Ethics of Climate Change: Adopting an Empirical Approach to Moral Concern[1]

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Abstract:

Introduction

This paper is about the problems ethical deliberation and theorizing encounter when faced with the type of complexity that climate change scenarios present us. In the first part of the paper, I examine the problem of complexity as it undermines our ability to utilize justificatory frameworks to prescribe courses of action. In the second, I attempt to sketch an approach to ethical deliberation that better handles the complex concerns that arise in such situations, referring to an inter-disciplinary research project, Institutional Adaptations to Climate Change, as an example. Given the nature of the paper, the position I take is more programmatic than substantive.

On the Problem of Complexity as Generated by Climate Change

Climate change affects everyone, every culture, every sector of society, indeed, every living (and many non-living) thing in interconnected and unanticipatable ways. Global warming, for instance, has widely ranging effects (e.g., flooding, drought, broadening disease vectors, fires, etcetera); and this list anticipates only physical effects. Viewing it from humanist and social scientific perspectives exacerbates the complexity. As we become familiar with how it affects economics, security, aesthetics, health and the like, we anticipate equally and probably more complex effects on human communities, political arrangements, psychology and possibly religion. Some, if not most, people's lives and ways of life will be threatened, while others' will be enhanced. Just how these effects will be connected remains uncertain.

To exacerbate the problem, many researchers in the social sciences have attempted to analyse vulnerability to climate change issues in accordance with a justice or distributive justice framework, only to find themselves being criticized for imposing western or northern values onto southern and developing nations (argument developed in companion papers). This problem raises the further problem of determining whose vulnerabilities are to be considered, whose perspectives or world views are to be respected and how incommensurable and conflicting values and perspectives should be recognized, weighted and admitted to decision-making procedures. While none of these concerns are unique to climate change issues, climate change brings them to the foreground in a way that forces us to deal with complexity in a way that other arenas seem able to escape. In almost every other arena in applied ethics, we have been able to delimit the discourse to more specifically defined issues (e.g., in medical ethics, abortion and euthanasia can be discussed independently) and terms of reference (e.g., respect for patient

autonomy vs. care giver beneficence). In business and professional ethics, animal and development ethics, we can also delimit in a similar manner, by sorting out what rights are affected, who should be protected by those rights and how they should be protected. The result is that we can fairly clearly and confidently prescribe or proscribe courses of action.

The complexity of climate change, in contrast, is not easily reduced to more workable terms of reference. As in environmental ethics in general, climate change issues demand more holistic approaches, because it is not always clear how to delimit the moral community, what sorts of moral values are at stake and how they are related. For instance, we are beginning to see how attempts to delimit decision making approaches and ways of thinking about conservation of natural resources, e.g., to a western value and epistemological analytic schemes, prevent Aboriginal people from managing natural resources according to their cultural and spiritual values/practices. When dealing with climate change issues, similar attempts at delimiting the scale and types of changes to be examined encounter similar consequences. For instance, in the Institutional Adaptation to Climate Change project with which I am involved, we have focused on drought conditions, only to find that violent storms and flooding had become the primary problem in our area of study at the time field work was being conducted. Granted, these consequences of climate change had been predicted to occur at some point. This does not change the fact that our attempt at delimitation was frustrated, forcing us to expand our frame of reference to include vulnerability and adaptability to various water related conditions. But by so expanding, different sorts of vulnerabilities and relations between stakeholders and institutions became at issue. For instance, had we continued to focus on drought, the Aboriginal community we are studying would have provided little information, since their longstanding problem has been flooding. They had little to say about drought. However, when our field researcher expanded the study to include flooding, the flood gates of issues opened up. While some respondents did address the physical problems, a greater number addressed issues of governance and how the failure of government institutions to protect treaty rights had created their vulnerability and lack of adaptive capacity. We also found that our attempts to delimit our study to formal governance institutions were frustrated by stakeholders wanting to address cultural, religious and familial institutions as key to adaptive strategies. Obviously, then, understanding the nature of stakeholder vulnerability to climate change requires a recognition of an array of what matters to people, their physical and social conditions and the connections between them.

