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Building new foundations: the future of education from a degrowth perspective

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Abstract

Considering education in the context of making and unmaking sustainable futures, a growing relevance is attributed to the role of shared beliefs or mental infrastructures which shape the way people perceive crises and solutions. The currently dominant capitalist economic paradigm is seen as one such powerful belief that generates imaginaries which cannot accommodate sustainable futures. At the same time, in educational practice, social movements, and academic discussion, the perspective of degrowth has gained attention as an approach which challenges this paradigm. In this article, we address the role of education in processes of socioecological transformation in the context of degrowth. We do this from a perspective of practice, linking our experiences in non-formal education to academic discussions on education and sustainability. The aim of this article is to contribute to a pedagogy of degrowth as one path within a complex search for ways to imagine and support sustainable futures, which address root causes of the current crises. Analysing these crises as *crises of conviviality*, resulting from imperial modes of living and producing, we sketch the framework for sustainable futures marked by world relations of *interconnectedness* and *solidarity*. Relating a theory of transformative learning to a *critical-emancipatory* understanding of education, we propose two interlinked aspects for pedagogy of degrowth: *creating spaces for reflection* and *emphasizing the political* in educational settings. We discuss our practical experience as learning facilitators in non-formal educational contexts. As a cross-cutting challenge, we will touch upon the role of strengthening psychological resources in education for a degrowth society.

Keywords Economic paradigm · Imperial modes of living · Transformative learning · Reflective learning processes · Politicization of education · Psychological resources

Introduction

"How would we like to have lived?" "What is the purpose of economic activities?" "Who can change society?" In trying to answer these questions, people are likely to draw upon

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the knowledge which they acquired through their socialization and education in the societies in which they grew up. In the context of education and the *making and unmaking of sustainable futures*, growing relevance is attached to this kind of shared and intuitive knowledge and beliefs (Getzin and Singer-Brodowski 2016; Andreotti et al. 2018; Prádanos 2016). Having evolved from the past, these *mental infrastructures* (Welzer 2011; Sanders 2016) shape our present and the imaginaries[1] that determine how we construct the future. The perspective of *degrowth* relates to this nexus between economic thinking and sustainability: *Degrowth* stresses the idea that, to open up possibilities for sustainable

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[1] We have adopted this term from Prádanos (2018). Referring to Cornelius Castoriadis, he describes 'imaginaries' as "social significations which recreate meaning and thus reproduce themselves […] ignoring, avoiding, dispossessing, disciplining, or even criminalizing whatever or whomever does not fit within its pre-determined framework" (Prádanos 2018, 11–12).

futures, some prevalent beliefs about economy and society must be revisited in the early industrialized countries, because they are closely connected to the root causes of the current ecological and societal crises:

> It is the automatic association of growth with better that the word 'degrowth' wants to dismantle. For degrowthers, it is the unquestionable desirability of growth in the common sense that needs to be confronted if a discussion for a different future is to open up (D'Alisa et al. 2015, 5).

The term *degrowth* itself focusses on a critique of economic growth, but the ideas and proposals subsumed under this concept aim mostly at identifying and challenging shared beliefs that are opposed to the emergence of sustainable futures.[2] Two key concepts in this regard are *capitalism* and *commodification* based on a *rationale of separation*. In the debate about degrowth, these notions are challenged by the guiding principles of *care, solidarity,* and *commons* (D'Alisa et al. 2015; Brand and Wissen 2017; Schmelzer and Vetter 2019).
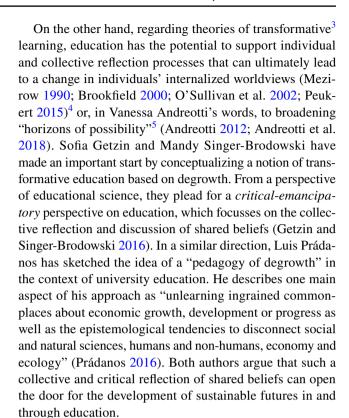
D'Alisa et al. (2015) describe the significance of a shift in the baselines of economy and society:

> In a degrowth society, everything will be different: different activities, different forms and uses of energy, different relations, different gender roles, different allocations of time between paid and non-paid work, and different relations with the non-human world (D'Alisa et al. 2015, 4).

Education plays a twofold role here: our Western educational system is shaped by and reproduces assumptions which constrain ideas for sustainable futures (Graupe 2016). From a *multilevel perspective* of societal change, educational institutions such as schools and universities are seen as stabilizers of the system in place; they are largely resistant to reflection, because they are strongly locked-in by power structures and path dependencies (cf. Göpel 2016; Narberhaus 2016). According to Amsler and Facer (2017), "the imposition of institutional logics which construct the future in this way makes it impossible to organize learning towards these ends [sustainable futures] in ways that 'reopen the future'". Other authors such as Michael Kopatz (2017) argue critically that, vis-à-vis people's customary and unsustainable routines and prevailing economic power structures, changing society mainly through education is not a promising approach. He pleads, therefore, for political incentives to "[change] structures instead of people" (Kopatz 2017), which, it is surmised, would then lead to a change in worldviews.

