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Transformative enterprises: Characteristics and a definition

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Abstract

This paper contributes to an emerging discussion about transformative enterprises, which are increasingly seen as change agents in sustainability transformations. Some scholars have hitherto described them as pioneering enterprises that strive for fundamental changes towards sustainability at different scales. Economic geography has, however, so far glossed over a micro-perspective on such enterprises. In this paper, we define transformative enterprises in detail by systematically identifying and elaborating their characteristics and actions. We ask: What operationalizable characteristics that refer to transformative enterprises are discussed in the literature? How can we define transformative enterprises? Starting from a comprehensive literature review, we identify nine key dimensions of transformative enterprises that we specify with a set of indicators, and we then synthesize our finding with a definition. With this contribution, we further develop the concept of transformative enterprise in economic geography and show how it complements current conceptualizations of firm-level agency and system-level agency.

KEYWORDS

change agent, definition, economic geography, indicators, key dimensions, sustainability transformation, transformative enterprise

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1 | INTRODUCTION

Although often perceived as unspectacular and overlooked, small and medium-sized enterprises (SMEs) may initiate industry changes needed in times of grand challenges like climate change, biodiversity loss and recurring economic crises (cf. Coenen et al., 2015). There are indeed examples of SMEs that employ regionalization strategies, develop renewable products or promote sufficiency, thereby forging new paths and turning into *change agents*¹ (North, 2016). Some German-language scholars of corporate social and environmental responsibility refer to such firms as transformative enterprises ("transformative Unternehmen", Pfriem, 2021; Scholl & Mewes, 2015a)² which are described as pioneers who strive for fundamental changes towards sustainability. But what exactly are the characteristics of such SMEs? In what ways are they different from "normal" SMEs, and how do they bring about changes towards sustainability?

Even though economic geographers started addressing sustainability matters, their understanding of development mainly rests on the premise of economic growth (e.g. Donald & Gray, 2019) and they predominantly draw on the concept of the "green economy", which embraces decoupling material throughput from economic output by technological advances (Schulz & Bailey, 2014). But critical voices about the feasibility of absolute decoupling become louder (e.g. Haberl et al., 2020), and some scholars start seeing the need to think development beyond a single focus on growth (Martin, 2021). One discourse that takes up this critique is that on a Great Transformation.³ The German Advisory Council on Global Change WBGU took up the term in the context of sustainability transformations to propagate profound changes that include, restructuring national economies and the global economy, so as to stay within planetary boundaries and to prevent irreversible damages of earth systems and ecosystems (WBGU, 2011a, p. 417). This transformation goes beyond "greening" industries and decoupling. It involves systemic ecological, technological, economic, institutional, and cultural changes towards modes of living, working and economic activity that do not exceed the ecological basis of the planet (Schneidewind, 2019, p. 11). The need to keep economic activities within planetary boundaries makes it necessary to imagine alternatives to growth-based economies as sufficient decoupling seems unlikely. At the industry level, this means changing technologies, implementing new social and environmental standards, and ending the use of fossil fuels. At the enterprise level, major changes in input, output, production processes and practices, and stakeholder relations are necessary. In our understanding, this implies a notion of strong sustainability. ⁴ Together with geographers engaging with transformative geographies (Schmid, 2019, e.g. Grenzdörffer, 2021), we think that this transformation discourse⁵ can help us broaden our understanding of economic development.

Economic geography research interested in SMEs as critical actors in a regional economy has only recently turned towards sustainability matters (Tödtling et al., 2021; Trippl et al., 2020, p. 189), and little is known about the characteristics of enterprises that shape sustainability transformations. In evolutionary economic geography (EEG), for example, the notion of green path development is used to describe the rise of new green industries or the "greening" of existing ones (Trippl et al., 2020, p. 189). But while path development is mostly depicted as a firm-driven process (Baumgartinger-Seiringer et al., 2020, p. 2), EEG has been criticized for its focus on aggregated firms (Kyllingstad, 2020, p. 1): A micro-perspective on these firms 6—an account of their visions, governance structures, the products and services they sell—is still missing (e.g. Hassink et al., 2019; Jolly et al., 2020). Other economic geography conceptions of firms do not help here either because they remain at a meta-level and lack precision (Taylor & Asheim, 2001). This means that although the idea to study regions by studying firms was promoted a long time ago (Markusen, 1994), there is still a dearth of knowledge on "...how economic and other actors create, recreate, and alter paths" (Martin, 2014, p. 619).

Closer attention to agency has therefore been identified as key for understanding regional path development (Steen, 2016). One recent conceptualization of agency is that of firm-level agency and system-level agency (Isaksen et al., 2018). Firm-level agency, defined as "actors who found new firms or introduce innovative activities within existing companies" (Trippl et al., 2020, p. 193f.), has its main influence within the firm or organization (Hassink et al., 2019, p. 1638). System-level agency in contrast are actors who transform innovation systems and exert influence outside institutional or organizational borders (ibid.). Both types of agency are needed for new path development to unfold (Trippl et al., 2020, p. 193f.), and hence also for transformation towards sustainability. The bigger the changes, however, the more important system-level agency becomes (Isaksen et al., 2018, p. 8). Firm-level agency

and system-level agency are also referred to in studies on regional restructuring and transformation of regional innovation systems (RIS) (Isaksen et al., 2018). More recent conceptualizations of RIS like challenge-oriented RIS (CoRIS) (Tödtling et al., 2021) that foreground sustainability concerns and grand societal challenges, in particular, insist on the need of powerful system-level actors (ibid, p. 8). The more radical the reconfiguration of a RIS, the greater the need for new innovative actors and actor groups who implement institutional changes (Isaksen et al., 2022).

