From Global Champions to Local Loops:
Sustainable Lifestyles in Europe 2050

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Abstract

Recent years have witnessed the growing number of more sustainable products, services and experimental social innovation initiatives. This signals that sustainable consumption and lifestyles may be achievable for a greater number of people than ever in post-industrial societies. However, a lot of imagination is needed to understand how the shift from the current overconsumption can be turned into sustainable lifestyles for all. On the one hand, we need a deeper understanding on how to scale up current promising practices. On the other hand, we need to know how far these practices will take us towards sustainable living for all, and what kinds of new creative solutions, currently unknown or "unthinkable", might bring us there.

This paper presents four different scenarios for European sustainable lifestyles in 2050. The different lifestyle scenarios are based on the foundations of sustainable systems, and each of them explores different options in an attempt to acknowledge the diversity amongst European citizens. The scenarios are part of the European Commission funded project SPREAD Sustainable Lifestyles 2050: http://www.sustainable-lifestyles.eu/.

All the scenarios presented share the normative goal of a material footprint of eight tonnes per capita in a year for household consumption. The scenarios are modeled through the identification of critical uncertainties on two axes: meritocratic vs. human-centric approach to human skills and endemic vs. pandemic technological paradigms. Despite the normative constraint regarding the material footprint that is to be achieved, the scenarios offer a diverse set of lifestyle patterns. The purpose of the scenarios is to describe links between, and the significance of, emerging lifestyle patterns and infrastructural development. Transition management is used as a framework for analysis in how lifestyle-level experiments could serve as bottom-up actions for macro-level transition.

Keywords: sustainable lifestyles, sustainable society, future, scenario, material footprint, Europe

1   Introduction

Imagine your life in 37 years time. Imagine it in a sustainable world where we have attained 'one planet living'. What does your life look like? What are the things that you can't live without? What does the surrounding environment look like? What do people eat and where are the best places for an ice cream on a hot day? Do people even eat ice cream anymore?

Difficult to imagine, isn't it? That's why we created four potential future scenarios to describe what sustainable lifestyles in Europe might look like in 2050 and to identify the pathways towards reaching it. Our scenarios are not predictions or forecasts but instead seek to explore the most extreme yet sustainable possibilities, in order to help e.g. policy makers and designers think of the currently "unthinkable". Our scenarios present different options for

sustainable living choices across Europe. The scenarios help to understand and manage long-term thinking and to widen imagination: new solutions can come from surprising places.

The scenario work is based on research done by Finnish think tank Demos Helsinki as part of the European Commission's Framework Programme 7 project SPREAD Sustainable Lifestyles 2050 that took place in 2011-2012. The outcome of this research was four alternative scenarios on how lifestyles and societies in Europe could evolve by 2050, assuming that the target of not exceeding the planetary boundaries would be attained. The scenarios are published as report (Demos Helsinki 2012a) as well as an online tool at http://spread.demoshelsinki.fi/.

2   Our approach to sustainable lifestyles

We all know that there is a certain need for understanding sustainable societies with regard to future development. Our approach has two starting points: firstly, we start with the knowledge that planetary boundaries are about to be met if material consumption is not reduced (Rockström et al 2009). The resource challenge is huge and it will radically change the way we live and and consume. Secondly, we have realised that there is a huge potential to disrupt current lifestyles and living patterns. While infrastructure guides many of our lifestyle choices, the root for changes in infrastructure can often be traced back to lifestyle choices (Wangel 2011, 881).

Both adoption of new technologies and progress in policies are dependent on changes in social structures and behavioural patterns. Lead users and their experimental lifestyles and living patterns offer a platform through which new technical solutions can find their way to wider audiences and markets (Rotmans et al 2001). For instance, a company offering a service for shared car use today can serve as an agent for change in the society of tomorrow.

The purpose of the scenarios is to describe links between and the significance of emerging lifestyle patterns and infrastructural development. In this study, transition management (Rotmans et al. 2001) and multi level perspective (MLP) (Geels 2002) were used as theoretical frameworks for understanding how changes in our societies emerge and transform, and how lifestyle-level experiments could serve as bottom-up actions for macro-level transitions. These concepts were created to understand how more sustainable patterns evolve, i.e. how new technologies are used to create a more sustainable society.

