

Choreographing Climate Justice:  
A Phenomenological Study of Using Dance to Communicate the Human Dimensions of  
Climate Change

by

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## Abstract

In a time where “fake news” is prevalent in our media and climate denial is being perpetuated by merchants of doubt, it is increasingly important to use all possible media, including creative media, to reach those who are not already engaging in climate change discourse. *Climate arts* are emerging as a different avenue for pursuing effective climate communication to catalyze the cultural transformations that are needed to address the current climate crisis. Dance, in particular, can be used to express a unique aspect of performance art that is marked by *presence*, meaning that it constitutes an awareness in the “here and now.” Dance can help to express emotions and reactions to events that cannot necessarily be relayed in speech. The following manuscript looks at the intersection of Climate Justice and Climate Arts and a phenomenological study of creating a dance piece intended to help increase awareness about the issues faced by climate refugees across the world, exploring the emotional reality of unexpected displacement due to an environmental catastrophe.

## Choreographing Climate Justice:

### A Phenomenological Study of Using Dance to Communicate the Human Dimensions of Climate Change

#### **Introduction**

Can a painting save the world? What about a photograph? A dance piece? The arts have historically been used to enact social change and create a space for reflection of the human experience. Even Aristotle made arguments that poetry could be used to educate emotions and transmit universal truths in ways that pure intellectual language could not (Belfiore & Bennett, 2008). In a time when addressing climate change about not just saving the planet, but saving civilization, do the arts even have a place in making a change or inspiring hope for future generations? The following paper explores how focusing on the human dimension of climate change through climate justice, alongside climate arts, can effectively communicate issues of climate change in ways that other methods cannot. As part of this research, a phenomenological study was conducted by creating a dance piece about climate justice, which was used to explore the process of creating climate arts and the impact that climate-art projects can have on viewers. After a Yale publication showing the results of a national survey revealed that seven out of ten Americans rarely or never discuss global warming, climate scientists and communicators are looking for ways to spark conversation around climate change and to motivate action. When people view art, maybe they do not see something that can save the world, but the research in climate-arts argues that maybe it can. The way that an issue is framed can drastically change the way that issue is understood. Climate arts can allow for a more tangible understanding of broader issues by using narrative-based approaches, i.e. story-telling, as an emotional appeal to understand an issue.

## **Climate Justice and Climate Refugees**

### **Review of Literature**

Often climate change is framed with a lens of how it affects animals or the natural world around us. The American public are fed photographs of polar bears starving or on a small floating piece of ice in the Arctic Ocean or the Giant Panda struggling to find a food source due to changing growing conditions for bamboo. Humans are also animals and thus are not immune to the effects of climate change. Changing patterns of temperature, precipitation and severe weather can affect multiple aspects of human well-being; for example, these changes can mean crop failures, the drying up of essential drinking water resources, and increasing transmission of vector-borne diseases, such as malaria.

The burdens associated with the consequences of climate change are not equally distributed across members of our species, and this is where the concept of climate justice comes in (Miller, 2003). Climate change is exacerbating extreme poverty, food insecurity and access to resources like freshwater, thereby compounding economic, social, political, and ecological stresses. In many cases, these stresses drive people away from their homes (EJF, 2017). Just since 2008, there have been 21.7 million people each year displaced due to weather-related events that are intensifying because of climate change (EJF, 2017). Often those who face climate-related displacement are people in the poorest areas of the world, and often marginalized communities are those that are most heavily impacted in both the Global South and in the United States (Miller, 2003). The vast majority—95%— of climate change induced human displacement has occurred in developing countries, and 99% of the deaths from severe weather events occurred in developing countries (Miller, 2003). Developing countries contribute significantly less to the causes of climate change than developed

countries, yet their stories go unheard or unheeded by the Global North when the international community is making policy decisions regarding climate change.

There are countless examples of climate refugees across the globe, but the following stories provide striking examples of countries that are significantly affected and a context for these issues. The Republic of Maldives is an island nation in the Indian Ocean whose population is at significant risk for sea-level rise (National Geographic Society, 2012). Sitting only eight feet above sea level, inhabitants of the Maldives find that their environment and economy are facing grave threats; all 1,200 islands are at the risk of disappearing underwater (Vos, 2016). The Maldives, with a population of 345,000 people, is an example of a nation that has made minimal contributions to the causes of global warming that are related to sea-level rise but is experiencing the effects more severely. The first democratically-elected president of the Maldives, Mohamed Nasheed, has invested billions of dollars towards making the Maldives a carbon neutral nation, but migration is increasingly become an unfortunate reality due to the collapse of an economy that is reliant on fishing and tourism as well as the flooding of homes and land.

