



## Analysis

## Is eco-village/urban village the future of a degrowth society? An urban planner's perspective



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## ABSTRACT

In the degrowth literature, relocalization is widely considered as a strategic approach to transition to a degrowth society, and eco-village/urban village is argued to be the spatial organization suitable for implementing localism. These debates on eco-village/urban village as a vision for long-term sustainability have profound implications for the spatial development of our society. This paper aims to challenge this proposition from an urban planner's perspective by dwelling on spatial implications and planning process. It is argued that spatial decentralization can lead to various social and environmental consequences contradicting the multi-goals of a degrowth society. Localizing and decentralizing decision making in the planning process does not necessarily lead to a just and sustainable society. Instead, it is of importance to have multi-scalar strategies in the planning context to pursue degrowth. The paper concludes by pointing out the complex relation between paradigmatic societal transformation and spatial development, and the significant role that urban planning can play in the transition to degrowth.

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## 1. Introduction

A degrowth society is defined as 'an equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions at the local and global level, in the short and long term' (Schneider et al., 2010). More broadly, as degrowth is an alternative to the present growth society, it challenges the dominant growth ideology and its social mentality, economic rationality, political institutions and ethical premises. The degrowth paradigm, therefore, embraces more than just reduction in economic output in the economic sphere, but calls for a fundamental change in the economic, social and political systems that can liberate humanity from economism in order to achieve social justice, quality of life, democracy and ecological sustainability (Martinez-Alier et al., 2010).

In the degrowth debates, relocalization is widely accepted as a degrowth approach (Fotopoulos, 2007; Latouche, 2009; Trainer, 2012). It means not only producing and consuming goods and services on a local basis, but also organizing life and making political and cultural decisions at the local level. Relocalization refers to relocalization of economy, understood as highly self-sufficient local economies, and relocalization of politics, understood as a decentralization of decision making with an emphasis on greater democracy.

There is a tendency among degrowth advocates to believe that the best visions of a degrowth society that can embed the ideas of localism are the eco-village and the urban village. From an urban planner's perspective, the development of eco-village/urban village as well as the fundamental idea of localism has a spatial dimension, which is a main concern of the urban planning profession. In addition, decentralization of decision making to the local level influences the planning process through which spatial strategies intervening and changing reality are produced. Derived from the degrowth debates on localism, the paper aims to critically discuss whether eco-village/urban village can fulfill the multi-objectives of a degrowth society by scrutinizing the impacts in the planning context. By criticizing from the perspective of urban planning, the paper contributes to enhancing the coherence, consistence and complementarity of the degrowth debates.

In Section 2, the roots of eco-village/urban village as a vision for a degrowth society are traced. The discussion will revolve around the sources of the degrowth concept and how localism and eco-village/urban village have been considered being able to meet the degrowth perspectives. Sections 3 and 4 will argue, from the perspective of urban planning, that there are conflicts and gaps between the eco-village/urban village vision and the desirable degrowth paradigm. Section 3 will expound the spatial implications of eco-village/urban village which lead to various social and environmental consequences. Section 4 will discuss the risks of localizing and decentralizing decision making in the planning process and argue for a multi-scalar strategy

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combining certain centralization of power and local participation. The final section will conclude by a general discussion on the relation between societal paradigm and space, and on the necessity of interdisciplinarity in the degrowth movement as well as the significant contribution that urban planning can make.

## 2. The Roots of Eco-village/Urban Village as a Vision for a Degrowth Society

As stated before, degrowth is an encompassing concept deriving from different philosophical currents and disciplinary fields. According to Demaria et al. (2013), degrowth is first a concern to the ecology that is perceived as having intrinsic values rather than instrumental values for human production and consumption. Degrowth through reduction in energy and material throughput is a path to preserve ecosystems and keep human activities within the biophysical capacity. Secondly, degrowth criticizes economism which pursues utility maximization and creates market-based social relation and consumer society. Market relations are characterized as impersonal and dissolve the traditional social ties based on giving, receiving, sharing and reciprocity (Bonaiuti, 2012a). The third source of degrowth is the need for redefining meaning of well-being or quality of life, substituting voluntary simplicity for the current dominant notion of working more and consuming more. The fourth stream of thought of degrowth, identified by Demaria et al. (2013), is bioeconomics which addresses the biophysical capacity of providing resources and assimilating waste and believes in the insufficiency and implausibility of decoupling economic growth from environmental impacts through technological fix. In addition, degrowth arises from an aspiration for deeper democracy through autonomy and self-determination, as contemporary economics is seen as colonizing and depoliticizing collective social choice. Finally, degrowth aims to degrow inequality for economic, social and environmental justice. It therefore argues for fair distribution of wealth, ecological resources, and economic and environmental burdens within and between rich and poor countries, and within and between generations (Demaria et al., 2013).

To transition to a degrowth society, Latouche (2009) puts forward a “virtuous circle” comprising eight ‘R’s as a trigger of degrowth process: reevaluate, reconceptualize, restructure, redistribute, relocalize, reduce, reuse and recycle. Among others, ‘relocalize’ is considered one of the most important approaches and assumes a strategic role. This proposition is shared by many degrowth proponents (e.g. Fournier, 2008; Frankova and Johanisova, 2011; Kallis, 2011). The argument for localization is primarily motivated by the negative social and environmental impacts of globalization and neoliberal capitalism. As already mentioned, the idea of relocalization in the degrowth debate is not confined to economic relocalization though it is an important aspect, but also means political and ecological relocalization.

Developing local economy as a counter-force of economic globalization is to seek for local economic autonomy which includes making economic decisions at the local level, developing locally owned business by preferably using local resources, employing local workers, satisfying the needs of local consumers, and supporting local finance like community banks. The intention is to become more self-sufficient in production and consumption. Initiatives in this vein also include e.g. relocalizing food production and consumption, and development of local complementary currencies in order to keep the wealth within the community. Latouche argues that the benefits of economic localization include:

“Less transport, transparent production lines, incentivizing sustainable production and consumption, reducing dependency upon capital flow and multinationals, and greater security in every sense of the world. Regionalizing the economy and embedding it in local societies protects the environment, and the environment is ... the basis for any

economy. Regionalization facilitates a more democratic approach to the economy, reduces unemployment, increases participation (and therefore integration), encourages solidarity, opens up new perspectives for the developing countries, and finally, improves the health of citizens in the rich countries by encouraging sobriety and reducing stress.” (Latouche, 2009, p.50)

Another dimension of relocalization complementary to or as a consequence of economic localization is bioregionalism. A bioregion is a region defined by natural boundaries with a geographic, climatic, hydrological and ecological character capable of supporting unique human and non-human living communities (Cato, 2011). The unique products and cultures given rise to by the ecological features are also essential elements of a bioregion. A bioregion has a high capacity for ecological self-sufficiency in terms of basic resources and for self-sustainability in terms of being in perfect harmony with the ecosystem and ensuring awareness of where resources come from and where wastes go. Local agriculture should be protected and local renewable energies are encouraged to develop (Latouche, 2009). The potential benefits of embedding human activities within a bioregion are high energy efficiency, enhanced environmental sensitivity and accountability, and strong human social relationships (Cato, 2011).

