



Groundings Undergraduate Academic Journal
University of Glasgow | Glasgow University Union

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Source: Groundings Undergraduate, May 2024, Vol. 15, pp. 323-352

Published by: University of Glasgow, Glasgow University Union Publications.

ISSNs: 1754-7474 (Print) | 1755-2702 (Online)

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Reconceptualising Barriers to Engagement with Climate Change

Dylan Brotherston

This paper contributes to the discourse on climate change by emphasising the imperative for inclusive engagement, particularly at the intersection of socio-economic challenges and climate impacts in Glasgow, Scotland. Despite recent shifts towards a ‘Just Transition’ and increased public engagement efforts, working-class voices remain marginalised. To address this gap, the paper first reviews existing literature on Climate Change Communication (CCC), examining some of the competing conceptualisations of barriers and public engagement and their policy implications, and more specifically, participatory policymaking and its role in engagement. Through doing so, the central debates of how public engagement with climate change ought to be pursued will be established, and to what degree this can be understood in the context of developing engagement with working-class people. Subsequently, it proposes a novel framework synthesising insights from Lorenzoni, Sutton, and Tobin utilising an ecological Marxist perspective that aims to address barriers to climate change engagement among the working class.

Introduction

Climate change represents one of the most daunting global challenges of our time, necessitating inclusive and comprehensive responses. The urgency of this crisis, highlighted by the UN since 1992 and further emphasised by the IPCC’s call for broader public engagement to meet the 1.5-degree temperature limit,¹ is compounded by its disproportionate impact on different societal groups. Both King (2018) and Paavola (2017) highlight the vulnerability of different demographic segments, including older adults, individuals with pre-existing medical conditions, low-income and socially disadvantaged groups, urban and rural residents, women, and children.^{2,3}

1 IPCC, *Special Report: Global Warming of 1.5 Degrees* (Geneva: 2008).

2 Andrew D. King and Luke J. Harrington, “The Inequality of Climate Change from 1.5 to 2 C of Global Warming,” *Geophysical Research Letters* 45, no. 10 (2018): 5030-5033.

3 Jouni Paavola, “Health Impacts of Climate Change and Health and Social

Hence, this paper adopts an ecological Marxist perspective. At its core, this theoretical framework posits that the inherent drive for profit and accumulation within capitalist systems inevitably leads to the unsustainable exploitation of natural resources, exacerbating ecological crises.⁴ Central to this perspective is the recognition that capitalism's pursuit of growth and expansion prioritises short-term economic gain over long-term environmental sustainability. In other words, ecological Marxism is characterised by its understanding of how evolving human relationships, shaped by changing capital flows and labour relations, lead to individuals' relation to and experience of nature being inherently different.⁵ Through this lens, capitalism emerges as the primary driver of climate degradation and can be seen as the continuous process through which working-class individuals not only suffer economic injustices but also the effects of environmental degradation. As such, climate change represents the extension of working-class struggles and risks actively exacerbating structural inequalities and, more broadly, economic, and social inequalities. Within this context, working-class engagement is not only essential to fighting the climate crisis but also critical to the notion of a just transition, a fair assessment given the well-documented effects of climate change and its intersection with other socioeconomic and political issues.^{6,7}

Yet ecological Marxism is not without criticism. While some Marxists have claimed universality for their theories, it is essential to acknowledge the limitations inherent in much of the existing literature. Indeed, as Grundmann (1991) notes ecological Marxism alone, does not offer a suitable framework to adequately account for how drastically capitalism has altered economic and social

Inequalities in the UK," *Environmental Health* 16, no. 1 (2017): 61-68.

4 John B. Foster, *Marx's Ecology: Materialism and Nature* (NYU Press, 2000).

5 Camilla Royle, "Ecological Marxism," *Routledge Handbook of Marxism and Post-Marxism* (2020): 443-450.

6 Ian Preston et. al., *Climate Change and Social Justice: an evidence review* (Joseph Rowantree Foundation. (2014).

7 Nazrul Islam and John Winkel, *Climate Change and Social Inequality* (United Nations, Department of Economic and Social Affairs, 2017).

relationships both in and between countries.⁸ This inadequacy can result in a disproportionate emphasis on engagement models tailored to Northern societies, neglecting the challenges and perspectives of the global South.⁹ This bias is reflected in many of the engagement models discussed within this paper, and it's crucial to recognise the limitations inherent in extrapolating these models and this paper's analysis of them to regions outside of the global North.

