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# Institutionalising degrowth regime: a review and analysis of degrowth transition proposals

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## Abstract

The degrowth project proposes a fundamental reorganisation of contemporary society. The existing literature focuses on explaining why degrowth is needed to tackle the multiple socioecological crises of our time and what needs to change in contemporary society. Recently, there have been explicit calls to moving on to thinking about the question of how a degrowth transition could be achieved. In this task, we identify the ‘end’ of the vision, that is, the cornerstones of a degrowth society, and focus on the suggested changes leading there. Therefore, we conceptualise a degrowth society as a regime that can be studied with the help of institutional theory and the change leading to a degrowth regime as a degrowth transition. To understand the constituents of such a regime, we conducted a systematic mapping of the degrowth literature by focusing on specific change proposals from 2000 to 2020. We analysed these change proposals in the framework of institutional theory and identified three overarching themes forming the backbone of a degrowth society: reduction, reorganisation and localisation. These themes represent the cultural–cognitive dimension of institutionalisation processes and entail varying degrees of normative and regulative dimensions. According to the degrowth change proposals in the literature, reduction is to be achieved mainly through top-down regulation, while reorganisation and localisation require a bottom-up approach to mobilising collective agency and changes in the normative orientation of society. Our analysis regarding the founding pillars of the institutional order of a degrowth society unveils essential signposts that could be considered when formulating policies and narratives compatible with a degrowth transition.

**Keywords** Degrowth · Post-growth · Proposals · Sustainability transition · Regime · Institutional theory

## Introduction

Degrowth can be seen as an assemblage of diverse ideas concerning society that does not aim at growth (Parrique 2019). The degrowth approach challenges the traditional narrative embraced by various governmental and institutional actors based on decoupling environmental impacts from economic growth through efficiency improvements, clean technology and sustainable substitutes (Hickel and Kallis 2020; Buch-Hansen and Carstensen 2021). Instead, it calls for a democratically led shrinking of production and consumption with the aim of achieving social justice and ecological

sustainability (D’Alisa et al. 2015). The main argument of the degrowth approach is built on the necessity of achieving declining output to tackle the grand sustainability challenges, such as climate change and biodiversity loss, which have not been decoupled from economic growth, contrary to claims by advocates of the green growth paradigm (Ward et al. 2016; Parrique et al. 2019; Feola 2020; Hickel and Kallis 2020; Vadén et al. 2020). As a whole, however, the degrowth project goes beyond the idea of declining output and pursues change in the underlying rules, structures and culture of society. Despite still being a movement at the margins, there has been growing interest in degrowth because of recurring economic crises and the global COVID-19 pandemic. These crises have shed light on the drawbacks of today’s highly connected and globalised societies. In addition, the inclusion of degrowth as an alternative sustainability concept in the latest report by the Intergovernmental Panel on Climate Change (2022) means that it has been introduced to wider audiences.

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The degrowth literature has traditionally focused on *why* degrowth is needed to tackle the multiple socioecological crises of our time (see, e.g., D'Alisa et al. 2015; Kallis 2011; Hickel and Kallis 2020). Furthermore, there has been considerable attention on what needs to change in contemporary society (see, e.g. Cosme et al. 2017; Parrique 2019; Hickel et al. 2022). However, many authors have been calling for greater emphasis on the question of how a degrowth transition could be achieved (Joutsenvirta 2016; Vandeventer et al. 2019; Kallis et al. 2020; Khmara and Kronenberg 2020; Fitzpatrick et al. 2022; Guerrero Lara et al. 2023). A promising approach to addressing the 'how' question of degrowth lies in the intersection of sustainability transition research and the degrowth literature, which have until recently remained largely isolated from each other (Loorbach et al. 2017; Khmara and Kronenberg 2020; Guerrero Lara et al. 2023). A sustainability transition is defined as 'a radical, structural change of a societal (sub) system that is the result of a co-evolution of economic, cultural, technological, ecological and institutional developments at different scale-levels' (Rotmans and Loorbach 2009, p. 2). Research on sustainability transitions has generally aimed to uncover how these radical changes take place within a social system (Köhler et al. 2019). Sustainability transition research has been characterised as a 'meso-level approach' that does not always sufficiently address large-scale societal developments (Genus and Coles 2008; Svensson and Nikoleris 2018; Feola 2020). Indeed, even though transition research, by definition, advocates a radical societal transformation, the research stream is largely silent on the nature of the sustainable society being pursued (Meadowcroft 2011; Patterson et al. 2017; Muiderman 2022)—the 'sustainability of sustainability transitions' (Feola 2020, p. 242).

The degrowth project offers a promising frame or vision of the kind of development that could be sought in the course of sustainability transitions. However, the integration of degrowth and transition theory needs to be accompanied by further signposts in order to formulate pathways towards a post-growth society (Schmid 2019). In this task, the concept of regime can prove helpful. A regime can be seen as an institutionalised structure built around a semi-coherent rule set that coordinates the activities taking place within societies; they are conceptualised as socio-technical systems in transition theory (Geels and Schot 2010; Fuenfschilling and Binz 2018). Sustainability transitions can then be seen as regime shifts in which the dominant institutional logics of the system undergo profound change (Fuenfschilling and Truffer 2014; Kuhmonen and Kuhmonen 2023). Degrowth represents an alternative regime to the contemporary growth-oriented regime. In this vein, we argue that to explicitly answer the question of how degrowth is to change

regimes as the dominant patterns of social organisation, it is useful to understand the (proposed) institutional foundations.

Institutional theory, which has its roots in the study of organisations, stresses the importance of social context in understanding economic processes (Scott 2008). It seeks to understand how the institutional context drives similarities between organisational forms and practices (Lewin and Volberda 2003) through coercive, mimetic and normative mechanisms (DiMaggio and Powell 1983). Scott (2008) expanded the framework to account for three main pillars accounting for institutional isomorphism—the process in which organisations develop increasing similarity—namely, regulative, cultural–cognitive and normative. In the context of degrowth, institutional approaches have been employed, among others, to understand the institutional dimensions of enforcing limits on economies (Klitgaard and Krall 2012), the influence of capitalist diversity on institutional change towards degrowth (Buch-Hansen 2014), the divergence of the institutional features of degrowth societies from current institutional settings (Joutsenvirta 2016) and the meaning-making related to institutional change (Krueger et al. 2018). However, accounts describing the three pillars of the institutionalisation process in the context of degrowth remain wanting. Such accounts could provide a stronger narrative for a prospective degrowth transition, the lack of which has been identified as a major shortcoming in attempts at formulating alternatives to the current growth-focused economic model (Berg and Hukkinen 2011; Vandeventer and Lloveras 2021).

In this study, we ask what a society built on degrowth would look like in light of proposals addressing the question of how a degrowth society could function. We conceptualise such a society as a regime, a temporally stable organisation mode of a socio(-technical) system.<sup>1</sup> Specifically, we address the institutional foundations of a regime built on ideas around degrowth—as a counterpart to the current regime built around growth and capital accumulation. To do this, we ask, what could a degrowth regime look like? What are the constituents of such a model of social organising? While such an endeavour is necessarily hypothetical in nature, as there are currently no regimes built around degrowth, we argue that this line of inquiry can provide important

<sup>1</sup> The 'system', which is institutionalised as a temporally stable regime, has been variously conceptualised depending on the field of study: as a socio-technical system in the field of socio-technical sustainability transition studies; as a social-ecological system in resilience theory, which explores transformations in social-ecological systems, or as a society or specific institution, as in the field of political economy. We use the term 'society' as referring to the social order that is currently organised around a growth-oriented capitalist regime and understand the 'degrowth transition' as a profound transformation process that will result in a reformed social order, organised around the principles of degrowth.

signposts for navigating society beyond capitalism. To do this, we perform a literature review of degrowth proposals, specifically those addressing the question of how a degrowth society could function.

Previously conducted reviews on degrowth proposals have contributed to developing a more coherent degrowth agenda. Cosme et al. (2017) reviewed degrowth policy proposals in relation to the policy objectives of ecological economics, type of approach and geographical focus. Parrique (2019) conducted a wider recompilation of degrowth policies and took a few policy examples to the next level by considering their practical implications. Fitzpatrick et al. (2022) identified 13 themes within degrowth policy proposals and analysed their fit with those of the design of public policies and transition strategies. Chiengkul (2018) broadened the scope by reviewing policy proposals to existing grassroots initiatives within the current capitalist system. Similarly, Kousis and Paschou (2017) reviewed alternative forms of economic and non-economic activities and ways of living, such as citizen initiatives and grassroots groups. Khmara and Kronenberg (2020) reviewed the key literature on degrowth and sustainability transitions to identify common ground between the fields and applied the findings in an analysis of transition experiment cases. Gibbs and O'Neill (2017) reviewed degrowth as a transition discourse, while Vandeventer et al. (2019) conceptualised degrowth as a radical niche innovation that challenges the capitalist growth regime.

While the above studies have been crucial to advancing the degrowth agenda, we complement the existing body of literature by conceptualising the 'how' of degrowth as reflecting the essence of a potential new regime as a new kind of institutional order. We recognise the plurality of degrowth approaches and, therefore, are mindful that degrowth regimes can manifest in diverse forms in different locations. Therefore, we analyse the constituents of a prospective degrowth society in terms of the three institutional pillars: cultural–cognitive, normative and regulative (Scott 2008; Fuenfschilling and Truffer 2014; Kanger and Sillak 2020). Analyses of the founding pillars of the institutional order of a degrowth society can unveil essential signposts that need to be considered when formulating policies and narratives deemed compatible with a degrowth transition. These signposts can also reveal possible contradictions within the degrowth proposals.

