

University of Montana

## ScholarWorks at University of Montana

---

Undergraduate Theses, Professional Papers, and Capstone Artifacts

---

2022

### Roots to Reasons: A Podcast Series - Emotional, Intellectual, & Substantive Environmental Conversations

Abigail Vogt

av132661@umconnect.umt.edu

Damara Stewart

ds136974@umconnect.umt.edu

Sarah Griffin

sg136708@umconnect.umt.edu

Rowan Ulrigg

ru148246@umconnect.umt.edu

Sierra Franklin

sf135636@umconnect.umt.edu

*See next page for additional authors*

Follow this and additional works at: <https://scholarworks.umt.edu/utpp>

**Let us know how access to this document benefits you.**

---

#### Recommended Citation

Vogt, Abigail; Stewart, Damara; Griffin, Sarah; Ulrigg, Rowan; Franklin, Sierra; and Shepard, Cara, "Roots to Reasons: A Podcast Series - Emotional, Intellectual, & Substantive Environmental Conversations" (2022). *Undergraduate Theses, Professional Papers, and Capstone Artifacts*. 387. <https://scholarworks.umt.edu/utpp/387>

This Thesis is brought to you for free and open access by ScholarWorks at University of Montana. It has been accepted for inclusion in Undergraduate Theses, Professional Papers, and Capstone Artifacts by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

---

**Author**

Abigail Vogt, Damara Stewart, Sarah Griffin, Rowan Ulrigg, Sierra Franklin, and Cara Shepard

**FRANKE GLOBAL LEADERSHIP INITIATIVE CAPSTONE PROJECT PORTFOLIO:**

Roots to Reasons: A Podcast Series  
Emotional, Intellectual, & Substantive Environmental Conversations



By: Sierra Franklin, Sarah Giffin, Cara Shepard, Damara Stewart, Rowan Ulrigg and Abby Vogt

**Mentored by Peter McDonough,**  
Climate Change Studies Program Director at the University of Montana



## **ABSTRACT**

As six students of the Resources and Sustainability Global Theme of the Franke GLI program our capstone project addresses the need for emotional, intellectual and substantive environmental conversations, a lack thereof we all have observed in our studies and daily lives. We conducted research of scholarly sources that found experience, upbringing, biases, and emotions are influencers of a person's attitude and behavior toward the environment and climate change. Attitude is expressed through a person's morals that inform behavior. The topics of environment and climate change are largely interpreted and expressed through pathos, which is easily manipulated by social media, marketing, and news sources. The second half of our research focused on conversation and interview techniques that would help us discuss these influencers with others and learn how they manifest themselves in individuals' lives. Finding agreement, listening intently, providing a safe atmosphere, creating rapport, being cognisant of pacing, tone, and emotions are crucial to conducting an emotionally, politically, or personally challenging conversation. We compiled our sources into a literature review that identifies what shapes a person's relationship with the environment and climate change and how to hold conversations about these topics. The culmination of work is a podcast series, "Roots to Reason," that models these environmental conversations. We conducted nine conversations with individuals such as ranchers, professors, small business owners and tribal members about their upbringing and relationship with the environment and climate change. These conversations were analyzed and synthesized into a podcast format to deliver conversation models to scholars and laymen. Not considering the background that shapes an individual's morals, attitudes, and behaviors impedes productivity and collaboration that is critical to solving environmental challenges. This project models how differing backgrounds can cooperate from a place of mutual understanding and acceptance.



## **PROJECT PROPOSAL:**

December 17, 2021

### **Defining the Topic:**

This project was chosen for an undergraduate capstone project under the theme of Resources and Sustainability in the Franke Global Leadership Initiative at the University of Montana. The project will be a podcast series of research-based emotional, intellectual, and substantive conversations between us and environmental laymen and scholars alike, about the environment and climate change. Project members chose the topic in response to unsatisfactory environmental and climate conversations in personal, professional, and political spheres, where opposing perspectives circle like isolated whirlpools, neither one touching nor influencing the other. The project will encourage listeners, young adult and older, to develop an environmental self-awareness, a sense of belonging in a global context, to find connections between oneself and “opposition,” and to understand the complex origins of diverging and converging relationships that people have with the environment and climate change.

### **Thinking Global:**

This project identifies and analyzes how the environment is perceived and experienced according to geographical, cultural, sociopolitical, and historical contexts. Such factors that influence human behavior and biases can be applied to all people globally without regard for state nor boundary. Due to time, resource, and funding restraints, podcast participants will be located in the Missoula Montana area. However, a diversity of age, ethnicity, social class, and profession will be asked to participate with the goal of creating a global diversity microcosm. By intentionally incorporating the viewpoints of individuals from a variety of backgrounds and cultural experiences, it contributes to diversity and inclusion efforts. With this literature review and podcast series, readers and listeners can foster empathy for opposing perspectives while gaining tools to manage them in daily life. The interrelationship between social context and environmental ethic, as well as that between the self and global community are examined in this research. In examining these interrelationships, readers and listeners develop environmental self-awareness and a sense of belonging to larger contexts. An understanding of how personal background affects present-day perspective helps guide empathetic interactions, and can serve as a launching pad for interpersonal relationships. By incorporating this research, nonproductive environmental and climate conversations can be replaced by emotional, intellectual, and substantive conversations that drive problem-solving instead of problem-perpetuating.

