US Centre Summer Research Grant

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Thesis Title: From the individual to the system and back again: Bridging the gap between deconsumption and degrowth for a sustainable path forward

Project Title: Degrowth in America? Using a Discrete Choice Experiment to Understand Policy Preferences

Summary of Project:

Climate scientists, activists, and concerned citizens around the world are converging toward a consenus regarding climate change: we need immediate global action on mitigation and adaptation to avoid environmental catastrophe. However, recent calls are shifting tone away from behavioural and individual level changes, instead toward addressing systems and structures. The IPCC's Sixth Assessment report recently called for *transformations* and structural changes to achieve adequate climate mitigation and adaptation, including fundamental changes to society through policy implementation (IPCC, 2022). One such change involves reevaluating the role of economic growth as a societal objective. Degrowth is a critique of the econonomic growth mandate imposed by capitalism, positing instead that affluent countries in the Global North reduce production and consumption of carbon-intensive industries to remain within planetary limits (Schmelzer et al., 2022). Beyond economic restructuring, degrowth also calls for less extractivist and consumeristic values and instead more community-oriented values (Kallis et al., 2020). Degrowth also encompasses a series of policy proposals for how to bring about this transformation (e.g., Fitzpatrick et al., 2022). The current project sought to analyse American's preferences for a subset of these degrowth policy proposals using a discrete choice experiment. Previous studies have examined public opinion on the growth-environment debate and importance of economic growth (e.g., Lehmann et al., 2022; Tomaselli et al., 2019), and sentiments toward its name and framing (Krpan & Basso, 2021; Tomaselli et al., 2021). To our knowledge, no study has systematically analysed public opinion related to degrowth policy proposals, at least in the United States. Degrowth opinions and preferences are particularly understudied in the United States, where there is less awareness of the term and its objectives than in Europe. Using discrete choice methodology, we investigate how a representative group of the American public trade-off between different specifications of the following degrowth policies: work time reductions, limits to fossil fuel extraction and production, restrictions on advertising of high emissions goods, and expanded coverage of free health insurance. We also capture self-reported data about people's engagement with reduced consumption behaviours to examine any links between practicing reduced consumption and supporting degrowth policies.

Introduction

Sustainable consumption[1] (hereafter, "SC") discourse has evolved substantially over the past few decades, initially with a focus on clean and efficient production in the 1990s, to "greener" consumption choices through educational campaigns and 'nudging'[2] interventions in the 2000s (Cohen, 2020). However, there is little evidence that individual behaviour change agendas have made any meaningful difference in reducing emissions levels and/or applying pressure to pass comprehensive climate policies (Jackson, 2009; Lorek & Fuchs, 2013; Wynes & Nicholas, 2017). Primarily following the 2008 financial crisis, there have been increasing appeals in the SC literature for structural approaches to tackle consumerism and reduce overall levels of consumption as the only means of adequately addressing the environmental consequences of consumer behaviour (e.g., Abson et al., 2017; Cohen, 2020). In adjacent literature, ecological economists have considered the limits to growth for many decades, including the landmark "Limits to Growth" report from 1972 calling into question the compatibilty of inifite economic and population growth on a planet with finite resources (Meadows et al., 1972). However, critiques of growth go back much further than this report, to at least the 18th century (Schmelzer, 2022).

Degrowth arose mostly from within the ecological economics discipline, starting from this standpoint that infinite economic growth cannot ever be sustainable given the finite resources on our planet. However, it is not simply an academic exercise, as degrowth is also a political movement (Demaria et al., 2013). Advocates of degrowth espouse the need for significant downscaling in the production and consumption of energy and resources by countries in the Global North to remain within planetary limits (Schmelzer et al., 2022). Beyond economic objectives, degrowth scholars also call for values of extractivism and consumerism to be replaced with more community-oriented values, conviviality, and a revival of the commons

[1] In addition to 'sustainable consumption', various other terms, e.g., green consumption, ethical consumption, responsible consumption, pro-environmental behaviour, have also been used to describe overlapping topics in a variety of publications related to SC (e.g., Bylok, 2017). Because of the practical application of SC as a Sustainable Development Goal and what appears to be a greater consensus in the academic literature, this paper will use "sustainable consumption" as the appropriate super-category.

[2] A 'nudge' is a behavioural intervention in which context or choice's architecture is altered in some way without imposing any restriction on choice or changing economic incentives in a meaningful way (Thaler & Sunstein, 2008).

(Kallis et al., 2020). To enact this shift, degrowth also encompasses a series of policy proposals for how to bring about the transformation. Recently, more than 500 proposals related to degrowth were identified in the literature, though commonly cited policies include: reducing time in paid work, caps on resource (e.g., fossil fuel) use and emissions, expanding acces to social support and basic services such as a universal basic income, reclaiming the commons, and income caps (Fitzpatrick et al., 2022).