When analyzing the effects of climate change, we need to understand differences between stakeholder value systems in order to understand how to describe impacts or consequences. Some populations in low-lying coastal areas, for instance, will have to be re-located when sea levels rise, if they are to survive. Some of these populations are communities which closely identify with their place of habitation and occupation. Helping these communities adapt to climate change by relocating them to inland areas can result in destroying their sense of identity and security arrangements, much more so than for more transient, less place-identified communities (for whom re-location might be desirable). Familial and social dysfunction can be expected to be exacerbated by such adaptive responses for the former whereas they could be viewed as opportunities for others. The same can be said for different prairie farmers. Re-training them to adapt to drought by adopting irrigation technologies to produce cash-crops can be equally a threat to their identity. This seems especially true for longstanding family farmers who have been dry-land grain farmers. If we consider climate change at greater scales, e.g., widespread increases in violent storms, hurricanes, floods, etc. as in the United States, the consequences of climate change for many more peoples' senses of identity and security may create an ever-increasing demand for re-location and vocational training, which in turn, could undermine people's sense of local or even national identity. In other words, we can go seriously wrong, if we apply decision-making schemes that fail to recognize and account for the complexities of climate change effects. We need to know what should count morally and how it should count in the face of unpredictability.

Another distinguishing feature of climate change issues, which contributes to their complexity, is the increasing resignation that we can no longer focus on mitigating the effects of climate change in an attempt to undo or arrest the damage done by fossil fuel consumption. Growing numbers of scientists, policy makers and researchers of are beginning to shift their focus toward adaptation. As ethicists, then, we can no longer think in terms of preventing violations and threats; we may have to turn our attention toward adapting to them. Ethicists who work in climate change are in an unenviable position, because there is no victory on the horizon to be declared.

What I am suggesting is that we can no longer be as confident about what ethics and especially practical ethics is to do as awareness of complexity increases, delimitation of moral problems because more difficult and defining terms of reference becomes more controversial. But there is more concerning this last

point. Climate change issues exacerbate the growing uncertainty about our ability to determine the "right" course of action, as argued by various critics of "traditional ethics." Feminist thinkers (e.g., Benhabib{Benhabib, 1992 #1168}) have argued that even those whom I consider to be the most promising thinkers to lead us out of this crisis in applied ethics– Jürgen Habermas,{Habermas, 1990 #772; Habermas, 1994 #2963} – proceed in an ethnocentric and androcentric manner. Cultural and feminist critique have made it difficult to know how to proceed in a genuinely recognized universally legitimate manner. Moreover, the growing critique of traditional approaches to ethics by the likes of Rachels{Rachels, 1990 #2502}, Baier,{Baier, 1986 #714} Davis,{Davis, 1990 #1175} Nagel,{Nagel, 1977 #2503} Williams{Williams, 2002 #748; Williams, 1973 #2504}, Sylvan{Sylvan, 1973 #1172} etc.) exacerbates this erosion of confidence. Their effect has been to undermine confidence in the assumption that a rationally constructed grounding for ethical deliberation, because such grounding tends to ignore real world complexities of moral life. (See my *Thinking Ecologically*{Morito, 2002 #2877} for more detailed development of the point).

Sketching a Direction for an Ethic of Climate Change

If we accept the view that complexity engenders a deep problem for ethical deliberation and we reject traditional approaches, as a consequence, is there any recourse? I suggest that there is and that it is worthwhile adopting an empirical/descriptive approach toward climate change issues. It is to allow prescriptive elements to emerge as the normative expectations of stakeholders become evident through various means of identifying stakeholder values. The idea is first to understand stakeholder values before thinking about how to address them normatively. If we reject traditional accounts and can accept that moral life somehow arises in human evolutionary history and belongs to ecological processes, then we have at least *prima facie* reason to believe that agreements over normative values have and can arise in the course of human interaction. Accepting this places us in a kind of Quinean situation, according to which understanding the nature of ethical life and even the principles that are suited to ordering such a life depends on engagement in the complexities of what we call 'moral life.' The term 'empirical' can be somewhat misleading, however, when associated with hypotheses that can be verified or falsified according to observations of people's actual behaviour. For this paper, I expand the concept 'empirical' to include experience and the phenomenon of inter-subjectivity, through which we come to understand one another by communicating and interacting with one another. Thus,

