

Sustainable place-shaping: what, why and how?

Findings of the SUSPLACE program

Deliverable D7.6 Synthesis report

LG Horlings (Ed.)

With contributions from: L Axinte, J van den Berg, E Felcis, S Grenni, LG Horlings, O Husain, A Moriggi, M Nieto Romero, A Papangelou, K Pearson, S Pisters, M Quinn, M Quinney, C Rebelo, D Roep, D Soares da Silva, K Soini, A Šuvajevs, A Taherzadeh, G van der Vaart, S Valente, A Vasta, A de Vrieze.



SUSPLACE has received funding from the EU Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement no. 674962.

TABLE OF CONTENTS

<u>I. Introduction</u>	<u>3</u>
1.1 SUSPLACE	4
1.2 Transforming Places	5
1.3 Research Projects	10
<u>II. What is place and why does it matter?</u>	<u>16</u>
2.1 What is place?	17
2.2 Why does place matter?	21
2.3 Interpretations of place	28
<u>III. What is sustainable place-shaping?</u>	<u>36</u>
3.1 Interpretations of sustainability	37
3.2 Place-shaping	44
<u>IV. How to shape sustainable places?</u>	<u>53</u>
4.1 Place-shaping as a process of co-production	54
4.2 Creative and arts-based methods	59
4.3 The role of place-based researchers in place-shaping	61
<u>V. Mastering complexity: SUSPLACE as a joint learning journey</u>	<u>63</u>
5.1 Introduction	64
5.2 Training in facilitation	64
5.3 Mastercircle: an online tool	65
5.4 Facilitation of co-creation of deliverables	68
<u>VI. Lessons learnt and implications</u>	<u>71</u>
6.1 Summarising reflections	72
6.2 SUSPLACE's contribution to Sustainability Science	73
<u>Annex: Overview of SUSPLACE outputs</u>	<u>75</u>
<u>References</u>	<u>81</u>



I. Introduction

I. Introduction

1.1 SUSPLACE

SUSPLACE, the acronym for SUStainable PLACE-shaping, is a European Marie Curie (ITN) funding scheme for Innovative Training Networks funded by the European Commission. The overall aim of SUSPLACE was “to train Early Stage Researchers (ESRs) in innovative, interdisciplinary approaches to study sustainable place-shaping practices”. The program was implemented from 2015-2019, and explored how people can shape more sustainable places together. It analysed practices, pathways and policies that can support place-based approaches to sustainable development.

Sustainable place-shaping is seen as a way to strengthen the capacities and autonomy of people in places. The assumption is that place-shaping supports their participation, collaboration, and collective agency. A selection of European initiatives and cases was analysed in 15 research projects under the heading of five themes: Inclusive Places, Resilient Places, Connected Places, Greening Economies and Pathways to Sustainability. The central questions that guided SUSPLACE research were: What are place-based resources? What are place-shaping practices that can support the transformation towards sustainability? How can the full potential of places and capacities of people be utilised to spur place-shaping processes? How can researchers support such processes?

The SUSPLACE program involved place-based research carried out by Early Stage Researchers or fellows. The consortium was further composed of the supervisors of the individual fellows, as well as seven non-academic partners representing the public sector, NGOs and consultancies, visualised below. The SUSPLACE program supported the fellows with training to learn skills in collaboration, participative research, interdisciplinary working, and multi-method ways of working. Fellows were also engaged in the work of non-academic partner-

institutes via 3-months internships. Overall, the program provided a setting where place-based research, the roles of researchers and lessons learnt were regularly discussed during joint events and meetings, which took place biannually.

This report provides an overview of the SUSPLACE findings and the why, what and how of sustainable place-shaping. It also includes a description of our learning journey, and highlights inspiring outputs.

SUSPLACE partners





1.2 Transforming places

Places face all sorts of sustainability challenges such as inequalities between places, exclusion of people, poverty, economic decline, resource depletion, ecological hazards and food insecurity. Often a narrow approach to sustainable development is promoted that is limited to efficient resource use and where development is understood as economic growth. Such a 'place-less' approach is not sensitive to differences in contexts and places and the relations between places. A place-based development towards sustainability, in contrast, acknowledges the activities, energies and imaginations of the people (i.e. communities) and how these can have an impact on the environment and the economy in a more sustainable way [1].

Sustainability is a normative concept referring to the responsibility of decision-makers to make short-term decisions from a long-term perspective, considering the effects of these decisions on future generations and taking into account a range of geographical scales. The much needed transformation towards sustainability is not only driven by practices and political structures, but also by beliefs, values and worldviews that influence people's attitudes

and actions. We call this the 'inner dimension' of transformation [2]. It has been argued that a transformative learning process – which involves a shift in consciousness – is needed for people and societies to change their current way of living and to adapt sustainable or regenerative behaviours. Insight into the possibilities for such 'change from the inside-out' helps us to understand the reasons behind people's choices which determine their daily activities, and what drives their willingness to support change.

SUSPLACE assumes that people/societies are able to transform their environment and to promote an inherently sustainable approach in finding 'place-based' solutions to societal challenges. A place-based approach to development [3] builds on the specific resources, assets, capacities and distinctiveness of places that can strengthen the resilience of areas. The challenge to develop sustainable, place-based pathways for the future has become especially urgent in the wider debates on the depletion of fossil resources and climate change. The simple evidence of a global ambient temperature rise is undisputable. Climate change impacts places in different ways. According to the International Panel on Climate Change these

spatial differences include increases in: the mean temperature in most land and ocean regions, hot extremes in most inhabited regions, heavy precipitation in several regions, and the probability of drought and precipitation deficits in some regions [4]. Scientists argue that the rise of CO2 emissions combined with the melting of the Arctic ice and a rise in sea water level will result in non-linear, complex and partly unpredictable changes, or even in a societal collapse [5]. The rapid pace of such upcoming changes leaves governments a very limited window of opportunity to take measures in transforming our carbon dependent society. As a response, energy and sustainability policies are quickly gaining more urgency and momentum as part of the political agenda. The European Commission for example has a long-term aim of achieving a carbon-neutral economy by the year 2050 in order to reach the climate goals of the Paris Agreement.


Issues regarding challenges such as energy transition and climate change, or food security, scarcity of resources and inequality, are inherently political, societal and spatial. Being political issues, they require negotiations between policy-makers and other actors to determine goals and interventions needed to implement these

goals. They are societal issues, in the sense that humans have to 'deeply adapt' to uncertainty, instability, and unpredictability, which requires a change in emotional and psychological awareness, mindsets and attitudes. They are also spatial in that the causes, impacts and potential solutions of environmental problems often occur on different geographical scales.

SUSPLACE advocates that place-based development can accommodate public participation and negotiation, local knowledge and sense-making, practices and planning to support sustainable development [6]. Place-based research helps to understand how practices on the ground can have transformative power. However, more research is needed to answer questions such as: what motivates people to transform (needs), what should be changed or transformed (challenges), how to transform these (via innovations) and through which practices transformation can be achieved. The term transformation has been described in different ways. SUSPLACE considers transformation as a radical bottom-up perspective of change across sectors, which includes:

- the practical, policy and personal sphere [7]
- a spatial and place-based perspective
- the acknowledgement that human activities



- 
- have to stay within planetary boundaries [8]
 - changing the relations between society and the environment, and between people and their environment [9]
 - innovations which support new pathways towards sustainability
 - a 'deep adaptation' to change, including the emotional and psychological attitudes needed to change awareness and behaviour [5]

Although leadership is needed to transform places and images for the future (textbox 1), transformation does not call for monopolies of single actors taking the lead, but for collaboration, coalition building and co-creation. This includes the knowledge, imagination and capacity of 'people on the ground'. SUSPLACE paid specific attention to the wide array of citizens' initiatives in the unfolding participative society or 'do-it-yourself democracy'. These individual and collective initiatives can potentially transform their place according to their ideas, needs, values and demands. As one of the non-academic partners, RoyalHaskoningDHV, mentioned: "The SUSPLACE program has addressed and explored an important trend in our societies: the increasing importance of joint initiatives and collaborative action of societal stakeholders / civil society and government and/ or private companies to enhance society together. In our daily work we encounter the significance of these kinds of initiatives, of 'shared ownership' in making transitions in sustainable energy production and consumption, in sustainable food and agriculture, in climate change, really happen".

The SUSPLACE program provides such initiatives a platform and voice via the research projects.

Imaginative leadership: 'the Cornwall Retreat'

Kelli Pearson

The goal of this project was to explore the potential of arts-based practices in nourishing imaginative leadership, which in turn can support ecological transformations. One of the case-studies was a retreat, an experimental arts-based residency, which took place in Cornwall in the UK. It was designed to engage local citizens around the topic of climate change. The retreat was set up as a loosely simulated holding camp in which people would imaginatively experience and explore life as a climate change refugee.

During the four days of the retreat, 38 participants from the coastal Cornwall region camped and cooked together and engaged in various hands-on creative activities. These activities were intended to explore emotions and issues related to climate change and its potential impacts.

Addressing climate change and other global social-ecological challenges requires adopting radical transformations in the future. Individual and collective responses will necessarily involve a mix of both mitigative and adaptive actions. These (future) issues represent environmental, cultural and political phenomena that are re-shaping the way we think not only about ourselves, but also about our societies and even humanity's place on earth. Inferred from this, the retreat was about reshaping social imaginaries and mindsets about sustainability. It concerned reshaping the way we think about and respond to the existential threat of climate change and the potential collapse of ecological systems.

The research led to three key insights. First, fostering citizens' knowledge allows people to engage with climate change in ways that make sense in their everyday lives. This potentially opens up new pathways for action. Second, supporting experiential learning about climate change through resonant experiences enables people to better understand the implications of climate change, both personally and empathetically. Third, arts- and maker-based approaches are an effective instrument for engaging situated knowledges and supporting experiential learning.

For more information, see:

<https://www.sustainableplaceshaping.net/re-treat-cornwall-how-to-live-when-sea-levels-rise/>



1.3 Research projects

The 15 fellows investigated a range of cases and practices in different European contexts (figure 1 and table 1). A practice is defined here as a shared bundle of activities and ideas. Practices are sets of 'doings and sayings' that involve both practical activity and their representation [10]. Some of the fellows focused on one place-shaping initiative in particular, while others looked at practices in various places or compared places/regions.

As the fellows performed place-based research in a foreign country, this raised ethical issues. SUSPLACE therefore developed an ethical policy and data management plan that was implemented as part of the individual research designs, including an information sheet and letter of consent for participants. Ethical considerations involve the inclusion and exclusion of actors, vulnerability of actors and (hidden) power relations. Within SUSPLACE the assistance of native supervisors and non-academic partners was valuable in designing and implementing the research in an ethical way.

Most of the fellows carried out participative research or applied elements of action research [11]. The fellows often saw themselves as part of the networks of relations in the place they were studying. They spent time in the researched places and built relations with inhabitants. As one of the fellows mentioned: "becoming a participant in the community's life allows for a deep relation with the key actors, and for gaining trust". Their engagement influenced the relations that shape places. This influenced fellows as well: "I allow myself to connect to the research and my research participants in a personal and emotional way and reflect upon the feelings that they evoke in me and the ways their stories touch me personally..."

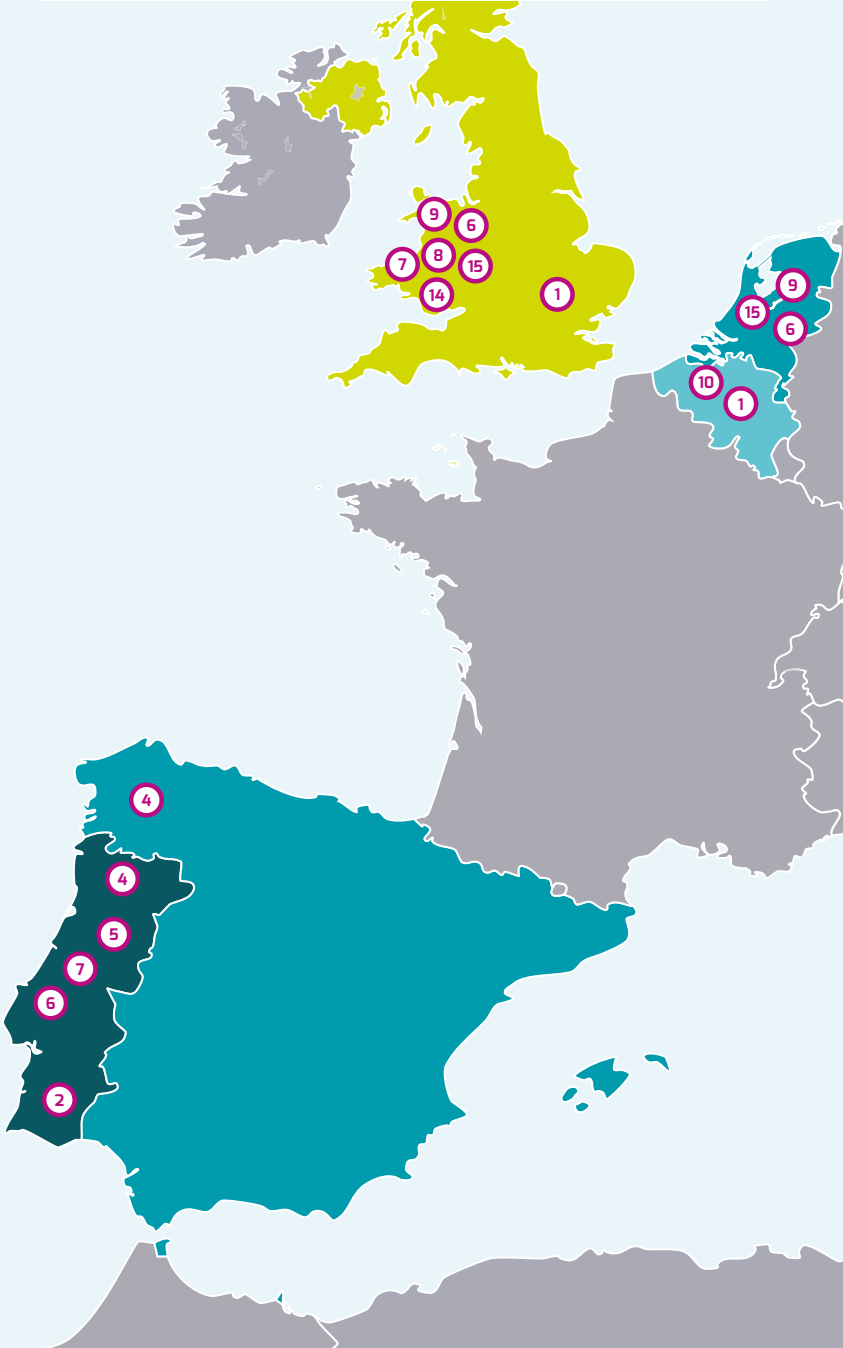
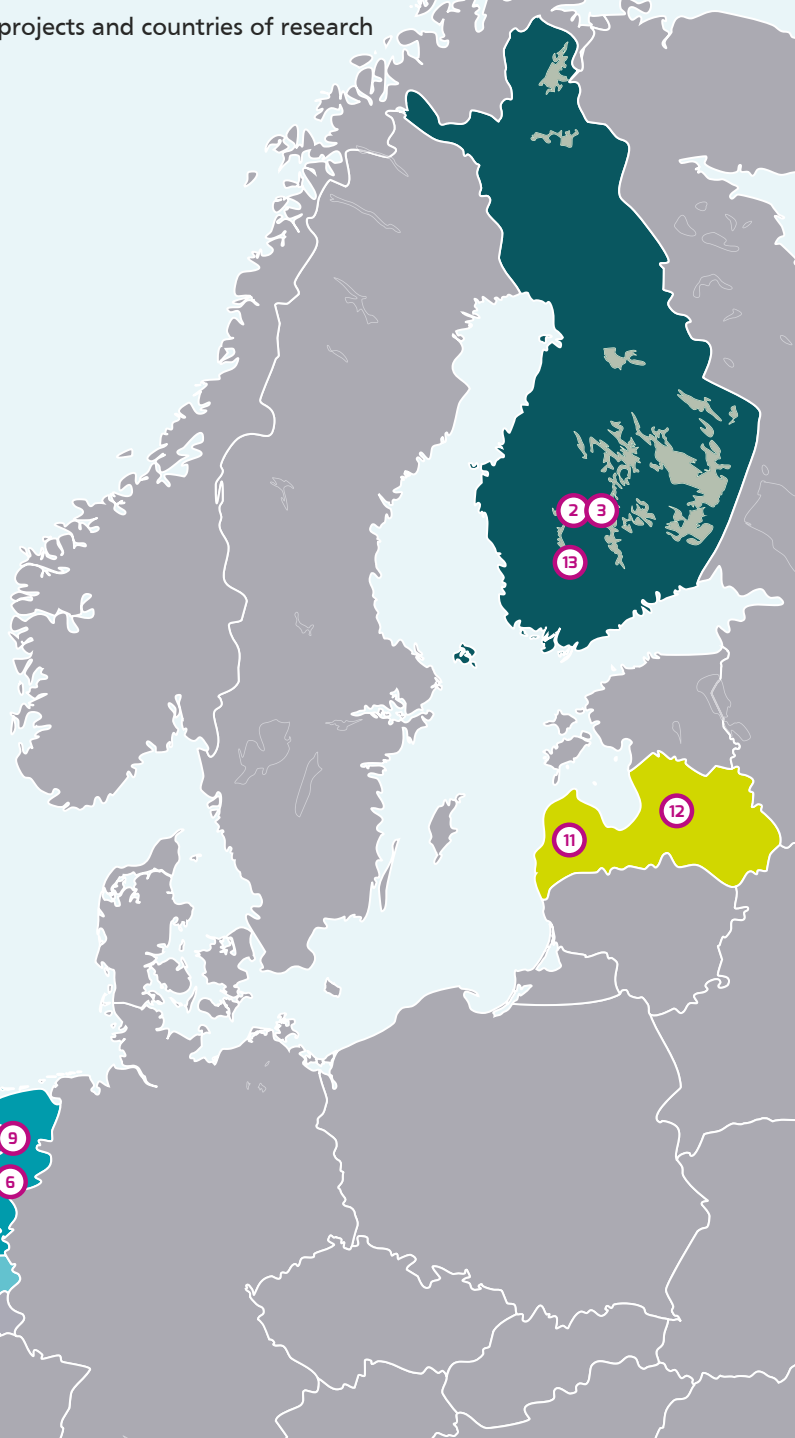
Through this type of engagement with place, participants and networks, fellows became conscious of their role as a researcher. They took on different roles, influenced by their viewpoints on sustainability and on their concept of place itself, and by their engagement with people. During the research some fellows experienced a lack of power: "I think my topic and the level I work at (city-regional) leaves very little space for me to do something meaningful...the discussions, plans and strategies for the city-region happen at a highly political level to which I don't have access and almost zero capacity to contribute to". Others were however able to spur joint learning (textbox 2).

