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Creative practice and transformations to sustainability – insights from research

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Abstract

This document is intended to inform those involved in policy making, practice and research who are interested in how to encourage a shift to a more sustainable society. We demonstrate the quick wins and long-term value of employing, supporting and enabling creative practice that is collaborative and outward-oriented, inspires reflection and develops a sense of agency, and we highlight that examples of such practice are already happening.

Table of Contents

A. Introduction.....	3
B. Definitions.....	3
C. Drivers	6
D. Context	6
E. Insights and Themes from previous research and projects	7
F. Summary and Manifesto.....	13
G. References	14

List of tables and figures

Box 1 Drivers of creative practice.....	6
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Figure 1 Shifting cultures rather than merely changing behaviour means encouraging or introducing creative practice into the process.	10
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A. Introduction

1. It is increasingly clear that the transition to a climate-changed world and sustainable society will not be achieved simply by doing what we currently do more efficiently with lower carbon emissions. Current efforts are necessary and valuable but not sufficient: a different way of *being* is implied by both the current and baked-in impacts of climate change and the need for a radically lower-carbon, reduced-consumption society with values and practices that sustain and pursue those changes.
2. Such a transition to sustainability will require a challenging but exciting transformation in our institutions (e.g. government at all tiers), as well as in what communities do and the way in which we all conduct ourselves. Such a transformation can help deliver many and diverse desired outcomes, embedding sustainability across all areas of public life, but is not well understood and will not be achieved simply by accelerating or increasing current efforts. Something different is required (Fazey et al 2018).
3. Employing creative practice can provide that difference - a set of understandings, techniques, skills and knowledge to introduce to this area of work that can help us achieve the essential transformation.
4. To inform policy and practice, this paper:
 - a. Defines what we mean by Sustainability, Transformation and Creative Practice
 - b. Places this work in a wider Context of existing practice and a wide range of Drivers for change
 - c. Provides an Evidence base for additional effort
 - d. Sets out a programme of next steps.

B. Definitions

1. Sustainability

- a. The UN Sustainable Development Goals (SDGs) (sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals) point to 16 aspects in need of balance, including decent work, social equity and economic development, and a 17th that is 'Partnership for the Goals'.
- b. In *Doughnut Economics*, Raworth (2017) argues that '*Humanity's 21st century challenge is to meet the needs of all within the means of the planet. In other words, to ensure that no one falls short on 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.*'
- c. Climate change and related socio-ecological uncertainties require flexibility and resilience. The world's use of 3 - 5 planets' worth of resources annually dictates that a major part of sustainable living is learning to operate collectively within affordable limits and developing corrective socio-economic processes, as well as better energy policies.

- d. The RESTORE project (<http://www.eurestore.eu>) points to different levels of sustainability ambition:
- *Limiting* damage caused;
 - *Restoring* social & ecological systems to a healthy state;
 - *Regenerative, enabling* social & ecological systems to evolve.

RESTORE argues for attention to the second level of ambition, leading to the third, but notes that most effort now is allocated to the first alone.

2. Transformation

- a. Transformation is generally regarded as being more than superficial or incremental. It refers to major shifts: *'profound and enduring systemic changes that typically involve social, cultural, technological, political, economic and environmental processes'*. (NORFACE – Belmont 2017).
- b. Whilst 'adaptation' has a sense of adapting as a passive subject to external change, 'transformation' implies taking a role in choosing and developing the planet's fate, as *'an active player in the future of the community and world'* (O'Brien and Hochachka 2010).
- c. Transformation poses particular challenges for policy. *'On the one hand transformation implies a need for policies that may challenge existing ways of doing things. On the other the abstract nature of concepts like transformation and resilience make it difficult for policy makers to put such concepts into practice.'*
(<http://www.transformations2017.org/about>).
- d. Transformation means not only changing what we do, but who we are and how we do things, alone and together. A vision of ontological change – crudely, where we change what we are to change what we do – appears in different ways across different traditions, e.g. in terms of aesthetic response (Dewey 1934), affect (Deleuze 2005) and the political economy of enchantment (Bennett 2001).
- e. The STEPS centre (<https://steps-centre.org/transformations>) made transformations its 2018 theme, collecting resources and asking: *'What does it take to make sustainability transformations emancipatory, diverse and caring, rather than repressive or controlling?'* (2018).

