Imagining transformation: Change agent narratives of sustainable futures

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Abstract

Deliberate transformation for sustainable futures requires new social imaginaries that collectively envision futures beyond the dominance of neoliberal capitalism. We looked for these imaginaries by surveying change makers working on system transformation and ecological issues. Drawing on a conceptual framework that connects social imaginaries, stories and memes, our research asked: what are the memes and stories that proponents of transformation use to describe desirable futures? And, how likely are social imaginaries derived from these memes and stories to guide deliberate transformation? Collectively, the 72 survey respondents valued ideas of harmony with nature, social justice and equality, ecological sustainability, human awakening, compassion, wellbeing, and connection as elements of their imagined futures. Many found it difficult to then incorporate these ideas into stories. Nevertheless, they identified three simple plot devices for moving from a problematic present to their desired future – crisis, 'waking up' and collective action through social movements. Overall, social imaginaries formed from these stories and ideas are contested and currently lack the plausibility and tangibility to challenge neoliberal capitalism. Transformative social imaginaries could grow from these ideas if change agents nurture shared visions of desirable futures, explore real practices that support awakening and create tangible stories to guide collective action by 'all of us'.

Keywords: social imaginaries; stories; memes; transformation; change agents; sustainable futures

1   Introduction

Humanity faces major global challenges like climate change (IPCC, 2018; Ripple et al., 2019), biodiversity loss (IPBES, 2019), inequality and poverty (Alvaredo et al., 2018; UNDP, 2019) that threaten our future on the planet. An effective response to these interlocking sustainability challenges will require far-reaching transformations in technological, economic, political, social and cultural systems (Fazey et al., 2017; Moore & Milkoreit, 2020; Network, 2022; Scoones et al., 2020).

One system in dire need of transformation is the neoliberal capitalist[1] economic system that dominates political and economic discourse (Healey & Barish, 2019; Raworth, 2017), fuels humanity's deep disconnect from nature (Eisenstein, 2018; Korten, 2015; Riedy, 2020), and is strongly implicated in climate change (Ehrenfeld & Hoffman, 2013; Lovins et al., 2018; Ripple et al., 2019). Neoliberal capitalism promotes a core set of ideas that normalise ecological and social exploitation in the pursuit of economic growth (Healey & Barish, 2019; Korten, 2015; Lovins et al., 2018; Monbiot, 2016; Waddock, 2016). The devastating impacts of the neoliberal capitalist narrative on social-ecological systems have prompted the emergence of multiple overlapping movements promoting alternative economic futures, such as the degrowth movement (Kallis, 2018) and the Wellbeing Economy Alliance.[2] Despite the participation of many thousands of people and organisations in these movements, a neoliberal capitalist economic narrative remains globally dominant.

Recent scholarship points to the role that social imaginaries (Taylor, 2002) play in the success or failure of transformative responses to global challenges (Levy & Spicer, 2013; Milkoreit, 2017; Moore & Milkoreit, 2020). Deliberate societal transformation requires imagination 'to envision possible, likely, and desirable futures that can guide decision-making and direct social change in collectively determined directions' (Milkoreit, 2017, p. 1). Scholars of social imaginaries highlight the ways in which our collectively held visions of the future both limit and enable positive transformations (Milkoreit, 2017; Moore & Milkoreit, 2020). A key research agenda is to determine whether our social imaginaries are sufficient to support deliberate transformation in response to sustainability challenges. And if not, how might those imaginaries be enriched? In the specific case of economic transformation, how successfully are change agents able to imagine alternatives to neoliberal capitalism?

In her work on socio-climatic imaginaries, Milkoreit (2017) argues that the imaginaries of social groups form when individuals share what they imagine with others and find convergence and coherence. One of the most obvious ways in which this sharing takes place is through storytelling, particularly storytelling about imagined futures.

In what follows, we report on an effort to collect stories of desirable futures from change agents working to transform economic systems. Our intent was to look for common ground in such stories that could support the emergence of shared social imaginaries to guide

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[1] Our critique here is specifically of the dominant combination of neoliberalism and capitalism, hence we use the term 'neoliberal capitalism' throughout. We are agnostic on the question of whether a reformed capitalism can support a sustainable future, but clear that neoliberal capitalism cannot.
[2] https://weall.org/

deliberate transformation. As will be demonstrated, the effort proved more difficult than we hypothesized, yet the seeds of possible new imaginaries are evident.

The next section describes our conceptual framework, which draws on the related concepts of social imaginaries, stories, and memes. This is followed by a section summarising our online survey methodology and analytical approach. Section 4 presents the survey findings, which are then discussed in Section 5 to draw out implications for change agents pursuing deliberate transformation. Finally, Section 6 concludes by summarising lessons for establishing transformative social imaginaries.

2   Conceptual framework

Our conceptual framework for this survey research draws together three closely related concepts: social imaginaries; stories; and memes.