\*\*\*



## **THE LITERATURE REVIEW**

### **Abstract**

Research suggests that experience, upbringing, biases, and emotions are the primary influencers of a person's attitude toward the environment and climate change. This attitude is expressed through a person's ethics, their morals that often inform conduct or behavior. The topics of environment and climate change are largely interpreted and expressed through pathos, which is easily manipulated by social media, marketing, and news sources. It is necessary to understand the emotional foundation and influencers of environmental convictions while also combatting their manipulation through media literacy. This emotional manipulation, in conjunction with Strategic Science Translation and social media echo chambers, results in polarization as opposed to unification in environmental and climate conversations. Even when a person is an environmental and climate change sympathizer, a whole slough of psychosocial roadblocks impede activism. These roadblocks include the scale, futuristic component, and perceived distance of climate change, among others. All of these elements shape a person's relationship with the environment, climate change, and their subsequent crises. From the dining room table to the legislature, interlocutors must consider what shapes a person's environmental ethic if they wish to reach mutual understanding and problem-solve effectively. And that starts in conversation. Finding points of agreement, listening intently, providing a safe and respectful atmosphere, creating rapport, being cognisant of pacing, tone, and flaring emotions are all part of facilitating an emotional, intellectual, and substantive conversation. By considering carefully the factors that influence a person's environmental and climate change convictions while minding the conversation strategies, a person can facilitate an emotional, intellectual, and substantive environmental conversation.

### **Methods**

The resources for this review include scholarly articles, popular articles, and books selected both from public domain information resources and Mansfield Library databases at the University of Montana. Resources were chosen that identified factors that influence a person's relationship with the environment and climate change, and motivators that affect a person's actions or inactions on climate change. Once these factors are identified they can be used to enrich and improve conversations about the environment and climate change. Regarding scope, literature was selected that came from and addressed a multitude of geographic areas because factors that influence human behavior, biases, environmental relationships, and climate change are all global phenomena. The resources were then organized according to theme and divided into the following categories: Biases, behaviors, and attitudes that influence people's engagement with climate change information and the environment; Factors that perpetuate



polarity in climate conversation, including social psychological obstacles, science, and social media; Why it's difficult for individuals to act on climate change; and lastly, How to have emotional and meaningful conversations about climate change. Lastly, this literature review details how to conduct emotional, intellectual, and substantive climate conversation.

### **Theme 1: Biases, behaviors, and attitudes that influence people's engagement with climate change information and the environment**

Individuals' underlying biases and emotions create overall "attitudes". In Kendra Cherry's article, *Attitudes and Behavior in Psychology*, she defines attitudes as "a set of emotions, beliefs, and behaviors toward a particular object, person, thing, or event. Attitudes are often the result of experience or upbringing, and they can have a powerful influence over behavior"(Cherry). One can extend this theory that experiences and upbringings shape one's attitude to the environmental and climate change realm as well, a theory that will inform the strategic conversations throughout this project. According to Cherry, attitudes are formed by personal experiences, social roles and norms, classical and operant conditioning, and observing others. When attitudes don't align with behavior it creates something called cognitive dissonance, in which case the individual either changes his/her attitude or changes his/her behavior to find inner harmony. People often change their attitude as a result of classical or operant conditioning. Classical conditioning is a learned, positive psychological association between two things that informs behavior, the phenomenon advertisers capitalize on. Operant conditioning is changing one's behavior due to negative feedback received from others. However, someone may have what is known as a temporary/surface shift in attitude if they are attracted to the personal characteristics of someone who holds the opposing view (Cherry). Because attitudes are closely linked with experiences and behaviors, studying an individual's upbringing, daily routines, work, etc. is crucial for understanding and/or changing an individual's attitude toward climate change.

The attitudes and behaviors that Cherry discussed are outward expressions of a person's ethics, the moral principles that inform conduct. According to Clare Palmer and her researchers, there are two primary factors that form an individual's environmental ethics: human and nonhuman values. Palmer defines human values as the thought or feeling that only human beings have a moral status or "... that human beings are much more morally significant than any other living things" (Palmer et al). Naturally, if one believes that humans have superior rights, it will affect one's relationship with the environment and opinion about climate change. Nonhuman values concede "...that at least some nonhuman beings or things, which may include animals, living organisms, ecosystems, populations, and species, have interests that should be taken into consideration in our moral decision making" (Palmer et al). A person with nonhuman values will likely be more empathetic toward non-human beings and the idea of climate change than a person with strictly human values. In conflict resolution, it is vital to recognize that everyone has



a unique set of values that dictate decision making, thoughts, and feelings. For environmental and/or climate change related disagreements it is even more crucial since it deals with something so very personal for people — their home.

Susan Clayton and Christie Manning's book on human perceptions, impacts, and responses to climate change further explore the individual's development of environmental and climate change ethics. Clayton and Manning focus on how people's values (like the human and nonhuman values identified in the research by Palmer et al), worldviews, and ideology filter climate change information and dictate how it is interpreted. For example, Clayton and Manning write about a biased assessment of information known as "motivated reasoning". This is when a person seeks out and uses information that confirms their existing beliefs and ignores or dismisses information that contradicts them. This ultimately skews an individual's perception of reality. Another major factor that affects how a person views climate change is one's preferences for different types of social relations or "cultural worldviews". For example, if someone has an egalitarian worldview or a preference for a collective and equal organization of society, they will tend to be more concerned with the impacts of climate change. However, if they have a worldview that is more individualistic, they will be less concerned. Since values and worldviews are often inherited from guardians and life experiences, as noted by Cherry, it is natural to find a person's life story, upbringing, and background central to their relationship with the environment and climate change. Lastly, Clayton and Manning emphasize the effect that the media has on people's personal views of climate change. According to Clayton and Manning, "Since media is the primary source of public information about climate change, it is unsurprising that it plays such a key role in priming and shaping public attitudes and responses" (Clayton & Manning).

Betsy Lehman and her fellow researchers narrowed the scope of Clayton and Manning's study by specifically testing the power of social media *graphics* in shaping public attitudes and responses to the environment and climate change. They found that, "Individuals' opinions on climate change are often based on emotion rather than on scientific evidence" (Lehman et al). In other words, climate change is experienced more so as a pathos-driven problem than a logos-driven problem. In their study, they presented 320 different images to non-expert public participants and collected ratings based on two criteria: relevance to climate change and emotional arousal. Then Lehman et al assessed the relationship between relevance to climate change and the emotional qualities of the image. Lehman's study found the image-rating task of relevance to climate change and arousal rates were positively correlated. This evidence supports that individuals' opinions on climate change are often based on emotion rather than on scientific evidence. Therefore, when analyzing an individual's perspective on the environment and climate change, it is pertinent to analyze the personal and emotional experiences that have shaped that perspective before ever proposing to change it with logos-driven scientific data.

