



Journal of Human Development and Capabilities

A Multi-Disciplinary Journal for People-Centered Development

ISSN: 1945-2829 (Print) 1945-2837 (Online) Journal homepage: http://www.tandfonline.com/loi/cjhd20

Examining Collective Action Through the Capability Approach: The Example of Community Currencies

Felix Rauschmayer, Christine Polzin, Mirijam Mock & Ines Omann

To cite this article: Felix Rauschmayer, Christine Polzin, Mirijam Mock & Ines Omann (2017): Examining Collective Action Through the Capability Approach: The Example of Community Currencies, Journal of Human Development and Capabilities, DOI: <u>10.1080/19452829.2017.1415870</u>

To link to this article: <u>https://doi.org/10.1080/19452829.2017.1415870</u>



Published online: 15 Dec 2017.

C	
L	19
L	2
_	_

Submit your article to this journal 🕝

Article views: 26



View related articles 🗹



View Crossmark data 🗷



Examining Collective Action Through the Capability Approach: The Example of Community Currencies

FELIX RAUSCHMAYER*, CHRISTINE POLZIN ^(D)*, MIRIJAM MOCK** & INES OMANN**

*Department of Environmental Politics, Helmholtz-Centre for Environmental Research—UFZ, Leipzig, Germany **Department of Socioeconomics, Institute for Social Change and Sustainability, Vienna University of Economics and Business, Vienna, Austria

ABSTRACT Collective action—the involvement of a group of people carrying out common and voluntary actions to pursue shared interests—has a high potential to contribute to agency and wellbeing freedom. It is a current and recurrent phenomenon in society, but it is still poorly explained by the Capability Approach (CA). This paper's main aim is to look more closely at how the CA can be used to better frame, understand and evaluate the impacts of collective action. Based on a discussion of the literature on collective capabilities and agency we suggest extending the perspective of the original approach, mainly through a more explicit distinction between three layers: individual processes, collective action, and social institutions. We argue that such an extension is useful in order to evaluate how collective action can alter wellbeing and agency freedoms. By way of example, we look at community currency (CC) initiatives—trading schemes that are designed and implemented as a supplement to the legal tender money—and employ the three-layered CA to describe and evaluate the effects of acting collectively in such a setting. We also point out what distinguishes such an assessment from other approaches that we have found in the literature on CC. We conclude that a more systematic analysis of collective action through the CA may enable the latter to provide for useful assessments of collective action.

KEYWORDS Capability Approach, Agency, Agency freedom, Wellbeing freedom, Collective action, Community currencies, Collective capabilities

1. Introduction

At all times and places, people have gathered to pursue their shared interests through collective action. No standard definition exists for the term "collective action," but essential elements include the involvement of a group of people, a shared interest, as well as common, cooperative and voluntary actions to pursue that interest (Marshall 1998; Meinzen-Dick, DiGregorio, and McCarthy 2004). The underlying motivation is to realise

Correspondence Address: Christine Polzin Department of Environmental Politics, Helmholtz-Centre for Environmental Research—UFZ, Permoserstr. 15, 04318 Leipzig, Germany. Email: christine.polzin@ufz.de

self- and other-regarding goals that are beyond the scope of individual participants, for example aiming to change social institutions. Collective action may increase the freedom to realise such goals.

As the expansion of freedoms is at the core of the Capability Approach (CA), we consider it a good candidate for better understanding and evaluating the effects of collective action. The standard versions of Amartya Sen's CA have so far been mostly concerned with individuals and individual aims, preferences, and agency, without sufficiently elaborating the collective aspects of establishing and valuing individual freedoms. So far, the CA has not been able to provide guidelines for strengthening collective agency (Leßmann 2011, 11). Whereas the standard CA focusses on individual capabilities only, we argue that it makes sense to explicitly analyse collective aspects of capabilities when looking at collective processes that involve a significant amount of interaction and collaboration among users. Our considerations go beyond arguments for considering procedural aspects of collectives with respect to collective value judgements (Alkire 2006) and beyond the discussion on positive or negative capabilities evolving from (not necessarily voluntary) group adherence (Evans 2002; Sen 2002; Stewart 2005; Ibrahim 2006). We argue that collective action requires and creates collective agency which may in turn change the capability set and hence the achieved functionings of both participants and non-participants of such action. We focus our discussion on the evaluative analysis of collective action and not on motivational questions about why people gather to undertake collective action.

As a contemporary example of collective action, we use community currencies (CC), that is, currency systems that exist as supplements to the national ones at the local level (Seyfang and Longhurst 2016, 5). CC are used around the world, attempting to provide local answers to global challenges, such as the opacity of the standard financial system with its seeming tendency to redistribute wealth from the poor to the rich (Atkinson, Piketty, and Saez 2011). The aims of such complementary currencies include, inter alia, the creation or strengthening of a locally rooted resilient economy, giving value to skills and things not valued by the standard market, and creating social ties in neighbourhoods. Bernd Lietaer, a Belgian expert on finance and CC, is convinced of the strong impact that currencies and their characteristics have on society: "Money matters. The way money is created and administered in a given society makes a deep impression on values and relationships within that society" (Lietaer 2001, 4). CC are forms of collective action because they are based on the solidarity and cooperation of a group of people who voluntarily engage in the scheme in order to enact change within the social institutions of the current economic and financial system, notably money and exchange (Seyfang 2006).

CC have captured the interest of scientific research within various disciplines, including economics, sociology, anthropology, geography and to a lesser degree also development studies, political science, psychology or jurisprudence (Schroeder, Miyazaki, and Fare 2011). Given this wide spectrum of perspectives and ontologies, analyses of CC adopt very diverse approaches, models, theories, measurements, and indicators. Up to now, much research on CC does not refer to a clear conceptual framework, but is strongly practice-oriented and case-study-based. As we will show later, the CA offers an interesting focus on CC that complements and enriches current assessments of CC in terms of their effects on capabilities. It thus allows us to look more thoroughly at both the individual dimension of CC as well as the interplay between individual and collective effects.

This paper starts by extending standard uses of Sen's CA to better cover the process aspect of collective action. We briefly review the literature on CC and use our extended CA to show what an evaluative analysis of CC would look like if the focus were placed on individual freedoms and collective agency. The discussion focuses on the enrichment of the CA through the suggested extension.

2. The Capability Approach as a Means to Evaluate Collective Action

The social embeddedness of both capability generation and the choice of achieved functionings has been mentioned throughout the literature, but—in our opinion—its conceptual implications have not been sufficiently elaborated. With what follows we want to resume the debate with regard to collective action and propose a three-layered understanding of Sen's CA.

2.1. The Capability Approach Embedded in Social Institutions

The CA was developed by the economist and philosopher Amartya Sen as a critique to standard welfare economics, but also with the aim of proposing an alternative method for descriptive, prospective, and evaluative analyses. Within this framework, the ultimate goal of development is to contribute to a good human life, expressed by the enhancement of one's capability set (Sen 1999). A good life goes beyond the notion of achieving specific functionings by including the freedom to achieve them, and it includes aspects of wellbeing as well as aspects of agency (Alkire 2007). Capabilities are a function of resources and conversion factors (acting as non-monetary constraints and opportunities), some of which can be acquired through individual action, but most of which depend on social institutions and are not within an individual's control. Analysing the potential of collective action to influence social institutions in order to enhance human freedom should thus also be based on this multidimensional understanding of a good life that includes achievements and freedoms.