On the other hand, regarding theories of transformative[3] learning, education has the potential to support individual and collective reflection processes that can ultimately lead to a change in individuals' internalized worldviews (Mezirow 1990; Brookfield 2000; O'Sullivan et al. 2002; Peukert 2015)[4] or, in Vanessa Andreotti's words, to broadening "horizons of possibility"[5] (Andreotti 2012; Andreotti et al. 2018). Sofia Getzin and Mandy Singer-Brodowski have made an important start by conceptualizing a notion of transformative education based on degrowth. From a perspective of educational science, they plead for a *critical-emancipatory* perspective on education, which focusses on the collective reflection and discussion of shared beliefs (Getzin and Singer-Brodowski 2016). In a similar direction, Luis Prádanos has sketched the idea of a "pedagogy of degrowth" in the context of university education. He describes one main aspect of his approach as "unlearning ingrained commonplaces about economic growth, development or progress as well as the epistemological tendencies to disconnect social and natural sciences, humans and non-humans, economy and ecology" (Prádanos 2016). Both authors argue that such a collective and critical reflection of shared beliefs can open the door for the development of sustainable futures in and through education.

In this article, we address this dual role of education as it pertains to processes of socioecological transformation of early industrialized societies. Having developed our educational practice within the framework of Education for Sustainable Development (ESD), we focus on this field and draw links to education in general. We do this from the perspective of practice,[6] linking our experiences in non-formal

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[2] For an overview of the different approaches and proposals in the context of degrowth, see Jackson (2017), Konzeptwerk Neue Ökonomie (2017) and Schmelzer and Vetter (2019).

[3] The Humboldtian notion of *Bildung* (education) holds that one main aspect of it is transformation in the way people relate to themselves and to the world. In our expanded view of education, we now also talk about transformation of collectively shared beliefs shaping our societies instead of just the individual and his or her unique relations to the rest of the world and the things in it.

[4] The UNESCO Roadmap for Implementing the Global Action Programme on Education for Sustainable Development is clear on that question: ESD "achieves its purpose by transforming society. ESD is about shaping a better tomorrow for all" (UNESCO 2014). As this describes the goal of education rather than the way to achieve it, we do not go into to this approach any deeper.

[5] We are aware that trying to pluralize perspectives from a position that is "White and academic" is difficult. We want to be transparent about this. The debate about sustainable futures cannot be separated from people's positions in terms of social status or privileges and associated forms of discrimination.

[6] Consequently, we will not go into depth about societal transformation theory and learning. The reader will find more relevant literature in the footnotes.

educational settings to academic discussions on education and sustainability.[7]

We understand our educational practice as a contribution to a search for ways to imagine and support sustainable futures, which address the root causes of current crises in the world today; we oscillate between practice, theoretical abstraction and (re-)adjustment of our practice, as a sort of "messy journeying" (Harmin et al. 2016, 5). The aim of this piece, therefore, is to contribute to the development of a pedagogy of degrowth in the context of sustainable futures. As Prádanos (2016)'s ideas relate to formal education at universities and those of Getzin and Singer-Brodowski (2016) focus on the foundation of such a pedagogy in educational science, we will add, discuss, and problematize our own experiences in the area of non-formal education and in political and social movements.

We begin by depicting the interconnectedness between education, modern world relations, economic growth, and current crises. To this end, we review critically mainstream ESD and retrace how non-sustainable assumptions and power structures have become stabilized or institutionalized. From the resulting analysis, we derive two key requirements for overhauling ESD in a critical-emancipatory sense and for developing a pedagogy of degrowth, namely, (1) *creating spaces for reflection* and (2) *emphasizing the political* in educational settings. We discuss our approaches and outline the challenges in translating these prerequisites into practice.[8] We claim that a politicized educational approach must focus on plurality in *collective* new beginnings and be more sensitive to power structures. Finally, we bring in one cross-cutting aspect, namely, *strengthening psychological resources* (Hunecke 2013). We consider this approach crucial, although its foundation still needs to be intensified. The idea is to use the educational field to strengthen certain psychological resources that would enable individuals to perceive sustainable futures and the processes towards attaining them not as threatening or unreachable, but rather as something desirable and achievable.

