, people aren't really talking about it as much, and so people have done the revitalizing work of, like, documenting those stories, but I think at the level of culture, displacement does something in your physical and, like, emotional and, you know, just everyday orientation to a space. And then, you know, it does have a disconnection component, not just from that physical part, but you know, as people have been doing that important work of revitalizing and getting those stories and documenting things, it's good because you have, like, oral histories about those villages, or you have, you know, I think there's probably some books behind me that are like, oh, the stories of these places. But then on another level, I- I would invite people to think about how that displacement affects all of our communities, because it means then we only think about a place in a book, right? Or you don't have that experience of being able to reconnect, to put your hand on the ground or like to- to see those places and to know that ancestors have- have and continue to, you know, be a part of that place/ Things are buried there. There are stories. And then when it comes to, you know, how does that displacement affect responses to climate, I think it also disconnects people from understanding the vibrant things of those places so. I'll give an example and I hope you all can look, this group up: 'Protect Guam Water' It's a youth-based organization that's been doing some really great work to make sure to educate people about

issues. So one of the pressing issues that we're facing right now is at this area called Litekyan. Litekyan is something that I've written about and published about, other people have too, but the firing range that the US military is constructing as we speak, it's- it's threatening our freshwater aquifer in that area. And people don't realize, one, that 90% of the freshwater from the island comes from that aquifer. People just generally don't know where their water comes from. OK, I'm guilty of this too. We just don't know. But when you start to realize like ohh, 90% of our fresh water, well you know, 80 say- It's 85 to 90%. It could be a little bit off- Protect Guam Water will tell you, But they- If once you start to know that, right. And then you? Realize the stakes are so high, if-if a live fire training range is going to be shooting bullets right near your freshwater aquifer, like what- what does that do? Right? The displacement that's happening there is that people have already been kind of, like, moved away from that space or that space is already under eminent domain, as they say, and it's part- partly because it's near a Wildlife Refuge. But that also raises other questions like why would we put a firing range by a Wildlife Refuge? Because we're protecting the environment, you know? And so I think when it comes to the climate issues when people are- are separated from land, or separated from place, or separated from understanding the, you know, the resources there, those natural resources are ancestral connections, the resources as environmental resources as related to us, right? Like, if we think about that relative idea, the more you can disconnect from that, the harder it is to imagine protecting it. And yet, everybody needs clean water, right? So, it doesn't matter if you're active military, or if your family's military, or you have access to the base/ you don't have access to the base. Litekyan also is a Chamorro word and it means 'a place of stirring', and it actually- a lot of our place names tell stories about those places. And this place is named that way because of the tides and the way that they- they're very strong currents over there and- and again, not being connected to it, not going there, not really recognizing it as a lot of people think because it's up in the northern part of the island that it's- it's part of the military base already, and so like, they just don't think about that place. They don't know where their water comes from. They don't realize the firing range is going to impact that. And they don't even know the name of the place. You know, that's what the revitalization work has been doing. So, I think all of that together impacts people's thinking about the climate as something that they can pay attention to, right? and I know a lot of people are talking about overwhelm and the anxiety about climate crises and things like that, but I think, examples of groups like Protect Garm Water are great because they're youth-oriented and they're telling the stories that are just like this- is just the basic stuff- Everybody needs clean water, ours is being threatened. It's part of the climate issue by way of the- the impacts that the military is having on their orientation to the environment and we're the ones that are losing, including the military personnel themselves, right, like we don't want them to be poisoned and their water getting poisoned anymore than ours, like, we're all supposed to share that. So, you know, Oh my gosh, I talked too long, and you can cut out some things you- that you want.

BA: That more than answers my question though, thank you so much.

