

Ethical Values and the Integrity of the Climate Change Regime

Edited by

HUGH BREAKEY
Griffith University, Australia

VESSELIN POPOVSKI
Jindal Global University, India

ROWENA MAGUIRE
Queensland University of Technology, Australia

ASHGATE

Chapter 10

Polycentric Systems and the Integrity Approach

Anne Schwenkenbecher

Introduction

This volume is concerned with the integrity of the global climate regime, that is, the extent to which the global system of the United Nations Framework Convention on Climate Change (UNFCCC) institutions and mechanisms aimed at addressing climate change acts according to its public institutional justification (PIJ) and as well as with the values which do or should form part of that justification. The starting point of this chapter is the observation that at the global level the climate system is failing to produce the outcomes it was set up to produce and as such is lacking consistency-integrity. That is, it is failing to act in accordance with its PIJ and the values embodied in it. However, emerging so-called polycentric systems are increasingly successful at addressing the challenges of global climatic change, according to economist Elinor Ostrom.¹ The aim of this chapter is to discuss the possibility of applying the integrity approach to polycentric systems, which comprise a multitude of institutional, corporate and individual agents not all of which have a clear public institutional justification.

The Problem

One thing to note on the outset is that any debate about combating climate change is necessarily a debate about morality and justice. Moral values and principles of justices – hereafter referred to in short as ‘values’ – are essential to understanding *why* climate change is a problem and *how* it should be addressed. In other words, in identifying climate change as a problem and addressing it, one must talk about values. To recognize climate change as a problem means to recognize it as a moral problem and a problem of justice. Why do we address climate change at all? Because we believe that if we do not address it many people will end up living worse lives than they could live. Because we hold that it is not fair to leave future generations a planet with an instable climate, depriving them of the kind of life we can enjoy now without fault of their own. Because, roughly speaking, we accept that people have an obligation to prevent avoidable serious harm if they can.

Addressing climate change includes addressing mitigation, adaptation and compensation. In this chapter, for simplicity’s sake, I will focus on global efforts to mitigate climate change only, and leave the two other important tasks, adaptation and compensation aside. However, much of what I say here about mitigation will apply to the other two sets of problems, too. Mitigation concerns the reduction of factors that trigger climate change, including the emission of greenhouse

¹ See, Elinor Ostrom, ‘Toward a Behavioral Theory Linking Trust, Reciprocity, and Reputation’, in *Trust and Reciprocity: Interdisciplinary Lessons from Experimental Research*, ed. Elinor Ostrom and James Walker (New York: Russell Sage Foundation, 2003); ‘Polycentric Systems for Coping with Collective Action and Global Environmental Change’, *Global Environmental Change* 20, no. 4 (2010).

gases (GHG), deforestation and meat production. From a moral point of view, there is no doubt that, collectively, climate change ought to be mitigated.² But when we ask the question of *how* we ought to mitigate we enter yet another normative debate concerning fairness in the process of mitigating.³ It can easily be seen that climate governance, the use of policy tools (including legislation, regulations, the establishment of institutions and organizations) for addressing climate change, including mitigation, necessarily involves value-sensitive decisions at all levels.

The integrity approach and the Comprehensive Integrity Framework,⁴ upon which this collection is focused, provides a tool for analysing the extent to which an institutional agent lives up to its PIJ. The integrity approach helps identify factors that trigger non-compliance with the institutional justification and the resulting failure to deliver on the values it reflects and embodies. The point of this volume is to discuss its applicability to the global climate regime – the existing UNFCCC-related institutions and their respective mechanisms. This also means to analyse to what extent the UNFCCC regime fosters those values or norms that are incorporated into its public institutional justification.

The UNFCCC was founded with the goal of cooperatively considering what could be done ‘to limit average global temperature increases and the resulting climate change, and to cope with whatever impacts were, by then, inevitable’.⁵ The UNCCC website also states that the ‘ultimate objective of both treaties [the UNFCC and the Kyoto Protocol] is to stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system’.⁶ Let us assume for the purpose of the following discussion that these two statements express the UNFCCC’s PIJ or at least an important part thereof.