moral life and moral principles are to be explained in a manner consistent with what can be known experientially and inter-subjectively, as much as through what we ordinarily consider empirical investigation (e.g., sociological or psychological studies).

The problem with this approach, of course, is that whatever prescriptions we find people agreeing to will not be binding for all, in the sense that traditional ethical theories attempt to establish. They can not lay claim to *a priori* legitimacy, being grounded in concepts of rational being or human nature. But to say that an empirical approach can yield no sense of legitimacy or rational grounding is to rush to a conclusion. Taking a page from Habermas, Benhabib and others, I wish to suggest that dialogue and negotiation can more successfully constrain agreement over normative values, concepts and principles, than more traditional deductive approaches, if the recognition of stakeholder values is brought about in an appropriate manner. I will attempt to show how the IACC vulnerability analysis supports the view that such agreement can be expected.

By riding on the coat tails of Mill, Rawls,{Rawls, #2971} Singer, Regan, Goodpaster,{Goodpaster, 1978 #2651}Birch{Birch, 1998 #2650} and the like, I hope to get away with assuming that avoiding arbitrariness is a necessary principle of inter-human moral communication and interaction. Arbitrary exclusions or assignings of privilege are the sorts of thinking and decision-making that all people who wish to form communities would adopt as a *prima facie* moral principle. The "empirical" approach to establishing agreement over moral principles requires that, however stakeholders identify their values or however researchers identify stakeholder values, that identification procedure assumes that stakeholders are obliged to give an account of their value commitments. The source of my confidence in this empirical approach is this: at some level of generality, concern for security, a supply of food, availability of shelter, a sense of well being, having a sense of meaning are common across genders, cultures, sectors etc. Not everyone agrees about the specifics of concern, but as members of a moral community, we are all in the protection business. At some level of generality we in fact agree on what needs to be protected. We agree, then, that the avoidance of harm is a central concern of moral communities, which explains why the harm principle has become so central to ethics and why we could expect it to emerge as a central principle in a values analysis.

For purposes of this paper, I suggest that a thorough values analysis would also typically disclose acceptance of at least two other general normative categories, which in turn would enable us to treat them as near universal normative

principles. Leibniz serves here as a lead. In his attempt to conduct research into a the possibility of a universal law, he suggests that every legal system, however culturally different from European ones shares three basic principles. They are: 1) avoiding harm; 2) giving what is owed; 3) trust or integrity.

If this is the case and what I call 'values analysis' will enable these normative principles to emerge, then applying a values analysis can be expected to yield agreement over how to proceed in decision-making on climate change issues. I further argue that the ethnographic work of the IACC project supports placing confidence in this approach.

Identification

What actually matters to people? The IACC's project is to determine whether and how relevant (especially governance) institutions are equipped to enable stakeholders to adapt to climate change. An initial aspect of the research is to identify and explain stakeholder vulnerabilities, which is then to be used to assess institutional adaptive capacity to respond to these vulnerabilities in two regions (the South Saskatchewan River Basin in Canada and the Elqui River Basin in Chile). The idea is to identify stakeholder vulnerabilities to climate change in as comprehensive and thorough manner as possible within certain time and resource constraints. My role has been to conduct a complementary values analysis, first by contributing to the development of the ethnographic methodology and second by analyzing the results of the interviews, focus groups and the yet to be conducted questionnaires. Stakeholders' values are to be identified in as open manner as possible, which will allow us, in turn, to understand what stakeholder vulnerabilities are from their own perspective. The structure of the research team, then, is well-suited to the identification of stakeholder values, in a manner which initially, at least, avoids the pitfalls of impositional approaches to value identification and moral prescription. Using a literature review to identify patterns of stakeholder vulnerabilities and values helps to supplement this open-ended process and deepen value profiles, through, for example, follow-up feedback interviews or focus groups in which various formulations and identifications of stakeholder vulnerabilities/values are tested. This and other devices are used to give depth to these profiles and to serve as a check against misrepresentations.