TN: Yeah, I do have a whole article on the issue of the firing range, and I can text it- I can spell it in the chat if that's helpful because I was like, oh, I'm saying some Chamorro words, but I will say the other name of it in English. They use it as Ritidian, so they- they'll talk about Ritidian National Wildlife Refuge. I don't really know why they call it Ritidian but- and the other one that I'll say is when you use the place name like Guahan versus Guam which is the English one, but Guahan in our language actually means- we have just like a verb- It's like very active. And so one way to think about that too, that might be of interest to you all from, like communication climate stuff, is that Guahan, meaning 'we have', is a way of thinking about abundance. All that we have on the island, right? Like all that we have from the water around us all that we have. And Guam doesn't really mean anything in English. But if you think about it like I'm because I'm a communication scholar and I'm like, oh, yeah. Guahan meaning we have is another way we might think about all the ways that people could respond to the climate issues, just like what resources do we have now that we can protect, that we can learn from still? You know whether it be coconut, our Tree of Life, right? Or, you know, thinking about what I was just talking about the fact that we have a fresh water aquifer that gives so much water to the island, like Guahan has a lot. They have a lot of resources already, rather than, I think some of these external perspectives are. Like, what does Guam need? From the outside because they can't take care of themselves, right? And we do have a lot of problems because of the colonial political status, but we also have a lot of resources and really awesome- awesome groups doing amazing things and doing as they've always done, which is, you know, protecting what we have.

KE: Talking a little more. So my section is on activism and like more specifically art and activism on Guam, and I did look over the kulozine, which is so amazing, but I wanted to know a little bit about - since you are kind of Introduction and activism, how have you seen any like major demographic changes in people that are becoming engaged? Like, how has it shifted over the years that you've been involved and, like, what kind of hope does this give you for the future of, like, independence and decolonization on Guam?

TN: Well, thanks for that question and in general I will just say like, I think it's wonderful that you all are focusing on these intersecting- intersecting issues and different places because activism and art, while they go hand in hand, like, no revolution can happen without art and music and creativity, and I think a lot of that has to do with what other other people have said way more eloquently- eloquently and before me, just that, you know, we need creativity to- to thrive like, humans, for example, and even our nonhumans, like the- the- the world is just so creative. It's vibrant. It's got so many different- I- I say, I- I think scientific and theoretical things just everywhere around us, right? The way that the waters operate, the way that, like, the air circulates, I just think all of these systems, right? Planetary systems that keep us alive are amazing, and so of course we're creative beings. And of course, creativity, I think will be and has been a way for people to heal, and it has been a way for people to express frustration and

otherwise right. So, with the zine it was like, let's do a call and you know open call to get people to think and imagine what you know, decolonization looks like. And I think we need those. creative outlets and the reason they're- they're thriving is because it is heavy. I mean, like in the last 10 minutes, I talked about some very heavy stuff and I'm not even like scratching the surface, right? And at the same time, those systems that are, you know, contributing to the climate crisis being the biggest, one being the US military and military pollution and the everyday routine operations that I really just think you have to name. We cannot talk about climate justice or the climate crisis without talking about the largest polluting industries on the planet, and even if those are polluting industries from, you know, extractive fossil fuel industries or the military, which also benefits from that, like, those are- those seem to be too big to tackle. Right? But activism, and some people don't like that term, but in community spaces where people are activating to- to protect land and life, they think the arts are demonstrating that creativity is the way to challenge what would otherwise, be pretty boring and pretty, young and pretty unimaginative structures of. Yeah, right. So, like, I mean, palms and colonized for a very long time and still colonial in power over right that context. But in the, like 4000-year history timeline, colonization is pretty young, and it's actually not very smart. It's pretty unimaginative, right? So that's why I think the arts and activism really go hand in hand to challenge that. I have a ton of art behind me and, like, some of it's from the movement: Groups that I work with. You had asked about changes. I think one thing that's changed is because of a lot of the displacement stuff we were talking about earlier. A lot of people, myself included, have experiences of not growing up on the islands, or, you know, generations of our parents moving away for jobs, opportunities, or kind of some of those grand narratives of being told that you have to leave to become- become something, because, like, the small island doesn't have enough. Which is another reason why I like to say Guahan because it's like, wait, we have a ton of stuff. You know, and to challenge those narratives. But I also noticed that of the populations and the communities that are there now, there are a lot- a lot of different groups doing coalition building. So there's a coalition or a group called Fanohge Coalition. I'll put that in a chat as well. And one of the things that. The word Fanohge means to rise, so it really is a coalition of people rising up to support the issues and you know, of course, arts can be a great way to communicate to the younger generations as well, so most of our events with Independent Guahan always include kids running around, of our friends or, you know, family members who are coming and bringing their kids because they know it's going to be outside. They can let them run around and we always have some activity for them. And then we also have with Independent Guahan in particular, art reach component so our- our core organizer folks do art reach and that's like a mural. The scene project different ways to allow creativity through poetry, through dance, you know, through these other things that are also cultural, you know, we come from a natural lineal oral culture. And I think that from that perspective, as tomorrow as we also understand that there are people who are mixed answers, ancestry, not tomorrow maybe. Part of this coalition. Living long for a long time or just move there but care about, you know the climate, and so all of that comes together and I think a really important way through the arts.