Susanne C. Moser took Lehman's observation of environmental imagery and emotions and analyzed the implications for outreach efforts. Moser found that "...neglecting the emotional



reception of climate-related news makes communication and outreach efforts more likely to fail” (Moser). Moser finds that using emotional appeals in climate change communication is essential for catalyzing action. Sabine Roeser concurs in her article, *Risk Communication, Public Engagement, and Climate Change: A Role for Emotions*. Roeser further stresses the importance of including emotions in our risk communication of climate change. As Moser discussed, when emotions are not used in climate change conversations people will feel detached from the problem, therefore paralyzed and unwilling to consider lifestyle changes. Most people in the world know climate change is caused by human behavior. However, few people are changing their lifestyles in order to reduce their footprint. Roeser argues, “...emotions might be the missing link in communication about climate change, in a two-fold way: they lead us to more awareness of the problems and to being motivated to do something about climate change” (Roeser). If emotions are used in the correct way, such as narratives that approachably illustrate the risks of climate change, people may begin to act out of enlightened self-interest.

Roeser walks through a common example of climate action or lack thereof. One person decides to limit the amount of time they travel by plane because they know the effects it has on climate change. Then one day a rational individual comes along and points out how insignificant that action is because everyone else will still be using planes. So the person decided to give up on their new behavior because it seems futile. In this situation, “rationality corrupts our appropriate moral emotions” (Roeser). Using emotions can help begin to reverse these situations. “Sympathetic emotions can help to correct egoistic rational judgments. Emotions can enable us to make better moral judgments, by helping us to reverse our mistaken rational judgments” (Roeser). Emotional risk communication of climate change can combine the feelings of fear and hope and enable people to extend their moral judgments.

Upbringing, experience, social media, as well as the way environmental and climate change information is presented/absorbed play a key role in the development of attitudes, behaviors, and biases toward climate change. The purpose of this research is to turn nonproductive environmental and climate conversations into emotional, intellectual, and substantive problem-solving conversations. To do that, those key players need to be analyzed and taken seriously. When upbringing, experience, social media, and information transfer are considered legitimate influencers of environmental and climate change perspectives, both in oneself and in one’s interlocutor, then mutual understanding can spawn legitimate problem-solving. However, the opposite of mutual understanding and legitimate problem solving is prevalent in the United States’ politics and amongst its people. The next section of this research identifies why.

## **Theme 2: Factors that perpetuate polarity in climate conversation, including social-psychological obstacles, science, and social media**



After taking a broad cognizance of what shapes values, behaviors, and attitudes, it's important to discuss what keeps them from changing. There are several obstacles that particularly reinforce polarity in environmental and climate conversation, preventing one's values, behaviors, and attitudes from changing. They include social psychological obstacles, scientific obstacles, and the presence of social media.

In Alissa Cordner's research, *Strategic Science Translation and Environmental Controversies*, she develops the concept of Strategic Science Translation (SST), "the process of interpreting and communicating scientific evidence to an intended audience in order to advance certain goals and interests" (Cordner). She explains how the uncertainty of science allows stakeholders to sway environmental policy making away from preservation and conservation efforts, typically for capital gain. Her study involved interviewing approximately 110 people composed of scientists, state and federal regulators, industry representatives, fire safety experts, and environmental health activists on the use of flame retardant chemicals in consumer products. These chemicals slow combustion in products like electronics, insulation, furniture, etc. Several flame retardants have been banned due to their negative effects on human health, and the ones still in use have a similar form and function to those that have been banned. Exposure to some of these products has been proven to cause cancer, reproductive defects, thyroid disorders, neurodevelopmental disorders, and diabetes (Cordner).

In conducting the interviews Cordner observed three types of SSTs: Selective SST, meaning elaborating on advantageous pieces of evidence, Interpretive SST, emphasizing one augment in an inconclusive finding, and Inaccurate SST, or deliberately mistranslating scientific evidence to the audience. Her findings demonstrate how science can be used to advance political and economic interest in environmental policy making. By engaging selective science, social media as well as accredited news sources perpetuate division on issues such as climate change.

The era of social media has also decreased exposure to opposing viewpoints of all kinds, including those about environmental controversies. Hendriks et al. conducted a study, analyzing opposing Facebook pages related to a controversial coal seam gas project in Australia. They analyzed how competing groups and arguments were discussed on social media and how they influenced stakeholders. They found that social media pages on environmental topics typically create echo chambers for like minded individuals, and that people often don't engage in conversations outside of these echo chambers nor in person. They found that social media strategies polarize issues and increase the close minded gap between opposing sides instead of encouraging collaboration (Hendriks et al.).

In addition to social media echo chambers and SST perpetuating polarity amongst the public and between policy makers, Michael Morris and Steven K. Su discuss the role of social psychology in their article *Social Psychological Obstacles in Environmental Conflict Resolution*. They define social psychological obstacles, which include thoughts, motivations, and feelings, as "tendencies in social perception and decision making that impede negotiators' progress toward



efficient solutions” (Morris & SU). Using these barriers they assess specific characteristics of environmental conflicts, one being the way in which individuals comprehend facts. “A barrier to comprehending the facts of an environmental conflict is the tendency to resolve uncertainty or complexity in a way that supports one’s prior belief” (Morris & SU). This supports Cornder’s hypothesis that information consumers are susceptible to SST that reinforces a prejudice as opposed to cold hard facts that negate their prior attitudes, behaviors, and values. When information presentation is skewed toward one interest, polarity is intensified and acknowledging an opposing viewpoint becomes more difficult, let alone collaborating with it. The majority of their research is focused on the conflicting goals of economic and environmental interests and how psychological obstacles are impeding the ability for the two to work together on environmental issues like climate change.

