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Empathy-Based Conservation: An Interdisciplinary Approach to Conservation Policy and Decision-Making

by

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Empathy-Based Conservation: An Interdisciplinary Approach to Conservation Policy and Decision-Making

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Introduction

In the late 20th century, neuroscientists in Italy discovered a neuron in the brain capable of mentally mimicking the emotions derived from the actions of others (Rizzolatti and Craighero, 2004). It is the process that makes your elbow ache when someone else knocks their elbow on the counter or the uncontrollable smile that creeps up when someone smiles at you. No questions asked, people intuitively sense what others are feeling. The old school of thought was that humans deduced through logic and reason the actions of others and interpreted the emotions through a rational process (Carew et al, 2008). As neuroscience progresses, they have discovered more and more about how much people rely on their emotions to interact with others and make decisions. The mirror neurons

in our brains allow us to make judgments about situations without being completely conscious of them. But when those emotions become conscience, it is often referred to as the act of empathizing with someone or, more simply put, walking in the other person's shoes.

What could this have to do with conservation? The choices people make to recycle, reduce consumption, and reuse everyday products often comes not because of our rationalization of the activity through scientific fact, but because we are empathizing with someone or something. People have changed their conservation behavior due to feelings for the plight of penguins losing their arctic habitat, someone in another country not having access to the same comforts they enjoy, or a neighbor downstream drinking polluted water. They also choose to abide by the laws of game wardens when hunting to make sure population levels are sustainable and enter into agreements such as the Conservation Reserve Program to make habitat for animals and promote ecosystem health. Regardless of what side of the fence they sit on, people make all sorts of decisions based on emotions, whether they empathize with their future great-grand children or the animals themselves. It seems like common sense that we are, at base, emotional beings.

Most economic theories, however, are not based on such an irrational means of making choices. Those neoclassical economic theories rely on the assumption that we are all rational, self-interested beings that will always act in a way to maximize profit or utility. This is a dangerous assumption since it literally controls the formulas on which the U.S. economy bases growth, price, and

prosperity. So if the basic utility curve from microeconomics assumes that a person will act rationally and they act irrationally on emotions, where does that leave us?

Hundreds of millions of dollars each year are dealt out for conservation programs, many of which operate on these same economic assumptions, using direct payments and subsidies as economic trade-offs for best management practices. Perhaps direct payouts aren't the most efficient way to cultivate conservation practices for everyone. Seemingly the system needs be looked at from an interdisciplinary angle combining what is known of linguistics, psychology, sociology, economics, and environmental science to form a new contextual framework for conservation behavior and policy-making.

Framing, Context, and Metaphor in the Conservation

Perhaps more than anything else, language reflects this capacity for empathy expressed through our emotions. Language and its many intricacies, influenced as it is by empathy, in turn, play an important role in context and framing of ideas, arguments, and values. One of the most common ways in which we express ourselves is through the use of metaphor. This may not seem to be crucial to the conservation rhetoric, but it actually plays a more important role than many people think. Commonly, metaphor is viewed as a poetic construct of language used to express ideas in a sophisticated and lyrical manner (Lakoff Johnson, 1980). The way we use metaphor and where we use

them may have more to do with context, especially relating to what we share in common with others as arising out of the process of empathy, operating out of the subconscious.

The use of conceptual metaphors is prevalent in everyday expression. For example, the phrase “time is money” may express more about how people metaphorically conceptualize money or time than just a clichéd phrase. Consider the phrases, “I spent time with my family” and “that cost me my lunch hour.” Both phrases clearly express time in terms of commodities, but we rarely think of the use of those phrases as metaphorical (Lakoff and Johnson, 1980). If the metaphorical context is stripped from these types of ideologies, however, there is not much left to qualify the terms in our minds (Fesmere, 2000; Lakoff, 1999).

The use of metaphorical expressions and “value-laden terms” is also recurrent in how we frame environmental concepts (Trudgill, 2001), especially in the evolution of the interests we share with others about the environment. The study of psychogeography and psychobiogeography are based on the use of terms of senses and emotions reflecting the way people view nature and the personification of natural features (Trudgill, 2001). Instances of the usage of these morally loaded terms are a frequent construct in framing the conservation debate. The environment and ecosystems are often described as fragile, disrupted, unbalanced or balanced, vulnerable, and endangered. These terms, although referring to simple concepts such as increase and decrease, inject ethical values and metaphorical context into an ecological construct that is viewed by others as empirical. The general public relates to the references to an

ecosystem as fragile, which leads to the assumption that it can be easily broken because they view it in that context. As Trudgill (2001, p. 684) argues, these terms “refer to deeply held motivating emotions” and “underlie a conservation ethic which stresses the value of species”. Many people's environmental ethic, though, does not put such high value on species other than humans. The people with an anthropogenic environmental ethic have problems extending their empathy to include all sentient being or living things. Including such ethically loaded terms biases those that lean toward narrower environmental ethics.