The bioregional vision entails a decentralized society which is self-reliant, small scale and ecologically harmonious. Cities are usually regarded as inappropriate to apply a bioregion approach, as a large city makes employment of local renewables difficult and hence has to rely largely on immense quantities of fossil fuels (Cato, 2011). Moreover, cities usually overconsume resources that overshoot their biological capacity, and thus cannot maintain themselves without supply from outside their bioregions. By contrast, decentralized small-scale human settlements tailored to the characteristics and resources of a region, low-density and spacious residential area are better able to utilize local resources and realize self-sufficiency (Owen, 2012).

A third vital dimension of relocalization in the degrowth debates is political relocalization which means that decision making and authority should be decentralized to small-scale systems. Political relocalization is closely related to the concern on democracy. Degrowth proponents consider contemporary society undermines democracy. Many studies on urban governance have revealed that socio-economic and political-institutional spaces are increasingly shaped by capital under present global neoliberalism (Brenner, 1999; Peck, 1998), whereas democratic choices of citizens are undermined. Urban governing institutions are continuously restructured to cater for the need of capital accumulation and are less accountable to citizens. It is often seen that representative democracy is compatible with such neoliberal form of capitalism. To some degrowth proponents, e.g. Fotopoulos (2007), capitalist market mechanism and liberal representative democracy system have led to the concentration of political power at the hands of political and economic elites. This is seen as problematic from a degrowth perspective which seeks to a more democratic society. For this reason, other types of democracy, such as deliberative democracy, direct democracy, participatory democracy or improved representative democracy are proposed (Asara et al., 2013). All these are aimed at regaining citizens' power in making political decisions about economies, organization and social activities. There is a strong belief among degrowth advocates in that reclaiming the right to make choices and having more democratic decision-making process require decentralizing governance to lower scales, such as small towns, suburban villages and neighborhoods. The primary reason for this ‘local level preference’ is that localism creates conditions and has the capacity to allow for participation and direct control in the decision-making process (Bonaiuti, 2012b; Johanisova and Wolf, 2012).

Apart from becoming a more democratic society through political relocalization, it is believed that regaining citizens' power in decision making is of importance to escape from the growth imperative and tackle ecological crisis. Due to reliance on locality and its ecological

capacity, direct participation can make citizens aware of the importance of keeping the local area in good condition, increase their concern for public good, and thus try to make decisions best for their local area. Furthermore, local scales are where most of daily products and services are produced and distributed, and where local citizens have the best knowledge foundation to make the right decision for their town (Trainer, 2012).

Arising from the foregoing discussion has been a concern of the spatial form of localism that can facilitate relocating economy, being self-sufficient, and pursuing local democracy. Homs (2007) argues that 'urban village' could function as a spatial unit to implement the principle of localism in a degrowth society, while others argue that 'eco-village' can be such a unit (Delambre, 2010; Trainer, 2012). Both of them are movements that suppress towards contemporary growth society and its associated lifestyle, and attempt to promote alternative socially and ecologically sustainable way of living. The former can be seen as the transition process within the main society and the latter outside the main society (Fotopoulos, 2007).

Both urban village and eco-village aim to realize the lifestyle imagined in a degrowth society through promoting a certain mode of spatial organization. First of all, by avoiding large concentrations of human beings, decentralized human-scale settlements can be better linked to their environment and hinterland and reconcile humans with nature. Self-sufficiency can be achieved through farms within the village or in the near suburbs (Homs, 2007). Second, a diversity of functions and mixture of land use should be provided in order to create a variety of jobs and satisfy villagers' needs of consumption. This can help keep economic and social activities within the village, which is conducive to reduce travel demand outside the village. Given the village's small-scale and functional diversity, most of the destinations in the village are within walking and biking distance. Thirdly, locating activities within the village tends to facilitate interaction among villagers, create strong social relations, enhance the sense of community and belonging, and encourage conscious and responsible autonomy. Fourthly, the urban village and eco-village are regarded as suitable units allowing for political relocation based on deliberative or participatory democracy.

Even though the concepts of urban village and eco-village have originated without explicitly referring to degrowth, they seem to be able to develop social, economic and political activities and modes of lifestyle in line with the imaginary of a degrowth society largely based around localism. In the following two sections, the validity of this proposition will be examined thoroughly through the lens of the urban planning profession, addressing the implications of the urban village/eco-village vision on both spatial environment and planning process.

### 3. Spatial Implications of Eco-Village/Urban Village

Even though there is no consensus on how big an eco-village or urban village is, their 'village' character implies a small population size. It is stated by Latouche that an urban village should not exceed a threshold of 30,000 inhabitants, beyond which it is impossible to use the term 'local'. An eco-village accommodates an even smaller population, usually with only a few hundred people. What matters from an urban planner's perspective is how such a local unit is spatially structured internally and how it is externally linked to other villages. Different distributions of locations and densities both on the local and higher geographical scales can lead to different environmental performances.

As depicted by Homs (2007), an urban village is structured around a densely built center, and land use becomes less dense as one moves away from the center. Mixed land use is addressed as one of the planning principles to a higher extent in the development of an urban village, while the built environment in the eco-village has lost most of the urban attributes. For both types of villages to be self-sufficient as much as possible, food production and materials for other basic needs like shelter and cloth are mainly produced within the community

bioregion. Since no large companies will exist any longer in a relocated degrowth society, production will be decentralized into the villages. Therefore some even go further as to argue for backyard as the main production site (Trainer, 2010). It means that a relatively sparse and open structure will have to be created in order to accommodate farms, market gardens and backyards. Besides, the aspiration for being self-sufficient for energy needs requires spacious and low-density single-family dwellings in order to capture as much local renewables as possible, like solar energy. For humans to be in complete harmony with nature and to reduce human-made environmental load, eco-cycles through recycling of sewage, water, waste and nutrients at the local level are promoted.

It can be seen that when eco-village/urban village is promoted as degrowth habitats, what is embraced in the concept is an anti-urban sentiment and a strong preference for small-scale, decentralized and self-contained human settlements. In addition, it shows a tendency in the degrowth movement which limits the concern primarily to the local level, although the very idea of degrowth holds a global concern. Therefore, the following discussion is on the spatial implications of these two tendencies represented in the eco-village/urban village concept.

Despite the strength of detached single-family houses in utilizing local renewables and accommodating local production, their thermal efficiency is usually lower than concentrated types of dwellings. That is because single-family houses usually have a larger envelope of external walls and roofs, so the surface through which heat leaks out in the winter and leaks in during the summer is larger than an apartment with the same floor area. To tackle issues of climate change and peak oil, besides exploiting renewables, absolute energy demand has to be reduced too. However, the size of single-family dwellings is on average larger than apartments, which thereby contributes to an increase in energy demand. In addition, single-family dwellings consume more materials due to their larger size. As Høyer and Holden (2001) pointed out, compared to semi-detached houses and multifamily buildings, single-family homes also have the largest consumption in terms of indoor and outdoor maintenance, different equipment in the houses, furniture and equipment for recreational purpose.