However, given the focus of this paper, the framework offers a suitable foundation. In Scotland, particularly in Glasgow, the intersection of socio-economic challenges and climate change presents a compelling case for studying working-class engagement. Approximately 44% of Glasgow's residents live in 20% of the most deprived areas of Scotland, with deprivation being a combined metric of seven domains: income, employment, education, health, access to services, crime, and housing¹⁰ —reflecting a broader narrative of economic and urban challenges. Recent policies do reflect a shift towards a 'Just Transition' and attempts to enhance public engagement, reflected in both Scottish national policy,^{11,12} and Glasgow City Council's climate emergency plans.¹³ Nonetheless, they often fall short of effectively representing the voices of the working classes, whose perspectives are crucial yet frequently marginalised in climate change discussions. Consequently, this paper argues for a more inclusive approach to engagement and policymaking, one that resonates with and actively involves the working class.

To address this gap, this paper reviews existing literature on climate change communication (CCC) and barriers to public engagement, with a particular emphasis on participatory policymaking, setting the

8 Reiner Grundmann, "The Ecological Challenge to Marxism," *New Left Review* 187, no. 1 (1991): 103-120.

9 Emily Nicolosi and Julia B. Corbett, "Engagement with Climate Change and the Environment: a review of the role of relationships to place," *Local Environment* 23, no. 1 (2018): 77-99.

10 Scottish Government, *Scottish Index of Multiple Deprivation* (2020)

11 Scottish Government, *Big Climate Conversation: report of findings* (2020).

12 Scottish Government, *Climate Change – Net Zero Nation: public engagement strategy* (2021).

13 Glasgow City Council, *Glasgow's Climate Plan* (2020).

stage for a novel framework. This framework synthesises the work of Lorenzoni et al., (2007), which highlights the existence of barriers to engagement at both individual and social levels, adopting a non-linear approach to engagement,¹⁴ and the work of Sutton & Tobin (2011), who conceptualise engagement as a linear process.¹⁵ The proposed framework seeks not only to further our understanding of barriers to working-class engagement in terms of both policy and personal connection but also to provide a tool conducive to the pursuit of social justice and equity in climate policy within Glasgow and more broadly in the UK.

Methodology

The literature review was conducted using a Scopus and Google Scholar search, in which keywords such as ‘climate change’, ‘working-class’, ‘engagement’, ‘barriers’, ‘adaptation’, and ‘mitigation’ were included across the subject areas of environmental science, social sciences, and psychology. To identify relevant literature, results were sorted according to the “best fit” framework,¹⁶ using Wibeck’s (2014) literature review as a starting point.¹⁷ This conceptual model allows for factors previously not considered in the initial search to be incorporated. The logic is that the literature on climate change engagement spans multiple disciplines; therefore, to provide a more comprehensive review, this was deemed the most appropriate approach. Moreover, the best-fit approach is widely used in policy

14 Irene Lorenzoni et. al., “Barriers Perceived to Engaging with Climate Change among the UK Public and their Policy Implications,” *Global Environmental Change* 17, no. 3-4 (2007): 445-459.

15 Stephen G. Sutton and Renae C. Tobin, “Constraints on Community Engagement with Great Barrier Reef Climate Change Reduction and Mitigation,” *Global environmental Change* 21, no. 3 (2011): 894-905.

16 Yu Xiao and Maria Watson, “Guidance on Conducting a Systematic Literature Review,” *Journal of Planning Education and Research* 39, no. 1 (2019): 93-112.

17 Victoria Wilbeck, “Enhancing Learning, Communication and Public Engagement about Climate Change—Some lessons from recent literature,” *Environmental Education Research* 20, no. 3 (2014): 387-411.

urgent areas.^{18,19}

The result was a collection of literature that included initial factors and new ones that were not anticipated. In this case, this included broader literature on communication and participatory policymaking, which were not initially considered in the search. The literature was subsequently sorted according to the number of citations and impact score, respectively, to identify seminal works in the field. The abstracts of the articles were then read to further ensure their relevance.

The Development of Climate Change Communications and Engagement

While the field of CCC encompasses both engagement and understanding, this was not always the case. Much of the earlier literature emphasised the scientific knowledge gap of laypeople, or the ‘information deficit model’ (IDM), as an explanation for the lack of interest in the issue.^{20,21,22} Potentially, since climate change is often viewed as a scientific issue, disregarding its multifaceted socioeconomic and political implications.²³ The underlying assumption of the IDM is representative of the broader attitudes that scientific disciplines adopted in the period preceding the 1990s and is indicative of governments and scientists’ contemporary perspective that public disinterest and lack of support for proposed policies are because they

18 Mary Dixon-Woods, “Using Framework-based Synthesis for Conducting Reviews of Qualitative Studies,” *BMC Medicine* 9 (2011): 1-2.

19 Christopher Carroll et. al. ““Best Fit” Framework Synthesis: Refining the Method,” *BMC Medical Research Methodology* 13 (2013): 1-16.

20 Dominique Brossard and Bruce V. Lewenstein, “A Critical Appraisal of Models of Public Understanding of Science: Using practice to inform theory,” In *Communicating Science* (Routledge, 2009): 25-53.

