Making Visions for Transitions in SCP: overview of methods and cases

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Long Abstract (478 words)
Visions are important in sustainability transitions and niche formation and their role needs further study, both conceptual and empirical, including their relevance for governance of transitions. A distinction can be made between (i) visions in long-term developments and transitions, also used to explain socio-technological change, (ii) generating visions through interactive learning and interaction among groups (of actors) for instance in transition management and backcasting, and (iii) assessing visions through vison assessments to explore possible value conflicts and other value-driven and interest-driven differences among actors and stakeholders in emerging transitions. This paper will focus on methods for making visions for transitions to sustainable consumption and production. Two major approaches for making visions are backcasting and transition management, though other participatory normative scenario approaches can be found too. Backcasting essentially means looking back from a desirable future. As an approach it is about generating one or several desirable future visions before looking backwards how these could have been achieved and defining a follow-agenda and a pathway towards these desirable futures. Over the last decade both backcasting and transition management have increasingly been applied to sustainable lifestyles, sustainable consumption and local communities.

The paper will first review recent developments of vision-based approaches with a particular focus on on sustainable consumption and production. This will include, but not be limited to the BIG2050 project, the combination of backcasting and transition management in the community arena methodology in the InContext project, the FP7 SPREAD project, the Consensus project in Ireland, and the participatory backcasting methodology for sustainable lifestyles and a green economy, as part of the EU funded Glamurs project. Based on the overview of vision studies for sustainable consumption, , an inventory will be made of how visions can be made, supported by examples. The inventory of visioning methods includes: (i) creativity methods, such as brainstorming, in combination with clustering, (ii) problem structuring approaches, as often used in transitions management, (iii) elaboration of visions start via setting targets, which has been done in many studies in Sweden, (iii) changing systematically along different dimensions of the systems under study, which can be seen as a type of morphological analysis that is more widely applied in design processes and in context scenario methods. Morphological analysis, in the sense of creating diversity for different dimensions of the system under study, is not always mentioned explicitly, but can be seen in the results of multiple vision backcasting studies. (iv) Q- methodology, a method from social sciences that is applied to study diversity in viewpoints, but it can also be used to generate future perspectives and may yield up to five or six future perspectives.(v) Making narratives, for instance of every day life futures, and (vi) providing pre-developed visions as an input to dialogue workshops.

The proposed paper is organized as follows. After the introduction (Section 1), Section 2 contains a literature review of visioning approaches with a focus on sustainable consumption and production. Section 3 describes and compares the main visioning approaches identified in the review and illustrated with examples from the review.

Keywords:

Visions, Transitions, Sustainable Consumption and Production, visioning methods

1 Introduction

1.1 Purpose and outline

Visions are important in sustainability transitions and niche formation and their role needs further study, both conceptual and empirical, including their relevance for governance of transitions. A distinction can be made between (i) visions in long-term developments and transitions, also used to explain socio-technological change, (ii) generating visions through interactive learning and interaction among groups (of actors) for instance in transition management and backcasting, and (iii) assessing visions through vison assessments to explore possible value conflicts and other value-driven and interest-driven differences among actors and stakeholders in emerging transitions. This paper will focus on methods for making visions for transitions to sustainable consumption and production. Two major approaches for making visions are backcasting and transition management, though other participatory normative scenario approaches can be found too. Backcasting essentially means looking back from a desirable future. As an approach it is about generating one or several desirable future visions before looking backwards how these could have been achieved and defining a follow-agenda and a pathway towards these desirable futures. Over the last decade both backcasting and transition management have increasingly been applied to sustainable lifestyles, sustainable consumption and local communities.

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The proposed paper is organized as follows. After the introduction (Section 1), Section 2 contains a literature review of visioning approaches with a focus on sustainable consumption and production. Section 3 describes and compares the main visioning approaches identified in the review and illustrated with examples from the review. This is followed by framework development that provides and overview of characteristics of the methods and criteria for application in transition settings in Section 4. Conclusions are drawn and discussed in Section 5 4.

2 Overview backcasting

2.1 Rise of participatory backcasting and transition management

Backcasting was proposed in the 1970s in energy studies (e.g. Lovins 1977, Robinson 1990) and later also applied to sustainability planning (e.g. Robinson 1990) and to sustainable organisations (Holmberg 1998). Since the early 1990s it has developed into a participatory approach, taking off in the Netherlands (Weaver et al 2000, Quist & Vergragt 2006), Canada (Robinson 2003) and also Sweden (Holmberg 1998, Dreborg 1996, Carlsson-Kanyama et al 2007).