## Theoretical background

The convergence between the degrowth and sustainability transition literature is compatible with the recent turn in degrowth research addressing the question of how a degrowth transformation could be fostered (Joutsenvirta

2016; Schmid 2019; Vandeventer et al. 2019; Kallis et al. 2020; Khmara and Kronenberg 2020; Koch 2020; Mocca 2020; Smith et al. 2021; Savini et al. 2022; Barlow et al. 2022; Fitzpatrick et al. 2022; Guerrero Lara et al. 2023). The value of this convergence, we argue, can be captured via the concept of regime. The concept of regime is part of the central vocabulary in research concerning sociotechnical systems and their (sustainability) transitions as well as socioecological transformations and political ecology. Regimes are temporally stable, path-dependent and semi-coherent forms of social organisation. They can encompass both certain subsystems, such as the food system or energy system, or they can operate on a larger scale, encompassing various systems and their interlinkages (Geels and Schot 2007; Geels 2011; Kanger and Sillak 2020). A regime can be conceptualised as the dominant institutional logic of a specific system that coordinates the activities of social groups inhabiting the regime, delineating the “rules of the game” for actors operating within the system (Geels 2011; Fuenfschilling and Truffer 2014).

Institutional theory offers a prominent framework for understanding the logics and rules of regimes (Geels 2004; Fuenfschilling and Truffer 2014). Institutional theory approaches institutions as socially constructed patterns or social orders that instigate routine-like behaviour, relying on specific rule systems and norms (Jepersson et al. 1991; Pacheco et al. 2010). In this framework, institutions can be seen to comprise three elements: regulative, normative and cultural–cognitive (Scott 2008). These elements, ‘together with associated activities and resources, provide stability and meaning to social life’ (Scott 2008, p. 48). Regimes also feature specific material conditions, infrastructures, technologies and artefacts as well as the power relations that keep the social arrangements effective (Buch-Hansen 2014; Svensson and Nikoleris 2018). Thus, understanding the institutionalisation of regimes requires keen attention on the social processes building on these three dimensions.

The cultural–cognitive dimension forms the “bedrock” upon which the other two dimensions build. It concerns the often unconscious, “taken-for-granted” assumptions and understandings about social reality as well as the frames through which this reality is interpreted (DiMaggio and Powell 1983; Scott 2008). An example of such taken-for-granted assumptions about social reality is the need for continuous growth, which guarantees the functioning of society. Once such ideas become “common sense”, overcoming them is difficult (Buch-Hansen 2014). Constitutive rules are important for the cultural–cognitive dimension. As Scott (2008, p. 65) puts it, the ‘constitutive rules construct the game of “football” as consisting of things such as “goal posts” and the “gridiron” and events such as “first downs” and off-sides.’ In a similar vein, the pursuit of economic growth labels much of the policies of

contemporary societies—if the overarching goal delineating the social organisation was something other than growth, the constitutive rules and assumptions about social life and its meanings would need to change profoundly (Barlow et al. 2022). An example of this could be the changing of key organizing principles of our lives from markets and commercial exchanges (Schneider et al. 2010) to care and well-being of humans while living within planetary boundaries. It can be assumed that if the key principles of social organization were changed, our societies would look very different.

The normative dimension emphasises the prescriptive, evaluative and obligatory dimensions of societies, which are based on values and norms—what is the preferred order of affairs and what are the ‘legitimate means to pursue valued ends’ (Scott 2008, p. 55). When actors internalise certain normative frameworks, they are considered “institutionalised” (Zucker 1977). The normative dimension of institutions becomes real in roles and identities and the social expectations related to the positions individuals face when occupying them (Jepperson et al. 1991; Scott 2008). It is also manifested in the attempts of organisations to legitimise their existence by aligning with the institutionalised normative framework (Scott et al. 1991). As such, the institutional structure both empowers and limits the individuals operating within it (Jepperson et al. 1991). In contemporary societies it is acceptable for an individual and/or organisation to pursue economic gains while causing environmental and social suffering often, in the Global South. This economic activity reflects the values and norms of our times.

The regulative dimension builds on the capacity of regulatory processes ‘to establish rules, inspect others’ conformity to them, and, as necessary, manipulate sanctions—rewards or punishments—in an attempt to influence future behavior’ (Scott 2008, p. 52). While the constitutive rules construct the game to be played, the regulative rules prescribe the specific ways in which this game is to be played: how exactly the players are allowed to take the ball to the goal and what kinds of penalties are associated with breaking the rules (Scott 2008). The vehicles for the regulative dimension involve rules, laws, governance systems, protocols, and standards (Scott 2008). Joutsenvirta (2016) illustrated how the regulative framework impedes the development of alternative community currencies in the case of applying tax laws to timebanking to its detriment.

An increasing number of scholars are applying institutional theory to their research projects; however, the approach has not been without criticism. There have been concerns about the vagueness of the theory that has led to a situation where everything can be considered as an institution (Alvesson and Spicer 2019). In addition, Kostova et al. (2008) highlight the narrow subset of institutional

ideas primarily coming from neoinstitutionalism, therefore, raising questions about the applicability of this theory to a study object of pluralism and change. At the same time, degrowth scholars have been explicitly voicing out concerns about degrowth proposals targeting narrowly defined areas solely within the domain of the civil society or within the domain of state, arguing that such strategies are “bound to fail” due to the deep and various interconnections between the distinct facets of the society (Koch 2022, p. 178). Despite the criticism, we argue that institutional theory enables an analysis of the various, intertwined facets of the society. While the theory has been originally applied to understand stability, the counterpart for stability is change. In this case, the source of isomorphism lies ahead of us—in the future—but at the same time, the seeds that could give rise to an alternative future are already taking shape.

Change from a growth-oriented regime towards a degrowth regime can be captured as a transition. The vocabulary concerning large-scale societal transitions varies depending on the research tradition; researchers in the socio-technical field refer to transitions, whereas researchers engaged in understanding change from a social–ecological perspective tend to refer to transformations (Hölscher et al. 2018). In this study, we rely on the term transition. This is because our research is theoretically positioned along the contributions developed within the socio-technical transition field in relation to institutionalisation of socio-technical regimes (Fuenfschilling and Truffer 2014; Kanger et al. 2022; Wesseling et al. 2022)—even though, we argue, these ideas are applicable also beyond socio-technical systems. The dimensions of institutionalisation process offer a promising framework for understanding the “how” of degrowth and, at the same time, for delineating the cornerstones of the kind of social processes that could make up a degrowth regime. Our paper seeks to offer an integrative perspective on degrowth change proposals to help understand how a degrowth society could function. Such an understanding can prove to be critical for fostering a degrowth transition. In sum, this research strategy facilitates the positioning of divergent change proposals as founding pillars of a prospective degrowth regime. In the rest of this paper, we will analyse how these dimensions are visible in the change proposals for degrowth.

## Methods

### Data collection

The overarching aim of this study is to identify the constituents of degrowth society within the framework of institutional theory by analysing degrowth change proposals. Therefore, we draw our attention to proposals specifically



addressing the question of how could a degrowth society function. To gain insights into degrowth change proposals, we conducted a systematic literature review with strict inclusion criteria. A systematic approach that follows explicit procedures (Bell et al. 2022) was found to be essential when collecting data in a highly multidisciplinary research field (see Kallis et al. 2018 for research disciplines), generating different types of change proposals, varying from policies to changes in value systems. The chosen systematic review method enabled the production of a manageable number of academic papers that we could analyse in detail (Bell et al. 2022) and, ultimately, define the boundaries of the subject. From this point forward, the research questions and the chosen theory guided the work further.

Searches were conducted in ProQuest Central, Scopus and Web of Science databases. Databases were searched for papers using the term “degrowth” combined with “transition”, “path” or “policy”. We chose transition keyword over transformation because we observed that the former as a search term resulted in more concrete change proposals than the term transformation, which was mostly used to depict large-scale, systemic changes. This search strategy facilitated understanding the nature of the practical changes that degrowth scholars promote. While there has been some debate concerning whether transition or transformation as concepts can reveal something about how radical the pursued change is. We argue that the choice of terms may not inherently say much about how radical the intended societal change is in relation to existing system structures. Rather, we suggest that it can be interpreted from the nature of the change proposals. This database search covered the title, abstract and keywords of the papers. Overall, the search resulted in 649 hits. This initial sample was narrowed down based on several exclusion criteria. The review was limited to include peer-reviewed articles published between 2000 and 2020 and written in English—both original papers and literature reviews, but not conference papers or book chapters. The scope was extended beyond the original articles because of the broad range of disciplines that generated proposals for the transition in degrowth. Many of the review articles were also fundamental pieces of the development of the research field.<sup>2</sup> From this list, papers that met the three further inclusion criteria were selected. First, as the aim of the study was to understand the kinds of changes needed for transitioning to degrowth society, the selected publications had to include a concrete proposal for prompting the change, such as presenting a novel proposal, advancing an already existing

one or developing a specific criterion, such as choosing suitable technology in line with degrowth ideas. The guiding question to decide on the inclusion of the paper was “does this study provide specific information on how the change to degrowth society could occur?” This phase resulted in the greatest reduction of the sample, as the majority of papers in the initial sample of 649 papers—also some of the most influential pieces in the field—addressed more the “what” or “why” of degrowth rather than “how” (e.g., Hickel and Kallis 2020; Lange et al. 2018; Bovari et al. 2018; Schindler 2016; Gezon 2017; Pichler et al. 2020; Eugenio-Gozalbo et al. 2020; Eckersley 2018; Panzer-Krause 2019). Second, and in a similar vein, papers that interpreted degrowth literally, solely as a reduction activity, were excluded from the selection because degrowth goes far beyond reduction. These proposals also enabled comprehension of what needs to be transformed within the current society. Third, the aim was to discover whether this kind of transition had already occurred elsewhere. For this reason, research from specific sectors and/or locations was included.