To date, there have been hundreds of articles published related to degrowth in academic literature and books (Fitzpatrick et al., 2022), transitioning from a fringe project and into the mainstream (e.g., Hickel, 2020). The word 'degrowth' was even included in the body of the IPCC's Sixth Assessment report 15 times (IPCC, 2022). The term has also garned much media attention (e.g., Urso & John, 2022), though much of it is from those who disagree with the proposals and any criticism of economic growth as a policy objective (e.g., McLaughlin, 2022; Phillips, 2019).

There is mostly agreement amongst degrowth supporters that the main goals and policies associated with degrowth should be achieved through the means of democratic deliberation as opposed to top-down imposition by any current or future state (Buch-Hansen & Koch, 2019; D'Alisa & Kallis, 2020; Gabriel & Bond, 2019; Gunderson & Yun, 2017; Sekulova et al., 2013). Despite the rather strongly held belief in democratic deliberation, not nearly enough studies have asked the public their opinion of these policies, while most articles outlining policy ideas characterize top-down, national level policy (Cosme et al., 2017).

To date, degrowth studies examining public opinion typically focus on attitudes toward growth and/or the environment, and the trade-off between these broad ideological factors (Drews et al., 2018; Drews & van den Bergh, 2016; Lehmann et al., 2022; Tomaselli et al., 2019). Studies have also investigated responses to the term 'degrowth' and how it is framed (Krpan & Basso, 2021; Tomaselli et al., 2021). To our knowledge no study has systematically analysed public opinion related to degrowth policy proposals specifically. A commonly held criticism of degrowth's policy proposals is not the logistical feasibility of implementing them, but rather a question of political will (e.g., van den Bergh, 2011). The opinions of state leaders and policymakers present a significant impediment. However, the political will of the people must

be won first and foremost, as social-political feasibility of policy implementation depends on attitudes of the public (Drews et al., 2018). This process starts with understanding public appetite for the specific policies cultivated and debated over years by degrowth scholars. This is the central objective of the present study. Among the few empirical studies that address attitudes toward growth or degrowth, none appear to connect individual-level practices toward reduced consumption with degrowth policy support more broadly. While we do not make the argument that individual behaviour change is adequate in addressing the climate crisis, we also seek to understand the connection between everyday behaviours and policy preferences in exploring pathways to garner public engagement with degrowth.

Project Design

This study elicits preferences for degrowth policies from a representative sample of Americans, using a discrete choice experiment (DCE) to test policy preferences using a rigorous quantitative method. There are notable drawbacks to the methodology, including concerns over its validity and hypothetical bias associated with stated preference methods in general (Johnston et al., 2017). We take steps to address these concerns, whilst still recognizing the limitations associated with using discrete choice experiments here.
Research questions associated with this project include:

1) How do Americans' preferences for degrowth policies compare to those of status quo policies, and how does presenting a degrowth-framed context influence preferences?
2) Which degrowth policies, if any, are more acceptable to Americans than others?
3) How might an individual's engagement with reduced consumption practices relate to their preferences for degrowth policies?

The study involves a mixed between- and within-subject design. Between subjects, there are two treatment groups, which vary by the extent of background information provided about degrowth related themes. In the control group, participants receive factual information about the climate crisis, and a very brief description of the link between social and ecological

problems. In the treatment group, participants receive more extensive background information, including an introduction to the themes related to degrowth, such as concerns regarding economic growth and excessive consumption. We designed these treatments to test if providing context about degrowth's objectives would promote support for related policies, or cause more backlash, and to understand which demographics are more or less responsive to the framing.

Within subjects, there are also repeated measures per participant for each policy scenario choice set they receive. The policy scenarios randomly vary six attributes with a set of levels each, and each attribute comprises two to three possible levels. A sample choice card is shown in **Figure *1***. Each participant is shown eight randomly selected choice sets out of a possible 40, and must choose one of three alternatives (Status Quo, Option A, and Option B) comprising different levels of each attribute. We use an iterative process to select the appropriate levels for each choice set for a Bayesian efficient design (Contu et al., 2016).

Figure 1 – Sample Choice Card

Choose the option <u>you</u> prefer overall.

	Option A	Option B	Status quo
Work time	4 days, 28 hours weekly	4 days, 32 hours weekly	5 day work week, 40 hours weekly
Fossil fuel limits	Annual cap on extraction	Complete ban on new extraction	No caps or limits
Advertising (high emissions products)	No ads allowed in public spaces	No ads allowed in general	No limits on advertising
Healthcare coverage	Universal Health coverage for all	Raise Medicaid limit to 500% Federal Poverty Line	Medicaid is provided for those up to 138% of the Federal poverty line
Emissions reduction (from 2005 level by 2030)	50% reduction in emissions	70% reduction in emissions	between 12.5% to 40% reductions in emissions from 2005 level by 2030
Income tax increase	5% increase in income taxes	1% increase in income taxes	No change

Each of the eight choice cards the participants receive contains six attributes. The worktime, emissions reductions, and tax attributes all have three possible levels, while the healthcare, advertising limits, and restrictions on fossil fuel production have two possible levels. These attributes were selected following a review of the degrowth policy literature and were further refined using focus groups and piloting.