In order to combat these obstacles to mutual understanding and collaboration, individuals must work on their media literacy. Media literacy is the ability to access and evaluate media in a variety of ways and platforms, to seek credible sources (Center for Media Literacy). Inaccess to and or ignorance of accurate climate change science perpetuates polarity in climate conversation, creating feedback loops. People who are not media literate can perpetuate incorrect information published by media outlets regarding climate change, unaware that the information is misguided. Caren Cooper has developed a strategy to encourage media literacy by incorporating both laymen and scientists in the creating and distributing of information. The PES model uses two-way discussions between citizens, scientists, and policymakers to promote public trust in environmental science and policy making (Cooper). The goal is to empower people to have confidence in their knowledge and to value science. Through the creation of public scientific discussions and engagement, it is possible to overcome many of the barriers brought about in scientific translation and to overcome social media induced polarity.

Psychological obstacles, such as the tendency to resolve uncertainty or complexity in a way that supports one’s prior belief, can inform strategies for bias checking and facilitating emotional, intellectual, and substantive climate conversation. Overall, psychological obstacles, science, and social media increase polarity and make facilitating emotional, intellectual, and substantive conversations more difficult. But if these obstacles are kept in mind, interlocutors can hurdle them on the path to collaboration and mutual understanding. But even upon evaluating the development and polarization of environmental perspectives, catalyzing action is often very challenging, even for individuals whose ethics it aligns with.

### **Theme 3: Why it’s difficult for individuals to take action on climate change**

Science calls for a much more aggressive approach to climate change if the worst consequences are to be avoided. For the purposes of this research, one could categorize actors into two levels, the individual and the corporate or governmental. This review is interested in what factors motivate an individual’s climate action or inaction. Miriam Webster defines



activism as a doctrine or practice that emphasizes direct vigorous action especially in support of or opposition to one side of a controversial issue. In terms of climate activism, this could be anything from political campaigning to composting could be considered “climate change action”. On the individual level, societal issues such as poverty, work, lack of education, and psychological roadblocks are often what prevent a person from taking climate action, even if he/she supports the cause and understands the threat. Being able to identify these roadblocks to climate action is the first and foremost step toward addressing them.

Per Espen Stoknes has identified five psychological barriers people have that inhibit climate advocacy in his theory “The 5 Ds of Climate Change”. The first barrier is distance. Climate change, to many, does not seem like an immediate issue. It makes appearances as occasional disasters and statistical trends at most, but is not a present an in-your-face threat. The second barrier is doom, climate change is seen as so enormous and overwhelming that people bury their heads in the sand as opposed to confronting it with action. The third barrier is dissonance, where behavior is rationalized in order to deal with feelings of guilt. Denial is fourth, which as it suggests, denies the existence of climate change. According to Stoknes, this does not come from ignorance but from fear, anxiety, depression, and a lack of hope. The fifth barrier is Identity. Identity determines what kind of media, values, and new ideas a person accepts or rejects. When identity takes precedence over facts and science, one can find his or herself stuck and isolated in unhealthy behavior, even if it’s self detrimental (Stoknes).

Matthew Wilburn King further expands on these cognitive hang-ups that explain why climate change is hard for humans to address in his article, “How Brain Biases Prevent Climate Action”. Just like Stoknes, King says that humans are not evolutionarily wired to tackle long term threats like climate change. It is a far off, complex, non-immediate threat, evident only through statistics and long-term trends which are much less compelling than immediate threats like terrorism and war. As animals, the human brain evolved to handle immediate threats to its survival (Wilburn). This evolutionary factor is behind many (over 150) cognitive roadblocks to addressing climate change (Wilburn). One of the most important evolved roadblocks/biases is hyperbolic discounting, which emphasizes present threats rather than future threats. The bystander effect plays a large role as well, where one believes that others will address a problem (Wilburn). Despite the issues these evolutionary biases present, Wilburn asserts that humans are, on the other hand, equipped to fight climate change. Humans possess the capacity to anticipate future events, whereas other animals do not. Wilburn discusses the concept of Dunbar’s number, an idea tested that in a cooperative group beyond an amount of 150 people there is a tendency to lose trust and faith in collective goals. Wilburn discusses cases where working in smaller groups has yielded positive results, a strategy that can be used for motivating climate action on the individual level.

In addition to understanding these roadblocks, it’s important to know how to manage and overcome them, encouraging those who care to take action. Sarah Jaquette Ray’s “A Field Guide



to Climate Anxiety” claims that having a sense of purpose is the most helpful tool in maintaining happiness, as opposed to seeking pleasure or eliminating discomfort. Rather than focusing on specific actions to mitigate climate change, Ray centers on cultivating a healthy mindset to avoid burnout, integrate optimism, and maintain a sense of purpose in climate change activism. She argues that a great life is not a life without problems but one that is filled with them. In sticking with Dunbar’s number, the suggested cognitive limit to the number of people with whom one can maintain stable social relationships, individuals can focus on grassroots initiatives in their local communities to maintain a sense of purpose in climate change activism. This will help avoid the dissociation that Stoknes identified in his “5 Ds of Climate Change. Even among climate change sympathizers it is common to see inaction in the face of such a paralyzingly large problem.

In summation, these sources identify concrete reasons for the inaction of climate change sympathizers, but also ways to combat it. People’s relationship with the environment and climate change are complex, often more complex than they think. In order to reach mutual understanding and collaborate on controversial issues, people must understand these complexities, such as what has shaped their perspective, why it has or has not changed, and what influences their behavior associated with the environment and climate change activism. The goal of this project is to draw out this understanding in others through well directed, emotional, intellectual, and substantive conversations. As a guide, the final section of this review includes resources on conversation and interview techniques.

