Deforestation, biodiversity loss, and the changing climate are some of the more certain and harmful socio-environmental problems that face this planet. Recent years have seen dramatic increases in the available technology to combat these harmful problems. With this, however, we continue to see unsustainable levels of environmental degradation. Many have found a relationship between human environmental values and reduced concern for natural systems.¹ Here I argue that explanations beyond human environmental values are worth consideration if we hope to both understand and affect human behavior toward the environment. In particular, I suggest here that a consideration of values as they relate to personality and identity should guide both the general framing and also the conceptual underpinnings of information that is consumed by the public.

The relationship between human values and environmental change is complex. Values are those internal factors that help us identify what is important. There is evidence to suggest that these facets are relatively stable, and at their core, are similar across cultures of humans.² This is not to say that culture does not influence the way individuals conceive of the environment. Indeed, major religious traditions in India are nested in environmental harmony;³ whereas the roots of Western type ideologies are much more individualistic and human-centric.⁴ Despite these differences however most developed nations face widespread environmental problems, which are positioned to reoccur within developing nations. Environmental ethics therefore may be represented differently to the public in different nations. In India, for example, there are strong central innovative environmental protection policies that are not enacted likely because of differences in local
governance, whereas in the United States, there is greater expectation for adherence to federal policy, but environmental policy is often limited by fears over limiting individual freedom; a critical value.

Values are thought to be relatively stable, but personality traits can impact values. Personality traits are those internal drivers of motivation when there are no external influences. These, like values, are considered quite stable. The big five personality traits are openness, conscientiousness, extraversion, agreeableness, and neuroticism. A person tends to fall along the spectra of these traits which can influence motivation. Markman (2019) in his review of Fetvadjiev and He’s 2019 study on how personality traits change over time, points out how certain personality traits are associated with well-being and that changes in personality over time (though modest) can precede changes in well-being. With this, however, changes in well-being were most associated with changes in values. While the intent of the study was to investigate stability in personality characteristics, those of us who investigate environmental behavior can use this and other such articles to understand why models of environmental values and behaviors do not do well to predict outcomes in a general sense (as a caveat, these models tend to do better in much narrower contexts).

This consideration of values and personality traits, I argue, are essential to understanding individual identity. My colleague and I wrote about identity in a previous volume defining it as the internal narrative that one holds about themselves. Individuals tend to act consistently with their identity but identity can change over time and with influence from others. Teasing apart these less to more mutable factors can provide hints as to how one might frame problem and its required actions to find a solution.

Framing also requires an understanding that people tend to have perceptual and cognitive biases. Markham in a Harvard Business Review article (2019) highlights how three critical biases can influence individual perceptions around the threat and immediacy of environmental problems and in particular climate change period. Markham explains that while individuals tend to be motivated to avoid threats, those that are uncertain, occurring over time, and tend to follow exponential paths are particularly hard to motivate mass action; This means that large scale, temporally mediated, and somewhat uncertain threats to human well-being (i.e., the major threats to life on this planet (e.g., climate change, deforestation, and loss of biodiversity) are those that do not seem to motivate large scale-individual or collective action. In response to these biases, Markham (2019) also suggests action. If individuals tend to engage in temporal-discounting, where benefits in the near term are weighed heavier than those in the long term, then perhaps finding ways to help individuals see the future as more near term (aka, this is happening now and affecting you) might help change their weights. Markham also encouraged consideration of uncertainty in terms that individuals can relate to in an effort to help them make judgements about likelihood. In sum, Markham is talking about shifting the frame or the lens by which individuals are encouraged to view a situation.

To change the frame, I argue, that individuals need to have basic conceptual understandings that move beyond appealing to values alone. If one does not frame to some level of conceptual understanding, then how can individuals be made to understand costs and benefits in the near and long term? It seems that without a sense of how certain elements in a system relate to each other we cannot determine if the weight (whether positive or negative) that we place on these elements is accurate. Further, if we do not see how trends are plotted across time and space, how can we understand compounding or exponential effects? Finally, if we do not see how effects (whether additive or multiplicative) can be integrated into percentages that make sense how can we make a reliable assessment of risk. These basic concepts touch on mathematics, science, literacy, and logic and are difficult to explain with only very simple models or analogies. In fact, I argue that such simplicity can serve to conflate not improve conceptual understanding.

In this editorial article I have touched upon several areas of human personality, values, and, understanding. I have done so with the intent of pointing out that human value is related to the underlying personality traits
of who an individual is (akin to 11) and this is strongly affected by human well-being. Taken together this can help shape an individual’s identity and influence the type of problem framing that most appeals to them provided that they are experiencing some level of rational well-being. Such framing, if it is to be successful, however requires that individuals have a basic idea of how environmental threats compound to create a range of risk. Individuals then can weigh risks in a manner that is consistent with their underlying motivations and concerns. Taken in sum, this means that considering the above two examples; in India participatory action strategies can encourage the necessary individual action to enact federal policy and in the United States, individuals can understand the critical collective action necessary to create federal policy.

References