3. Creative Practice

- a. The broad term 'creative practice' is used here to include all professional and non-professional work which uses personal and/or collective craft skills and ingenuity to make something new, renew or reinterpret some aspect of the world: from writing, art and theatre to designing to repair cafes and data hackathons; from community development to storytelling to participative citizen science (such as making and using community air monitoring kits, e.g. Disalvo et al 2008) and experimentation of many kinds.

- b. Based on the evidence referenced below (Light et al 2018), creative practice involves one or more of the following modes:
 - i. **Illustrative**: created to show relations, explain a theory, make attractive or other instrumental adoption of a creative medium for communication purposes.
 - ii. **Responsive**: created in reaction to a feeling or stimulus, to express an affective state and share a mood or opinion.
 - iii. **Practical**: created to change a set of materials into a more useful form.
 - iv. **Transformative**: created to have a significant affective, political or spiritual impact on self, others and/or institutions, often to a stated end but not always articulated in the work.
- c. Transformative creative practice brings an experiential quality to projects, which, at best, enables collaborators to learn together and provides them with the opportunity to see differently. Such interventions can lead to new ways of *feeling* and *being* as well as *knowing*.
- d. Examples of how transformative creative practices enhances a behavior:
 - i. Starting to use a bike is good for the environment. But collaborative projection and reflection transforms this into considering the city layout and how to get others to leave their cars.
 - ii. Monitoring water quality is informative. Linking up people across a catchment so that data is shared, turns isolated readings into a system supporting local community initiatives, raising the interconnected challenge of ensuring clean water, food and energy (e.g. Carroll and Beck 2018).
 - iii. Growing food provides fresh local resources. Add a facilitated workshop and the opportunity arises for connecting this with how we make meaning for ourselves through reflection on the seasons and cycles of life (e.g. Light and Welch 2018).

Box 1 Drivers of creative practice

1. The SDGs provide a vision of an integrated approach to sustainability and are a clarion call for action that crosses boundaries to achieve it. One example of integration into policy is Scottish Government's alignment of the National Performance Framework and bolstered by its Community Empowerment Act. Such an approach promotes concerted action at all levels and kinds of social actors, from government to private and public bodies to communities and individuals to achieve multiple cross-cutting aims.
2. The Stockholm Institute's work on the Planetary Boundaries (referenced in Raworth, 2017) highlights the intersectional nature of the environmental challenges facing the world, whilst the SDGs highlight the interlocking nature of the social and human challenges. Together these provide clear evidence of the need for socio-cultural transformation as part of attaining the global structural change that will make life on earth viable in future.
3. Support for communities to reduce carbon emissions is not sufficient to bring about a step change in behaviour. For example Scotland's Climate Challenge Fund has supported a wide range of projects aiming both to reduce communities' carbon emissions and to strengthen the communities themselves as a means of increasing their resilience. The 10-year programme has seen more replication than acceleration and innovation. A different approach is now needed to achieve a step change.
4. The easy element of carbon reduction through decarbonisation of the energy supply is nearly over: the next steps involve challenging mass lifestyle transitions relating to questions such as diet, consumption and relationships with energy and travel. These will require a fundamental transformation as described above and there is as yet no widely accepted plan to achieve this.