Bangladesh is another vivid example of a country whose population is being forcibly displaced by natural disasters that are exacerbated by climate change. This nation also faces the impacts of sea-level rise, but a much larger population is affected compared to the Maldives. Predicted sea-level rise will potentially displace 30 million people in the coastal regions of Bangladesh (Glennon, 2017). The effects of climate change are seen in storm surge in rivers and extreme droughts during the dry season, leading to a scarcity of freshwater resources. The hydrologic effects of climate change in this region also lead to salt water intrusion of fresh groundwater resources (Rashid & Paul, 2014). In just the last decade

there has been a significant increase in the events that cause these environmental catastrophes to occur due to climate change (Rashid & Paul, 2014). Once again, Bangladesh bears little responsibility for global warming and its consequences, with the second smallest ecological footprint in the world of 0.7 global hectares per person, compared to the United States at 8.2 global hectares per person (Happy Planet Index, n.d.). Although their environmental impact is so small, millions are facing the effects of climate change because of their low elevation and the general lack of infrastructure to face up to threats from sea-level rise and storm surge.

Although wealthy populations in the Global North are contributing more significantly to the effects of climate change, many of the weather-related disasters in the United States that have led to displacement have not been explicitly attributed to climate change until recently. Nearly 800,000 people were left homeless after Hurricane Katrina hit New Orleans, Louisiana, in 2005. Surrounding states found themselves taking in displaced New Orleanians; communities in Texas took in nearly 300,000 people, with Houston alone taking in 35,000 (EJF, 2017). More recently, climate change “supercharged” Hurricane Harvey hit Houston, Texas, in 2017 (Greshko, 2017). Even a month after this storm, nearly 60,000 people were still displaced from their homes (Lozano, 2017). Events like the hurricanes of 2017 are finally making U.S. policymakers reconsider the impacts of their decisions related climate change to how those decisions affect human lives as the catastrophic events are being re-framed as a climate-related issue.

People who are displaced from their homes as a result of the consequences of climate change have come to be called “climate refugees.” In 1951, the Refugee Convention was held by the United Nations (UN), following World War II, the UN declared a Universal Declaration of Human Rights stating that “everyone has the right to seek and enjoy in other

countries asylum from persecution” (Berchin et al., 2017). This convention was assembled specifically to evaluate the status of refugees. The UN defined refugees during this convention as follows:

“Any person who owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it” (Berchin et al., 2017).

This definition is still used by the UN today to define a refugee. Discussion around the idea of climate refugees started in 1985 with Essam El-Hinnawi who defined a similar term of “Environmental Refugee” as the following:

“Those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardize their existence and/or seriously affects the quality of their life” (Berchin et al., 2017).

The current definition of “refugee,” which allows legal status and protection, does not include those affected by natural disasters. Instead, the UN uses the term “displaced persons” as to avoid using the term “refugee” which had an inherent emotional appeal (Berchin et al., 2017). There has also been discussion regarding whether the people who are being forced to leave their land due to the damaging and irreversible effects of climate change should be called “climate refugees” or “forced climate migrants.” The preference for these terms is supported by the idea that the public already has a decent understanding and emotional

appeal towards the term “refugee.” But even with the term “climate refugees,” they are still not protected under the 1951 Refugee Convention. Coastal residents, especially islands with nowhere inland to move to escape the effects of sea-level rise, are in desperate need of legal protection under the term that now provides that as “refugees.”

The way that the issue of people displaced by climate change is framed matters, not only for the legal protection that these individuals might receive, but for the way they are perceived and understood by the public. This is especially true within the United States where the way we frame the victims of natural disasters, such as those from hurricanes that were intensified by climate change, can affect the action that is taken to curb our global impact.

### **Framing Climate Issues for the Public**

#### **Review of Literature**

Although climate change has become a much more openly discussed and debated issue, there is still a long way to go in order to create the conversation needed to enact political will to change climate change policy. A Yale study on climate communication reported that seven out of every ten Americans rarely or never discuss climate change (Yale Program on Climate Communication, n.d.). There is even less conversation around issues of climate justice, given that the people who are most directly affected by climate change are the ones who have done the least to cause it and are often left out of the international conversation about climate action (Dreher & Voyer, 2015). Effective and coherent framing of issues of people displaced from climate change is needed to bring awareness and appropriate voices to the conversation (Dreher & Voyer, 2015).