It is obvious that, at the global level, the climate regime is failing to meet its purpose: the world appears to be heading towards levels of GHG concentrations in the atmosphere that are very likely to trigger dangerous global warming.⁷ So far, there is no binding global agreement on climate change, only a commitment to negotiate such an agreement to enter into power in 2020. Current voluntary mitigation commitments are insufficient for averting dangerous global warming beyond 2°C. As such, the global climate regime lacks consistency-integrity: its outputs (or actions) are not in accordance with the regime’s public institutional justification. This indicates not only

2 See my discussion of this question in Anne Schwenkenbecher ‘Is There An Obligation To Reduce One’s Individual Carbon Footprint?’, *Critical Review of International Social and Political Philosophy* 17, no. 2 (2014).

3 To address climate change, we need to ask further value-related questions. These are essential to determining the specific content of climate-related policy and agreements: how should the burden of addressing climate change be distributed? Who deserves support by others in order to combat climate change? Should economic development be sacrificed to emission reductions? Notions such as equality, desert and responsibility shaped the guiding principles for international climate regime such as the polluter pays principle, the beneficiary pays principle, general principles of distributive justice, and so on. See discussions in Simon Caney, ‘Just Emissions’, *Philosophy and Public Affairs* 40, no. 4 (2012); Edward A. Page, ‘Distributing the Burdens of Climate Change’, *Environmental Politics* 17, no. 4 (2008).

4 See Chapter 2.

5 UNFCCC, ‘Background on the UNFCCC: The International Response to Climate Change’ (2014), http://unfccc.int/essential_background/items/6031.php (accessed 5 May 2015).

6 ‘UNFCC Secretariat’ (2015), <http://unfccc.int/secretariat/items/1629.php> (accessed on 15 May 2015).

7 IPCC, ‘Summary for Policymakers’, in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. Christopher B. Field, et al. (Cambridge, UK, and New York, NY, USA: Cambridge University Press, 2014); UNEP, ‘Bridging the Emissions Gap Report: A UNEP Synthesis Report’ (2011).

a lack of integrity, but it constitutes a major moral problem and injustice as it is causing ‘deadly delays’⁸ while collectively the world falls short of acting, the time window for averting dangerous global warming is closing and the potential consequences for current and future generations are worsening.⁹

At this point, a discussion of systems integrity can take a number of possible directions. One could discuss the factors stymying consistency-integrity of the international regime. As a result, we gain insights into why those institutions lack integrity. For instance, one of the main problems appears to be the fact that the Conference of the Parties (COP), the decision-making body of the Framework Convention on Climate Change, is composed of states, or rather their governments. Governments will often act in their own short-term political interest, rather than contribute constructively to the process of establishing a successful climate regime. However, the manifold reasons for the internal climate deadlock will not be discussed here, as other chapters in this volume have done this.¹⁰ Instead, this chapter will address two questions concerning the scope of the integrity approach:

1. How can we establish the consistency-integrity of the global climate regime given the regime is a kaleidoscope of institutions?
2. Can the integrity approach be applied to emerging polycentric systems?

Of these two questions, the first will only be dealt with briefly, while the second will be this chapter’s main concern.

Consistency-Integrity for a Kaleidoscope of Institutions

An institution’s consistency-integrity is the degree to which the institution’s activities, actions and produced outcomes are in line with its PIJ. It is the measure of the extent to which the institution *acts* with integrity. It is easy to see how this type of analysis can best be conducted for a discreet institutional agent. I said earlier that the global climate regime does not currently have consistency-integrity. And it is easy to see that that is true, simply by virtue of the fact that we currently have no binding global agreement that regulates emissions. But the opposite would be more difficult to establish: how do we find out whether the UNFCCC and its corresponding institutions *do* act according to its PIJ?