With their ability to exert firm-level and system-level agency, enterprises can play a key role in a transformation towards sustainability (Schneidewind et al., 2012). As so-called transformative enterprises, they can go beyond using green technologies and advocate for regionalized economic cycles, sufficiency, alternative ownership etc. But the knowledge on the characteristics and agency of transformative enterprises is scarce. We found that most scholarly contributions addressing the characteristics of enterprises aiming at strong sustainability are from the field of post-growth, whose advocates understand transformation as profound change towards economic stability and human well-being within planetary boundaries, and towards a socio-economic organization without the necessity of economic growth (Asara et al., 2015; D'Alisa et al., 2015; Jackson, 2017; Schmelzer & Vetter, 2019; Seidl & Zahrnt, 2010). But apart from one comprehensive literature review on enterprises approaching degrowth (Hankammer et al., 2021), knowledge on transformative enterprises is fragmented. Many different labels for such enterprises like "growth-neutral enterprise" (Deimling, 2016; Liesen et al., 2013), "post-growth business" (Hinton, 2021), "degrowth company" (Khmara & Kronenberg, 2018), "common-good-oriented company" (Wiefek & Heinitz, 2018) or "transformative enterprise" (Pfriem, 2021; Scholl & Mewes, 2015a) are used. We use the term transformative enterprise because we want to emphasize the enterprise's transformative action and effects and thus their role in firm-level and system-level agency. To conclude, the concept of transformative enterprise is only emerging, findings are dispersed, and economic geography did not use it so far. Given that enterprises are central economic actors in sustainability transformations, economic geography could benefit from a precise description of such enterprise's characteristics. In Table 1 below we summarize how traditional economic geography (left) and the transformation discourse (right) conceptualize enterprises in sustainability transformations.

In this paper, we put the pieces together and join insights on enterprises that may be labelled transformative. Our goal is to define transformative enterprises by identifying and elaborating their characteristics and actions. Thereby we complement conceptualizations of firm-level agency and system-level agency. Hence we ask: What operationalizable characteristics that refer to transformative enterprises are discussed in the literature? How can we define transformative enterprises? Starting from a literature review, we identify nine key dimensions of transformative enterprises and develop a set of 30 indicators for describing them. This leads us to proposing a definition of transformative enterprises that extends the few and vague existing ones. Finally, we reflect upon the question how these insights can deepen knowledge on enterprises as change agents in economic geography and advance a more critical perspective on economic development and industry transformation.

2 | METHODS

To develop indicators and a definition for transformative enterprises, the first author of this paper conducted a literature review and repeatedly discussed the intermediary and final results with the other authors. In a first step (cf. Figure 1), we collected contributions covering enterprises' orientation towards transformation and strong sustainability by scanning databases (Google Scholar, Web of Science, swisscovery). Because the body of literature that specifically speaks of transformative enterprises is small and only includes German-language publications, we decided to use search terms related to the concept of transformative enterprise that were enterprise, entrepreneurship, growth, degrowth, post-growth, growth-independent, transition, transformation, sufficiency, sustainability and sustainable. For the same reason, we used English and German search terms and included English- and German-language publications. Also, we specified that publications were based on published research and written within the past 11 years (2010–2021). The search was first conducted in November 2020 and extended via snowballing until October 2021. Second, we defined

TABLE 1 How traditional economic geography and the transformation discourse conceptualize enterprises in sustainability transformations

sustainability transformations			
	Traditional economic geography approaches	Transformation discourse	
Understanding of sustainability	 Discuss sustainability challenges in the context of green path development, green innovations etc. Direction of change: Implicitly normative* Growth-oriented *for example, creation of "good" jobs, income and wealth by enhancing the innovation capacity and growth 	 Discuss sustainability challenges as requiring systemic ecological, technological, economic, institutional, and cultural changes Direction of change: Explicitly normative** Not primarily growth-oriented ** strong sustainability 	
Enterprises in sustainability transformations	 Central actors in regional economic restructuring Creators of new growth paths Initiators of new (green) technological innovations Profit-oriented 	 Actors in sustainability transformations Creators of new development paths that break with existing (e.g. growth-oriented) paths Initiators of technological and social innovations Broad goals, profit is not the primary focus 	
English search: enterprise, entrepreneurship, ment growth, degrowth, post-growth, growth-	Scanning Abstracts 2nd selection Read whole text summarize key messages in table tion criteria: explicitly ions characteristics of enterprises are operationalizable as binary (V/N) indicators.	Snowballing identify suitable publications final selection Transfer to framework	

FIGURE 1 The selection process for the reviewed literature

that the publication explicitly mentions characteristics of potentially transformative enterprises and that the latter are operationalizable as binary indicators. Finally, we identified contributions with substantial statements about such enterprises and translated these statements into indicators. We continued this iterative process of reviewing literature and translation into indicators until theoretical saturation was reached at 44 contributions (cf. Appendix, Table A1).

3 | DEFINING TRANSFORMATIVE ENTERPRISES: NINE KEY DIMENSIONS AND 30 INDICATORS

Based on our review we identified nine defining features that can be used to describe potentially transformative enterprises. These are so-called key dimensions, which touch upon three realms (or topic areas): values and basic orientation, enterprise strategies, and relations with stakeholders. For each of the nine key dimensions we determined a set of two to five indicators¹⁰ that specify how the key dimension may operationalize within a particular enterprise. As each indicator either describes innovative activities within existing firms or actions that influence the wider institutional or organizational context, indicators can be attributed to firm-level or system-level agency

(cf. Table 2). For each key dimension, we hereafter discuss major claims from the literature, and state which indicators these relate to. Certain key dimensions are described more extensively because they encompass more indicators.

3.1 | Values and basic orientation

The first realm which helps to differentiate transformative enterprises from conventional ones, concerns values and basic orientation. It encompasses two key dimensions that are 1 *Driving mission* and 2 *Stability and autonomy*.

TABLE 2 Key dimensions of transformative enterprises and corresponding indicators

Realm	Key dimension	Indicator	Agency
	1 Driving mission	1.1 Alternative goals	
Values & basic orientation		1.2 Idealism	
		1.3 Role model	
c ori	2 Stability & autonomy	2.1 Sufficiency orientation	
basi		2.2 Long-term orientation	
es &		2.3 Autonomous management	
Valu		2.4 Financial independence	
		2.5 Limits to growth	
	3 Ecological footprint	3.1 Low resource use	
		3.2 Low environmental pollution	
Strategies	4 Social obligation	4.1 Care for employees	
		4.2 Social inclusiveness	<u>—</u>
	5 Participatory governance	5.1 Participation	 irm-level
		5.2 Flat hierarchies	fir
		5.3 Transparency	
		5.4 Alternative ownership	
Ś		5.5 Knowledge exchange	
	6 Alternative products & services	6.1 Niche markets	
		6.2 High quality	
		6.3 Repairable products	
		6.4 Service-orientation	
		6.5 Convivial innovation	
Relations with stakeholders	7 People before profit	7.1 Low wage differentials	
		7.2 Fair prices	<u> </u>
		7.3 Profit redistribution	
take	8 Regional embeddedness	8.1 Regionalization	
ith s		8.2 Stakeholder proximity	
M SU		8.3 Strong cooperation	
atio	9 Change agent	9.1 Initiative for value change	system-level
Re		9.2 Initiative for industry change	