C. Context

1. There is a considerable untapped knowledge about social change from the arts, design and humanities that can inform transformations towards low-carbon, resilient living (Fazey et al 2018).
2. There are many good examples of previous creative practice work, but they are spread across different disciplines and described in different ways. The multiple practices and themes intersect but this is not necessarily recognised by practitioners or external viewers. People appear to be doing different things, but they are using similar processes and techniques and aiming at similar outcomes.
3. There are multiple policy makers and funders needing to solve interlocking problems, albeit in different fields and often expressed differently.
4. Accordingly, there is growing interest in work in this field, for example from, on the cultural/creative front, the Arts & Humanities Research Council (e.g. Light et al 2018), Arts Council England, and, on a practical front, the worlds of climate change and environmental sustainability.

5. There is therefore a need to bring the appropriate knowledge together in one place and express it so that all can understand and make use of it.

D. Insights and Themes from previous research and projects

This section pulls out the Insights from existing research and identifies Themes, which, we note, offer transformative potential. Research references are provided below.

1. Insights

a. Insight: The Importance of Direct Engagement

Most people are trying to secure a decent life for themselves and those for whom they care. Yet sustainability work has overlooked the value of involving people directly in re-imagining futures and working towards them.

Creative practice has a key role in leading this participatory experimentation with changes in the way we might live. This ‘future-making’ involves activities requiring imaginative work and a consideration of values, from rethinking governance to planting a communal garden. Thus, many less obviously ‘creative’ activities can be transformed to become opportunities for transformative work through interventions that inspire collective reflection about how things might be different and valuable.

Effective transformative creative practice not only dreams up new ways of being, it creates the conditions for new ways of being to emerge. It is a means to ignite multiple different experiments in living, all able to contribute to a bigger story of change and move the world beyond the current impasse.

To achieve this, it is necessary to ensure that people have the elements that together support transformative change:

- **Forum** – a space to contribute and people to connect to
- **Motivation** – the desire to contribute
- **Articulacy** – the fluency to present one’s ideas in a particular domain
- **Confidence** – the assurance to become involved
- **Knowledge** – enough understanding to have an informed opinion
- **Sense of Agency** – an awareness that change is possible and of oneself as an agent of change
- **Association** – the ability to interpret things together or see links, such as: old and new, people and things, etc.

Together, these lead to:

- **Transformation** – the act of combining to make new ideas, feelings, concepts and associations and connection. (adapted from Light et al 2009).

b. Insight: Transformation requires more than Behaviour Change

Persuading someone to take an action stays at the level of behaviour change. Cultural change is promoted by bringing people together to consider their actions and the futures they want. This rethinking can be stimulated in different ways (for instance, the examples of biking, monitoring and growing, given above). Taking action (i.e. personally demonstrating effectiveness), looking beyond the immediate situation in time and/or space (i.e. making connections with other contexts), putting this into an emotional and ecological future (i.e. reflecting constructively as part of the activity) and joining with others to do so (i.e. being affected and affecting others) *together* works to turn what could remain as simple behavioural change into an enabling force in individuals' and communities' lives. (More detail of the themes that support this is presented in the final sections.)

c. Insight: Affective Change is Effective Change

Changes of the magnitude needed for living within planetary limits involve shifts in knowing, feeling and being – no single one is adequate. The 'rational actor' myth has led to emphasis on information at the expense of work on collective values and more collaborative approaches (Crompton 2010; Marçal 2016). Impacting feelings about issues is more powerful than addressing thought alone (e.g. Coelho et al 2017) and more likely to result in longer-term change, since it is closely related to self-identity (e.g. Terry et al 1999). Feelings of pride, in particular, are a trigger for greater pro-social environmental behaviour (Bissing-Olson et al 2016) and there is a link between the condition of 'learned helplessness' – where people who have been conditioned to expect pain or suffering will, after enough conditioning, cease trying to avoid the pain at all, even if there is an opportunity to escape it – and a failure to act on environmental concerns (Landry et al 2018). Overall a positive orientation has an impact on both breadth of creative thinking and willingness to engage in pro-environmental behaviour (Coelho et al 2017). Thus, inspiring people to act positively on their environment works to change their degree of commitment and sense of agency and brings beneficial side-effects, such as greater flexibility, virtuous influence on others and further initiatives towards sustainability (e.g. O'Brien 2012; Macy and Johnstone 2012).