The question arises because the UNFCCC apparatus is rather complex and the global institutions and mechanisms adopted are (or need to be) translated into national, regional and, finally, local measures. The participants in a potential future global climate agreement and respective global institutions are states or amalgamations thereof, such as the European Union (EU). In order to comply with emission targets, states must implement respective measures domestically. Does the integrity assessment stop at the national level or include it? Or, more generally, at which level should we make our observations of acts relevant to the UNFCCC climate regime in order to determine its consistency-integrity? Furthermore, whatever the aims determined in UNFCCC’s PIJ at the global level (see quotation above) – they will have to be embedded in national policy which addresses all sorts of problems, not just climate change. Rather, domestic policy measures will

8 Henry Shue, ‘Deadly Delays, Saving Opportunities: Creating a More Dangerous World?’, in *Climate Ethics: Essential Readings*, ed. Stephen M. Gardiner, et al. (Oxford: Oxford University Press, 2010).

9 See also Anne Schwenkenbecher, ‘Bridging the Emissions Gap: A Plea for Taking up the Slack’, *Philosophy and Public Issues* 3, no.2 (2013).

10 See, for example, Goyal, Chapter 9 in this volume.

(ideally) be embedded into a larger context of domestic distributive justice: avoiding the income and wealth gaps to widen and ensuring that the already underprivileged are not made worse off. Both the multitude and variety of agencies and institutions and the mingling of global mitigation targets with domestic social and economic policy may make it hard to establish the consistency-integrity of the UNFCCC regime down the track.

However, those employing the integrity approach may simply have to assess each of the UNFCCC and Kyoto II mechanisms on their own merits and then in relation to the over-arching aim of mitigation (for instance). The assessment may have to stop at the national level given that the unit of agency in the international realm and the unit of GHG output continue to be states. Yet there is one interesting caveat: If – in a few years' time with a binding mechanism in place – we assess the degree of GHG mitigation at the national level and find those emissions to be decreasing in line with the targets specified in Kyoto II, this would not necessarily mean that the reduction is due to Kyoto II measures. That is, in measuring purely the final result (of mitigation, for instance), we may not be able to draw a valid conclusion concerning the integrity of the global climate regime. This is because GHG emission reductions may have been produced as a result of entirely different mechanisms: They may be the result of polycentric action, for instance. Those using the integrity approach to assess the global climate regime will need to take that into account. I will turn to now to discussing the integrity approach in relation to such polycentric systems.

Can the Integrity Approach be Applied to Polycentric Systems?

The second and main question of this chapter concerns the suitability of the approach to assess the integrity of emerging polycentric systems. The fact that the global climate process has stalled does not mean that nothing is happening. Currently, climate action is taken at a multitude of levels despite the lack of a binding global agreement. A multitude of agents and measures at the individual, local, regional and state levels, as well as some in the private sector focusing on mitigation, are making (usually voluntary) contributions to solving the climate problem. This is what Elinor Ostrom calls evolving polycentric systems on climate action.¹¹ Emerging polycentric systems form a significant part of the global efforts to address climate change. Ostrom argues that while an international treaty is a major step, we must also recognize the strengths of evolving polycentric systems in addressing global collective action problems such as climate change.¹² According to Vincent Ostrom et al.,¹³ polycentricity is a scenario where 'many centers of decision making that are formally independent of each other' act towards providing a certain collective good. Polycentric initiatives to reduce GHG include local efforts such as US Conference of Mayors' Climate Protection Agreement which included 1,026 cities at the time of writing, or the C40 Cities Climate Leadership Group, including cities from Africa, Asia, Europe, Latin America, and the US. In terms of US state-level efforts, Elinor Ostrom refers to the Californian 'Global Warming Solutions Act' in 2006, the Colorado State House Bill 08–1350 in 2008 and the Regional Greenhouse Gas Initiative (RGGI), on the US east coast.¹⁴ All of these initiatives attempt to commit to mitigation efforts where their federal government lags way behind.

However, polycentric systems are not limited to agents and measures at the institutional or governmental level – individual actions are part of them, too: 'instead of the benefits derived from

11 Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change'.

12 Ibid.

13 Ostrom, V. et al., 'The Organization of Government in Metropolitan Areas: A Theoretical Inquiry', *American Political Science Review* 55, no. 4 (1961): 831.