Sen distinguishes between different goals that individuals have with regard to their respective individual or collective actions: whether they do something with the aim of increasing their own wellbeing (sometimes motivated by sympathy for others) or their agency (being motivated by any commitment to the wellbeing of others or to non-wellbeing related principles). Through this distinction, the CA includes a whole range of goals and values, narrowly self-regarding as well as completely other-regarding (see Grasso and Di Giulio 2003; Robeyns 2005). A good life, according to Sen, necessarily includes the freedom to pursue and achieve other-regarding values and goals. The literature on collective action and collaborative behaviour concurs that people have good reasons to take on commitments to the wellbeing of others, such as children, the poor, or future generations (see e.g., Ostrom 1990; Putnam 1993).

In line with Alkire (2002) and Qizilbash (2002) who argue that it is important to distinguish values from capabilities, Deneulin (2011) calls for a better understanding of how social processes influence individually held values. The prioritisation among different capabilities, the act of choosing which functionings to achieve, and the evaluation of agency or wellbeing achievements all depend on values.¹

With regard to the topic of this paper, the relation between values and capabilities therefore is two-fold: on the one hand, individually held values and goals determine the relative importance of wellbeing with respect to agency freedoms. On the other hand, actions resulting from these choices lead to wellbeing or agency achievements which influence goals and values—this feedback loop might be especially important for collective actions.

Neither values and goals, nor capabilities or functionings are independent of larger collective processes, comprising of formal and informal institutions, but also of collective debates and actions.² Therefore, the individual achievement of functionings can only be understood with such collective processes in mind. Especially social conversion factors, such as intrapersonal trust or reciprocity depend on collective processes. The white core of Figure 1 summarises the main elements of the CA, adding values and goals as an element and highlighting the distinction between self- and other-regarding goals.³ As

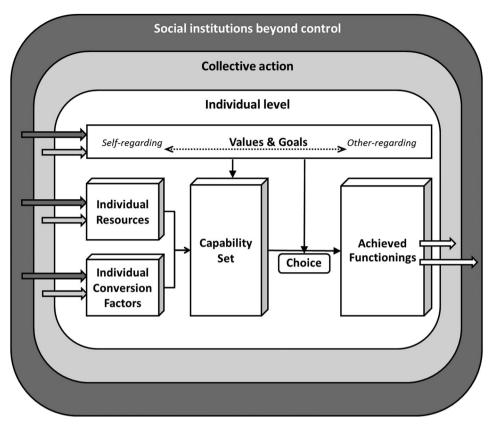


Figure 1. Embedding the CA in social institutions (own depiction).

another contrast to standard presentations of the CA (e.g., Robeyns 2005; but Ibrahim 2006) where the capability function is subject to singular external factors such as the social context or personal history and psychology, Figure 1 shows the embeddedness of individual capabilities and functionings in social institutions. In our use of the term institutions, we follow one of the main traditions of institutionalist thought, Old Institutional Economics, particularly Veblen's conception of institutions as "settled habits of thought common to the generality of men" (Veblen 1909, 626). However, as these behavioural habits are dispositions "to engage in previously adopted or acquired behavior or thoughts, triggered by an appropriate stimulus or context" (Hodgson 2006, 6), behavioural habit and institutional structure are interlinked and cannot be separated from each other (in a similar way as agency and structure are inseparable). Hence, institutions include both institutional arrangements (organisational forms) and institutional environments (social rules, regulations and behavioural patterns), both of which are tightly interlinked.⁴ Some social institutions may be considered to be changeable from an individual perspective (e.g., local associations or groups), while most are beyond individual control.⁵ We assume that participating in collective action, as defined above, is a voluntary and intentional act, which is not the case for all social processes or group memberships. The interactions between the three layers are highlighted with bold arrows. The white arrows depict the (admittedly limited) influence that individually achieved functionings can have on social institutions whereas the dark and light grey arrows depict the influence of social institutions on individual goals, resources, conversion factors, and choices. It is important to acknowledge (but difficult to illustrate in a two-dimensional figure) that institutions are not separate from individuals. Individuals are not only embedded in social institutions, but social institutions are also inside individuals, in the form of (partly unconscious) predispositions to act or respond in particular ways (Hodgson 2006).

We will now turn to a more specific discussion of collective processes and capabilities in order to be able to specify this embeddedness.

2.2. Collective Processes and Capabilities

A merely individualistic understanding of behaviour has been criticised for omitting the deep embeddedness of individual actions in cultural norms and social institutions (e.g., Shove 2010). Scholars of practice theory such as Elizabeth Shove see values (or in her terms: meaning) alongside material and skills as an inherent part of social practices and presume that they are for the better part socially embedded routines (Schatzki, Knorr-Cetina, and Savigny 2001; Reckwitz 2003). As the CA is essentially individualistic in its normative basis (Robeyns 2005), but also in its practice (e.g., the CA is void of an elaborate theory of society), the criticism of omitting the deep social embeddedness of individual practices is also partially applicable to the CA.⁶ As Leßmann (2011, 19) puts it:

the CA should more systematically take account of the social embeddedness of individuals. The CA is not ignorant of the influence of groups, social relations, norms etc., on people's choices as Robeyns (2005, 98–99) points out, but as the literature on participatory projects shows there is a tension between the narrative approach taken so far and the model of choice used in the CA.

Among CA scholars, the (too) individualistic perspective has been criticised by different authors as too narrow to deal with social phenomena constituted by social interdependencies (see e.g., Evans 2002; Stewart 2005; Ibrahim 2006, 2011; Ballet, Dubois, and Mahieu 2007; Deneulin 2008, 2011; Volkert 2013; Demals and Hyard 2014; Davis 2015). Demals and Hyard (2014, 36), for example, affirm that "the Senian CA is grounded in a kind of individualism that states that collectivity is built up from individuals or people, who think, act and choose in relation with others and under the influence of social circumstances." John Davis (2015) has shown, though, that Sen's differentiation of aspects of the self, ranging from self-welfare to commitments, allows a more differentiated analysis of the link between collectives and individuals, in particular, when separating the evaluation of individual advantage—where only individual capabilities count—from the non-evaluative analysis of agency where it makes sense to also consider collective aspects (which Davis calls "collective capabilities").

Some authors have argued that the methodological perspective of the approach, not necessarily in its concept, but in its implementation in practice, downplays the importance of collectives in enhancing capability sets. One of the first to do so was the sociologist Peter Evans, seeing himself in accordance with Sen, who has repeatedly stated the embedding of preference formation in cultural and hence collective processes. But Evans wants to acknowledge this embeddedness through the extension of the CA towards collective capabilities: "In practice, my ability to choose the life I have reason to value often hangs on the possibility of my acting together with others who have reason to value similar things. Individual capabilities depend on collective capabilities" (Evans 2002, 56). Davis (2015) argues that such dependency is contingent on a strong identification of the individual with the group—an issue that is also relevant for Ibrahim's (2006) and Stewart's (2005) contribution to the debate on collective capabilities.

