

The Environmental Commons: Collective Moral Actions and Policies

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Abstract

Contrasting policies according rights of humans to non-human entities (corporations vs. rivers) and the principles guiding behavior within those competing moral orders provide the ecological argument for this chapter. As an alternative to a moral order that privileges private ownership of natural resources, we provide an example from the Anishinaabe people where cultural practices remind people that their identity is rooted in the land and that other species are their relatives. The interdependence of humans with other living things is extended in our discussion of *Environmental Commons* theory. Tenets of this theory and educational practices that flow from its principles are used to address the challenges raised in Bandura's discussion of the mechanisms by which humans selectively disengage from moral responsibility for the environment.

Keywords: environmental commons, ethics of community, interdependence, moral disengagement, environmental ethics, environmental identity

The Environmental Commons: Collective Moral Actions and Policies

On January 21, 2010, in the *Citizens United v. Federal Election Commission*, the United States Supreme Court held in a 5-4 decision that freedom of speech prohibits government from restricting independent political expenditures by nonprofit and for-profit corporations. This so-called *Citizens United* decision guaranteed these entities the same rights to free speech as persons enjoy under the Constitution.

On March 15, 2017 New Zealand's Parliament granted the Whanganui River, known as Te Awa Tupua by the indigenous Whanganui Iwi community, the status of legal personhood. The parliamentary bill was the culmination of 160 years of activism by the Whanganui Iwi who consider the river part of the living mountains and the sea. The New Zealand case is not unique. The constitution of Ecuador declares that nature “has the right to exist, persist, maintain and regenerate its vital cycles” and a court in Northern India has referred to the Ganges and its tributary, the Yamuna, as living entities. As recently as September, 2017, a suit was filed in Federal District Court in Colorado to get the Colorado River recognized as having the same rights as a person and holding the state of Colorado and its governor liable for violating the river’s “right to exist, flourish, regenerate, be restored, and naturally evolve.” Referring to the *Citizens United* decision, the suit held that if a corporation has rights, an ancient waterway that has sustained human life for all of its existence deserved the same status.

The decisions by the United States Supreme Court and New Zealand’s Parliament – each granting rights of personhood to a nonhuman entity – reflect opposing world-views that set the stage for the moral arguments at the heart of our chapter. Ours is an ecological argument, i.e., that policies at the macro level reflect the current cultural views of a community or society and those views inform the mundane transactions, practices, and relationships in which people

engage and the moral choices that they make every day (Bronfenbrenner & Morris, 2006). We begin with a definition of the *Environmental Commons* to emphasize the fundamental relationship of humans with other living things and then draw an example of that relationship from the belief system and practices of Native American communities. Our specific example comes from practices of the Plains Anishinaabe provided by co-author, Becca Dower, who is of Anishinaabe descent. Following that, we summarize Bandura's argument about the mechanisms whereby people selectively disengage moral self-censures that might prevent them from engaging in environmentally harmful behaviors. To address those mechanisms of moral disengagement, we discuss practices we have been documenting in k-12 civic/community-science projects. These projects emphasize the interdependence of humans with other living things and the collective moral agency of local citizens in protecting the natural environment in their community. Principles enacted in these civic/community-science projects echo those identified by Elinor Ostrom, political economist and winner of the 2009 Nobel Memorial Prize in Economic Sciences, and her colleagues as principles that enable community groups to make sustainable choices and avoid a "Tragedy of the Commons".

Opposing World Views as Foundations for Moral Development

The *Citizens United* decision was named for the conservative nonprofit organization that brought the suit against the Federal Election Commission, arguing that limiting the amount of money organizations can spend in elections violated their Constitutional right of free speech. Here we do not take issue with the conservative ideology of the organization but rather with the moral order that it reflects. We challenge the decision on two grounds. First, although the basis of the decision was that organizations and corporations are collections of individuals and thus deserve the same right to free speech accorded individuals, the power to exercise free speech

(whether as individuals or organizations) is unevenly distributed. The Citizens United decision gives additional power to exercise free speech to those who already enjoy and benefit from their powers of free speech.

Second, the ruling reflects a moral order that privileges individual autonomy and ignores the insurance of basic human needs that enable all members of a community to exercise self-determination. The interpretation of freedom in this decision is based on individual rights – *freedom to* – speak, act, think – that is embedded in the liberal orientation toward justice in the practices of United States culture and enshrined in her Constitution. As philosophers have pointed out, the capabilities to engage in such autonomous actions also depend on *freedoms from* -- hunger, poverty, illiteracy. Such privations effectively exclude some individuals and groups from having a voice in policies that affect their well-being (Nussbaum & Sen, 2004). The *Citizens United* decision is relevant to our thesis on moral development insofar as that decision is a logical extension of a moral order that privileges individual self-determination and rights of speech and expression untethered to a larger community and ultimately unchecked by responsibilities to a larger whole (Sandel, 1996).