Understanding current societal crises as crises of conviviality

The way we understand and analyse current crises influences the way we think about possibilities to address them. A useful reference enabling us to better grasp the current ecological and societal crises plaguing the world is the concept of *imperial modes of living*[9] developed by Brand and Wissen (2017). This approach connects symptoms of an unsustainable present with root causes that lie in our relations to the world and the way these relations shape the dominant economic paradigm and practice based on hierarchical separation and exploitation of an "*other*" (ibid.). This "other" includes natural resources as well as discriminated-against groups of people. Conversely, the notion of sustainable futures that emerges from this analysis is sketched as *solidary modes of living and producing*, which, in turn, presupposes world relations based on interdependence rather than separation and hierarchy. This leads to a new economic paradigm based on the principle of *care*[10] and, respectively, on different views of what is *normal* and desirable (I.L.A. Kollektiv 2019). Drawing on Ivan Illich, we can frame this new economic paradigm as one characterized by *conviviality*. For Illich, conviviality describes the *opposite of industrial productivity* insofar as the latter focuses on economic growth and strives for monopolistic and hierarchic structures and, in doing so, shuts out most of the possibilities for people to steer the economy and shape society according to their needs and desires. Conversely, an economy and society characterized by conviviality open up spaces for autonomy, for de-commodification and for common new beginnings (Illich 1998; Deriu 2016).

We want to stress two root causes of our exploitative imperial modes of living on the level of shared beliefs, which must be addressed (also in education) in order that sustainable futures can be imagined and built[11]: (1) the relation between humans and the more-than-human and (2) the dominant economic paradigm including a certain understanding of rationalism. (1) In accordance with eco-feminist Val Plumwood (2002), we hold that the modern worldview is characterized by a "system of ideas that takes a radically separated reason to be the essential characteristic of humans and situates human life outside and above an inferiorised and manipulable nature." This dualistic understanding serves not only to create exclusive

[7] We will also relate to the experiences of actors in the field of ESD, with who we are in close contact, and to political education, to broaden the practical background that we refer to.

[8] Getzin and Singer-Brodowski (2016) argue that ESD is too much influenced and instrumentalized by economic interest and thus a pedagogy of degrowth cannot be developed within this frame. We see this point, but our position is less hardened. We see it as a crossover between ESD and political education, pointing out that both fields can learn or inform reciprocally.

[9] Brand and Wissen (2017) describe the modes of living of the Global North as imperial; they are based on access to cheap labour and resources from the Global South as well as protection of this exclusive access.

[10] Cf. Biesecker's concept of "Vorsorgendes Wirtschaften" (Biesecker and von Winterfeld 2014).

[11] Cf. Plumwood (2002), Descola (2011), Göpel (2016), Muraca (2007), Sanders (2016), Brand and Wissen (2017).
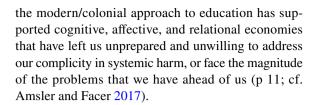
identities, but also "justifies and naturalises domination of people and events by a privileged class identified with reason, who deserve to be in control and to be disproportionally rewarded" (ibid., 17). In a historical process, controlling and instrumentalizing nature as the "other" for one's own purposes became a guiding mode of relating to the world (Descola 2011). This dualism has paved the way for discrimination and exploitation of groups of people who, according to this worldview, are associated more closely to the realm of nature. This, in turn, engenders and supports racist, sexist, and classist belief structures and, in so doing, it lays the foundation for imperial modes of living and producing. Consequently, to enable alternative imaginaries and practices of *solidary* modes of living, we must first reflect upon and revise our way of thinking and conceptualizing away from such dualist worldviews in global relations (cf. Brand and Wissen 2017; see also Amsler in this issue).

(2) The desire to control and to instrumentalize is also crucial for the dominant economic paradigm that focusses on commodification, economic growth, and the *homo oeconomicus* qua role model (Göpel 2016). These three aspects shape how we conceive the economy. If we regard everything pre-dominantly as something of calculable economic value to which a price tag can be attached, then it becomes a disposable commodity and, therefore, attractive in virtue of its exploitability. If the main tool for achieving societal well-being is increasing economic growth, then the non-measured (and in part non-remitted) reproductive base of economies such as natural resources and care work (mainly executed by women) is systematically ignored (Brand 2014). And if humans are characterized as being driven mainly by the aim to optimize their own cost–benefit decisions, then this characterization universalizes egoistic rational thinking and behaviour, ignoring other parts of the human identity that focus on interconnectedness and solidarity (cf. Tomasello 2010). In this way, the dominant economic paradigm leads to the *imperial modes of living* mentioned above. Consequently, to bring about a socioecological transformation, we share Maja Göpel's viewpoint that an important task must be the following:

> to fill the reservoir of social and cultural inventions with ideas, norms, principles and values that support a decommodified view of human needs, nature and money […]. They provide alternative meaning, legitimacy and practice options for everyone engaging in the highly political struggles over transformations for sustainable development (Göpel 2016, 5).