BA: Yeah. Thank-Thank you so much, yeah. I mean, as you've said, there's so much that we could not cover with all the time in the world. But if there's anything else that you feel is important to talk about that we have not asked-

TN: Well, I would say one of the things that I saw from your questions and I know you're probably still figuring it out as a capstone project, you can't do everything in a capstone either and I'm sure your- your capstone class will make sure that you try to limit some things, but I will say it is very important to do exactly what you've already been doing, asking questions, but also doing your own kind of homework first, you know, there are a lot of groups on the ground, so to speak, in the region. There are a lot of community groups that are like in diaspora, as we would say, like up and down California coast, you know these other places in Turtle Island. And so I think it's really great if you have an opportunity to highlight them and to allow those groups to be kind of centered and and recognized as already doing this work and then supporting them. So that support could come in various forms. Having conversations like this sharing your capstone, if it becomes like a project that you put, you want to put online or share out more widely. Getting the voices and the stories of the perspectives of peoples and and there is some scholarship, a lot of scholarship that's being I also say scholarship loosely defined. But I think there's some scholarship out there, that you could cite that does another kind of work of sharing those perspectives, right? That people have been writing and thinking and publishing about this and that's important because I think so many times, whether it's journalists or students or everyday folks, we just we have so much going on in our lives and we can't pay attention to everything. And so when you have an opportunity to really talk about some of these important issues, it's a- it's really great to be able to say and here are some examples of people doing that stuff and ways that you know, you might be able to uplift them, recognize that they have resources. Also, a lot of us have needs, but like they also have resources like I was saying earlier I think. Sometimes it's like, oh, you need this. Like maybe and asking those questions like what- what can be done to support? So you're already doing that with the project, but I think the other thing I was going to say you could do- Ohhh and the thing I said earlier, which is just like if you're gonna talk about climate change, climate justice, climate action, gotta talk about the US military. It's the largest military on the planet. It is continuously being funded all across the political spectrum. It is everywhere. I mean, where I'm situated right now and also as an employee benefiting from the University of California system, you know, as they funded the research that created nuclear weapons, those nuclear weapons were launched from the islands just above Guam to Hiroshima, Nagasaki. The ongoing nuclear testing program in the Marshall Islands, like those things are circulating in our air and our water still for all of us, you know, and we don't know what the future generations will hold, but we can't- we can't continue to be thinking separately and individualistically. And so I think that your project is also really important because it gives an opportunity to- to- to think about what Indigenous folks and non-Indigenous folks are doing and also realizing that we can still hold critiques against some of these big polluting entities, even if

we are in the youthful orientation or the younger generations of folks. Because those are the ones that are doing all the moving and shaking, really. I say we, you all, and you know what I mean.

BA: Well, thank you so much. We definitely- those- those two things are- this is going to definitely be a center to our project, especially the first one, but I know through our research we're finding that we can't avoid the US military in this.

KE: Yeah, there was a recent- I think we have it somewhere on the document, but a recent article that we found about like the base that they're building a certain base that they're building on the island.