According to Jensen's (2008; 2010) cultural developmental approach to moral development, an Ethic of Autonomy is privileged within this world view. The focus is on persons as individuals and moral reasons include interests, well-being, rights of individuals and fairness between them. In an ethic based on individual autonomy, the phrase, 'fairness between them' is the only allusion to others. In this model, the exercise of freedom by those others may conflict with one's own. Thus, determining what is fair implies a process of negotiation over competing rights and interests. The kind of political community reflected in this liberal interpretation is what Sandel (1996) has called a thin version of democracy where citizens have the right to live

independent lives and to determine *on their own* what they value and how they want to live.

In contrast, the Whanganui's struggle to get the government to grant rights of personhood to a river reflects a moral order based on a principle of interdependence. According to a spokesperson for the community, the Whanganui viewpoint conceives of the well-being of the river as directly linked to the well-being of the people. Thus, it is important that the river be recognized as its own identity. As Gerrard Albert (as cited in Roy, 2017), the tribe's lead negotiator, explained,

We have fought to find an approximation in law so that all others can understand that from our perspective treating the river as a living entity is the correct way to approach it, as an indivisible whole, instead of the traditional model for the last 100 years of treating it from a perspective of ownership and management.

The principle of interdependence also figures in what Sandel has described as the republican interpretation of democracy in which citizens obtain and guarantee their liberty by participating in political communities and deliberating with fellow citizens about how, collectively, they should live together (Sandel, 1996). This latter vision of democracy is closer to cultural models that emphasize citizens' roles within a larger community and the moral obligations to act on one another's behalf (Ihara, 2004; Rosemont, 2004).

The natural resources that sustain life that are celebrated in the Whanganui vision of the connection between the river's and people's well-being and the deliberative practices with fellow citizens in the civic republican vision of democracy are core elements in our definition of the environmental commons. In this world view where the emphasis is on persons as members of social groups, moral reasoning in Jensen's model would be based on an Ethic of Community in which duty to others (with others broadly defined), and concern with the customs, interests, and

welfare of groups figure prominently as bases for moral decisions and actions (Jensen, 2008).

The Ecological Argument

The contrasting world views reflected in the *Citizens United* and Whanganui Iwi cases – each according rights of personhood to non-human entities – have implications for moral development on the ground. Children construct their moral identities as they participate in cultural communities that share key beliefs and values including conceptions of humans, of nature, responsibilities, and rights (Goodnow, 2010; Jensen, 2015). People exercise agency but they do so within particular social, economic, and political systems. The policies, institutions, and reward structures of those systems regulate transactions in the everyday settings where children are growing up. Ultimately, moral standards emphasized in socialization practices at the micro level are informed by moral principles enacted in policies at the macro level (Bronfenbrenner & Morris, 2006; Flanagan, Lin, Luisi-Mills, Sambo, & Hu, 2014). Although an Ethic of Autonomy or of Community may figure in any individual’s moral decision making, children’s moral development is more likely to be informed by the ethic that is reinforced by their culture’s beliefs and practices (Jensen, 2008; 2010). At the same time, cultures and policies are dynamic, the product of human choices. They inform but do not determine human decisions.

The Environmental Commons

Our argument for the Environmental Commons raises moral questions about humans’ relationship with the natural environment and the ethical implications of the distinct world views discussed in our introduction. In the next section, we explain what we mean by the term, *Environmental Commons*, and discuss the moral implications implied in this world view. Following that we describe the cultural practices and beliefs of the Anishinaabe people to illustrate how this indigenous group’s identity is informed by core principles of an

Environmental Commons framework.

By the *Environmental Commons* we refer to: 1) the natural resources and systems on which life depends (water, air, land, other species) and 2) the public spaces and settings where people gather and decide how they will insure the health of the living systems on which their community depends. The moral implications of this framework are that: a) the natural resources that sustain healthy lives cannot be owned as commodities but instead belong to everyone and b) the public spaces where people assemble and make decisions about their commons are rights of all people (Bowers, 2006; Flanagan & Galloway, 2014; Galloway, Lupinacci, Sarmiento, Flanagan, & Lowenstein, 2016).

The two interpretations of the term cannot be decoupled as is evident when natural resource commons are transformed into private commodities. Vandana Shiva (2005) uses the example of seeds to illustrate how privatization of what had been commonly managed, disrupts the natural systems on which life depends. In order to create a market and make a profit, the natural life cycle of seeds has to be transformed materially so that its reproductive ability is blocked. The legal status of seeds must also be changed: instead of being owned and managed as a commons by farming communities, seeds are legally defined as the private property of corporations.