A representative of one of the non-academic partners, The Global Ecovillage Network in Finland, mentioned: "Perhaps the most important lesson I learnt from the SUSPLACE project was a new, broader view of research. The SUSPLACE project's way of connecting science to social sciences and creative projects was a very positive experience. The multitude of ways and examples of participatory learning made a strong impression on me". In section 4.3 we further reflect on the role of place-based researchers in sustainable place-shaping.

The fellows creatively engaged participants in places in a meaningful way, highlighting that research should be driven by the needs of the people in places and be attentive to the relation between researcher and participants. In their data-collection they applied various methods to give voice to people, to map their views and experiences, to bring people together, and to co-create knowledge (table 1).

Figure 1. Map of the SUSPLACE projects and countries of research

Nr.	Project title	Country of research	Context/setting/cases
1	Sustainability awareness and agency in food	Belgium and the UK	Food consumers
2	Ecovillages and sustainable living	Finland and Portugal	Three intentional communities
3	Sense of Place	Finland	Small industrial (rural) town
4	Managing the commons	Portugal and Spain	Forested common lands
5	Re-grounding of practices	Portugal	Depopulated rural village
6	The energetic society	Netherlands, Portugal and Wales	Three citizens initiatives in renewable energy
7	Place ambassadors	Wales and Portugal	National Park in Wales; a depopulated rural village in Portugal
8	Connected learning spaces	Wales	Community gardens in Wales



Nr.	Project title	Country of research	Context/setting/cases
9	Leadership of place (and arts-based methods)	Netherlands and Wales	Arts-based
10	Circular economy	Belgium	City of Brussels
11	Place branding (changed later to permaculture)	Latvia	Permaculture in Latvia
12	Social economy, social entrepreneurship	Latvia	Social economy
13	Nature as pathway	Finland	Green care practices
14	Sustainable city-regions	Wales	City-region Cardiff
15	Place-based policies and pathways	Netherlands and Wales	Virtual places

Sustainability learning

Alice Taherzadeh

This study focused on designing, implementing and investigating a specific experiential learning methodology called Service-Learning, which involves the use of community service to achieve learning outcomes. The study launched and evaluated the volunteer students' education project Tyfu i Ddysgu (Growing to Learn) at Cardiff University in Wales. The aim of Tyfu i Ddysgu was to improve the sustainability of five local community gardens. The project acknowledged the importance of extra-curricular learning experiences and, through a place-based approach to education, aimed to connect the students with sustainability issues in their local communities.

The empirical findings suggest that having rich interactions between students and community gardeners helps students to develop appropriate real-world project ideas and exposes them to different perspectives. The community gardeners were generally very impressed with the creativity and enthusiasm of the students. However, they were concerned with issues of continuity and feasibility. These concerns were shown to be valid within the current landscape of higher education and several key barriers were identified to the success of the service-learning methodology in this context. The main barriers to employing

such a methodology are teaching staff's time and confidence with new approaches; course timetabling and term-time dates limiting the scope of projects and making it difficult to create interdisciplinary courses; the challenge of maintaining the commitment of the students throughout the academic year. In accordance with the literature, the barriers identified highlight that such methodologies need the support of the entire institution rather than depending on the work of individual teaching staff. Additionally, student mental health is a large and growing issue in the UK and such teaching approaches have the potential to improve wellbeing through developing a stronger sense of place for students in their university towns or cities. The findings suggest that this potential is best realised through formal courses rather than voluntary activities as the additional responsibility can place strain on students and is likely to be abandoned when their workload increases.



Table 1. Description of the 15 SUSPLACE research projects

Nr.	Project title	Country of research	Context/ setting/cases	Practices shaping...	Methods
1	Sustainability awareness and agency in food	Belgium and the UK	Food consumers	..alternative and mainstream practices of food procurement	Reflection via focus group coupled with photo-voice
2	Ecovillages and sustainable living	Finland and Portugal	Three intentional communities	..consciousness through transformative place-based experiences in ecovillages	Reflection via intuitive inquiry and photo-voice
3	Sense of Place	Finland	Small industrial (rural) town	..narratives through a co-creation process based on sense of place and values	Co-production via appreciative inquiry coupled with arts-based methods
4	Managing the commons	Portugal and Spain	Forested common lands	..human and more-than-human communities through commoning forests	Reflection via event-tracing and giving voice via storytelling and affective mapping
5	Re-grounding of practices	Portugal	Depopulated rural village	..networks in rural areas through innovation of traditional artisan local products	Reflection via participant observation, network analysis and giving voice via storytelling
6	The energetic society	Netherlands, Portugal and Wales	Three citizen initiatives in renewable energy	..governance for local provision of services by community initiatives/ social enterprises	Reflection via semi-structured interviews
7	Place ambassadors	Wales and Portugal	National Park in Wales; a depopulated rural village in Portugal	..narratives and place ambassadors through visual methods	Giving voice via collaborative video-making.
8	Connected learning spaces	Wales	Community gardens in Wales	..learning through an educational co-design process in community gardens	Reflection via reflective journals and co-production via collective learning
9	Leadership of place (and arts-based methods)	Netherlands and Wales	Arts-based participative processes	..mindsets and narratives through creative and arts-based practices	Giving voice via storytelling and co-production via Theory U coupled with arts-based methods

Nr.	Project title	Country of research	Context/ setting/cases	Practices shaping...	Methods
10	Circular economy	Belgium	City of Brussels	..circularity in city/regions' economy through new chains of organic waste and nutrients management	Giving voice via modelling and storytelling
11	Permaculture	Latvia	Permaculture in Latvia	..ecological lifestyle through action research (embodiment of sustainability and permaculture principles)	Reflection via action research
12	Social economy, social entrepreneurship	Latvia	Social economy	..economic relations through social entrepreneurial practices of non-profit voluntary associations	Reflection via participant observation and action research
13	Nature as pathway	Finland	Green care practices	..people and place regeneration through social entrepreneurship of green care initiatives	Reflection via conceptual maps, giving voice via storytelling and co-production via Appreciative Inquiry, Theory U and arts-based methods
14	Sustainable city-regions	Wales	City-region Cardiff	..involving youth in city-regional discussions and promoting a more inclusive governance structure	Giving voice via photovoice, mapping and storytelling
15	Place-based policies and pathways	Netherlands and Wales	Virtual places	..peer-to-peer networks and de-centralised policies through block-chain initiatives	Reflection via action research, conceptual maps and co-production via Hackathon



II. What is place
and why does it
matter?

II. What is place and why does it matter?

2.1 What is place?

Research discusses in-depth what place is, and uses a variety of definitions and understandings for it. SUSPLACE describes place in the following way: place can be a neighbourhood, village, town or region, or even a workplace, which is shaped by people and by natural processes. The identity of a place is dynamic and continuously changing, so a place is always in the process of being made. It is never finished; never closed. Therefore, we speak of processes of place-shaping.

Place, however, is not just materially shaped and visible in the form of buildings, green spaces, recreational areas and infrastructure. It is a social space as well, where people shape communities and institutions. The relations that people build also shape places. Places do not necessarily mean the same thing to everybody. Although people have become part of global networks in their work and life, they still have a sense of place and are longing for a place to feel like home. Places thus need to be meaningful for people who live there (textbox 3). Place meanings are very diverse though, as a place covers several communities, values and interests.

The SUSPLACE program used a 'relational approach' to place. This means that places are not defined by administrative or geographic boundaries, but are seen as assemblages of social relations, continuously changing as a result of economic, institutional and cultural transformation. Places are not essences, but processes, and the product of flows and networks. The nature of a place is not just a matter of its internal (perceived) features, but a product of its connectivity with other places. Places are nodes in networks, integrating the global and the local [12].

Although places do have some continuity, they are dynamic and 'always under construction'. Places shape each other and are continuously reshaped via processes of change. This relational approach emphasizes the linkages between geographical scales. Processes that happen on a global and national scale such as climate change, the economic and political situation, and migration of people, have an impact on the local level. Likewise, the practices of people in localities also influence places and developments on higher scales.



Place ambassadors

Cátia Rebelo

Cátia Rebelo's work involved two engagement projects in two distinct locations: the Portuguese village of Carvalhal de Vermilhas and Brecon Beacons, a National Park in Wales. In both places documentaries were produced together with inhabitants, which helped them become place ambassadors.

Carvalhal de Vermilhas is a small rural village of around 200 inhabitants in Portugal. It faces depopulation, an ageing population and lack of employment, but has the potential to develop sustainable practices in tourism. Brecon Beacons is in a somewhat better economic situation, but suffers from similar issues. Being a national park, tourism is already one of its main activities. In both places, the researcher worked together with residents to test a new conceptual framework and to develop a co-produced documentary. The projects are an example of collaborative and inclusive strategies of place branding.

The research resulted in public engagement, capacity building and a set of empowered visions and expressions. By participating in the projects, the residents had a say in how they would like to shape their place with regard to tourism policies and development. The resulting documentaries are products that show the intangible heritage of the places and communities. They are also used as a tool to allow residents to reclaim their right and power as citizens to shape their place according to their needs and place values. The ownership and responsibility as well as shared power over the visual narratives mobilise participants to take action for their place.

Co-producing the documentary also motivated residents to be more effective and become collective ambassadors of their place. Moreover, the two documentaries (see the links below) can be used to promote the places more effectively to visitors, and potentially also to new residents, young people and labourers.

<https://www.sustainableplaceshaping.net/documentary-place-ambassadors-shaping-better-places-to-live-and-visit/>

<https://www.sustainableplaceshaping.net/sensed-place/>



People in places are not passive actors, but rather potential change-agents able to change a place, not only in response to something but also in a proactive manner. Place links people together. Via the practices people are involved in, they change social relations in networks on multiple scales. This makes place relevant as a site for social interaction: people with different experiences and backgrounds come together and discuss what they have in common or build a joint agenda for the future of a place. Social, economic and ecological aspects of life are linked in places and become concrete in the form of place-shaping practices.

SUSPLACE analysed place-shaping practices as embedded in the complexities of wider spatial connections. To illustrate this: in different parts of Europe people in eco-villages have started activities such as sustainable housing and permaculture. These 'local' practices are supported via participation in national and global eco-village networks, while this engagement in global networks also spurs learning on the ground (textbox 4).





2.2 Why does place matter?

Are places still relevant in a globalized world?

Places change at a rapid pace. Some scientists have argued that globalization has turned the world into a marketplace, where everything has become a tradable object, favoring some places over others. Cities and regions are seen as businesses competing for resources, aiming to develop 'smart solutions' driven by market forces [13].

Institutions that shape our society, such as the national state, have eroded in the past decades, handing over tasks to market parties and citizens. The sociologist Bauman has described our society as a 'liquid society' where power is exercised on a global scale, institutions are fluid, and the ways we live together are subject to change. The identity of people and places has also become fluid [14]. The rapid change and increasing complexity of our society has caused feelings of unsafety and insecurity in communities. People search to find anchors in situations of vulnerability and insecurity, while at the same time current institutions are wavering and unsettled, in a society which itself is in rapid and uncontrollable motion. As a response people try to develop 'social navigation' strategies to cope with these dynamics in places without fixed identities [15].

According to the Dutch architect Rem Koolhaas cities have become 'generic' as a result of capitalism. He argues that places increasingly look the same everywhere and uses the metaphor of an airport, where there is no authentic culture or history. The generic city is without characteristics, without identity and without a past - soulless [16]. According to Koolhaas the city has become unmakeable, and planning powerless. This raises the question: does place still matter?

SUSPLACE considers place as neither generic nor passive, and more relevant than ever. Processes that effect places such as capitalism, climate change, state decisions, or market relations, have a different spatial impact on places and play out in spatially varied ways. Inferred from this, processes such as globalization do not have generic, equal or uniform impacts. Furthermore, a place is not a blank canvas, but the result of culture, physical characteristics, local actions, and historic actions in the past, which creates inequalities, and spatial differences. Places are also unequal in the manner in which power, capacities and resources are mobilised, something that a local 'politics of place' must take into account. Places shape a wide range of opportunities and barriers. The physical form of places, their infrastructure, ownership and uses, all influence how people can live their lives, and enable or disable sustainable pathways for the future.

Place is also relevant because it has meaning for people. It holds the space for individual values and collective identities of people. A shared sense of place can potentially be a call for action and result in collective care and responsibility of resources in common lands (textbox 5).

Place brings people together. It is an arena and site of power where a variety of opinions and interests circulate, cutting across boundaries of wealth and institutions. It is a bridging notion that helps to understand the relations between interests and between humans and their environment. Place is a site of collective action and co-creation between diverse actors (text box 6).

Transformative learning in eco-villages

Siri Pisters

In this project the learning journeys of people living or temporarily residing in intentional communities or ecovillages were explored. Three communities were investigated:

1. Kurjen Tila, a biodynamic farm and ecovillage in central Finland. This is a relatively young community, composed of families that wished to move from the city to the countryside while not becoming socially isolated and while supporting the production of local, organic food.
2. Väinölä, a theosophical inspired community in central Finland, was founded 40 years ago. Väinölä aims at a peaceful world through focusing on personal and communal spiritual growth.
3. Tamera, a community and Peace Research & Education Center in southern Portugal. This is one of the biggest communities in Europe working for peace in all areas of life, while inspiring the broader network of ecovillages.

The empirical findings of the three intentional communities/ecovillages confirm the theory that 'outer' change goes hand in hand with 'inner' change. In the study, transformative learning is seen as a place-based phenomenon, grounded in the learning dimensions of connection, compassion and creativity.

The cases, however, show that each positive learning dimension is accompanied by its negative opposite learning dimension. In other words, though ecovillages intentionally try to move towards the 'positive' pole, learning actually involves a tension between these opposite poles. The research suggests that whatever is being created or shaped needs to be rooted in connection and compassion (both for humans and non-humans) in order for it to actually be sustainable, in a social, ecological, economic and cultural/spiritual sense.