3.1.1 | Key dimension 1 Driving mission

With the indicator 1.1 Alternative goals we highlight that directionality in mission seems to be a key feature of enterprises that may be labelled transformative. Alternative business goals, which originate in a business' underpinning values such as social justice and equality, cooperation, autonomy or self-sufficiency (Pansera & Fressoli, 2021), are discussed as perhaps the most important characteristic of a transformative enterprise. These goals may be recorded in the founding documents, legal charter, or vision statement. While contributions with a focus on social enterprises stress the explicit aim to benefit the community and to foster societal wellbeing (Bacq & Janssen, 2011; Johanisova & Fraňková, 2017), post-growth scholars also emphasize environmental goals (e.g. Hankammer et al., 2021; Nesterova, 2020a; Nesterova, 2021; Schmid, 2018). They further put forward that social and environmental goals replace "classic" business goals (De Souza & Seifert, 2018; Gebauer et al., 2017; Khmara & Kronenberg, 2018; Naumann, 2017; Nesterova, 2020b; Schubring et al., 2013; Wiefek & Heinitz, 2018): for transformative enterprises, success is not about business growth or profit maximization. Although profit may be necessary to make additional investments etc., it is never the main goal. It appears to be a consensus that an enterprise's goals are crucial for it to become a change agent.

The indicator 1.2 Idealism circumscribes that the values of an enterprise with transformative potential are strongly influenced by its founders or leaders who are said to follow their ideals, to be visionary, passionate about their business and emotionally attached to it (Burlingham, 2016; Deimling, 2016; Maurer, 2017). This goes along with a heightened sense of accountability for the consequences of entrepreneurial activities (Maurer, 2017; Palzkill et al., 2015; Palzkill-Vorbeck, 2018) and may mean that the leaders forgo business opportunities so as to remain true to themselves (Deimling, 2016; Maurer, 2017). Further, indicator 1.3 Role model addresses that such idealist founders and leaders also have a role model function (Deimling, 2016; Naumann, 2017). They are not only committed to the enterprise values in their personal lives (Deimling, 2016; Naumann, 2017) but are also pioneers in their business (Maurer, 2017). Engaged and enthusiastic leaders are thus key in transformative enterprises.

3.1.2 | Key dimension 2 Stability and autonomy

This key dimension is multifaceted and therefore encompasses five indicators. The two first indicators, 2.1 Sufficiency orientation and 2.2 Long-term orientation emerge from a transformative enterprise's driving mission. Indicator 2.1 Sufficiency orientation points out that by implementing practices of sufficiency (Gebauer, 2018), so-called transformative enterprises reduce their ecological footprint and alleviate consumerism. At the same time, they maintain stable customer relations and robust internal processes. Several authors discuss decommercialization through sharing, prosumption and engagement in non-market production and provisioning patterns (Gebauer et al., 2017; Johanisova & Fraňková, 2017; Niessen, 2013; Paech, 2017; Pfriem, 2021; Posse, 2015). Others emphasize that transformative enterprises do not use conventional advertising and generally moderate sales and promotion (e.g. Nesterova, 2021; Sommer & Wiefek, 2016; Tschumi et al., 2020). Deceleration and decluttering are also identified in transformative enterprises, which may implement phases of retreat and reflection or count on slow, artisanal production. Some enterprises have a limited product range, consciously forego possibilities to expand sales or to grow otherwise, and seek to reduce the complexity of the organization (Gebauer et al., 2015; Gebauer & Mewes, 2015; Liesen et al., 2013, 2015; Nesterova, 2020b; Palzkill & Schneidewind, 2013; Pfriem, 2021; Pfriem et al., 2015). With the indicator 2.2 Long-term orientation we suggest that, in addition to applying principles of sufficiency, transformative enterprises often aim to secure the enterprise in the long run. Case studies observe that this means maintaining stable production capacities and numbers of employees (Gebauer et al., 2015) and involves careful investment to avoid sudden and potentially destabilizing growth in production (De Souza & Seifert, 2018; Gebauer & Mewes, 2015; Nesterova, 2021).

To live up to this orientation, these enterprises manage their business autonomously. Indicator 2.3 Autonomous management describes what Gebauer (2018) summarizes with the sentence "...entrepreneurs were primarily concerned with preserving or regaining autonomy and control; the decision-making and management scope was supposed to remain within the company [...]" (p. 240). Others (Burlingham, 2016; De Souza & Seifert, 2018; Liesen et al., 2013, 2015; Tschumi et al., 2020) confirm that for an enterprise, to keep autonomous management means to avoid dependencies, be they related to customer structure or financing. Because financial independence seems to be particularly important and allows potentially transformative enterprises to renounce the growth paradigm (Gebauer & Mewes, 2015; Leonhardt et al., 2017; Schubring et al., 2013; Wiefek & Heinitz, 2018), we propose the indicator 2.4 Financial independence. Possible strategies are using alternative financing models or regional currencies (Gebauer et al., 2015; Mewes & Gebauer, 2015; Nesterova, 2021; Niessen, 2013; Paech, 2012, 2017; Scholl & Mewes, 2015a). Transformative enterprises are likely to avoid debts (De Souza & Seifert, 2018; Gebauer & Mewes, 2015) and to have low borrowing costs (Gebauer et al., 2017) or low shares of foreign capital and interests (Tschumi et al., 2020) which ensures that repaying interest and generating profit does not become a major concern to their entrepreneurial activity. They eschew growth-driving external financing and cover their investments and business activities with own resources (De Souza & Seifert, 2018; Gebauer & Mewes, 2015). Reducing fixed costs (Liesen et al., 2013) and cautious investments (Gebauer & Mewes, 2015) complete this arsenal of strategies for financial independence.