21 Matthew C. Nisbet and Dietram A. Scheufele, “What’s Next for Science Communication? Promising Directions and Lingering Distractions,” *American Journal of Botany*, 96, no. 10 (2009): 1767-1778.

22 Sally Eden, “Public Participation in Environmental Policy: Considering Scientific, Counter-scientific and Non-scientific Contributions,” *Public Understanding of Science* 5, no. 3 (1996): 183.

23 Mike Hulme, *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity* (Cambridge University Press, 2009).

do not know any better.²⁴

Such a view promotes education as the primary means of countering public disinterest, intending to correct knowledge gaps and increase public acceptance of policies.^{25,26} Engagement through this model was not paramount. This is epitomised by much of the communication strategies at the time, which primarily saw the simple transmission of information from experts to the public. Given what we know now about the role of public and civic engagement in developing quality democracies,²⁷ it is clear why such strategies have been ineffective. However, during the 1980s, governments broadly speaking did not assign great importance to the public's role in policy processes or their engagement thereof. However, throughout the 1980s, the UK Royal Society was the first to challenge the IDM and the methods it promoted. They posited that these approaches and their sole emphasis on knowledge gaps undermined democratic processes by reinforcing hierarchies of expertise that marginalised lay perspectives and diminished public trust in scientific institutions.²⁸ By excluding the public from participating in policymaking processes, governments and scientists were conflating significant political, social, and policy decisions with scientific choices, all while claiming objectivity and leveraging their established social standing. This, of course, impedes the democratic process by imposing what are in reality not objective viewpoints but rather contestable normative decisions on the public and therefore depriving them of the opportunity to engage in policy processes.

Consequently, a new approach that corrected the previous over simplistic assumptions was necessitated. Indeed, this was part of a

24 Ulrike Felt et. al., *Taking European Knowledge Society Seriously* (Luxembourg: DG for Research, EUR 22, 2007): 700.

25 Ibid.

26 Royal Society, *The Public Understanding of Science. Report of a Royal Society Ad Hoc Group Endorsed by the Council of the Royal Society* (London: Royal Society, 1985).

27 Raffaella Y. Nanetti, Robert Leonardi and Robert D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1994).

28 Royal Society, *The Public Understanding of Science*.

broader revolution that saw a turn to public participation as a research objective, which highlighted the need to involve the public and other stakeholders in governments' decision-making processes.²⁹ Within CCC, this shift has prompted a re-evaluation of the underlying principles and assumptions to better align with these new objectives. As Scoones (1999) notes, the increasing complexity of climate change has meant that positivist and objective viewpoints are less applicable in this context;³⁰ hence, there has been a shift towards the constructivist school of thought coupled with an interpretive ontological position, respectively. These have in turn underpinned much of the core literature that has informed the development of the field since.^{31,32} Within CCC, the constructivist approach suggests that traditional knowledge transmission is insufficient for acquiring and promoting engagement, and instead, individuals should participate in knowledge-building processes like assemblies, workshops, and forums, fostering local context-specific learning and generating new insights.³³ This approach, while acknowledging the role public understanding plays in engagement, recognises the limitations of a sole focus on increasing objective understanding, as one's understanding is ultimately influenced and informed by pre-existing beliefs and such variables as gender, ethnicity, social class, and other social factors.^{34,35,36}

29 Magda Pieczka, "Critical Perspectives of Engagement," *The Handbook of Communication Engagement* (2018): 549-568.

30 Ian Scoones "New Ecology and the Social Sciences: What Prospects for a Fruitful Engagement?," *Annual Review of Anthropology* 28, no. 1 (1999): 479-507.

31 Victoria Wibeck, *Enhancing Learning*.

32 Ville Kumpu, "What is Public Engagement and How Does it Help to Address Climate Change? A Review of Climate Communication Research," *Environmental Communication* 16, no. 3 (2022): 304-316.

33 Svend Brinkmann and Steinar Kvale, *Doing Interviews*, Vol. 2 (Sage, 2018).

34 Johanna Wolf and Susanne C. Moser, "Individual Understandings, Perceptions, and Engagement with Climate Change: Insights from In-depth Studies Across the World," *Wiley Interdisciplinary Reviews: Climate Change* 2, no. 4 (2011): 547-569.

35 Patrick Sturgis and Nick Allum, "Science in Society: Re-evaluating the Deficit Model of Public Attitudes," *Public Understanding of Science* 13, no. 1 (2004): 55-74.