See also: "Place based transformative learning: a framework to explore consciousness in sustainability initiatives", <https://doi.org/10.1016/j.emospa.2019.04.007>.



Common lands in Galicia

Marta Nieto Romero

This research explored how 'commoning' occurs in forested common lands, its impact on relations between humans and forests and how commoning can be promoted through policy and research. Common lands are regulated community-based properties that date back to the Middle Ages and are based on the collective use and benefit of resources. Common lands are open to anyone living in a particular parish. Access to common lands is closed to non-residents and ends for those who move away.

The term commoning refers to the process by which communities take collective care and responsibility of resources in common lands, and start using and benefiting from the land, while seeking an equitable distribution of benefits for the wellbeing of the community as a whole. It involves negotiations and collective practices to produce and care for the resources, and results in the creation of community economies.

This study looked specifically at practices in common lands in the Northwestern Peninsula, in North Portugal and Galicia in Spain. Both regions have conserved vast areas of common lands. During the last century, however, links between communities and common lands have eroded. Only a few communities still take the responsibility of common lands and try to (re)build the necessary social underpinnings of community commons. The Spanish cases of the Teis and Carballo common lands are examples of communities that started commoning again. These communities are putting renewed efforts into building community relations around the collective use and benefit of resources.

In both cases the commoning of forests started as a way to fight against the extractive usage of the forests (i.e. exotic tree plantations). The communities self-organised to generate benefits from the forest that went beyond wood

production. They rebuilt the native forest to restore the ecosystem. The commoning of forests is seen by the communities as a way to attach people to their place, to fight against rural abandonment and to re-build relationships of care between humans and nature. In the Teis common land, people try to restore Galician native forests and societal connections via communitarian and school activities. In Carballo people manage their common land with a focus on forest multi-functionality including, among other activities, Galician pig and horse breeding, honey production, festivities and training activities. In both cases, commoning can be considered as an activity dominated by the volunteer work of a group of people that want to self-organise to address community needs, with a focus on fair access, use, and long-term sustainability.

The cases in the Northwestern Peninsula reveal that community strategies are a condition for creating and maintaining a collective management of forests. Change, for instance, must be implemented not too quickly, to prevent conflict. Informal communication is also key, as well as the involvement of external people (that are not part of the 'legal' community), for technical or moral support. Lastly, community social events in forests are important in building connections between people and forests, and for community building.

See also: <https://www.sustainableplaceshaping.net/video-rebuilding-the-commons/>



Citizen Initiatives

Diogo Soares da Silva

This research aimed to understand the potential and limitations of Citizen Initiatives (CIs), organised as new institutional arrangements between citizens and governmental organisations; it also looked at how these initiatives could contribute to shaping more sustainable places. *Coöperatie WindpowerNijmegen*, for example, is a citizen-owned energy cooperative in the city of Nijmegen in the east of the Netherlands. Its goal was to build a wind park composed of four turbines in municipality-owned land along a motorway, the so-called Windpark Nijmegen-Betuwe. The cooperative started with roughly 30 people and now has more than 1.400 members, with over 1000 residents of Nijmegen purchasing shares that helped to fund the wind park. This wind park was completed in 2016. As of 2019, the cooperative is planning the construction of a solar park in the same site as the wind park: Zonnepark de Grift, a complex of 17.000 solar panels.

Place-shaping processes in the case of *Coöperatie WindpowerNijmegen* involve the shift from fossil fuels to cleaner forms of energy and the decentralisation of its production. Effectively, the citizens of Nijmegen own 95% of the wind park. The great success of the wind park prompted the cooperative to go further and seek for another round of funding in order to build a solar park. The successful collaboration between the cooperative and the municipality can be considered a best practice. In the Netherlands there is strong

institutional support for citizen-led initiatives in general and for the decentralised production of clean energy in particular. In addition, the initiative benefitted from a municipality that aims to be carbon-neutral. Nijmegen, for instance, was named the European Green Capital of 2018. The large support of the local residents has also allowed the initiative to flourish and finish the construction of the wind park in a short period of time.

It is important to be aware though, that a reliance on governmental support schemes and institutional support at various levels can make an initiative vulnerable to abrupt changes in policy and political context. Continuity in energy policies is, therefore, essential, and governmental incentive schemes should offer a long-term guarantee in order to reduce the uncertainty for investors.

See also: Diogo Soares da Silva, Lummina Horlings, Elisabete Figueiredo (2018) Citizen Initiatives in the Post-Welfare State. *Social Sciences* 7(12):252. <https://doi.org/10.3390/socsci7120252>





2.3 Interpretations of place

SUSPLACE based its research on a relational approach to place. During the program, however, a wide range of notions about place were used and are discussed below.

Place as a (virtual) arena

Place is an arena of multiple stakeholders and a site for policy interventions. Place, understood as arena, sheds light on how social relations shape place materially and immaterially, and perpetuates the formation of new relations. SUSPLACE researchers analysed the 'outer dimension' of transformation, including behavior, practices, and changes in organisations, society, governance, and political-economic systems. They raised questions such as: which actors are or should be involved in place-shaping and how to support interaction, restore connections, create new arrangements, and build capacities in places to enhance transformation.

A place does not have to be a physical space, it can also be virtual. For example, one fellow's research analysed virtual spaces enabled by blockchain technologies. The project showed how such technologies can support peer-to-peer communication and exchange between businesses, citizens, and governments outside the existing governance realm: "The blockchain experiments that I am researching are grassroots projects trying to create a systems' change by creating a new infrastructure – for finance, politics, energy and so on. My research studies the effect that it has on decentralisation of power and how it creates a new (global) geography of politics and power" (textbox 7).



Place as state of mind

Place can be seen from a psychological perspective linked to people's mindsets and motivations. People's mindsets influence their attitude, motivation and behaviour towards sustainability. A shift in mindset can create new opportunities: "Looking at a place or an issue from a new perspective - such as the ecological self, the perspective of uncertainty, or deep care for place - can open up spaces of possibility...". Humans' experiences in places are not merely cognitive or rational, but also embodied via multiple senses, emotions and intelligences. Learning to embody place can potentially result in a stronger connection with a community or the environment and to a shift in consciousness, so that people become more aware of the impact of their actions.

People's desire to act on this consciousness, through for example consuming more sustainable food, may however be blocked by the environment or by an inability to know how to act in a more sustainable way (textbox 8).

Place as narrative, place as imagined

Place can also be interpreted as a socially constructed narrative. A narrative can be understood in two ways: as a means to make sense of the world (a way of knowing) and as a practice (a way of doing), using language to build new knowledge via storytelling [17]. Places are produced and reproduced by telling stories.

SUSPLACE investigated place meanings, shared values, and people's perceptions of place and how these can contribute to joint narratives or stories for the future. This process starts with an exploration of people's sense of place – their attachment to their environment [18]. It builds on what people appreciate and value about their place as a starting point for joint action (textbox 9).

Place based civic tech

Omer Husain

This project researched socio-political practices and movements that disrupt politics and political action. Through unique and innovative forms of self-organisation and self-governance, local governments, activists, technologists, social innovators and citizen groups are creating protected spaces within and more radically outside the existing institutional setting. They have the capability to create a new geography of politics through altering the way decision making, citizen/community participation and place-based development occurs in different places.

The focus of this project was on emerging technologies (blockchain) that impact how global and local politics are practiced. The study questioned technological and political design: the decentralisation of decision-making, distribution of power, participatory or collaborative politics, the desirability of public involvement etc. Some of the most innovative socio-political processes and movements were investigated which utilize technology and develop methodologies to support these.

The notion of 'place-based civic tech' was introduced, referring to citizen engagement technology co-designed by local government,

civil society and global volunteers. A key question explored was to what extent the creation of a digital space for autonomous self-organisation allows for the emergence of a parallel, self-determining and more place-based geography of politics and political action. The research showed that combining online tools with offline collaborative practices presents a unique opportunity for decentralisation of power and democratic decision-making. This can both politically motivate civil society and update the infrastructure of democracy. Research data was drawn from a range of empirical sources, including an in-depth case study of the radical municipal movement in Spain.

A conclusion was that there is a clear and compelling narrative of cities taking power back, in the form of a plural and globally networked movement. Further research is suggested on experiments and movements that currently still exist below the academic radar.

See also: [Syed Omer Husain, Alex Franklin and Dirk Roep \(2019\) Decentralising geographies of political action: civic tech and place-based municipalism, Journal of Peer Production, Issue 13: 1-22.](#)



... (Bank)
... (President)
... (Collective)

The Future A Fishbowl

Roscoe Brown (Lecturer)
Lorraine de Fozzard (VC)
Melissa Brown (Our Cities Hub)

Moderator:
QUISHARE | FEST 2018 | @quishare

QUISHARE FEST



Food citizenship

Marie Quinney

This research project analysed the food procurement of citizens. Food consumption shapes various food environments ranging from the conventional (e.g. supermarket) to a niche environment (e.g. farmers market or community gardens). Understanding the processes that underlie human behaviour is key to promoting sustainable consumption habits. The research focused on the citizen experience, emphasizing the role that people can have in changing the food system, rather than leaving it up to policymakers and industry leaders. Flexible and participatory methods were used for data-collection, such as photovoice and focus groups.

An assumption was that food citizenship can exist at the global as well as the local level, and is expressed not just in alternative spaces but also in supermarkets. The researcher argued that food citizenship belongs not to a physical place, but to a psychological place: place can be a sense of community or identification with a certain moral order. This fits with the relational nature of food that can be simultaneously bound to the local and global scale. The experience of food citizenship creates a place within consciousness first, and then has effect in the physical world via (the impact of) citizens' behavior.

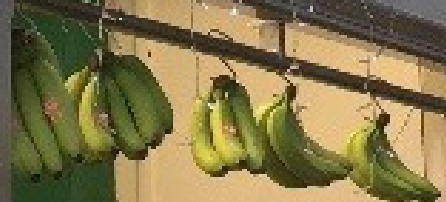
Through food citizenship practices, human relations can change in communities (with friends and neighbours for example) and via distant emotional connections to others in faraway places (such as farmers who grow the food we purchase). Equally, the relationship one has with oneself can evolve through a deeper connection to the food that we procure and the responsibilities people feel towards their environment. This can be a frustrating, emotional and/or empowering realisation. The participants in the research often found the experience of understanding their own motivations in food consumption insightful.

128

YEATES

FRUIT & VEG

Rollies & Suitcases



Handwritten price tag: 100/100

Handwritten price tag: 100/100

Handwritten price tag: 100/100

Handwritten price tag: 100/100



Sense of Place: a Finnish industrial town re-imagining its future

Sara Grenni

This research investigated the role of sense of place and place values in shaping narratives of change and transformation towards sustainability. It was set in Mänttä, a small town about 100 kilometers northeast of Tampere in Finland. The town has a rich industrial history linked to the family that founded the paper mill. The mill is still operating and employs a significant portion of the local population. The family also acted as local patrons and brought art and culture to Mänttä, building an art collection that became a foundation and a local museum. The museum grew in importance over recent years and is currently one of the most prominent in Finland, attracting over 100.000 visitors per year. The municipality of Mänttä-Vilppula aims to promote the cultural and artistic heritage of the town and is planning to revitalize the town center to make it more attractive for both tourists and residents. This redevelopment plan, which would physically change the town center, has been put on hold due to budgeting issues. In turn, the material changes proposed will likely affect some immaterial aspects of place, such as the town's perceived identity and its residents' sense of place.

The research in Mänttä specifically focused on the 'inner' dimension of change, in the form of individual and collective human values, place

meanings and place identities. The project relied on semi-structured interviews and arts-based workshops based on Theory-U and Appreciative Inquiry. The latter involved 'silent conversations' – concept mapping of local meanings and values, 'future headlines' and collage/visual narratives. Throughout the research process, a dialogue was created with the town residents on their visions and desires for the future, rooted in their sense of place and values.

The use of an appreciative approach supported positive feelings among the research participants. This resulted in a collaborative atmosphere. In addition, the approach facilitated a re-appreciation of assets that are otherwise often overlooked or taken for granted. This, in some cases, led to participants changing their perception about their village in a positive way. The use of arts-based methods proved useful as a tool to bring meanings of place and underlying values to the fore, which subsequently could be used in the conversations on how to build a joint narrative for the future [19].

See also: Sara Grenni, Lummina Horlings, Katriina Soini (in press). Linking spatial planning and place branding strategies through cultural narratives in places. *European Planning Studies*.





III. What is
sustainable
place-shaping?

III. What is sustainable place-shaping?

A key assumption within SUSPLACE was that people have the capacities to change the relations that shape places. These capacities become materially visible in practices such as craftsmanship, the built environment, forms of land-use or consumption patterns. Sustainable place-shaping means that these practices are embedded in the characteristics and assets of a place in a sustainable way, changing the relations between people and their environment on multiple geographical scales. As aforementioned, the concept of sustainability can be interpreted in varied ways.

3.1 Interpretations of sustainability

The concept of sustainable development was born from the need to preserve the quality of natural resources for present and future generations. It is commonly perceived as a 'balancing act' between planet, people and profit. Embodied in international policy agendas starting from the 1972 Stockholm Conference, the best-known formal definition of the concept is contained in the so-called Brundtland Report 'Our Common Future', published some decades ago [20]. In this report sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. However, in the Brundtland Report the connections between sustainability and notions of space and place remain implicit and underestimated. Therefore in SUSPLACE researchers aimed to analyse the potential of place-based practices for future sustainable pathways, and positioned themselves explicitly in the sustainability debate, applying different interpretations, which are described below.





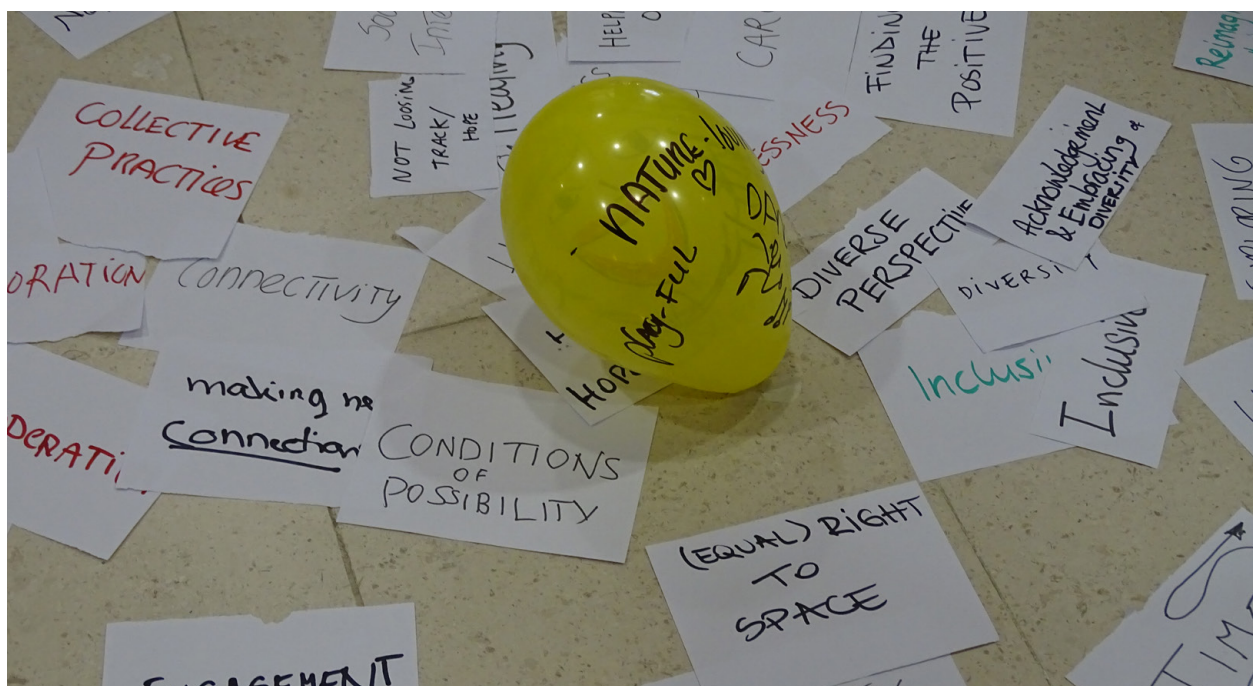
Interpreting sustainability in terms of ecological limits acknowledges the ecological boundaries in all human activities and aims at shaping practices that fit within those planetary boundaries. In other words, the goal is to ensure that no one falls short of life's essentials (from food and housing to healthcare and political voice), while ensuring that collectively we do not overshoot our pressure on Earth's life-supporting systems, on which we fundamentally depend – such as a stable climate, fertile soils, and a protective ozone layer [21]. SUSPLACE research shed light on what the boundaries of human activities are, how societies can be organised in ways that respect those boundaries, and what the implications are for different groups of people. The fellows took two normative stances in their research: a critical stance towards the market economy and a regenerative position as a guiding concept for their research.