The necessity to meet planetary boundaries, i.e. to consume fewer resources than our globe is able to produce, is one of the leading ideas of our scenarios. The normative goal used in defining our scenarios is sustainable society, where annual per capita total material consumption has reached the level of 8 tonnes per capita in a year: the level that is estimated to be globally sustainable (Bringezu 2009, Lettenmeier et al. 2012). By defining our goal through figures on material consumption our approach on sustainable society and sustainable lifestyles thus expands the scope of low-carbon society to cover a wider range of "planetary boundaries" (Rockström et al 2009).

3   Methods used: backcasting and co-creation

In this study, we have used a methodology called backcasting scenarios. The backcasting method allows us to address the risk that starting from the present may lead to concentrating on challenges that in the longer perspective turn out to be less significant than thought now, or even irrelevant. Backcasting means that we start from the normative goal - here the defined sustainable society of 2050 - and then count backwards to explore possible pathways to successfully reach the desired future.

Backcasting scenarios has been one of the methods that has emerged steadily over the course of the past decade within the field of futures studies, especially concerning the discussion on transitions towards sustainable socio-technical systems, especially in energy production and transportation (Quist & Vergragt 2006). Backcasting is a relevant option in issues where the mainstream of forecasting studies indicate that long-term development leads to outcomes that have been widely recognised as undesirable. Backcasting scenarios offer new options to be considered as reasonable, widening the rather narrow perception people often have on what could be possible and reasonable in the long-term (e.g. Dreborg 1996; Höjer & Mattsson 2000).

Since the goal of SPREAD scenarios was to elaborate on the potential role of changing lifestyles throughout the transition to a sustainable society, we built the scenario narratives in a way that emphasizes the role of lifestyle innovations and everyday life as part of broader change of society and its structures. Each scenario is presented as a timeline that comprises of both macro-level political, technological and social events that reflect the impact of the major drivers specific to each scenario, and of "bits of lifestyles" exemplifying how changing structures of society shape everyday life and how new lifestyle innovations appear in society.

The future scenarios on sustainable lifestyles were created with a large number of people from all over Europe. Two online Delphi surveys collected views from stakeholders and experts. The backcasting co-creation workshop gathered 54 participants from 16 countries, representing stakeholder groups from start-up businesses to governments, multinational companies, NGOs, researchers, entrepreneurs, designers and independent policy experts. Furthermore, to add the views of citizens from across Europe to the process, the scenario drafts were further discussed and evaluated through five participatory iFuture workshops of the SPREAD project (Demos Helsinki 2012b).

4   Results: four scenarios on sustainable society

In this research, sustainable lifestyles were depicted through societies that were either meritocratic or human-centric and that utilised either pandemic or endemic technologies. Four different landscapes were drawn, each portraying a unique societal model (figure 1). In each of the four scenario landscapes, sustainable lifestyles with 8000 kg material footprint were possible latest by 2050 .

The different lifestyles in each scenario with leading macro-level drivers and lifestyle triggers are widely presented in the research report (Demos Helsinki 2012a). Here we present some selected examples of different elements in each scenario.
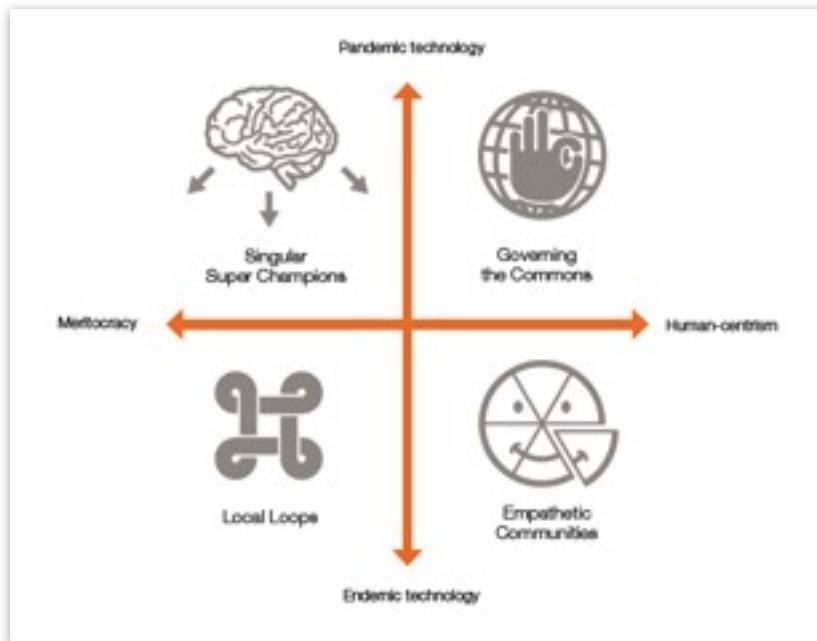
Figure 1. *Four possible future landscapes (Demos Helsinki 2012a).*