36 Alan Irwin and Brian Wynne, *Misunderstanding Science?: The Public Reconstruction of Science and Technology* (1996).

When accounting for this, advocates of this school call for a more nuanced and context-dependent approach to research that shifts beyond top-down expert-centric models, whereby the knowledge-building process is taken to be a continuous process and contends the public should be actively involved in this. Leading to more qualitative forms of research, such as interviews, focus groups, and ethnography. In turn, a valid criticism of much of the research has been the inability to generalise results; indeed, this represents a significant limitation of much of the existing research as most studies have taken place within the UK and America.^{37,38,39} In reality, the theoretical departure from the IDM and transition to a more critical constructivist and engagement-focused approach is not as drastic as it first may seem. Through understanding that public understanding is an implicit part of public engagement, the two can be seen as not mutually exclusive concepts but rather two ideas that are intrinsically linked.⁴⁰ Critically, the primary difference under the constructivist approach is not a rebuke of public understanding itself but a shifting of importance and altering of its definition.

Conceptualising Engagement and Barriers

Despite the widespread adoption of the constructivist approach, there is disagreement on the definition and scope of public engagement in climate communication.⁴¹ In a meta-analysis of 44 studies, Kumpu (2022) found that the term is rarely defined and often used as a general reference to interest.⁴² While there are two broad perspectives on how to approach public engagement that are fundamentally connected, they have rarely been synthesised and integrated.⁴³

37 Irene Lorenzoni et. al., “Barriers Perceived to Engaging”.

38 Lorraine Whitmarsh and Saffron O’Neill, “Opportunities for and Barriers to Engaging Individuals with Climate Change,” In *Engaging the Public with Climate Change* (Routledge, 2012): 1-14.

39 Johanna Wolf and Susanne C. Moser, “Individual Understandings”.

40 Brian Trench, “Towards an Analytical Framework of Science Communication Models,” *Communicating Science in Social Contexts: New models, New Practices* (2008): 119-135.

41 Ville Kumpu, “What is Public Engagement”.

42 Ibid.

43 Corina Höppner and Lorraine Whitmarsh, “Public Engagement in Climate

Regarding the definitions of engagement, the first perspective takes engagement to mean public engagement with climate science and policymaking, which can be viewed as civic engagement.^{44,45,46} Fundamentally, this interpretation necessitates the active presence of individuals in decision-making as part of a broader aim to empower the public and widen access to the issue.⁴⁷ Through this understanding, engagement is to be approached as a matter of involving the public in policy deliberation processes as a means of democratising decision-making and building consensus amongst communities; critically, this requires a redistribution of power. Without it, the focus on engagement is ultimately a fruitless endeavour and serves only to enforce existing social power relations between government institutions and the public.^{48,49,50} This approach places a strong emphasis on involving the public in policy processes, the logic being that this is one of the most direct means through which the public can exercise influence and make their opinions vocal when done effectively.⁵¹ Hence, measures to increase engagement from this perspective often lead to government institutions facilitating environments like workshops or forums where individuals can discuss, develop, and deliberate alternative opinions and decisions. Institutions should strive to establish forums that adhere to trust, transparency, openness, and equity principles, as

Action: Policy and Public Expectations,” In *Engaging the Public with Climate Change* (Routledge, 2012): 47-65.

44 Roger Few et. al., “Public Participation and Climate Change Adaptation: Avoiding the Illusion of Inclusion,” *Climate Policy* 7, no. 1 (2007): 46-59.

45 Debashish Munshi et. al., “Centering Culture in Public Engagement on Climate Change,” *Environmental Communication* 14, no. 5 (2020): 573-581.

46 Susanne C. Moser and Cara Pike, “Community Engagement on Adaptation: Meeting a Growing Capacity Need,” *Urban Climate* 14 (2015): 111-115.

47 Bruce V. Lewenstein and Dominique Brossard, *Assessing models of public understanding in ELSI outreach materials. No. DOE/ER/63173-1* (Ithaca, NY: Cornell Univ., 2006).

48 Sherry R. Arnstein, “A Ladder of Citizen Participation,” *Journal of the American Institute of Planners* 35, no. 4 (1969): 216-224.

49 Bill Cooke and Uma Kothari, eds. *Participation: The New Tyranny?* (Zed Books, 2001).

50 Susan Owens, Tim Rayner, and Olivia Bina, “New Agendas for Appraisal: Reflections on Theory, Practice, and Research,” *Environment and Planning A* 36, no. 11 (2004): 1943-1959.

51 Roger Few et. al., “Public Participation”.

suggested by Mitchell (2013).⁵² For this to work, such environments must be tailored to the specific audiences, contexts, and problems of the intended area; without doing so, this will likely not result in any constructive results.^{53,54} Ergo barriers to engagement here can be understood as anything that challenges or negatively affects this process. This would seem to be an unsatisfactory conceptualisation of barriers, and that is largely because it is. A significant criticism of this approach is that it doesn't explicitly account for the complexity of barriers. While from the literature one can infer what would act as a barrier, for example, institutional reluctance to cede power to participants or a lack of demand on participants' parts, an actual framework for conceptualising and identifying barriers does not exist.