TN: Yeah, it's probably Camp Blaz. So I can send you some you all- I have a ton of resources. You probably don't need all of them, but, like, I have a ton specifically about the- the Camp Blaz military base that's being constructed, U.S. Marine Corps base in Guam. So it's very close to the firing range. It's all part of this maneuver. And one thing I didn't even get into, but if you wanted to also think about, that there's, like, those interconnections I have such a hard time separating things out, and sometimes people are like, here are you, everything's not connected- I'm like, yes, it is, but Okinawa just very close to us and also colonized by Japan. They are experiencing military issues in terms of military buildup, even though the reason that this militarization is happening in Guam is because of the long standing peaceful protest of the Okinawan people to challenge the US military and the Japanese military from noise pollution and sexual violence and sexual assault and all these like really important issues around U.S. military bases and just the heteropatriarchy of the military situation. And then, you know, the long fought, you know, effort to get the bases, you know, out, ends up being like the reason that they're coming. Originally they were said to be coming to, And yet in my travels and my time and my abilities to connect with folks in those regions, we're seeing that the Futenma military base is moving a lot of its stuff. And you know this firing range, this new base in Guam, blah blah blah, is part of that. But the Japanese government and the US government are still increasing militarization in Okinawa, so it's- they actually didn't decrease the- they didn't do what they said they would do- Not surprisingly- but if we're going to be critical and also recognize the freedoms that we have, you know, in a privileged position like the US nation-state, for example, in some ways and also academic environments to think about what you want to think about and talk about what you want to talk about and research what you want to research. Like, all of those things actually give you an opportunity to- to bring those critiques in while also being like there's other ways, right? So sometimes I think it's like- it's easy to make the critique, it's harder to then talk about the active, imaginative possibilities. And that's another reason I was like, shout out to all the groups that are doing that artwork and that, you know, research work and, you know, there's people I was just talking to somebody who's like, I want to do urban planning. It's like, whatever your gifts are, whatever your skill sets are, whatever, like, gets you going and you're like, sorry, I'm

always talking about this thing- keep doing it because, like, we need all the people to do all of those things so that you know, collectively we're- we're protecting our future, you know?

BA: Yes. And we are obviously happy to accept any resources you can give us as long as you're willing to do so. Your contribution to our project has already been so valuable to us and just thank you so much for taking the time to talk to us and giving us all of your very, very valuable insight we-

UNKNOWN: Yeah, yeah.

BA: Appreciate it.

TN: Thanks for reaching out. I said again, you know, say hello to your- to your professor. I know there's so much that we could talk about and I was like, I won't overwhelm you. But I do think- I do think if you have a chance to- to kind of situate some of the things in your project, obviously the 4000-year history, probably a little too much, but I do think it's important to- to think about what you're talking about. You know, like, even if you just look at the very contemporary sample and you talk about 1 issue, like the firing range, and the- you know, the freshwater aquifer and use the example of Protect Guam Water as a community youth led group. Or you talk about the new base and the issues there is, it's really about desecration. You know, the ancestral remains were- were found and not told to us until later, and that happens a lot with these development projects. But the expectation that again, things can just be sort of clear cut and told later, right? The lack of, I'm sure you probably know this phrase, 'clear, prior, and informed consent' around anything about our environment. Is- is- is- It's just not there, right? And we're not even talking about deep-sea mining. You know, there's so many things, and so when you're picking and choosing, you know, I think that the elements of climate change that- that are being told on the one side with the military is like, well, a lot of the comments- the comments in the research I found is that the military is talking about climate change as a really big problem- And sure, but their concern is that the problem is if sea levels rise, for example, it would threaten the base. And I think we might be more concerned, or we should all think about being concerned about how a sea level rise happens, it will threaten everything, not just the base. Right? And then, I wonder why are we protecting bases more than, you know, in the era of the climate crisis and COVID and pandemics and, you know, economic downturn and people was needing support on all these different registers. What if we did something like, redirect those funds and those resources into things that can really actually be sustainable and genuine security rather than threats constantly, you know, preparing for the next threat, because war costs a lot, right? Not just land, not just lives, but it really does- it destroys our environment and even the training for war, right? But OK, I'll leave it at that. I will say too that whatever timeline you all have, I'd be happy to- to like review something, or if you're like, hey, you said something and you were talking so much and we recorded it and we don't remember you can- you can, you know, refer

back to me, you know, e-mail me again. I had a- I had a version of an interview that is supposedly coming out in early March. That's like stories from the front lines kind of thing and I'd be happy to share that as well because I think I might have more succinctly answered some of your questions in that and you'd be welcome to use it as well. It is a project for some folks that are also doing stuff around storytelling and arts and climate.