The role of education in the reproduction of the current crises

Concerning the role of education in closing paths to sustainability, Andreotti et al. (2018) have recently declared that:

the modern/colonial approach to education has supported cognitive, affective, and relational economies that have left us unprepared and unwilling to address our complicity in systemic harm, or face the magnitude of the problems that we have ahead of us (p 11; cf. Amsler and Facer 2017).

In trying to retrace this effect in educational practices, we focus on two main aspects linked to our discussion of societal crises above: the reproduction of a problematic economic paradigm in education and the instrumental understanding of ESD.

The reproduction of the dominant economic paradigm in education

Our educational institutions, as a part of our societies, are strongly "locked-in" (Amsler and Facer 2017; Göpel 2016). Using the example of economic education, Silja Graupe (2017) describes concretely how a certain understanding of normality is created in economic textbooks, teaching, and scholarship. The economic paradigm of commodification and the role of markets serve as useful examples to illustrate this point. The diffusion of the notion of economy considered only as *market economy* has become an effective mechanism for exerting depersonalized power. Markets are presented in economic textbooks as the *natural* and only way to organize society. This portrayal of society, as just one giant marketplace filled only with commodified entities and competitors aiming ruthlessly at maximising their own individual well-being, leaves little real space for alternative imaginaries that go beyond markets and include ideas such as commons or some form of the share economy (cf. Brown 2015; Prádanos 2016; Graupe 2017). In that regard, standard economic education is highly normative and political without rendering this transparent.

A similar tendency has been observed and criticized in the context of ESD. One crucial criticism concerns what has been called the "closed circle of ESD" (Selby and Kagawa 2010), meaning that many approaches in ESD do not address the root causes of current societal crises (cf. Huckle and Wals 2015; see also Holfelder in this volume). Getzin and Singer-Brodowski (2016) stress, in particular, the focus in ESD on measurability. Focussing on measurability mostly means focussing on cognitive argumentation and the promotion of solutions that tend to be superficial or onesided: for example, proposing different forms of consumption instead of reflecting on why consumption per se—especially conspicuous consumption—has become such a crucial part of our notion of the *good life*; or promoting technological efficiency as the key solution to ecological sustainability rather than asking why we regard nature only as something to be

exploited for its resources (Getzin and Singer-Brodowski 2016).

In line with this dominant rationality, emotional and physical experiences have been largely excluded from educational processes (Graupe 2013). Barbara Muraca (2007) explains:

This elimination of any kind of non-measurable aspects like perceptions (colors, smells, and sounds) and emotions, as well as teleological implications and activities, implied a complete exclusion of experience, which had to be cast out of nature to render it easily describable in quantitative terms (Muraca 2007, 166).

However, according to Håkansson and Östman (2018), physical sensations, emotions, and other experiences can play an important role in sustainability learning, especially as regards the politics dimension of ESD.[12] Referring to research from positive psychology and environmental psychology, Marcel Hunecke (2013) has also stressed the role of experiences which can strengthen certain psychological resources, which, in turn, can aid in one's ability to perceive sustainable futures as something positive and shapeable, and thereby encouraging people to envisage effective societal change. Such resources include the *capability to enjoy*, *self-acceptance*, *self-efficacy* as well as *mindfulness*, *the quest for meaning* and *solidarity* (Hunecke 2013). Educational settings can be designed to support the development of these resources.

An *instrumental* versus a *critical and emancipatory* understanding of ESD

Not only are the proposed solutions seen as problematic, but also the process of *promoting* them. Promoting solutions means to pass on specific, often unquestioned information about sustainable alternatives in such a way that the *unknowledgeable* can apply it to a given problem. This is just another dimension of the already mentioned normativity of this "instrumental" (cf. Vare and Scott 2007) approach to education and ESD. Although it has been criticized since the 1990s (cf. Jickling 1992), it is still, for example, the main concept underlying the idea of *transformative education* as promoted by the German Advisory Council on Global Change (WBGU).[13] For the WBGU, transformative education means "imparting an understanding of problem-solving approaches and options for action. This includes, for example, knowledge about climate-sensitive mobility, knowledge about sustainable nutrition, or cross-generational responsibility" (WBGU 2011, author's translation). In contrast,

Getzin and Singer-Brodowski (2016) plead strongly for a *critical-emancipatory* perspective. In this view, "whether or not the learner engages in more sustainable behaviours or environmental protection is of important but of secondary value and is a judgment that needs to be made by the critically reflective learner" (Sterling 2010, 514). The goal of critical-emancipatory education is to support the learner taking part in public and political debates and in understanding different opinions—participation and recognition of options being core elements of democratic practice (Scott and Gough 2010; Getzin and Singer-Brodowski 2016). This means that, in educational settings, marginalized approaches to economy, like the degrowth perspective, should also be brought into the sustainability discussion.[14]