#### **Theme 4: How to facilitate an emotional, intellectual, and substantive conversation about the environment and climate change**

This literature review aims not only to synthesize the primary social and psychological influencers of climate change mentality, but also to serve as a guide for having productive climate conversation. As suggested previously in this review, key to resolving environmental conflicts is constructive (as opposed to destructive) conversation between individuals and stakeholders. These conversations are often high tension and difficult to resolve in a fashion that meets all parties’ desires.

In 2019 Sarah DiGiulio wrote an article for NBC News called “9 tips for talking to people you disagree with.” This article lays out simple steps for conversing with someone who holds one’s opposing opinion. According to DiGiulio, the first step is asking whether or not the other party is ready and willing to have the conversation. By mutually agreeing, both parties can be prepared mentally and emotionally to enter it. Throughout the conversation, it is important for interlocutors to look for places where they can agree, and reinforce his/her understanding of the other party’s side. This signals to the other person that he/she is listening intently as opposed to focusing on proving his/her own point (DiGiulio, 2019). Another helpful tip from this article is to avoid using the word “but”. It acts as a subtraction sign in a conversation, erasing the validity of what the other has just said. Finally, DiGiulio stresses the importance of anecdotes throughout



high tension conversations; this keeps the conversation specific and factual, avoiding hyperbolic language and the risk of one's conversation partner dismissing him/her as exaggerating (DiGiulio, 2019).

Mark Feldstein expands on DiGiulio's advice for conducting healthy conversations by discussing the difference between open-ended and closed-ended questions and how they relate to comfort. Feldstein explores a broad comparison of the techniques and goals of journalism versus oral history interviews in his 2004 piece titled "Kissing Cousins: Journalism and Oral History". This piece contributes to the theme of neutralizing contentious conversations by discussing the importance of making a person feel comfortable, able to speak freely in conversation (Feldstein, 2004). Asking open-ended questions leads to a discussion whereas asking close-ended questions "gets a result" (Feldstein, 2004). If one asks questions that make the other person feel trapped, then he/she has lost the opportunity to have free, open, and problem-solving conversation.

Whereas Feldstein discusses the pragmatic elements of productive conversation, Courtney Seiter of Buffer Blog takes DiGiulio's *perceptive* elements of conversation one step further by introducing the concept of "flexible listening". Everyone has heard the term "active listening", but flexible listening is "... listening not just to the words [a] subject is saying but also the tone in which the words are said, the pauses and nuances of the answer and what's being left unsaid" (Seiter, 2014). Flexible listening incorporates body language cues that tell the interviewer when to move on and when to probe. Being able to interpret the tone of someone's response is a powerful and necessary tool for interviewers, making for a comfortable and respectful experience. With sensitivity to these nuances, an interview will feel much more like a conversation than a laundry list of questions. Flexible listening is a much more intuitive practice, but one that can lead to a deeper understanding of the interview subject and topic at hand.

Despite all efforts to incorporate the above methods into a contentious conversation, like climate conversations so often are, different values often lead to disagreement. But as Melody Martin points out in, "'Agree to Disagree' Is Not an End, It's a Beginning", disagreeing is not always a bad thing. "What if the point of the conversation is not to agree, but to have a conversation?" (Martin, 2020). According to Martin, disagreeing with other people is a healthy part of society. Martin concurs with DiGiulio and Feldstein's idea that instead of trying to change or control one's conversation partner, both parties should try to understand one another (Martin, 2020). If people enter a conversation wanting to be right, they've automatically lost the ability to understand the other's perspective and the goal of "communication" at its most fundamental level has been lost (Martin, 2020). This can be related to solving environmental conflicts by keeping in mind the goal is to find solutions. If a person discredits the validity of another's values, concerns, or desires, then they are less likely to reach a working consensus.

Researchers Nathaniel Greiger, Janet K. Swim, and John Fraser have recognized societal disengagement with climate change conversations and conducted a study to get to the bottom of this phenomenon. According to Greiger, Swim, and Fraser's article "Creating a climate for



change: Interventions, efficacy and public discussion about climate change”, there is a positive correlation between climate change discussions and knowledge-based intervention. They found that “...a knowledge-based intervention which communicates climate change information in a simple, accurate, and engaging manner that is easy for learners to recall and repeat will promote increased public discussion of this topic” (Greiger et al). This knowledge-based intervention offers people a clear explanation of what causes climate change and links these causes to their impacts. It also connects “solutions language” to community-level actions that are within the scope of a listener’s sphere of influence. As stated in theme one, the research of Lehman et al shows that most people have a pathetic understanding of the environment and climate change. So relating the personal experience and emotional attachment (or detachment) of an individual to knowledge-based intervention will be key to its success.

In the podcast portion of this project, facilitators will seek to engage with participants in a meaningful and emotional way. Appropriate techniques in conducting emotional interviews is important to consider. A journal article from Law and Method out of the Netherlands, *Conducting Sensitive Interviews: A Review of Reflection*, by Angela Melville and Darren Hincks, explains some best practices for conducting emotional interviews. They define sensitive research as, “...research about emotionally difficult topics that require participants to face issues that are deeply personal and possibly distressing” (Melville). When trying to uncover an individual’s emotional stance on climate change it is important to have tools to do it tastefully and effectively.

The first step is to establish a rapport with one’s interviewee, “which refers to the relationship of trust between researcher and participant. Rapport can be used to open conversational space. Researchers often try to build rapport by starting an interview with general questions” (Melville). Additionally, the authors explain that researchers must prepare for a sensitive interview by watching model interviews, gathering knowledge on the topic from academic literature, and obtaining background information on each participant, along with preparing for the participant to become distressed or raise ethical dilemmas during the interview (Melville).

If a goal of the researcher is to evoke emotion from their interviewee, they need to acknowledge the individual may begin to feel uncomfortable, angry, and/or change topics. It will be important for facilitators to plan for these behaviors and have backup responses such as asking more fact-based questions or allowing the individual to take a break. The authors also encourage not to avoid uncomfortable topics. If a direct approach is taken the individual may be open to exploring their feelings further. Asking why they are upset or uncomfortable is also appropriate alongside letting the individual know the feelings are acceptable. Recognizing key techniques in conducting sensitive interviews will prepare facilitators for a safe and welcoming engagement with participants.