The term regenerative practices refers to initiatives 'beyond sustainability' which create new relations between ecological and socio-cultural systems [22]. Drawing from ecology and originating in the design field, the approach to regenerative action entails a radical mindset shift among all inhabitants of a place. The assumption is that the crises that affect our world, create the urgency to actively restore or repair – not just sustain – the social, economic and environmental damage done to the planet. Arguably, efficiency and 'mere sustainability' are no longer enough, and humans need to regenerate the health of places and support the co-evolution of human and natural systems in a partnered relationship. The approach to regeneration surpasses the idea of doing less harm, and aims at affecting positive change (textbox 10). Used in an interdisciplinary manner, there is wide consensus that regenerative practices are borne from the uniqueness of a place. Regenerative action initiates transformation and highlights the need to constantly re-evaluate and adapt to new conditions – an aspect particularly important in the face of rapidly changing climate conditions.

Sustainability can also be interpreted as constructed by actors in places. This position understands sustainability as negotiated between stakeholders in places. As one of the researchers mentioned: "It is a process, more than an essence or a specific goal: an emergent property in a collective discussion about desired futures". Ideas, wishes, demands and opinions differ between actors involved and these should be respected. Sustainability is discussed in arenas of stakeholders, including varied opinions and implicit normative and political intentions. Place-shaping initiatives can confirm but also challenge those intentions.

Most fellows acknowledged the need to view sustainability from a system perspective. This view highlights the different dimensions or 'pillars' of sustainability (people, profit, planet) and the interconnections between geographical scales and levels of change. The three-pillar definition of

sustainability was criticised because it favors one pillar (economy) over the others (ecological and social). In a system perspective attention is given to the flows of resources, exploring possibilities to develop a more circular economy (text box 11). Sometimes other dimensions were added to the interpretation of sustainability, such as the aesthetic, inner, and cultural dimension. In some research projects the inner dimension of transformation was prioritised, including meanings, values, culture and worldviews with regard to sustainability as a condition for transformation. SUSPLACE fellows applied theories from environmental psychology, cultural geography, transformative learning and pedagogical theories. While dealing with the differences in interpretations of sustainability, the fellows often played a role as knowledge brokers between citizens, policy-makers and scientists.



Permaculture and regenerative practices

Elgars Felcis

This project resulted from a process of co-creation with the Latvian Permaculture Association and was carried out in collaboration with several permaculture farms. The aim was to explore how permaculture in Latvia supports sustainability transformations and regeneration and the key challenges of these processes.

Regenerative places and practices aspire to be more than just 'sustainable', which is often limited to 'self-sustaining', 'lasting', 'enduring' or 'doing less harm'. An assumption is that climate change and other socio-ecological problems make the reformist approach to sustainable development and related fields of corporate sustainability redundant. Regenerative implies not to generate problems in the first place while also regenerating the negative impacts of social and economic practices in places so far. Permaculture is considered a regenerative approach both environmentally and socially.

This research demonstrated that permaculture closely matches Latvian realities, bridging traditional practice and novelty and thereby providing potential for regeneration and resilience. On the local level, the success of permaculture depends on its ability to be deeply embedded in localities and to revive cultural, local practices that people feel connected to. Even if people are not explicitly interested in sustainability or climate change, cultural and local practices can still provide an entry point for them. Through this common ground, gradual change, adaptations and novel practices can be introduced.

See also the video:

<https://www.sustainableplaceshaping.net/video-sustainability-transformations-through-permaculture/>



Circular economy: Brussel's food system

Anastasia Papangelou

Where does your food come from? Where does your organic waste go? Can these two be the same place, to create a closed-loop food system? The main objective of this research project was to identify, assess and compare different ways of making Brussels' food system more circular and ultimately more sustainable. The focus was on phosphorus, the nutrient that links different environmental concerns such as resource depletion and aquatic pollution, and domains such as food, water and waste, and the city with its hinterland.

Brussels' food system is a linear one. Food is imported from the rest of Belgium or abroad, organic waste is mainly incinerated, and treated sewage sludge ends up in landfills. This means that the valuable nutrients entering the city with the imported food, end up buried in landfills or locked in the techno-sphere. At the same time, new nutrients in the form of mineral fertilizers have to be applied to the hinterland, to grow the food that Brussels consumes.

Brussels has recently adopted several initiatives towards better resource management and a more sustainable food system. The 'Strategy Good Food' and its regional circular economy program 'BeCircular' provide examples. In addition, new ways to manage organic waste in the city are currently being discussed. Organic waste is collected on a voluntary, individual basis since 2017 but an important question still remains: what to do with this waste? The city is considering the construction of an anaerobic digestion facility, which can become a source of renewable energy for the city. Other actors are promoting more decentralised or hybrid solutions such as the expansion of community composting sites and the implementation of small-scale facilities throughout the city. This project aimed to assess the potential implications and contributions that such diverse solutions can have towards a more circular food system for Brussels.

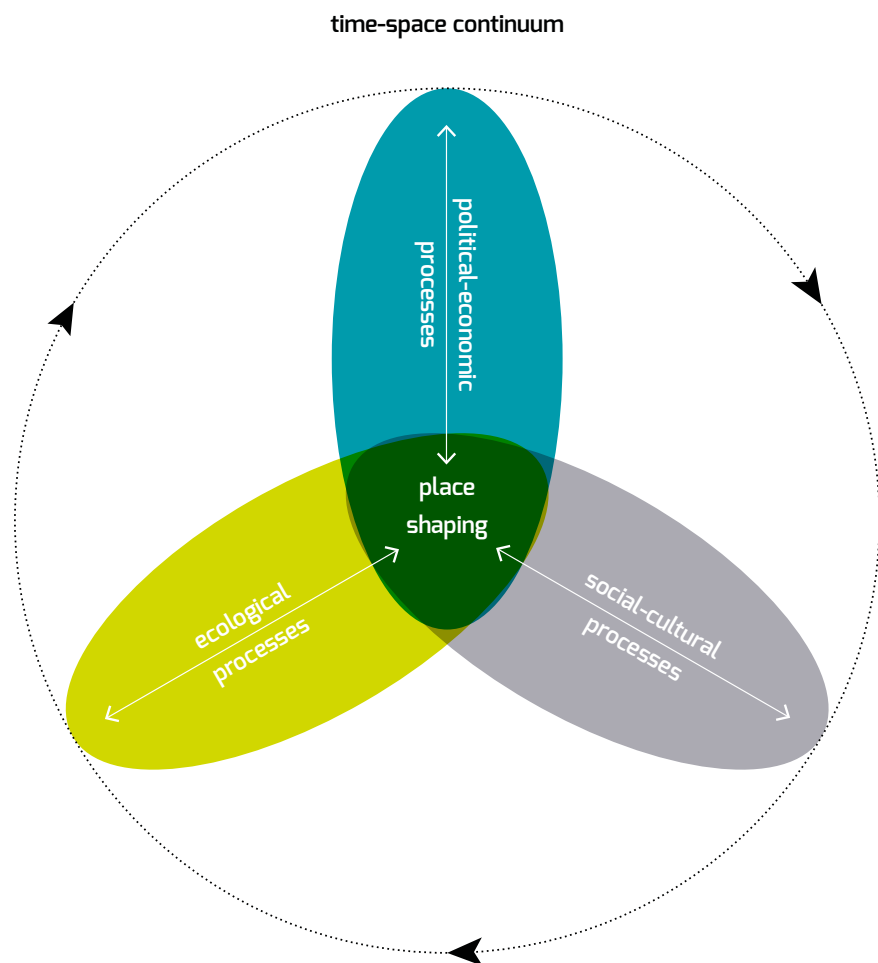


3.2 Place-shaping

Place-shaping takes into account that dominant processes 'propel' everyday living; these include socio-cultural, political-economic and ecological processes (figure 2). These processes also provide the space for people to position themselves and perform place-shaping practices. These practices create connections between nature and society, the local and the global, the rural and the urban. Processes of sustainable place-shaping 'connect people to place' [23]. Examples are specialty food products, craftsmanship specific for a locality or region, or agriculture based on agro-ecological principles; agreements for the provision of ecosystem services, adapted to the specific natural context; and place-based policy agreements, grounded in the features of a place.

A key question is how to shape more sustainable places. Doing so requires a collective effort that involves collaboration between citizens, governments, private entrepreneurs, scientists and non-governmental organisations. Processes of co-creation between these actors are key to deliver more sustainable futures. SUSPLACE has produced an interactive policy guide: "Creating sustainable places together", to show how policy-makers and practitioners across a range of different policy areas can support sustainable place-shaping through well-designed participative work with communities (see chapter 4).

Figure 2. Processes that determine place-shaping [24]





time-space continuum

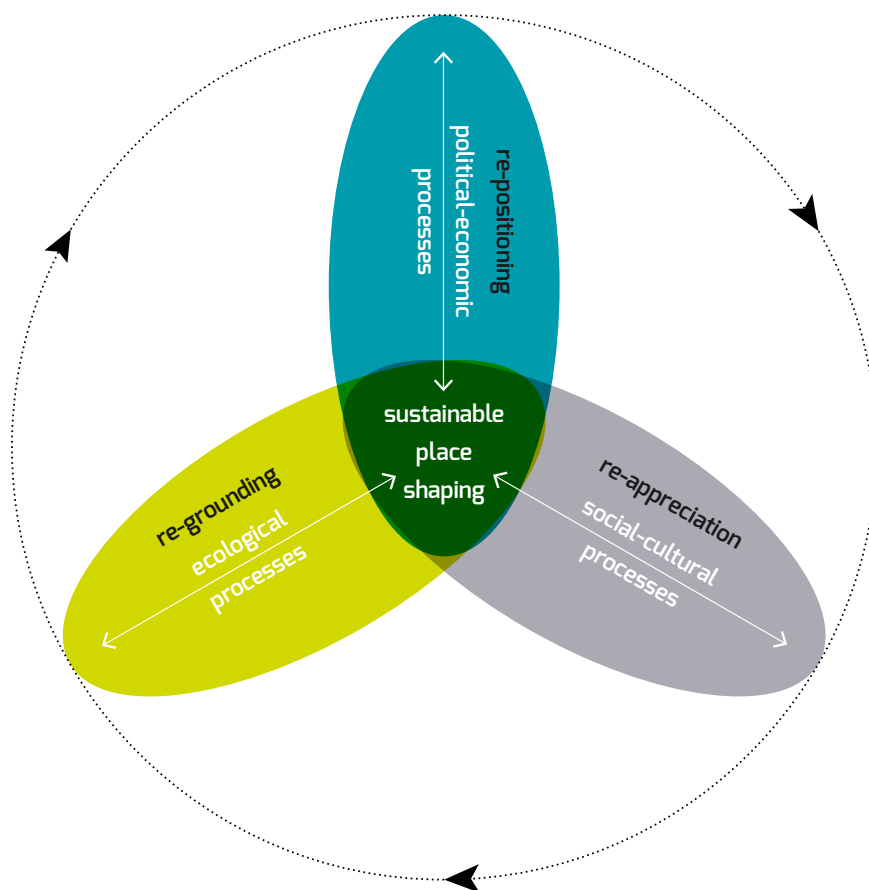


Figure 3. Shaping sustainable places [24]

SUSPLACE also developed a framework as a starting point for research. The assumption is that sustainable place-shaping happens via processes of re-appreciation, re-grounding and re-positioning, which alter the relations that shape places (figure 3).

1. personal meanings, associated with feelings and self-identification
2. meanings related to a sense of community and
3. meanings attached to the environment: the physical natural or built environment, a symbolic, historical, or even institutional environment.

Re-appreciation of places

Re-appreciation analyses how people value their place and reflects on the relations which they are part of. The goal is to create more autonomy and self-efficacy in the daily sphere, contributing to place-based development. Processes of re-appreciation can strengthen people’s sense of place, an umbrella term for the connections and values people hold with regard to their place. Sense of place provides information about which place qualities people consider as worthwhile and what should be preserved. Researchers and practitioners can analyse the meanings attached to place, including [25]

If people become more aware (‘making sense’) of their intentions, values and sense of place, they will be motivated to get involved in their place. This shapes common ground for cooperation between actors with different interests and values. An understanding and inventory of people’s sense of place is therefore a valuable source of input for policymakers in processes of spatial planning. Insight in processes of re-appreciation also provides insight in people’s resources and capacities. Places can enable or constrain the resourcefulness of communities (textbox 12).



Green care in Finland

Angela Moriggi

This research explored the potential of so-called Green Care practices to contribute to place regeneration. Green Care practices include a diverse number of activities carried out in nature, with the aim of providing therapeutic, pedagogical, leisure and/or social inclusion benefits to different target groups. The researcher looked at three Finnish communities of practitioners:

1. Tikanmäki farm, an ecological sheep farm where mentally disabled people are involved in sheep husbandry and farming activities for therapeutic reasons;
2. Majvik biodynamic farm, which engages different target groups in farming practices for pedagogical and social inclusion purposes;
3. Hiking Travel Hit, a nature-tourism company, which offers sports-based, educational and leisure activities in forests and lakes to private customers for wellbeing, educational and recreational purposes.

The cases revealed that Green Care practices shape places in different ways and via different dimensions. From an institutional perspective, they shape the provision of social and health care, through cross-sectoral collaborations that involve public, private and third sectors in novel ways. These collaborations also affect the market, as alternative services and products are offered, and urban and rural areas are re-connected. From a relational perspective, Green Care practices constantly shape relationships, especially through the daily interactions of the people directly involved in the practices, and through their relations with both humans and non-humans.

Processes of mutual learning occur in Green Care initiatives, which may lead to re-connection, inclusiveness and empowerment. These processes also include non-human beings, animals, and the natural environment such as farms, forests or lakes. Seen from a collective cognitive level, Green Care practices contribute to framing a whole set of ideas in new ways. For example, people start to think differently about the use of nature-based solutions to reach social goals.

Lastly, the 'inner dimension' of sustainability of the initiators of the Green Care practices plays an important role as entrepreneurial processes are driven by strong personal beliefs and visions, along with a desire to drive change. In the Finnish cases, caring arises as a universal value, a way of being in the world based on the recognition of our foundational interdependence. This awareness leads to a feeling of responsibility for others and for the ecosystem. Caring appears to be a learning process, based on iterative experimentation and constant tinkering to adapt to the needs and capacities of those involved.

This learning process can have a transformative potential. It can enable both people and places to thrive, when certain practices and values are enacted. The practitioners mobilise and create resources and competences, to realise innovative solutions and entrepreneurial ventures. These resources are not only of social and material nature, but also cultural, ethical and affective. Place embeddedness can also be a resource in itself, enabling resourcefulness in various ways.



The Linen Cooperative of Várzea de Calde, Portugal: innovating local traditions

Alessandro Vasta

The aim of this case study was to analyse innovative practices of sustainable place-shaping related to traditional rural resources. The research was set in Várzea, a small, typical rural village of around 230 inhabitants in the interior region of central Portugal. The landscape is mountainous, dotted with small farms. It is a region with strong depopulation and ageing trends and a history of lack of investments, especially in the region's infrastructure. The research focused on the importance of the traditional local resource of linen (flax). Linen has been present in this land for centuries and has, for many generations, contributed to many social and economic livelihoods.

In Várzea several place-shaping practices occur around linen. For example, 18 active women of the community, grouped together in the Linen Cooperative, and stimulate the younger generations to get involved. They are re-grounding the traditional practices around linen in their place. The women aim to create a platform for all kinds of

social activities around linen, which supports their empowerment and economic autonomy. Behind all this, is the overarching goal of ensuring the continuity of their local heritage: the practice and culture linked to the traditional resource of linen. Actors such as the local museum and the NGO Binaural work towards a re-appreciation of Várzea, its traditions and resources. These actors collect and share the essence and heritage in various innovative ways to schools, artists, visitors etc. Re-positioning is also taking place in Várzea, via product innovation and new ways of marketing.