The arguments for small-scale and decentralized villages as a desirable settlement type in a degrowth society seem to ignore the wider spatial fabric, namely how the villages are related to each other and the spatial arrangement of other functions and activities essential for the society. On many occasions, degrowth proponents have claimed that self-sufficiency and relocation is not equal to autarky, and exchange of goods and services with neighboring villages should be maintained by public transport so that the need of long-distance travel by car will be minimized. However, it has been rather ambiguous in the spatial relation between villages, e.g. the distance between them. For villages to be able to specialize in different trades and exchange products, they seem to have to be located in different bioregions, otherwise they tend to produce similar products given their availability of similar resources within one bioregion. It implies that either one village has to trade with villages far from it instead of neighboring ones, or the villages are scattered so that they are able to specialize in different production. In neither case, the transport demand can be dramatically reduced. Arguably, the smaller the village is, the more transportation of goods is needed as the capability for self-sufficiency is low. There is an even more fundamental issue of how to decide the boundaries of each bioregion as well as how to handle the conflicts arising from this (Kovel, 2007).

There is awareness among degrowth proponents that some production processes cannot be decentralized to the local level. Trainer (2012) showed that a few large mass-production factories, like railway equipment plants, should be retained. Besides that, many other functions in our society such as research institutes, universities, hospitals, stadiums, museums, theaters and libraries are unlikely to be located within each village due to small population base. Unless these traits of modern

society are discarded in a degrowth society, the spatial arrangement of these facilities and how they are connected with villages should be taken into account in urban planning. If, as claimed by degrowth proponents, the meaning of good life in a degrowth society draws on non-material life satisfaction, the implication is that instead of downplaying these cultural and spiritual facilities, they are of vital importance and should be promoted. Most of these facilities are currently located in the traditional urban cores. Given the expected increase in frequencies of visiting to these cultural facilities in a degrowth society, the low-density and scattered distribution of villages will result in longer travel distance and use of motorized transport mode.

Since green areas, community farms and market gardens are incorporated within the demarcation of villages and there is a promotion of low-density houses in order to maximally utilize local renewables, the density in general will be much lower compared to current high-density cities. For high-density metropolitan areas, e.g. most Asian cities, to apply the principle of eco-village/urban village would mean a dramatic dispersion of population and hence conversion of large non-built-up land into built-up areas (Næss, 2001). It may arguably decrease the part of human ecological footprint for food production and waste absorption, but the footprint of built-up land will increase, which will impose a great threat to biodiversity conservation due to deforestation and habitat fragmentation for other species (Liu et al., 2003). Due to unequal distribution of ecological capacity over the world, a proportion of inhabitants in populous countries may need to migrate to less populous countries. However, considering the existing national borders, this is a rather unrealistic solution. These conflicts with biodiversity conservation and food supply caused by the universalization of the eco-village/urban village model will be intensified in the near future as world population is projected to surpass 9 billion by 2050 (UN, 2009).

Many concerns have arisen from the applicability of eco-village/urban village in the main society. As argued by degrowth advocates, a degrowth society cannot be achieved with only a few of such villages. Rather, a universalization of the villages all over the world is necessary. Nevertheless, the built environment of eco-village/urban village indicates a radical departure from contemporarily existing cities. Given the physical durability of buildings, to adapt existing cities to the eco-village/urban village vision is therefore both time-consuming and resource-demanding as rebuilding also consumes materials and energy. Apart from that, the establishment of local eco-cycling and energy supply systems implies that some of the centralized infrastructure systems such as sewers and power plants will be abandoned, which is a waste of resources. Depending on the extent of self-sufficiency in each village, those services that cannot be provided locally, e.g. water, pipelines have to be extended and sprawled in order to meet the basic needs of villagers. This applies to the provision of public transport infrastructure, like busses, metro and railway. The rebuilding and adaption process is by no means environmentally neutral.

Apart from being criticized for neglecting a larger spatial scale, empirical studies show that following the planning principles of eco-village/urban village such as mixed land use and provision of a range of local facilities, does not necessarily engender localized pattern of activities and enhance the sense of community (Tait, 2003). People do not live within the limits of small villages. This counters to the underlying assumption of eco-village/urban village, which assumes that small settlement and self-sufficiency will lead to a certain type of activity pattern. According to case studies in the UK, factors like employment location, the location of the villages to other functional destinations, mobility capability, housing tenure, life stage and status, all have impacts on the activity patterns of villagers (Tait, 2003). This demonstrates the limitation of drawing on the local scale as a path to attain degrowth lifestyle.

To sum up, spatial decentralization and local self-containment as promoted by eco-village/urban village not only have limitations in constraining activities, but also tend to have negative environmental consequences when taking into account the larger spatial network.

Then, what is the ideal urban form in line with the vision of a degrowth society from an urban planner's perspective? The most commonly suggested and adopted instrument for the purpose of reducing transport volume and energy consumption of buildings is a concentrated urban developmental pattern, i.e. compact city (Newman and Kenworthy, 1999; Stead and Marshall, 2001). A dense urban structure also conserves land and relieves some of the land-related environmental pressure from building and infrastructure construction.

High density at an urban scale implies shorter average distances between origins and destinations, so that a large share of destinations can be accessed by walking or cycling. Even in a degrowth society, where a localization of life within the village's boundaries is expected, inter-village exchange of goods and access to large public facilities located outside villages still need movement out of the village. Because of the small size of each village and hence limited capacity of holding large public facilities, there is arguably an increased need of interaction with the outside. It is thus important to have high density both at the village and city levels. High population density at the local level increases the population base large enough to sustain a diverse range of workplaces and facilities, which in a way helps keep daily activities within the village. In addition, high density at the city scale reduces the amount of travel outside of villages and promotes non-motorized transport. Such a solution does not counteract local self-sufficiency by squeezing farms out of the village. Rather than seeking to self-sufficiency at the village level, it can be pursued at the city level through locating farmland in the surroundings of a city.

Another strong argument for the compact city is that it reduces the distance for commuting which accounts for a major part of daily transport in modern society. Case studies around the world show that in general, travel distance and energy consumption for local transport increase considerably as the distance between the household's residence and the city center increases (Næss, 2012; Schwanen et al., 2001; Stead and Marshall, 2001; Zegras, 2010). That is because in modern societies most workplaces are located in the major urban center, and inhabitants tend to choose among a number of facilities and do not necessarily choose the closest ones. This is especially the case for workplaces, where a person does not only have to find a job matching her or his qualifications, but must also be selected for this job by the employer. In the vision of the eco-village/urban village, even though most workplaces are located within the village, there are still a number of workplaces (e.g. hospitals, universities, mass-production factories, and other public facilities) that have to be located outside the local and often in the city center in order to have high accessibility. Therefore, planning strategies to increase the proportion of the population living in the inner and central parts of the city still makes sense in a degrowth society. Furthermore, by localizing employment, individual freedom of job selection is quite constrained. It is thus a matter of to what extent freedom of choice should be kept in a degrowth society, and this will have an influence on the urban structure. I shall leave this issue for a detailed examination in a later section.