Regardless of the empirical values, data sets and graphical representations, values and emotions are still subconsciously, one could argue, injected into the interpretation of the data. Relating to conservation behavior and decision-making, acknowledging and accepting that these value-laden, metaphorical expressions are essential to our descriptions of the environment is important in evaluating environmental policy and how these decisions are made. A person would be hard pressed to find any conservation policy, either pro-environment or anti-environment, that is strictly empirical with no set of values injected into scientific evidence. It is and always was a highly emotional issue based upon a differing ethic, rather than a scientific disagreement.

Perhaps this is culminated in the argument of why environmental policy has largely failed in the last hundred years. Policy decisions often live and die by their fiscal notes, formulated around microeconomic principles of maximization and estimated agency expansions, all rationally considered. The microeconomic principles that presume the rational, self-maximizing nature of humans,

seemingly opposite of the emotion charged, irrational descriptions discussed above, which become revealed in language and subtly operate in the conversation about conservation. The feelings on expansion of agencies and increased expenditures as they take on extra duties and regulatory actions are based on political rhetoric, not empirical evidence that the expenditures opportunity-cost will be greater with or without the policy. And often, the effect that bad conservation policy is passed because of emotional, moral driven motivations, doing little collective good for the environment or society, while good policies are often passed-up due to an over emphasis on the short-term cost versus long-term benefits.

As illustrated, it actually comes down to the emotions and values behind the decisions rather than just the literal meaning or empirical data behind the decision, that decides who wins or loses the policy debate. How the debate is metaphorically framed is often the deciding factor in the decision being made. Lakoff would assert that whoever frames the debate, wins the debate (Lakoff, 1999). In a historical example, Lakoff examines the metaphorical argument behind former-President Jimmy Carter's framing of the 1970's energy crisis as the moral equivalent to war (Lakoff, 1980). Although there were other frames that were comparable to President Carter's war metaphor, Carter's prevailed and resulted in much harsher energy policies. He was able to frame the debate and thus win the war. The same could be said for a more recent example, the War on Terror. Terrorism isn't a literal construct as it is an ideology. It's not a state, a country, a regime, it is merely a construct of emotions such as fear and hatred. It

is created from an act of terrorism, which usually involves invoking unwarranted fear and thus reaction among people. Because the President and his cabinet were able to frame the debate in such violently emotional terms, they prevailed in gaining the support of the nation for preemptive strikes against both Afghanistan and Iraq. Although these are very political examples, they both glaringly illustrate the importance of framing.

To the conservation debate, the language used to frame the debate, put it into context, and conceptualize it, with each in turn driven by the capacity for and expression of empathy, are very important to the success of either side. Both language and the empathy-based feeling it represents, both leading to the way the matter of conservation is framed, play an important role in the tempering of the self-interest toward conservation choices.

A large part of the pre-policy framework building process is considering the demographics and attitudes of the stakeholders that will be affected by the policy. This is a chance for policy-makers to set the stage for the debate over the policy, defining both the terms and context in which the issue will be discussed and conceptualized. Take for example the term global warming. To a climatologist, there is an understanding of the context in which the term is used. The average global temperature has increased over a period of time with a net global warming effect. This effect, however, has not been felt equally across the latitudes. Some places have seen colder than average temperatures and greater seasonal fluctuations in temperatures. The average person, however, does not associate the term global warming with a net climatic affect. It has been reflected

in terms of weather and changes from year-to-year, not in a span of several decades or centuries. The media and opponents of the economic and political effects action to combat global warming would have latched onto this poor job of framing and used it to poke fun at and discredit the empirical data. The term climate change is also equally ambiguous as it can mean changes from warmer or colder and is also a more complicated concept that without background knowledge is hard to conceptualize. Poor framing and poor communication exacerbated the confusion and led to the discrediting of an empirically substantiated concept of a trend toward a warmer climate. The common demographic and attitudes of the stakeholders, who are, in this case, the global population, was not considered and the level of understanding was not assessed. The attitudes of the stakeholder demographic must then be assessed and evaluated prior to policy implementation.