In terms of solving environmental conflicts, communication that is focussed on mutual understanding is crucial to creating meaningful and sustainable solutions. For policy makers to find a solution that meets every individual's values, goals, and desires is a naive expectation. But there is a way to move forward that incorporates primary values, goals, and desires for the greatest number of people possible. The first and most fundamental step is facilitating emotional, intellectual, and substantive conversations even if it respectfully ends in agreeing to disagree. If these techniques are utilized in climate conversations, just solutions will follow suit.

### **Conclusion**

Research suggests that experience, upbringing, biases, and emotions are the primary influencers of a person's attitude toward the environment and climate change. For us to make progress, we must take steps to begin understanding that environmental and climate change convictions are much more complex than they seem at face value. The convictions that individuals hold on these issues are shaped by the natural, cultural, sociopolitical, and historical contexts in which they were raised, down to finite daily experiences. By understanding the intricate nature of our attitudes toward the environment and climate change, we can facilitate productive conversations that lead to progress and sustainable compromise.

This literature review and subsequent podcast series will encourage our audience to develop an environmental self-awareness and sense of belonging in a global context. It will also help the audience to understand the complex origins of diverging and converging climate change perspectives. By minding conversation tips such as finding points of agreement, listening intently, providing a safe and respectful atmosphere, creating rapport, being cognizant of pacing, tone, and flaring emotions, this will help our audience improve the quality and outcome of environmental and/or climate change conversations in which they partake. There is sufficient literature on the topics of attitude and ethic formation, the reasons for cognitive reception or rejection of climate change information, and conversation-based solutions. This literature review bridges the gap between these topics and will assist in understanding the confluence of environment, emotion, and strategies for conducting holistic dialogue.

\*\*\*



## **THE PODCAST SERIES**

Before we engaged in the strategic conversations with participants, facilitators familiarized themselves with the research and practiced conducting emotional, intellectual, and substantive environmental and climate conversations with no less than three people. Once facilitators selected a pool of participants and were prepared to begin the podcast series, they familiarized themselves with the participants' known backgrounds. This helped avoid redundant and/or generic questions and gave the participants the opportunity to speak more personally. We aimed to have 10-15 participants, but nine individuals participated. Each conversation was roughly an hour in length and recorded for further analysis and podcast production. They were conducted in a safe, welcoming, and quiet space, primarily of the participants' choosing. For some that was an office, for others their living room. In order to work with the range of our participants' availabilities and locales, several interviews were conducted via Zoom. This made for variation in the audio quality, but the intention of incorporating as many perspectives as possible, without exclusion due to availability, was important to us. Each facilitator guided one to two conversations, and no less than two individuals oversaw audio editing and production.

The podcast format was chosen for a variety of reasons. With the end goal being to conduct emotional, intellectual, and substantive climate conversations in daily life, modeling those conversations was essential. Podcasts offer many benefits the written word does not. For example, podcasts capture the audience's attention because people like information that is easy to consume and don't like to dwell on one piece of text for too long. With text, people can't decipher your emotion, and some elements like your tone, sarcasm, etc., can be lost. Podcasts also create a personalized experience for the audience and listeners can hear thinking patterns regarding environmental conversations. This podcast is intended for environmental laymen and scholars alike, with content appropriate for young adults and older. Once the conversations were conducted and edited, members analyzed them based on the participants' overarching reactions and opinions. Each episode was composed of conversations that fit thematically, and episodes were released on a biweekly basis. The intention of the podcast series is to encourage listeners to develop an environmental self-awareness, a sense of belonging in a global context, to find connections between oneself and "opposition," and to understand the complex origins of diverging and converging climate change perspectives.

\*\*\*



## PROJECT FINDINGS AND ANALYSIS

### Findings

Over the course of conducting these conversations, editing, and publishing our podcast, the findings of our research were reflected in real life scenarios. We set out to discover why environmental discussions are often challenging, tense, and stagnant, both in our personal lives and between stakeholders that are tasked with solving environmental challenges. Our research suggested that experience, upbringing, biases, and emotions are the primary influencers of a person's attitude toward the environment and climate change, and we found that to be the case for our podcast participants as well. For example, experiences like going on Safari, scuba diving, growing up on a ranch, or going to boarding school as a child all influenced a person's unique relationship with the environment they grew up in and/or now inhabit. The political leanings or careers that a person's parents had, their socioeconomic position, their ethnicity, and particular emotional ties to places and memories all influenced these relationships, which is to say they are complex and for good reason. When asked, all nine participants thought that conducting emotional, intellectual, and substantive (in other words, productive) environmental conversations was not only possible but necessary for sustainable problem solving. But most also agreed that it was hard to do.

For that reason, it was challenging to incentivize people who were not proponents of or otherwise appreciators of the environment to participate in the project. Therefore, we were unable to incorporate as many perspectives as we would have liked, nor able to demonstrate the full range of environmental conversations that we set out to exemplify. We reached out to 15 individuals but were declined by the founder of an investment firm, a university student, a professor of anthropology and Native American studies along with others. We would have liked to "work across the aisle" a little more by including the perspectives of people working in resource extraction or other environmentally relevant industries to put differing perspectives in conversation with one another holistically, but a number of factors prevented that from happening. We were primarily working within the pool of people we already knew in order to accommodate the capstone's timeline, and that pool didn't include anyone in the resource extraction industry. The closest we got was the founder of the investment firm who is capital



driven and what some might consider “not environmentally friendly”. We wanted to include as many voices as possible under the pretense that every voice matters. So although we were unable to incorporate every perceived stakeholder, we found an encouraging level of tension, emotion, and empathy in the conversations we had, demonstrating the every-voice-matters ethic all the same.