d. Insight: One Size does not Fit All

Different routes result in this changed sense of self; we all have our own path. In common is a change to *what matters to people* and what they would fight to preserve or alter to make a future worth living. But the starting points are plural (especially in an inclusive society), even if the end point is more similar. One approach does not fit everyone because how people decide what matters differs, based on life experience, tastes and personality. Meaning is the great motivator (Frankl 1946), so within a frame that keeps activity affirming, articulations positive and outputs meaningful, creative practice can be devised to be responsive to the context and the people it is serving. It does not have to look or feel like what is happening in neighbouring areas; as long as it is following the same underlying frame it will produce similar transformations.

e. Insight: Looking beyond the Immediate Situation

Creative practice allows people to explode systems, expand cause-effect relations and raise consequences in a manageable way. The time and place of interventions will impact on which activities will be effective, but, more broadly, playing with time and place helps people situate themselves in the world and appreciate interconnections that make up the ecologies of life. Bottom-up place-making/shaping (Hester 1993) can be key to community-oriented pro-ecological changes.

Prompting reflection on how factors link up and which parts of the system people can influence alone or in groups is one of the ways that creative interventions can change mindsets and ambitions.

f. Insight: Dealing Well with Change

Creative practice brings hope. Facing and accepting the need for change is more challenging than continuing to do the same thing (e.g. Haraway 2016, Macy and Johnstone 2012) and can be made more appealing by clear next steps, the chance to do something constructive and the company of others.

Learned helplessness is a factor in stopping people acting (e.g. Landry et al 2018). Moving beyond this requires ability to look outwards and works best if big leaps in imagination and comprehension are balanced by pathways for social connection and immediate opportunities for making small but practical differences. This relates closely to the qualities of confidence, forum and sense of agency referred to above (Light et al 2009). Some economic and social security is necessary in people's lives to allow them to consider broader themes of change (Zimbardo and Boyd 1999). People need to have, as well as feel, some control over their environment; for instance, poverty and poor housing make it hard to be energy efficient in the home (Dillahunt et 2009), but there are other ways of getting involved and seeing benefits (and these can also positively affect other areas of people's lives). Creative practice can adapt to the circumstances in which people find themselves.

g. Insight: The Need for Collaborative Reflection

Whether envisaging, planning or fixing, to work with others at points of reflection is to escalate and embed changed mindsets. There are multiple reasons for this. The first is that it accesses peer effects in the group and impacts norms, i.e. people's new reality will have been negotiated, normalised and endorsed by others (e.g. Salazar et 2013). Second, groups tend to encourage each other past sticking points, such as feelings of helplessness or despair, and produce more imaginative results together. Third, strong social structures are the basis for sustainable change towards environmental ends and this a) models that, and b) creates new networks for promoting strong social structure.

h. Insight: Evaluation – Judging the Conditions of Change

Most existing evaluation mechanisms are not tuned to detect the changes that creative practice brings about in individuals or communities. Depth of meaning and feeling are likely to be more indicative than metrics for this kind of transformation. New mechanisms are being developed (and need to be developed) that

can support this kind of evaluation and judge effectiveness over shorter and longer terms (e.g. Light et al 2018).

i. Insight: A Support Role for Professional Intervention

Professional facilitation can help creative practices develop, but good work is already happening and can be supported by nurturing existing groups that demonstrate this ability to inspire change (e.g. Light et al 2018). At its most effective, the creative process inspires people to make these changes for themselves and to inspire others to follow. It has its own style of leadership and this emerges as part of the transformation. With support and access to the key elements, change can spread through a community, leading to new group behaviour and new priorities. Introducing creative support to an existing activity can be a way of encouraging reflection and the application of specific learning to wider societal issues. Figure 1 shows the position of creative practice in the cultural transformation process.

