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Climate change policy

Let the negotiation resume

The avowed purpose of policy, whether devised by a government, non-governmental body or an organisation, is to direct action to address an issue, event or interaction, with the objective of improving or reforming the social or natural world. Social policies address issues bearing upon economic and political stability; continuity, security and cultural integrity, individual and collective safety; or liberty and rights to citizenship.

However, if we ask of policy the Deleuze-inspired question: 'what does it actually do?', we may conclude that the act of policy-making in pluralist societies marks out an end to negotiations between stakeholders of possible responses concerning an issue, and the intent to initiate actions based upon the outcomes of these negotiations. This act of closure thereby establishes the extent of, and limits to, the proposed response to an issue, while ruling out possibilities and opportunities not enshrined in the policy position.

As academics, citizens and activists, we have recently been concerned with the pressing issue of climate change. Like many, we have watched as bodies such as the United Nations and the Intergovernmental Panel on Climate Change set out policy frameworks and targets to address the challenges now facing our planet.[1] What is disturbing, however, is the poor progress towards these goals on environment degradation and climate change – as acknowledged in the UN's most recent review.[2] This led us to ask questions about climate change policy-making, and to consider fresh ways to analyse the policy process.

Again applying the Deleuzian question mentioned above, we have sought to disclose what a range of differing policy statements on climate change actually do. In other

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words, what kinds of closures do they establish concerning appropriate actions to address the climate emergency the planet is now facing? We draw upon and develop theoretically a recent cultural geography literature that explores policy-making and implementation in terms of a 'policy assemblage'. 'An implemented policy', Russell Prince suggests 'is an assemblage of texts, actors, agencies, institutions and networks [that] come together at particular *policy-making locales*' (emphasis in original).[3]

This concept of a policy assemblage is helpful once we also treat a phenomenon such as anthropogenic climate change as a material *assemblage*. At its simplest, this assemblage may be conceived as an arrangement of the followingconstituents (in no particular order):

> oceans; atmosphere; greenhouse gases; the Sun; humans; human activities; industry

These constituent parts assemble because of how one affects another. At its simplest: human use of fossil fuels as an energy source creates greenhouse gases; the release of useable energy provides humans with the opportunity to develop industrial production that increases demand for energy; greenhouse gas emissions prevent the Sun's heat from escaping from the atmosphere. These interactions increase the Sun's capacity to heat the Earth's oceans, producing climate changes. (In reality, this assemblage is far more complex; as we will show in a moment.

We can treat a policy in the same way: pulling apart the assemblage to reveal its human and non-human constituents, and the interactions between them. The literature suggests that policy-making comprises a multiplicity of different elements, from scientific evidence to stakeholders.[4] So a climate change policy assemblage will incorporate at least:

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> evidence of climate changes; relevant natural and social science theories; experts; policy-makers; stakeholders; money and economics; social and political processes; policy documents; audience

Many other contextual relations may also be assembled, including governments, energy producers, consumers and the media).

This policy assemblage works through the interactions between these components. So for example, policy makers will be affected by the evidence of climate changes from scientific studies or from expert witnesses, and by theories explaining climate change. They will also be affected by economic and political considerations, and by any underpinning perspectives or orientations (for instance, a commitment to protecting wildlife or an emphasis on North/South global equity).

However, we need to explore the interactions *between* the climate change assemblage and a policy assemblage, in order to assess the capacity of a specific policy to actually be effective. These assemblages interact in two ways (see Figure 1). First, during policy formulation, the policy-making process must be capable of accurately identifying the entire range of interactions producing climate change (for instance the interactions between humans, fossil fuels, the atmosphere and the Sun and other constituents). Scientific evidence is key here: prior to data linking the warming effects of 'greenhouse' gases to human activity, a policy assemblage would not have considered such data relevant. A policy can only achieve its aim if it fully comprehends the topic it seeks to influence.

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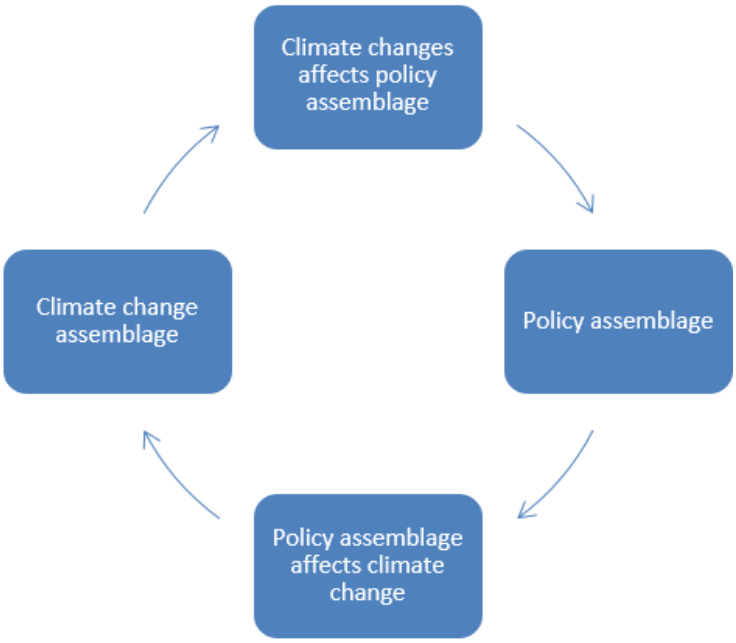