The overall goal, as mentioned above, was for listeners and participants to develop an environmental self-awareness, a sense of belonging in a global context, to find connections between oneself and “opposition,” and to understand the complex origins of diverging and converging climate change perspectives. Although we have not implemented a method of determining if the project impacts our listeners in that way, we watched these conversations transform our participants in real time. No matter the expertise, biases, or history of the individual, we challenged our interviewees to walk in others’ shoes on record. In the exercise of role reversal, we helped our participants reach an elevated level of self-awareness and find a depth of empathy they may not have known they had and listening to the podcast encourages the same practice.

### Implementation Challenges

We did not face extensive challenges in project implementation. However, we did face a few that impacted our timeline and ability to incorporate certain aspects of the podcast, the first being factoring in potential interviewees' response times. We started reaching out to individuals at the beginning of the semester. It often took several emails before we heard back, making it difficult to stay on track with our deadlines. Also, some individuals were unable to interview until later than we would have liked. There was a large gap between the first interview and the last; roughly two months apart. As the months went on, our own understanding of the project and its desired outcomes developed. Therefore, early interviews focused more heavily on career and present day whereas later interviews focused more heavily on childhood and development. In some ways, we weren't able to see the big picture ourselves until all the interviews were completed, and by that point following up with anyone for more information was challenging.



Balancing the interviewees' locations and comfort level with meeting in-person was also a challenge, leading some interviews to have been conducted on Zoom. Interviewees were either not in the Missoula area, did not have the time to meet in-person, or did not feel comfortable with an in-person interview due to COVID-19. Therefore, we had no uniform modality for recording the audio. This impacted the continuity of audio quality throughout the podcast as a whole, but we determined as a team that the benefits of working with these folks outweighed the costs. To counter the variation in raw audio from our interviews, we conducted all the metavoices, the reflection and summary done by ourselves as hosts of the podcast, in the Mansfield Library's One Button Studio which produced audio with more clarity and consistency. The One Button Studio is a video and audio production studio, where we used high quality recording equipment.

The sheer quantity of interviews was also challenging to manage. Our initial goal was to work with 15, but the nine we conducted and produced had us at maximum capacity between finding participants, scheduling, recording, grouping into episodes, editing, marketing, and publishing. None of us had extensive familiarity with the process, so we all had to learn the ins and outs of a new media which took time. Another complicating factor was that editing could only be done by one person for the sake of continuity between the episodes and working as efficiently as possible. Without our editor having graduated, the workload would have been nearly impossible for any other member. If we had both semesters to dedicate to the interviewing, editing, and production of a podcast instead of just one semester, the project would have been much more feasible.

The last implementation challenge is that we did not apply for funding and faced unexpected funding issues throughout the semester. We thought we could complete this podcast without any monetary support. Unfortunately, when it came time to release the second episode on Spotify, we were informed that a subscription was necessary to continue, which was unclear in the research we did beforehand; we thought we could do so for free. Therefore, one team member purchased a subscription to upload the episodes. This will impact the amount of time our project will be available to the public because it is unsustainable for us to maintain the subscription.



### Recommendations for the future & lessons learned

Although we do not plan on continuing this podcast into the future, if it were to continue, we would recommend changes based on what we have learned. The first recommendation is to expand the variety of participants. Due to time and resource constraints, we primarily had access to people we already knew or knew of. As each one of us in the group are pursuing environmentally inclined careers, many of the individuals we know or contacted were also environmentally inclined individuals. That hampered our ability to incorporate the perspective of as many backgrounds as we would have liked. Intentionally seeking a variety of political, personal, or career backgrounds is important, especially those that may not be associated positively with the environment or climate change. To do this, requests for participation in the podcast must make people feel welcome and not intimidated or put-off. To alter this issue, it would be important to emphasize the group's desire to hear the candidate's full story, and how each of our backgrounds impacts our ability to have productive conversations instead of emphasizing strictly environmental conversations. It would still be important to include the environmental component, but to do so alongside political or other social conversations that the theory can be translated to. Invitations to have conversations about a variety of topics would make participation less intimidating for those who don't consider themselves environmentalists.

We also recommend funding to compensate the podcast participants. Compensation in the form of money or gifting is commonplace and we were unaware of that. This will broaden the population of people willing to participate in interviews. We learned that specific groups of people are approached for interviews more frequently than others. This leaves individuals taxed by countless hours of interviews, without being compensated for their work. Therefore, many individuals no longer participate in interviews unless there is a form of compensation. Compensating them for their time and perspectives is the most appropriate and respectful thing to do.

As far as team communication, it is vital that everyone be on the same page every step of the way, especially regarding big-picture desired outcomes. Due to the large number of group members, it was difficult to nail down the nuanced angle from which we were approaching the



topic. Missing meetings or not having enough time to discuss goals led to incohesive results when we divided up tasks and worked independently of each other. To ensure everyone is on the same page, more detailed documentation such as meeting notes would be beneficial, as well as more time dedicated to planning and preparation.

We also faced the issue of not having all the information that we wished we had from an interviewee. Throughout this process, we determined that it is important to compare the interviews sooner rather than later; so, if there needs to be another conversation with an individual it can happen. For future reference, it is important to follow up, when necessary, as it is better to have more information from an individual than not enough. A follow-up conversation closer to the time of the interview makes it easier to connect to topics during the original interview and also gives the editor more time to begin editing.

Lastly, creating a podcast is very time intensive. One must be efficient and designating a single individual to edit the audio is most beneficial. At the beginning of the editing process, we all tried to participate but it was an unproductive use of time. By designating one individual to edit, it gives others time to conduct more interviews, code existing ones with topics and timestamps, and market. We also determined it is beneficial to have one or two other individuals help the editor determine which parts of the interviews will be included. Editing efficiently will make the process much smoother and less time consuming.