“Frames” refers to actual words, images, phrases, and presentation styles that are used to communicate a message (Eng, 2016). “Framing analysis” can be described as “the fundamental categories in which thinking can take place. It establishes the limits of discussion and defines the ranges of problems that can be addressed” (Eng, 2016). There are three ways that frames are typically used around an issue. First, they are used to decrease bias and build support for an issue. Second, framing can be used to decrease the complexity or accessibility of an issue. Lastly, it can help to establish a narrative or discourse, each of these things compelling towards a certain change (Eng, 2016). Framing has the ability to draw attention towards certain aspects of an issue and away from other aspects, which can have an important influence on the action taken, especially in the case of climate change where many of the risks being faced are beyond the individual experience of a decision-maker (Dreher & Voyer, 2015). Relatively little coverage is given to human aspects of climate change in the media, which can lead the public to see the impacts as a non-issue (Dreher & Voyer, 2015). Often, framing issues of climate justice are determined by the words we use to describe these incidents such as what we choose to call those who are displaced by climate change events. Speakers and writers may use different messages or languages depending on the audience they are attempting to reach (Yale Program on Climate Communication, n.d.).

One method discussed by Dan Kahn, a Yale professor who is leading research in climate communication, encourages using a framing technique that “disentangles the facts from people’s identities.” Kahn said that when he discusses climate science, he does not talk about science, but rather what is important to his audience and connects it to the issues that matter to them (Hendricks, 2018). Frames do not have to be words. In fact, conservatives changed to be more pro-environmental after seeing past-focused images, or satellite images

from the past, next to images from today (Hendricks, 2018). The arts are increasingly merging within climate communication, working to frame issues in a way that will achieve all three objectives of framing. The arts can allow information around a certain issue to be more accessible for someone who isn't directly impacted or who does not understand or have background knowledge about that issue. This kind of framing can use narrative, visual, and performing arts to foster what is needed to create positive transformations in our climate (Galafassi et al., 2018).

The term "climate-arts" has emerged as a bridging of climate communication and different art forms. Research has shown that climate-arts "can contribute positively in fostering the imagination and emotional predisposition for the development and implementation of the transformations necessary to address climate change" (Galafassi et al., 2018). One of the important aspects that focusing on the arts can do is to reconnect human prosperity to the dynamics of the Earth's ecosystem (Galafassi et al. 2018). This aspect of framing through the arts reiterates how framing can present what is important to certain audiences to inspire them to care about an issue. One of the essential sources for climate change information is through the International Panel on Climate Change (IPCC). A word search of the IPCC report shows that the arts are never mentioned (Galafassi et al. 2018). There are arguments that the "intellectual climate" needs to be changed to include a more "broad-based, integrated, useful knowledge" around the world of global environmental change science (Castree et al., 2014). While scientists typically use biophysical science to explore how humans are impacting the environment, there is little utilization of social sciences and the humanities (Castree et al. 2014). There is a call for interdisciplinary dialogue that reflects human values or takes a "culture turn" (Galafassi et al., 2018) to create

the transformations needed to address the impact of climate change (Castree et al., 2014). This kind of interdisciplinary dialogue allows for a “humanistic climate response” that pays attention to the human experience including emotions and human values (Galafassi et al., 2018). People sometimes experience psychological barriers, preventing them from seeing the personal relevance of climate science. Exploring climate communication and framing through the arts can help achieve the kind of “humanistic climate response” that can break through those barriers.

### *Framing Climate Justice Through the Arts*

The arts have historically been used to enact social change, creating a space for reflection on how the human experience is impacted in different situations (Belfiore & Bennett, 2008). The arts are useful, not just for personal well-being, but also for education and self-development, as a political instrument, or even as a way in which people construct their identities (Belfiore & Bennett, 2008). Millennia ago, Aristotle argued that dramatic poetry could both educate emotions and transmit universal truths in ways that pure intellectual language could not (Belfiore & Bennett, 2008). Studies reveal that social change occurs first through people’s emotions and then in their minds; therefore, the arts can help to achieve these transformations through allowing that avenue for emotional exploration (Galafassi et al., 2018).