The case of Várzea shows that the quality of the network in rural areas and the dynamism of the actors involved are crucial for sustainable place-shaping initiatives. Innovating traditional products and practices is paramount in this place, so that they do not die out. The weaving of tradition with innovation is also key to the exchange of knowledge and skills between generations, allowing young people to stay and empowering women.



Bringing a social enterprise into being

Andris Šuvajevs

This research project aimed to understand the nature, role and context of social enterprises, including their origins and the benefits of social enterprises for well-being. It also considered the shifting policy landscape in the specific context of Latvia, and the implications of the changing roles of the State and social actors that resulted from the shift to privatisation in the delivery of welfare, driven by 'austerity' measures. One of the case studies zoomed in on a new project initiated by the social enterprise 'BlindArt'. This enterprise is based in a fairly secluded village in Riga, Latvia, where most blind people live, work, rehab and socialise. The new project employed four sightless women in the creation of design objects and was followed from its development until its operations became more or less solidified.

Metaphorically seen, the place-shaping practices in this case affected the relation and space between the public and private sector. The State in Latvia is forced to re-think its role in the welfare state. This is related to the imperative of fiscal discipline and the way the rules of the Eurozone are implemented. As a result, the State is forced to cut 'unproductive'

expenses. Social enterprises are seen as ways to integrate marginalised people into society via employment. Hereby, public concerns are translated as private responsibilities. The final consequences and shape of the social economy are hard to predict, as it is not certain whether the private sector will indeed assume a role as care-taker.

The new project of BlindArt improved the quality of life for the sightless women. Having access to stable employment increased their sense of independence, provided an opportunity for commitment and contributed to their sense of self. The current regulation of social enterprises in Latvia, however, is still unfriendly towards entrepreneurs. The tax on income is disproportionate to such small enterprises. This forces social enterprises to re-orient their production towards export, which can be a challenge in itself. The researcher claimed that the amount of bureaucracy – which also impedes the successful development of social enterprises – has to be alleviated altogether, or the Ministry of Welfare has to take on some of the reporting tasks itself.



Photo by BlindArt



Re-grounding

SUSPLACE assumes that a re-grounding of practices in place-specific assets and resources can potentially lead to more sustainability. Practices of sustainable place-shaping are influenced by wider communities, cultural notions, values, natural assets, technology and historical patterns. These practices illustrate variations in institutional and cultural contexts within Europe. The challenge is to develop products and innovation based on assets, traditions and place characteristics involving inhabitants and stakeholders (textbox 13).

Re-positioning

Re-positioning refers to a change in political and economic relations that shape places, in order to enhance the quality of life in these contexts. This includes 'diverse economies' [26], moving beyond the current capitalistic way of organising markets, such as forms of social economy and social entrepreneurship, social services, new currencies, and alternative products. Key questions here are whether these practices can be considered as sustainable innovations in niches, and under which conditions these can be scaled-up.

Re-positioning involves a critical perspective on how our economic system is organised and a search for sustainable alternatives. Social enterprises, for example, offer the potential to include disabled people, often considered unproductive in other firms (textbox 14).



IV. How to shape
sustainable places?

IV. How to shape sustainable places?

4.1 Place-shaping as a process of co-production

Sustainable development pathways are closely linked to the active engagement of society, changing the places in which we live and our ways of living. This is a challenge for decision- and policy makers, calling for a radical change in traditional and centralised policy- and decision-making processes. Traditional consultation methods are no longer appropriate for the current challenges that places face, while place-based participation can help to deliver more sustainable futures. New and innovative approaches in participation can provide a more equal voice to stakeholders and open up new ideas and perspectives.

The SUSPLACE program provided the opportunity to develop a set of place-based projects, and test methods for place-based participation in real case studies. This resulted in the online guide 'Creating sustainable places together', which describes how processes of co-production between stakeholders can support sustainable place-shaping.

Co-production is considered as a process of collective learning. Co-production [27] - sometimes referred to as co-design or social innovation - is a process of combining the practical knowledge, insights and experience of those most affected by an issue, in order to create and deliver something new and shared together. It therefore differs significantly from the traditional use of consultation to inform decisions (text box 15).

A condition for co-production is the willingness to share power and knowledge between the actors involved. Policy makers and practitioners can facilitate this through well-designed participative work with communities. A process of community engagement has to be carefully planned and designed while maintaining flexibility throughout the process and allowing participants to shape the work. Key-ingredients of co-production are: getting the design, the people and the methods right, committing the appropriated time and resources, setting a 'good' starting question, and being open to learning together.

The assumption is that co-production offers elements that are important for creating sustainable change. It can help MAP how people interact with each other and with their places and see what is important to local well-being. It can also GIVE VOICE to a wider range of perspectives and identify local knowledge and priorities in order to create a different understanding of issues and their potential solutions. Furthermore, co-production can BRING PEOPLE TOGETHER with different experiences and worldviews, releasing creativity and innovation and building trust and community capacity.

What is co-production?

What do we mean by co-production?

Co-production is about genuinely sharing power and knowledge

Genuine co-production seeks to put the community at the center and places professional or institutional roles in a supportive rather than a controlling role. It aims to establish a genuine dialogue that enhances mutual understanding and builds capacity to learn and act together.

Co-production is doing with, not doing to

Co-production seeks to reverse the tendency of administrators and experts to know what is best for others without really involving them. Doing with people builds the confidence of those engaged and enhances the likely success of the resulting actions. Co-production regards everyone as having value. This is a fundamental principle of co-production in order to empower people and to show how they can bring insight, contribute, and take control of issues of concern.

Co-production seeks to empower those with the weakest voice

By giving voice to those with little voice in decision-making, co-production improves the decision-making process, increases confidence and self-worth for those participating and helps to connect different groups and interests.

Co-production seeks to build new common understanding

By working across divides of expertise and sectors and bringing together people with different interests and understandings, co-production can shape actions to deliver wider and more equal benefits.

What we don't mean by co-production

Co-production isn't holding a consultation workshop

Co-production must give participants the opportunity to determine and shape the debate and the scope to explore and develop ideas. If there is already a decided or firm proposition for a project, be clear and honest about the limited space to act, and engage in normal consultation, in order to understand the impacts for different groups.

Co-production isn't about talking to the usual participants

Co-production can't easily be based on existing decision-making groups or policy processes. It needs a specific design to reduce the impacts of unequal power and voice among participants, in order to support them to define issues and develop responses.

Co-production isn't about keeping different groups or views separate

One of the powers of co-production, especially when combined with place-based working, is to bring people together rather than treat them as distinct, competing interests. Place-based co-production seeks a dialogue on a basis of equality, though to achieve this, you may first need to work with groups separately so as not to disadvantage marginalised voices.

Cardiff Capital Region's young people

Lorena Axinte

The research project 'Sustainable city regions?' aims to find pathways through which the economic drivers of city-region development can be balanced by broader priorities of sustainable place shaping at the regional scale. In Wales, such ideas are supported by a national piece of legislation that makes sustainable development a statutory obligation for public bodies. The Wellbeing of Future Generations Act (WFGA) requires public organisations to consider their long-term impact and to make positive contributions to the environmental, social, cultural and economic wellbeing of current and future generations.


Based in Cardiff, the researcher focused on the application of the Act in Cardiff Capital Region (CCR). CCR is a collaboration between ten local authorities in South East Wales, comprising more than half of Wales' population. The city-region struggles with issues such as deprivation, inequality, health, poor housing conditions and insufficient infrastructure investment. At the same time though, the region holds enormous potential in terms of renewable energy production, sustainable tourism, access to natural spaces, a rich culture and history, as well as several community initiatives for food production and reciprocal help.

The WFGA is an example of sustainable place-shaping happening at a national level, being initiated by the Welsh Government. The Act encourages public actors to challenge 'business as usual' and puts the environment, people and culture at the same level with the economy. The Future Generations Commissioner's office, comprised of the Commissioner and her team, has the power to challenge any decision made by a public body. They prioritise working in collaboration to help institutions understand the benefits of embodying the act, as well as the complex effects of their own actions. The city-regional development can also be considered a place-shaping practice, as it is essentially reorganising governance arrangements, policy focuses and projects in South East Wales.

Considering that CCR is a long-term collaboration, a key question arising during the research was: 'How can we plan with future generations, instead of planning for future generations? And what happens if we involve young people in decision-making about the areas where they live?' The researcher created a video on this topic, aimed at giving young people space to talk about their own experiences, perceptions and aspirations for their city-region(s). Thus, she invited a few of her research participants to star in the video, so that their ideas could be portrayed.

See: <https://www.sustainableplaceshaping.net/engaging-youth-in-city-region-development/>





The online report guides stakeholders through the process of planning place-based working and offers a menu of different participative methods to suit different aims and needs. The methods described in this report are illustrated with case study examples to bring them to life and are linked to the fuller cases to allow readers to check their relevance to their own context. The participative methods used by the SUSPLACE fellows are divided into three main categories.

Mapping

Mapping allows people to draw on their personal experiences, capturing and understanding issues, situations, relations, connections and impacts. These participative methods can help to unveil the meanings and values people attach to a place or to capture the relation between people and places, offering opportunities to re-engage people with their places and to foster the will to contribute to change. For example the case of the linen cooperative in Portugal (text box 13) highlights how the quality of the network and dynamism of the actors involved are key in sustainable place-shaping initiatives.

Giving voice

Giving voice can help capture a wide range of perspectives and views about issues and their impacts on different people or locations. For example during a research project in Cardiff (textbox 15), the fellow aimed to give voice to young people in a decision-making process. Some methods as participant observation can enable trust between the researcher and community and provide a deeper and contextualised understanding of the practices (e.g. cases on sustainable food

citizenship in textbox 8, social entrepreneurship in text box 14). Other fellows were concerned with empowering those with the weakest voice, by providing methods to enable them to equally expose their ideas (e.g. case green care practices, text box 12). Video narratives can give voice to people and also build pride and confidence for local participants to take collective action for their place (e.g. case place ambassadors, text box 3).

Bringing people together

Bringing people together enables communities to develop their own collective actions with potential collaboration or support of public authorities. Besides sharing ideas and visions and creating consensus around goals and understanding, these methods aim at building social capital and empowering participants to co-produce places. The SUSPLACE case on learning (textbox 2) enabled richer interactions between groups of actors exposing them to different perspectives and favouring projects and action. Meanwhile new synergies were established between actors who did not usually speak to each other. Some projects such as the case on initiatives in energy transition (text box 6) show that citizen-led initiatives can thrive if they have the support of institutions or receive technical or moral support from external people (e.g the SUSPLACE case on communing, textbox 5). Besides more conventional discussion methods, workshops and focus groups can benefit from the use of creative or arts-based methods. Arts-based methods can be useful as a tool to bring meanings of place and underlying values to the fore as was shown in the case of a Finnish industrial town re-imagining its future (text box 9) and can be highly effective in terms of evoking imagination (text box 1).



4.2 Creative and arts-based methods

SUSPLACE researchers have experimented with the role of creative- and arts-based methods while engaging in places. Art itself can be a way to unfold place-based narratives [28]. Other fellows involved artists in place-shaping or planning processes. Art and artists can design and/or facilitate forums to 'set a new scene', thus creating a context where stakeholders are encouraged to use different language and different logics [29]. Conversely, artists are granted a mandate 'to be strange', to act in ways that are out of the norm by other actors or governance structures.

Research and researchers have the potential to play a similar role to that of artists when they adopt arts-based methods as part of their tools. A distinction can be made between artists as agents in a process of change on the one hand, and 'artfulness' as a type of agency on the other hand – and it is to the latter that we refer to here [30]. Creative and arts-based methods are methods that engage participants in some sort of creative or artistic exercise. Advanced artistic skills or aesthetic sensibilities are not required from participants, since the aim is not to produce fine artworks, but to achieve research purposes through the active involvement of participants. Instead, art is used as a tool to disrupt routine ways of thinking and open up new imaginaries for the future.

Developed in the realm of research, arts-based methods merge art, creativity and imagination to traditional qualitative research in order to expand its possibilities. In general, arts-based research practices, or 'artful doings', draw on inspiration, concepts, processes, and representation from the arts, helping researchers to access and represent several points of view that otherwise are overlooked by traditional research methods [31]. These approaches are useful in applied research because they can open spaces of possibility in people's imagination and evoke transformative mind-sets that condition for meaningful changes. In the context of planning, this means bringing to the table new ways of seeing the present and future of a place from the eyes of its community, which can be used for more inclusive spatial interventions and design [19].

SUSPLACE has developed a toolkit on "Arts-based methods for transformative engagement" (see page 60). The toolkit assumes that transformation requires change from the 'inside out'. This entails engaging with emotions and changing cultural narratives and worldviews. In looking for ways to support these inner changes, SUSPLACE research shows that arts-based approaches and techniques can open spaces of possibility in people's imagination, thereby evoking transformative mindsets. Transformative methods are specific cognitive lenses or frames that are helpful for orienting and motivating people towards social change.

Toolkit Arts-based methods for transformative engagement

Six SUSPLACE fellows decided to combine forces and experiment with creative and arts-based approaches to “sustainable place-shaping.” They wanted to emphasize the cultural and psychological dimensions of sustainability and also to practice with methods that make researchers and participants feel energetic and inspired. They aimed “to go beyond debates that center around reducing our ecological footprint or creating technological solutions, and find ways to access our emotions and values”. Additionally, they were motivated to create something practical that change-makers and local leaders could use in their work.

Inspired by Kelli Pearsons’ research on the arts and ‘imaginative leadership’ and being empowered by a training on facilitation methods provided by the non-academic partner Royal HaskoningDHV, the fellows designed a workshop, combining and integrating a variety of arts-based exercises. These exercises were intended to help participants view a case study or sustainability issue from different perspectives, such as a more-than-human perspective or from an expanded sense of time. As

a result of implementing this workshop in multiple locations a toolkit was developed, describing the methods used.

The toolkit is a rich and user-friendly resource with over 90 pages of tips, resources, workshop outlines, and detailed instructions for nearly 30 specific methods. The toolkit was informed by different sessions where the researchers experimented with the methods, such as the conference Transformations 2017, an international conference in Dundee, Scotland. Since then, artists, researchers, students, practitioners, educators, policy-makers, as well as SUSPLACE colleagues and supervisors, have participated in sessions all over Europe, helping to fine-tune the methods and the workshop design. The toolkit has received much enthusiasm and positive feedback throughout. The intention is, as a next step, to develop a website on creative methods.

The toolkit can be downloaded here:
<https://www.sustainableplaceshaping.net/arts-based-toolkit/>



4.3 The role of place-based researchers in place-shaping

Place-shaping research is not only about understanding places and their dynamics, but can also be used to change a place and place-based practices. This inevitably invites researchers to engage in places, but can also result in conflicting positions and tensions surrounding the position a researcher takes. A researcher, for instance, can be a promoter and activist, observer or active participant. Most of the fellows followed the lines of participative and action research stepping out of the objective and reflective role of the researcher. They acted as a process facilitator, knowledge broker, change agent or self-reflexive researcher [32].

In principle, the roles played by fellows depended on their personal capabilities and the context in which they were working, and of course, the goal and approach they had set for their research. They experienced the role of knowledge broker during the data collection, trying to bridge different types of knowledges in communities. Some fellows became more critical during their engagement in places, feeling responsible for the processes they were involved in. As a consequence they decided to engage with the place as a 'change agent' or as a 'process facilitator'. Some fellows realised their limitations with regard to their capabilities and chose to act as a 'reflective scientist', although not as an objective or distant observer.