Furthermore, despite the ease of operationalising this definition, its limited scope perhaps fails to account for the broader manners in which people may be engaged with climate change. Therefore, employing this approach alone in the context of this paper and its aims may not be appropriate. While increasing participatory policymaking is important, an exclusive emphasis on this aspect fails to address the practical challenges associated with its implementation, particularly within contexts where the intended participants typically demonstrate low engagement with the issue of climate change.^{55,56} For this approach to be viable, existing concern or interest is a prerequisite, which is not the case for the working class, especially in Glasgow.⁵⁷ While a relevant starting point, this interpretation does not go far enough. Hence, an

52 Bruce Mitchell, *Resource and Environmental Management*. (Routledge, 2013).

53 Neil W. Adger, Katrina Brown, and Emma L. Tompkins, "Making Waves: Integrating Coastal Conservation and Development," *Management of Environmental Quality: An International Journal* 15, no. 1 (2004): 79-80.

54 Gard Lindseth, "Local Level Adaptation to Climate Change: Discursive Strategies in the Norwegian Context," *Journal of Environmental Policy and Planning* 7, no. 1 (2005): 61-84.

55 Ciaran Mulholland et. al., *Understanding and Engaging the Public on Climate Change* (Ipsos MORI, 2020).

56 Robert Gifford and Andreas Nilsson, "Personal and Social Factors that Influence Pro-environmental Concern and Behaviour: A Review," *International Journal of Psychology* 49, no. 3 (2014): 141-157.

57 Ciaran Mulholland et. al., *Understanding and Engaging the Public on Climate Change*.

approach that provides a broader understanding of engagement and a concrete framework for identifying barriers is required.

This approach can be found in the second perspective on engagement and has been widely employed throughout the literature. This understanding of engagement posits that engagement should be understood as a personal state of connection with the issue of climate change, with engagement comprising three elements: cognitive, affective, and behavioural, which interact non-linearly.^{58,59} Critically, this perspective contends that simply involving people in policy processes is inadequate, but rather their ‘hearts, bodies, and minds’ need to be involved with the issue of climate change to elicit sustained engagement with the issue.^{60,61} Fundamentally, to be engaged in this perspective is to understand climate change, to care about it, and to be able to act on it. This can, in turn, manifest as political engagement, civic engagement, or consumer engagement; however, it is not confined to one type of engagement.⁶² The distinction here is the notion that engagement, viewed only as involving citizens in policy processes, is not a sufficient objective. This can be construed as temporary engagement, whereby individuals are briefly involved with the policy processes, but involvement with these processes does not guarantee sustained engagement.⁶³ This is not to say individuals cannot enact environmentally friendly behaviours or choices without being involved with their hearts, bodies, or minds, but rather they are not consciously engaging in those behaviours with the issue of climate as a motivating factor, hence not embodying a personal state of connection. While this sounds pedantic, it is an important distinction to draw, as sustained active engagement is integral to the success of mitigation and adaptation measures.⁶⁴

58 Irene Lorenzoni et. al., “Barriers Perceived to Engaging”.

59 Johanna Wolf and Susanne C. Moser, “Individual Understandings”.

60 Susanne C. Moser and Carol L. Berzonsky, “There Must Be More: Communication to Close the Cultural Divide,” *The Adaptive Challenge of Climate Change* (2014): 287-310.

61 Lorraine Whitmarsh and Saffron O’Neill, “Opportunities for and Barriers to”.

62 Irene Lorenzoni et. al., “Barriers Perceived to Engaging”.

63 Susanne C. Moser and Carol L. Berzonsky, “There Must Be More”.

64 John Wiseman et. al., “Community Engagement and Climate Change:

By accepting this interpretation, engagement becomes a somewhat ambiguous term in terms of operationalisation. Having shifted from the sole emphasis on engagement as participation in policy processes, there is a need to present how engagement might be pursued in this regard. However, it is essential to note that individuals engage with the issue differently according to their demographic characteristics.⁶⁵ Hence, efforts to increase engagement vis-à-vis this interpretation could take a variety of forms depending on what audience one is speaking to. For example, basic information provision on the causes of climate change could provide one with knowledge on how best they can act appropriately with the issue.^{66,67} However, this information must be communicated in a manner deemed credible by the prospective audience to be effective.⁶⁸ This represents one example; however, policy options are widely context-dependent and contingent upon the state of the audience's baseline engagement, although a better understanding is gained through the conceptualisations of barriers in this interpretation. Building upon existing literature on psychological, social, and institutional barriers concerning climate change,^{69,70} Lorenzoni et al., (2007) separates 'barriers' into the categories of social and individual based on a comparative analysis of three international empirical studies. Individual barriers relate to constraints that are endogenous and specifically apply to one on a personal level, such as lack of knowledge, externalising responsibility, helplessness, and Learning from Recent Australian Experience," *International Journal of Climate Change Strategies and Management*, 2, no. 2 (2010): 134-147.