Not only being argued to be more energy efficient as regards travel, a concentrated urban structure is particularly advantageous in the protection of agricultural land, natural landscape and biodiversity, because it requires less land for building sites and reduces the encroachments on natural landscapes and farmland. Concentrated types of buildings like apartments and row houses are required in the compact city, indicating high energy efficiency and low absolute energy consumption from the building sector.

If localization of economy and activities to local villages also aims to revitalize community life and promote non-material social relations, a compact city vision can easily accommodate such purposes. Neighborhood is not necessarily sparse and scattered in order to enhance a sense of community. Instead, set in a dense urban context, it is even easier to foster a sense of community, because, as already mentioned, a large population base provides conditions for the existence of a diversity of local facilities, through the use of which social linkages will be

intensified. Moreover, compact city may increase the chance to interact with people as a large number of potential friends and acquaintances can be found within acceptable travel distance, and people may choose to meet people beyond their urban neighbors. Neighborhood planning and local organization strategies which promote walkability, a variety of housing, mixed land use of commercial and residences, traffic calming and so on will facilitate integration and interaction among citizens in the community.

It is worth noting that the above criticism on the eco-village/urban village does not necessarily imply that all practical eco-village initiatives fall into the same criticism. The essential part in the criticism is not on the concept of eco-village/urban village per se, but on the idea of small-scale and decentralized human settlements as degrowth habitats and the anti-urban sentiment contained in the concept. In addition, it is a criticism on the tendency in the degrowth debates which confines too much concern to the local scale and overlooks the potential consequences and opportunities on the larger spatial scales. However, when the concept of eco-village/urban village is implemented in practice, it generates various interpretations and practical diversity (Biddulph et al., 2003). Some neighborhoods, such as Vauban in Freiburg and Hammarby Sjöstad in Stockholm are broadly regarded as exemplary eco-districts which follow some of the urban village principles (Broaddus, 2011; Kasioumi, 2011). Apart from mixed land use, housing-job balance, transit-oriented development and eco-cycles, more importantly, both pursue a high residential density and plan the neighborhood as an integral part of the whole city, which is distinct from the criticized idea of small-scale decentralization and local self-sufficiency. This also indicates that an overall high-density urban structure is capable of integrating some of the principles of eco-village/urban village. The village is therefore one of the spatial units embedded within the larger sustainable urban structure.

In a growth society, compact city is regarded as a way to increase eco-efficiency in the urban domain, following the principle of ecological modernization. Several studies have indicated the limits of eco-efficiency strategies in decoupling environmental impacts from growth in the urban housing and transport sectors and pointed out the necessity of growth containment in the overall volume of urban built environment towards long-term sustainability (Tapio, 2005; Xue, 2012). Thus, compact city in the growth paradigm can only help lower the environmental impacts than otherwise the case. Nevertheless, eco-efficiency strategies are by no means irrelevant in a degrowth society. When in a degrowth society the demand of mobility is generally reduced and people travel less, increasing fuel efficiency is also beneficial in reducing energy consumption. Compared to decentralized, small-scale urban development, high density and concentrated human settlements are both more resource efficient and beneficial in demand reduction.

#### 4. Decentralization, Centralization and Planning

When translated to planning-related issues, the call for political relocation implies that planning power and process should be decentralized to the level of many small villages. By planning power, it means the power and capability to make decisions on land use, dwelling types, infrastructure provision (transportation, energy, waste, sewage, telecommunication, etc.), location of various urban functions (housing, workplaces, public facilities, etc.) and use of space in general. The decisions on these issues will be made by villagers by means of public participation and communication. The underlying assumption is that political decentralization and localization will lead to the achievement of a degrowth society as being democratic, just and sustainable. Put in the setting of urban planning and spatial development, it is argued in the following sections that such an assumption is untenable and there is no logical necessity between localism and these degrowth goals. It is further claimed that instead of merely resorting to localism as a strategic approach to degrowth, a multi-scalar strategy combining centralized

planning power and local participation is arguably quite necessary, however without at the cost of democracy.

The ontological premise of my argumentation is that scale is socially constructed (Maston, 2000). From this perspective, scale is not fixed but is continuously remade through social actions and thus the outcomes of any scalar strategy are contingent on who are empowered and what their agendas are (Brenner, 2001; Delaney and Leitner, 1997). For this reason, localizing control over space through decision making directly by citizens is not given a priori any consequence, no matter whether it is greater democracy or other degrowth goals (Purcell, 2006). The tendency to equate devolution of authority to local scale with greater democracy and other goals is framed by Purcell (2006, p.1924) as “local trap”, which “assumes something inherent about the local scale”.

However, scalar arrangements can be relatively stable geographical-ly and temporarily, forming “scalar fixes” that bound socio-economic-political activities (Brenner, 2001). It is this spatial fixity, according to Purcell, that contributes to the local trap. As indicated before, it is partly because of the globalized capitalism that leads to the aversion among many degrowth proponents to the national-scale strategy as well as representative democracy and thus the resort to localism and other types of democratic legitimacy. However, there are some caveats to be taken care of when taking a local-scale approach to resist the contemporary growth society based on neoliberal capitalism.

Firstly, the spatial fixity is just relative and temporary, which means counteracting strategies which seem to be valid for the time being will not always be so in future. Historically, a capitalist growth society has been very adjustable and continuously transforming itself to sustain capital accumulation. In history, capitalism has experienced different formalities such as commercial, industrial, corporate, neoliberal and globalized capitalism, which continuously restructured the socio-spatial settings and institutions at multiple geographical scales (Gordon, 1984; Smith, 1984/2010). Studies have unravelled how the contemporary globalization and neoliberalization process of capitalism have restructured the political-economic spaces at multiple scales from local, regional, national to global (Brenner and Theodore, 2002). The contemporary neoliberalization process of capitalism does not mean that the scalar settings will maintain the same in the future. Even if localism is a currently effective approach, the future rescaling along with new developments in capitalism might make this particular scalar approach ineffective.

Another relevant aspect of scale is that scale is relational, which means that the dynamics, functions and meanings of one scale is socially constructed in relation to other geographical scales. As Brenner (2001, p.606) put it: “the very intelligibility of each scalar articulation of a social process hinges crucially upon its embeddedness within dense webs of relations to other scales and places”. The implication is that scalar strategies should not just focus on a particular scale but consider other scales as well as the interrelationships between them. This last point of scale is of great relevance to the discussion on the proposals for achieving degrowth later in the paper.

This ontological exploration of scale lays the foundation for the following concrete discussion of political devolution to the local level in the planning context. In the degrowth debates, the emphasis on decentralization and localization is partly grounded on the belief that it can make decision-making process more democratic. Although there is no consensus on which theories of democracy should be adopted for degrowth (Asara et al., 2013), there seems to be a general tendency to advocate more direct form of democracy as an opposite to representative democracy (e.g. Asara et al., 2013; Fotopoulos, 2010; Ott, 2012). The direct democracy usually contains more participation, communication and deliberation of local citizens so that people can be empowered and have more direct influence and control on their own situation. Apparently, local-scale community, like an urban village or eco-village, can much more conveniently and possibly exercise this type of democracy than a larger geographic scale. The call for reclaiming citizens' power in deciding on how to shape and use spaces rather than giving it

to capital has parallels with ‘the right to the city’ movement (Marcuse, 2009). In the planning profession, it resonates with the turn to ‘collaborative planning’ which has gained theoretical popularity since the 1990s (Allmendinger, 2002/2009).