14 Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change'.

reducing GHGs existing only at the global level, multiple benefits are created by diverse actions at multiple scales. Potential benefits are even generated at a household level'.¹⁵ Dietz et al. have identified 17 actions that can cumulatively have a major impact on carbon emissions.¹⁶ Ostrom¹⁷ believes that because actions at a local level are a major source of carbon emissions, mitigation must be tackled locally and that, in order to collectively confront global environmental challenges such as climate change, a so-called polycentric approach is needed.

In sum, in the light of the current global deadlock, rather than relying solely on a global solution, we must address environmental change at multiple scales, including national and local levels. Despite the recently communicated willingness to finally tackle the problem at the G20 summit in Brisbane, it is reasonable to assume that global climate action alone will not be sufficient for averting dangerous climate change (beyond 2°C) and that waiting for a global treaty will increase the risk of dangerous warming. While the ozone-crisis and subsequent international prohibition of chlorofluorocarbons seem to be a rare exception that proves the rule, tackling collective action problems at the global level is usually unlikely to succeed, especially if the problem is as complex as climate change. Ostrom believed that voluntary, polycentric action on climate change is the key to achieving substantial outcomes globally and that actions taken by multiple units can cumulate to reduce the threat of climate change:

What we have learned from extensive research is that when individuals are well informed about the problem they face and about who else is involved, and can build settings where trust and reciprocity can emerge, grow and be sustained over time, costly and positive actions are frequently taken without waiting for an external authority to impose rules, monitor compliance, and assess penalties.¹⁸

She argues that the resulting organizations would in any case be involved when a global treaty comes into effect and must be broken down into domestic policy measures.¹⁹

If her analysis is correct, in order to effectively mitigate climate change we must not rely on global action and wait until an international agreement is reached but instead act at local, regional and individual levels. In fact, such polycentric action may be more efficient in achieving the desired outcome and it is already happening.²⁰

15 Ibid., 553.

16 These include measures such as using low-flow showerheads, efficient water heaters, low-rolling resistance tires, and fuel-efficient vehicles, changing HVAC air filters and tuning up AC, routine auto maintenance, lowering laundry temperature and water heater temperature, turning off standby electricity, using line drying, changing driving behaviour as well as carpooling and trip-chaining. '[N]ational implementation could save an estimated 123 million metric tons of carbon per year in year 10, which is 20% of household direct emissions or 7.4% of US national emissions, with little or no reduction in household well-being'. Thomas Dietz et al., 'Household Actions Can Provide a Behavioral Wedge to Rapidly Reduce US Carbon Emissions', *Proceedings of the National Academy of Sciences* 106, no. 44 (2009): 18452. See also Kornelis Blok et al., 'Bridging the Greenhouse-Gas Emissions Gap', *Nature Climate Change* 2, no. 7 (2012).

17 Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change', 553.

18 Ibid., 555. On the feasibility and importance of polycentric action see also Daniel H. Cole, 'Advantages of a Polycentric Approach to Climate Change Policy', *Nature Climate Change* 5, no. 2 (2015).

19 Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change', 554.

20 Ostrom admits though that 'Self-organized, polycentric systems are not a panacea' – in her view there are no panaceas for complex problems such as global warming. Ibid., 555.

But can the integrity approach be used for assessing polycentric systems? That is, can it help us diagnose and analyse the underlying problems of such systems? In the following, let me first discuss some of the challenges for applying the integrity approach to polycentric systems. Further down, I will consider a few potential solutions.

The integrity approach is designed to analyse the integrity of individual institutions or systems thereof where there is one over-arching institution and several subsidiary bodies. It aims at mapping a single hierarchical institution and its sub-institutions, or at least a complex where there is a single dedicated organization whose purpose fixes the over-arching PIJ. The approach, as developed by Sampford and set down in the Comprehensive Integrity Framework, is in this respect a 'top-down' approach.²¹ This poses a difficulty for analysing polycentric systems. The activities of polycentric systems are not planned, controlled or overseen by one central agency, so there is no single or over-arching PIJ that frames the purpose and goals of all those subsidiary ones which form part of this system. Polycentric systems address climate change from the bottom-up and, while they form part of the global mitigation efforts, those institutional and other agents that are part of such systems may have all kinds of PIJs or none at all. There is a multitude of diverse agents in polycentric systems, including individuals who tend to lack such justifications. The PIJ of the global climate regime's institutions cannot be the standard of integrity all the way down to the individual agents participating in polycentric systems.