Closely related to financial independence is growth independence. Indicator 2.5 Limits to growth emphasizes that many transformative enterprises—some of them with an explicit no-growth strategy (Khmara & Kronenberg, 2018) limit the enterprise size by limiting growth in sales, production, employees etc (Gebauer et al., 2015, e.g. Deimling, 2016; Posse, 2015). The reason for restricting growth can be organizational: some SMEs are satisfied with their current business, and growth may imply instability (De Souza & Seifert, 2018). Growth may moreover mean more (administrative) work, stress and poorer quality of life (Gebauer & Mewes, 2015). Limiting growth can also have ideological reasons: SMEs with the potential to be transformative are said to renounce growth either because they reflect on resource limits and the accompanying limits to growing resource throughput (e.g. Naumann, 2017; Nesterova, 2020a) or because they prefer staying small, local and connected to the community (e.g. Hinton, 2021). In a growth-driven economy, limiting growth may, however, need conscious decisions. Transformative enterprises therefore seek to reduce growth drivers and growth dependence (e.g. Gebauer & Mewes, 2015; Naumann, 2017; Pfriem, 2021; Pfriem et al., 2015). Consequently, transformative enterprises reach managerial goals and success by other means than growth (De Souza & Seifert, 2018; Leonhardt et al., 2017). Instead of scaling up, these enterprises seek to reproduce their business model (Gebauer et al., 2015; Nesterova, 2021; Pansera & Fressoli, 2021; Scholl & Mewes, 2015a).

Strategies 3.2

The second realm of a transformative enterprise encompasses its strategies. Four key dimensions are part of this realm: 3 Ecological footprint, 4 Social obligation, 5 Participatory governance, and 6 Alternative products and services.

3.2.1 | Key dimension 3 Ecological footprint

In their enterprise case studies various authors observe high environmental consciousness and low environmental impact (e.g. Gebauer et al., 2015; Hankammer et al., 2021; Nesterova, 2020b; Nesterova, 2021; Pfriem et al., 2015; Wiefek & Heinitz, 2018). With the indicator 3.1 Low resource use, we summarize that, given their ecological goals, possibly transformative enterprises reduce resource use. They promote process efficiency, technological innovations, and close material cycles, or encourage frugal use and sharing models. Indicator 3.2 Low environmental pollution takes up that these enterprises moreover reduce environmental pollution by minimizing waste and energy use and

using renewable energies and recyclable, biodegradable or recycled materials and products. The examined literature does, however, not discuss the technological aspects of environmental friendliness at large. Referring to ecological goals and sufficiency orientation, authors rather stress the frugal use of materials and energy in general (e.g. Nesterova, 2021).

3.2.2 | Key dimension 4 Social obligation

The importance of employee well-being is a recurring topic in the reviewed literature. We therefore propose the indicator 4.1 Care for employees which emphasizes that enterprises that may be called transformative provide work that gives meaning and personal satisfaction to employees (Deimling, 2016; Gebauer, 2018). To achieve this, work must be varied (Gebauer et al., 2015), participation-oriented and enable autonomy and capacity development (ibid., Hankammer et al., 2021). Moreover, it requires appropriate technologies (Hinton, 2021) and may even involve de-specialization (Nesterova, 2020a). Another component of employee well-being are working conditions: transformative enterprises ideally provide lasting employment opportunities (Gebauer, 2018) and improve the work-life balance of employees (Hankammer et al., 2021), for example, with reduced working hours (Hinton, 2021; Nesterova, 2020a, 2020b) or flexible working times (Khmara & Kronenberg, 2018; Nesterova, 2021).

The second indicator in this key dimension, 4.2 Social inclusiveness highlights that transformative enterprises tend to promote social inclusion (Gebauer, 2018), for instance by training and employing disabled, disempowered, or delinquent people. Social inclusion transcends the boundaries of the enterprise when the latter cooperates with charities (Nesterova, 2021) or supports fair-trade initiatives (Sommer & Wiefek, 2016). Altogether, care for employees goes beyond the boundaries of the working place and the employees' legal protection (Burlingham, 2016).

3.2.3 | Key dimension 5 Participatory governance

With the indicator 5.1 Participation we summarize that in the analyzed literature many authors find pronounced participation. In their day-to-day business enterprises with transformative potential foster collaborative practices like sharing, co-production or networking (Gebauer et al., 2015, 2017; Pfriem, 2021; Pfriem et al., 2015). Moreover, in decision-making processes, including the development of a mission statement or new products and services, transformative enterprises do not only consider the interests of employees, but also of external stakeholders (Bacq & Janssen, 2011; Gebauer et al., 2017; Khmara & Kronenberg, 2018; Nesterova, 2020a). Indicator 5.2 Flat hierarchies seizes that such extensive participation goes along with flat hierarchies (Nesterova, 2021), meaning that all enterprise members have an equal say (Naumann, 2017). Decisional power is thus not based on capital ownership, and governance mechanisms do not prioritize investors (Bacq & Janssen, 2011; Khmara & Kronenberg, 2018). Flat hierarchies and democratic decision-making further imply transparency (e.g. Dyllick & Muff, 2016; Gebauer, 2018; Nesterova, 2021; Niessen, 2013) which we describe with indicator 5.3 Transparency. For an enterprise, transparency can mean that it communicates economic, ecological and social key figures (Posse, 2015; Tschumi et al., 2020; Wiefek & Heinitz, 2018), and that it has traceable procurement chains (Sommer & Wiefek, 2016). Besides that, transformative enterprises may disclose their financing, including performance and advertising costs (Khmara & Kronenberg, 2018). Together with transparency and flat hierarchies, participation is thus distinctive for transformative enterprises.

The indicator 5.4 Alternative ownership captures that an enterprise's participatory nature may translate into alternative and democratic ownership patterns (e.g. Gebauer, 2018; Nesterova, 2020a; Wiefek & Heinitz, 2018). Possibly transformative enterprises are likely not to be publicly traded shareholder companies (Hinton, 2021; Reichel, 2013; Schubring et al., 2013) because this could compromise their mission and growth independence. Instead, many of them experiment with uncommon organizational forms such as collective enterprise, citizens' cooperative or

community-owned enterprise (e.g. Johanisova & Fraňková, 2017; Pansera & Fressoli, 2021; Tschumi et al., 2020). The last indicator of this key dimension that strongly relates to transparency, is 5.5 Knowledge exchange: the literature emphasizes that transformative enterprises engage in sharing knowledge and best practices (e.g. Dyllick & Muff, 2016; Gebauer, 2018; Gebauer & Ziegler, 2013), for example, through open-source models and open-license production (e.g. Hinton, 2021; Khmara & Kronenberg, 2018; Niessen, 2013; Pansera & Fressoli, 2021). Together with alternative ownership, this supports the effort to bring changes forward.