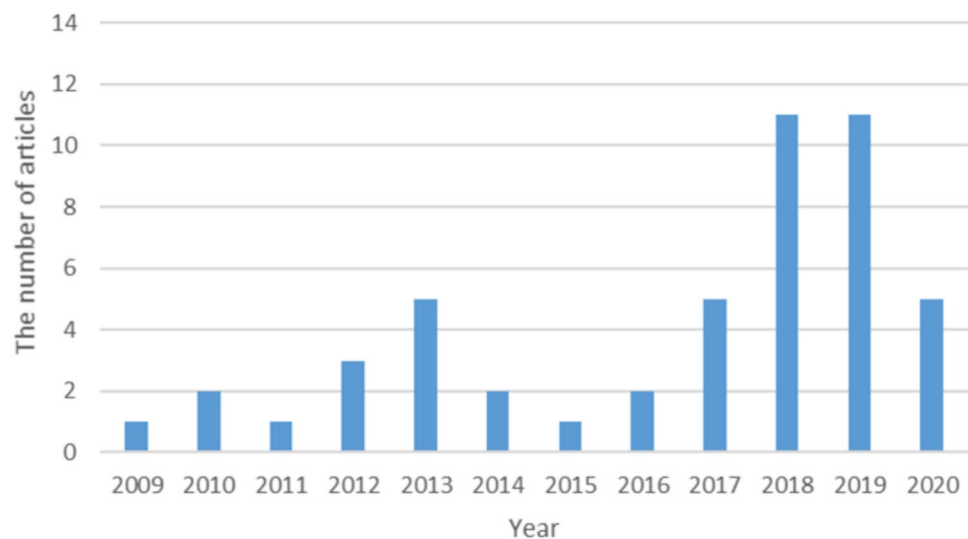
These criteria produced a list of 49 articles. All the reviewed articles and journals are listed in the References section. More than half of these articles (64%) were published between 2017 and 2020 (see Fig. 1 for the distribution of publication years). Meanwhile, the years 2018 and 2019 accounted for the largest number of papers published. Twenty-two articles were published during these 2 years, representing 44% of the total. While the topic has attracted growing attention generally, the emphasis of the sample towards the end of the period also reflects the growing recognition of the “how” of degrowth in the recent years.

## Data analysis

The analysis proceeded through three main stages. First, each of the 49 articles included in the review was individually analysed to identify its understanding of degrowth and its perspectives on transitioning to a degrowth society (i.e., it identified the specific change proposal). Often, individual papers included several change proposals, and they were categorised accordingly. Intensive reading of the articles resulted with the identification of 170 change proposals. The proposals were coded into a customized table created for this exercise. Second, the proposals were analysed in terms of conventional content analysis (Hsieh and Shannon 2005). In conventional content analysis, categories are allowed to ‘flow from the data’ (Hsieh and Shannon 2005, p. 1279). This phase resulted with the identification of three main categories of reduction, reorganisation and localisation, which could be used to label each of the degrowth proposals. In addition, several subcategories were identified for each parent category.

Third, to understand how the identified proposals could contribute to a formation of ‘degrowth regime’, we analysed

<sup>2</sup> While discussing the change proposals, the reference is made to the review paper not to the original paper where the proposal originates. This applies to the review papers of the sample.

**Fig. 1** Distribution of the study sample

the proposals within the framework of institutional theory by means of directed content analysis (Hsieh and Shannon 2005). In directed content analysis, the interpretation of the data is guided by the theoretical framework, in this case, the dimensions of the institutional theory. Directed content analysis was built on the three dimensions of institutionalisation: cultural–cognitive, normative and regulative. This research strategy facilitated the exploration of how could a degrowth society organise by analysing divergent change proposals. The three overarching themes identified in the first step of the analysis, the conventional content analysis (reduction, reorganisation and localisation) was interpreted as being the main frames that reflect the underpinning logic for the emerging degrowth regime. Thus, we placed them under the cultural–cognitive dimension of the institutionalisation process. Each of the proposals within these parent categories were then coded as representing either the regulative or normative pillar of institutionalisation. The codes were discussed, reviewed, and re-reviewed several times during the coding process. To validate the coding process, detailed instructions for categorisations were written down. The categorisation strategy and the distribution of change proposals within the categories is presented in Table 1.

## Results

In this section, the main findings of the analysis of degrowth proposals in the light of institutional pillars are presented, followed by a discussion of the implications of these findings for a degrowth transition.

The cultural–cognitive pillar represents the underlying currents of the society—the basic ideas upon which the society is built. In the degrowth project, these currents can be characterised in terms of reorganisation, reduction and

**Table 1** Categorisation strategy and distribution of degrowth change proposals in the reviewed literature

Category	Number of change proposals	%
<b>Reorganisation</b>	<b>75</b>	<b>44</b>
Normative	41	24
Regulative	34	20
<b>Reduction</b>	<b>63</b>	<b>37</b>
Normative	10	6
Regulative	53	31
<b>Localisation</b>	<b>32</b>	<b>19</b>
Normative	20	12
Regulative	12	7
Total	170	100

localisation. Thus, the project not only aims to decrease the throughput within the society (reduction) but especially to change the way this throughput is managed (reorganisation) towards more localised forms (localisation). Measures targeting reorganisation represented 44% of the proposals, whereas reduction and localisation represented 37% and 19%, respectively. The measures were further divided in the normative and regulatory pillars, depending on their nature. In the rest of this section, we will discuss these themes of reorganisation, reduction, and localisation as the founding institutional pillars of the degrowth movement in more detail (Table 2).

### Reorganisation

Reorganisation was the largest category in the analysis (44%). The frame of reorganisation encompassed ideas of doing things differently in comparison with the current capitalist system. Based on the institutional pillars identified

from the literature, societal reorganisation is to be achieved both through changing norm orientations and regulatory changes; the normative elements were prevalent in 55% of the proposals, and regulative elements in 45%, respectively. Proposals aiming at reorganisation included a wide variety of topics, such as alternative organising practices and organisation models, changing value orientations, new or reformed welfare institutions that lead to redistribution of power and resources, redirected government spending and changes in how sustainability is measured. The proposals aiming at reorganisation covered all main sectors of the society (e.g., finance and banking, food, water, housing, and energy).

Within the normative domain, reorganisation implies adopting alternative forms of organising and organisations as well as changing stakeholder values. Alternative forms of organisations can take various forms, including non-profit organisations, community-based organisations or social enterprises. Examples of such alternative forms of organising include food cooperatives, alternative forms of water supply, new forms of housing and co-habitation schemes, as well as collective ownership of the energy system. These initiatives aim at directly changing the rules and principles of economic exchange, and thus providing alternatives to the profit-driven organisational models and management styles. For example, three papers recognised ethical banks as a step in the right direction (D’Alisa and Kallis 2020; Chiengkul 2018; Kousis and Paschou 2017). One example comes from Italy (Chiengkul 2018), where Banco Popolare Etica finances solely third-sector organisations, such as volunteer groups, community organisations, self-help groups, cooperatives, associations, and social institutions (Banca 2018).

The alternative forms of organisation are linked to the social and solidarity economy (SSE), which “refers to the production of goods and services by a broad range of organisations and enterprises that have explicit social and often environmental objectives. SSE organisations are guided by principles of cooperation, solidarity, ethics, and democratic self-management” (UNTFSS 2014, p. 4). However, there is no clear consensus on the definition of alternative organisations, and scholars tend to debate the criteria of what is recognised as an alternative organisation (Barin Cruz et al. 2017). Depending on the paper, these alternative forms of organisations were labelled as cooperatives in the fields of energy, food, recycling, and reuse.

Degrowth authors recognised the importance of stakeholder values in transitioning towards a degrowth society. There are many theories and approaches within stakeholder scholarship, the following being one accepted definition: “A stakeholder in an organization is (by definition) any group or individual who can affect or is

affected by the achievement of the organization’s objectives” (Freeman 1984, p. 46). We found several degrowth proposals bringing forth and enforcing various stakeholder views, e.g. when choosing suitable technology. Milano et al. (2019) suggested fostering a debate between different critics, actors, and stakeholders within the tourism sector. This approach of adding stakeholder cooperation was seen as promoting the degrowth of the local tourism sector. Speth (2012) supported a new design for twenty-first century corporations—one that embraces reuse, new ownership patterns and prioritisation of stakeholders rather than shareholders. As a whole, proposals that aim at increasing citizen involvement (D’Alisa and Kallis 2020) and establishing public platforms targeted at citizens affected by tourism (Milano et al. 2019) can also be seen as means to increase stakeholder participation.