2.1   Social imaginaries

According to James (2019), the concept of social imaginaries emerged in the 1940s in the work of Jean-Paul Sartre and Jacques Lacan, with key contributions later made by Cornelius Castoriadis (1997), Manfred Steger (2008) and Charles Taylor (2002, 2003), among others. Broadly speaking, social imaginaries can be understood as how people collectively see, sense, think and dream about the world and, in the context of social change, how they envision making changes in that world (Taylor, 2002; Yusoff & Gabrys, 2011). Social imaginaries are a resource for both understanding the current world and creating representations of possible future states of the world (Moore & Milkoreit, 2020). They 'provide a shared sense of meaning, coherence and orientation around highly complex issues' (Levy & Spicer, 2013, p. 660) and shape the mindsets or paradigms out of which people act. As such, they are crucial to transformation.

Social imaginaries have recently been discussed in the context of climate change (Davoudi & Machen, 2021; Levy & Spicer, 2013; Luke, 2014; Yusoff & Gabrys, 2011). Levy & Spicer (2013, p. 662) introduced the concept of a climate imaginary, which they defined as 'a shared socio-semiotic system of cultural values and meanings associated with climate change and appropriate economic responses'. They identified four core climate imaginaries, which they called 'fossil fuels forever, 'climate apocalypse', 'techno-market, and 'sustainable lifestyles' (Levy & Spicer, 2013). These imaginaries are in contestation to form 'value regimes', defined as 'the broader political-economic settlement linking an imaginary with specific set of technologies, production methods and market structures' (Levy & Spicer, 2013, p. 673).

This scholarship makes it clear that imaginaries are plural and in competition for our hearts and minds. For many decades, the social imaginary supporting neoliberal capitalism has won that competition (Monbiot, 2016; Temple et al., 2016; Wrenn, 2016). The collective beliefs embedded in this social imaginary normalise ecological and social exploitation in pursuit of economic growth. While the flaws in this belief system are evident to some observers (Healey & Barish, 2019; Korten, 2015; Lovins et al., 2018; Monbiot, 2016), many remain

caught up in this pervasive narrative, which serves as the default cultural mythology and future for today's world. Deliberate transformation requires new social imaginaries to emerge that offer compelling alternatives to neoliberal capitalism. There are many potential sources of such imaginaries (Riedy, 2020), from Indigenous, decolonial and 'beyond-human' wisdom that reimagines human relationships with each other and the natural world (Chao & Enari, 2021; Roux-Rosier et al., 2018) to various re-visionings of the purpose of economic activity (Blühdorn, 2017; Costanza et al., 2018; Kallis, 2018; Raworth, 2017; Waddock, 2021). In this paper, we look to the latter as a possible source of new social imaginaries by surveying change agents working in alternative economic movements.

For a social imaginary to support deliberate transformation, it needs to offer a sense of transformative agency (Moore & Milkoreit, 2020). This could be achieved, for example, by placing relatable characters in the collective story at the heart of social imaginaries. Transformative imaginaries also need to be plausible. Moore & Milkoreit (2020) argue that people discount future imaginaries that are either too optimistic or too pessimistic. To guide deliberate transformation, imaginaries need to be aspirational but not feel too far out of reach. They need to offer a plausible pathway from the present to the imagined future that would allow the imaginary to be embedded as a value regime (Levy & Spicer, 2013).

2.2   Stories

Taylor (2003, p. 23) notes that social imaginaries are carried in the 'images, stories, and legends' of 'ordinary people'. This points to methodological options for accessing social imaginaries. We could ask people to share or create visual images that represent their imagined present and future, or to tell us stories (noting that a legend is just a particular kind of traditional story). We chose to focus on soliciting stories from change agents as we anticipated they would offer a more direct expression of imaginaries and be simpler to collect through an online survey. Stories have the power to stimulate our imaginations, guide and influence our behaviours, and shape ideas about what is possible and normal (Riedy, 2020). In daily life, stories help us make sense of the world in the face of complexity and uncertainty, and open up or close down possibilities, stimulating or limiting imagination (Augenstein & Palzkill, 2015; Harris, 2017). Stories are told as a sequence of events, documenting the actions or interactions of characters (protagonists and antagonists), set in contexts, and involved in a plot that has a beginning, middle, and end (Moezzi et al., 2017).

Human minds naturally think in stories and we are well equipped to remember and share them (Cron, 2012; Harris, 2017). When stories are popular enough to be widely shared, they contribute to the collective imagining from which social imaginaries form. At the same time, stories are shaped by the social imaginaries in which the storyteller is embedded. Asking people to share stories about their desired future offers a glimpse into current social imaginaries and potential future imaginaries. Therefore, in this paper we focus on how 'agents of transformation' envision and 'story' the future.

To evaluate whether these stories could help to generate transformative imaginaries, we examine the transferability of the stories. For stories to contribute to collective social imaginaries, they need to spread from mind to mind. Stories spread when they: engage affect by connecting with emotions, values and identity (Bulfin, 2017; Chabay, 2020; Morris

et al., 2019); are coherent and accessible; are conceptually defensible; help to create dialogue rather than polarisation; and open up a bigger picture of new ways to be and think (Boulton, 2016; Moezzi et al., 2017). Further, as noted in our discussion of social imaginaries, these stories need to support transformative agency, particularly by including characters with which people can identify. Identifying with the characters in a story can help people to see the ways in which they might contribute to transformation.