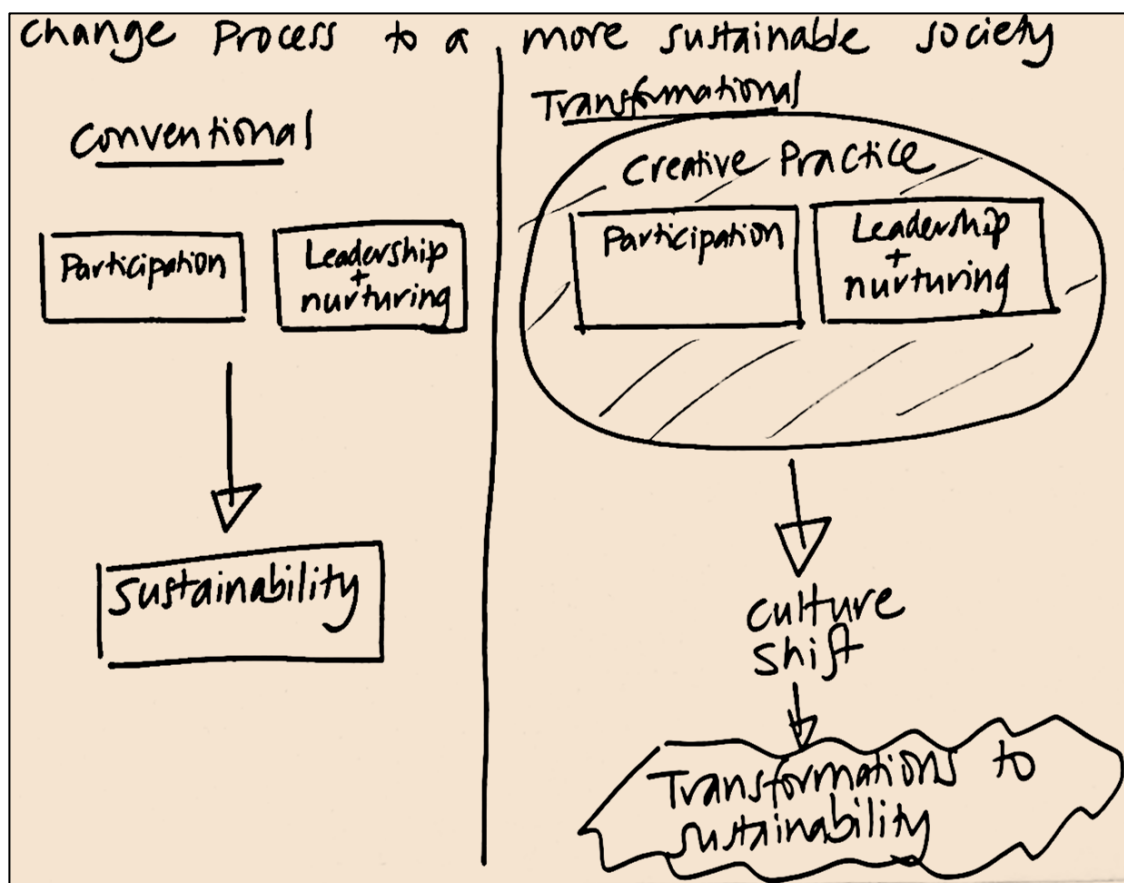


Figure 1 Shifting cultures rather than merely changing behaviour means encouraging or introducing creative practice into the process.

2. Promoting Aspects of Engaged Living: 6 Themes

What makes these creative practice approaches so valuable is their appeal to how we live, how we want to live and what makes life important, rather than economic and efficiency measures. The more aspects of our experience of living that a practice can touch upon, the more likely it is to trigger a rethink and recommitment through a sense of feeling different, not just rationalizing a better approach. Its goal is to impact our sense of meaning: our place in the world,

and how that relates to connection and belonging (e.g. Davis, Ghorashi and Smets 2018, Frankl 1946/2006). Feeling valued, able to influence one's environment and fulfilled is known to be beneficial for health (e.g. Shepherd et al 2008). It can be triggered by considering other times and spaces and by daring to dream (e.g. Weaver 2007).