Social Justice Implications of the Environmental Commons Framework

From a social justice perspective, there are moral implications of an environmental commons framework (Flanagan, Byington, Galloway, & Sambo, 2016). First, because the commons provide the resources essential to sustaining life, it is unjust when powerful actors extract and privatize those resources. As the Whanganui Iwi community argued, nature has a right to exist and to regenerate itself. Nature and natural systems have existential value and thus

moral standing. Second, since there is a finite supply of many natural resources, overconsumption by the powerful and privileged is immoral because the costs of that consumption are disproportionately borne by the less powerful. Across the earth, island and low-lying countries that have contributed the least in greenhouse gases will likely experience the worst impacts of climate change (Samson, Berteaux, McGill, & Humphries, 2011). The livelihoods of many indigenous groups who have followed traditional ways of living in concert with nature are being compromised by the forces of climate change and by corporate mining and oil drilling (Klein, 2014; Le Guen, Iliev, Lois, Atran, & Medin, 2016). Within the United States, brownfields and toxic manufacturing that pollute air, soil, and water are typically located in low-income communities. In addition, people living in those communities are less likely to have access to clean and safe outdoor spaces (Grist, 2006) and are more likely to suffer from health problems such as asthma. Not surprisingly, ethnic minorities are more likely to get recruited into environmental activism when the intersections of racial and class injustice with environmental injustice are made clear. For example, organizing efforts in Detroit, Michigan show how high rates of asthma are due to the political decision to locate large trash incinerators in the very communities where those rates are high (Gallay, Lupinacci, et al., 2016).

Our definition of the environmental commons also invokes the rights of all people to have a voice in decisions about natural resource use and the health of their community. The right of free speech accorded to corporations in the Citizens United decision is an affront to the moral claim of an Environmental Commons framework because it exacerbates extant power differences in whose voices count in policy decisions. Analyses of policy-making in the United States Congress indicate that members are far more likely to pay attention to the concerns of the most

economically advantaged constituents than to those of constituents in poorer communities (Bartels, 2008).

Finally, our definition of the environmental commons alludes to two kinds of freedom. By emphasizing people's right to healthy life-giving resources, we allude to the importance of *freedom from* want. By emphasizing the collective voices of all people in decisions about those resources, we allude to *freedom to* self-determination, the rights of all citizens in a democracy to author their lives. Moral claims of lives guided by an Environmental Commons ethic are illustrated in the cultural values and traditions of the Anishinaabe people discussed in the next section.

Cultural Understanding of Human-Environment Relationships

Last summer, co-author, Rebecca Dower, visited the Roseau River Anishinaabe community in southern Manitoba. Dower is a descendent of the Turtle Mountain Band of Ojibwe (Anishinaabe) Indians. As the community shared a meal, an elder, inspired by his young granddaughter running around, began telling stories of youth within Anishinaabe communities. Children, he said, are still part spirit and therefore have unique roles in our communities. The youngest members of a society represent a purity in their connection to the spirit world and they bring older community members great joy in their honesty and free play. The gifts children bring to community are reciprocated with adult guidance and teachings meant to give young people the tools and skills needed to be a part of that unique community. These teachings are often given through oral tradition and modeling.

In many indigenous communities, identity is formed through relationship to humans and non-human relatives of a particular place as well as to the spirit world of that place. Kin structures are distributive and the whole community assumes responsibility for raising a child.

For example, in many Native communities, a child's father's brothers are not seen as uncles but also as fathers. These understandings of kin mean that a child has multiple mothers, fathers and grandparents, all of whom guide and teach the child. The repeated reinforcements of these kin relationships (through names, activities and time together, etc.) mean that children and other community members will quite literally understand the ways in which they are all related.

For groups whose customs include a clan system, it is not just the human community that raises children. In this type of social organization, community members belong to an identity group that relates to a particular animal. Clans are denoted by non-human relatives specific to the place the community traditionally lived. For the Great Lakes Anishinaabe, this includes the loon, crane, fish, bear, deer, pine martin and bird clan. Traditional government and decision making for the Anishinaabe was organized according to clan representation, each having their own roles and responsibilities to contribute to the greater community. For example, the bear clan is responsible for patrolling the community and keeping unwanted visitors away.

Typically, children are born into their clan, inheriting it from either their mother or father depending on how the society is organized. As with human kin, the child learns to observe and listen to their clan animal relatives and through practice acquires the knowledge to assume the responsibilities of their clan. People have a direct relationship to their clan animal and can learn how to interact by observing and listening to its ways. Typically bear clan people are comfortable spending time in solitude with nature as are bears themselves. Since they spend a considerable amount of time close to nature, bear clan people are keepers of medicines and plant knowledge (Benton-Banai, 1988).

Indigenous models recognize relationships to place, to Mother Earth. They reflect an Ethic of Divinity as well as an Ethic of Community. As Pulitzer prize winning author, N. Scott

Momaday (1974) reflected, “To [the Indian] the sense of place is paramount. Only in reference to the earth can he persist in his true identity”. Land is not something to own but a gift from the creator to be cared for by humans. Rather than a hierarchical moral order (with humans at the top) native ways of thinking value intergenerational and interspecies equality. In order to maintain equality, harvesting nature for sustenance requires first an offering, an act of giving to balance that of taking. The Anishinaabe term, *Gakina-awiiya*, means, “we are all related” and refers to connectivity and interdependence between people and the natural world. *Gakina-awiiya* extends beyond just human relatives and encompasses what Winona LaDuke (2005) has called our relatives with roots.