Reorganisation through regulation entailed proposals that aim at redistributing power and resources, redirecting government spending and making better use of various sustainability indicators. Schemes aiming at redistributing power and resources were frequently mentioned, and they would take place through reforms of the welfare institutions or creation of new ones, citizens’ basic income, job guarantee systems and taxation. These initiatives directly target institutions that are committed to the growth imperative (Kallis 2011), addressing topics, such as money-issuing and financing systems. Regulative aspects are important in proposals that confront poverty and increase the well-being within societies and distribute it more equally, such as citizen’s basic income, job guarantees, redistribution of wealth and redistributive taxation schemes. Many of these proposals share the same idea of guaranteeing a dignified standard of economic security for permanent residents (Alexander 2012).

Reorganisation through government spending implies on the one hand shifting investments away from projects that are considered detrimental to the environment and human health (e.g., extraction activities, mega transportation projects and investments in dirty sectors) while strengthening investment in clean sectors and public spending. Cosme et al. (2017) suggested that an increase in this kind of public spending guarantees equal access for citizens to goods and services and thereby protects people from poverty and exclusion. At the same time, sustainability indicators can be integrated more clearly in the regulative frameworks to redirect for example investments in more sustainable society.

## Reduction

Reduction is a key to achieving the degrowth vision, and 37% of the degrowth proposals represented the theme of reduction. Turning the current paradigm of valuing economic growth as an end itself requires a paradigmatic shift extending beyond the normative orientation to the very



**Table 2** Institutional pillars of degrowth change proposals

Reorganisation	75 proposals	44%
Normative	<p>Alternative forms of organising and organisations</p> <p>Timebanks (Chiengkul 2018; Dittmer 2013)</p> <p>Collective ownership of energy systems (Chiengkul 2018; Gunderson et al. 2018; Kunze and Becker 2015)</p> <p>Alternative models of water supply (Domènech et al. 2013; Douthwaite 2012)</p> <p>Health and school systems based on cooperative forms (Chiengkul 2018; Kousis and Paschou 2017)</p> <p>Decentralised energy cooperatives (Demaria et al. 2013)</p> <p>Post-growth organisational models (Schmid 2018)</p> <p>Citizen self-organisation and grassroots innovation (Sanna 2018)</p> <p>Ecovillages (Demaria et al. 2013; Lockyer 2017)</p> <p>Urban gardening projects (Lloveras et al. 2017; Kousis and Paschou 2017)</p> <p>Agroecology, eco- and agritourism (Chassagne and Everingham 2019; Chiengkul 2018)</p> <p>Alternative community activities and/or cooperatives (food production, recycling and reuse initiatives) (Nyblom et al. 2019; Demaria et al. 2013)</p> <p>Community library (Lloveras et al. 2017)</p> <p>Solidarity bartering (Kousis and Paschou 2017)</p> <p>Degrowth incorporated into education (Videira et al. 2014)</p> <p>Stakeholder values</p> <p>Increased citizen involvement and citizen forums (Büchs and Koch 2019; D'Alisa and Kallis 2020; Milano et al. 2019)</p> <p>Stakeholder cooperation in tourism (Milano et al. 2019)</p> <p>Prioritising stakeholder value over shareholder value (Speth 2012)</p> <p>Criteria for choosing suitable technology based on conviviality, appropriateness, feasibility and viability (Kerschner et al. 2018)</p> <p>Maintain and advance critical and reflective dialogue between perspectives on digitalisation and advancements of technology (Pansera et al. 2019)</p>	
Regulative	<p>Redistribution of power and resources</p> <p>Create new welfare institutions and/or reform of the existing ones (Cosme et al. 2017; Chiengkul 2018; Speth 2012; Kallis 2011, 2013; Douthwaite 2012)</p> <p>Citizen's basic income (Videira et al. 2014; Đula et al. 2019; Cosme et al. 2017; Alexander 2012; Kallis 2011; Demaria et al. 2013)</p> <p>Redistribution of wealth (within society or to improve the welfare of developing countries) (Videira et al. 2014; Cosme et al. 2017; Nieto et al. 2020; Kallis et al. 2018)</p> <p>Job guarantee (Đula et al. 2019; Cosme et al. 2017; Buch-Hansen and Koch 2019)</p> <p>Redistributive taxation schemes (Cosme et al. 2017)</p> <p>Withdrawal of tax relief to the tourism industry's private sector (Milano et al. 2019)</p> <p>Tourist tax to address the negative impacts of tourism (Milano et al. 2019)</p> <p>Government spending</p> <p>Remove harmful subsidies for resource extraction (Videira et al. 2014; Cosme et al. 2017; Milano et al. 2019)</p> <p>Redirect investments away from infrastructure in fast and car-based models of transport to slow-mode ones, moratoria on large infrastructures (Videira et al. 2014; Cosme et al. 2017; Sekulova et al. 2013)</p> <p>Invest in clean sectors while divesting away from dirty sectors (Cosme et al. 2017; Kallis et al. 2018)</p> <p>Invest in public goods (to guarantee equal access to goods and services) (Cosme et al. 2017; Speth 2012)</p> <p>Sustainability indicators</p> <p>Integration of ecological and social impact indicators and agreements (Videira et al. 2014)</p> <p>Use of OECD Better Life Initiative and Index of Sustainable Economics Welfare—ISEW (Krueger et al. 2018)</p>	
Reduction	63 proposals	37%
Normative	<p>Changes in consumption</p> <p>Critical consumption/voluntary cuts in consumption (Kousis and Paschou 2017<sup>a</sup>; Kallis 2013)</p> <p>Sufficiency-oriented lifestyles (Krueger et al. 2018)</p> <p>Active resistance campaigns (anti-advertising, cyclist and pedestrian rights campaigns, boycotts, demonstrations against expansions of highways and airports) (Chiengkul 2018; Demaria et al. 2013)</p> <p>Changes in production</p> <p>Using less energy via a transition to renewable and more efficient energy systems (Alexander 2012)</p> <p>Leaving natural resources untouched; resource sanctuaries (Videira et al. 2014; Sekulova et al. 2013)</p> <p>Extending product lifecycles through establishing sharing and leasing schemes and integrated product service systems (Krueger et al. 2018)</p> <p>Growth-averse enterprises (Gabriel et al. 2019)</p>	

**Table 2** (continued)

Reorganisation	75 proposals	44%
Regulatory	<p>Changes to labour market</p> <p>Working hour reduction (Cosme et al. 2017; Mikkelson 2020; Chiengkul 2018; Alexander 2012; Kallis 2011; Nieto et al. 2020; Kallis et al. 2018)</p> <p>Work-sharing (Videira et al. 2014; Đula et al. 2019; Cosme et al. 2017; Buch-Hansen and Koch 2019; Chiengkul 2018; Kallis 2017; Sekulova et al. 2013)</p> <p>Limiting production and infrastructure development</p> <p>Caps for natural extraction (Kallis and Martinez-Alier 2010; Đula et al. 2019; Cosme et al. 2017; Chiengkul 2018; Sekulova et al. 2013)</p> <p>Caps for resource use (Cosme et al. 2017; D'Alisa and Kallis 2020; Chiengkul 2018)</p> <p>Emission caps (Kallis and Martinez-Alier 2010; Cosme et al. 2017; Chiengkul 2018)</p> <p>Moratorium and/or limitations on resource extraction and resource use (Đula et al. 2019; Cosme et al. 2017)</p> <p>Tax on resource use and resource extraction (Videira et al. 2014; Cosme et al. 2017)</p> <p>Strict urban planning legislation; revise the working conditions of tourism workers (Milano et al. 2019)</p> <p>Limitation of urban development (Blázquez-Salom et al. 2019)</p> <p>Limitation of the capacity of infrastructures (Blázquez-Salom et al. 2019)</p> <p>Renewing land-use planning practices (Lehtinen 2018)</p> <p>Limiting and redistributing consumption possibilities</p> <p>Restrictions on commercial advertising (Videira et al. 2014; Cosme et al. 2017; Chiengkul 2018; Sekulova et al. 2013; Speth 2012)</p> <p>Caps on maximum wealth and/or income (Cosme et al. 2017; Buch-Hansen and Koch 2019; Chiengkul 2018)</p> <p>Maximum income (Videira et al. 2014; Đula et al. 2019; Chiengkul 2018)</p> <p>Tax on income and property (Videira et al. 2014; Alexander 2012)</p> <p>Tax on environmental externalities and consumption (Kallis 2011)</p> <p>Regulation on housing and mobility (Xue et al. 2017)</p> <p>Personal carbon trading or personal carbon budget (Seyfang 2009; Heikkinen 2020)</p> <p>Limiting the distances and volumes of trade (Videira et al. 2014)</p> <p>Tax on international capital movement (Cosme et al. 2017)</p> <p>Caps/limits on political and electoral spending (Cosme et al. 2017)</p>	
Localisation	32 proposals	19%
Normative	<p>Relocalisation of production</p> <p>Relocalisation of production (Chiengkul 2018; Sekulova et al. 2013)</p> <p>Regional sourcing in manufacturing firms; establishing local/regional value chains (Krueger et al. 2018)</p> <p>Establish “local living” economies and/or solidarity economies and transition towns (Krueger et al. 2018; D'Alisa and Kallis 2020; Speth 2012)</p> <p>Local market cooperatives (Krueger et al. 2018; Kousis and Paschou 2017)</p> <p>100% reserve banks, cooperative banks managed by local communities and municipalities (Videira et al. 2014)</p> <p>Strengthen local purchasing power</p> <p>Local trust-based networks (Krueger et al. 2018)</p> <p>Solidarity-based purchase groups and local exchange trading systems (LETS) (Chiengkul 2018)</p> <p>Locally oriented technologies</p> <p>Technology designed globally and manufactured locally (Kallis et al. 2018)</p> <p>Small-scale technology (Kunze and Becker 2015)</p> <p>Environmental sustainability</p> <p>Community governance of resource use (Fuente-Carrasco et al. 2019)</p> <p>Utilising local water sources (Cosme et al. 2017)</p> <p>Finance conservation of biodiversity (Cosme et al. 2017)</p> <p>Restoration of ecosystems (Cosme et al. 2017)</p> <p>Alternative business performance indicators prioritising locally relevant measures of success and performance (Gabriel et al. 2019)</p> <p>Cultural aspects</p> <p>Promotion of cultural and knowledge exchange, production and promotion of traditional handicrafts and arts (Chassagne and Everingham 2019)</p> <p>Reproduction of cultural knowledge via oral and artistic expression (Kousis and Paschou 2017)</p>	
Regulative	<p>Alternative currencies</p> <p>Community, complementary and/or local currencies, HOURS and convertible local currencies (CLCs), modern regional and community money, and LETS (Cosme et al. 2017; Buch-Hansen and Koch 2019; Chiengkul 2018; Dittmer 2013; Douthwaite 2012; Seyfang 2009)</p> <p>Protection of local economic activities and natural spaces</p> <p>Incentives for local production and consumption (Cosme et al. 2017; Speth 2012)</p> <p>Investments to restore and strengthen local communities (Cosme et al. 2017)</p> <p>Protection of natural spaces (Blázquez-Salom et al. 2019)</p>	