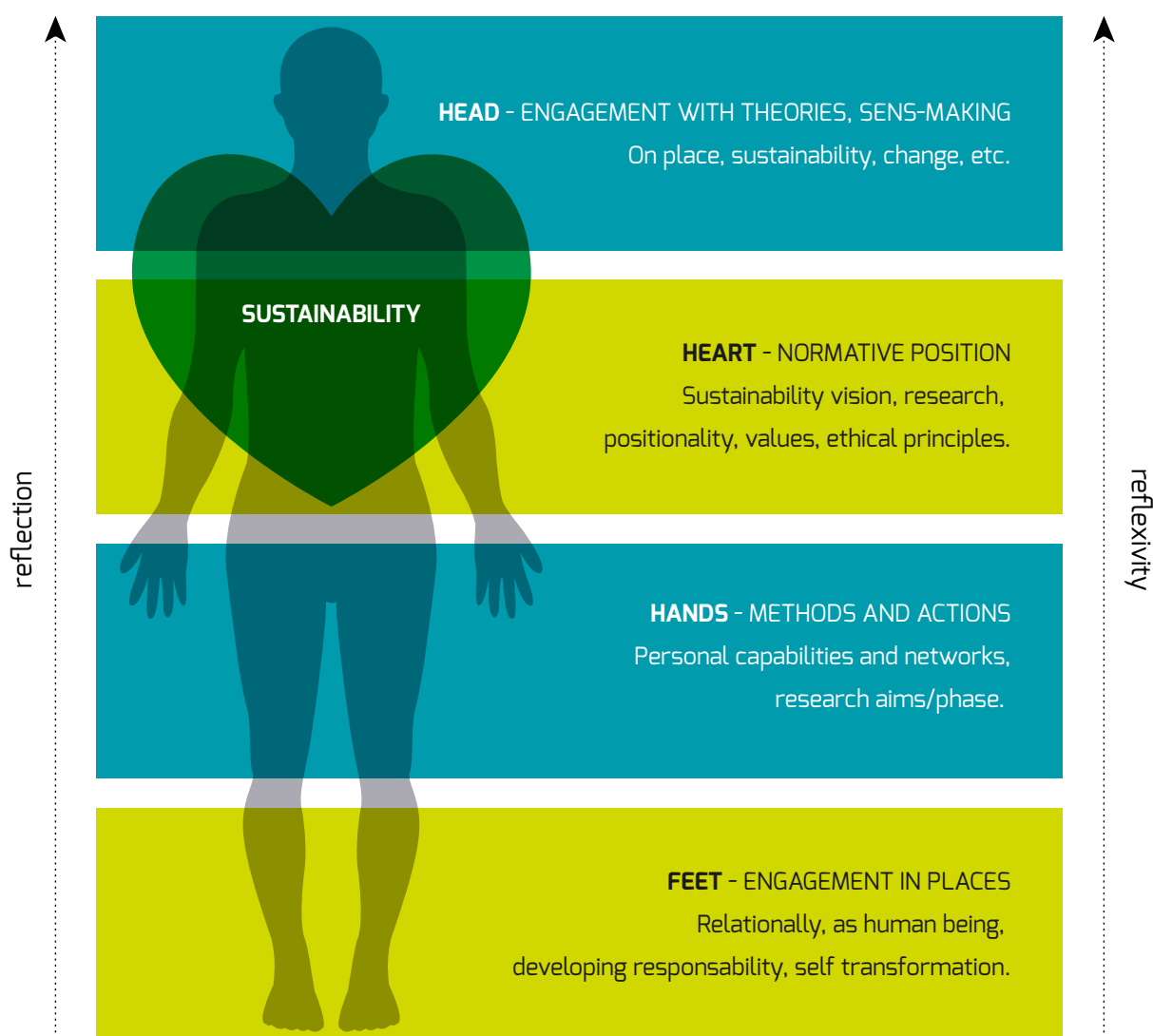
Many fellows brought their 'whole self' into the research: incorporating their personal background, values, skills, attitudes and ambitions when engaging in places and with people, and becoming more reflexive of their own responsibility, and more willing to change themselves. The research was a means to integrate sustainability values and learnings in their personal life. At the end of the SUSPLACE program researchers felt that they had become part of the place they studied, influencing the practices they studied. They held different researcher 'hats', sometimes simultaneously, throughout various phases of the project. In this sense place-based sustainability researchers acted as 'embodied' researchers involving four parts of the body: head, heart, hands and feet (figure 4).

An embodied researcher ideally practices research informed by the heart. The researcher's ambitions and motivations, as well as his/her view of sustainability, influence the research. The hands refer to the "how" of doing research, often more important than the outcome. This illustrates a process oriented research approach. The brain represents how researchers theoretically make sense of all they have experienced and learnt: how they use methods, act as knowledge brokers, and which theories and methods they use. This influences how they frame research questions and the choice to explore specific practices. The feet illustrate the embodied engagement with places: doing research as human beings with specific normative positions, developing personal connections and ethical responsibilities with places and communities, and reflecting on one's own position within the networks of relations of a place. Engagement as a human being emphasizes the importance of paying attention to inner processes of learning and change, as well as to the values that the researcher holds.

Finally, all the four components of the body of the researcher play a role in self-transformation. It concerns the whole body starting by engaging with critical theories related to sustainability and transformations (head), by reflecting upon one's own normative position as a researcher (heart), by experimenting with methods (hands) and by engaging in places as a human being (feet). The

different roles and positions of researchers affect the research process and its outcomes. We should take into account that each researcher combines the various parts of the body in unique ways. In that sense there is no single format for conducting place-based sustainable research, but rather it can be done in innumerable ways.

Figure 4. The embodied researcher [33]





V. Mastering
complexity:
SUSPLACE as a joint
learning journey

V. Mastering complexity: SUSPLACE as a joint learning journey

5.1 Introduction

Non-academic partners in SUSPLACE contributed to the program. They provided training, offered possibilities for secondments, contributed to outputs or helped with the organisation of training events. The consultancy RoyalHaskoningDHV (RHDHV) supported SUSPLACE's learning journey by co-creating and facilitating group the learning journey roadmap, and by facilitating workshops during joint meetings of the partners. This facilitation supported collaboration, provided direction, and created shared ownership.

Group facilitation is a process in which a person – who is neutral, acceptable to all members of the group, and has no substantive decision-making authority - diagnoses and intervenes to help a group improve how it identifies and solves problems and makes decisions, in order to increase the group's effectiveness [34].

In this chapter the main steps of SUSPLACE's learning journey are described, highlighting the importance of process design and methodology to empower participants in complex interdisciplinary international projects (see also: <https://www.sustainableplaceshaping.net/mastering-complexity-susplace-as-a-joint-learning-journey/>)

5.2 Training in facilitation

SUSPLACE offered a training course on 'Facilitating of place-based development', with the goal of using facilitation as tool and skill in participative research. This also helped the fellows to become

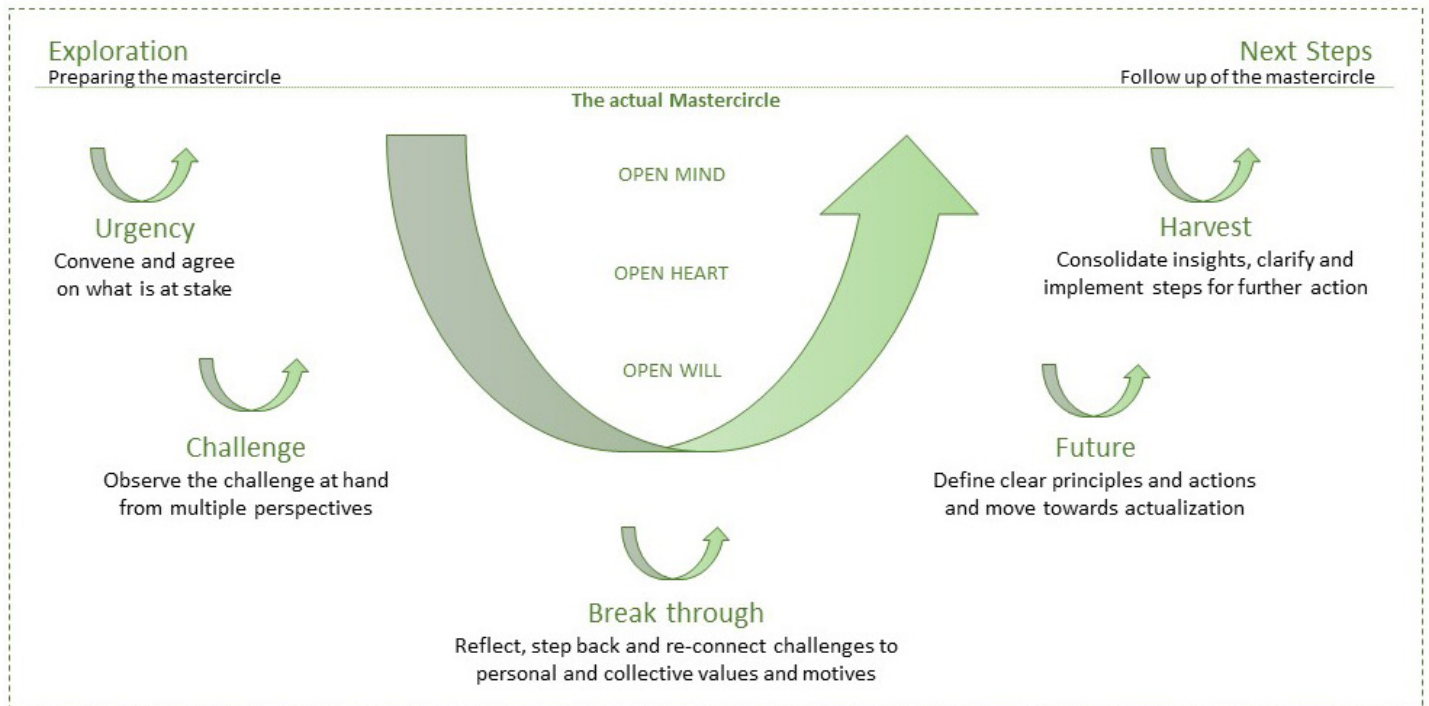
a community amongst themselves. The training supported the development of their personal skills. Marie Curie fellows feel the tension of combining a lot of tasks: research, contributing to joint deliverables, following intensive training, and doing secondments. Thus, developing skills in collaboration is vital. The relevance in executing the research became clear shortly after the training, when seven participants started the initiative to co-create and test 'Arts-based methods for Transformative Engagement' in their research and published their findings one and a half years later as a SUSPLACE Toolkit. It turned out to be possible to connect the inclusive approach of theory U [35] introduced during the training in its simplest form to the participative and co-creation approaches used in some of the research projects of the fellows.

Key elements of this training were:

- Using Theory U as an organising method. Theory U [35] is a clear and adaptable outline for change management (Figure 5). It strikes a balance between interpersonal processes of collaboration and individual or introspective processes of transformation. For every step a set of focus questions was developed, to help participants briefly prepare the next meeting. The method stimulates careful listening and appreciative feedback.
- Introducing the facilitators' compass (see page 66). This framework visualises the essential elements of facilitation skills and is easily applicable in practice, when acting as or working with a professional facilitator.
- Applying reverse learning, whereby theory follows experience. To stimulate this the training started with defining personal and collective learning objectives. During the training, realistic cases on place-shaping from the participants and from invited guests were outlined.

- Experiencing the importance of the ability to listen to one another in group sessions, and ways of working to stimulate listening.
- Experiencing the impact of physical and mental creativity on collaborative group processes.

Figure 5. Theory U [adapted from 35]



5.3 Mastercircle: an online tool

The mastercircle method helps professionals in organisations to work together in complex challenges (www.mastercircle.org). It was used to work together online during the SUSPLACE program and was applied 'on the job' as an integrated part of actual individual and joint challenges. It consists of five meetings, each alternated with a period of a few weeks to apply insights.

A facilitator invites 'masters' to reflect on the participants' approaches. A mastercircle therefore creates joint action. Because it aims at the

'head' (joint analysis) as well as the 'heart' (joint motivation), it envisages a change of attitude ('will') towards the joint problem with the other participants. This enables a breakthrough in common approach, clearly visible to stakeholders. Mastercircle is supported by a secured online platform to capture exchanged information, feedback and follow up in text, images and video. This can be summarised in a journal of the transformative journey.

The mastercircle worked well in SUSPLACE to harvest ideas and results from the fellows, supervisors and partners. It turned out to be more challenging to use it as a platform to respond to others and to discuss findings.

The Facilitators' Compass

The Facilitators' Compass [36] describes preparation and facilitation of group sessions, based on practical learning questions of over two hundred participants of facilitation training courses at Royal HaskoningDHV from 2004 to 2018.

Goal

Clarify and specify the objective as well as possible. What should be the result? This is the key steering factor

Context, motives

Why are we here? Learn about and understand the history, reasoning and context of the initiative and initiators.

Group, participants

Who is who: how are they related, do they share the objective, what are the stakes, etc.?

Approach, program

The clearer the objective the easier to design the approach of a workshop

Facilitator

The facilitators task during a 'meeting' or a process is to start a new phase in sustainable place shaping initiatives



ArtNik Uitgaven | Embergitch

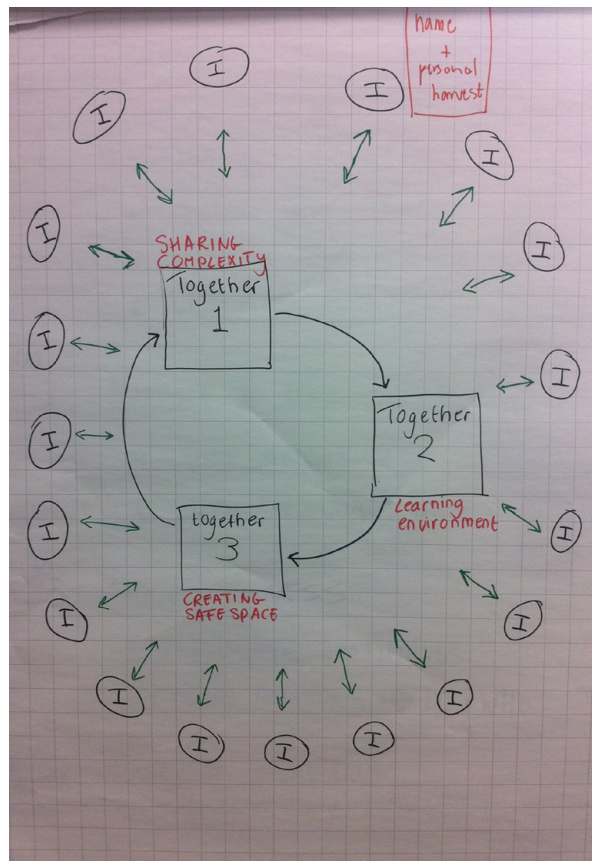
Talking in Silence

Example of a facilitation method. The goal was to make a quick inventory that connects personal views of a subject (put in one or two words on A4) into common views and themes, after arranging the related A4's together into several thematic groups. The whole exercise is executed in silence. It reveals group dynamics using our senses more intensely.



Harvesting results during the training

Sharing complexity, learning environment, creating a safe space.



5.4 Facilitation of co-creation of deliverables

A key goal of SUSPLACE was to create collective deliverables such as a video, a book and report. A large group can only co-create outputs when individuals are empowered to take responsibility. The co-creation of collaborative outcomes was supported by the organisation of workshops during joint meetings organised biannually.

The researchers and their supervisors were asked before the workshop in Leuven (March 2017) to answer questions about the potential meaningful results of the program and the challenges to create these results.