65 Jan C. Semenza et. al., "Public Perception of Climate Change: Voluntary Mitigation and Barriers to Behavior Change," *American Journal of Preventive Medicine*, 35, no. 5 (2008): 479-487.

66 Willett Kempton, "How the Public Views Climate Change," *Environment: Science and Policy for Sustainable Development* 39, no. 9 (1997): 12-21.

67 Keith R. Stamm et. al., "Mass Communication and Public Understanding of Environmental Problems: The Case of Global Warming," *Public Understanding of Science* 9, no. 3 (2000): 219.

68 Susanne C. Moser and Lisa Dilling, "Making Climate Hot," *Environment: Science and Policy for Sustainable Development* 46, no. 10 (2004): 32-46.

69 Susanne Stoll-Kleemann et. al., "The Psychology of Denial Concerning Climate Mitigation Measures: Evidence from Swiss Focus Groups," *Global Environmental Change* 11, no. 2 (2001): 107-117.

70 James Blake, "Overcoming the 'Value-action gap' in Environmental Policy: Tensions Between National Policy and Local Experience," *Local Environment* 4, no. 3 (1999): 257-278.

reluctance to change lifestyles.⁷¹ Comparatively, social barriers are exogenous and represent constraints that are beyond the individual's capacity to change alone.⁷² Consequently, policy measures should be tailored to these overarching barriers. This separation of individual and social, while simple, reveals how barriers are experienced by the public on multiple levels, thus providing a more nuanced framework to diagnose barriers to public engagement and highlight more appropriate policy solutions. However, there are some questions to ask about this approach. For example, how does one negotiate barriers that stray across the boundaries of social and individual? And perhaps more pertinently, how does one decide which barriers warrant prioritisation?

To provide a comprehensive understanding, Sutton and Tobin's (2011) development of this approach warrants inclusion. They argue for refinement and expansion of the previous approach, which can answer some of the above questions. A central contention of Sutton and Tobin (2011) is that engagement is a linear process.⁷³ Whereby cognitive dictates the affective, the sum of which influences the level of desire for behavioural engagement.⁷⁴ This has significant implications for operationalising this approach and importantly it contrasts the conceptualisation outlined by Lorenzoni et al., (2007). Arguing for a linear process means that one can understand the cognitive and affective elements as being the sum of an individual's desire to engage with the issue, which informs the behavioural element, representing one's ability to act on this desire.⁷⁵

In this same vein, barriers then correlate to constraints on desire and ability, and using Tanner's theory (1999), engagement with climate action can be categorised as subjective and objective, respectively.⁷⁶ If one accepts this development, then barriers to engagement can be viewed as a hierarchy that individuals must navigate to increase their

71 Irene Lorenzoni et. al., "Barriers Perceived to Engaging".

72 Ibid.

73 Stephen G. Sutton and Renae C. Tobin, "Constraints on Community Engagement".

74 Ibid.

75 Ibid.

76 Carmen Tanner, "Constraints on Environmental Behaviour," *Journal of Environmental Psychology* 19, no. 2 (1999): 145-157.

engagement.^{77,78} From this position, it then becomes clearer how to tackle barriers. While subjective and objective barriers coexist and exert influence at the same time, in this view, they are separate. In other words, subjective barriers only impede cognitive and affective engagement, whereas objective barriers only affect behavioural engagement. Intuitively, policy measures should start with removing barriers that inform one's desire to be engaged.

The Role of Participation in Policymaking

Participation in policymaking has received a lot of attention; indeed, it is a central form of engagement. While the above approach places less emphasis on participation in policy processes, it is a recurring theme throughout engagement literature, and there is nearly universal agreement that it is intrinsically good.⁷⁹ Yet a comprehensive review should entail an analysis of the role it plays. Participation in policymaking can play two roles: as an instrument from the perspective of policymakers and as an intrinsic aspect of empowerment.⁸⁰ The latter is more relevant in this context. Normatively speaking, participative policymaking can be viewed as a fundamental pillar of inclusive and deliberative approaches that place participants' concerns and knowledge at the centre of decision-making processes, contrasting the top-down managerial approach that often does not incorporate the concerns of those less privileged.⁸¹ Hence, through an emancipatory understanding, participation in policy processes can be seen as more than just simply involving people but rather as an intrinsic medium that individuals may use to engage with democracy, which is essential

77 Edgar L. Jackson, Duane W. Crawford, and Geoffrey Godbey, "Negotiation of Leisure Constraints," *Leisure Sciences* 15, no. 1 (1993): 1-11.