This style of encounter can be strengthened by short interventions, but much is built by sustained engagement, repetition and attention to local details. The following six themes appear in much of the best work of this kind.

a. Theme: Existence

Creative practice is well placed to tackle the metaphysics of human existence and our relationship with life, death, loss, creation and other beings. While not all creative practice concerns itself with such philosophical fields, transformational aspects of creative practice engage at the level of *being* and help us question who we are and can become. This is often achieved experientially so that ontological questioning comes from a deeply inquisitive place inspired by a change of perspective and recognition that collective change would be possible in the short-term. We become what we do. A sense of agency and urgency can move people quickly from bystanders to advocates for more sustainable living. In looking for a sea-change, this is where we can stimulate and inspire the engagement with life that leads to new ways of thinking. In *Playing for Time: Making Art As If The World Matters*, Lucy Neal (2015) looks at how we mark the transitions in our lives: '*the celebration of new beginnings and endings could become a shared community practice, in which we rehearse how to be resilient in the face of adversity.... These reinventions of ceremony create an intimacy with death that resists mainstream culture and aspects of medical practice*'. An example of motivating practice is Bridget McKenzie's *Remembrance for Lost Species*, an annual commitment to remember and mourn the passing of biodiversity (www.lostspeicesday.org).

b. Theme: Meaning

The affective dimensions of relationships, what we notice, where we put our effort and how we build coherence for ourselves and situate ourselves within the world are all matters that can be noted through reflection and changed through encountering the right creative stimulus. *Meaning* is crucial to motivation and a small shift in sense-making can alter behaviour more dramatically than any amount of manoeuvring at behavioural level.

Changes in the meaning we attribute to things and relations can be performed through disruptive interventions, but more often take time and commitment from dedicated practitioners. Mattering (the condition of being meaningful to someone) has patterns to it: caring; justifying this concern through its own value to the individual; extending the rewards to be received from this investment (Grossberg 2006). These patterns can be applied to approaching the living world and how we develop it as committed citizens. For instance, the Transition Movement has developed the concept of *Inner Transition* to create a culture in the organisation (and beyond) that supports a balance between inner and outer change: '*The nature of our relationship with our inner life determines how able we are to make the practical lifestyle, relational and cultural changes needed*

for Transition – as well as bringing depth, texture and meaning into everyday life. Inner Transition supports the choice of healthier, more resilient, connected and caring ways of being and acting in the world and experiencing inseparability and interdependence. (transitionnetwork.org/about-the-movement/what-is-transition/inner). This inner journey is possible to envision in much the way that positive material futures can be imagined (youtu.be/35QYtt7vmhY).

c. Theme: Connection

Being in the world together, among other living beings, is a profound part of what constitutes us as individuals (Vygotsky 1978 on people's interdependency; Haraway 2016 on all life's interdependency). The basis of ecological citizenship is to be in balance with other life forms; it is an intrinsically relational quality. Considerable creative work takes relationships as a starting point and uses this to explore sustainability as a social issue. *'Making is connecting because acts of creativity usually involve, at some point, a social dimension and connect us with other people; and [...] because through making things and sharing them in the world, we increase our engagement and connection with our social and physical environments.'* (Gauntlett 2018).

d. Theme: Time

Time horizons are critical in how we think and plan for sustainability, yet both politics and commerce are caught in short-term cycles. *'Our decades-long research and personal involvement with aspects of temporal perspective have convinced us that there are few other psychological variables capable of exerting such a powerful and pervasive impact on the behaviour of individuals and the activities of societies,'* say psychologists Zimbardo and Boyd (1999). Their work points to the importance of a thinking with a future orientation in dealing with challenges, rather than being stuck in a fatalistic or hedonistic present or perfect past. This may point to why playing with time works well for some, less well for others. Moreover, Pantzar and Shove (2010) have described the ways in which daily practices (such as commuting and showering) condition and are conditioned by temporal orders of daily life and make up more or less sustainable consumption patterns.