3.2.4 | Key dimension 6 Alternative products and services

The two first indicators of this key dimension, 6.1 Niche markets and 6.2 High quality suggest that as pioneers many enterprises operate in niche markets and offer high-quality products and services. High quality may be a precondition for surviving in a niche. Particularly small traditional handicraft businesses want to assure high quality standards in the long run (De Souza & Seifert, 2018; Naumann, 2017). Indicator 6.3 Repairable products addresses that products are designed to last and are repairable which minimizes resource use (e.g. Deimling, 2016; Khmara & Kronenberg, 2018). Besides that, offering durable products is said to reduce growth drivers (Gebauer & Mewes, 2015; Liesen et al., 2015; Mewes & Gebauer, 2015; Tschumi et al., 2020). Regarding repairability, some enterprises may undertake special efforts against planned obsolescence by designing upgradeable products (e.g. Bocken & Short, 2016). With indicator 6.4 Service-orientation we describe that to prolong product life, potentially transformative enterprises may reorient their offer towards repair and maintenance services or promote sharing solutions (Gebauer et al., 2017; Khmara & Kronenberg, 2018; Paech, 2012). When enterprises shift to offering services instead of products (Gebauer & Mewes, 2015, e.g. Gebauer et al., 2017; Posse, 2015), they reduce demand and save resources at once. In terms of resource use, innovation is discussed as another lever. We propose the indicator 6.5 Convivial innovation to highlight that transformative enterprises may opt for different types of innovations like "frugal innovations" (Bocken & Short, 2016), open innovations or user-centered innovations (Scholl & Mewes, 2015a). These are not technology-driven but pushed by perceived social and ecological needs (Hinton, 2021; Nesterova, 2020a; Pansera & Fressoli, 2021). Cycles of innovation may moreover be slower and therefore less resource intensive (Gebauer et al., 2017).

3.3 | Relations with stakeholders

The third realm that distinguishes transformative enterprises is their relations with stakeholders. It encompasses three key dimensions: 7 People before profit, 8 Regional embeddedness and 9 Change agent.

3.3.1 | Key dimension 7 People before profit

Several studies highlight the importance of putting people before profit. We describe aspects of this key dimension with three indicators, the first of which is 7.1 Low wage differentials: two case studies find low wage differentials (Liesen et al., 2015; Sommer & Wiefek, 2016). The reason for this may be ideological. At the same time, it serves to keep fixed costs low. The second indicator, 7.2 Fair prices, addresses that possibly transformative enterprises do also not offer dumping prices or quantity discount, but have long-term and fix acceptance prices (Gebauer et al., 2015, 2017; Tschumi et al., 2020). With this, they reduce the pressure to rationalize, automatize and expand production to make up for low prices. And finally, the indicator 7.3 Profit redistribution emphasizes that transformative enterprises limit the distribution of profit to owners or shareholders. They redistribute profit to employees, reinvest into

infrastructure maintenance or support social or ecological projects (Bacq & Janssen, 2011; Gebauer et al., 2015; Johanisova & Fraňková, 2017; Pfriem et al., 2015; Wiefek & Heinitz, 2018). Transformative enterprises thereby demonstrate their commitment to financial fairness.

3.3.2 | Key dimension 8 Regional embeddedness

An enterprise's regional embeddedness is a topic with wide resonance in the literature. The first indicator of this key dimension, 8.1 Regionalization, addresses that many studies emphasize that enterprises with transformative potential promote regional production, provisioning and consumption patterns (e.g. Paech, 2017; Pfriem et al., 2015; Schneidewind et al., 2012). Rationales for this may be ecological because energy use and transports are minimized (Nesterova, 2021; Paech, 2012; Posse, 2015) or related to an enterprise's no-growth strategy (Hinton, 2021). Some authors also put the community aspect forward: locally embedded enterprises (Hankammer et al., 2021; Johanisova & Fraňková, 2017) feel responsible towards the local community (North, 2016), support it (Nesterova, 2021) and consequently have a regional identity (Pfriem, 2021). Indicator 8.2 Stakeholder proximity highlights that such embeddedness goes along with close contact between the enterprise and involved stakeholders. Several studies mention that so-called transformative enterprises have strong, long-term, partner-like and trust-based relationships with their customers and suppliers (e.g. De Souza & Seifert, 2018; Khmara & Kronenberg, 2018; Posse, 2015; Schubring et al., 2013; Wiefek & Heinitz, 2018). As a side effect, enterprises may be less dependent on market dynamics (Gebauer et al., 2017). With the indicator 8.3 Strong cooperation we suggest that close contacts moreover facilitate cooperation between enterprises, which is said to be particularly strong in transformative enterprises (e.g., Hinton, 2021; Khmara & Kronenberg, 2018; Niessen, 2013). They not only share contracts and employees (Gebauer et al., 2017; Mewes & Gebauer, 2015), but may even support potential competitors (Gebauer et al., 2015; Wiefek & Heinitz, 2018). Regional embeddedness thus not only reduces environmental impacts but is socially important to enterprises too.

3.3.3 | Key dimension 9 Change agent

Enterprises labelled transformative are agents of change towards sustainability in two different ways. First, indicator 9.1 Initiative for value change describes that they are dedicated to initiating changes in values. They for example, encourage employees to share the company values (Khmara & Kronenberg, 2018), carry out educational campaigns (ibid.; Gebauer, 2018) and advocate for reducing consumption and production (e.g. Dyllick & Muff, 2016; Hankammer et al., 2021; Khmara & Kronenberg, 2018; Mewes & Gebauer, 2015). Further, transformative enterprises may implement alternative reporting standards and metrics of success (Niessen, 2013, Posse, 2015) or support environmental or social organizations and initiatives (Khmara & Kronenberg, 2018; Nesterova, 2021). Put differently, these enterprises "...challenge economic discourses and practices more broadly" (Schmid, 2018, p. 238).