Figure 1. *Interactions between climate change assemblage and policy assemblage*

Second, when a policy is implemented, the policy needs the capacity to adequately and effectively alter the processes that make the climate change assemblage do what it does (heat the Earth). For instance, a global policy to replace fossil fuels with renewable energy sources will – according to the theory of anthropogenic climate change – have a beneficial impact on limiting climate change. A policy to ask citizens of the UK to drink less tea (boiling fewer kettles) or choose one brand over another will be respectively *inadequate* and *inappropriate* to affect greenhouse gas production.

Our research used this analytical framework to explore the ways in which a range of climate change policies have been formulated, but importantly, to also disclose the limitations of each to counter anthropogenic climate change effectively. We have looked at four broad policy perspectives on climate change: 'liberal environmentalism', the United Nations policy on sustainable development, 'green capitalism' and finally no-growth economic policy.

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Our analysis has revealed that sadly none of these policy positions passes the test of adequacy as a basis for effective action to counter anthropogenic climate change. Each, in a different way, excluded from its formulation crucial aspects of the climate change assemblage, closing out key aspects of the complex processes that have produced the current climate crisis. We would conjecture that these 'blind-spots' are principally ideological. For instance a right-leaning policy forum is unlikely to recommend the end of capitalist economics.

So, for example, the 'liberal environmentalist' approach (which tends to focus on protecting specific aspects of the environment such as an endangered species) ignores the part that the capitalist economic system plays in fuelling industrial growth globally. Meanwhile, the UN's position ties environmental sustainability to economic development in the global South, and downplays the inexorable growth in resource and energy consumption such economic development brings. 'Green capitalism' sees technological innovation as the answer, but again fails to recognise that capitalism's ceaseless search for profit and growth is an inherently wasteful economic system. Finally, no-growth solutions, while addressing the latter, has no plan in place to achieve – within the timescale that the climate emergency dictates – changes that would amount to a transformation of global economics and politics: a transformation that runs counter to the agendas of the Western capitalist economies that are the leading producers of greenhouse gases.

Despite this depressing conclusion, our approach allows for a way forward. We have also been able to turn this analytical process on its head – working backwards from the climate change assemblage to identify the actions that an effective policy needs to take. This comprehensive policy draws elements from all four of the failed policies we analysed.

The message for policy-makers (on climate change or any other issue) is to avoid allowing narrow theoretical or ideological commitments to close down policy negotiations between stakeholder groups too soon. On climate change, an effective

policy solution is achievable, but depends on forging a comprehensive policy assemblage that takes into account the physical, social and political complexities of anthropogenic effects on climate. Fortunately, much of this research has already been done, and has been collated in the UN work on sustainable development.[5]

Policy makers need to go back to the drawing board: to broaden the parameters of their discussions and come back with an action plan that takes the best from all the polices we have analysed here, and overcomes the premature closures that each reflects. We have begun this analysis and offer our suggestions to the global community as a starting point for now resuming negotiations to address and resolve the climate emergency.[6]

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[1] See for example, the UN's 2030 *Agenda for Sustainable Development* (United Nations (2015) Transforming *our World: The 2030 Agenda for Sustainable Development*. UN General Assembly Resolution 70/1. https://sustainabledevelopment.un.org/post2015/transformingourworld/publication)

[2] United Nations (2019) *The Sustainable Development Goals Report.* Geneva: United Nations. https://unstats.un.org/sdgs/report/2019/#sdg-goals.

[3] Prince, R. (2010) Policy transfer as policy assemblage: making policy for the creative industries in New Zealand. *Environment and Planning* A 42(1), 169-186.

[4] See for example, Dror, Y. (2017) *Public Policymaking Reexamined.* Abingdon: Routledge.

[5] IPCC (2013) *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.

[6] Fox, N.J. and Alldred, P. (2020) Re-assembling climate change policy: materialism, posthumanism and the policy assemblage. *British Journal of Sociology*. DOI: 10.1111/1468-4446.12734. https://onlinelibrary.wiley.com/doi/full/10.1111/1468-4446.12734