- The **worktime reduction attribute** varies by days and hours worked per week, with the following three levels: 5 days, 35 hours weekly; 4 days, 32 hours weekly; or 4 days, 28 hours weekly.

- The **restrictions on fossil fuel production attribute** varies by the extent of the restriction, with the following two levels: Annual cap on extraction, or Complete ban on new extraction.

- The **limits to advertising of high emissions goods attribute** varies by the type of limitation, with the following two levels: No ads allowed in public spaces, or No ads allowed in general.

- The **health insurance attribute** varies by the population covered under insurance, with the following two levels: Raise Medicaid limit to 500% Federal Poverty Line, or Universal Health coverage for all.

- The **emissions reduction attribute** varies by the percent of emissions reduction from the 2005 level of emissions by 2030, with the following three levels: 50% reduction in emissions, 60% reduction in emissions, or 70% reduction in emissions.

- Finally, the **income tax attribute** varies by the percentage increase in annual income taxes, with the following three levels: 1%, 3% or 5% increase for households earning less than $600K (we expect nearly all of our sample to fall into this category) or 3%, 9%, or 15% increase for households earning more than $600K. The $600K mark was used as a rough estimate of the average top 1% of earners in America. Participants are informed of the tax increase for both groups in the scenario description regardless of their income.

We also ask participants to report how often they engage with behaviours associated with reducing consumption, for example including: avoiding flights, choosing meals with less meat and animal proteins, using active travel (e.g., walking and cycling), or reducing water use (e.g., shorter showers). These behaviours were adapted from ongoing work by Shreedhar (in preparation), and classified as reduced consumption based on the typologies of consumption changes for sufficiency outlined by Sandberg et al. (2021). Finally, we include other questions on individual characteristics, such as political ideology (Whitmarsh & Corner, 2017), trust in government (Faure et al., 2022; Kettle & Dow, 2016; Kim et al., 2013), and universalism values (Schwartz et al., 2012), along with demographic questions.

Our target sample is 1,000 participants. This sample size would not have been possible without the Phelan US Centre Grant. The full grant has been used to recruit and compensate an adequate sample size of participants in order to achieve an appropriate power level of at least 0.8, assuming a small effect size when comparing two independent groups (Faul et al., 2007). This sample size and the ability to afford a representative sample will improve the rigor of our findings, bolstering internal and external validity.

Participants are recruited through a market research firm, from which they receive a number of points proportional to the length of the survey upon completion of the survey. These can be later redeemed for purchases. Participants must be at least 18 years old, residents of United States, and speak fluent English. The final group of participants comprises a representative sample of the American population by age, gender, and geographic region. Participants complete the survey online, which was created via Qualtrics.

Data Collection & Results

Data is still in its final stages of being collected, so analysis has yet to be completed. Analysis will take place using a combination of STATA and R to test the following hypotheses:

- **H1** (non-directional): Exposure to the degrowth background information treatment will influence willingness to pay for all attributes.

- **H2a** (directional): Political ideology will significantly predict WTP for all attributes, such that being further to the left will increase WTP.
- **H2b** (directional): Political ideology will significantly predict WTP for all attributes, such that being further to the right will reduce WTP.
- **H3** (directional): The effect of the background information treatment on WTP for attributes will be moderated by political ideology.
- **H4** (directional): Self-reported engagement in deconsumption behaviours will increase WTP for all attributes.
- **H5** (directional): Policy consequentiality beliefs will increase WTP.
- **H6** (directional): Pay consequentiality beliefs will increase WTP.
- **H7** (directional): Universalism values (nature, concern) will significantly predict WTP for all attributes.

Conclusions and Next Steps:

Whilst it is too early to establish any formal conclusions, our aim is to establish some baseline understanding of how Americans perceive the selected policy proposals related to degrowth. Much time and energy has been spent formulating these ideas by various contributors to degrowth literature, yet not nearly enough has been devoted to understanding the perceptions of and support for these policies by the general public. Upon completing data collection and analysis, I hope to use these findings as the third project in my doctoral thesis. More broadly, I hope that this study can contribute toward shifting away from solely formulating ideas about degrowth policies and toward engaging directly with public opinion to understand preferences. It is only through engaging in democratic processes and dialogues, involving the voices of citizens, that initiatives toward climate change mitigation may advance from theory to action.

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