<sup>a</sup>Refer to papers reviewed. This is not an exhaustive list of the change proposals presented in each paper

conceptions of what it is to sustain human well-being. The proposals that were most commonly put forward to enforce reduction of material throughput centred around production and consumption, at the beginning (producers) and the end of value chains (consumers). However, degrowth does not centre only around reducing the production and consumption but also reducing material wealth and the speed of life through. For example, by reducing working hours or reducing international trade or capital movement. The analysis of the proposals indicated that reduction would, for the most part, take place through changes in regulations, as 82% of the proposals aiming at reduction were regulative nature and a clear minority (18%) had a normative character.

Regulatory pillar would imply either entirely new policies or changes to existing ones through various forms of regulation, policies and taxation schemes. Degrowth change proposals in the regulative dimension enforce top-down changes in the form of policies, regulation and taxation, which could be put in place at various scales, from federal to national, regional and local levels—with federal, such as European Union, or national-level policies, likely playing focal roles. Regulatory changes concerned labour markets, limiting the development of production and infrastructure, and limiting and redistributing consumption possibilities. Proposals concerning labour markets are well-known degrowth proposals, and they aim to increase the well-being of humans and distribute it more equally through work sharing and reduction of working hours. The widely supported policy to reduce working hours is seen as a means to free up time from paid employment while allowing people to have more leisure time and participate more in communal, caretaking and other non-capitalist activities (D'Alisa et al. 2015). Speth (2012) explained that we need government policies that will temper growth while simultaneously improving social and environmental well-being. The most recurring degrowth policies aim to fulfil this aim.

Limiting urban sprawl and urban development was a prominent theme in the literature, and it was addressed through various forms of regulation and legislation (e.g., incorporating strict urban planning legislation, restricting the building of new infrastructure, and extending the current one, limiting housing and mobility development and renewing land-use practices). Similarly, a number of proposals suggest implementing collective limits on environmentally harmful activities (e.g., caps, moratoriums and limitations for natural resource extraction, resource use and emissions). At the other end of the spectrum were personal carbon budgets or personal carbon trading schemes aimed at limiting activities with environmental impacts—thus, the calls for reduction concern both the production and consumption. Important means to realise especially cuts on consumption would take place through taxation—such as taxing income, property, consumption and international

capital movement—but taxing schemes would also be extended to resource use and extraction. Taxation could also have distributive impacts in terms of spreading welfare more equally.

Reduction of consumption was based on both changing norms and regulations. Changes in lifestyles and value systems lead to endorsing critical consumption, and, for example, taxation, maximum income schemes and mechanisms that bind the level of consumption to the personal carbon footprint would enforce such changes. Ultimately, these can lead to substituting the unlimited desire to acquire more material wealth with more free time and other activities, for instance, space for conviviality, social relations, culture and political engagement (Latouche 2010; Schneider et al. 2010; Demaria et al. 2013; D'Alisa et al. 2015; Kothari et al. 2014; Paulson 2017). Through these mechanisms, degrowth could increase human well-being by slowing down the pace of life. Considering the critical importance of such *normative* shifts, it is somewhat surprising that norms were relatively rarely the likely mechanism for a degrowth transition. The mechanisms through which the normative proposals aim at reduction are not coercive but rather build on changing norm orientations and voluntary action.

In addition to individuals, the degrowth agenda calls for voluntary changes at the organisational level. These kinds of changes involve decisions on business models for organisations, for instance, how to organise the supply of raw materials and what kinds of product and service models are offered to the customer. These new business models reduce society's throughput by revoking changes in production and consumption. For instance, establishing sharing and leasing schemes and integrated product service systems would ultimately reduce material use as a whole and take advantage of already extracted materials and final products. Overall, these activities can be seen to enforce the reduction of purchasing new products (reduce production) and transforming consumption patterns (reuse/recycle), and in this way also aligning with the principles of a circular economy.

## Localisation

The call to relocalise the economy is a recurring theme within the degrowth literature. In our sample, it represented 19% of the degrowth initiatives. As a whole, these change proposals strengthen the agency of local actors, but also call for authorities to enable and enforce the emergence of local practices and forms of organisation. Localisation was to be achieved via both normative and regulative changes, with the normative pillar accounting to 61% of the initiatives, and 39% accounting for regulative changes.

Within the normative domain, relocalisation of production, strengthening of the local purchasing power, locally oriented technologies, questions of environmental sustainability and cultural aspects were recurring themes. Relocalisation of production (Chiengkul 2018; Sekulova et al. 2013) would lead to a reduction in the number of intermediaries in supply chains (Krueger et al. 2018; Chiengkul 2018; Sekulova et al. 2013; Nieto et al. 2020). These types of changes transfer the production of goods closer to where they are sold and consumed. Globalisation has enabled long supply chains where the demand typically originates from the Global North (purchasing) and the supply is offered by the Global South (producing). Therefore, production activities take place in countries where environmental and social regulations are weak, thus offering a competitive advantage at the expense of externalities imposed on communities and ecosystems in the Global South (Dorninger et al. 2021). The agenda also calls for regional sourcing in manufacturing firms that would lead to establishing local and regional value chains (Krueger et al. 2018) and local living economies—also called solidarity economies and transition towns (Krueger et al. 2018; D’Alisa and Kallis 2020; Speth 2012).

While moving production closer to consumption is considered crucial, some proposals have focused on establishing and/or enforcing local level purchasing power. For instance, solidarity-based purchase groups and local exchange trading systems (LETS) have been studied and promoted within the degrowth community (Chiengkul 2018). As an example of solidarity economy networks, Chiengkul (2018) introduced the Italian Gruppi di Acquisto Solidale, which collectively organises direct purchases of basic household items, such as food, toiletries and clothes (Grasseni et al. 2013). In relation to local level purchasing, local currencies were a recurring theme driving localisation, having a *regulative* character. Degrowth authors recognised the importance of alternative, often local, currencies to prompt changes towards a degrowth society (e.g. HOURS, convertible local currencies and LETS). Among these, HOURS is a local currency that is printed on a piece of paper and allowed to circulate freely in a locality with no backing from legal tenders (Dittmer 2013, p. 7). In general, local currencies are seen as an alternative to official national currencies (Nyblom et al. 2019). They have also been described as complementary attempts to relocalise the economy (D’Alisa et al. 2015, p. 13).

Localisation is an endeavour that is strongly bound to the resources and materials available at the local level. Locally oriented technologies were present in this category, too, but the discussion on technological innovations in the degrowth literature is generally limited. It may be that the conception of technology has been seen as representing a business-as-usual approach because technology is often linked to the

idea of green growth. The degrowth agenda advocates small-scale technology (which is often constructed and managed locally) and a new design of technological processes that employ global digital commons but employ resources that are shared and managed by a local community. Similarly, questions about environmental sustainability and resource use are relevant from the local viewpoint. The proposals related to these themes call for enhanced management and increased protection of natural resources and natural spaces (e.g. community governance of water use and use of local sources of water). Many environmental-related proposals originate from already existing models, indicators and/or communities that operate within the current neoliberal economic system. However, while the whole degrowth movement originates from the idea of infinite growth driving ecosystem collapse by overstepping planetary boundaries, the degrowth proposals rarely directly addressed ecosystems, nature protection or biodiversity loss (e.g., by promoting the restoration of ecosystems and financing the conservation of biodiversity).