Solava Ibrahim, referring to Evans, defines collective capabilities (in the context of selfhelp groups)

as the newly generated capabilities attained by virtue of their engagement in a collective action or their membership in a social network that helps them achieve the lives they value. They are not simply the sum (or average) of individual capabilities, but rather new capabilities that the individual alone would neither have nor be able to achieve, if he/she did not join a collectivity. (Ibrahim 2006, 404)

Ibrahim assumes that collective capabilities influence individual choices in two ways: they extend the range of available options, and they influence the individual perception of a "reason to value" which, again, affects the conversion of capabilities to achieved functionings:

In contrast to individual agency where a person pursues 'individually' his/her own perception of the good, through acts of collective agency the individual can pursue this perception of the good collectively by joining or participating in a group with similar goals. (ibid., 405)

Others (e.g., Sen 2002; Deneulin 2008; Volkert 2013) do not disagree on the importance of social interaction for human development, but refrain from calling such freedoms to realise doings and beings in collective interaction "collective capabilities" due to the strong normative role of "capabilities" within the CA's use in evaluation. Capabilities, as the expression of human freedom, are the normative basis of any CA-based evaluation of individual advantage; giving "collective capabilities" the same function is questionable and would challenge the CA's ethical basis. "Collective capabilities" that are valuable for some members may at the same time harm other members, whereas individual capabilities are, in principle, always beneficial to the individual.⁷

Claiming that a structure or group provides a collective capability may thus overlook some significant dis-benefits or heterogeneities. Sen (2002, 85) refers to those capabilities that are dependent on social interactions as "socially dependent individual capabilities," since the experience of an "intrinsic satisfaction" still takes place on the individual layer. In his analysis of the process of agency development (in contrast to an evaluation of individual advantage), Davis (2015) complements these socially dependent individual capabilities with "individually dependent collective capabilities" in order to capture "how individuals influence what social groups in Sen's sense can achieve" (Davis 2015, 10).

Volkert talks about "collective abilities" that are produced by groups (including, but not limited to, groups carrying out collective actions) and "comprise positive and negative collective potentials that are beyond any individual's capability" (2013, 10–11). He sees the main importance of groups (including the state) in their intent to influence the distribution of resources and conversion factors as well as individual choices and goals. Economic lobby groups, environmental NGOs, self-help organisations, and sporting associations can all be analysed in this perspective. Volkert (2013) differentiates between direct and indirect individual agency, referring with the former to direct control of decisions and actions. Indirect individual agency "stands for individual citizens' public reasoning envisioning a 'government by discussion' (Sen 2009, 324). This allows influencing and indirectly controlling social actors and institutions" (Volkert 2013, 10). For example in sporting associations, members can exert direct agency through their engagement within the association and indirect agency through participation in the town's discussion and decisions on the importance and support of sporting associations. This last type of

agency becomes collective when members act out of collective interests and/or out of commitments they have taken collectively. In conceptual terms, Volkert talks about collective agency and avoids the term "collective capabilities" and herewith apparently sees agency as being different from capabilities. Davis, on the other hand, talks of capabilities, but differentiates between evaluation of advantage and analysis of agency. In substance they do not seem to disagree. Apart from this distinction, it seems necessary to better describe the character of membership. This paper's focus is on voluntary and intentional participation in collectives pursuing collective actions based on members' shared interests. We assume that collective capabilities that harm their wellbeing would in general encourage individuals to leave the collective, and herewith dissolve the harming component.

In the light of Sen's fourfold differentiation between wellbeing freedom and achievement as well as agency freedom and achievement, an engagement for a sporting association can then be understood not only with respect to effects on individual wellbeing freedom and achievement (e.g., being able to and actively carry out a sports activity), but also with regard to agency freedom and achievement (e.g., being able to and actively support others to perform this sport), on an individual and/or collective level. Many people design and/or implement collective action processes and benefit from their outcomes. This "direct collective agency" (Volkert 2013) additionally enhances their indirect individual and collective agency by empowering them to take part in public reasoning.

From this brief and incomplete review on collective (cap)abilities and agency we conclude that culturally and institutionally embedded collective processes and their outcomes are important for individual capabilities. Due to the normative weight of "capabilities" in the CA's evaluation of advantage it seems necessary, however, to specify that collective capabilities may be an important part of agency development but should not be a source of a normative analysis of individual advantage. We will therefore call Davis' "collective capabilities" collective agency. Ibrahim's use of collective capabilities in an evaluative sense seems to be misleading and Sen's use (2002) misplaced in a discussion on collective action.

2.3. A Three-layered Understanding of the Capability Approach

Based on Figure 1 and our discussion on collective processes and capabilities, we are now able to present Figure 2 that shows a more fully fledged three-layered understanding of the CA:

- (1) The white boxes in the centre correspond to the respective individual layer embedded in social institutions (depicted in more detail in Figure 1).
- (2) The outer box in dark grey corresponds to those social institutions that are considered unchangeable by the respective individual, such as the national currency system, or rules of market exchange. These are not in the focus of this paper.
- (3) The light grey box in between, which is at the centre of this conceptual analysis, depicts specific processes of collective action and their outcomes. By taking part in such processes, individuals can acquire collective agency, which can take both direct and indirect forms (Volkert 2013) and have different effects, as depicted through the different arrows (a) to (d):
 - Arrow (a): Direct collective agency may influence an individual's values and goals, resources, and conversion factors and the interaction of those which we have not depicted in the figure. With regard to goals, for example, an individual's courage to strive for societal change may increase through engagement in

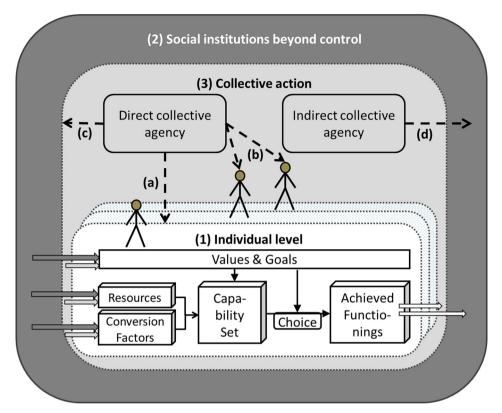


Figure 2. Role of collective processes in the three-layered understanding of the CA (own depiction).

collective action. Through collective action, they may also adjust their preferences towards goals that previously seemed unattainable. Some personal conversion factors may also change as a result of engaging in collective action, such as self-confidence and courage.

- Arrow (b): Direct collective agency may in very similar ways influence the goals, resources, and conversion factors of other members of the collective action group.
- Arrow (c): Direct collective agency may also shift the border line between those institutions that are considered changeable and those that are considered unchangeable by the individual at hand and thus increase the control over one's surrounding social institutions.
- Arrow (d): Through indirect collective agency it may be possible to influence institutions that are considered to be beyond the control of individuals and their collectives. In line with Volkert's (2013) definition of indirect individual agency, this is done by participating in public discourse. Indirect collective agency within wider systems can have different goals, such as improving the quality of life of group members, or collective commitments to other humans or non-humans.

The following chapter will take an example of collective action—CC—in order to illustrate the usefulness of the three-layered CA in practice.

3. Community Currencies

3.1. Defining Community Currencies

CC are alternative trading schemes that are designed and implemented as a supplement to the conventional money (Seyfang and Longhurst 2016, 5). Over the last 30 years, a new wave of CC emerged across the world, giving rise to a wealth of those schemes in continental Europe but also in the US, the UK, Australia and New Zealand (Seyfang and Longhurst 2013). A long and successful tradition of CC also exists in Japan (Nakazato and Hiramoto 2012). South American CC are particularly well known for their strong impacts. A famous example is the Argentinian barter market "Club de Trueque," which grew to an estimated 2.5 million members during the economic demise in 2001 and 2002. Only a few years later, however, when the national economy was recovering, the number of participants shrank to approximately 0.25 million (Gómez 2010).