Through stories, language, and customs, children learn the history of their people rooted in a physical place that includes humans and other living things. Lands hold the highest possible meaning in which relationship to place is told in creation stories and oral histories (Deloria, 1973). Typically, indigenous creation stories reference events that happened in a particular landscape, with timing of those events being less important. For example, the Anishinaabe migration story tells of finding “the place the food grows on water” and the great gift of *manoomin*, or wild rice for the people. Just as the place of the wild rice takes care of the Anishinaabe people, the people in turn take care of it. Considered a relative, their relationship to *manoomin* upholds cultural values of natural cycles, intergenerational share, and cultural resiliency through harvest to eating. The August moon, *manoominike-giizis*, signals wild rice harvest time which is carried out in ceremony with deep respect and humility. A team of “ricers” load into a canoe, each with his/her own job. Before any rice is taken, the team will make an offering of prayer and tobacco, giving thanks to the creator for the gift of *manoomin*. One person uses a long rod to steer through the slough while the second uses two cedar rods, *bawa'iganaak*,

to knock mature rice from stalks and into the boat. In doing so, some rice inevitably falls into the water, reseeding for future harvests. Once collected, the grain is dried and parched over fire to remove any moisture inside which ensures the wild rice will not rot. It can then be winnowed, removing deeply colored edible seeds from their outer papery husks. If the process is done correctly, manoomin kept dry will sustain the community until next season's manoominike-giizis. The method recognizes the gift from Earth while serving as a direct connection between ancestors and future generations. Place, with all it provides, has a relationship to the entire community to be sustained for those to come just as it was for the ancestors.

We have described the beliefs, traditions, and practices of the Anishinaabe people to draw attention to the emphasis on human interdependence with the land and other living species and the history of a people in a particular place. Moral sanctions against harming the natural environment follow from traditions that refer to non-human species as relatives, not resources. Moral identity derives from an understanding of self in extended kin relationships – across species, generations, and time. Leading a moral life implies a responsibility to do so in a way that preserves a habitable earth for the future. Such moral awareness is manifest in the practice of being mindful of how one's use of natural resources today will impact the next seven generations (Loew, 2014). The concept of interdependence (between living things and over generations) figure in the socialization of children as elders emphasize the importance of teaching younger generations that they must take care of the land so that the land can take care of the people (Doan-Crider, Hipp, Fight, Small, & Ashley, 2013).

When the beliefs and traditions of a culture emphasize human relationships to and responsibility for all living things we would expect children to hold moral standards of respect for the natural environment. However, what about children growing up in societies with very

different belief systems where commodification and consumption of nature is celebrated? In societies where human interdependence with other living things goes against the grain, can children learn and live by a different moral standard? Put differently, should harmful environmental behaviors be excused in cultures where they are customary?

Based on the gravity of their consequences, harmful environmental behaviors cannot be excused, even in cultures where they are customary. The cumulative consequences of human activity and consumptive lifestyles are exacting serious costs on the earth and its living systems. Nixon (2011) has referred to this phenomenon as “slow violence” because, despite its gravity, it is an attritional, environmental catastrophe unfolding out of sight and dispersed over time. It is an invisible violence produced through customary practice enabled by institutional and societal policies. At the same time, such policies are not a “reified entity disembodied from individuals” but “are the product of human activity” (Bandura, 2007, p. 9).

In the next section, we examine the impediments to moral behavior on behalf of the environment. First, we summarize Bandura’s (2007) argument about the mechanisms that people, groups, and whole societies use to selectively disengage from environmental responsibility. Following that we discuss specific practices documented in our Environmental Commons work that engender moral standards to act in environmentally protective ways.

Moral Disengagement from Environmental Responsibility

Moral disengagement is a core concept used in social cognitive theory to explain the mechanisms whereby people reconstrue as acceptable moral behaviors that violate their moral standards (Bandura, 2016; see Bussey, this volume for a more detailed review of the concept of moral disengagement). Bandura (2007) has applied the concept to explain the mechanisms whereby people will act in environmentally harmful ways without any self-censure restraints.

These mechanisms operate at three loci: the behavior or agent locus; the outcome locus; and the recipient locus.

Concerning behavior, both individuals and societies may justify injurious environmental practices as well-intentioned ones or use sanitizing or obtuse language (e.g., externalities, carbon footprint) to explain them. People can minimize their own agency or accountability for the actions by diffusing or displacing responsibility, for example, arguing that science, technology, or government will fix the problem.