Other examples of participatory backcasting can be found in various European collaborative research projects (e.g. Kok et al 2006, Kok et al 2011), while related participatory vision development and assessment projects can be found in several countries (e.g. Eames & Egmose 2011; Sondeijker 2009). Though most participatory backcasting studies involve (expert) stakeholders, examples involving citizens, consumers or end-users can increasingly be found. Citizens were involved in vision development and backcasting workshops in sustainable urban planning (Carlsson-Kanyama et al 2007) and in developing and evaluating local and regional energy futures in Canada (Robinson 2003, Robinson et al 2011). Strong citizen involvement was also part of local vision development (Kok et al 2006) and defining sustainability research agendas in the UK (Eames & Egmose 2011). In addition, the 'Strategies towards the Sustainable Household' (SusHouse) project involved societal stakeholders like consumer associations and environmental organisation as well as consumers/citizens (Quist et al 2001, Green & Vergragt 2002, Quist 2007, see also Quist 2016). In the SusHouse project, experts and stakeholders were involved in visioning and backcasting workshops, whereas three kinds of consumers were involved in focus groups in which visions were assessed and complemented.

2.2 Recent developments on visions for SCP

Interesting recent participatory backcasting studies include the BIG2050 (Building Ideas Glocally for 2050) as reported by Georgina Guillen and Marina Nicolau (2013) and the backcasting within organisations as part of the LOCAW project (e.g. Dumitru et al.2013), whereas backcasting and transition management have been combined in the community arena methodology in the InContext project (see also the next section). Other interesting backcasting studies involving citizens, communities or dealing with consumption include the FP7 SPREAD project (Mont et al 2014, Neuvonen et al 2014), the Consensus project in Ireland (e.g. Doyle and Davies 2013, Davies 2015), and some local climate change studies in Sweden (Milestad et al 2014, Carlson-Kanya et al 2013).

Next to participatory backcasting, transition management is a related major normative approach to sustainability. Transition management has rapidly emerged over the past decade as a new approach addressing complex societal problems and the governance of these problems towards sustainability. It is a participatory learning and experimenting process aiming at creating agency that can put pressure on dominant policy (Loorbach 2007, 2010). The transitions approach assumes that wicked problems that persist over time require a fundamental change in the structures, cultures and practices of the societal system for bringing about sustainability in the system under study. The transformative processes of change are called sustainability transitions and take a long-time period (over 25 years) to materialise (Grin et al. 2010, Frantzeskaki & De Haan 2009). Until now most transition management studies have focussed on production systems or production and consumption systems. Transitions have been defined as the structural changes, societal process and mechanisms through which novelty in niches matures and becomes mainstream, heavily influencing the dominant practices of consumption and production at the meso-level of socio-technological regimes. Transition Management

has also been described as a reflexive governance approach aiming at exploring, initiating and facilitating sustainability transitions, while taking into account system thinking, complexity and uncertainty (Loorbach 2010).

Recently, transition management was applied on the local level with citizens in the Charlois district in Rotterdam (Wittmayer et al 2011). Other even more recent examples include local urban transition arenas that have been applied in major cities across Europe in the MUSIC project (Nevens et al 2014) including cities like Ghent (Belgium), Aberdeen and the development of the community arena methodology in the InContext project. The community arena methodology, in which transition management and backcasting has been combined and integrated, has been developed in the InContext project (Wittmayer et al 2011, 2015) and has been applied in three communities across Europe: the rural municipality of Finkenstein in Austria, the medium-sized town Wolfhagen in Germany, and the deprived urban district of Carnisse in Rotterdam (e.g. Wittmayer et al 2015, Quist et al 2013). A key issue in the InContext project was to support the transition to sustainable behaviour in local urban communities by aiming for a better understanding of how the inner and outer context on individual and group level interrelate with individual and collective strategies and/or practices. The objectives of the InContext project were (1) to facilitate pathways towards alternative, more sustainable behaviours of individuals and (2) to foster collective activities towards more sustainable communities.

Another interesting example of transition management at the local level has taken place in the CRISP project. Wehrmeyer et al. (2013) and Iacovidou and Wehrmeyer, (2014) have reported on the transition pathways generated by teenagers and professionals in 6 EU countries as part of the CRISP project.

3 Making visions

The inventory of visioning methods includes: (i) creativity methods, such as brainstorming, in combination with clustering, (ii) problem structuring approaches, as often used in transitions management, (iii) elaboration of visions start via setting targets, which has been done in many studies in Sweden, (iii) changing systematically along different dimensions of the systems under study, which can be seen as a type of morphological analysis that is more widely applied in design processes and in context scenario methods. Morphological analysis, in the sense of creating diversity for different dimensions of the system under study, is not always mentioned explicitly, but can be seen in the results of multiple vision backcasting studies. (iv) Q- methodology, a method from social sciences that is applied to study diversity in viewpoints, but it can also be used to generate future perspectives and may yield up to five or six future perspectives.(v) Making narratives, for instance of everyday life futures, and (vi) providing pre-developed visions as an input to dialogue workshops.

4 Discussion and conclusions

This paper has shown several ways of making vision, which can be used under different conditions, while examples from SCP have been highlighted

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