Obviously, there is no rigorous definition of transformative education. But for us, what distinguishes it from the instrumental practice of ESD is that the latter shuts out possibilities for sustainable futures, because it restricts the parameters of inquiry and categorically dismisses options. Any unreflected proposal for sustainable solutions, which is developed pre-dominantly by experts, is likely to reproduce the current paradigms and worldviews (which have also determined the way in which these experts have gathered knowledge) as well as supporting problematic present power structures (Andreotti et al. 2018). Harmin et al. (2016) have considered the necessity to decolonize knowledge and knowledge acquisition, calling for a "critical epistemological reflexivity, acknowledgement of more diverse sources of knowledge, and more open approaches to knowledge generation" (Harmin et al. 2016, 1). Furthermore, an instrumental understanding of ESD hinders learning to deal with the complexity of worldviews. A pre-determined solution depoliticizes the future; possibilities are not negotiated in society (see Knappe et al. in this volume). Conversely, supporting people in learning to deal with this complexity is one of the core tasks of critical-emancipatory education (Andreotti et al. 2018). This is also one way of responding to the all-too-often simplistic narratives of the past and future offered by the dominant economic paradigm and promulgated by a growing number of right-wing populist movements seeking to defend the imperial modes of living.

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[12] Andreotti et al. (2018) have also stressed the importance of learning processes beyond a cognitive rational level.

[13] The Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen (WBGU) is an advisory council to the German Federal Government and a main actor in the German sustainability debate.

[14] This notion of education also underlies the Frankfurt Declaration for a critical-emancipatory political education (2015) which claims, that to support a more balanced public debate on sustainable futures, an important task of education is to "display excluded and underprivileged positions" (Eis et al. 2015).

Two key aspects for a pedagogy of degrowth—potential, experience and challenges

For us, the question as to what extent education can contribute to the emergence of more sustainable futures can hardly be answered definitively. However, in accordance with a multilevel approach to societal change as sketched briefly in our introduction, we find two toeholds for non-formal educational practice. The model suggests that working on *worldviews* and in *niches* is more likely to foster sustainable societal change than the dominant regime (institutions, laws etc.) which is too strongly tied to prevailing power structures and locked into path dependencies (cf. Göpel 2016; Narberhaus 2016).

What is required is an adjusted normative framing of sustainable futures, which would replace hierarchical, dualistic division, and exploitation with the guiding principles of *interconnectedness* and *solidarity*. Education, therefore, must invite people to reconsider and broaden their perspectives on problems and problem-solving in the light of these two principles. It is crucial that this normativity is made transparent in the process of education to allow critique.

We, thus, draw two main conclusions for educational practice. First, it must support people in learning to reflect on their worldviews critically by providing spaces for collective contemplation and by establishing direct contact to existing niches. Second, it must rediscover the political as a core aspect of education in the context of societal change.

Supporting people in reflecting on their worldviews

Research tradition and experience with transformative education has shown that learning processes in which people reflect deeply on and even change their worldviews significantly are possible (Mezirow 1997).[15] In an attempt to prevent the concept of transformative learning from being reduced to a mere buzzword in ESD, Getzin and Singer-Brodowski (2016) have linked its core meaning to a critical-emancipatory understanding of ESD, referring to O'Sullivan et al. (2002):

Transformative learning involves experiencing a deep, structural shift in the basic premises of thought, feelings, and actions. It is a shift of consciousness that dramatically and permanently alters our way of being in the world. Such a shift involves our understanding of ourselves and our

self-locations; our relationships with other humans and with the natural world; our understanding of relations of power in interlocking structures of class, race, and gender; our body awarenesses; *our visions of alternative approaches* to living; and our *sense of possibilities* for social justice and peace and personal joy (O'Sullivan et al. 2002, xvii, emphasis added).

This understanding of learning goes well beyond an expansion of knowledge within a given paradigm and an accumulation of competences. It addresses epistemological and ontological roots, and includes the possibility to critically evaluate and emancipate oneself from ingrained beliefs. Stephen D. Brookfield has applied this perspective to collectively shared economic beliefs:

Critical reflection as ideology critique focuses on helping people to come to an awareness of how capitalism shapes belief systems and assumptions (ideologies) that justify and maintain economic and political inequity (Brookfield 2000, p 128).

Prádanos (2016) describes his approach to a pedagogy of degrowth.

The goal of this strategy is to design activities to make students aware that they do not know what they do not know, and that many commonplaces that they assume they know are nothing but a dangerous and destructive learned ignorance normalized and disseminated by the dominant imaginary of economic growth (Prádanos 2016, 160).