The answers to these questions were then analysed and summarised into three main themes that guided the creation of collaborative outcomes:


- Empirical – Insights on varied practices of place-shaping
- Methodological – Participatory approaches, tools and (arts-based) methods for collaboration in communities and multi-stakeholder settings
- Theoretical – The context, cultural and institutional varied notions of sustainable place-shaping

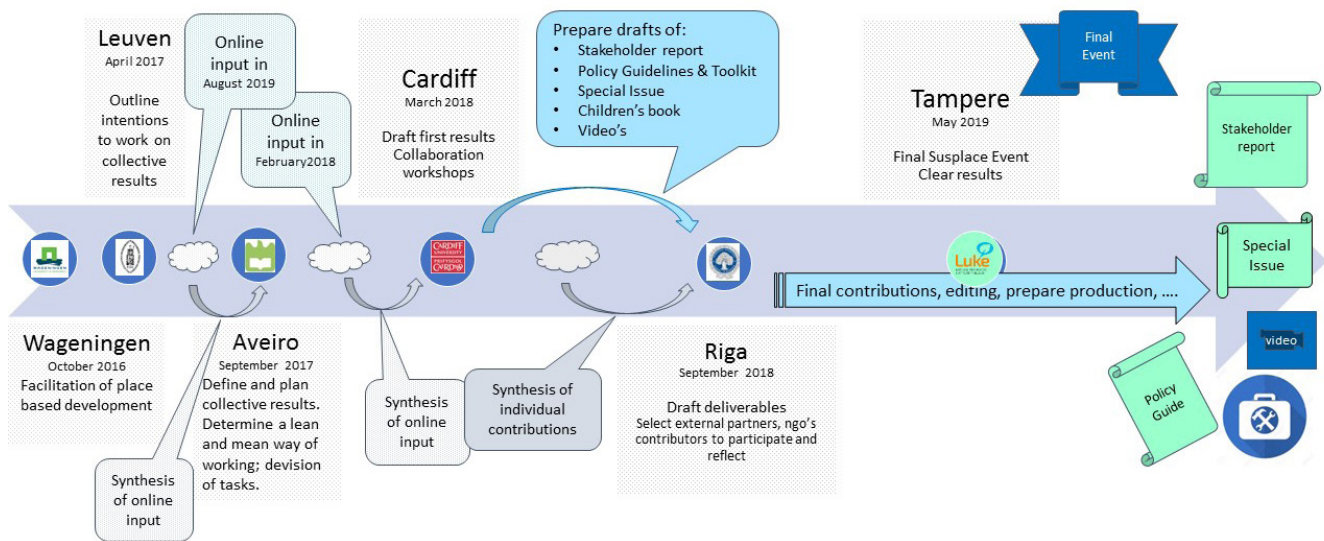
During the Aveiro event (October 2017) the participants acknowledged and further enriched these themes and also decided which theme and deliverable they would contribute to. In this way thematic groups were formed, that were responsible for the next steps. This resulted in shared ownership of defined collaborative deliverables. Furthermore, the idea of storytelling emerged in the form of a children’s book. Several fellows inspired each other to transform their insights and research findings into children’s stories as a way of communicating SUSPLACE results. The co-creation process gave direction to the SUSPLACE coordination team to plan the intended deliverables and the next events (figure 6).



Figure 6. Process design

The SUSPLACE journey of co-creating collaborative results

 = Online cooperation in online mastercircle environment – planned time slot of two weeks



The online mastercircle tool was used to prepare a seminar in April 2018 in Cardiff. The first draft outlines of the collaborative results were discussed there. This group process was facilitated by a simple version of Open Space Technology, giving much room for the participants to work on the issues they preferred. It resulted in the setup of several deliverables such as a policy guide, video and synthesis report, and provided clarity for the participants about the priorities and how they could contribute to these. During a next event in Riga (September 2018) the preparation of the SUSPLACE final event started. Further workshops were organised to create progress or finalise other collective results. The lessons learnt during the

journey of co-creating collaborative results are described on page 70.

In May 2019 the SUSPLACE final event was organised in Tampere in Finland. The event brought together an enthusiastic and engaged group of around 70 international participants. For three days, they delved into discussions through various forms of interactions, such as plenary workshops, panel discussions, artistic expressions and performances, and field trips to Finnish case studies. All activities were structured according to the underlying themes of the event: disruptive and creative methods, engaging people, and ethical doings.



Facilitate a structured collaboration process to enhance researchers' work

Facilitation of a structured collaboration process benefits researchers

Collaboration in large teams is complex. This certainly is the case for large international and interdisciplinary research projects. Individual research tasks are complex and demanding, especially when executed in a foreign environment and culture, and when using participative research methods, as was the case in SUSPLACE. This complexity should not be underestimated. The facilitation of collaboration and joint events can bring structure in and direction to the collaborative effort and clarity with regard to 1) the link between one's own research findings and collaborative deliverables, and 2) the individual effort expected from individuals to contribute effectively and sufficiently to joint deliverables.

Facilitation empowers self-management in the research team

Managing and coordinating collaboration in large, complex research teams benefits from the self-management skills and power within the team and the ability to use this in a complimentary and empowering way. Group dynamics can benefit from professional facilitation, applying ways of working that create structure and guide the appropriate follow up steps.

Integrate the use of online tools in the facilitation of collaboration

Online tools to gather and exchange key contributions within a research team are effective when well-integrated in the facilitation of the collaboration process. These online tools need a moderator to plan and facilitate contributions with a dedicated time frame.

Make facilitation of collaboration an explicit and integrated part of the management and coordination of complex research consortia and projects

Collaboration processes can be improved by professional facilitation skills and methods. The training of fellows in SUSPACE provided insights into the role of facilitation in research projects and the role of a researcher when applying participative methods. The facilitation of events contributed to the planning and quality of the collaborative deliverables. This type of complex international and interdisciplinary research project benefits when more attention is paid to the processes of internal collaboration over multiple years.



VI. Lessons
learnt and
implications

VI. Lessons learnt and implications

6.1 Summarising reflections

The findings of SUSPLACE are discussed in scientific papers as well as more popular outcomes. Results were also communicated via video's and blogs on the SUSPLACE website. The annex provides an overview of the highlights. In this chapter we provide a summarising overview of the main reflections and lessons learnt from SUSPLACE and the implications for Sustainability Science.

Place

A relational approach considers place as the outcome of relations that stretch beyond geographical boundaries. These relations are visible in activities of people that shape places materially and immaterially. This approach helps to understand how local and global forces that affect places mutually influence each other. The SUSPLACE projects show how people are able to transform the web of relations that make up places. These relations influence practices and networks on different geographic scales.

A place-based lens in policy-making and research acknowledges that economic, ecological and political processes impact places in spatially varied ways. Place-based development is based on the complexity and distinctiveness of places and uses the varied resources, qualities of places and the capacities of people to develop future pathways for sustainable development. The game of scrabble, making long words with available letters, exemplifies how complexity in and between places provides all sorts of chances and possibilities for new combinations. The more resources (such as know-how, time, capital and natural resources), the more clever and smart combinations. Variety thus supports resourcefulness and capability in places to adapt to future challenges.

Transformation

In the context of urgent challenges such as climate change, increasing inequalities and resource development, a transformation of society is needed. Transformation is a radical bottom-up perspective of systemic change across sectors. It includes not just a change in behavior or in the way we organize our society but also 'a change from the inside out'. This means that in order to transform places we also have to change ourselves, and the mindsets that withhold us from a more sustainable form of living. Insight into emotions, feelings, and psychological responses, helps to answer the question of why people would want contribute to change. Deep adaptation includes the heart, mind, and will to prepare for a future that is uncertain and unpredictable.

Sustainable place-shaping

Sustainable place-shaping is the appreciation, grounding and positioning of practices in places in a sustainable way. These practices are rooted in the meanings people attach to place, the material and immaterial assets, activities, and connections. The SUSPLACE projects show that place-shaping is rooted in people's sense of place, can result in capacities and autonomy of people and communities, and can support participation, collaboration, and co-creation between the actors involved.

Co-production

Co-production is a process of combining the practical knowledge and experience of those most affected by an issue with different forms of professional insights. The goal is to create and deliver something new and shared together. It therefore differs significantly from the traditional use of consultation to inform people about

decisions. Key-ingredients of co-production include: getting the design, the people and the methods right, committing the appropriate time and resources, setting a 'good' starting question, and being open to learning together.

Research in places

When researchers engage in places, they can take on different roles including reflective researcher, knowledge broker, process facilitator or self-reflexive scientist; they can also function as a change agent, aiming to support change. Research roles are influenced by several factors such as the ways researchers engage in a place and with people, their theoretical and methodological choices, and normative positions with regard to transformation and sustainability. An 'embodied researcher' engages in places with the brain, heart, hands and feet. Research on transformation in places can potentially transform researchers themselves.

Methods

A Marie ITN training network is about cross-national mobility of researchers. This has some challenging sides, as fellows work in countries and places which they are not familiar with. It is challenging to engage with research participants in places, due to power inequalities, language translations, cultural and generational differences. Different methods can be applied in place-based research to support reflection, map actors, opinions and values, give people a voice, and co-produce results together with stakeholders. The development and use of creative and arts-based methods turned out to be very helpful, to enable participants in visualising

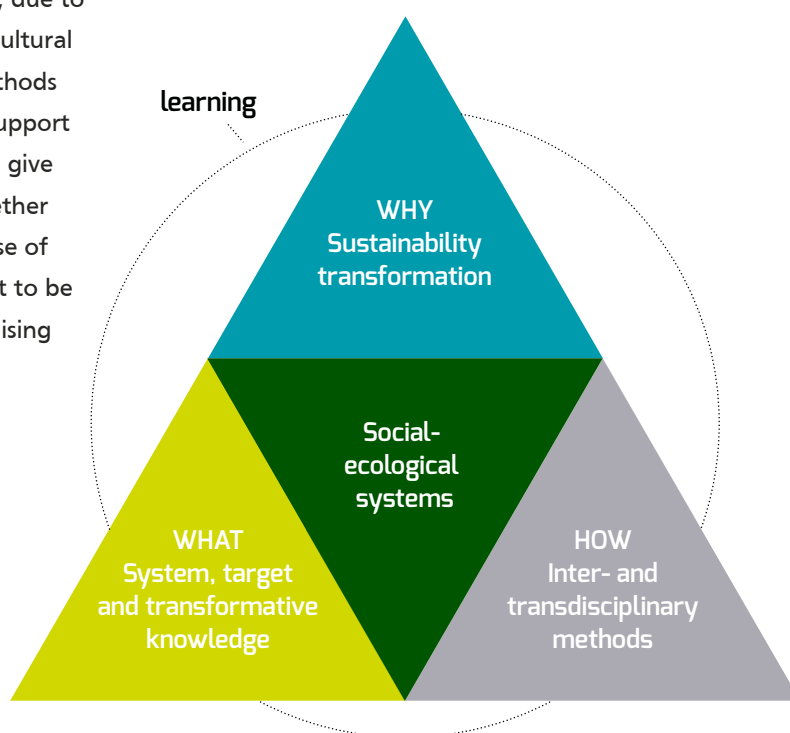
Figure 7. Key elements in Sustainability Science. Adapted from [39].


alternative futures, and imagining the 'unimagined'. This can open up new possibilities and narratives for the future.

6.2 SUSPLACE's contribution to Sustainability Science

Research in and for sustainability has been carried out for decades. Sustainability Science was introduced as a specific research field not only to understand complex relationships between humans and nature, but also to change these relations towards sustainability [37;38]. This research field is continuously evolving, and is embedded in the academia with its own publication forums and educational programs.

There are a variety of interpretations of Sustainability Science, but some common elements can be highlighted [39], see also figure 7. Sustainability Science explicitly aids social transformation by producing knowledge on changing social-ecological systems, but also by transforming knowledge itself [40]. Methodologically this means going beyond disciplinary perspectives. It employs inter- and





transdisciplinary research practices, including participatory action research, the co-production of knowledge and the use of creative methods. Such research contributes to social learning in projects, to collective social learning, and to learning on the wider societal level. The importance of Sustainability Science as a research approach has been underlined in the UN Agenda 2030 for Sustainable Development [41] and been mentioned in the Global Report for Sustainable Development [42]. So, what is the contribution of SUSPLACE to this research field? All of the SUSPLACE projects tackled social-ecological systems in various contexts and on different scales. Some of them were more ecologically and others more socially oriented, reflecting the fellows' background and motivations. Fellows boldly took up the challenge of looking at research problems from a broader systemic perspective, although they were limited in resources for giving a more detailed picture of these systems. In particular the fellows were interested in looking at places as living systems, as continuously evolving. Most of the fellows were also highly committed to not only understanding these systems but also to changing them. This also impacted others: participants in the SUSPLACE projects mentioned that collaboration with the fellows had changed their way of thinking about the issue. They reported a feeling of empowerment, and some of the participants even changed their practices.


Other forms of change occurred as well. Some of the fellows and partners experienced a personal learning journey, a transformative learning process including a deep reflection on their values and ways of life. The conclusion here is that as researchers, we cannot position ourselves outside the transformation towards sustainability. And this has consequences for our work: we need to be aware of our values and positions, and continuously reflect on them. These issues were explored, resulting in the development of the idea of the embodied researcher in place-based sustainability research [32].

Sustainability has become a buzzword. The fellows and the consortium partners realised that sustainability, as a goal, is not enough to

face the challenges of our time. In order to reach sustainability in the long term, we have to regenerate. Regeneration is, in the words of Bill Reed – a keynote speaker during the Final event in Tampere in 2019 – co-evolution of the whole living system, including humans who are part of nature [43]. This calls for an inclusive approach to place-based research approaches, and for bottom-up projects where researchers are involved as active participants, instead of implementing top-down approaches.

Many fellows applied participatory transdisciplinary research methods, and were also bold enough to develop new innovative methods and test these in their projects. These methods were collected in the publication on creative and arts-based methods and were appreciated by participants of different ages and of various professions, cultural identities, and abilities. Creative methods made it possible to address and question issues related to inequalities and social justice. They included feelings and emotions that are increasingly recognised as important in the field of Sustainability Science.

The fellows also realised that this type of research requires new skills, such as being able to act as a facilitator. Such skills are not part of the conventional training package for researchers, but were part of the SUSPLACE training program. Working in the real world shows the challenges of participatory methods: it is not always easy to reach the participants or stakeholders, they might be less committed than expected or the timing of the project is less ideal. These are known issues in Sustainability Science but will become more relevant in the future when co-producing knowledge: how to motivate people voluntarily to co-create knowledge and solutions? How to make clear that co-creation can produce socially robust scientific knowledge? What are the right means to engage the participants? As a response to this last question some of the SUSPLACE fellows developed a new way to engage others: the children's book 'Once upon the future: every day adventures that change the world', is a way to imagine the world with new eyes. It shows the power of storytelling as a means of communication.



Annex: Overview of SUSPLACE outputs

HIGHLIGHTS

Arts-Based Methods for Transformative Engagement: A Toolkit.

Pearson, K.R., Backman, M., Grenni, S., Moriggi, A., Pisters, S., Vrieze de, A. (2018). Arts-Based Methods for Transformative Engagement: A Toolkit. Wageningen: SUSPLACE. [SUSPLACE Toolkit Arts-based Methods \(2018\)](#)

This open access toolkit offers a collection of almost 30 methods, practical examples, workshop outlines

and tips for creative facilitation, as well as resources and relevant academic references. The ideas and methods collected in this toolkit are intended to support new ways of thinking and doing in our work as change agents towards regenerative societies. Compiled by a research team collaborating through the SUSPLACE Innovative Training Network, it is the result of our collective research and experimentation with creative and arts-based methods of engagement.

Printed copies can be ordered via diverse online channels, such as Amazon and Waterstones.



Arts-Based Methods for Transformative Engagement

A TOOLKIT

By Kelli Rose Pearson, Malin Backman, Sara Grenni,
Angela Moriggi, Siri Pisters, Anke de Vrieze



Creating Sustainable Places Together. A quick start guide for policy-makers and practitioners to place-based working and co-production

Quinn, M.J. and Vrieze, Anke de (Eds.) (2019). Creating Sustainable Places Together. A quick start guide for policy-makers and practitioners to place-based working and co-production. Wageningen University & Research: SUSPLACE. <https://doi.org/10.18174/494918>

This guide sets out why place-based participation can help deliver more sustainable futures and how policy-makers and practitioners across a range of different policy areas can support this through well-designed participative work with communities. Taking the practical examples from the work of SUSPLACE and the knowledge of its partners, this interactive PDF allows you to read the guide as a normal paper or to navigate 'web-style' through the ideas and examples. It introduces the benefits

and do's and don'ts of place-based working and of co-producing outcomes with communities. It guides you through the process of planning place-based working and offers a menu of different participative methods to suit different aims and needs. All the methods are illustrated with case study examples to bring them to life and all have links to the fuller cases to allow you to check their relevance to your own context.

Once Upon the Future: Everyday Adventures That Change The World (Children's book, forthcoming)

Written by six SUSPLACE fellows, this book is an anthology of six stories, inspired by themes from their own research. The stories aim to trigger the curiosity of children about their environment, highlight the connection between modern life and tradition, and empower readers to stimulate change in their surroundings. Throughout their careers as researchers, the focus of the SUSPLACE fellows has been on communicating themes of sustainability to wide and diverse audiences. Writing for children combines their love of creative writing with their passion for telling engaging and exuberant stories about ecological and social issues.

For more information, [read the leaflet](#).