78 Duane W. Crawford, Edgar L. Jackson, and Geoffrey Godbey, "A Hierarchical Model of Leisure Constraints." *Leisure Sciences* 13, no. 4 (1991): 309-320.

79 Stephan Hügel and Anna R. Davies, "Public Participation, Engagement, and Climate Change Adaptation: A Review of the Research Literature," *Wiley Interdisciplinary Reviews: Climate Change* 11, no. 4 (2020): 645.

80 Judy B. Rosener, "Citizen Participation: Can We Measure Its Effectiveness?," In *The Age of Direct Citizen Participation* (Routledge, 2015): 365-373.

81 Roger Few et. al., "Public Participation".

to improving legitimacy and representation.⁸² Yet the effectiveness of participatory policymaking is fundamentally influenced by its structure. For example, is there a genuine commitment from governmental institutions to listen to and cede deliberative power to participants? If this is not the case and there is no redistribution of power, this approach, as O'Neill (2001) notes, can only result in a false consensus.⁸³ In this sense, participative policymaking may reinforce existing power structures, especially within inherently inequitable institutions, by failing to address underlying power imbalances, thus suppressing genuine dialogue, and perpetuating hierarchical control, stifling meaningful engagement.⁸⁴

With participation in policy processes playing such an essential role in empowering individuals, the first approach to engagement might be the most suitable for this context. However, while the second interpretation places less emphasis on participation in policy processes, it is still incorporated into its conceptualisation of engagement instead of being limited to it. Rather than separate the two approaches, as is often the case, I would contend that they are both inherently fundamental to understanding engagement, and an integrated approach is needed. A combined approach is justified due to the limitations of existing research. For example, in Hugel and Davies' (2020) review of 484 publications related to the topic, they found relatively few that looked at the issue of engagement with climate change for low-income communities.⁸⁵ Despite the acknowledgement that material capabilities and unequal power distribution influence engagement, there is a lack of focus on working-class individuals.^{86,87}

82 Jean-Jacques Rousseau, *Rousseau: The Social Contract and Other Later Political Writings* (Cambridge: Cambridge University Press, 2018).

83 John O'Neill, "Representing People, Representing Nature, Representing the World," *Environment and Planning C: Government and Policy* 19, no. 4 (2001): 483-500.

84 John Bosco Isunju and Jaco Kemp, "Spatiotemporal Analysis of Encroachment on Wetlands: A Case of Nakivubo Wetland in Kampala, Uganda," *Environmental Monitoring and Assessment* 188 (2016): 1-17.

85 Stephan Hügel and Anna R. Davies, "Public Participation, Engagement"

86 Mark Kammerbauer and Christine Wamsler, "Social Inequality and Marginalisation in Post-disaster Recovery: Challenging the Consensus?," *International Journal of Disaster Risk Reduction* 24 (2017): 411-418.

87 Dries LT Hegger et. al., "The Roles of Residents in Climate Adaptation:

Theoretical Underpinnings and Proposed Framework

Central to the analysis of this literature is the employment of critical theoretical frameworks, namely ecological Marxism,⁸⁸ rational ecology,⁸⁹ and green political theory.⁹⁰ These frameworks critically examine the exacerbation of traditional class conflicts under capitalist systems in the context of climate change. A fundamental tenet shared across these theories is the presumption that addressing climate change necessitates a broad class coalition and systemic changes in political and economic structures.⁹¹ This perspective underscores the intrinsic connection between class dynamics and climate change, emphasising how the working class's ability to adapt and mitigate its effects is constrained by their social position.^{92,93} Moreover, limited resources exacerbate their challenges, further reducing their capacity to cope with climate change.^{94,95} Thus, these critical theories are instrumental in providing a perspective that interweaves the complexities of class and climate change. This approach aligns with past research in the field, notably the seminal work of Lorenzoni et al., (2007).⁹⁶ However, given the focus on addressing the gap in working-class individuals' engagement with the issue in this paper, it is important to explicitly acknowledge their contribution.

A Systematic Review in the Case of the Netherlands," *Environmental Policy and Governance* 27, no. 4 (2017): 336-350.

88 James R. O'Connor, ed. *Natural Causes: Essays in Ecological Marxism* (Guilford Press, 1998).

89 John S. Dryzek, "Foundations for Environmental Political Economy: The Search for Homo Ecologicus?," *New Political Economy* 1, no. 1 (1996): 27-40.

90 Robyn Eckersley, *Environmentalism and Political Theory: Toward an Ecocentric Approach* (Routledge, 2023).

91 Dale Jamieson, ed. *A Companion to Environmental Philosophy* (John Wiley & Sons, 2008).

92 Pierre Bourdieu, *Outline of a Theory of Practice*, trans. Richard Nice (Cambridge: Cambridge University Press 1972).

93 Anthony Giddens, *A Contemporary Critique of Historical Materialism*, vol. 1 (University of California Press, 1981).

94 Jan C. Semenza et. al., "Public Perception of Climate Change".

95 Susan M. Shaw, Arend Bonen, and John F. McCabe, "Do More Constraints Mean Less Leisure? Examining the Relationship Between Constraints and Participation," *Journal of Leisure Research* 23, no. 4 (1991): 286-300.