There is some evidence that future-gazing calls on a vaguer and more optimistic mode of thought (D'Argembeau and Van der Linden 2004). This means that situating change as having happened, rather than in the future, makes for more detailed and convincing ideas of what can be achieved. *The Museums of the FutureNow* (<https://museumsofthefuturenow.wordpress.com>) is an evolving artwork and participatory process that uses this device. It is set in a future from which participants look back at events between then and now and decide on how the world would have played out.

e. Theme: Space.

Considering spatial aspects of sustainability and community life is a popular part of creative practice, with mapping of everything from places of significance, to waterways to emotional touch-points. Helping people think of their space transformed also introduces broader themes of how one local spot connects with other places in the world and people living in them and a sense of the links between community, conviviality and the interdependence of life on the planet.

A project that linked both practical and inspirational spatial work is *Square Go*. The Stove in Dumfries invited local people to engage in conversation on topics relating to the future of the town and then add ideas to a giant map of Dumfries drawn out on the paving of the square. It was one activity in a decades-long engagement in developing space meaningfully for the residents of an area with a struggling town centre and it did more than just revive a part of the city; it gave people hope through an opportunity to shape their place.

f. Theme: Imagination

Perhaps the most remarkable quality of humankind is the power to dream and imagine how things might be different. We are not locked into the current moment, but can recall other situations and extrapolate into new ones. Whole emancipation programmes have been built around this quality, such as Augusto Boal's *Theatre of the Oppressed* (Boal 1979), which encourages people to take over the action on stage and rehearse the changes they want to see before using this extra confidence and wisdom as part of enacting the changes for real.

Of course, what we imagine has a bearing on what the world could become. For instance, the Craftivist Collective addresses gentle action for change: 'Gentleness can be a great strength, and quiet action can sometimes speak as powerfully amid the noise as the loudest voice. And if we want a world that is beautiful, kind and fair... shouldn't our activism be beautiful, kind and fair?' (Corbett 2017).

Harnessing imagination is a core part of transformation, but even more compelling is what happens when people observe the degree of agency that using imagination makes possible.

E. Summary and Manifesto

1. Shifting to a different and more sustainable world means going beyond the 'austerity narrative' to focus on societal flourishing.
2. This shift requires new ways of thinking and working. Creative (cultural) practice can help bring about such transformation. Creative practice goes beyond awareness-raising to encourage different ways of thinking, feeling and organising, within institutions and across societies.
3. Using the power of the imagination, we can create new futures. Unlike science and technology, which do not equip us well to imagine, design and cultural practice provide ways of harnessing curiosity and exploring alternatives. It is timely to reverse the hierarchy of discipline with imagination and design leading, supported by science.
4. Hope and inspiration can bring about change. Without experiencing vision, people are unlikely to take action. People don't learn from a place of fear, or they learn in a way that doesn't lead to better places. We need to change how people feel about uncertainty, providing the positives and helping to find meaning. This will create greater opportunities for policymakers and scientists to support change.

5. Achieving a cultural shift will involve a diversity of approaches at different scales, recognizing the value of relational assets. It is not about creating a uniform landscape replicating similar practice, but about encouraging creativity and new ways of working. It is important to embrace difference in terms of perspectives, ways of working and context, acknowledging that how things are different is more interesting than commonalities. There are many entry points.
6. Achieving a cultural shift will involve challenging existing and traditional hierarchies. This means addressing the hierarchies of knowing, organising, participating, initiating, imagining and leading, not only in relation to practice but to the perceived hierarchies of knowledge across academic disciplines.
7. Achieving a cultural shift will involve transitions in leadership with a rebalance from top-down policy to community-led actions and systems approaches. The drivers of wellbeing are increased sense of agency, autonomy, social connection and interdependencies.

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