Concerning the outcome locus, people may minimize the impact of their actions. If they live in urban areas they may be oblivious to the ways that their urban lifestyles rely on natural systems. In the case of climate change, individuals might minimize the impact of their personal actions since the problem is due to many people engaging in common practices over time. When people can mentally distance themselves from the threats of climate change, they underestimate its risks. In fact, beliefs that the risks of climate change are distant (whether temporally, socially, or spatially) are major reasons for underestimating its risks (van der Linden, Maibach, & Leiserowitz, 2015). Finally, the outcomes of policies and lifestyles that are the norm of societies in the global north exact costs on societies in the global south but inattention by the media make those outcomes unknown and unimportant.

At the recipient locus, individuals can avoid self-censure by derogating, marginalizing, or ignoring the victims impacted by their actions. They may ignore the impact of environmental harm done today on future generations. In addition, if they believe that humans are superior to other animal and plant species, they may consider human impact on other species of no great consequence.

There has been scant attention to moral disengagement in environmental behavior or to practices that might encourage moral agency. In the next section, we address the challenge of selective moral disengagement by discussing key principles of educational practice that have potential to reinforce moral agency and social responsibility for the environment. Our examples are drawn from the place-based stewardship education projects in urban/suburban schools that we have been documenting in our program of work on *Youth and the Environmental Commons*.

Education to Nurture an Identification with the Environmental Commons

We have been documenting the learning of students in k-12 schools engaged in projects using a unique place-based stewardship education approach. In contrast to citizen-science projects where the expert scientist defines the issue and crowdsources data collection, in the projects we have been studying students collaborate with teachers and adult community partners to define the environmental issue impacting their community, collect and analyze relevant data, and take actions to mitigate the problem.

In analyzing what students learn from participating in these projects we have drawn from the work of Elinor Ostrom, who challenged a prevalent theory in political science known as the “Tragedy of the Commons” (Hardin, 1968). Scholars promoting this theory argued that ordinary citizens were motivated to maximize their self-interest and so would inevitably overharvest natural resources and destroy the commons. To avoid this “tragedy of the commons”, they argued that it would be best if managing natural resources were left to the government or the market, not to citizens. Ostrom challenged both the thesis (that individuals were mainly driven by self-interest) underlying the Tragedy of the Commons as well as its policy implications for democracy, i.e., that citizens should be passive observers in the process of design and implementation of effective public policy.

To challenge the inevitability of the “tragedy of the commons”, Ostrom and her colleagues studied groups around the world who had successfully managed and sustained what she referred to as common-pool resources (water, forests, fisheries). Through these studies they identified certain core practices of groups that enabled them to succeed in sustaining natural resources including: proximity to and knowledge about the local context; identification with the group and its task; and mutual respect, responsibility, and collective actions over time that enabled people to know one another and to build trust (Cardenas & Ostrom, 2006; Ostrom, 2010).

We have documented parallel principles to those identified by Ostrom and her colleagues in our project on *Youth and the Environmental Commons*. In this project we are studying youth engaged in community science collaborations to mitigate environmental problems in their local communities. Each community science collaboration is unique but follows a core set of principles resonant of those identified by Ostrom and colleagues. These include: an emphasis on local place and students’ responsibility and agency for that place; collective rather than individual action with teams of students and adults bringing different experiences and perspectives to bear on the project; group processes that emphasize an interdependence of fate and of group goals. In the next section, we elaborate on how the principles identified by Ostrom are enacted in the Environmental Commons projects and have interspersed quotes from students about “what I learned from the environmental stewardship project” to illustrate points.

Proximity to and Knowledge about the Local Context

All of the citizen-science projects documented in our Environmental Commons work take a place-based approach to environmental education, i.e., students and adult educators study the natural environment as it functions in their urban or suburban community, identifying the

benefits provided to humans as well as problems posed by human impact. Local issues that students have studied include heavy rains and the flooding of their school's athletic fields; benefits of shade trees to temperature levels in school buildings; storm water runoff in local streets and potential mitigation via rain gardens. Moral arguments for this place-based approach come from rural education research where scholars have emphasized that the purpose of education should be to teach students how to re-inhabit their communities. Based on the belief that the dignity of a human life is in the positive impact one can have on the lives of others, students should learn to restore their relationships with the people and the land that define their community (Gruenewald & Smith, 2008; Theobald, 2006). In our studies of community-science projects in rural schools that are part of the Environmental Commons work, we have documented increases in students' sense of attachment to their community and environmental sensitivity. In other words, they feel that the community is part of them; also they are more aware of nature and enjoy it. In addition, students show gains in responsible environmental behavior (e.g., picking up litter and recruiting friends to help the environment) and capacities for civic action (e.g., confidence in their skills in communicating about and recruiting people to address an environmental problem in the community) (Gallay, Marckini-Polk, Schroeder, & Flanagan, 2016).

With respect to urban youth, the value of a focus on local place for engendering moral agency and commitment to the natural environment is critical for several reasons: First, in contrast to rural areas, human's relationship and interdependence with nature is not obvious. If youth are going to be attentive and vigilant about human impact on the natural environment, they must first *notice* nature and natural systems as they exist within their urban setting. Youths' attention must be drawn to ways that the natural environment operates in their urban ecology and

to the ecological balance between human activity and the natural environment. This relates to a second reason to draw attention to human interdependence with nature: focusing on local place means that people can directly translate human actions and impact in a concrete way.