Collaborative planning is informed by deliberative democracy and emphasizes the process of planning characterized by collective communication involving diverse communities with different perspectives, which is regarded as a way to realize the democratic potential of planning (Forester, 1989; Healey, 1992, 1997/2006). Since collaborative planning emphasizes citizen participation and challenges scientific rationalism, there is a general skepticism to top-down management and expert knowledge. There is also a strong belief in much of literature on collaborative planning that consensus will be built through communicative practices and inter-subjective understanding (Innes, 1996). Instead of specifying the goal of a plan, supporters of collaborative planning claim that purposes, options and actions should be decided collectively through the process of communicative practices (Healey, 1992).

Despite the merits of decentralizing planning power by deliberation which promotes public participation and increases the possibility of reaching mutual understanding, when seen in relation to the challenges of degrowth, serious concerns and skepticisms can be raised against it. Decision making based on communicative rationality has an exclusive focus on the planning process and thus leaves the outcome of the communication process open. As framed by Healey (1992), planning is about “future seeking” rather than “future defining”. Various outcomes might be generated depending on who are empowered, the conditions of negotiation, etc. and there is no guarantee that these outcomes will lead to a transition to degrowth which is a normative project. E.g., if a group of citizens after deliberation decide to support the planning strategy of increasing road capacity instead of improving public transport to solve local congestion problems, this decision will bring long-term negative environmental consequences.

So, what assumptions and conditions need to be fulfilled in order to arrive at the consensus that can result in degrowth? It might be true that due to a strong sense of belonging and responsibility for managing the community in a good way, local people attempt to make decisions that are best for local interests by using their local knowledge. The question arises if the right decision for the local people is the best one for the people living outside the village and living in the future. A just distribution and environmental sustainability achieved at the local scale do not necessarily mean achievement of these goals at another scale. As the call for economic degrowth in rich countries is partly based on the moral premise that more ecological space ought to be saved for people living in poor countries and aims to reduce economic inequality across space and time, local decisions should be made taking into consideration the consequences of environmental justice on higher geographical scales and in future. Not the least for urban planning-related issues, the local land use pattern usually has influences, for instance, on travel behavior which in turn affects energy consumption and greenhouse gas emissions that are not constrained within the village boundaries. Thus, one assumption is that people will have a high level of sobriety, hold the value of ‘voluntary simplicity’ and believe in altruism, so that they will make the right decisions for the globe as a whole. Particularly in affluent countries, decisions made at the local level more often than not may have negative impacts on the rest of the world either because local concerns are given the highest priority or due to lack of proper knowledge. Degrowth requires a far departure from the prevailing lifestyles in affluent countries, which means that preferences for cars and single-family dwellings will be challenged. Unless there is a strong environmental awareness and belief in altruism among the locals, it is hardly to be expected that they will propose a plan contradicting their own preferences.

Apart from being equipped with these virtues, another assumption is that local people are required to possess some expertise on spatial solutions to a sustainable urban development that can contribute to lowering environmental impacts and bringing justice both locally and

globally. Here, expert knowledge of urban planners who grasp scientific knowledge of the relationships between goals and means is very necessary and important (Næss, 2001). That is not to downplay the significance and validity of local knowledge, but to suggest integrating them in the planning process (Inners and Booher, 2010, p.193). The belief that a direct democracy and local self-determination can naturally lead to a degrowth society has been accused of taking the above assumptions for granted (Harvey, 2012; Romano, 2012).

The limitations of decentralized autonomy also lie in the ‘democratic dilemma’, which means that the capacity for making decisions will decrease along with downscaling of the political unit (Latouche, 2009). It is obvious that different facilities should be provided at different spatial scales. The small size of a village makes its citizens unable to make decisions on questions beyond its territorial limit. This applies to issues like climate change adaptation, intercity transportation, national territorial development, location of mass-production factories, large-scale energy infrastructures<sup>1</sup> and so on. Planning for these issues needs coordination between sectors at municipal, regional, national and even global levels and therefore cannot be made in the local villages.

The discussions on the limitations of localization and deliberation as a decision-making mechanism and strategy does not necessarily deny the importance of this strategy and argue for a replacement by centralization and top-down planning system. Instead, what I refuted is the notion of resorting to an exclusive scale and democratic form as a degrowth strategy. I consider that different scalar strategies and planning styles should be combined and selected according to the issues in question. It is wrong, as Purcell and Brown (2005, p.284) suggest, “to conflate local scale with democracy, justice and sustainability, and larger scale with authoritarianism, inequality and ecological destruction”. In a similar way, a hierarchical form of planning does not by nature conflict with democracy, justice and sustainability. Purcell recommended that:

“Normative research should critically analyse why a particular rescaling (such as localisation) is better than other rescaling strategies (globalization/nationalization/regionalisation) for achieving specific goods (such as democratisation) and these goals should be clearly articulated and distinguished from the scalar strategy used to pursue them”. (Purcell, 2006, p. 1929)

If we regard degrowth as a goal of societal transition, we therefore need a careful evaluation of different rescaling strategies, rather than taking it for granted that localization will lead to the desired outcomes. In the case of spatial development for a degrowth society, I consider some centralization of planning power in a hierarchical form is quite necessary and even more crucial in a degrowth society.

That is because, firstly, degrowth is a matter of equalizing wealth, natural resources, environmental burdens and welfare within limited global biocapacity. A centralized planning power can bring elements of substantive agenda (goals and strategies) which are indispensable for the transition to degrowth. Urban planning plays a role in the transition process by determining how space is allocated, for what purposes and used by whom. In order to reduce our consumption to the level of sustainability, setting a cap on how much land can be used for human settlements at the international and national levels is of importance. The higher-order constraints function as counteracting forces to the likely overconsumption and ecological destruction resulting from the sum of the actions taken by local regimes. Apart from setting limits, balancing and coordination from a higher authority are necessary to avoid the development of inequalities among communities, and to deal with externalities generated by decisions made in each local village. Non-centralized information gathering and negotiation costs are

<sup>1</sup> Contrary to the idea of ‘small is beautiful’, I hold the viewpoint that depending on the types and functions of mega-projects, they should not be presumed as undesirable in a degrowth society. Large infrastructures such as airports, highways, industrial ports, etc. should be abandoned, while infrastructures like wind farms and hydropower plants should be retained.

seen as barriers to efficient negotiation between local villages (Harvey, 1973/2009). Hence, a higher level of territorial planning organization is necessary to avoid and internalize externalities and provide facilities for the common good. If plans made on different scales are legally binding downwards in the hierarchy, they can impose constraints on those lower-level decisions in relation to types of land use and urban development that are in contradiction with the overall goal of a degrowth society. This can be done by strategic planning at the national and regional levels that set development goals and principles and regulate general spatial forms.