4.1 Singular super champions

In the scenario Singular Super Champions Europe has made the leap to a new type of sustainable, competitive and equitable economy: a result of numerous treaties, declarations and official goals. Cleantech and upcycling businesses flourish as sustainability has become the business opportunity of the century. Europe of Singular Super Champions is a society that celebrates an ethos of learning, achieving and self-mastery. The world is led by meritocratic, professional leaders, and technological innovations are global by nature. Pandemic technology creates similar opportunities for people around the world to use same kind of high quality products and services. This scenario probably describes most accurately the global society as it appears in 2013.

On the level of everyday life transparent product data allows people to understand the environmental cost of personal consumer choices and overall lifestyle. People prefer short commuting distances, well-serviced neighbourhoods and a better access to public space, because road pricing and the overall rise of transportation costs changes housing preferences. Improved design of public spaces and flats draws people to densely populated areas. In all countries, areas around city centres turn into the most desirable places to live. New upcycling approaches to consumer goods have changed product lifecycles. Material goods are sold with an additional deposit on their material resources.

4.2 Governing the commons

Governing the Commons is a scenario that exists mostly in digital reality. Ubiquitous computing enables the smart use of resources and, at the same time, redirects people's behaviour and focus of attention from material consumption to interaction in the digital realm. People abandon many institutions of the 20th century, liberate themselves in order to lead more meaningful lives and engage in new forms of collaboration. Instead of one job, people have diverse skills and roles appreciated by the surrounding community.

People's everyday life happens more or less in virtual realities and online communities, which means a decrease in needs for large living spaces, furniture and even foodstuffs. Customised 3D printers that can use recycled materials start to dominate the markets and more traditional companies struggle to compete with goods produced at home.

4.3 Local Loops

Local Loops is a scenario in which a radical energy crisis forces societies to fundamentally re-evaluate the foundations of their well-being. Energy and resource systems are increasingly seen though "Local Loops", which is a technical concept that can be applied in the context of local and regional production cycles. As a reaction to peaking resource prices people build their lifestyle and ways of belonging around their work. A new ethos of craftsmanship and professional communities, "guilds", shape the way people live, organize their work and spend their leisure time.