## Conclusions and discussion

In this study, we set out to explore the institutional dimensions of a (proposed) degrowth regime by means of a literature review of the change proposals advanced by degrowth scholars. We argue that degrowth should be understood as an end result or a vision for the process of sustainability transition, acknowledging that the lack of such visions has been identified as a major shortcoming in the sustainability transition literature (e.g. Jørgensen 2012; Kern and Rogge 2018). Here, the concept of a regime in describing the dominant and temporally and relatively stable way of organising social activities is central. Despite their seeming synergies, the literature streams on sustainability transitions and degrowth have until recently remained largely isolated from each other (Khamara and Kronenberg 2020). However, the literature on degrowth has increasingly addressed the question of how to move towards a society organised around degrowth (Joutsenvirta 2016; Schmid 2019; Vandeventer et al. 2019; Kallis et al. 2020; Khamara and Kronenberg 2020; Koch 2020; Mocca 2020; Smith et al. 2021; Savini et al. 2022; Barlow et al. 2022; Fitzpatrick et al. 2022; Guerrero Lara et al. 2023). We engage with this stream by analysing the institutional dimensions of a prospective degrowth regime, pointing to various dimensions of institutionalisation—cultural—cognitive, normative and regulative—as suggested in institutional theory. We identified three types of cultural—cognitive frames underpinning the various proposals in the literature: reduction, reorganisation and localisation. The cultural—cognitive dimension of institutionalisation was

the backbone upon which both normative and regulative changes could be built. Reduction was to be achieved mainly via changes in the regulatory system, whereas localisation was mostly a normative endeavour. Proposals enhancing reorganisation were evenly split between the regulative and normative dimensions.

The various degrowth proposals analysed herein promote either the reduction, reorganisation or localisation of a range of social practices. These themes operate in the cultural–cognitive domain of the institutionalisation process of the prospective degrowth regime; they give meaning to social organising in terms of providing a heuristic model of the pathways and visions associated with degrowth. They provide deeper narratives for the degrowth project and contribute to the internal stability of the movement (see also Berg and Hukkinen 2011). In terms of sustainability transitions, these themes configure a prospective ‘degrowth regime’—an alternative way of organising social life that entails the ways in which societies work, from production and consumption to infrastructure and metabolism and culture and values. Reduction, reorganisation and localisation can be thought of as the alternative attractors that configure social life in a society based on degrowth rules, contrast with the rules of fossil-fuelled capitalism, whose aims are continuous growth, the production of globalised homogenisation and place-independence.

Previous literature on degrowth proposals has yielded similar insights on the role of reduction, reorganisation and localisation as important constituents of the degrowth movement. These frames echo an understanding of degrowth as extending beyond mere reduction and highlight the importance of (collective) agency and new forms of organising for degrowth. Reduction, reorganisation and localisation can be seen as the cornerstones of the degrowth project; they serve as the new potential ‘rule set’ that could configure an emerging degrowth regime. However, their identification only partially answers our initial research problem—that of engaging with ‘the how’ of degrowth. On this end, the regulative and normative dimensions of institutionalisation can provide important insights. These dimensions assign agency of the necessary changes to achieving a degrowth vision to different actor groups. The regulative dimension assigns agency for driving a degrowth transition to public actors with coercive power, for instance, the state.

The regulative dimension is regarded as especially important in initiatives aimed at reducing the throughput of materials and energy within society. In terms of reorganisation, the regulative and normative dimensions are somewhat equally weighted, while localisation is a mainly normative endeavour. Cosme et al. (2017) noted that a majority of degrowth proposals follow a top-down approach, which corresponds with the regulative pillar

of the institutionalisation process. In our analysis, the regulative dimension covered a slight majority of the proposals (58%), but more bottom-up types of organising also featured in the literature. The degrowth literature indeed entails an interesting tension between bottom-up and top-down approaches. Many degrowth initiatives are locally organised, small-scale activities—with a greater focus on empowering change agents and addressing the social aspects of the movement (Schmid 2019)—arising from people’s changing norm orientations. At the same time, degrowth seems to be in need of a strong policy orientation to make, in particular, the dimension of reduction effective. In this vein, Xue (2014, p. 134) stated that ‘a multi-scalar strategy of combining centralised planning power and local participation is arguably quite necessary, however at the cost of democracy’, thereby making the political economy of degrowth a contested topic.

At the same time, organisations and businesses play an important role in the transition towards a degrowth regime (Reichel and Seeberg 2011; Hankammer and Kleer 2018; Khmara and Kronenberg 2018). Alternative forms of organising could also alleviate the observed tension between coercive forms of regulative power and ‘softer’ normative changes. A central feature of the degrowth literature reviewed herein is replacing capitalist economic structures and profit-oriented organisations with, for example, more democratic ownership structures and cooperative forms of operations taking place at the local level, including social enterprises with explicit social and environmental objectives, instead of organisational models simply aimed at maximising financial returns. These kinds of alternative business models could also have an impact in the consumption patterns they prompt. Alternative business models place more emphasis on stakeholder values instead of focusing on shareholder returns. Such models could also adopt the principles of a circular economy to the fullest extent and generally reduce the level of production. In addition, such models could return the power and resources to the hands of the many instead of accumulating them into the hands of a few large operators.

Similarly, the tenet of the degrowth movement of favouring local forms of organisation has been identified, such as the ‘call to relocalize the economy’ (Khmara and Kronenberg 2020, p. 4; Mocca 2020; Fitzpatrick et al. 2022; Ramcilovic-Suominen et al. 2022). The overarching argument for relocalisation derives from reducing the distance between production and consumption, thus making the environmental externalities of economic action visible while simultaneously revitalising local economies (Mocca 2020). This way also offering opportunities for challenging the unequal neo-colonial relationships between industrialised countries and the Global South (see, e.g. Zografos and Robbins 2020). However, as



Krähmer (2022) noted, the tendency of the degrowth movement to favour local forms of organisation can lead to unnecessary oversimplifications and dualisms in the sense of ‘good local and bad global’. Furthermore, Mocca (2020) referred to the many obstacles between the local utopias present in degrowth visions and the current practical reality.

Localisation as a recipe for a sustainability transition can be difficult to achieve if the logic with which societal transformation is pursued follows the conventional model of transition pathways: upscaling new sustainable alternatives while downscaling old, unsustainable practices (Geels and Schot 2007; Hebinck et al. 2022). If the overarching vision of degrowth is based on downscaling instead of upscaling, and if sustainable solutions are to be defined based on each and every unique local context, what kinds of transition pathways can then be promoted? A solution from sustainability transition research, which focuses on upscaling sustainable innovations and has been applied to degrowth transitions, is strategic niche management (Vandeventer et al. 2019). According to strategic niche management, sustainable alternatives with a weak competitive edge—in the context of mainstream technologies, practices or cultures—emerge from protected spaces (niches). These spaces allow for experimenting with new technologies or practices without having to face competition from the side of the regime characterised by established ways of doing. However, as Bouzarovski and Haarstad (2019, p. 258) argued, ‘experimentation has become a dominant mode of thinking about low-carbon activities’. Approaches that promote experimentation and the eventual scaling-up of the best experiments can be seen to align with the rules of the game of the dominant regime, thus reproducing the capitalist logic instead of challenging it. Therefore, there might be a need to rethink the traditional approach of promoting sustainable alternatives so that they can be applied to degrowth transitions.

Vandeventer et al. (2019) presented a ‘pluriversal’ approach towards degrowth transitions and argued that ‘the Pluriversal pathway for change transcends the competitive evolutionary theory of change within the MLP and the capitalist-growth regime more broadly’ (p. 284). Indeed, for a degrowth transition to take place through reduction, reorganisation and localisation, transition research might need to analyse more broadly the ways in which sustainable alternatives are ‘replicated’ in various locations and contexts instead of providing a winning one-size-fits-all recipe. As Otchere-Darko (2023, p. 1317) noted, the ‘methodology of how to scale them up remains elusive’: scaling up localised degrowth initiatives is indeed difficult, as the essence of these initiatives can be argued to be non-scalable.

The promise and lure of degrowth relate to the tenet of empowering citizen agency, distributing welfare more

equally, dismantling contemporary hegemonic power and making local communities matter. However, degrowth proposals feature strict policies that extend to the level of individuals in terms of placing, for example, limits on consumption or income. These contradictions reflect the nature of the degrowth project as a heterogeneous, versatile movement that is not committed to a particularistic imperative but, rather, seeks to explore various alternatives in and around the common theme. While identifying the institutional constituents of a prospective degrowth regime can help strengthen the degrowth narrative as well as uncover signposts for navigating pathways towards a degrowth society, it is possible that this process can work to diminish the plural, open nature of the degrowth project—which has been embraced by many degrowth scholars as the cornerstones of the movement. However, the time is becoming more ripe for the degrowth proposals to enter the policymaking arena. On this end, crafting alternatives that extend all the way to the constituents of a society based on the rules of degrowth instead of a capitalist growth regime will be important in terms of strengthening the foundations and vision of a degrowth society.