*Climate arts* have grown significantly over the past few decades and have diversified in terms of the different art forms that are engaged (Galafassi et al., 2018). Galafassi et al. (2018) conducted a study to analyze the ways that the arts have contributed to actions on climate change. From this study, they concluded that a majority of the artworks in climate-arts are done in literature, theatre and performance, film, and installations. Many of the

projects studied looked to create new emotional and intellectual awareness around a certain issue and seek to create dialogue around that issue (Galafassi et al., 2018). Related to framing, the arts allows for the creation of an accessible channel to connect people to phenomena that are difficult to understand (Galafassi et al., 2018).

In Robert Nixon's book *Slow Violence and Environmentalism of the Poor*, the author discusses how art can reveal the slow violence taking place across the planet. *Slow violence* is defined as violence that is not spectacular or instantaneous, but rather is incremental and whose repercussions may not be seen until long past the initial cause of the violence (Braddock & Ater, 2015). One example of how art revealed a slow violence was through photographs of children in the Niger Delta playing along a shore with gas flares in the background (Braddock & Ater, 2015). These modes of art allow the stories of those experiencing slow violence to be heard and brought to the attention of a much broader audience.

Storytelling has been a tool used since the beginning of time to pass on information, values, and culture, and this method is found in nearly every civilization (Barton & Baguley, 2014). The following source explores what storytelling can contribute to learning:

“Stories help to make sense of, evaluate, and integrate the tensions inherent in experience; the past with the present, the fictional with the “real” the official with the unofficial, personal with the professional, the canonical with the different and the unexpected. Stories help us transform the present and shape the future for our students and ourselves so that it will be richer or better than the past.” (Barton & Baguley, 2014)

Storytelling, including various forms of narrative are more commonly being employed in climate-related literature (Bremer et al., 2017). A genre of “Cli-Fi” has emerged in literature, films, art, and plays (Bremer et al., 2017). These stories allow climate adaption to be conceptualized as a social process and brings it into a social context. This concept is increasingly being used within the climate arts community, specifically within dance.

### ***Dance as a Climate-Art and Storytelling Form***

Narrative-based academic research has typically been exclusively verbal or textual (Eli & Kay, 2015), though there are studies examining the power of narrative in other media. For example, a medical anthropologist and contemporary dance choreographer worked together to study the use of dance to express lived experiences and feelings of women suffering from eating disorders (Eli & Kay, 2015). They turned to contemporary dance “as a means of constructing and communicating experiences of eating disorders.” One of the unique aspects of using dance as the climate-art method is that dance, or any other performing art, is marked by presence, meaning that it constitutes a living experience in the “here and now” (Eli & Kay, 2015). An important finding from this study regarding eating disorders indicated was that the participants felt as though the dance enabled expressions of aspects of eating disorders that would have otherwise been left un-articulated (Eli & Kay, 2015). Dancers expressed that they felt that dance captured crucial elements of their stories that are otherwise not understood by listeners through speech (Eli & Kay, 2015). This study also showed that using dance as a method of storytelling allowed the audience to recognize and empathize with another’s experience (Eli & Kay, 2015). The aspect of choreographing movement around these experiences adds another layer in which a choreographer has to synthesize and stylize a lived experience. This study focused on communicating about

healthcare issues but poses questions about using dance and storytelling to portray a lived experience (Eli & Kay, 2015). When applying the storytelling ability of dance to climate-arts, the lived experience is often not that of the actual dancer; rather, the dancer uses aspects of research or a common experience to create movement.

Anna Halprin, a pioneer in “post-modern dance,” uses what she called “transformational dance” to embody personal story-telling as a way of communicating with each other and about different theme (Halprin & Kaplan, 1995). Halprin’s works reintroduced dance as a medium for social investigation and activism and were often looking for ways in which those viewing the performances might change because of their witness of the dance (Ross, 2007). One unique aspect of Halprin’s work was that she desired the dancers not to act as script that was created by someone else, but rather that the desired subject of the dance was created as the moment-to-moment lived reality of the dancer themselves, adding an extra dimension of individual story-telling and experience (Ross, 2007). An example where her work was used within a social-context to enact change was her piece titled *The Five-Legged Stool*. This piece was designed as a sensory experience, without a deliberate meaning or continuity, the audience was given the space to derive their own meaning. Although there was no specific narrative, it was clearly about the desperation of communication and partnership and sometimes those things being at odds with each other. Without this clear narrative, many say the piece as “a domestic ritual of alienation and absurdity in keeping with the political and social climate of America in 1962” (Ross, 2007). One critic wrote that Halprin’s art was able to “speak to people in a language which they can understand through all their senses” (Ross, 2007). The open-endedness of the piece allowed

people to anticipate their own experience within the work and create their own meanings constructed in their own realities (Ross, 2007).