Photo credits: Janne Saukkonen

Policy Event: Revitalising Agenskalns Market, Riga, Latvia

How to re-develop a neighbourhood market in a sustainable and creative way? In September 2018, Kalnčiema Quarter invited the SUSPLACE consortium to think along and develop a set of practical ideas and a policy proposal for the re-development of the Agenskalns market in Riga. Together with local stakeholders and experts, the SUSPLACE team addressed 3 challenges:

- How can stakeholders work together effectively? How can new forms of private-public partnerships be developed and co-operation at the local and national level be fostered?
- How to build an identity for Agenskalns market, promoting the reputation of a cultural and historic place?
- What models of sustainable financing are available?

Watch the [video](#) for an impression and summary of the event. To learn more about the outcomes, please go to the full report: [Full Report_ Revitalisation of Urban Spaces_Riga_Sept 2018](#)

SUSPLACE Final Event - “Exploring places & practices through transformative methods”

The SUSPLACE Final Event took place in Tampere, Finland from May 7 to 10, 2019. The event was inspired by the desire to explore new ways of engaging with communities by means of experimental and unconventional research methods and approaches, to shape places towards desired futures.

Organised to celebrate and share the results of the four-year European MSCA ITN project SUSPLACE, the event brought together an enthusiastic and engaged group of around 80 international participants. For three days, the participants delved into discussions through various forms of interactions, such as plenaries, panel discussions, artistic expressions and performances, and field trips to Finnish case studies. All activities were structured according to the underlying themes of the event: Disruptive and creative methods; Engaging people and Ethical doings.

To learn more about what happened during the event, read our [VISUAL STORY](#) with images and tweets.

Check the blogs written by participants:

- [ON THE ART OF NOT FOCUSING ON ANSWERS](#)
– by Ruben Vezzoni
- [TIME, SPACE AND ESSENCE](#) – by Emily Finney
- [ENGAGING PEOPLE: VULNERABILITY AND SELF-REFLECTION](#) – By Timothy Visser
- [ROOTING TO PLACE BY REINTERPRETING ART](#)
– by Nina Luostarinen

Watch the videos of the keynotes speeches and the highlights of each day: <https://sustainableplaceshaping.net/home/final-event/>

FIRST PUBLICATIONS

- Moriggi A (in press) Exploring enabling resources for place-based social entrepreneurship: a participatory study of Green Care practices in Finland. *Sustainability Science*.
- Sara Grenni, Lummina Horlings, Katriina Soini (in press) Linking spatial planning and place branding strategies through cultural narratives in places. *European Planning Studies*.
- Siri Pisters, Hilikka Vihinen, Elisabete Figueiredo (2019) Place based transformative learning: a framework to explore consciousness in sustainability initiatives, *Emotion, Space and Society*, Volume 32.
<https://doi.org/10.1016/j.emospa.2019.04.007>
- Syed Omer Husain, Alex Franklin and Dirk Roep (2019) [Decentralising geographies of political action: civic tech and place-based municipalism](#), *Journal of Peer Production*, Issue 13, 1-22.
- Lorena F. Axinte, Abid Mehmood, Terry Marsden and Dirk Roep (2019) Regenerative city-regions: a new conceptual framework, *Regional Studies, Regional Science*, 6(1): 117-129.
<https://doi.org/10.1080/21681376.2019.1584542>
- Malin Backman, Hannah Pitt, Terry Marsden, Abid Mehmood, Erik Mathijs (2019) Experiential approaches to sustainability education: towards learning landscapes, *International Journal of Sustainability in Higher Education*, 20(1): 139-156.
<https://doi.org/10.1108/IJSHE-06-2018-0109>
- Diogo Soares da Silva, Lummina Horlings, Elisabete Figueiredo (2018) Citizen Initiatives in the Post-Welfare State. *Social Sciences* 7(12): 252.
<https://doi.org/10.3390/socsci7120252>
- Lummina Horlings (2017) The role of artists and researchers in sustainable place-shaping. In "Perspectives of Culture in Sustainable Development": concepts, policies and practices. Edited by Katriina Soini, Sari Asikainen, Katarzyna Plebanzcyk, Ljiljana Rojac-Mijatovic, Claudia Brites, SoPhi, University of Jyväskylä, Finland.
<https://www.jyu.fi/hytk/fi/laitokset/yfi/tutkimus/sophi/126-150/sophi139>
- Lummina Horlings (2018) Politics of Connectivity: The Relevance of Place-Based Approaches to Support Sustainable Development and the Governance of Nature and Landscape. In: Marsden T (ed.) *Handbook Nature*, Sage, London, pp. 304-324.

VIDEOS

Introducing SUSPLACE: 2 videos co-created and filmed by SUSPLACE researchers, introducing the network and the theoretical underpinnings.

- 'SUSPLACE: A Research & Training Network'. Link: <https://youtu.be/btxAmebV7rY>
- 'Sustainable place-shaping in theory and practice'. Link: <https://youtu.be/ES71f6n9SfU>

Videos made by SUSPLACE fellow Cátia Rebelo, as part of her research project Place Ambassadors:

- 'Lugar Sentido' or 'Sensed Place', made in collaboration with partner Binaural-Nodar. Link: <https://youtu.be/NYjxtzZu-bU>
- 'Place Ambassadors: shaping better places to live and visit', made in collaboration with As You See It Productions Ltd. Link: <https://www.sustainableplaceshaping.net/documentary-place-ambassadors-shaping-better-places-to-live-and-visit/>

Video summarising the Policy Event:

- 'Revitalising Agenskalns Market, Riga'. Link: https://youtu.be/QCIANKIew_w


Videos illustrating (research on) sustainable place-shaping practices:

- 'Engaging Youth in the Cardiff Capital Region', illustrating the work of SUSPLACE fellow Lorena Axinte on Sustainable City-Regions. Link: https://youtu.be/gDYu_-78dM0
- 'Sustainability Transformations through Permaculture', illustrating the work of SUSPLACE fellow Elgars Felcis in Latvia. Link: <https://youtu.be/ypjsMc6Cdx4>
- 'Place Ambassadors', illustrating the work of SUSPLACE fellow Catia Rebelo on sustainable tourism in Portugal and Wales. Link: <https://youtu.be/FtNUZk5dtEE>
- 'Rebuilding the Commons', illustrating the work of SUSPLACE fellow Marta Nieto Romero on commonlands in Galicia, Spain. Link: <https://youtu.be/Igb6PsUDxtM>
- 'Green care in Finland', illustrating the work of SUSPLACE fellow Angela Moriggi on green care farming in Finland. Forthcoming.

References

- 1 Marsden T (2012) Sustainable place-making for sustainability science: the contested case of agri-food and urban–rural relations. *Sustainability Science* 8(2): 213–226. DOI:10.1007/s11625-012-0186-0
- 2 Horlings LG (2015) Values in place; A value-oriented approach toward sustainable place-shaping, *Regional Studies, Regional Science* 2(1): 257-274, DOI:10.1080/21681376.2015.1014062
- 3 Barca F, McCann P, Rodriguez-Pose A (2012) The case for regional development intervention: place-based versus place-neutral approaches. *Journal of Regional Science* 52(1): 134-152.
- 4 IPCC (2018) International Panel on Climate Change (2018) Summary for Policymakers. In: Masson-Delmotte V et al (eds) *Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.* World Meteorological Organization Geneva. ISBN 978-92-9169-151-7.
- 5 Bendell BA (2018) *Deep Adaptation: A Map for Navigating Climate Tragedy.* IFLAS Occasional Paper 2. Available online: <https://www.lifeworth.com/deepadaptation.pdf>.
- 6 Horlings LG (2018) Politics of Connectivity: The Relevance of Place-Based Approaches to Support Sustainable Development and the Governance of Nature and Landscape. In: Marsden T (ed.) *Handbook Nature*, Sage, London, pp. 304-324.
- 7 O'Brien K, Sygna L (2013) Responding to Climate Change: The three spheres of Transformation. In *Proceedings of Transformation in a Changing Climate*, 19-21 June 2013, University of Oslo, Oslo.
- 8 Rockström J, Steffen W, Noone K, Persson Å, Chapin F S III, Lambin E, Lenton T M, Scheffer M, Folke C, Schellnhuber H J, Nykvist B (2009) Planetary boundaries: Exploring the safe operating space for humanity. *Ecology and Society* 14(2): 32.
- 9 Westley FR, Tjornbo O, Schultz L, Olsson P, Folke C, Crona B, Bodin Ö (2013) A theory of transformative agency in linked social-ecological systems. *Ecology and Society* 2013 18(3): 27.
- 10 Schatzki TR, Cetina KK, Savigny E Von (2001) *The Practice Turn in Contemporary Theory.* Routledge, London and New York.
- 11 Bradbury-Huang H (2015) *The SAGE Handbook of Action Research*, Sage, London, Thousand Oaks, New Delhi and Singapore.
- 12 Massey D (2005) *For space.* Sage Publications, London, Thousand Oaks, New Delhi.
- 13 Bristow G (2010) Resilient regions: Re-'place'ing regional competitiveness. *Cambridge Journal of Regions, Economy and Society*, 3(1): 153–167. <https://doi.org/10.1093/cjres/rsp030>
- 14 Bauman Z (2012) *Liquid Life.* Policy Press, Cambridge (UK) and Malden (USA).
- 15 Horlings LG (2017) Inaugural lecture: Transformative socio-spatial planning: enabling resourceful communities, RUG, Groningen. http://www.inplanning.eu/categories/1/articles/200?menu_id=home§ion_title_for_article=New+Books
- 16 De Caeter L (2004) The rise of the generic city. In: De Caeter, L. *The capsular civilization.* NIA Publishers, Rotterdam, pp. 11-26.
- 17 Bruner J S (1986) *Actual minds, possible worlds.* Harvard University Press, Cambridge.

- 18 Chapin FS, Knapp CN (2015) Sense of place: a process for identifying and negotiating potentially contested visions of sustainability. *Environ Sci Policy* 53: 1–9. <https://doi.org/10.1016/j.envsci.2015.04.012>
- 19 Grenni S, Horlings, LG, Soini K (in press) Linking spatial planning and place branding strategies through cultural narratives in places. *European Planning Studies*. Forthcoming.
- 20 Our Common Future; Report of the World Commission on Environment and Development. Transmitted to the General Assembly as an Annex to document A/42/427 - Development and International Co-operation: Environment. UN, <http://www.un-documents.net/wced-ocf.htm>
- 21 Raworth K (2017) *Doughnut Economics. Seven ways to think like a 21st century economist.* Random House, UK.
- 22 Cole RJ, Oliver A, Robinson J (2013) Regenerative design, socio-ecological systems and co-evolution. *Building Research and Information* 41: 237-247. <https://doi.org/10.1080/09613218.2013.747130>
- 23 Horlings LG (2016) Connecting people to place: Sustainable place-shaping practices as transformative power. *Current Opinion in Environmental Sustainability* 20: 32-40. <https://doi.org/10.1016/j.cosust.2016.05.003>
- 24 Roep D, Wellbrock W, Horlings LG (2015). Raising self-efficacy and resilience: collaborative leadership in the Westerkwartier. In: M Woods, B Nienaber, J. McDonagh (eds.) *Globalization and Europe's rural regions.* Farnham and Burlington, VT: Ashgate, pp. 41–58.
- 25 Gustafson P (2001) Meanings of place: Everyday experience and theoretical conceptualisations. *Journal of Environmental Psychology*, 21(1): 5-16. <https://doi.org/10.1006/jevps.2000.0185>
- 26 Gibson-Graham JK (2008) Diverse economies; Performative Practices for 'Other Worlds'. *Human Geography* 32: 613-632.
- 27 Albrechts L (2012) Reframing strategic spatial planning by using a coproduction perspective. *Planning Theory* 12: 46–63. <https://doi.org/10.1177/1473095212452722g>
- 28 Jensen O B (2007) Culture stories: Understanding cultural urban branding. *Planning Theory*, 6(3): 211-236. <https://doi.org/10.1177/1473095207082032>
- 29 Metzger, J (2011) Strange spaces: A rationale for bringing art and artists into the planning process. *Planning Theory*, 10(3): 213-238. <https://doi.org/10.1177/1473095210389653>
- 30 Dieleman H (2017) Enchanting sustainability: From enlightened modernity towards embodiment and planetary consciousness. In Asikainen S, Brites C, Plebańczyk K, Rogač Mijatović L, & Soini K (Eds.). *Culture in sustainability: Towards a transdisciplinary approach* (pp. 10-21). University of Jyväskylä, Department of Social Sciences and Philosophy: [SoPhi], Finland.
- 31 Leavy P (2017) *Research design: Quantitative, qualitative, and mixed methods, arts-based, and community-based participatory research approaches.* Gilford Press, New York.
- 32 Wittmayer JM, Schöpke N (2014) Action, Research and Participation: Roles of Researchers in Sustainability Transitions. *Sustainability Science* 9(4): 483–96
- 33 Horlings LG, Nieto Romero M, Pisters S, Soini K (forthcoming) Operationalising transformative sustainability science through place-based research: the role of researchers, *Sustainability Science*.
- 34 Schwarz R (2016) *'The Skilled Facilitator'.* 3rd edition. John Wiley and Sons, Baltimore, US.



35 Scharmer, CO (2016) (2nd edition) Theory U. Berrett-Koehler Publishers. San Francisco.

36 Mulder A, Van den Berg J (2019) Het gaat altijd anders dan je denkt (It will always be different than you think it will be), RoyalHaskoningDHV, Amersfoort.

37 Kates RW, Clark WC, Corell R, Hall JM, Jaeger CC, Lowe I, McCarthy JJ, Schellnhuber HJ, Bolin B, Dickson NM, Faucheux S, Gallopin GC, Grubler A, Huntley B, Jäger J., Jodha NS, Kasperson RE, Mabogunje A, Matson P, Mooney H, Moore III B, O’Riordan T, Svedin U (2001) Sustainability Science. 292(5517): 641-2. DOI: 10.1126/science.1059386

38 Miller TR (2014) Reconstructing Sustainability Science. Knowledge and Action for a Sustainable Future. Earthscan, Routledge, New York and London.

39 Dedeurwaerdere, T (2014) Sustainability Science for Strong Sustainability. Edwar Elgar Publishing. DOI: 10.4337/9781783474561.

40 Wiek, A. & Lang, DJ (2016) Transformational sustainability research methodology. In Heinrichs, H., Martens, P., Michelsen, G., Wiek, A. (eds.) Sustainability Science. Springer: Dordrecht, The Netherlands. pp. 31–41.

41 UN (2015) Transforming our world. The Agenda 2030 For Sustainable Development. A/RES/70/1. United Nations, New York.

42 Global Sustainable Development Report (2019) The Future is Now – Science for Achieving Sustainable Development. Independent Group of Scientists appointed by the Secretary-General. United Nations, New York.

43 Reed B (2007) Shifting from ‘sustainability’ to regeneration. Building Research & Information 35(6): 674-680. DOI: 10.1080/09613210701475753

Colofon

Editor

L.G. Horlings, Faculty of Spatial Sciences,
Department of Spatial Planning and
Environment, University of Groningen.

Contributors

L Axinte, J van den Berg, E Felcis, S Grenni,
LG Horlings, O Husain, A Moriggi, M Nieto
Romero, A Papangelou, K Pearson,
S Pisters, M Quinn, M Quinney, C Rebelo,
D Roep, D Soares da Silva, K Soini,
A Šuvajevs, A Taherzadeh, G van der Vaart,
S Valente, A Vasta, A de Vrieze.

Language editor

Liana Simmons
editingandeditors@gmail.com

Graphic Design

Suzanne Nieuman, Phanatique
info@phanatique.nl
<https://phanatique.nl>

Photos

Taken by or used with permission from the
contributors.

ISBN

978-94-6395-142-5

DOI

<https://doi.org/10.18174/501666>

To cite this report

Horlings L.G. (Ed.)(2019) Sustainable place-
shaping: what, why and how. Findings of
the SUSPLACE program; Deliverable D7.6
Synthesis report. Wageningen University and
Research, Wageningen.

More information

If you want to know more about SUSPLACE
or sustainable place-shaping, check the
website: www.sustainableplaceshaping.net

Or contact the SUSPLACE coordination team:

- Ina Horlings, University of Groningen:
l.g.horlings@rug.nl
- Dirk Roep, Wageningen University:
dirk.roep@wur.nl
- Anke de Vrieze, Wageningen University:
anke.devrieze@wur.nl



This work is licensed under the Creative Commons AttributionShareAlike 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/4.0/>