Attitudes and Behavior of Stakeholders

Environmental attitudes and their effect on the ensuing behavior to either reduce environmental impact or not has been a reason for contention for the last 40 years in both the conservation and psychology-based disciplines. Traditionally, attitudes have not been strongly correlated with corresponding behaviors. Much of this research, however, has relied on self-reporting mechanisms such as the New Environmental Paradigm (NEP) survey measure of Van Liere and Dunlap (1980). Van Liere and Dunlap's NEP survey has been widely used in its entirety as well as just sections of it to assess environmental attitudes. Because it is a self-reporting mechanism, however, it is a measure of

explicit attitudes, or conscious attitudes. Even in Scott and Willits (1990) more recent study in Pennsylvania, using the NEP did not comprehensively show any strong correlation between the explicit attitudes of the participants and their behaviors. This weak correlation is also reflected in other studies. In Kollmuss and Agyeman's (2002) synthesis of current theoretical frameworks to explain the gap between attitude and behavior, there exists no empirically supported conclusion, only educated guesses or assumptions. There are suggestions by several researchers that perhaps the answer lays in direct or indirect experience with nature, normative influences, and/or locus of control (Kollmuss and Agyeman 2002, Rajecki 1982, Hines, Hungerford, & Tomera 1986).

It is a possibility, on the other hand, that the explicit measures are not a valid measure of internal attitudes, rather just a reflection of group associations or normative social behavior, especially when dealing with issues that are socially sensitive or politically polarizing. This dual-construct theory of attitudes is referred to as attitudinal dissociation (Greenwald and Nosek, 2006). It is theorized that by measuring implicit attitudinal associations using a latency response, a more valid measure of internal or actual attitudes is obtained. Unlike self-reporting measures, which can be inaccurate due to the ability of the reporter to pick up on vernacular cues and research intent (as I like to put it, the chameleon effect), implicit measure instruments are hard to fool. Using latency response mechanisms, if the person is attempting to consciously project a certain attitude, it will increase the response time and the data will reflect the conscious (explicit) decision or dissociation between the two items (Greenwald et al, 2009).

Conservation practices have become progressively more polarizing as the differing political rhetoric and news media representation have necessitated, at least in the minds of some, an either pro-environmental or pro-capitalist identity for the conversation. So having a measurement that can, at least to some extent, lessen the self-reporting bias is essential to get a true measure of attitudes.

The process is not meant to completely rule out the explicit attitudes either. Both are important to see the entire scope of how normative and implicit associations play a part in the conservation decisions and the ensuing behavior. Both play a role in the decision-making process. The empathetic part, it can be argued, is largely implicit to begin with. However, as it becomes a conscious process of reflecting upon those emotions, empathy can become an explicit association. The gap then is the same as it is for the attitude-behavior discussion. If people have a natural propensity to empathize with one another and consciously weigh the decision, why don't they always act upon those notions? Why is there so much variance between the empathetic emotions and the sympathetic action?

Empathy-Based Decision-Making among Producers

Sheeder and Lynne (2010) empirically quantified the propensity toward empathy and the ensuing interests of people by surveying agriculture producers along the Blue River in Nebraska. Their goal was not only to discover and

document the level of empathy-sympathy, but also the role that self-interest and group-interest play in the conservation discussion in the agriculture sector.

The Blue River of Nebraska runs south into Kansas where it connects with Tuttle Creek Reservoir. Tuttle Creek is the main source of drinking water for the city of Manhattan, Kansas. Atrazine, a herbicide commonly applied in the production of corn and sorghum, has reached unprecedentedly high levels in the water system, posing a health risk to those who consume the water, even post-treatment. A cooperative effort between the Universities of Kansas and Nebraska, both states' Department of Agriculture, the Nebraska Department of Environmental Quality, and the Kansas Department of Health and the Environment have been working to develop a solution to controlling the atrazine levels as well as other farm byproducts (Franti et al, 2000). The development and implementation of best management practices have been integral to the solution. But how do you not only find practices that are acceptable to a majority of producers *and* implement them effectively?

The Sheeder and Lynne (2011) study begins to address these two questions by giving the researchers a better idea of the nature of the producers along the river. A survey was mailed to producers in four counties along the Blue River, two in Kansas and two in Nebraska. A total of 4,191 surveys were sent to farm operators in this target area. The operators were offered monetary compensation for completing the survey with 639 responses returned. The survey collected data including the number of acres of highly erodible land and non-erodible land farmed, the extent to which conservation tillage is used, farm

income, soil slope, and self-interest and group-interest. An accurate measurement of selfism and magnitude of control were also assessed.