These profiles are then compared against institutional value profiles to determine how well they are matched. We then ask whether relevant institutions are driven by values that will guide adaptive responses in appropriate ways. Developing these profiles, then, enables us to identify what stakeholders actually

value in a manner that enables them to inform decision-making and policy.

Now, in an attempt to deal with complexity and comprehensiveness, the team is composed of representatives from a wide range of disciplines and sectors, from sociologists to climatologists and from philosophers and economists to managers of federal agencies (e.g., the PFRA). To provide a systematic and coherent approach and discourse on vulnerabilities and adaptive capacity, a concerted effort has been made to transform the initially multi-disciplinary team into an inter-disciplinary one. Each researcher is attempting to be informed by what the others are doing and to communicate their disciplinary expectations. "Integration" is the key. The advantage of this attempt at transformation is that we have become somewhat accustomed to having to deal with diverse perspectives and are better able, thereby, to access diverse stakeholder perspectives. There is no guarantee that we will be successful in our integration efforts, but the focus on stakeholder perspective and soliciting feedback from them helps place pressure on team members to be open and creative in advancing integrative efforts.

Categorization

The second stage of the process is categorization. Still a descriptive function, categorization of stakeholder values is linked to identification, but is better seen as a second order identification. At this level (L2), values identified at the first level (L1) are arranged according to more general categories and their possible relationships noted. Categories, for the most part, announce themselves, particularly where the investigator holds the cultural expectations and perspective of the respondents. Where this is not the case, more care needs to be exercised to ensure that stakeholder perspective's are appropriately represented. Farmers may have a different world view than city lawyers; Aboriginal people may have a different world view from non-Aboriginals. It is important, then, to check the way L2 categories are formulated. What may be categorized as an economic value, but not a spiritual value in one community, for instance, may be categorized as both in another. Thus, it is important not to assume that categories are strict in the sense that they do not allow for cross-categorization or modification as to perspective. Our feedback solicitation process is designed as a check against imposing categorial rigidity.

L2 categorizations begin the process of interpretation and profiling. Once first order values are categorized, patterns typically become evident. Since our field researchers first become familiar with the communities to be profiled by living in community, they become familiar with its ways of doings things and its

norms. Community expectations, behavioural influences (motivations for action), even social arrangements become apparent during this process, so that once profiling processes begin, our researchers are not simply imposing categories to describe patterns of vulnerability/values. A third level (L3) categorial scheme can help sort types of values. Wes Cragg has proposed that a distinction between core and peripheral, negotiable and non-negotiable helps us understand the relative depth of stakeholder value commitments. If a stakeholder group acts as if certain values are non-negotiable and explains why this is the case, we might be able to see, for instance, that holding such values is core to their identity or social cohesiveness of their community. If stakeholders are willing to trade off certain values, a different understanding is called for.

Using a matrix for third order value representation can help investigators and respondents sort out their values. The matrix below is one possible device.

Core ⁄ Peripheral

Negotiable
0
Non-Negotiable

(adapted from Cragg, 1997)

This categorization process, then, is a way to help sort stakeholder values in ways that allow for dialogue across perspectives. It enables different stakeholder groups and institutions to make their values cognizant to others, by allowing categorizations to emerge or be created until a level of mutual understanding is reached. For instance, even though one stakeholder group may not understand or appreciate another's valuing of water as something sacred, by categorizing it as a non-negotiable value, it can be compared against the first group's level 3 non-negotiable values (e.g., love of children) to establish a sense of what being sacred means for group 2.