Appreciation of local cultural treasures starts to boom. A movement of cyber-localism that celebrates global culture and technology together with traditional ways of building and agriculture rises all over the Europe. Tight workplace and neighbourhood-based communities enable and encourage people to share spaces and equipment. People live close to their guild peers. Ample service options mean minimal needs to commute outside the neighbourhood (figure 2).
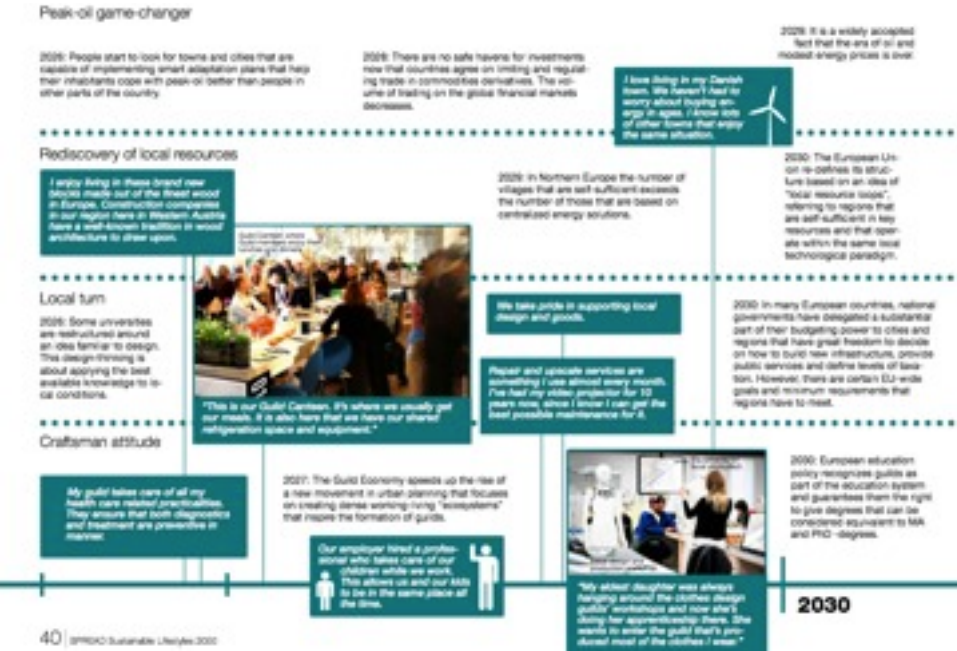

Figure 2: Example of the Sustainable lifestyles scenarios' timelines: a part of 'Local Loops' scenario (Demos Helsinki 2012a).

4.4 Empathetic Communities

Empathetic Communities is a story in which the global economy as we knew it in 2013 fails, followed by paralysis of nation states and their political decision-making structures. By 2050 this all leads to lifestyles in which the community and neighbourhoods have an important role in everyday life. In Empathetic Communities the many fruits of global culture and

advancements in latest technological innovation are enjoyed, although people in general focus on communicating and developing solutions on a local level.

The organization of work changes due to long recession and high unemployment. More and more people start to work outside of traditional companies. Rising energy and food prices combined with a long economic downturn lead to people becoming more eager to find alternative solutions to current food, housing and mobility patterns. Do-it-yourself (DIY) farming, energy production and retrofitting solutions gain popularity among many of the unemployed. A reduction in food, living space, consumer expenditure, travel and other leisure time activities is compensated for by the richness of social life and a sense of purpose in one's work and communal activities.

5   Conclusions: enabling sustainable lifestyles by 2050

The four scenarios on sustainable lifestyles 2050 demonstrate that there is not just one but many different alternatives to sustainable lifestyles and sustainable societies. In our vision, future sustainable lifestyles are not only LOHAS but everyday practices of all of us.

One of the outcomes of our research is that by analysing lifestyles through the backcasting methodology, we were able to identify and potentially empower new actors. The question of relevant actors is significant in the transition management model used for this research, which highlights the relevance of niche level action. By enabling new actors and agency, the effects these have on the infrastructure and regime level become essential in understanding how sustainable futures could evolve.

We have suggested that the transformation to a sustainable society requires interplay between the evolution of emerging lifestyle practices and the infrastructure (both physical and institutional) that either enables or restricts sustainable behavioural patterns. Further research is required to understand how new lifestyle experiments serve as a leverage point for the renewal of infrastructure. On the other hand, the renewal of infrastructure can serve as a leverage point for mainstreaming lifestyle practices.

The four European-level scenarios presented in this study provide a promising ground for similar work at the city level or at different sectors of the society. Furthermore, we would be very interested in doing similar scenarios in other regions, e.g. in Asia or in Africa. Several themes emerge as important for shaping and enabling more sustainable lifestyles 2050 that need to be further researched, e.g.

- Enabling policy environments and the role of political leadership in initiating, supporting and enabling sustainable lifestyles,

- Providing infrastructure that stimulates and supports changes towards sustainable lifestyles, and

- Supporting alternative business models that shape, enable and promote sustainable consumption and lifestyles.

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