CC appear under different names, the most common ones being complementary currencies, alternative currencies, and parallel currencies, without any sharp typology or classification shared by different scholars (Blanc 2011, 4). Various criteria for classifying them have been suggested, according to their technical and operational design features, objectives, purposes, and visions (Martignoni 2012). In the following overview, we follow a design-oriented classification of CC based on a rich empirical data basis.

Seyfang and Longhurst (2013) analysed 3418 CC projects across the world and categorised them into four main groups: service credits, mutual exchange schemes, local currencies, and barter markets.⁸ Service credit time banks are the most widely spread type of CC. They are a reciprocity-based trading system in which work hours are usually used as currency. Service credits often take the form of time banks and foster neighbourhood support, social care, and community activities. Many time banks value every activity equally, that is, one hour of a rendered service can be exchanged for one hour of any other service on offer. Saved credits can be spent, donated or saved for future use (there are also special schemes for care of the elderly). Mutual exchange currencies, such as Local Exchange Trading Schemes (LETS), are locally organised economic organizations regulating the exchange of goods and services among the members of the group. They are usually run by community volunteers taking care of providing all required information and a system to record all the transactions. In LETS, the members list their offers and requests for goods and services in a directory and then exchange them at a price negotiated in units of the locally created LETS Credits. LETS often take the form of purely notional credits and debits. Hence, they are a form of "mutual credit," meaning that the currency is issued by the members themselves and generated by the act of exchange. The value of the currency is maintained by the trust in other members to meet their commitments. The third group of CC, local currencies, are geographically bound, locally issued notes or tokens which circulate freely among consumers and participating businesses in a defined area. They are utilised in a similar manner as national currencies, to purchase goods and services. Some are even convertible to the national currency. Because of their local boundaries, they foster the local economy. In most cases, participation is based purely on exchange, facilitated by an internet platform and directory which lists businesses that accept the local currency (see Seyfang and Pearson 2000, 57; Seyfang 2001, 976; Seyfang and Longhurst 2013).

Besides the differences in engagement among the participants as in most collective action groups, the different types of CC also imply different degrees of engagement of their users. In contrast to local currencies, which do not usually involve any form of membership in the currency scheme, mutual exchange currencies or service credits often require membership.

Independently of their differences, all these forms of CC include the essential elements of collective action, that is, the involvement of a group of people, a shared interest, as well as common, cooperative and voluntary actions to pursue that interest (Marshall 1998; Meinzen-Dick, DiGregorio, and McCarthy 2004).

3.2. Community Currencies Linking Markets, Deliberation, and Collective Action

It is interesting to note that the discussion on collective capabilities has begun with a critical note by Evans (2002) on the role of markets as an impediment to deliberative preference formation, an issue that Sen concedes he should have given more attention to (Sen 2002, 84). Currencies are an integral part of markets. Leßmann (2011) differentiates the space in which people act into three relatively distinct domains: market activity, public deliberation, and community participation. Referring to Granovetter (1985), Davis (2015, 2) distinguishes these domains "in terms of their 'social embeddedness' or according to the extent to which they each determine the nature of interaction between individuals and social structures." Davis sees markets as spaces in which people primarily seek to develop individual capabilities, though these are still "socially dependent individual capabilities. [...] In terms of Sen's different aspects of the self thinking, individuals' privateness is high. In general the market promotes welfarist thinking" (Davis 2015, 20). In public deliberation arenas, individuals can develop their "socially dependent individual capabilities" more successfully. Self- as well as other-regarding values and goals can be found in this space of public interaction (see also Soma and Vatn 2014). The space of community participation-or collective action-depends "almost entirely on individuals' commitment to them and strong identification with their overall goals and the role opportunities they create for members. That is, their collective capabilities are highly 'individually dependent'" (Davis 2015, 13).

CC can, in this light, be seen as endeavours to link market activities, public deliberation arenas, and community participation in a hybrid form. CC users engage in market activities when they buy and offer goods and services through the complementary currency. At the same time, CC can provide a forum to discuss alternatives to capitalist markets, and participation may be a form of political engagement (North 2006, 2007). Especially the process of setting up a CC and establishing these (mostly small) collective action initiatives in a region is an act of community participation. As specified above, it is this latter aspect of collective action that is in the focus of the analysis below.

It is important to capture the whole range of capability impacts of such forms of collective action: from individual capabilities to socially dependent individual capabilities to collective agency. Moreover, it is useful to distinguish the process of agency development that comprises these three categories of capabilities (in Davis' terms) from the evaluation of individual advantage referring only to individual capabilities. We suggest that the three-layered CA may offer a coherent framework to analyse the effects of collective action at various scales, their interaction, as well as the significance of collective action for enhancing human freedoms. Collective action has a number of important characteristics which differ from the properties of individual action and which may enable freedoms that individual action would not be capable of achieving. In order to shed light on these freedoms—notably on the ability to influence social institutions that would otherwise be regarded as unchangeable—it is useful to consider the manifold ways in which individuals engaging in collective action are able to change their own capability set and its determinants through the power of collective agency.

4. Applying the Three-layered Capability Approach to the Case of Community Currencies

The main question that emerges from what we said above is: What effects does engaging in collective action have on (a) individual capabilities, (b) collective agency, and (c) on society as a whole? More specifically, we look at what happens when people develop and use alternative trading schemes in addition to or instead of the national currency. Analysing this phenomenon through the CA reveals a plethora of changes at the individual layer, not only in terms of the financial value of the trading activities, but also with regard to values and goals, conversion factors, choices, individual capability sets and achieved functionings. A closer look at the dynamics involved in using CC reveals that direct and indirect collective agency affect the individual capability sets of the users and non-users as well as social institutions.

In the following, we will describe some of the potential effects of CC along the arrows of Figure 2. The description draws on exemplary findings from the CC literature, situating them in the CA perspective.⁹ We conclude this section by specifying exemplary research questions that emerge when looking at CC through the three-layered CA.

4.1. Influence of Direct Collective Agency on the User (Individual Layer)—Arrow (a)

Taking part in CC may induce changes in various elements at the individual level (the central box of Figure 2), namely in goals, resources, personal and social conversion factors and thereby in capabilities, choices, and achieved functionings.

• Changes in resources:

Using CC changes the disposable resources at hand that help to form the individual capability set. Most local currencies do not have interest rates (Brooks 2015, 17), thus encouraging a continuous cash flow instead of savings. The goods and services traded within a CC community differ from the ones offered through the formal market (Seyfang and Longhurst 2013, 67; Williams et al. 2001). In LETS and time banks, the members of the CC themselves offer goods and services. By creating an alternative source of income (and purchasing possibilities), they alter the individual resources of the CC users. For retired or unemployed people, for example, the availability of time may herewith constitute a new resource. Thus, people who have traditionally been excluded from the formal labour market may gain access to an alternative market (Seyfang 2006; Molnar 2011). Additionally, users get access to interest-free credits (Seyfang and Longhurst 2016, 5). As CC are complementary to national currencies, the changes in resources mostly constitute an enlargement of the set of resources available (except for the negative interest rate).