One of the benefits of the community-science approach we are studying is that it enables everyday citizens to attend, monitor, and act on a daily basis. Such everyday vigilance means that environmental changes can be detected and actions taken. Further, as people become attentive and see that they can do something, they become both more empowered and committed. According to the social science on responses to climate change, people are more likely to pay attention to and support policy if the risks are translated into relatable and concrete personal experiences (van der Linden, et al., 2015). Finally, with respect to policies governing the environmental commons, an emphasis on local place means that citizens can attend to the ways that political decisions impact the local environment and can mobilize to hold elected officials accountable.

Awareness of human impact relates to a third reason for the focus on local place. That is, once students learn to monitor and act in environmentally supportive ways, they recruit others – family members, other students – into pro environmental behavior. The projects that we are documenting engage students in *collective* environmental action – to mitigate environmental harm. In this process, students gain a sense of agency as they realize that ‘what is’ does not define ‘what could be’. They learn that human impact on the environment can be positive or negative and that they can choose to redress the negative with their actions. This contrasts with the inertia identified in Kahn’s (2002) studies of children and adolescents in a Texas bayou. Although, in the abstract, the young people he interviewed knew what pollution was, they were accustomed to living in polluted places and, for the most part, did not see the pollution around

them. Kahn theorized that, over generations, increasingly polluted settings had become the new normal. He referred to the phenomenon as “environmental generational amnesia”, alluding to the possibility that the cumulative impacts of environmental degradation mean that, over time, people forget that cleaner environments are even possible. As the following quote from an urban student in the Environmental Commons projects suggests, students engaged in this work realize that there is another possibility and that they can be part of realizing that vision.

It was important for me to work and be a member of the Guardian Team (pseudonym) because it helped me believe in my community. At first, I really didn't care about my surrounding but working with the Guardian Team made me realize I need to do something about it. Also, my community changed a lot because it looked better than it was before I started being in the community.

This quote alludes to a final reason why a focus on local place is important for engendering moral agency in youth. Specifically, it engenders in youth an identification with their community and their membership in it. Many of the Environmental Commons projects take place in low-income ethnic minority communities where residents have been marginalized from policy considerations and consequently have few resources. Negative stories about these communities have dominated media coverage. For young people, distancing themselves from these communities would be a logical reaction. But that is not what we hear in students' reflections. Instead, they point to the sense of pride they feel about contributing to their community and the desire to push back and reclaim the narrative. In fact, the sense of collective agency that they feel in effecting community change is empowering. Engaging in collective environmental action seems to motivate an identification with their community – which leads to

Ostrom's second principle about the characteristics of groups that are effective in managing environmental resources, i.e., an identification with the group and its task.

Identification with the Group and Its Task

Decades of psychological studies point to the role of group identity in people's actions on behalf of the group. When people feel a part of and identify with a group and its goals, they are more likely to cooperate, to act responsibly, even to make personal sacrifices on behalf of the group (Baumeister & Leary, 1995; Pearce & Larson, 2006; Ryan & Deci, 2000). However, there are different ways to define "the group" with which youth in these Environmental Commons projects may identify. And there are different mechanisms through which group identification comes about and enables growth in moral understanding. As noted above, identification with their local community is one interpretation of group identification for the children and adolescents in these studies. A second meaning of *group identification* emerges when we consider that these projects focus on the natural environment. Consequently, there is potential for youth to appreciate the impact of human actions on other species. This would address Bandura's moral disengagement at the recipient locus, i.e., if youth become aware that their actions can have negative consequences for other species, they will be less likely to ignore the victims of their actions. Finally, "the group" with whom young people identify can be the group of fellow students and educators with whom they are working on environmental projects. The mechanisms underlying these processes of identification – with other species and with the goals of a group – will differ. In the case of the former, empathy undoubtedly is at work whereas in the latter case, the mechanism is more likely goal interdependence.

Identification with other living things and with future generations. According to Bandura (1992), the tendency to disregard the negative impact of our actions on others can be

overcome by increasing awareness that there are commonalities between our own needs and those of other sentient beings. That awareness can induce empathic reactions toward those ‘others.’ Typically, research on empathy has defined the construct as an affective response to another *human*’s situation. That work has shown that, whereas empathic responses tend to be biased towards other humans who are similar to oneself, this tendency can be expanded to include dissimilar others, especially when moral principles such as compassion and egalitarianism are combined with the activation of empathy (Eisenberg, Fabes & Spinard, 2006; Hoffman, 2000). The question at hand is, what role might empathy for non-human species or other living things play in overcoming moral disengagement at the recipient locus? The answers from empirical work are encouraging: both dispositional empathy for nature and even empathy that is induced are positively associated with pro-environmental attitudes and efforts to protect nature (Berenguer, 2007; Tam, 2013). Similar to the example from the Anishinaabe people, Tam (2013) has shown that dispositional empathy toward nature is positively related to emotional experiences with nature and with an awareness of other living things as sentient beings. People who empathize with nature are conservationists and are often active in environmental movements (Tam, 2013). And that commitment to preserving nature can be fostered in childhood if adults cultivate time in and a love of nature in children (Chawla, 1999).