Second, transformative enterprises are aware of their structural political impact and engage for industry change. With indicator 9.2 Initiative for industry change we emphasize that possibly transformative enterprises network with like-minded entrepreneurs, influence industry associations or engage in entrepreneurial adjustment policy (e.g. Palzkill & Augenstein, 2017; Palzkill-Vorbeck, 2018; Pfriem, 2021; Posse, 2015; Scholl & Mewes, 2015a). Some of them share professional knowledge and good management practices and select suppliers who comply with the company values (Dyllick & Muff, 2016; Khmara & Kronenberg, 2018; Scholl & Mewes, 2015a). Finally, to raise awareness of their transformative impact, transformative enterprises may carry out PR activities like talks, reports or open house days (Gebauer, 2018). With this, they scale up their effect without necessarily having to grow (Mewes & Gebauer, 2015) and push back unsustainable practices (Pfriem, 2021). This engagement for value change and industry change is what makes an enterprise transformative beyond its boundaries.

Synthesis: A definition of transformative enterprises

With a synthesis of the nine key dimensions which resulted from our literature review, we propose a definition of transformative enterprises:

Transformative enterprises are pioneering SMEs who strive for fundamental changes towards sustainability. They have a social and/or ecological (1) driving mission and are oriented along the values of (2) stability and autonomy. Inside the enterprise, they implement these values through minimizing their (3) ecological footprint, assuming (4) social obligations, introducing (5) participatory governance structures, and offering (6) alternative products and services. The enterprise's core values define how it interacts with stakeholders: transformative enterprises put (7) people before profit, emphasize (8) regional embeddedness and act as (9) change agents. By spreading their vision and taking initiative for industry changes, they trigger or facilitate transformation processes and thereby contribute to sustainable, future-proof economic practices.

Figure 2 illustrates the nine key dimensions. A transformative enterprise's values and basic orientation represented by key dimensions 1 and 2—are at its core. They resonate with organizational and operational aspects, or with the enterprise strategy described with key dimensions 3-6. Values and basic orientation also shape the enterprise's relations with stakeholders (key dimensions 7, 8 and 9), depicted in the outermost circle. Key dimensions 1 and 2 thus strongly influence all other dimensions. Key dimensions 1-7 can moreover be attributed to firm-level agency while key dimensions 8 and 9 describe system-level agency. This classification facilitates the differentiated examination of agency in individual enterprises.

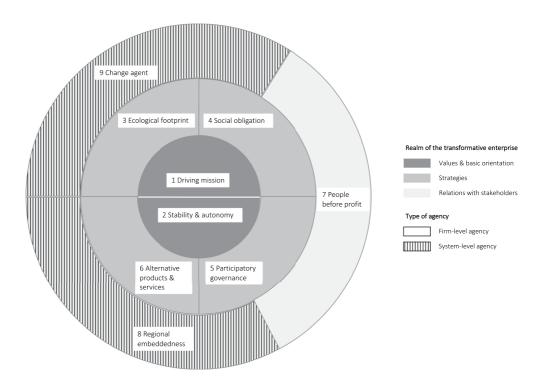


FIGURE 2 Nine key dimensions of transformative enterprises

4 | DISCUSSION

In the previous section we reviewed the literature, operationalized characteristics of potentially transformative enterprises and proposed a definition. With an understanding of transformation that exceeds the premise of a green economy, we join debates on economic development beyond growth (cf. Gibbs & O'Neill, 2017; Martin, 2021; Schulz & Bailey, 2014). At the same time, we complement current conceptualizations of enterprises in sustainability transformations. We show that firm-level agency and system-level agency can go beyond technological innovations and the greening of industries. The focus on SMEs is motivated by their number and importance in industrialized countries (Muller et al., 2021), which makes them key actors for transformative change. Our contribution illuminates SMEs as change agents in times of grand challenges.

Our findings could enrich the engagement with sustainability issues in economic geography and provide fresh points of reference for researchers focusing on SMEs in regional economies. The concept of transformative enterprise offers a micro-perspective of economic actors and their agency—an aspect increasingly discussed by economic geographers (e.g. Baumgartinger-Seiringer et al., 2020; Grillitsch & Sotarauta, 2019). We encourage researchers to take our work as a starting point for more engagement with transformative enterprises, especially empirical studies (cf. Pike et al., 2016). It would be exciting to explore how transformative enterprises, with their firm-level agency and system-level agency, create and alter paths, or become drivers of path-breaking innovations (cf. Gebauer, 2018, p. 245) that require institutional and normative changes (Grillitsch, 2019, p. 684). We also do not yet know what types and aspects of agency are particularly important in this process and what the barriers to and drivers of agency are. Innovation policies too could profit from a new perspective on enterprises: while innovation studies so far mainly aimed at economic growth (Tödtling et al., 2021), a focus on transformative enterprises could reorient attention away from technological innovations towards other types of innovation like slow innovation (Mayer, 2020) or social innovations (e.g. Mayer et al., 2021). This shift would support calls for mission-oriented, responsible or challenge-oriented innovation policies (Tödtling et al., 2021) and is a step towards decoupling innovation from growth (Pansera & Fressoli, 2021).

Turning to the limitations, we want to emphasize that our definition depicts a stylized enterprise. No "real" enterprise will fulfill all 30 indicators and in "real life" enterprises will have to balance their idealism and economic realities (cf. O'Neil & Ucbasaran, 2016). Further improvements of our definition would thus touch on three questions: how can transformative enterprises be delineated from non-transformative ones, that is, how does the continuum from transformative to non-transformative manifest? Are there different types of transformative enterprises? And what challenges and contradictions do they encounter? Answering these questions would imply to clarify relationships and tradeoffs between indicators as well as their weight. Further, other relevant indicators may appear. Moreover, the indicators we described could principally apply to large companies too. Empirical studies drawing on large companies that may be labelled transformative are, however, rare (see e.g. Khmara & Kronenberg, 2018 on Patagonia). Field data could fill these open issues. Given that our work is based on a limited number of studies from the industrialized world, of which only a handful draw on fieldwork, we consider its empirical refinement crucial. This may moreover highlight industry-specific characteristics of transformative enterprises and show barriers to transformative action (cf. Nesterova, 2021). Concurrently, one could examine at what scale enterprises initiate transformative changes. Regarding this, we see potential in opening the view to other research fields concerned with transformation like transition studies, sustainability management or resilience research (cf. Wittmayer & Hölscher, 2017, Heyen & Brohmann, 2017). Our contribution is a starting point for many more fascinating research projects.