• Changes in social and personal conversion factors:

Most studies suggest that CC foster trust, cooperation and reciprocity (e.g., Williams et al. 2001; Seyfang 2009, 8; Ozanne 2010, 10; Krabbe 2015). Trust has been labelled as "the currency" of the sharing economy (Botsman and Rogers 2011), and the idea that mutual trust can be extended beyond friends and acquaintances is a fundamental element of CC (Seyfang 2009, 8). Molnar argues that time banks allow for new forms of cooperation, for example based on "generalized reciprocity" (Putnam 2000), "which implies long-term, indirect exchanges within a network of people rather than the short-term, direct exchanges between two or more individuals that are a characteristic of 'direct reciprocity" (Molnar 2011, 18). Similarly, Nakazato and Hiramoto (2012) study how CC provide social support in form of emotional, informational or appraisal support. Engaging in CC groups can also change self-efficacy (Bandura 1977), a key

mechanism in empowerment for personal and social change, for example, by enabling people to (a) gain first-hand experience of the influence of one's own capacities in acting on alternative markets, (b) create and maintain such currency systems, and (c) experience the collective agency to create self-controlled spaces within social institutions beyond control (see arrow (c) on this last point).

• Changes in values and goals:

Many CC significantly alter rules of the economy for example by establishing systems in which every activity is valued equally and all services (cleaning as well as accounting) cost the amount of time needed to carry them out. Thereby new understandings of work, money and wealth are set into practice that influence the user's goals (Kristof, Nanning, and Christiane 2001; Briceno and Stagl 2006, 1548). "In fact, the most significant benefit of time banking, for many participants, was the opportunity to redefine what is considered 'valuable' [...] in other words: creating and putting into practice new institutions of wealth, value and work" (Seyfang 2004, 10).

Resonating with Deneulin's (2011) discussion on groups as drivers of value change, CC have been reported to provoke reflections on individual values, for example, in relation to consumption, environmental awareness (Briceno and Stagl 2006), or economic localisation (Collom 2007). As transaction processes with CC are often less straightforward than with standard currencies, people are more likely to pause and question if they really need a certain good or service (Kristof, Nanning, and Christiane 2001; Briceno and Stagl 2006, 1547; North 2005, 225; Seyfang 2009).

· Changes in choices

The change in resources, conversion factors, and values and goals induce a change in concrete choices. Briceno and Stagl (2006, 1546) report from their study that "[m]any participants (about 40%) identified the existence of [collective action and consumption] initiatives and gave some examples such as 'sharing systems of garden tools,' 'work in garden allotments,' 'decorating equipment leasing,' 'video sharing,' 'carpooling,' and other rotator, loan, and hire projects."

4.2. Influence of Direct Collective Agency on Other Individual Users-Arrow (b)

The direct collective agency involved in using a CC may not only influence the capabilities of the individual user (and his or her quality of life), but also those of other CC users. These effects, which are the same as described under arrow (a) above, may be unintended by some users, while for others, they may constitute a prime motivation for engaging for and using a CC—as an expression of sympathy or commitment.

The literature on CC describes a broad range of motivations why people join such a trading scheme. Collom (2007) as well as Briceno and Stagl (2006) found that both selfand other-regarding motivations are common motivations for using CC. From a CA perspective with its missing discussion on how processes influence values (Deneulin 2011), it is unclear whether the wish to act on personal values (in this case to "create a better society," to "contribute to the quality of life in our region," to "be part of a larger movement for social change" and to "help build community in our region"; Collom 2007, 39) should be regarded as a motivation that is self-regarding or other-regarding.

4.3. Increasing Control Over Social Institutions Through Direct Collective Agency—Arrow (c)

In her research on local currencies, Schwaiger (2006, 23) analyses the feeling of powerlessness and asks whether local currencies can address it. For many of her interviewees, local currencies represent a possibility to actively shape their own surrounding and even to influence global processes to a limited extent, notably by promoting small local enterprises through the currency scheme and thus supporting the economic development of the home region (ibid.). This as well as creating spaces for public discussion, for example, on the values related to consumption, environmental awareness, or economic localisation, can be considered as a means to have more control over social institutions. This implies an increased control over the social institutions' influences on resources, conversion factors, values and goals, as well as on choice.

Psychological literature distinguishes between self-efficacy and group-efficacy (Pescosolido 2003), defining the latter as the group's collective estimate of its ability to perform a task (Gibson 1999). The development of both group-efficacy and self-efficacy is based on previous performances and goal attainments. As CC are based on collective action, not only self-efficacy may increase as a conversion factor, as Schwaiger (2006) found in her study on local currencies, but also group efficacy: Through collective agency, CC users may (as a group) perceive their control over social institutions as increased and hence "widen" the middle box of Figure 2 by slightly shifting the border line between those institutions that are considered changeable and those considered unchangeable. This potentially increased sense of efficacy is based on experiences such as becoming more independent from large corporations or the government by being integrated in an alternative economic system. The expectation of such experiences may be one of the motivations to join a CC (Collom 2007) and some users do indeed experience increased efficacy (Seyfang 2006).

4.4. Influence of Indirect Collective Agency on Social Institutions Beyond Control—Arrow (d)

As stated above, indirect individual agency reflects the ability of individual citizens to engage in public reasoning and envision a "government by discussion" (Sen 2009, 324), thus allowing them to exert influence on social actors and institutions (Volkert 2013, 10). Collective agency, though, arises when members act out of collective interests and/or out of commitments they have taken collectively. In the field of CC, agency is also exerted as indirect agency: Several national networks have emerged which aim to support networking and knowledge transfer between different currency schemes and are also engaged in spreading the experiences of CC via handbooks, websites, conferences, media etc. They are volunteer-run and act as advocates for the CC trying to recruit new actors and supporters and hence impact on social institutions beyond control, such as the economic system (Seyfang and Longhurst 2013).

The questions that have been stipulated through Figure 2 resonate with many of the topics studied in the CC literature but differ in character insofar as they do not address the social effects brought to communities (e.g., Williams et al. 2001; Seyfang and Smith 2002; Nakazato and Hiramoto 2012). Instead, they always refer to individuals' quality of life (indicated here through capabilities) as the evaluative source of value. Usually, the CC literature deals with questions such as localisation of the economy, recognising informal work and skills, or tackling social exclusion (e.g., Molnar 2011), without any clear reference to a coherent normative foundation. Placing these discussions within the coherent frame set by the three-layered CA might alter their focus and facilitate impact analyses of the CCs. By way of example, we shortly discuss what these divergences could mean for the assessment of CC in the case of three recurrent topics in the CC literature and show how findings of the CC literature may be re-interpreted.

(1) Localisation of the economy can be interpreted in three ways: first, as a potential change due to direct collective agency deployed in the individual layers (arrows

(a) and (b)), and here as changes in values, conversion factors, and resources. Secondly, it can be regarded as a widening of the sphere of influence on social institutions beyond individual control (arrow (c)). Third, discussing the advantages and disadvantages of more local economies can also be part of indirect collective agency (arrow (d)). Discussing economic localisation within this frame of analysis facilitates linking this socio-economic strategy back to the normative ideal of strengthening individual freedoms. Yet, as the three-layered CA is only a conceptualisation, it cannot fully capture the phenomenon of localisation and other real-life complexities.

(2) and 3) The CA background of being a partial theory of justice can also allow integrating the two social justice issues of recognising informal work and skills as well as tackling social exclusion, two other important issues in the debate around CC. Recognising informal work and skills is seen as a motivation for engaging for CC as well as an impact of CC and it is linked, in terms of the three-layered CA, to altered personal conversion factors, resources, values and goals (e.g., through discussions on this within CC), but also to a different group efficacy and discussion in wider society.