Another challenge for the integrity approach may be that, while the institutions and mechanisms of the UNFCCC are single purpose in that they have been installed specifically to address climate change, polycentric institutions and agents engaging in climate change mitigation have all kinds of different purposes and PIJs, including some relating to climate change, but not only those. Can the integrity approach assess agents along a variety of such standards? In the global climate regime, there is one leading body, the UNFCCC with the particular PIJ it endorses. The coherence-integrity of the system can be assessed through the actions of the COP and all UNFCCC-related mechanisms, institutions and policies.²² However, there is no single PIJ for the multitude of institutions, agents and organizations in polycentric systems, nor are their individual PIJs (to the extent that they have one) usually merely climate change-related. Take, for instance, local governments: they must meet a whole range of values and principles and only some of the measures they adopt and actions they take will relate to climate change and its particular normative demands.

In short, the global climate regime and its single-purpose institutions may successfully be assessed using the integrity approach. Using the approach for polycentric agents with multiple purposes and perhaps less specific PIJs may require to somewhat adjust the approach. The emergence of polycentric systems to cope with climate change mitigation seems to challenge the idea of a clear-cut integrity assessment and of a consistent enactment of a PIJ and its embodied set of stable values and principles. That is, we can only judge each agent on its own merits unless we find something that can play the role of an over-arching PIJ. I will get back to this issue in a moment.

Here is another interesting caveat: Given that significant action is taken at the local, regional and national levels, the purpose of the UNFCCC could – theoretically – be achieved regardless of the deadlock at the global level, at least partially. But an integrity analysis of only those agents who have a PIJ would not reveal this. Many of the agents in polycentric systems have no PIJ, but their actions may well make a difference to the overall result of the process. One of the most obvious

21 Sampford, 'Extending the Integrity Systems Approach: Global Financial Integrity Systems and Global Carbon Integrity Systems' (Institute for Ethics, Governance and Law, 2014).

22 See Figure 2.2, Chapter 2.

example are individual agents. Ostrom, as well as Dietz, seemed to think that individual agents are an important part of emerging polycentric systems for coping with climate change and that individual behavioural change can possibly play a decisive role in bridging the emissions gap and averting dangerous global warming.²³ How would the integrity approach handle individual agents?

This takes me to my brief discussion of how the integrity approach *could* be applied to polycentric systems. I believe that we can still use the integrity approach as a diagnostic tool even for decentralized agency as in the case of polycentric systems, assuming we are willing to make some modifications to it. Remember that the point of having an analysis tool like the integrity approach is to find out how institutions fail to meet their purpose and to determine the underlying causes. Out of the multitude of agents that are already contributing to mitigation and which are forming polycentric systems of climate action, some agents (institutional, corporate) will have particular PIJs, including those particular values or principles of morality and justice that they endorse. The integrity approach can be applied to these agents individually, assessing the extent to which each institution, organization or – more broadly speaking – agent forming part of polycentric systems comply with *their own* PIJ. As I said earlier, this will enable us to judge the integrity of the individual components (institutions, organizations and so on) of polycentric systems, but it will not necessarily give us an indication of how well a particular task, for instance climate change mitigation, is in fact being achieved by the system.

How could the integrity systems approach handle the multitude of – often interconnected and mutually interdependent – agents and their varying – and possibly conflicting – sets of institutional justifications and corresponding levels and types of integrity? This question is closely related to another one: What are the limits, or boundaries, of polycentric systems?