Much later in her life, Halprin choreographed a piece titled *Still Dance*, which is describe as “situation between environmental theater, performance art, feminist body art of the 1970s, and massive earthworks” (Ross, 2007). Performed in the nude, *Still Dance* reflected on aspects of death and human connection to the earth. Halprin used her body in this piece to create narratives of the fragile and fleeting existence of the old female body (Ross, 2007). This piece was also often performed in nature, using the environment as both a text and a partner, allowing the environment to be a part of the story-telling (Ross, 2007). This concept was taken by Halprin into communities as well. Halprin found that her unique exploration of dance as an experience was useful in community building (Halprin & Kaplan, 1995). She worked alongside psychologists to create workshops that allowed communities to relate to their environments (Halprin & Kaplan, 1995). From this Halprin began exploring “creative communications processes” in which she could use dance as a way to achieve social interactions within a community (Halprin & Kaplan, 1995).

### **A Phenomenological Study: Choreographing Climate Justice**

#### **The Creation of Space for Climate-Arts**

It is important to recognize that the social learning being suggested here through the arts, dance, and storytelling methods requires spaces of creativity and innovation. This kind of space is what has become available through Appalachian State University’s “Climate Stories Collaborative.” The Climate Stories Collaborative was created by an interdisciplinary group of faculty at Appalachian State University (ASU) after a visit from author, historian and playwright Jeff Biggers in February, 2017. At the time, Biggers was a writer-in-residence

at University of Iowa's Office of Sustainability. The performance presented at ASU was titled "Appalachia: Envisioning a Regenerative City" and it involved both music and written stories. Only recently in 2014, Biggers started a project titled "The Climate Narrative Project." Through this project, workshops on visual arts, film, radio, theatre, dance, and creative writing mediums are being offered in schools, universities, and organizations all over the country. The goal of the project is "to train a new generation of 'climate storytellers' and climate leaders" by asking the question "What accounts for the gap between science and action on climate change, and how can stories reshape the climate narrative and galvanize action?" (Biggers, 2016). Some examples of projects first included in University of Iowa's Climate Narrative Project are spoken word that examined the role of women witnessing climate change, a children's book and photography essay that focused on the importance of prairie grasses, and a performed story about the connections between religious verses and conservation issues (Biggers, 2016).

Biggers was invited to ASU by faculty member Laura England after participating in a session led by him at the 2016 Association for the Advancement for Sustainability in Higher Education meeting in Baltimore (McCandless, 2017). Following his visit and explanation of his project at the University of Iowa, faculty from across the College of Fine and Applied Arts at ASU came together to initiate the creation of a space similar to that created by Biggers at the University of Iowa. The College of Fine and Applied Arts includes a variety of disciplines and the following departments: Applied Design, Art, Communication, Military Science and Leadership, Sustainable Technology and the Built Environment, Theatre and Dance, and Sustainable Development. The Climate Stories Collaborative emerged on a

grassroots basis among faculty from these departments who shared an interest in engaging in and amplifying the climate change conversation.

This Collaborative was designed “to grow the capacity of faculty and students to use a variety of creative media to tell the stories of those who are already affected by, and/or taking action to address, climate change” (College of Fine and Applied Arts, 2018). In the fall of 2017 the Climate Stories Collaborative hosted a two-part faculty workshop to begin this work. In December of 2017, the Climate Stories Collaborative hosted a showcase of student work that was open to the public. This showcase featured visual and performance pieces that expressed climate stories. I was fortunate to have a work featured in this exhibit, a narrative-based non-fiction piece about the migration of monarch butterflies and how their migration patterns are affected by global warming. The next project being implemented by the Climate Stories Collaborative is a series of events in April 2018 titled “Climate Justice Month” including seminars and film screenings to “shine a spotlight on the stories of lives and livelihoods disrupted by climate change and motivate participants to engage in efforts to address climate justice issues in the present and future.”

One of the speakers invited to speak as part of the Climate Justice Month is Chantal Bilodeau, a playwright and translator whose focus is on the intersection of science, policy, art, and climate change (Bilodeau, n.d.). Bilodeau has developed numerous productions that look at the social and environmental changes taking place in the Arctic through her role as the Artistic Director for the organization The Arctic Cycle. Bilodeau has also done significant research in the furthering of climate-art field, including works that have already been cited in this paper.