In general, orienting attention to the suffering of others – whether humans or other species – may cultivate environmental values and behavior. For example, compassion for humans is positively correlated with pro-environmental values and behavioral intentions and even inducing compassion for human suffering increases pro-environmental intentions (Pfattheicher, Sassenrath, & Schindler, 2016). Experiments also have shown the efficacy of inducing empathy for the suffering of other living things. A simple intervention of a story

reading can be effective in inducing empathy for other species if readers are asked to imagine how the “other” (e.g., a bird or a tree) felt in a distressful situation. Taking the perspective of the other living thing in distress increases feelings of responsibility toward nature and environmental causes (Berenguer, 2007). Inducing empathy for other living things also affects the bases for resolving moral dilemmas: compared to a control group who read the story “objectively”, those whose empathy for other species was induced subsequently resolved moral dilemmas with a greater number and more ecocentric arguments (i.e., valuing nature for its own sake) as opposed to the greater anthropocentric reasoning (nature for the benefit of humans) of the control group readers (Berenguer, 2010).

Besides empathy, moral actions that benefit the environment can be motivated by an awareness of the interdependence of the fates of humans with other living things. According to meta-analyses of research, awareness of other species and human interdependence with them motivates actions to protect that larger community (Bamberg & Moser, 2007). Scholars also have pointed to the psychological role of an environmental identity in motivating moral action on behalf of the environment (Clayton, 2003). Like other group identities, an environmental identity is based on a sense of connection and commitment to a larger whole which then motivates responsible actions on its behalf (Arnocky, Stroink, & De Cicco, 2007; Schultz, 2001). Not surprisingly, environmental activists are more likely than their non-activist peers to report that their sense of self is deeply connected with the natural environment (Alisat, Norris, Pratt, Matsuba, & McAdams, 2014).

Moral disengagement operating at the outcome or recipient locus can also be addressed by increased awareness of the impact of human actions today on the future. In our discussion of the Anishinaabe, we alluded to the seven generations principle practiced by many indigenous

groups, in other words, deciding on one's actions after considering the impact of those actions on the future or the next seven generations.

Researchers studying the phenomenon of *generative concern* have shown that concern with future generations is a moral standard associated with pro-environmental behavior (see Matsuba et al., this volume). Generative concern refers to a conscious preoccupation with the well-being of future generations and an awareness and sense of unrest about the impacts of one's actions on them (McAdams & St. Aubin, 1992). Such rumination and unrest does affect behavior: scholars have shown that generative concern is positively correlated with pro-environmental behavior (Matsuba, Pratt, Norris, Mohle, Alisat, & McAdams, 2012) and also predicts the formation of an environmental identity and behavior over time, over and above the effects of education, political orientation, and benevolent values (Jia, Alisat, Soucie, & Pratt, 2015). The role of parents in nurturing this value in children is similar to that of elders in nurturing the seven-generations principle: parents who hew to environmental values pass those values onto their children (Pratt, Norris, Alisat, & Bisson, 2013).

Generative concern is a moral standard that increases feelings of satisfaction when people live by it and causes feelings of regret or self-condemnation when they violate it. According to Jia et al.'s (2015) longitudinal study, life events can trigger the moral standard of generative concern. For some young adults in that study, becoming a parent rekindled the relationship to and respect for the environment they had learned in childhood and also the sense of self-worth associated with living up to this moral standard. Other young adults in the study recounted an instance when they lacked the courage to take a pro-environmental stance as a definitive moment. Reflecting on that instance elicited self-condemnation about violating their moral

standard. Regret about their failure to act induced generative concern and renewed their commitment to environmental action.

Interdependence of fate and interdependence of goals. Finally, the group with whom youth in the environmental commons projects identify can refer to the group of fellow students and educators with whom they are working on environmental projects. The social psychologist, Kurt Lewin (1948), argued that social groups form when people realize that their fate depends on the fate of the group as a whole and that this awareness will make them ready, even eager to take over a fair share of responsibility for the welfare of the group. However, Lewin also maintained that an even more powerful dynamic was created by an interdependence in the goals of group members, i.e., to achieve the group's goals, members must rely on one another. As the following quote from a student in the Environmental Commons projects suggests, the successful group dynamic evolves if students are prepared to overcome personal obstacles or interpersonal discord in the interests of their shared goal of making their school or environment better.