Another argument in support of some centralization of planning power is that decentralized community can be easily co-opted by the neoliberal politics and be utilized by vested interests for the pursuit of local economic growth (Harvey, 2012). The neoliberal agenda favors devolution of authority from the state to individuals and corporations, which allows local places to have more power to make decisions in open and competitive markets. National and top-down regulatory policies are generally seen as an impediment to competitive markets and inhabit capital accumulation. In a political climate dominated by neoliberalism, there is an unequal power relation between capital and citizen, where capital represented not the least by corporations has more power in determining spaces and urban development (Brenner et al., 2012). Communicative planning which aims to neutralize this power inequality through inter-subjective understanding is argued to be impossible and undesirable, as the conflicts and differences are seen as irreducible and cannot be overcome (Hillier, 2003; Purcell, 2009). Therefore, any agreement or consensus inevitably involves exclusion of certain participants, interests and issues (Connelly and Richardson, 2004). Purcell (2009) contends that under the hegemony of neoliberalism, property owners and business interests are systematically included in a communicative process. Moreover, given the unequal esteem between different social groups, the neoliberal ideas and arguments “about economic growth, competitiveness and property right carry that same epistemological privilege” and gain more reorganization than groups granted with low esteem (Purcell, 2009, p. 155). Local deliberation and communication though can bring certain mutual understanding between participants, can hardly confront the existing power relations and neoliberalization. Particularly in the process of building consensus, the pre-existing power relations are reinforced in order to guarantee the satisfaction of self-interest (Purcell, 2009). Taken together, the communicative planning process and outcome might be dominated by market interests who have a hegemonic social position and unintentionally serve the interests of capital. Even more, localization and deliberation is utilized to justify the neoliberal urban policies since it takes a seemingly more democratic form of decision making by involving various groups of population.

The discussion has shown that localism and deliberation alone does not offer a good way to confront the hegemonic political-economic regime to reach a degrowth society. Emphasizing on decentralization of planning power to the locals as a means to reach these goals precludes the development and adoption of other scalar strategies which are more effective. The failures of eco-village movement have been attributed to its lack of challenge to the systemic structures which need to be changed at a significant social scale (Fotopoulos, 2000; Vellssaris, 2006). Degrowth should be pursued at multi-scales. I believe participation and deliberation at local scales should be incorporated and combined with centralization and a hierarchical form of planning. Issues at different levels – local, regional, national and global, need decision making at corresponding levels, as certain problems only become visible and can be effectively tackled at certain scales. At higher levels where direct participation of citizens seems to be difficult to apply, representative democracy and voting should function as a decision-making mechanism. Again, representative democracy is not a priori a better form of democracy than participatory democracy. If representatives are not manipulated by money power and urban planners as

experts are able to propose solutions to a just and sustainable society, representative democracy should be adopted in a degrowth society. If representative democracy has been employed by neo-liberalists and capitalists to pursue their own interests, why cannot degrowth exponents use the same form to champion a degrowth society?

In the planning process, planners should know what are the good and bad choices as well as the environmental and social consequences of each choice and present their expert views as basis for pluralist debate in democratic processes of decision making (Löwy, 2007). Participant diversity, democratic discussion and transparency should be advocated too, which cannot only avoid top-down and authoritarian decision making, but also increase the legitimacy of planning and the applicability of goal-directed planning strategies. There is also a need for planners to advocate the disadvantaged population groups and interject their demands into participatory planning process (Rankin, 2012).

## 5. Discussion and Conclusion

By scrutinizing the eco-village/urban village solution from the perspective of urban planning, the preceding discussion indicates that spatial and political decentralization is not self-evidently equivalent to a degrowth future. The idea of eco-village/urban village completely neglects the existing urban structures and thus represents unrealistic solutions. Instead, I have argued for a multi-scalar approach in both spatial and political development in the field of planning to counteract the growth society.

### 5.1. Space and Freedom of Choice

Space not only has environmental consequences but also bears social meaning. Cultural values can be affected by the opportunities provided in the physical environment (Harvey, 1973/2009). The eco-village/urban village therefore promotes a certain set of social structures, lifestyle, and values and restrains the alternatives. However, the question is: do the spatial arrangements of eco-village/urban village harmonize with social processes in line with the genuine image of a degrowth society?

In a society dominated by neoclassical economics, the concept of quality of life is defined purely as preference satisfaction. Economic policy should not interfere with people's preferences, but aim to satisfy the largest amount of private preferences. Nowadays, markets do not only satisfy needs but also create needs. In such a society, consumers seem to have an unlimited freedom of choices, particularly in relation to material goods. Moreover, the conditions of modern society give the opportunities and capabilities to choose among a large range of options in relation to living, working, studying, shopping and leisure. Eco-villages/urban villages with the wish to contain the range of choices by localizing activities counter this modern trend. No doubt that in a degrowth society, our freedom of choices and individualistic behaviors will be constrained to varying degrees, and some attributes of the modern society will be scrapped. It therefore comes to the question of to what extent the traits of a civilized society can still be preserved and to what extent freedom of choice and individualistic behavior should be constrained.

Of course, conspicuous consumption of positional goods will be limited and more equal distribution of goods will be needed. If a degrowth society does not represent a retrograde step to barbarism as argued by degrowth opponents, some of the features of a civilized society need to be maintained. This may include among others certain division of labor, higher education, and advanced health care system. Different individual preferences and a certain freedom of making individual choices should be allowed to some extent. Take jobs for example. While degrowth may decrease the level of division of labor, degrowth champions seem not to reject division of labor at

all (e.g. Latouche, 2009).<sup>2</sup> It therefore means that there is still some scope for people to make individual occupation choices according to their preferences. However, the spatial organization of eco-village/urban village does not facilitate such freedom, since individual activities will be mainly located within the village and the acceptable needs will be determined by the community as a whole. In such a society, there seems to be very limited scope for individual freedom of choice in terms of occupations, education and living in general sense. People live in a rather uniform way.

A balance between individuality and uniformity should be pursued. Instead of pursuing uniformity among citizens, a compact city development still allows and facilitates a certain level of freedom of choices while reducing consumption level and environmental impacts. This will be obtained by a combination of 'selective degrowth' to constrain unsustainable ways of living and 'selective improvement' to promote sustainable lifestyles. For the former, urban planning strategies aim to prevent urban sprawl, decrease high-speed transport infrastructures, and reduce traffic volume, consumption and usage of cars and per capita consumption of dwellings. However, the selective degrowth should arguably accompany selective improvement of social services and welfare including affordable housing, cycling infrastructures, mass transit, medical care and education opportunities. Policies can also be used to facilitate that people choose sustainable ways of living, e.g. by using subsidies or tax relief to encourage citizens to live close to workplaces in order to reduce travel demand for commuting.