### **The Present Study: Choreographing Climate Change**

To explore the importance of the arts, specifically dance, in climate communication and expressing the stories of individuals being affected by climate change, over the past semester I created a choreographed piece to be included as an opening event for Bilodeau's seminar "Addressing Climate Change Through the Arts" as part of the Climate Justice Month event series. Returning to the subject of climate refugees, the goal of the piece was to use dance as a medium to effectively express the stories of people who identify as climate refugees and to inspire action to provide legal protection for these people and to curb the causes of the environmental disasters caused by climate change. The following sections will explore the choreographic process of using dance as a tool for framing these stories and also provide a reflection on the performance, including responses from the audience. The following questions were explored through this work:

- How can dance be used to tell the stories of the people impacted by climate change?
- What can exploring a medium of dance contribute to the climate conversation?
- How can dance help to alter framings of how people view problems?
- How can dance render visible experiences, emotions, anxieties left out of dominant frames of discussion on climate change?

#### ***Choreographic Process/ Methodology***

To begin the choreographic process, there were some key ingredients that needed to be assembled, including dancers to be part of the piece and a rehearsal space and time. To recruit dancers, I created a flier that advertised the piece as "Choreographing Climate

Justice.” The flyer stated that I was looking for four to six dancers to use in a piece to be featured as part of Climate Justice Month, and it advertised an interest meeting to be held about the piece. The flier was made in a print version, hung up in various areas on campus, distributed to members of the Momentum Dance Club through email, and posted online on the Appalachian State University Dance Facebook page. To find rehearsal space I worked through the Appalachian State University Theatre and Dance Department to book a dance studio in Varsity Gym. I booked two rehearsals a week in the intimate space of studio 203 up until the scheduled performance date in early April. Three dancers initially attended the interest meeting, but one dancer was unable to continue in the piece due to a scheduling conflict and therefore I stepped in as a dancer in the piece. I began by asking them each to introduce themselves and to explain why they had decided to come to the interest meeting. After introductions, I explained what I wanted the piece to represent.

As mentioned earlier, dance has a unique way using storytelling to allow the audience to recognize and empathize with another’s experience (Eli & Kay, 2015). From this I wanted to use a somewhat universal theme to allow the piece to portray the climate refugee crisis—losing your home. Most people, no matter what background, have a sense of the concept of home, whether that is a physical place, a culture, a tradition, or the people that surround them. A TEDx Talk that I watched solidified this connection of climate refugees to an individual’s concept of home (Tedx Talks, 2014). The talk was done by Stephan Jeremendy, part of a campaigns team at the Environmental Justice Foundation (EJF, n.d.). EJF (used a source earlier for statistics regarding climate justice), works to protect the environment and defend human rights internationally. This TEDx Talk focused on how climate change is not just an environmental issue but also a human rights issue. Jeremendy begins the talk asking

where is home and what is home for people, leading into directly asking the audience to write down the first word that comes to mind when they think of home (Tedx Talks, 2014).

Following this introduction, Jeremendy explained the current climate refugee crisis, including examples in both developing countries and developed countries, discussing the disparity between how little developing countries contribute significantly to climate change but that they carry 9/10 of the climate change burden (Tedx Talks, 2014). He had the audience close their eyes and he read off some of the words audience members had written at the beginning of the talk. After reading these words, he challenged the audience to imagine losing that home, and if you had only five minutes to pack up your bag, what things you would take or where you would go if your home was destroyed (Tedx Talks, 2014). He used this to drive home that these are the impacts being faced by climate refugees in countries around the world. Jeremandy concluded by arguing for advocacy towards legal protection under the UN for climate refugees, requesting specific actions such as sending a postcard with a photo of your home and sending it to the UN General Secretary (Tedx Talks, 2014).