This may provoke a *disorienting dilemma* (Mezirow 1990), namely, the discomfort or confusion people feel at finding that their beliefs are no longer useful for dealing with a current problem.[16] According to the theory, such learning processes are not guided educationally but *supported* (cf. Getzin and Singer-Brodowski 2016). We try to reinforce them by creating (safe) spaces for collective reflection and by drawing attention to existing alternatives shaped by different beliefs. Counter-hegemonic approaches to education (Brand 2005) can make existing struggles over unsustainable practices in the present as well as sustainable alternatives or niches more approachable (Narberhaus 2016; Göpel 2016). Such niches include, for instance, community-supported agriculture and struggles for food sovereignty, repair cafés, or consumption alternatives based on de-commodification and global solidarity (Konzeptwerk Neue Ökonomie 2017). The various approaches co-exist and all have evolved in bottom-up processes.

For us, these approaches are two sides of the same coin. Beginning with confusion that people experience as regards the current societal direction and (dire) outlook for

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[15] In the German-speaking countries, a similar debate is occurring, influenced by Koller (2010) and Peukert (2015), the latter placing a stronger emphasis on collective and political perspectives.

[16] In their comparative study on political dimensions in ESD, Håkansson et al. (2017) raise the question of whether we must deal with learners' personal commitments in order to discuss or to manage the experience of antagonistic conflict in the context of building sustainable futures.

the future, one can enable contact to the existing niches of *radical* sustainable practice. At the same time, experiencing projects in which interconnectedness and solidarity are guiding principles can raise new questions or cause a degree of bewilderment; this, nevertheless, could also lead to subsequent processes of reflection and engender hope.[17]

Within our own organization, Konzeptwerk Neue Ökonomie (Laboratory for New Economic Ideas—an independent non-profit organization), for example, we offer workshops to persons (15 years old and older), in which we invite participants to engage in dialogue and share their own experiences concerning questions that address socially shared beliefs.[18] "How would we like to have lived?" "How much competition is good for us?" "What is the purpose of economic activities?" "Who can change society?" These questions and our method of direct, open engagement invite creative, cognitive, or playful responses as a means to anticipate and discuss alternative ways of addressing our current crises from a degrowth perspective.[19] However, in short-term educational settings, we face two main challenges. For people to be willing and able to engage in processes of self-reflection, (1) the learning environments have to be as *safe* as possible, that is, transparent and largely free of discrimination, judgement or pressure to perform; and (2) they must enable experiential learning. Even in non-formal settings, this is not easy to establish in a short time.

Consequently, we have developed longer formats for collective learning. We have gained experience with 1-week theatrical workshops, for example, dealing with fears, hopes, and coping strategies related to current societal crises, or to the (lost) interconnectedness between humans and the more-than-human. In this expanded learning context, participants can get to know one another and develop trust as a vital precondition for collective reflection processes. Using theatre as a vehicle-aided participants in acknowledging the complexity and emotional impacts of the questions raised and opened up opportunities for the group to experiment with new possibilities of referring to the world.

In cases where we used the theatrical approach, participants took part voluntarily. In other contexts, however, we

have experienced (for reasons addressed above) that people are often sceptical towards non-cognitive approaches to learning and reluctant to try them. It is often challenging to create spaces in which people are or can be open to such processes. At the same time, if people do enter into such reflexive processes, facilitators must be on hand and able to handle feelings of powerlessness, sadness, and despair vis-à-vis the complexity of current crises.

With the focus on experiencing *real utopias,* we have offered another 1-week workshop in which a group of young people visited existing niches in the field of solidarity economy. The workshop focused on hands-on experiences in places where alternatives to the dominant economic paradigm have already been implemented. Our role, as facilitator, was to offer space for exchange, reflection, and experimenting with new frames of reference, based on direct interaction with activists and actively participating in an alternative project, even for a limited time. Our experience showed that exchange over the empowering effects of this engagement as well as its difficult aspects also changed people's perceptions of the challenges and possibilities they saw to create sustainable futures.

In the context of a 1-week program, but more so in shorter educational formats, we as facilitators largely structure the workshops, ask the questions, and chose the alternatives. In so doing, we have also reproduced a hierarchic relationship between learners and facilitators, something that has been roundly criticized (cf. Getzin and Singer-Brodowski 2016). We try to deal with this problem by being aware and transparent about our powerful position; we invite participants in these programs to question the process we propose and suggest alternatives. However, because all of us have learned to accept unquestioningly these deeply ingrained hierarchical and expert-led learning methods, we often find it difficult to enter into a co-created process of reflection. Very recently, we have tried to meet this challenge by establishing longer term learning formats (up to 1 year) in which a group of people meets at regular intervals over the course of the program to engage with questions or topics which they have chosen themselves. This leads us, then, to the second main aspect we want to discuss in relation to a pedagogy of degrowth, namely, power structures and political education.