It has to be acknowledged that in a growth and market-dominated society, such a normative concept of compact city is quite hard to achieve. To invoke Næss and Vogel's (2012) words, in current market-liberal society, urban land use, transportation and housing are characterized as 'multi-segmented regimes' where, e.g. the different components of the housing sector (apartments, single-family houses, row houses) are different market segments reflecting different preferences of lifestyles, capabilities, etc. This also leads to a combination of environmentally friendly (such as densification in brownfields, public transport infrastructure) and environmentally harmful developments (like low-density urban sprawl in the urban fringe, road construction for automobiles) (Næss and Vogel's, 2012). Furthermore, the social darkness of current neoliberal urbanism is that it enhances the worldwide gentrification process (Smith, 2002). The above discussion therefore points out that compact city as a type of environmentally friendly urban spatial structure should accompany systemic transitions in the major social and economic institutions in order to materialize a degrowth society defined as ecologically sustainable and socially just.

## 5.2. Interdisciplinarity and the Role of Urban Planning

To smoothly and successfully transition to degrowth requires that degrowth in itself as a concrete utopia has a coherent picture of what a degrowth society is. As an overarching societal paradigm, the building up of this concrete utopia has to consider all dimensions of a society in a consistent and systematic way and entails an interdisciplinary approach. So far, contributions to the degrowth debates and movements have been mainly from economists, political ecologists, environmentalists, sociologists and philosophers. While they enrich the debates and improve the coherence of the concept, there is in general a lack of urban planners' input into this community.<sup>3</sup> The complex nexus between societal paradigm and space indicates that spatial forms can facilitate, constrain or alter certain social processes and that spaces should be planned in a way fulfilling the goals of the ideal society. By providing

<sup>2</sup> As argued by Latouche, a degrowth society can create new jobs in some fields, e.g. organic farming, renewable energy, sustainable transport (bicycle industry, light railways), reforestation, repair and recycling. It is hard to imagine that these jobs can be done without division of labor, even though the purpose is not to increase efficiency.

<sup>3</sup> Among the few explicit contributions from urban planners to the degrowth debates is Xue (2012, 2013). However, many studies in sustainable urban planning have borne an implicit degrowth idea, e.g. Næss (2001).

opportunities and constraints in the physical environment, urban planners are provoking a gradual cultural evolution. Consistency between space and societal paradigm is an essential element for the realization of a degrowth society. This interdependence among different components of a society indicates the necessity of urban planners' opinions and collaboration with other professionals. It requires urban planners to obtain a thorough understanding of the spatial mechanisms governing social justice and environmental sustainability. There has been a large body of research within the planning profession on sustainable urban development, but they seem to be not very well recognized by the degrowth community. There is thus a call for more research on the spatiality of degrowth and an integration of different trajectories of professional thoughts.

Not only does the establishment of a consistent utopia in theory need urban planners' input, but solution and transition to degrowth in practice also engage multiple actors including urban planners. Degrowth is a normative concept, similar to the nature of the planning profession which is target- and solution-oriented. On the path to degrowth, urban planners can work as degrowth activists and practitioners by making plans that are conducive to environmental protection and social sustainability. Such initiatives have already taken place in some parts of the world, e.g. by developing cycling infrastructures. Moreover, the planning process functions as a social learning process and has rhetorical power. Given the practical dimension of planning, by involving widespread public participation and building strategic translocal alliances, urban planners have the potential to catalyze collective critical consciousness on current society, enhance public awareness of sustainable choices and thus mobilize the public as agents of social change (Rankin, 2012).

Since the values in a degrowth society are so distinct from the current society, planning practitioners need to be more critical and evaluative of the present non-sustainable urban development practices that are against the goal of sustainability and equity. Challenging the reality is by no means a smooth process, as there are multiple societal actors with conflicting interests involved in producing social reality. Planners, in order to reach degrowth goals, will need to selectively ally with stakeholders who share common values to counteract those opponents. This alliance building process should be fostered by dialogue, communication and deliberation in order to reach consensus within the alliance.

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## References

- Allmendinger, P., 2002/2009. *Planning Theory*. Palgrave Macmillan, Hampshire.
- Asara, V., Profumi, E., Kallis, G., 2013. Degrowth, democracy and autonomy. *Environ. Values* 22 (2), 217–239.
- Biddulph, M., Franklin, B., Tait, M., 2003. From concept to completion: a critical analysis of the urban village. *Town Plann. Rev.* 74 (2), 165–193.
- Bonaiuti, M., 2012a. Degrowth: tools for a complex analysis of the multidimensional crisis. *Capital. Nat. Social.* 23 (1), 30–50.
- Bonaiuti, M., 2012b. Growth and democracy: trade-offs and paradoxes. *Futures* 44 (6), 524–534.
- Brenner, N., 1999. Globalisation as reterritorialisation: the re-scaling of urban governance in the European Union. *Urban Stud.* 36 (3), 431–451.
- Brenner, N., 2001. The limits to scale? Methodological reflections on scalar structuration. *Prog. Hum. Geogr.* 25 (4), 591–614.
- Brenner, N., Theodore, N., 2002. Cities and the geographies of "actually existing neoliberalism". *Antipode* 34 (3), 349–379.
- Brenner, N., Marcuse, P., Mayer, M., 2012. Cities for people, not for profit: an introduction. In: Brenner, N., Marcuse, P., Mayer, M. (Eds.), *Cities for People, not for Profit: Critical Urban Theory and the Right to the City*. Routledge, Oxon, pp. 1–10.
- Broadus, A., 2011. Tale of two ecosuburbs in Freiburg, Germany. *Transp. Res. Rec. J. Transp. Res. Board* 2187, 114–122.
- Cato, M.S., 2011. Home economics: planting the seeds of a research agenda for the bioregional economy. *Environ. Values* 20 (4), 481–501.