This TEDx Talk was my jumping off point for this piece. I played the video for my dancers to help articulate that common theme of “home” and also to give them basic background knowledge of the topic. Interestingly, the dancers had little base knowledge about the subject they were portraying. Inspired by Jeremendy, the first thing I had the dancers do was an exercise where they wrote down words that came to mind when they thought of home and also words that came to mind when they thought of losing their home. During this time, I also played a piece of music that I had come across titled “To Build A Home” by the Cinematic Orchestra. Lyrics in this song resonated with me, and I felt that they could especially be applied to climate refugees. Some specific lines that inspired me

included: “I built a home for you, for me, until it disappeared from me, from you,” “When the gusts came around to blow me down, I held on as tightly as you held onto me,” and, “Now it’s time to leave and turn to dust” (Watson, 2007). The combination of the TEDx Talk and the music allowed for an engaging atmosphere for the dancers to begin connecting with the purpose of raising awareness of the climate refugee crisis.

The following rehearsal, I took time to review the words the dancers had written down. The dancers wrote a combination of nouns and adjectives, specifying physical objects, people, and feelings.” The words “comfort,” “hug,” and “safe” as an indication of home I found inspiring. The dancers also generated words in association with the thought of losing a home such as “stressed,” “lost,” and “floating.” At rehearsal I taught a movement phrase and also challenged the dancers to explore speed, facing, and repetition within the movement. The second part of this rehearsal I had the dancers revisit their written words and create a short five-movement phrase based on the words that resonated with them. After showing these phrases to each other, the dancers taught their movement to each other. This rehearsal was specifically aimed at creating a large repertoire of movement to work with in future rehearsals.

In addition to these word generated movements that were included in the final piece, there were other sections of the piece choreographed in intentional ways to allow the dance to be an effectively tell the story of climate refugees. One of these sections was done to a spoken poem rather than to music. In doing research for inspiration, I found a video created by the UN Refugee Agency that used well-known actors to perform the poem “What They Took With Them.” The poem was originally written by Jenifer Toksvig, who was inspired by stories and first-hand testimonies from refugees forced to flee their homes and the items they

took with them. Although this poem was written in response to refugees from war, when listening to this poem I could imagine the actors urgent voices and the items they named also be an accurate representation of the climate refugees' experiences. The movement used to occupy this poem was sharp and quick to match the urgency in the actor's voices inspired by the objects they named such as "wallet," "diploma," or "national flag" (UNHCR, the UN Refugee Agency, 2016).

Another section of the movement we collectively titled the "contact section." This section of movement relied on contact improvisation, or movement derived from a point of physical contact between dancers, working with mass momentum, and gravity to create movement (Tafferner-Gulyas, 2015). This section used a combination of weight sharing and lifts to portray the relationships that are important during a crisis such as those climate refugees might face. Some movements portrayed being pulled away from support that someone has due to a specific event, with individual dancers using weight to pull away from each other. Other movements showed using a support system to get people through difficult times, with weight sharing towards each other and lifts requiring one dancer to lift the other and carry them from one place on the stage to another place.

When considering an introduction to the piece, I decided to use the sound of a thunderstorm paired with one dancer's five-movement phrase, that incorporated tension filled movement indicating a resistance or challenge moving through space.. In the documentary "Climate Refugees" (Nash, 2010), one of the scholars mentioned that the crisis facing climate refugees is often to do with water, either too much of it (flooding) or too little of it (a drought). This resonated with me and I wanted to include a nod to the importance of water, especially in the form of storms. The audience viewing this piece would likely be residents of

the United States; therefore, a majority of the experiences being framed as climate refugees is due to increased hurricane activity and intensified storms, which this soundtrack was able to reference. The costumes we chose to perform in also referenced the importance of the role of water in the climate refugee crisis, as each dancer wore shirts in different shades of blue along with black leggings. During the final rehearsal I played the trailer of the documentary “Climate Refugees” (Nash, 2010), in order to remind the dancers of the purpose of creating this piece.

The final piece opened with the thunderstorm sounds, which transitioned into the poem “What They Took With Them,” and then concluded with the music piece titled “To Build a Home.” The title “Our Humanity” was created by the dancers and myself at the end of the rehearsal process. The dancers recognized that they were presenting the human dimension of climate change and wanted the word “human” included as part of the title. They also wanted to recognize that both the people affected by the issue and the people who can make a difference towards effecting change are part of a collective, which is why the word “our” was used in the title to inspire a collective responsibility. The final dance piece used three dancers (including myself) and a combination of different soundtracks and dance styles to frame climate refugees as an emotional story-telling experience to inspire awareness and action around the issue of displaced people from climate-related events.