5 | CONCLUSION

To date, scholars of economic geography have not substantively engaged with transformative enterprises as change agents that tackle grand societal challenges, and little is therefore known about their characteristics. With our contribution, we address this knowledge gap. Drawing on findings from research fields concerned with

socio-economic transformation, particularly post-growth studies, we operationalized the concept of transformative enterprise. From our literature review, we distilled nine key dimensions and 30 indicators that describe firm-level and system-level agency. We synthetized by proposing a definition for transformative enterprises. With this definition in mind, economic geography scholars could now start engaging with a neglected but important research subject.

Our review confirms some well-known aspects in economic geography like embeddedness or regionality, but also adds fresh ideas that indicate ways forward for the discipline. Firstly, our work provides a micro-perspective on enterprises that are aware of their structural impact and committed to spreading their vision. Contrary to dominant conceptions of firms as profit maximizers, these enterprises are driven by social and environmental goals. Secondly, by showing what strategies transformative enterprises employ and how they relate with stakeholders, we draw a nuanced picture of enterprises that could inspire economic geography in developing concepts to capture economic development beyond growth.

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ENDNOTES

- ¹ Individuals or groups with a crucial role in the process of initiating, designing and implementing processes of change (Kristof, 2010; WBGU, 2011a, p. 419).
- ² The term transformative enterprise ("transformatives Unternehmen") is increasingly used by German-language scholars working on corporate social and environmental responsibility. It appeared around 2015 in a theme issue of the journal Ökologisches Wirtschaften on enterprises in socio-ecological transformation (cf. Pfriem et al., 2015; Scholl & Mewes, 2015b) and then became more widespread in publications emanating from the research project nascent (https://www.nascent-transformativ.de) which examines the emergence and development of transformative economies in the food system (cf. for example Antoni-Komar et al., 2015, Pfriem, 2021). To the authors knowledge, the term transformative enterprise has not yet been used outside the German-language research community.
- ³ The notion of the Great Transformation was first coined by Karl Polanyi in his 1944 book *Great Transformation*. The Political and Economic Origins of Our Time (Polanyi, 2001) and taken up almost 7 decades later by the German Advisory Council on Global Change WBGU in their flagship report World in Transition. A Social Contract for Sustainability (WBGU, 2011b).
- In sustainability economics, strong sustainability means that natural capital cannot be replaced with other forms of capital (human-made or social) (Stern, 1997). Colloquially and in this publication, strong sustainability is understood as primacy of ecological goals over social and economic ones.
- ⁵ Discussions on the transformation discourse are not uncontroversial: Some scholars point out that it risks getting hollowed out, losing its radical potential (Westman & Castán Broto, 2022).
- ⁶ The difference between the terms "firm" and "enterprise" is not clear cut but in most cases "firm" relates to a relatively larger business while "enterprise" means a smaller one. In our research we speak of "enterprises" because our focus is on SMEs. The EEG literature on the other hand, mostly uses the term "firm". The concepts discussed in this section are equally relevant for firms and enterprises.
- ⁷ Sometimes it has also been called field of degrowth. In the early 2010s, degrowth proponents aimed at intentionally downscaling economic activities (Van Den Bergh & Kallis, 2012), whereas post-growth highlighted growth independence (Seidl & Zahrnt, 2010). Schmelzer and Vetter (2019, p. 17) claim that the terms degrowth and post-growth may be used interchangeably as both aim at growth independence, resource use within planetary boundaries and social well-being.
- ⁸ We did not include the search term green entrepreneurship because dominant discourses—especially those in policy—do only propose incremental changes without fundamentally questioning the dominance of economic paradigms and business models (O'Neill & Gibbs, 2016, p. 1730). These voices emphasize absolute decoupling, green growth, technological advances, and the "greening" of existing industries as solutions to pressing ecological and societal challenges. The

- feasibility of absolute decoupling is, however, increasingly questioned (e.g. Haberl et al., 2020). Similarly, we did not include the literature on *circular economy* because it is mostly based on technical thinking and quite incremental regarding the development of enterprises.
- 9 A full summary table of text statements and derived indicators is provided in the Bern Open Repository and Information System BORIS.
- ¹⁰ An extensive list of indicators, including their description, possible implications, related indicators, and references can be found in the Bern Open Repository and Information System BORIS.

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TABLE A1 Overview of the reviewed literature

APPENDIX

Paper Nr.	Author, year	Title	Journal/Type of publication	Concepts
11	Bacq & Janssen, 2011	The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria	Entrepreneurship and regional development	Social entrepreneurship Social entrepreneur Social entrepreneurship organization
7	Bocken & Short, 2016	Towards a sufficiency-driven business model: Experiences and opportunities	Environmental innovation and societal transitions	Business case for sufficiency
ო	Burlingham, 2016	Small giants. Companies that choose to be great instead of big	Book	Small giants
4	De Souza & Seifert, 2018	Understanding the alternative of not growing for small mature businesses	Management revue	Small mature business
5	Deimling, 2016	Sinnstrukturen und Muster nachhaltiger Unternehmen im Kontext der Wachstumskritik - Eine Untersuchung unter Einsatz einer Systemaufstellung	Book (dissertation)	Growth-neutral enterprises
9	Dyllick & Muff, 2016	Clarifying the meaning of sustainable business: Introducing a typology from business- as-usual to true business sustainability	Organization and environment	Sustainable business Business sustainability
7	Gebauer & Mewes, 2015	Qualität und Suffizienz in stabilitätsorientierten KMU. Unternehmensansätze für die Postwachstumsgesellschaft.	UmweltWirtschaftsForum (SustainabilityManagementForum)	Stability-oriented SME
ω	Gebauer, 2018	Towards growth-independent and post-growth- oriented entrepreneurship in the SME sector	Management revue	Growth-independent entrepreneurship Post-growth-oriented entrepreneurship
6	Gebauer et al., 2017	Wirtschaftspolitik für Postwachstum auf Unternehmensebene: Drei Ansätze zur Gestaltung	Book chapter	Post-growth enterprise
10	Gebauer et al., 2015	Wir sind so frei. Elf Unternehmen lösen sich vom Wachstumspfad	Booklet (published by Institut für ökologishe Wirtschaftsforschung IÖW)	Post-growth pioneer