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## Declarations

**Conflict of interest** None.

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## References

- Alvesson M, Spicer A (2019) Neo-institutional theory and organization studies: a mid-life crisis? *Organ Stud* 40(2):199–218. <https://doi.org/10.1177/0170840618772610>
- Banca E (2018). Financing. <https://www.bancaetica.it/inglese/financing>. Accessed 29 June 2021
- Barin Cruz L, Aquino Alves M, Delbridge R (2017) Next steps in organizing alternatives to capitalism: toward a relational research agenda: Introduction to the Special Issue. *Management* 20:322–335
- Buch-Hansen H (2014) Capitalist diversity and de-growth trajectories to steady-state economies. *Ecol Econ* 106:167–173. <https://doi.org/10.1016/j.ecolecon.2014.07.030>
- Barlow N, Regen L, Cadiou N, Chertkovskaya E, Hollweg M, Plank C, Schulken M, Wolf V (2022) *Degrowth & Strategy. How to bring about social-ecological transformation.* Mayfly Books, London
- Bell E, Bryman A, Harley B (2022) *Business research methods.* Oxford University Press, Oxford
- Berg A, Hukkinen JI (2011) The paradox of growth critique: narrative analysis of the Finnish sustainable consumption and production debate. *Ecol Econ* 72:151–160. <https://doi.org/10.1016/j.ecolecon.2011.09.024>
- Bouzarovski S, Haarstad H (2019) Rescaling low-carbon transformations: towards a relational ontology. *Trans Inst Br Geogr* 44:256–269. <https://doi.org/10.1111/tran.12275>
- Bovari E, Giraud G, Mc Isaac F (2018) Coping with collapse: a stock-flow consistent monetary macrodynamics of global warming. *Ecol Econ* 147:383–398. <https://doi.org/10.1016/j.ecolecon.2018.01.034>
- Buch-Hansen H, Carstensen MB (2021) Paradigms and the political economy of ecopolitical projects: Green growth and degrowth compared. *Compet Chang* 25(3–4):308–327
- Chiengkul P (2018) The degrowth movement: alternative economic practices and relevance to developing countries. *Altern Glob Local Political* 43(2):81–95. <https://doi.org/10.1177/0304375418811763>
- Cosme I, Santos R, O'Neill DW (2017) Assessing the degrowth discourse: a review and analysis of academic degrowth policy proposals. *J Clean Prod* 149(2017):321–334
- D'Alisa G, Demaria F, Kallis G (2015) *Degrowth: a vocabulary for a new era.* Routledge, Abingdon
- D'Alisa G, Kallis G (2020) Degrowth and the state. *Ecol Econ* 169:106486
- Demaria F, Schneider F, Sekulova F, Martinez-Alier J (2013) What is degrowth? From an activist slogan to a social movement. *Environ Values* 22:191–215. <https://doi.org/10.3197/096327113X13581561725194>
- DiMaggio PJ, Powell WW (1983) The iron cage revisited: institutional isomorphism and collectiverationality in organisational fields. *Am Sociol Rev* 48:147–160. <https://doi.org/10.2307/2095101>
- Dorninger C, Hornborg A, Abson DJ, von Wehrden H, Schaffartzik A, Giljum S, Engler J, Feller RL, Hubacek K, Wieland H (2021) Global patterns of ecologically unequal exchange: Implications for sustainability in the 21st century. *Ecol Econ* 179:106824
- Eckersley R (2018) The green state in transition: reply to bailey, Barry and Craig. *New Political Econ* 25(1):46–56. <https://doi.org/10.1080/13563467.2018.1526270>
- Eugenio-Gozalbo M, Pérez-López R, Tójar-Hurtado J-C (2020) Identifying key issues for university practitioners of garden-based learning in Spain. *J Environ Educ* 51:3. <https://doi.org/10.1080/00958964.2019.1687407>
- Feola G (2020) Capitalism in sustainability transitions research: time for a critical turn? *Environ Innov Soc Trans* 35:241–250
- Fitzpatrick N, Parrique T, Cosme I (2022) Exploring degrowth policy proposals: a systematic mapping with thematic synthesis. *J Clean Prod* 365:132764. <https://doi.org/10.1016/j.jclepro.2022.132764>
- Freeman RE (1984) *Strategic management: a stakeholder approach.* Pitman, Boston
- Fuenfschilling L, Binz C (2018) Global socio-technical regimes. *Res Policy* 47(4):735–749. <https://doi.org/10.1016/j.respol.2018.02.003>
- Fuenfschilling L, Truffer B (2014) The structuration of socio-technical regimes—conceptual foundations from institutional theory. *Res Policy* 43(4):772–791. <https://doi.org/10.1016/j.respol.2013.10.010>
- Geels FW (2004) From sectoral systems of innovation to socio-technical systems: insights about dynamics and change from sociology and institutional theory. *Res Policy* 33(6):897–920. <https://doi.org/10.1016/j.respol.2004.01.015>
- Geels FW (2011) The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environ Innov Soc Trans* 1(1):24–40. <https://doi.org/10.1016/j.eist.2011.02.002>
- Geels FW, Schot J (2007) Typology of sociotechnical transition pathways. *Res Policy* 36:399–417
- Geels FW, Schot J (2010) The dynamics of transition: a socio-technical perspective. In: Grin J, Rotmans J, Schot J (eds) *Transitions to sustainable development. New directions in the study of long term transformative change.* Routledge, New York
- Genus A, Coles A-M (2008) Rethinking the multi-level perspective of technological transitions. *Res Policy* 37(9):1436–1445. <https://doi.org/10.1016/j.respol.2008.05.006>
- Gezon LL (2017) Beyond (anti)utilitarianism: khat and alternatives to growth in northern Madagascar. *J Polit Econ* 24:582–594. <https://doi.org/10.2458/v24i1.20895>
- Gibbs D, O'Neill K (2017) Future green economies and regional development: a research agenda. *RegStud* 51(1):161–732. <https://doi.org/10.1080/00343404.2016.1255719>
- Grasseni C, Forno F, Signori S (2013) Beyond alternative food networks: an agenda for comparative analysis of Italy's Solidarity Purchase Groups (GAS) and Districts of Solidarity Economy (DES) vis-a-vis US Community Economies. Draft paper prepared for the UNRISD conference "Potential and Limits of Social and Solidarity Economy," May, 6–8 2013. Geneva, Switzerland
- Guerrero Lara L, van Oers L, Smessaert J, Spanier J, Raj G, Feola G (2023) Degrowth and agri-food systems: a research agenda for the critical social sciences. *Sustain Sci*. <https://doi.org/10.1007/s11625-022-01276-y>
- Hankammer S, Kleer R (2018) Degrowth and collaborative value creation: re-reflections on concepts and technologies. *J Clean Prod* 197:1711–1718
- Hickel J, Kallis G (2020) Is green growth possible? *New Political Econ* 25(4):469–486. <https://doi.org/10.1080/13563467.2019.1598964>
- Hebinck A, Diercks G, von Wirth T, Beers PJ, Barsties L, Buchel S, Greer R, van Steenbergen F, Loorbach D (2022) An actionable understanding of societal transitions: The X-curve framework. *Sustain Sci* 17(3):1009–1021. <https://doi.org/10.1007/s11625-021-01084-w>
- Hickel J, Kallis G, Jackson T, O'Neill DW, Schor JB, Steinberger KJ, Victor PA, Ürgel-Vorsatz D (2022) Degrowth can work here's how science can help. *Nature* 612(7940):400–403. <https://doi.org/10.1038/d41586-022-04412-x>
- Hölscher K, Wittmayer JM, Loorbach D (2018) Transition versus transformation: what's the difference? *Environ Innov Soc Trans* 27:1–3. <https://doi.org/10.1016/j.eist.2017.10.007>
- Hsieh HF, Shannon SE (2005) Three approaches to qualitative content analysis. *Qual HealthRes* 15(9):1277–1288. <https://doi.org/10.1177/1049732305276687>