Evaluation

The first thing to note is that the two identification stages suggest a way of assigning relative weight to various value categories, for both individuals and communities. If we allow the matrix (above) to be scalar so that respondents can place value descriptions alongside and above or below one another, we gain

information about willingness to trade values off against one another. This association with cost-benefit analysis is intentional, without intending to be reductive. The identification/categorization process helps us understand relative importance of various values and why they are important.

The central philosophical problem arises, at this stage. Which values and categories of values ought to guide decision-making and responses to climate change? How should they be evaluated and treated? An answer needs to emerge from the data itself. At first glance, it would appear that data from the IACC project in fact fails to support my supposition that agreement on principles would emerge. To date, the field data indicates that the First Nation community's responses indeed arise from appeals to the harm principle. This data suggests that the three principles can readily be abstracted. The complaints by many respondents concerning the tribe's and the federal system of governance were clearly based on the view that they had been harmed and therefore violated by past decisions and practices. While flooding was clearly identified as a harm to property, more importantly, people viewed the problem of governance, the failure to uphold basic treaty and Aboriginal rights as a greater harm to identity, social cohesion and cultural integrity. Emphasizing treaty and Aboriginal rights was also an invocation of principle 2 (failure to give what is owed). As a result, trust could not be placed in the various forms of governance inability to trust. Similar data, however, cannot be found in data obtained from the dryland agricultural communities. They in fact tended to focus on their own ability to adapt as autonomous communities.

I would conjecture, however, that, despite this difference, a more thorough analysis would disclose the significance of the three principles in the management of stakeholder vulnerabilities. Some indicators are that some families were concerned that their children would not continue in the farming tradition. Becoming doctors or lawyers, might be seen as a good, but somewhat unfortunate alternative, since a way of life would be lost. A few people were adamant about not losing this way of life and even refused to entertain shifting from dry-land grain farming to irrigation-based cash crops. On the surface, it seems that harm to place-based identity, vocation, tradition, heritage and the like are not as central to these communities as they are to the indigenous community. But if we examine the context more closely, we find the presence of a strong social safety net that in fact has protected these communities since at least the great drought and depression. Because of this robust social safety, it can be argued that the significance of the harm principle is implicit in the social and economic arrangements of these

communities. Indeed, one of our partners, the PFRA, was formed precisely to aid farmers to develop adaptive capacities. Further, initial results from our Chilean counterparts mirror the indigenous community's profile. Despite not explicitly being asked for value commitments, many respondents in the Elqui Valley made it quite clear to our ethnographers that their culture and way of life had been or was being undermined by water management schemes. Many were quite clear that their vulnerability stemmed from injustice at decision-making and policy writing levels. While more analysis needs to be conducted, the data does suggest that stakeholders from various ethnic, geographic, economic and political contexts do in fact recognize the harm and related principles as core to evaluating how values are recognized and ordered.

Conclusion

I have tried to show, albeit all too sketchily, that climate change threatens to make ethicists irrelevant in the decision-making and policy arenas. If I am granted the principle of non-arbitrariness, however, the moral question of what we ought to do about climate change can, in part be addressed by making an empirical turn. The principle here tells us to search for empirically verifiable universal principles. The three that I have suggested would emerge in a rigorous values analysis are partly supported by the IACC project. It may not be disastrous, then, if we have to abandon traditional approaches to moral prescriptions.

1..This paper is a companion to two other working papers written for the project, Institutional Adaptations to Climate Change: "Value and Ethical Analysis in Vulnerability to Climate Change: Establishing an Analytic Framework for Identifying, Classifying and Evaluating Vulnerability Issues," for the SSHRC-MCRI research project, Adaptation to Climate Change – Comparative Study of Dry Land River Basins Canada and Chile http://www.parc.ca/mcri/pdfs/Morito.pdf; "Values Analysis and Institutional Adaptation to Climate Change" for the SSHRC-MCRI climate Change research team http://www.parc.ca/mcri/papers.php.