The results of the study showed that unlike the traditional microeconomic approach, the actual results favored a new metaeconomic approach to conservation behavior, getting rid of the assumption of self-interest only. The survey ranked the producers based on their answers on a scale of 0 to 7, with 7 being absolute self-interest and 0 being absolute other-interest. The agriculture producers' average score was a 3.29, illustrating the participants were more oriented to the shared other-interest than to self-interest only. The Likert empathy scale used, which also ranked on a scale through 7 with higher scores indicating an increased propensity to empathize with Tuttle Creek users, had a final average result of 5.06, showing significant ability to empathize with other users, with empathy the first step on the way to the evolution of an other (shared with others, yet internalized)-interest. The biggest divergence comes with the sympathy scale, however. Although the data shows that the producers lean toward selflessness and empathetic tendencies, there is a much larger variability in their willingness to take the empathy and act on those feelings in the form of sympathy, the latter leading to entering into common cause in an operant other-interest, like that related to less downstream water pollution.

The data from the survey confirms that the metaeconomic approach would be more applicable than the traditional microeconomic approach due to the empathetic nature of the producers. The problem now lies in transferring those emotions into sympathy, and thus action coming out individuals with more

orientation to the shared other-interest. When we talk of sympathy, it is not in the sense of feeling sorry for another being or creature, but more actions associated with the ensuing feelings, acting on the basis of "just how would I wish to be treated" if in that situation. It is hypothesized that if the issue is framed in the appropriate manner and proper education on the opposing stakeholders is given that the producers can be "nudged" into sympathizing with, and thus joining in common cause with, the downstream users, as reflected in this shared other-interest.

Policy and Decision-Making Implications

Because emotions play such a large role in language usage, context, attitudes, and ensuing behavior or decision-making, they must all be considered in the pre-policy discussion and policy implementation process. Because these frameworks are in some sense more abstract and a greater challenge to quantify, they have been largely ignored in the fiscal analysis and policy debate. A new era in policy-making considerations is thus needed to increase effectiveness and efficiency.

The first consideration in the pre-policy process should be the attitudes and empathetic tendency of the stakeholders. As discussed, there are numerous ways that these can be assessed and quantified to provide insight into the demographics and potential behavior of the stakeholders. Collecting this data can then influence the framework used to communicate the intent of the policy

and the likely effects in a non-polarizing manner, allowing for adequate and unbiased reflection. Information can then be circulated not only about the policy, but also including the stakeholder interests. Leaving it at information dissemination is not enough; the stakeholders must then have the opportunity to empathize, and thern perhaps join in sympathy with each other, perhaps through face-to-face meetings and hearings. Including this in the process would help them to relate to one another and possibly provide the nudge toward actively sympathizing with one another. After this initial pre-policy process is complete, the policy itself can be fully drafted and a fiscal analysis should be conducted.

Typical fiscal analysis is accomplished in the policy drafting process. Creating a fiscal note that focuses on agency expansion, increase or decrease manual workload, and direct economic benefit only, prior to any public discussion on the policy can lead to an economic-bias created before a fair discussion has even been contemplated. Also, ecological and social capital, both highly abstract concepts, are not included in the equation because they are hard to measure, although measuring empathy is the first step. But, it is necessary to include them because they play a defining role in policy effectiveness and implementation. Using a metaeconomic framework, such as is suggested by Sheeder and Lynne, including consideration of other(shared with the larger group)-interest and self-interest rather than the traditional economic framework focusing only on self-interest, would increase the likelihood of policy success and fiscal assessment that more accurately reflects reality. Now, instead of having an economic-bias before the policy discussion has even occurred, policy-makers can actively

reflect on the complete fiscal impact, balancing stakeholder interests and long-term metaeconomic impact.

This process could transcend some of the politically polarizing platforms that prevent policy action and greatly increase the procedural justice of the policy-making process. Including the constituent stakeholder in the discussion from the beginning, instead of the policy-makers political interests, has the potential to develop not only better policy, but policies that are easier to implement do to being more widely accepted across a broader span of the stakeholder population. The policies will never please everyone, but at least it will moderate the process, tempering the self-interested with the good of the group, shared among everyone in the group, and the group-interested with consideration for profit and individual prosperity.

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