## **Results**

### ***The Performance and Impact***

The performance of “Our Humanity” occurred on Monday, April 9 at 5:30 pm as part of the Climate Justice Month event “Addressing Climate Change Through the Arts.” The dancers opened the event that featured playwright Chantal Bilodeau. Throughout the

audience, there were printed programs that included a QR Code to a feedback form created through Google Drive that allowed the audience to leave anonymous responses to the piece. One of the difficulties in using the arts as a climate communication method is that it can be difficult to measure the impact of the work (Galafassi et al., 2018). This feedback form was a way to collect feedback and responses on the impact of “Our Humanity” and the effectiveness of telling the stories of climate refugees. The Feedback Form is included in Appendix A. Following the performance, I received seven submissions of feedback forms. One specific significant response was that 100% of the respondents marked “yes” when asked “Do you feel like the piece ‘Our Humanity’ effectively portrayed issues of climate refugees?”

In a phenomenological study, qualitative, rather than quantitative, assessments are seen as the best way of evaluating the effect of climate arts (Waters, 2017). The last question of this feedback form allowed for open ended responses to the dance piece. Some of the notable responses were the following:

- “The performers did a wonderful job by portraying the struggles climate refugees encounter with the packing, leaving their home and trying to stay together while moving. Very educational and beautifully done!”
- “It was an intense experience, filled with emotion. It seemed like the dancers understood the material they were performing and put their hearts into it.”
- “Really enjoyed the opening of the piece with the poem and storm sounds, felt like that was a really powerful way to begin.”
- “The poem was very powerful and the dance reflects the emotions.”

Based on these responses I would conclude that the dance piece “Our Humanity” was

effective at using dance as a climate-art method to communicate about the climate refugee crisis in a way that allows for the benefits from successfully framing an issue (Eng, 2016). Successful framing decreases bias and builds support for an issue (Eng, 2016). Controversy over legal protection for climate refugees can be dissipated by an emotionally-driven dance piece that focuses on the moral connection of what it is like to lose your home. Second, framing can be used to decrease the complexity or accessibility of an issue (Eng, 2016). As seen earlier, the examples listed are only scratching the surface of climate refugees experiencing displacement from environmental catastrophe across the planet. Framing climate refugees through this dance piece allowed for the complexity of details regarding specific cases of climate refugees to be condensed to the common-ground aspects that a viewer could more easily relate to. Lastly, framing can help to establish a narrative or discourse around an issue (Eng, 2016). Even immediately following the event in which “Our Humanity” was presented, there was conversation regarding the emotional expression of the piece and the emotional impact this had on the audience. The piece created space for communication about climate issues. When seven out of ten Americans rarely or never discuss climate change (Yale Program on Climate Communication, n.d.), these types of creative spaces are of the utmost significance. Each of these aspects of framing can bring awareness to the issue of climate refugees and forced displacement from environmental disasters.

### **Conclusion**

Within my phenomenological study, I was able to explore how dance can be used as a climate-arts method to frame issues of climate justice and climate refugees in a narrative that sparks dialogue around these issues. By using research about climate refugees and framing as

a score for a choreographed dance piece, the results, including open responses from the audience, showed an emotional impact and increased awareness around the issue. As mentioned earlier, recording the impact of climate-arts on both an individual and larger global level is difficult, and further research in discovering ways to measure the impact on transformations towards action addressing climate change is needed. The results that I found from my study are still based on only seven responses, when the audience size was approximately 200 people, which may have influenced results. Overall, phenomenological studies also can be varied and subjective based on my own personal opinions, feelings, and influences. I felt like I was more equipped to choreograph a piece that framed an issue like this after my own experiences as both a dance minor, taking a course titled “Composition and Improvisation,” and my own involvement in the Appalachian Dance Ensemble over my time as a college student. Overall, situating the dance piece “Our Humanity” as part of the Climate Justice Month events put on by the Climate Stories Collaborative allowed for the exploration of creative research and student work that combined the disciplines of environmental justice and the arts. This project demonstrated that dance can be an effective method of creating dialogue around issues of climate change, and that this approach is worthy of further research and exploration.

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## Appendix A

## “Our Humanity” Feedback Form

- Had you heard about climate refugees before the event?
  - Yes
  - No
- How often do you view various forms of art (performance, written (poetry), visual (paintings or drawings))?
  - Very Often
  - Often
  - Occasionally
  - Rarely
  - Never
- Do you feel like the piece “Our Humanity” effectively portrayed issues of climate refugees?
  - Yes
  - No
- Please describe your personal response to the piece “Our Humanity” (ex. emotional response, if you learned anything)
  - Open Response