4.5. Research Questions Arising from This Conceptual Application

Some of the following research questions are rather conceptual and require more development of the CA and its three-layered form, others are more empirical. As usual, an iterative development of empirical research along the provisional frame of analysis presented here and of a more conceptual debate seems to be necessary to better understand why and what in collective action constitutes an achievement in human wellbeing and agency.

4.5.1. Conceptual questions.

- To what extent is it possible (or necessary) to delineate personal and social conversion factors? In some cases, it may be difficult to categorise certain factors, for example, trust.
 - (1) In which way can conversion factors that are commonly changed by collective action be conceptualised? How malleable are social conversion factors in collective action settings?
- How can the difference between the shifting of the boundaries between collective action and wider social institutions be conceptualised in contrast to a change in conversion factors? For example, the literature on CC deals with effects such as localisation of the economy, recognising informal work and skills, and reducing social exclusion. Those effects can be seen as shifting the boundaries between what one can and cannot control, or as changing social or personal conversion factors: including informal work facilitates access to informal employment, skills are personal conversion factors, and reducing social exclusion reduces the lack of social opportunities.

4.5.2. Empirical questions.

• Given that members of CC schemes voluntarily accept zero interest rates (even at times when common market rates are positive), what capabilities are people trying to expand when using CC (if any)?

- Does the self-regarding deployment of wellbeing require the same resources and conversion factors as the other-regarding strengthening of agency? Are there any systematic differences?
- What kinds of conversion factors (personal, social, environmental) can be influenced through engagement in CC, how and under what conditions?
- Is there any correlation between the degree of engagement in collective action and the degree of capability changes involved?
- How does the way choices are made in collective action groups affect individual capabilities?

5. Conclusions

How can one frame, understand, and evaluate the impacts of collective action on individual and collective agency? To address this question, this paper has attempted to enlarge the current understanding of the CA by shedding light on various interactions between three layers: individual capabilities and functionings, collective action processes, and wider social institutions deemed beyond individual control. This perspective allows insights into the embeddedness of goals and values, resources, conversion factors, and choice in social institutions. It also helps to differentiate between different types of agency (individual and collective, direct and indirect) and shows how collective action can contribute to an enlargement of these types of agency and hereby of human flourishing. The threelayered understanding of the CA allows us to consider how collective action can change individual agency and create collective agency. Cooperation within a group creates a collective potential beyond any individual's capability and may provide a vehicle for increased agency. Agency derived through collective action can therefore be used to increase both one's own and others' wellbeing.

Based on a literature study, we looked at CC through the lens of the three-layered CA. While the current CC literature reflects a variety of approaches and a wealth of empirical studies, which mainly focus on social impacts, a clear theoretical approach that may capture a more comprehensive picture of the potential impacts of collective action has so far been missing. When CC members act out of collective interests and/or out of commitments they have taken collectively, collective direct and indirect agency develops. According to the literature on CC, it seems important to CC users to design collective processes, to implement them, to use the currencies, to spread news about them, and to motivate others to found similar initiatives. In CA terms, such engagement for and use of CC, both individually and collectively, can be motivated by the wish to increase freedom and achievement of both wellbeing and agency.

Looking at the CC literature through the distinction between goals and values, resources, conversion factors, capabilities, choice, and achieved functionings shows that many CC studies have focused on the analysis of resources and neglected other factors and elements. Working with a CA-framework which conceptualises money—in whatever currency—as a means but not an end in itself, widens this perspective. Using a systematic framework would make the many different analyses of CC more easily comparable and show commonalities as well as shortcomings in the scope of assessments. We assume that similar outcomes would be obtained when analysing other kinds of collective action.

We showed that the CA can provide a coherent framework to analyse the impacts of CC as an example of collective action. Our analysis sheds light on the interactions between different layers in a way that has not been considered before. It highlights the roles of individual and collective goals and the power of collective agency in shifting the boundaries

between what can and cannot be influenced in the realm of social institutions. Quite a few research questions, though, have remained open as to how to more thoroughly include collective action into a CA-based analysis.

Compared to standard CA understandings, the three-layered CA shifts the focus to aspects of collective action, and here especially to aspects of collective agency. "The idea of strengthening agency for improving the freedom of choice of [...] people shifts the focus away from the opportunity aspect of freedom towards the process aspect" (Leßmann 2011, 11–12) which involves a shift towards a more empowering policy. This shift would require a different discussion on policy-making that can be based on our analysis, but which was not feasible within the scope of this article. The three-layered model is not able to describe, help understand or propose improvements in the realm of institutions beyond control (third layer). Even though we included some aspects of collective action into the CA framework, the CA still misses a theory on economic systems, governments, or other social structures and processes. The same is true for the interaction with the natural systems, constituting the basis for any social and individual action, despite the nascent literature on this (see note 5). Other models are necessary for such analyses.

Acknowledgements

We are particularly grateful for comments by two anonymous reviewers as well as by Jürgen Volkert and Ortrud Leßmann, two of our colleagues in the research project GeNECA on "Just Sustainable Development based on the Capability Approach," funded by the German ministry for research (www.geneca.ufz.de). Two further anonymous referees' on a prior version (cp. its precursor Mock et al. 2013, developed within GeNECA) encouraged us to reorientate the paper from an empirical to a more conceptual paper.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by Bundesministerium für Bildung und Forschung [grant number 01UN1015A].

Notes

- 1. While we agree with Alkire (2002) and others that this space of values and goals is multi-dimensional, we want to highlight the tension between self- and other-regarding goals that has been prominent throughout Sen's work.
- We use the term collective processes to describe processes that are driven by a group of people may share common interests and who undertake common, cooperative and voluntary actions to pursue those interests.
- While it seems plausible that different resources and conversion factors are required for wellbeing capabilities than for agency capabilities, we are not aware of any study in this respect.
- 4. The embeddedness in natural systems has been discussed, for example, in Holland (2008), Polishchuk and Rauschmayer (2012), Peeters, Dirix, and Sterckx (2015), Pelenc and Ballet (2015).
- 5. Please note that what appears to be changeable or unchangeable differs from one person to another. For people in strong positions of power, national or international institutions may be changeable to some extent, while people with low self-efficacy may not even think that they may be able to change local institutions. Moreover, such assessments of one's own ability to change social institutions may alter over time.
- 6. Following Robeyns (2005), the CA is defined through ethical individualism (ibid., 109), and can in principle account for groups and social structures although it does not provide a profound theory of society, institutions, or organizations. Thus, "more elaboration and integrity on collectivity issues is needed particularly because CA

scholars often involve collective entities in their claims for justice (e.g., Nussbaum 2011)" (Griewald and Rauschmayer 2014, 31).

- 7. Along the discussion on Sen's (2002) definition and examples of collective capabilities, many scholars are against the use of the term "capabilities" for those collective capabilities that may harm group members or non-members. In our view, this is an overly harsh restriction, as the term "individual capabilities" is not restricted in this way. Even for the capability of cycling around (let alone: driving around), harming oneself and others is a possible and not unlikely outcome.
- We exclude barter markets from the following description as they account for only 1.4% of the 3,418 projects in the study of Seyfang and Longhurst (2013).
- It is important to note that a vast part of the CC literature deals with issues that cannot be captured by the arrows depicted in Figure 2—see discussion below.