Emphasizing the political in educational processes

Our claim that emphasizing *the political* in educational processes is essential for the making of sustainable futures in general, and for ESD in particular. It is based on the supposition that the dominant normative economic paradigm leads to individualized and market-based solutions to current crises. Following Hannah Arendt's (1958) notion of *the*

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[17] Harald Welzer states that our historically developed mental infrastructures are so deeply internalized that we can hardly access them through cognitive reflection. Rather, we can become aware of and change them by experiencing examples where different relations to the world are realized (Welzer 2011). See Amsler and Facer (2017) for more detailed discussion on hope in the context of learning for sustainable futures.

[18] In this context, Prádanos (2016) discusses the challenge of dealing with privileged learners and points out the necessity of learning to listen.

[19] See Konzeptwerk Neue Ökonomie, FairBidung (2014) Beyond Growth! Methods for Educational Settings on Economic Growth, Limits to Growth and Alternatives.

political, we understand the collective creation and experimentation with new spaces for living, working, producing, etc. to be essential components of that concept. On this understanding, the two main elements of the political are *plurality* and the *common beginning of something new and unexpected.*

Developing something *unexpected* in this sense has to do with challenging and overcoming the dominant economic paradigm under conditions of power inequalities.[20] According to Andreotti (2012), the politicization of educational processes means to recognize such power inequalities as well as to acknowledge one's own ideological position within this asymmetrical power structure. Our understanding is that a degrowth perspective must be genuinely critical of power hierarchies and associated forms of discrimination embedded in the current economic paradigm such as racism, classism, or sexism. In the educational practice of the Konzeptwerk Neue Ökonomie, by applying the methods which we developed, we try to retrace these power structures in mainstream solutions like the *green growth* concept. We discuss the potentials and the pitfalls of alternatives with embedded power hierarchies. Just to name some examples from a degrowth perspective: the reduction of standard working hours; the demand for food sovereignty considered as the baseline for future agriculture; or a de-colonial approach to development.

Underlying these approaches is the need to address power relations in the process of societal change itself. This is an important part of our work. Many young people share feelings of powerlessness (cf. Amsler and Facer 2017). In our workshops, we try to retrace these feelings of political ineffectualness in light of societal power relations. Important in this regard is facilitating learners' engagement with social movements and civil society, in particularly those who are challenging powerful structures and developing alternatives of their own.[21] To this end, we also attempt to link movements from the Global North and those from the Global South involved in similar areas, but whose approaches to the problems may be markedly different.[22]

One example of this educational approach in practice with a strong focus on both aspects of the political—plurality and finding coming ground—is given in our *Degrowth Summer Schools.* These are 4-day events with a specific theme like "*Skills for System Change*" or "*Utopias*", where 300–500 participants gather together at a camp to take part

in self-organized courses and workshops, and self-developed and managed living arrangements (including, e.g., cooking, hygienic facilities, division of labour, or rules of conduct). Activities draw on the impulses of various participants with different perspectives on those subjects on which the summer school focuses. The venues chosen for our summer school camps are frequently in locations where the impact of our imperial modes of living can be felt directly (for example, in regions severely damaged by strip mining).

Many of our summer school participants come from privileged social backgrounds; this can be seen as a cross-cutting challenge in nearly all non-formal and voluntary educational settings in the area of sustainable and de-colonial development. One of our main challenges, therefore, is to create learning environments that are attractive for people from more diverse backgrounds.

Both of these approaches, creating spaces for collective reflection and emphasizing the political in education, can be theoretically grounded; their potential has already been demonstrated. Nevertheless, such approaches can prove difficult: questioning one's own deeply ingrained convictions and possibly engaging in processes of societal transformation against strong power structures is not regarded as promising or attractive by many people to live a good life, nor have they really been taught, or learned, how to do this as part of their overall educational experience. Consequently, we also have to ask what can be done to support people in engaging in processes of critical reflection and emancipation.

Strengthening peoples *psychological resources* in the making of sustainable futures as a cross-cutting approach for education

Marcel Hunecke's (2013) approach to strengthening psychological resources for degrowth societies starts by asking what people need, in order for them to perceive as something positive and desirable, one's engagement in fundamental transformation of his or her own worldviews, production methods, and lifestyles. He proposes a set of six psychological resources—*capability to enjoy*,

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[20] Here, we refer to Eric Olin Wright's (2010) concept of Real Utopias which focusses on establishing alternatives in the cracks of the dominant economic and societal system. For the relevance of dealing with power relations in the context of ESD, see also Håkansson et al. (2017).

[21] See in particular Håkansson et al. (2017), a study dealing with the political dimension of ESD, focussing on conflict.