Of course, being in a group or a team you don't like all the people at first. You're going to have some issues, some problems, some obstacles, but, you know, at the end of the day you're all trying to do one thing. That's make this school, this environment better, so, you know, you better kick your problems to the side and get your stuff done.

Group Dynamics that Build Trust

To address environmental problems in their communities, students and adult educators (both teachers and community members) work in groups where collective action to achieve group goals is emphasized and where within group difference (in age, background, experience, perspective) is an asset. But the benefits of within-group diversity can only be realized if the

dynamics within the group enable the members to know each other and to appreciate that, as the student above noted, “at the end of the day, you’re all trying to do one thing”. Here we refer to Ostrom et al’s third principle, processes of communication, collaboration, and collective interactions over time that build feelings of trust.

Insights into the group dynamics of successful youth groups is germane (see Larson, Walker, & McGovern, this volume). We know that young people are more likely to identify with a community-based organization and be dedicated to its goals if they feel that they matter, that members of the group care about them, respect their insights and contributions (Eccles & Gootman, 2001). The quality of adolescents’ experiences as members of community institutions extends to their sense of membership in and responsibility for the broader communities of which those institutions are a part. For example, research on classroom dynamics suggests that when middle- and high-school students feel that they and fellow students are respected and heard in the mini-polity at school, those students also feel responsible for the broader polity, i.e., their community and society (Flanagan, Cumsille, Gill, & Gallay, 2007). Research on community service provides insights into its unique benefits for enhancing youth’s trust in fellow community members and their views about those residents’ commitments to the common good: compared to their peers who engage in other forms of extracurricular activities, those who do community service (whether voluntary or mandated) are more likely to report that intergenerational harmony, social trust, and compassion for others are characteristics of the residents of their community (Flanagan, Kim, Collura, & Kopish, 2014). Finally, consistent with Ostrom’s conclusion about the group processes that engender trust, longitudinal work shows that in middle- and high-school students, social trust can be boosted by a sense of student solidarity at

school that is founded on practices of communication that respects diverse perspectives (Flanagan & Stout, 2010).

Conclusions and Future Directions

In this chapter, we have drawn from Environmental Commons theory, arguing that behaviors that harm the natural environment or that privatize and commodify natural systems are immoral because water, air, land are essential for life. Thus, not only do those natural systems belong to everyone, but all people have a right to decide how such resources are allocated.

Attitudes toward and relationships with the natural environment vary across cultural contexts and pro-environmental behavior is more normative in contexts where traditions, practices, and policies emphasize human interdependence with other living things. Respect for other living things is evident in the traditional practices of indigenous communities such as the Anishinaabe as well as in laws such as that championed by the Whanganui Iwi community in New Zealand that accord rights to existence and protection to natural living systems.

Moral choices to respect and protect the natural environment are a greater challenge in contexts where practices and policies consider natural systems as resources for human consumption and privatization and commodification of those resources is normal practice. One contemporary example is the Nestle corporation's pumping and selling of water out of the Great Lakes. In such contexts it is common for individuals to behave in environmentally harmful ways, using mechanisms that disengage moral censure. However, even in these contexts there are educational models that challenge dominant cultural practice and encourage students' moral agency. This does require a paradigm shift in education toward, borrowing from rural educators, teaching students how to re-inhabit their communities and restore their relationships with people and other living things (Gruenewald & Smith, 2008; Theobald, 2006).

There is some hope, I think, in the idea of the commonwealth, which seems to acknowledge that we all have a common interest or share in the land, an interest that precedes our interest in private property. Of the precedence of our share in the common wealth the best evidence is that we share also a common health; the two, in fact, are inseparable. If we have the "right to life," as we have always supposed, then that right must stand upon the further right to air, water, food, clothing, and shelter.

As this quote from Wendell Berry (1995, 51) suggests, programs that emphasize the common interests of humanity – the right to life and the right to those natural resources that support life – hold promise even in societies where private property is valued. The place-based community science projects we have been studying emphasize this commonwealth and the insights that students have shared from these efforts suggest that most are learning principles and ethics consistent with an Environmental Commons framework. They become aware of human interdependence with and impact on the natural environment in their urban or suburban context; some even develop empathy for other species. Most students also realize that collective commitment and action is necessary to achieve the group goal of protecting and living in harmony with the natural environment and that this goal supersedes divisions within the group. Ultimately, we believe that projects that engage the attention of youth to the natural environment at work in their local place and that enable youth to take collective action on behalf of the natural environment are a foundation for the formation of moral identities.

The work we have been doing is at an early phase and our findings are based on data collected shortly after students have completed their projects. Future work should document the degree to which students have internalized an ethic of environmental protection. Following

students over time would reveal whether they exhibit generative concern about the environmental implications of their actions; whether they act on their initial enthusiasm to recruit others into environmental protection efforts; and whether some may even take on leadership roles in environmental activism. Nonetheless, drawing the attention of younger generations to the natural environment in their local place and to what they can do to sustain it holds promise for engendering moral commitment and action to preserve the Environmental Commons.

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