ORCID

Christine Polzin D http://orcid.org/0000-0002-4150-5203

References

- Alkire, Sabina. 2002. Valuing Freedoms: Sen's Capability Approach and Poverty Reduction. Oxford: Oxford University Press.
- Alkire, Sabina. 2006. "Public Debate and Value Construction in Sen's Approach." In Capabilities Equality. Basic Issues and Problems, edited by Alexander Kaufman, 133–154. New York: Routledge.
- Alkire, Sabina. 2007. "Why the Capability Approach?" Journal of Human Development 6 (1): 115–135. doi:10. 1080/146498805200034275.
- Atkinson, Anthony B., Thomas Piketty, and Emmanuel Saez. 2011. "Top Incomes in the Long Run of History." Journal of Economic Literature 49 (1): 3–71. doi:10.1257/jel.49.1.3.
- Ballet, Jérôme, Jean-Luc Dubois, and François-Régis Mahieu. 2007. "Responsibility for Each Other's Freedom: Agency as the Source of Collective Capability." *Journal of Human Development* 8 (2): 185–201. doi:10. 1080/14649880701371000.
- Bandura, Albert. 1977. "Self-efficacy: Toward a Unifying Theory of Behavioral Change." Psychological Review 84 (2): 191–215. doi:10.1037/0033-295X.84.2.191.
- Blanc, Jérôme. 2011. "Classifying 'CCs': Community, Complementary and Local Currencies' Types and Generations." International Journal of Community Currency Research 15: D 4–D10.
- Botsman, Rachel, and Roo Rogers. 2011. What's Mine is Yours: How Collaborative Consumption is Changing the Way We Live. Rev. & updated ed. London: Collins.
- Briceno, Tania, and Sigrid Stagl. 2006. "The Role of Social Processes for Sustainable Consumption." Journal of Cleaner Production 14 (17): 1541–1551. doi:10.1016/j.jclepro.2006.01.027.
- Brooks, Skylar. 2015. "How Green is Our Money? Mapping the Relationship Between Monetary Systems and the Environment." *International Journal of Community Currency Research* 19: D 12–D 18.
- Collom, Ed. 2007. "The Motivations, Engagement, Satisfaction, Outcomes, and Demographics of Time Bank Participants: Survey Findings From a US System." *International Journal of Community Currency Research* 11: 36–83.
- Davis, John B. 2015. "Agency and the Process Aspect of Capability Development: Individual Capabilities, Collective Capabilities, and Collective Intentions." *Filosofia de la Economía* 4: 5–24.
- Demals, Thierry, and Alexandra Hyard. 2014. "Is Amartya Sen's Sustainable Freedom a Broader Vision of Sustainability?" *Ecological Economics* 102: 33–38. doi:10.1016/j.ecolecon.2014.03.009.
- Deneulin, S. 2008. "Beyond Individual Freedom and Agency: Structures of Living Together in the Capability Approach." In *The Capability Approach: Concepts, Measures and Applications*, edited by F. Comim, M. Qizilbash, and S. Alkire, 105–124. Cambridge: Cambridge University Press.
- Deneulin, S. 2011. "Advancing Human Development: Values, Groups, Power and Conflict." In Overcoming the Persistence of Inequality and Poverty, edited by V. FitzGerald, J. Heyer, and R. Thorp, 127–148. Basingstoke: Palgrave Macmillan.
- Evans, Peter. 2002. "Collective Capabilities, Culture, and Amartya Sen's Development as Freedom." *Studies in Comparative International Development* 37 (2): 54–60. doi:10.1007/bf02686261.
- Gibson, Cristina B. 1999. "Do They do What They Believe They Can? Group Efficacy and Group Effectiveness Across Tasks and Cultures." Academy of Management Journal 42 (2): 138–152. doi:10.2307/257089.
- Gómez, Georgina M. 2010. "What was the Deal for the Participants of the Argentine Local Currency Systems, the Redes de Trueque?" *Environment and Planning A* 42: 1669–1685. doi:10.1068/a42309.

- Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." American Journal of Sociology 91 (3): 481–510. doi:10.1086/228311.
- Grasso, Marco, and Enzo Di Giulio. 2003. Mapping Sustainable Development in a Capability Perspective. Paper presented at the 3rd Conference on the Capability Approach, Pavia.
- Griewald, Yuliana, and Felix Rauschmayer. 2014. "Exploring an Environmental Conflict from a Capability Perspective." *Ecological Economics* 100: 30–39.
- Hodgson, Geoffrey M. 2006. "What Are Institutions?" Journal of Economic Issues 40 (1): 1–25. doi:10.1080/ 00213624.2006.11506879.
- Holland, Breena. 2008. "Ecology and the Limits of Justice: Establishing Capability Ceilings in Nussbaum's Capabilities Approach." *Journal of Human Development* 9 (3): 401–425. http://dx.doi.org/10.1080/ 14649880802236631.
- Ibrahim, Solava S. 2006. "From Individual to Collective Capabilities: The Capability Approach as a Conceptual Framework for Self-help." *Journal of Human Development* 7 (3): 397–416. doi:10.1080/ 14649880600815982.
- Ibrahim, Solava. 2011. "Poverty, Aspirations and Well-being: Afraid to Aspire and Unable to Reach a Better Life— Voices from Egypt." *Third World Quarterly* 32 (7): 1347–1368.
- Krabbe, Robin. 2015. "Building Trust: Exploring the Role of Community Exchange and Reputation." International Journal of Community Currency Research 19 (D): 62–71.
- Kristof, Kora, Sabine Nanning, and Becker. Christiane. 2001. "Tauschringe und Nachhaltigkeit." Wuppertal Papers Nr. 118.
- Leßmann, Ortrud. 2011. "Freedom of Choice and Poverty Alleviation." Review of Social Economy 69 (4): 439– 463. doi:10.1080/00346764.2011.577349.
- Lietaer, Bernard A. 2001. The Future of Money: Creating New Wealth, Work and a Wiser World. London: Random House.

Marshall, Gordon. 1998. A Dictionary of Sociology. 2nd ed.Oxford: Oxford University Press.