[22] Related to this is the relevance of socio-political engagement for progressive educators. Up to now, there has been very little exchange over challenges, good practices, strategic orientation, or political requirements. To change the conditions of educational practice and to become more visible, we believe that it is necessary to build and strengthen the image and identity of progressive educators through an associated movement. In our work, for instance, we organize bigger events like conferences with larger teams of organizers—groups of as many as 50 people. With these larger events, actors develop projects jointly; this kind of engagement supports the forming of a common bond.

self-acceptance, *self-efficacy,* as well as *mindfulness*, *the quest for meaning* and *solidarity*—that could aid people in seeing societal change towards sustainable futures and the elimination of imperial modes of living as something not threatening, but rather as an improvement to their own lives and something which they could shape (Hunecke 2013).

Practically speaking, reference to psychological resources for degrowth societies is relevant for the conceptualization of our workshops and for our role as facilitators. In the Konzeptwerk Neue Ökonomie, dealing with one's own role in the process of societal change means that we aim to raise awareness of, and be transparent about, individuals' different preconditions, possibilities, or capabilities, and to create an atmosphere in which it is acceptable to openly express insecurity, reluctance, and fear. At the same time, if people live together in a self-organized way for almost a week—for example, as we practice at our Degrowth Summer Schools with explicit time slots allotted to organizing the group in a grassroots democratic way—then participants are more likely to establish and practice solidarity and a self-effective and joyful way of learning together. Such learning environments also include explicit spaces and times to practice mindfulness.

However, these attempts to create sensitive learning surroundings should not be understood as the *happy end* to the story of education. In line with Getzin and Singer-Brodowski (2016), we want to stress the relevance of the environment in which learning takes place, and we see strong potential in non-formal settings as good venues for strengthening Hunecke's proposed psychological resources. However, for many educational actors and the respective structures financing educational work of this sort, our approach might still seem to be too eccentric or too *radical*. To implement such a practice on a broader scale, therefore, is likely to prove even more difficult than anticipated. To do so will require more research, more practical experience to draw from as well as communication with donor-structures, and educational institutions.

Finally, and with reference in particular to both proposals above—strengthening psychological resources and emphasizing the political—we see a strong need to institutionalize this approach in formal educational settings such as schools and universities, if such learning environments are not to remain small and exclusive. Following the multilevel perspective on societal transformation (Göpel 2016) as well as Wright's (2018) approach to real utopias, a further step in this direction would be to identify windows of opportunities, that is, relevant and accessible entry points for introducing elements designed to initiate long-term systemic change.

Conclusion

In this article, we have tried to link different perspectives for education in the context of sustainable futures and a pedagogy of degrowth. Similar to the notion of "politicizing the future" (see Knappe et al. and Kelz in this issue), we argue for a politicization of education, which means opening education for questions of power as well as for a plurality of alternatives. The idea of sustainable futures from a degrowth perspective includes the questioning and transformation of the currently dominant economic paradigm of growth, commodification, and competition towards a more convivial society.

Retracing and problematizing the influence of the neoliberal capitalist economic paradigm on education, and reconsidering the pre-dominantly instrumental understanding of ESD, we argue for spaces for collective reflection and for emphasizing the political in education in the context of sustainability. This includes engaging with power structures and focussing on collective and unexpected new beginnings.

We suggested adopting a critical-emancipatory perspective on learning, in which education is linked to an understanding of societal transformation as a pluralistic, non-linear, and bottom-up political process. Connected to our own educational practice, we addressed the potential and the challenges of learning processes with a focus on collective critical reflection of shared beliefs in conjunction with the experience of real-world alternatives. The idea underlying this approach is to broaden perspectives on possible modes of living and methods of production to foster hope that the future can be shaped appropriately and sustainably.

Referring to a multilevel perspective on societal transformation, we see non-formal education as an important field for creating learning environments which can support people in engaging in collective and political reflection processes and which could strengthen their psychological resources for responding to the complex challenges of creating sustainable futures. This is much more difficult in formal educational settings based on individualization and competition. Nevertheless, voluntary formats in non-formal education have a tendency to remain exclusive, often limited to a privileged circle of participants. To broaden the progressive approaches developed in informal educational settings, we encourage actors in this field to identify more strongly as a collective political movement so as to be more visible and better able to exert influence on educational debates in general. As a further step in disseminating these alternative approaches to education among formal institutions such as schools and universities, we have a stressed the relevance of identifying accessible entry points within this institutional context.

Understanding educational practice in the context of sustainable futures as a common and yet-unfinished project

shared by academic and practical educators and facilitators, we believe that there is much potential to be garnered from transdisciplinary research projects, especially if all parties involved are able to overcome the customary and deeply ingrained notion that cognitive knowledge and argumentation are superior to practical knowledge and everyday experience.

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