BA: Great, yes. Thank you so much again.

TN: Yeah, good luck. And I hope that what I have said has been useful and not too much, and- are you interested in a resource about the- the military base? Just so I can, like, write down my directives to not send you too many things.

BA: Yeah, definitely.

TN: OK, I was like what were you saying? I can't remember, Kate, maybe it was you. Somebody was saying something about the base, and I don't remember.

KE: Because we found on like the Marine Corps website, they put out like a statement about it and, like, the way they were framing the issue was very much like a fully consenting friendly relationship with the people of Guam and it just seemed very false.

TN: OK, fair. Well, you know, not all Chamorro's agree and it is a complicated issue in our community and especially among our families and friends. You know, whoever I will say, like even in California, like I- I there's certain conversations wherever I go that it's like OK that's we're going to have differences of opinion. I think that grand narrative in a place, like, that's heavily militarized and heavily Americanized, and there's some generational traumas around a lot of that, which is that, you know, I'm actually prided on in my family for speaking English so well, but I don't know my language, right? So those kinds of examples of that displacement and impacting us. And then there's also, like, I mean it's in even in as communication sites versus it's in our media, right? It's like the build up- the military build-up is going to be good for jobs and so of course, on a smaller populated place people are thinking about that right? Like, how do you feed your families and what are we doing? And so it is hard because I think sometimes people want to make it say like, are you for or against the military and so complicated because people are in the military, and then they also care about their land, right? So it's really about, I think, broadening and why climate justice is such an important topic is like it's actually broadening to think about planetary health and how we all need to be thinking with different ways of protecting the planetary health for all of us, right, not just for Chamorro's, you know? Like, it's not just like, oh, we shoot some bullets for the next 5 to 10 years, then it'll be fine. And then we'll protect the water. It's like, no, we need to protect it now, we need to continue to sustain ourselves and- and that's because the truth is that, like, you know, it's getting hotter and hotter. And it's hot, I mean. I

like the heat, but it's already pretty hot, you know, in Guam and the Super typhoons and the, you know, cascading impacts that they're really real. Those are things that we need to be able to take care of and think about without- without being reliant on the military to- to be the ones to do all of that work. Because even if they've got the logistical power. The long-term impacts are not worth it, right? The short-term ones often aren't either, right? They have a lot of spills. Yeah, there's a lot of stuff, so. OK, I've got a note to not overwhelm and I'll send, maybe- yes, I think it's good, Kate, that you pointed out like, their statement is interesting, but they, you know, they're doing a very, like- like a lot of good institutions, they have a good PR campaign and they have a lot of money, so they do- actually somebody else is doing- this research, but they do a lot of sustainability initiatives. The problem is that those really are less than a Band-Aid solution to their everyday stuff, right? So if you think about it and I don't know if you've seen, I might have the chapter, it's called Poisoning the Pacific. It's a book by John Mitchell, and in it he has a whole chapter on Guam. So it- it talks about things like Agent Orange and all these other toxins, so. You know, some of the stuff that people are like, obviously that doesn't seem like sea level rise. Now we're like typhoons now, but those kinds of pollutants that impact our environment, I think are actually part of our conversations a lot in the islands about what climate change needs to deal with is they still have to deal with the old- old- the mess that we're still dealing with, right, and we don't even know a lot of that stuff because it's- it's under military, like, classified documents, so. So I'll- I'll at least send you that just because I think the chapter is specific to Guam and that'll keep it organized. But yes, follow up if you need to. And thanks for starting and then letting me talk long. I obviously have a lot of thoughts today-

BA: We're very happy to hear them, thank you so much.

TN: Well, best of luck on everything. And like I said, you know, I'm very glad that you all are doing this work. And so I just wanted honor and appreciate that because it is- it's not often that I get an e-mail from somebody on my research about doing a capstone about- I was like, wow, that's- this undergrad could come to our program for Ph.D. studies if you want. Yeah, maybe in a year or so when you're thinking about those things. Happy to support that too.