- Intergovernmental Panel on Climate Change (IPCC) (2022) Climate change 2022: mitigation of climate change. Working Group III contribution to the Sixth Assessment Report of the Intergovernmental panel on climate change
- Jepperson RL (1991) Institutions, institutional effects, and institutionalism. In: Powell WW, DiMaggio PJ (eds) *The new institutionalism in organizational analysis*. The University of Chicago Press, Chicago, pp 143–163
- Joutsenvirta M (2016) A practice approach to the institutionalization of economic degrowth. *Ecol Econ* 128:23–32. <https://doi.org/10.1016/j.ecolecon.2016.04.006>
- Jørgensen U (2012) Mapping and navigating transitions—the multi-level perspective compared with arenas of development. *Res Policy* 41:996–1010
- Kallis G (2011) In defence of degrowth. *Ecol Econ* 70:873–880
- Kallis G, Kostakis V, Lange S, Muraca B, Paulson S, Schmelzer M (2018) Research on degrowth. *Annu Rev Environ Resour* 43:291–316. <https://doi.org/10.1146/annurev-environ-102017-025941>
- Kallis G, Paulson S, D’Alisa G, Demaria F (2020) *The case for degrowth*. Polity Press, Cambridge
- Kanger L, Sillak S (2020) Emergence, consolidation and dominance of meta-regimes: exploring the historical evolution of mass production (1765–1972) from the deep transitions perspective. *Technol Soc* 63(1020):101393
- Kanger L, Tinitis P, Pahker A-K, Orru K, Tiwari AK, Sillak S, Šeja A, Vaik K (2022) Deep transitions: towards a comprehensive framework for mapping major continuities and ruptures in industrial modernity. *Glob Environ Change* 72:102447. <https://doi.org/10.1016/j.gloenvcha.2021.102447>
- Kern F, Rogge KS (2018) Harnessing theories of the policy process for analysing the politics of sustainability transitions: a critical survey. *Environ Innov Soc Transit* 27:102–117
- Khmar Y, Kronenberg J (2018) Degrowth in business: an oxymoron or a viable business model for sustainability? *J Clean Prod* 177:721–731. <https://doi.org/10.1016/j.jclepro.2017.12.182>
- Khmar Y, Kronenberg J (2020) Degrowth in the context of sustainability transitions: in search of a common ground. *J Clean Prod* 267:122072
- Klitgaard KA, Krall L (2012) Ecological economics, degrowth, and institutional change. *Ecol Econ* 84:247–253. <https://doi.org/10.1016/j.ecolecon.2011.11.008>
- Koch M (2020) Structure, action and change: a Bourdieusian perspective on the preconditions for a degrowth transition. *Sustain Sci Pract Policy* 16(1):4–14
- Koch M (2022) Social policy without growth: moving towards sustainable welfare states. *Soc Policy Soc* 21(3):447–459. <https://doi.org/10.1017/S1474746421000361>
- Kostova T, Roth K, Dacin MD (2008) Institutional theory in the study of multinational corporations: a critique and new directions. *Acad Manag Rev* 33(4):994–1006. <https://doi.org/10.5465/amr.2008.34422026>
- Kothari A, Demaria F, Acosta A (2014) Buen Vivir, degrowth and ecological swaraj: alternatives to sustainable development and the green economy. *Development* 57:362–375. <https://doi.org/10.1057/dev.2015.24>
- Kousis M, Paschou M (2017) Alternative forms of resilience: a typology of approaches for the study of citizen collective responses in hard economic times. *Open J Sociopolitical Stud* 10(1):136–168. <https://doi.org/10.1285/i20356609v10i1p135>
- Krähmer K (2022) Degrowth and the city: multiscale strategies for the socio-ecological transformation of space and place. *City* 26(2–3):316–345. <https://doi.org/10.1080/13604813.2022.2035969>
- Kuhmonen I, Kuhmonen T (2023) Transitions through the dynamics of adaptive cycles: evolution of the Finnish agrifood system. *Agric Syst* 206:103604
- Köhler J, Geels FW, Kern F, Markard J, Onsongo E, Wieczorek A, Alkemade F, Avelino F, Bergek A, Boons F, Fünfschilling L, Hess D, Holtz G, Hyysalo S, Jenkins K, Kivimaa P, Martiskainen M, McMeekin A, Mühlemeier MS, Nykvist B, Pel B, Rohracher RH, Sandén B, Schot J, Sovacool B, Turnheim B, Welch D, Wells P (2019) An agenda for sustainability transitions research: state of the art and future directions. *Environ Innov Soc Trans* 31:1–32
- Lange S, Pütz P, Kopp T (2018) Do mature economies grow exponentially? *Ecol Econ* 147:123–133. <https://doi.org/10.1016/j.ecolecon.2018.01.011>
- Latouche S (2010) Degrowth. *J Clean Prod* 18(6):519–522. <https://doi.org/10.1016/j.jclepro.2010.02.003>
- Lewin AY, Volberda HW (2003) The future of organization studies. Beyond the selection-adaptation debate. In: Tsoukas H, Knudsen C (eds) *The Oxford handbook of organization theory. Meta-theoretical perspectives*. Oxford University Press, Oxford
- Loorbach D, Frantzeskaki N, Avelino F (2017) Sustainability transitions research: transforming science and practice for societal change. *Ann Rev Environ Resour* 42:599–626. <https://doi.org/10.1146/annurev-environ102014021340>
- Meadowcroft J (2011) Engaging with the politics of sustainability transitions. *Environ Innov Soc Trans* 1(1):70–75. <https://doi.org/10.1016/j.eist.2011.02.003>
- Mocca E (2020) The local dimension in the degrowth literature. A critical discussion. *J Political Ideol* 25:78–39. <https://doi.org/10.1080/13569317.2019.1696926>
- Muiderman K (2022) Approaches to anticipatory governance in West Africa: how conceptions of the future have implications for climate action in the present. *Futures* 141:102982. <https://doi.org/10.1016/j.futures.2022.102982>
- Otchere-Darko W (2023) Scaling-up degrowth: re-imagining institutional responses to climate change. *Urban Stud* 60(7):1316–1325. <https://doi.org/10.1177/00420980221146861>
- Pacheco DF, York JG, Dean TJ, Sarasvathy SD (2010) The coevolution of institutional entrepreneurship: a tale of two theories. *J Manag* 36(4):974–1010. <https://doi.org/10.1177/0149206309360280>
- Panzer-Krause S (2019) Networking towards sustainable tourism: innovations between green growth and degrowth strategies. *Reg Stud* 53(7):927–938. <https://doi.org/10.1080/00343404.2018.1508873>
- Parrique T (2019) *The political economy of degrowth*. Economics and Finance. Université Clermont Auvergne; Stockholms universitet, 2019. English. NNT : 2019CLFAD003
- Parrique T, Barth J, Briens F, Kerschner C, Kraus-Polk A, Kuokkanen A, Spangenberg JH (2019) Decoupling Debunked. Evidence and arguments against green growth as a sole strategy for sustainability. European Environmental Bureau. [eeb.org/decoupling-debunked](http://eeb.org/decoupling-debunked)
- Patterson J, Schulz K, Vervoort J, van der Hel S, Widerberg O, Adler C, Hurlbert M, Anderton K, Sethi M, Barau A (2017) Exploring the governance and politics of transformations towards sustainability. *Environ Innov Soc Trans* 24:1–16. <https://doi.org/10.1016/j.eist.2016.09.001>
- Paulson S (2017) Degrowth: culture, power and change. *J Political Econ* 125(4):425–448. <https://doi.org/10.2458/v24i1.20882>
- Pichler M, Brand U, Görg C (2020) The double materiality of democracy in capitalist societies: challenges for social-ecological transformations. *Environ Politics* 29(2):193–213. <https://doi.org/10.1080/09644016.2018.1547260>
- Ramcilovic-Suominen S, Kröger M, Dressler W (2022) From growth and planetary limits to degrowth and decoloniality: an emerging bioeconomy policy and research agenda. *For Policy Econ* 144:102819. <https://doi.org/10.1016/j.forpol.2022.102819>
- Reichel A, Seeberg B (2011) The ecological allowance of enterprise: an absolute measure of corporate environmental performance,

- its implications for strategy, and a small case. *J Environ Sustain.* <https://doi.org/10.14448/jes.01.0006>
- Rotmans J, Loorbach D (2009) Complexity and transition management. *J Ind Ecol* 13(2):184–196. <https://doi.org/10.1111/j.1530-9290.2009.00116.x>
- Savini F, Ferreira A, von Schönfeld KC (eds) (2022) Post-growth planning: cities beyond the market economy. Routledge, New York
- Schindler S (2016) Detroit after bankruptcy: a case of degrowth machine politics. *Urban Stud* 53(4):818–836. <https://doi.org/10.1177/0042098014563485>
- Schneider F, Kallis G, Martínez-Alier J (2010) Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. *J Clean Prod* 18:511–518
- Scott WR (1991) Unpacking institutional arguments. In: Powell WW, DiMaggio PJ (eds) *The new institutionalism in organizational analysis*. The University of Chicago Press, Chicago, pp 164–182
- Scott WR (2008) *Institutions and organizations. Ideas and interest*, 3rd edn. Thousand Oaks, Sage Publications
- Schmid B (2019) Degrowth and postcapitalism: transformative geographies beyond accumulation and growth. *Geogr Compass* 13(11):e12470. <https://doi.org/10.1111/gec3.12470>
- Sekulova F, Kallis G, Rodríguez-Labajos B, Schneider F (2013) Degrowth: from theory to practice. *J Clean Prod* 38:1–6. <https://doi.org/10.1016/j.jclepro.2012.06.022>
- Smith TSJ, Baranowski M, Schmid B (2021) Intentional degrowth and its unintended consequences: uneven journeys towards post-growth transformations. *Ecol Econ* 190:107215. <https://doi.org/10.1016/j.ecolecon.2021.107215>
- Svensson O, Nikoleris A (2018) Structure reconsidered: towards new foundations of explanatory transitions theory. *Res Policy* 7(2):462–473. <https://doi.org/10.1016/j.respol.2017.12.007>
- UNTFSSSE (2014) Social and solidarity economy and the challenge of sustainable development. A position paper. <https://unsse.org/2014/09/08/tfsse-position-paper-social-and-solidarity-economy-and-the-challenge-of-sustainable-development/>. Accessed 27 May 2021
- Vadén T, Lähde V, Majava A, Järvensivu P, Toivanen T, Hakala E, Eronen JT (2020) Decoupling for ecological sustainability: a categorisation and review of research literature. *Environ Sci Policy* 112:236–244. <https://doi.org/10.1016/j.envsci.2020.06.016>
- Vandeventer JS, Lloveras J (2021) Organizing degrowth: the ontological politics of enacting degrowth in OMS. *Organization* 28(3):358–379. <https://doi.org/10.1177/1350508420975662>
- Ward JD, Sutton PC, Werner AD, Constanza R, Mohr SH, Simmons CT (2016) Is decoupling GDP from environmental impact possible? *PLoS One* 11(10):40164733
- Wesseling J, Kieft A, Fuenfschilling L, Hekkert M (2022) How socio-technical regimes affect low-carbon innovation: global pressures inhibiting industrial heat pumps in the Netherlands. *Energy Res Soc Sci* 89:102674. <https://doi.org/10.1016/j.erss.2022.102674>
- Xue J (2014) Is eco-village/urban village the future of a degrowth society? An urban planner's perspective. *Ecol Econ* 105:130–138. <https://doi.org/10.1016/j.ecolecon.2014.06.003>
- Zografos C, Robbins P (2020) Green sacrifice zones, or why a green new deal cannot ignore the cost shifts of just transitions. *One Earth* 3(5):543–546
- Zucker LG (1977) The role of institutionalization in cultural persistence. *Am Sociol Rev* 42(5):726–743

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