We can perhaps think of the polycentric systems addressing climate change mitigation as an – admittedly amorphous – non-hierarchical group of agents who share a common justification for their particular actions. In the context discussed here, this justification may be the goal to mitigate climate change, or more narrowly, to reduce GHG. It may be a public justification as in the case of the C40 Cities Climate Leadership Group or not as in the case of most individual agents. And it may be an institutional justification or not. Let us call it the *shared justification*. We may now draw the boundaries of our polycentric system along the lines of that shared justification. It cannot be a very clear boundary as we do not exactly know how many agents share the same justification for their actions and to what extent. But those with a public shared justification are easily identified.

Remember that integrity assessments focus on a range of different aspects influencing an institution's performance. We may now be able to focus on the different aspects of the system's performance by focusing on agents that are clearly within the boundary. One important aspect to focus on is 'context-integrity': the qualities of the external environment that promote actions according to the shared justification. We can see that in polycentric systems in particular the independent agents form a mutually stimulating integrity context. That is, an awareness of the existence of agents who act upon the same shared justification fosters an environment conducive to other such agents. Ostrom emphasized in her work that building trust and face-to-face communication was decisive for the willingness of agents to cooperate.²⁴ In some places this context-integrity can be disturbed by particular aspects of the environment in which the polycentric agents move, for example, where trust and the willingness to cooperate are being undermined.

23 Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change'; Dietz et al., 'Household Actions Can Provide a Behavioral Wedge to Rapidly Reduce US Carbon Emissions'.

24 Ostrom, 'Toward a Behavioral Theory Linking Trust, Reciprocity, and Reputation'; 'Polycentric Systems for Coping with Collective Action and Global Environmental Change'.

Another interesting aspect of the integrity approach that may be applied to polycentric agents is the aspect of coherence-integrity. This aspect deals with those qualities of an institution that promote its acting according to its PIJ, covering both the internal organizational arrangements and the values held by its members. The integrity approach was originally developed on the basis of an account of integrity of individual agents. Perhaps in assessing polycentric system the individual and the institutional integrity perspective can be combined. We can see that, given the fluidity and high level of agent-interdependence in polycentric systems, the integrity of particular individuals would be especially important to the successful enactment of the shared justification.

However, there are probably some insurmountable limitations to using the integrity approach for an analysis of polycentric systems. In particular, it is difficult to see how we could ever arrive at a conclusion about such systems having full integrity or not, that is, whether or not the system as a whole has coherence-integrity, context-integrity and consistency-integrity. In fact, we may have to accept that, due to their nature, polycentric systems may never have something like full integrity.

In sum, while the integrity approach was designed as a diagnostic tool for institutional mal-performance, aspects of it may well be applied to agents in polycentric systems. We can use it to focus separately on each of the collective, corporate and individual agents in such systems, but it may be possible to apply a modified version of it to such systems as a whole, using the shared justification of the different agents as a demarcation line.

Conclusion

Climate change mitigation is taking place at a multitude of levels – global, national, regional and local – and is performed by a multitude of agents – collective, corporate, institutional and individual. Collective, institutional and corporate action involving (often voluntary) commitments by the public and private sectors and by individuals form the global effort to address climate change.

The integrity approach developed by Sampford is a very valuable tool in analysing the global climate regime and its underperformance. I briefly discussed the way in which the integrity approach could be applied to those regimes that *are* performing well, namely so-called polycentric systems. Perhaps a modified non-hierarchical version of the integrity approach can be applied to evolving polycentric systems, including to individual agents. This latter point is particularly important, as the problem of GHG emissions is a collective action problem in which individual behavioural changes – *en masse* – can make a real difference. In turn, individual behaviour and individual integrity are influenced by the particular local, regional and, finally, also the global contexts in which individuals act. Also, this discussion has shown that there is substantial interdependence between the integrity of the global regime and polycentric systems. Polycentric agents form part of the external context in which global and national institutions exist and which influences their consistency-integrity. Strong domestic and trans-national polycentric systems are likely to benefit the integrity of global and national institutions addressing climate change. In short, an analysis of polycentric systems is essential to an analysis of the global climate regime's integrity.