- Martignoni, Jens. 2012. "A New Approach to a Typology of Complementary Currencies." International Journal of Community Currency Research 16 (A): 1–17.
- Meinzen-Dick, Ruth, Monica DiGregorio, and Nancy McCarthy. 2004. "Methods for Studying Collective Action in Rural Development." Agricultural Systems 82 (3): 197–214. doi:10.1016/j.agsy.2004.07.006.
- Mock, Mirijam, Ines Omann, Felix Rauschmayer, and Daniela Fuchs. 2013. "Do Community Currencies Enhance Sustainable Quality of Life?" In UFZ Discussion Papers. Leipzig: UFZ—Helmholtz-Centre for Environmental Research.
- Molnar, Stefan. 2011. "Time is of the Essence: The Challenges and Achievements of a Swedish Time Banking Initiative." International Journal of Community Currency Research 15 (A): 13–22.
- Nakazato, Hiromi, and Takeshi Hiramoto. 2012. "An Empirical Study of the Social Effects of Community Currencies." International Journal of Community Currency Research 16 (D): 124–135.
- North, Peter. 2005. "Scaling Alternative Economic Practices? Some Lessons from Alternative Currencies." Transactions of the Institute of British Geographers 30 (2): 221–233. doi:10.1111/j.1475-5661.2005.00162.x.
- North, Peter. 2006. Alternative Currency Movements as a Challenge to Globalisation?: A Case Study of Manchester's Local Currency Networks. Aldershot: Ashgate.
- North, Peter. 2007. "Alternative Currencies as Localised Utopian Practice." In Utopias, Ecotopias and Green Communities: Exploring the Activism, Settlements and Living Patterns of Green Idealists, edited by Liam Leonard, 51–63. Bingley, UK: Emerald Group.
- Nussbaum, Martha Craven. 2011. Creating Capabilities: The Human Development Approach. Cambridge, MA: Belknap Press of Harvard University Press.
- Ostrom, Elinor. 1990. Governing the Commons. The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press http://dx.doi.org/10.1017/CBO9780511807763.
- Ozanne, Lucie K. 2010. "Learning to Exchange Time: Benefits and Obstacles to Time Banking." *International Journal of Community Currency Research* 14: 1–16.
- Peeters, Wouter, Jo Dirix, and Sigrid Sterckx. 2015. "The Capabilities Approach and Environmental Sustainability: The Case for Functioning Constraints." *Environmental Values* 24 (3): 367–389. doi:10.3197/ 096327115X14273714154575.
- Pelenc, Jérôme, and Jérôme Ballet. 2015. "Strong Sustainability, Critical Natural Capital and the Capability Approach." *Ecological Economics* 112: 36–44. doi:10.1016/j.ecolecon.2015.02.006.
- Pescosolido, Anthony T. 2003. "Group Efficacy and Group Effectiveness." Small Group Research 34 (1): 20–42. doi:10.1177/1046496402239576.
- Polishchuk, Yuliana, and Felix Rauschmayer. 2012. "Beyond 'Benefits'? Looking at Ecosystem Services Through the Capability Approach." *Ecological Economics* 81 (0): 103–111. doi:10.1016/j.ecolecon.2012.06.010.
- Putnam, Robert D. 1993. "The Prosperous Community." The American Prospect 4 (13): 35-42.

- Putnam, Robert D. 2000. Bowling Alone: the Collapse and Revival of American Community. New York: Simon & Schuster.
- Qizilbash, Mozaffar. 2002. "Development, Common Foes and Shared Values." *Review of Political Economy* 14 (4): 463–480. doi:10.1080/0953825022000009906.
- Reckwitz, Andreas. 2003. "Grundelemente Einer Theorie Sozialer Praktiken. Eine Sozialtheoretische Perspektive." Zeitschrift f
 ür Soziologie 32 (4): 282–301.
- Robeyns, Ingrid. 2005. "The Capability Approach: A Theoretical Survey." *Journal of Human Development* 6 (1): 93–117. doi:10.1080/146498805200034266.
- Schatzki, Theodore R., K. Knorr-Cetina, and Eike von Savigny. 2001. *The Practice Turn in Contemporary Theory*. London: Routledge.
- Schroeder, Rolf FH, Yoshihisa Miyazaki, and Marie Fare. 2011. "Community Currency Research: An Analysis of the Literature." International Journal of Community Currency Research 15 (A): 31–41.
- Schwaiger, Katharina. 2006. "Regionalgeld und Gemeinwesenarbeit." ZfSÖ-Zeitschrift für Sozialökonomie 43 (149): 19–25.
- Sen, Amartya. 1999. Development as Freedom. Oxford: Oxford University Press.
- Sen, Amartya. 2002. "Response to Commentaries." *Studies in Comparative International Development* 37 (2): 78–86. Sen, Amartya. 2009. *The Idea of Justice*. London: Allen Lane.
- Seyfang, Gill. 2001. "Community Currencies: Small Change for a Green Economy." *Environment and Planning A* 33 (6): 975–996. doi:10.1068/a33216.
- Seyfang, Gill. 2004. "Time Banks: Rewarding Community Self-help in the Inner City?" Community Development Journal 39 (1): 62–71. doi:10.1093/cdj/39.1.62.
- Seyfang, Gill. 2006. "Sustainable Consumption, the New Economics and Community Currencies: Developing New Institutions for Environmental Governance." *Regional Studies* 40 (7): 781–791. doi:10.1080/ 00343400600959173.
- Seyfang, Gill. 2009. "Low-carbon Currencies: The Potential of Time Banking and Local Money Systems for Community Carbon-reduction." Centre for Social and Economic Research on the Global Environment Working Paper EDM.
- Seyfang, Gill, and Noel Longhurst. 2013. "Growing Green Money? Mapping Community Currencies for Sustainable Development." *Ecological Economics* 86: 65–77. doi:10.1016/j.ecolecon.2012.11.003.
- Seyfang, Gill, and Noel Longhurst. 2016. "What Influences the Diffusion of Grassroots Innovations for Sustainability? Investigating Community Currency Niches." *Technology Analysis & Strategic Management* 28 (1): 1–23.
- Seyfang, Gill, and Ruth Pearson. 2000. "Time for Change: International Experience in Community Currencies." Development 43 (4): 56–60. doi:10.1057/palgrave.development.1110197.
- Seyfang, Gill, and Karen Smith. 2002. The Time of Our Lives: Using Time Banking for Neighbourhood Renewal and Community Capacity-building. London: New Economics Foundation.
- Shove, Elizabeth. 2010. "Beyond the ABC: Climate Change Policy and Theories of Social Change." Environment and Planning A 42 (6): 1273–1285. doi:10.1068/a42282.
- Soma, Katrine, and Arild Vatn. 2014. "Representing the Common Goods—Stakeholders vs. Citizens." Land Use Policy 41: 325–333. doi:10.1016/j.landusepol.2014.06.015.
- Stewart, Frances. 2005. "Groups and Capabilities." Journal of Human Development 6 (2): 185–204. doi:10.1080/ 14649880500120517.
- Veblen, Thorstein. 1909. "The Limitations of Marginal Utility." The Journal of Political Economy 17 (9): 620-636.
- Volkert, Jürgen. 2013. "Concepts of Agency, Sustainable Human Development (SHD) and Collective Abilities." Maitreyee-E-Bulletin of the Human Development and Capability Association 22: 9–12.
- Williams, Colin C., Theresa Aldridge, Roger Lee, Andrew Leyshon, Nigel Thrift, and Jane Tooke. 2001. "Bridges into Work? An Evaluation of Local Exchange and Trading Schemes (LETS)." *Policy Studies* 22 (2): 119–132. doi:10.1080/01442870127252.

About the Authors

Dr Felix Rauschmayer is a senior researcher at the Department of Environmental Politics at UFZ, Leipzig, Germany. His background is in Ecological Economics. His research focusses on theory and practice of decision processes in environmental governance and on the role of needs and capabilities in the transition to sustainable development.

Christine Polzin is a PhD student and research associate at UFZ. Her current work focusses on the interplay between institutions, identity and behaviour change towards sustainability.

She has worked on a range of interdisciplinary projects in the area of sustainability research and holds an MPhil in Development Studies from the University of Oxford.

Mirijam Mock is a PhD student and research associate at the Institute for Social Change and Sustainability of Vienna University of Economics and Business. Her research interests focus on transition processes, lifestyles, participation, and social innovation in the field of sustainable development. She has worked on various inter- and transdisciplinary projects in the field of sustainability research and has a background in sociology and development studies.

Dr Ines Omann is a senior researcher at the Institute for Ecological Economics, Vienna University of Economics and Business. She has been working in sustainability science for 20 years among others at the Department of Environmental Politics at UFZ, Leipzig, Germany. Her research centres around the themes of sustainability transitions, quality of life research, scenario development, trandisciplinarity, and good life for all. She also works as a moderator and facilitator in public participation processes and workshops.