\*\*\*

## **CONCLUSION**

We have learned a lot about what it takes to craft a podcast, and we hope the lessons learned will not only benefit us but others looking to follow in our footsteps. Logistically speaking, we faced difficulties regarding participation, but we think that could have been solved with financial incentives to encourage a more diverse pool of opinions. Additionally, due to the large size of our group communication was sometimes difficult, but altogether we worked through the challenges using conversation techniques that we ourselves were researching and practicing. Going forward that could be solved by taking more thorough meeting notes. We also



learned that editing is a one-person job given the boundaries of the editing technology, but that having another person's opinion in terms of content selection is helpful. But most importantly, we learned that we are each capable of holding highly emotional and intellectual conversations that will undoubtedly benefit us in our personal and professional lives. We learned how to advocate for ourselves and what's important to us; we learned technical skills like audio production and practiced a crazy amount of public speaking. All in all, this learning experience was so enriching, not only in terms of content but also in terms of the people we collaborated with along the way. A heartfelt thanks to each and every one.

\*\*\*



## ACKNOWLEDGEMENTS

We would like to extend our sincere gratitude to the following individuals for making this project not only possible but a true pleasure:

### Interviewees:

- Burke Holmes
- Bob Giordano
- Malou Anderson Ramirez
- Bart Morris
- Claudia Medina
- Carrie Richer
- Corey Cleveland
- Twila Old Coyote
- Sarah Aronson

### Mentors:

- Peter McDonough
- Jeanne Loftus
- MacKenzie Forbis
- Kelli Littleton

### Collaborators:

- Aubrey Frissell, artwork
- Rowan Ulrigg, music

\*\*\*



## APPENDIX

### Podcast Link

<https://open.spotify.com/show/7rlSrL4PuSWg2i0mYA1mKg?si=fe392ad1ee6846de>

### Common Questions Asked in Every Interview

- Tell me a time when you felt extremely aware of and/or connected to your environment.
  - Does this awareness affect conversations you have with people who don't share your same views?
  - How?
- Thinking about the future with climate change, list 3 words you think of, how you feel and why?
- Do you know your core values? What are they?
- Who were your role models or inspirations growing up?
- Have you ever thought about your own biases/how your upbringing has shaped your relationship with the environment?
- How do you deal with interactions and conversations with people who disagree with your thoughts and opinions on climate change?

OR

Do you believe healthy and substantive conversations about controversial environmental topics are possible in today's society?

- If YES, what do you think people need to do to achieve these conversations?
- If NO, What do we need to do to get to a place where they are possible?
- What do you believe is the biggest factor that inhibits people's ability to have productive conversations about the environment?
- How do you hope to communicate with others about environmental issues in the future?

\*\*\*



Marketing Material



SCAN ME





## References

- Atchison, J. (2019, July 9). *5 reasons you should start a podcast in 2019*. business.com. Retrieved December 14, 2021, from <https://www.business.com/articles/start-a-podcast/>
- Center for Media Literacy. “Media Literacy: A Definition and More.” Media Literacy: A Definition and More | Center for Media Literacy | Empowerment through Education | CML MediaLit Kit™ |. Accessed November 30, 2021. <https://www.medialit.org/media-literacy-definition-and-more>.
- Cherry, K. (2021, February 20). How can our attitudes change and influence behaviors? Retrieved from <https://www.verywellmind.com/attitudes-how-they-form-change-shape-behavior-279589>
- Clayton, S., & Manning, C. (2018). *Psychology and climate change: Human perceptions, impacts, and responses*. San Diego: San Diego: Elsevier Science & Technology.
- Cooper (2011), Media Literacy as a Key Strategy toward Improving Public Acceptance of Climate Change Science, *BioScience*, 61(3), 231–237, <https://doi.org/10.1525/bio.2011.61.3.8>
- Cordner, A. (2015). Strategic science translation and environmental controversies. *Science, Technology, & Human Values*, 40(6), 915-938. doi:10.1177/0162243915584164
- Geiger, N., Swim, J. K., & Fraser, J. (2017). Creating a climate for change: Interventions, efficacy and public discussion about climate change. *Journal of Environmental Psychology*, 51, 104-116. doi:10.1016/j.jenvp.2017.03.010
- Stoknes, P. E. (2016). *Five Ways to Climate Action*. BI Business Review. Retrieved December 3, 2021, from *BI Business Review*
- Hendriks, C. M., Duus, S., & Ercan, S. A. (2016). Performing politics on social media: The dramaturgy of an environmental controversy on Facebook. *Environmental Politics*, 25(6), 1102–1125. <https://doi-org.weblib.lib.umt.edu:2443/10.1080/09644016.2016.1196967>
- King, M. W. (2019). *How brain biases prevent climate action*. BBC Future. Retrieved December 3, 2021, from *BBC Future*



- Lehman, B., Thompson, J., Davis, S., & Carlson, J. M. (2019). Affective images of climate change. *Frontiers in Psychology, 10*, 960. doi:10.3389/fpsyg.2019.00960
- MORRIS, M. W., & SU, S. K. (1999). Social psychological obstacles in environmental conflict resolution. *The American Behavioral Scientist (Beverly Hills), 42*(8), 1322-1349. doi:10.1177/00027649921954886
- Moser, S. C. (2007). *More bad news: The risk of neglecting emotional responses to climate change information* Cambridge University Press. doi:10.1017/CBO9780511535871.006
- Palmer, C., McShane, K., & Sandler, R. (2014). Environmental ethics. *Annual Review of Environment and Resources, 39*(1), 419-442. doi:10.1146/annurev-environ-121112-094434
- Ray, S. J. (2020). *A field guide to climate anxiety: How to keep your cool on a warming planet*. University of California Press. ISBN: 9780520343306
- Roeser, S. (2012). Risk communication, public engagement, and climate change: A role for emotions: Risk communication, public engagement, and climate change. *Risk Analysis, 32*(6), 1033-1040. doi:10.1111/j.1539-6924.2012.01812.x