- Connelly, S., Richardson, T., 2004. Exclusion: the necessary difference between ideal and practical consensus. *J. Environ. Plan. Manag.* 47 (1), 3–17.
- Delambre, M.G., 2010. Sustainable communities of practice and eco-villages as mediation tool for degrowth process. Conference proceedings of the 2nd Conference on Economic Degrowth for Ecological Sustainability and Social Equity.
- Delaney, D., Leitner, H., 1997. The political construction of scale. *Pol. Geogr.* 16 (2), 93–97.
- Demaria, F., Schneider, F., Sekulova, F., Martinez-Alier, J., 2013. What is degrowth? From an activist slogan to a social movement. *Environ. Values* 22 (2), 191–215.
- Forester, J., 1989. *Planning in the Face of Power*. University of California Press, Berkeley.
- Fotopoulos, T., 2000. The limitation of life-style strategies: the ecovillage 'movement' is not the way towards a new democratic society. *Democr. Nat.* 6 (2), 287–308.
- Fotopoulos, T., 2007. Is degrowth compatible with a market economy? *Int. J. Incl. Democr.* 3 (1) (On-line access).
- Fotopoulos, T., 2010. Direct democracy and de-growth. *Int. J. Incl. Democr.* 6 (4) (On-line access).
- Fournier, V., 2008. Escaping from the economy: the politics of degrowth. *Int. J. Sociol. Soc. Policy* 28 (11/12), 528–545.
- Frankova, E., Johansova, N., 2011. Economic localization revisited. 9th International Conference of the European Society for Ecological Economics: ESEE 2011 Advancing Ecological Economics: Theory and Practice.
- Gordon, D., 1984. Capitalist development and the history of American cities, In: Tabb, W., Sawyers, L. (Eds.), *Marxism and the Metropolis*, Second edition. Oxford University Press, New York, pp. 21–53.
- Harvey, D., 1973/2009. *Social Justice and the City*, Revised edition. The University of Georgia Press, Georgia.
- Harvey, D., 2012. *Rebel Cities: From the Right to the City to the Urban Revolution*. Verso, London.
- Healey, P., 1992. Planning through debate: the communicative turn in planning theory. *Town Plann. Rev.* 63 (2), 143–162.
- Healey, P., 1997/2006. *Collaborative planning, Shaping Places in Fragmented Societies* Second edition. Palgrave Macmillan, London.
- Hillier, J., 2003. Agonizing over consensus: why Habermasian ideals cannot be 'real'. *Plann. Theory* 2 (1), 37–59.
- Homs, C., 2007. Localism and the city: the example of "urban village". *Int. J. Incl. Democr.* 3 (1) (Online access).
- Høyer, K.G., Holden, E., 2001. Housing as basis for sustainable consumption. *Int. J. Sustain. Dev.* 4 (3), 48–59.
- Inners, J.E., Booher, D.E., 2010. *Planning with Complexity: an Introduction to Collaborative Rationality for Public Policy*. Routledge, Oxon.
- Innes, J.E., 1996. Planning through consensus building: a new view of the comprehensive planning ideal. *J. Am. Plan. Assoc.* 62 (4), 460–472.
- Johansova, N., Wolf, S., 2012. Economic democracy: a path for the future? *Futures* 44 (6), 562–570.
- Kallis, G., 2011. In defence of degrowth. *Ecol. Econ.* 70 (5), 873–880.
- Kasioumi, E., 2011. Sustainable urbanism: vision and planning process through an examination of two model neighborhood developments. *Berkeley Plann. J.* 24 (1), 91–114.
- Kovel, J., 2007. *The Enemy of Nature: the End of Capitalism or the End of the World?* Zed Books, London.
- Latouche, S., 2009. *Farewell to Growth*. Polity Press, Cambridge.
- Liu, J., Daily, G.C., Ehrlich, P.R., Luck, G.W., 2003. Effects of household dynamics on resource consumption and biodiversity. *Nature* 421 (6922), 530–533.
- Löwy, M., 2007. Eco-socialism and democratic planning. *Social. Regist.* 43, 294–319.
- Marcuse, P., 2009. From critical urban theory to the right to the city. *City Anal. Urban Trends Cult. Theory Policy Action* 13 (2–3), 185–197.
- Martinez-Alier, J., Pascual, U., Vivien, F., Zaccai, E., 2010. Sustainable de-growth: mapping the context, criticisms and future prospects of an emergent paradigm. *Ecol. Econ.* 69 (9), 1741–1747.
- Maston, S.A., 2000. The social construction of scale. *Prog. Hum. Geogr.* 24 (2), 219–242.
- Næss, P., 2001. Urban planning and sustainable development. *Eur. Plan. Stud.* 9 (4), 503–524.
- Næss, P., 2012. Urban form and travel behavior: experience from a Nordic context. *J. Transp. Land Use* 5 (2), 21–45.
- Næss, P., Vogel, N., 2012. Sustainable urban development and the multi-level transition perspective. *Environ. Innov. Soc. Transit.* 4, 36–50.
- Newman, P.W.G., Kenworthy, J.R., 1999. *Sustainability and Cities: Overcoming Automobile Dependence*. Island Press, Washington DC.
- Ott, K., 2012. Variants of de-growth and deliberative democracy: a Habermasian proposal. *Futures* 44 (6), 571–581.
- Owen, D., 2012. *The Conundrum: How Trying to Save the Planet Is Making Our Climate Problems Worse*. Short Book, UK.
- Peck, J., 1998. Geographies of governance: TECs and the neo-liberalisation of 'local interests'. *Space Polity* 2 (1), 5–31.
- Purcell, M., 2006. Urban democracy and the local trap. *Urban Stud.* 43 (11), 1921–1941.
- Purcell, M., 2009. Resisting neoliberalization: communicative planning or counter-hegemonic movements? *Plann. Theory* 8 (2), 140–165.
- Purcell, M., Brown, J.C., 2005. Against the local trap: scale and the study of environment and development. *Prog. Dev. Stud.* 5 (4), 279–297.
- Rankin, K.N., 2012. The praxis of planning and the contributions of critical development studies. In: Brenner, N., Marcuse, P., Mayer, M. (Eds.), *Cities for People, not for Profit: Critical Urban Theory and the Right to the City*. Routledge, Oxon, pp. 102–116.
- Romano, O., 2012. How to rebuild democracy, re-thinking degrowth. *Futures* 44 (6), 582–589.
- Schneider, F., Kallis, G., Martinez-Alier, J., 2010. Crisis or opportunity? Economic degrowth for social equity and ecological sustainability. Introduction to this special issue. *J. Clean. Prod.* 18 (6), 511–518.
- Schwanen, T., Dieleman, F.M., Dijst, M., 2001. Travel behaviour in Dutch monocentric and policentric urban systems. *J. Transp. Geogr.* 9 (3), 173–186.
- Smith, N., 1984/2010. *Uneven Development: Nature, Capital and the Production of Space*, Third edition. Verso, London.
- Smith, N., 2002. New globalism, new urbanism: gentrification as global urban strategy. *Antipode* 34 (3), 427–450.
- Stead, D., Marshall, S., 2001. The relationships between urban form and travel patterns: an international review and evaluation. *Eur. J. Transp. Infrastruct. Res.* 1 (2), 113–141.
- Tait, M., 2003. Urban villages as self-sufficient, integrated communities: a case study in London's Docklands. *Urban Des. Int.* 8 (1), 37–52.
- Tapio, P., 2005. Towards a theory of decoupling: degrees of decoupling in the EU and the case of road traffic in Finland between 1970 and 2001. *Transp. Policy* 12 (2), 137–151.
- Trainer, T., 2010. *The Transition to a Sustainable and Just World*. Envirobook, Sydney.
- Trainer, T., 2012. De-growth: do you realize what it means? *Futures* 44 (6), 590–599.
- UN, 2009. Press release: world population to exceed 9 billion by 2050. <http://www.un.org/esa/population/publications/wpp2008/pressrelease.pdf>.
- Vellssaris, T., 2006. Reaching systemic change: some brief remarks on Mary Garden's "Leaving Utopia". *Int. J. Incl. Democr.* 2 (2) (Online access).
- Xue, J., 2012. Limits to decoupling strategies for sustainable housing development: the Hangzhou experience. *J. Environ. Plan. Manag.* 55 (8), 1004–1021.
- Xue, J., 2013. *Economic Growth and Sustainable Housing: an Uneasy Relationship*. Routledge, London.
- Zegras, C., 2010. The built environment and motor vehicle ownership and use: evidence from Santiago de Chile. *Urban Stud.* 47 (8), 1793–1817.