96 Irene Lorenzoni et. al., "Barriers Perceived to Engaging".

While the above theory has influenced the direction of the paper, a clear outline of the framework for analysis is required to understand the barriers to engagement. I argue that integrating the framework from Lorenzoni et al., (2007) with that of Sutton and Tobin's (2011) provides a complementary approach that synthesises alternative conceptualisations of engagement and barriers to provide a more comprehensive framework that can account for the interconnectedness of barriers. This approach includes an understanding of Tanner's (1999) application of the ipsative theory of behaviour,⁹⁷ on which Sutton and Tobin's (2011) framework is based, but with a key difference. The central distinction I contend is that, while Lorenzoni et al., (2007) are correct in their assertion that the three elements of engagement are related in a non-linear fashion, their explanation does not sufficiently account for barriers that stray across the boundaries of social and individual and operate concurrently. Similarly, as outlined by Sutton & Tobin (2011), engagement can be understood conceptually as a linear process, and barriers will coexist; however, subjective barriers are not invariably tied to the affective and cognitive elements of engagement but can also influence the behavioural element independent of informing an individual's desire for behavioural engagement. Likewise, objective barriers can also influence the affective and cognitive aspects, as illustrated by Figure 1.1. This assertion rests on the view that persistent objective barriers consequently reduce one's desire to be engaged. Indeed, as Sutton & Tobin (2011) note, their model assumes that subjective and objective do not overlap.⁹⁸ However, this is not a realistic interpretation or readily applicable to everyone, but it represents one path to engagement. Hence, while barriers can be navigated in a hierarchical manner, the framework is not confined to this and views engagement as a dynamic and continuous process. In essence, the proposed framework combines non-linear and linear understandings to provide a model that is more consistent with the various pathways to engagement that exist in reality. The principal conclusion from this integrated view is that policy must tackle both types of barriers at the same time. Accordingly, and in conjunction with the critical theories noted, this should allow for a more holistic

97 Carmen Tanner, "Constraints on Environmental Behaviour".

98 Stephen G. Sutton and Renae C. Tobin, "Constraints on Community Engagement".

approach, one that can identify barriers and assist in explaining the social, economic, and systemic roots of these barriers in Glasgow.

Concluding Remarks

Through an in-depth examination of the evolution of the field of CCC and the literature and appreciation of critical theories, alongside the integration of Lorenzoni's framework with Sutton and Tobin's conceptualisation of engagement barriers, this study has offered a nuanced understanding of the multifaceted barriers impeding working-class individuals' engagement with climate change. The synthesis of these theoretical perspectives has illuminated a critical, albeit intuitive, finding: that both subjective and objective barriers to climate change engagement are deeply embedded in the socio-economic fabric of the working class. This understanding challenges the simplistic dichotomy often portrayed in policy and academic discourse and recognises the dynamic and continuous nature of engagement.

By doing so, this paper underscores the necessity of addressing both types of barriers concurrently, a strategy that is more conducive to providing effective policy interventions and fostering engagement among the working class. However, it's important to acknowledge the limitations of paper. Firstly, the focus on Glasgow, while illustrative of broader socio-economic challenges, limits the applicability of the analysis and proposed framework to other contexts. Additionally, the theoretical frameworks employed, while insightful, may not fully capture the diversity of perspectives and experiences surrounding climate change engagement. Secondly, this paper has strayed away from providing concrete policy suggestions, as this is beyond the scope of the paper and inherently context dependent. However, this remains an equally important avenue for future research. Moreover, further research is required to uncover what drives engagement among working-class individuals. Understanding these factors is crucial, as the removal of subjective and objective barriers alone is not sufficient to induce sustained engagement.

Appendix

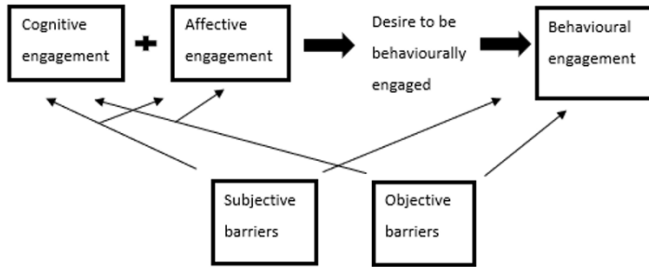


Figure 1.1: Theoretical Model for Understanding Engagement and Barriers to it. (Author's own).

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