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Concepts	Social entrepreneur Post-growth enterprise	Organization approaching degrowth	Post-growth business	Eco-social enterprise	Degrowth company	Non-growing firms	Growth-neutral enterprise	Non-growing company	Beseelte UnternehmerInnen	Post-growth pioneers	Post-growth enterprise	Degrowth business	Degrowth business
Journal/Type of publication	Ökologisches Wirtschaften	Journal of cleaner production	Futures	Book chapter	Journal of cleaner production	GAIA	Schriftenreihe des Instituts für Ökologische Wirtschaftsforschung IÖW	Research paper (humanistic management network, research paper No. 25/15)	Book	Ökologisches Wirtschaften	Masters thesis (M.A. International business and sustainability)	Journal of cleaner production	Dissertation (university of derby)
Title	Gemeinsam sind wir gross. Kollaboration als Weg für Poswachstumsunternehmen	Principles for organizations striving for sustainable degrowth: Framework development and application to 4 B corps	Five key dimensions of post-growth business: Putting the pieces together	Eco-social enterprises	Degrowth in business: An oxymoron or a viable business model for sustainability?	To grow or not to grow? That is the question. Lessons for social ecological transformation from small-medium enterprises	Wachstumsneutrale Unternehmen. Pilotstudie zur Unternehmensperspektive im Postwachstumsdiskurs	Successful non-growing companies	Beseelte UnternehmerInnen. Plädoyer für einen Wandel in der Wirtschaft.	Transformative Potenziale von Unternehmen, die nicht wachsen wollen	Bewusste Begrenzung von Unternehmenswachstum. Strategien und Problemanalyse von Postwachstumsunternehmen am Beispiel von Premium Cola und Quijote.	Degrowth business framework: Implications for sustainable development	Small business transition towards degrowth
Author, year	Gebauer & Ziegler, 2013	Hankammer et al., 2021	Hinton, 2021	Johanisova & Frankova, 2017	Khmara & Kronenberg, 2018	Leonhardt et al., 2017	Liesen et al., 2013	Liesen et al., 2015	Maurer, 2017	Mewes & Gebauer, 2015	Naumann, 2017	Nesterova, 2020a	Nesterova, 2020b
Paper Nr.	11	12	13	14	15	16	17	18	19	20	21	22	23

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Paper Nr.	Author, year	Title	Journal/Type of publication	Concepts
24	Nesterova, 2021	Small firms as agents of sustainable change	Futures	Radical small firm
25	Niessen, 2013	Pioneering business beyond growth? A multi- case study of small enterprises in Germany	Master's thesis (environmental governance)	Pioneering business beyond growth
26	North, 2016	The business of the anthropocene? Substantivist and diverse economies perspectives on SME engagement in local low carbon transitions	Progress in human geography	Change agent
27	Paech, 2012	Nachhaltiges Wirtschaften jenseits von Innovationsorientierung und Wachstum. Eine unternehmensbezogene Transformationstheorie.	Book (habilitation)	Growth-neutral enterprises
28	Paech, 2017	Unternehmerische Nachhaltigkeit aus Sicht der Postwachstumsökonomik	Book chapter	Growth-neutral enterprise
29	Palzkill & Schneidewind, 2013	Suffizienz als business case	Ökologisches Wirtschaften	Business case for sufficiency (suffizienzbasierts Geschäftsmodell)
30	Palzkill & Augenstein, 2017	Busines model resilience - understanding the role of companies in societal transformation processes	UmweltWirtschaftsForum (SustainabilityManagementForum)	Business model resilience (BMR)
31	Palzkill-Vorbeck, 2018	Geschäftsmodell-Resilienz. Bezugsrahmen für das Verständnis von Unternehmen in gesellschaftlichen Umbruchprozessen	Book (dissertation)	Business model resilience (BMR)
32	Palzkill et al., 2015	Suffizienz als Geschäftsmodell. Die Bedeutung von Socio-Entrepreneurship-Initiativen am Beispiel von Utopiastadt Wuppertal	UmweltWirtschaftsForum (SustainabilityManagementForum)	Social enterprise Social entrepreneurship
33	Pansera & Fressoli, 2021	Innovation without growth: Technological change in a post-growth era	Organization	Post-growth organization
34	Pfriem et al., 2015	Transformative Unternehmen	Ökologisches Wirtschaften	Transformative enterprise
35	Pfriem, 2021	Transforamtive Unternehmen und die Veränderung der Unternehmenslandschaft	Book chapter	Transformative enterprise

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Concepts	Future-proof enterprise	1	Post-growth organization	Business case for sufficiency (suffizienzbasierts Geschäftsmodell)	Transformative enterprise	Post-growth enterprise	Growth-neutral enterprise	Growth-independency	Common-good-oriented company
Journal/Type of publication	Book (dissertation)	Ökologisches Wirtschaften	Management revue	Book	Ökologisches Wirtschaften	Ökologisches Wirtschaften	Beitrag zur Veranstaltung »Neue Trends in der Umweltsoziologie« der Sektion Umweltsoziologie - organisiert von Matthias Groß	Book chapter	Management revue
Title	Zukunftsfähige Unternehmen in einer Postwachtumsgesellschaft. Eine theoretische und empirische Untersuchung	Das Ende des Wirtschaftswachstums, wie wir es kennen	Structured diversity: A practice theory approach to post-growth organizations	Der Beitrag von Unternehmen zur grossen Transformation	Unternehmen als Mitgestalter sozial- ökologischer Transformation	Unternehmen und Postwachstum: Das Beispiel Premium-Cola	Kein richtiges Leben im falschen? Wachstumsneutrale Unternehmen in der wachstumswirtschaft	Wachstumsunabhängigkeit durch Soziale Innovationen? Eine Analyse potenzieller Wachstumswirkungen von Sozialen Innovationen im Schweizer Berggebiet	Common-good-oriented companies: Exploring corporate values, characteristics and practices that could support a development towards degrowth
Author, year	Posse, 2015	Reichel, 2013	Schmid, 2018	Schneidewind et al., 2012	Scholl & Mewes, 2015	Schubring et al., 2013	Sommer & Wiefek, 2016	Tschumi et al., 2020	Wiefek & Heinitz, 2018
Paper Nr.	36	37	38	39	40	41	42	43	44