Another useful way to think about the transformative agency of stories is provided by Marshall Ganz's work on public narrative (ACF, 2017; Ganz, 2011). Ganz advises change agents to weave together three types of story to motivate change:

- A **story of self** – a personal story communicating the values that called an individual to act on a particular issue.
- A **story of now**, communicating an urgent challenge the community is facing and needs to act on. This is the story of the problematic present – the agreed starting point for the larger story.
- A **story of us** – a collective story that demonstrates the shared purposes, goals and visions of the community. This story shows people that they are part of a broader social movement, capable of collective action.

We will explore which of these stories change agents tell.

2.3 Memes

The final element in our conceptual framework is the meme, a building block or core unit of culture. The term meme was introduced as a cultural analogue to the gene in biology by biologist Richard Dawkins (1976). As described by Blackmore (2000), memes are words, phrases, ideas, images, symbols, and artefacts of various sorts that, when resonant, replicate well from person to person (mind to mind). While simple in form, resonant memes activate frames and mental models that are rich in meaning and can connect with our deep cultural narratives (Lakoff, 2014). Memes are the meaningful content of stories and social imaginaries. The memes that a storyteller chooses to use in a story determine the kind of meanings that the story conveys. Studying the memes embedded in stories can reveal much about the way of thinking of the storyteller and the imaginaries they are engaged with.

Neoliberal capitalist narratives repeat a powerful core set of memes that will be familiar to most, including: humans are self-interested profit maximizers; markets should drive human choices, and they (and trade) are and need to be free because that will solve societal problems; the only purpose of businesses is to maximise wealth for shareholders; responsibility is all individual; there are no such things as 'public goods' or societies; negative by-products of economic activity are simply 'externalities' that should be accepted; and continual growth is both necessary and possible on a finite planet (Lovins et al., 2018; Monbiot, 2016; Riedy, 2020; Waddock, 2016).

Those arguing for transformation of the economic system are propagating memes and stories that directly challenge the dominant narrative of neoliberal capitalism. The final question we explore in this paper is whether those memes are sufficiently compelling to

spread through stories and inspire collective social imaginaries that can guide deliberate transformation. Section 2.2 listed factors that help a story to spread, and memes need similar qualities if they are to spread – they need to engage affect, be quickly comprehensible, and open up new ways of thinking.

Drawing together the three elements of this conceptual framework, our two research questions are:

1. What are the memes and stories that proponents of transformation use to describe desirable futures?
2. How likely are social imaginaries derived from these memes and stories to guide deliberate transformation?

To answer these questions, we surveyed agents of transformation, focusing particularly on those who are engaging with 'new economics', and analysed the stories and memes that they provided. Our methods are described in the next section.

3   Methods

If any group of actors might be able to override Margaret Thatcher's famous dictum about neoliberalism that 'There is no alternative', we believed it ought to be people working for transformation of economic systems. Toward that end, we developed a short online survey instrument using the Qualtrics platform and solicited engagement from selected networks of change makers, activists, and scholars advocating for more sustainable economic systems. These networks included the (now defunct) SDG Transformations Forum, the Wellbeing Economy Alliance (https://wellbeingeconomy.org/), the Transformations community (https://www.transformationscommunity.org/), the Institute for Sustainable Futures at the University of Technology Sydney (http://www.isf.uts.edu.au) and various divisions of the Academy of Management (https://aom.org/). Participants in these networks were asked to further distribute the survey, resulting in some snowballing beyond these groups.

The complete online survey instrument is provided in Supplementary Material. In summary, we asked participants to provide some basic demographic data and respond to the following questions:

1. What do you think are the most important ideas that should be part of the stories that guide humanity into the future?
2. Can you think of any 'characters' that play important roles in your ideal future?
3. Can you share a story that includes some of the ideas and characters you have listed above?

The intention of the first question was to identify memes that participants considered important and to get them thinking about ideas they would like to include in their story about the future. For example, in neoliberal capitalist narratives, the memes of maximizing profits and shareholder wealth, continual growth, and free markets (market primacy) are among key (sticky) ideas. The goal here was to identify memes that change agents use to

describe new economic ideas and gauge whether they are similarly resonant and easily repeatable. Participants could list up to five responses.

The second question focused respondents' attention on characters. As discussed above, a story or social imaginary is more likely to create a sense of transformative agency if people can identify with the characters and imagine a role for themselves. Advice for writers and orators on creating compelling stories also frequently identifies relatable protagonists as crucial to the impact of a story (Abbott, 2020; Cron, 2012; Ganz, 2011; Storr, 2020). We prompted participants to think about different kinds of characters – heroes, villains, bystanders, etc. – and encouraged them to think not only of individual human characters but also to cast groups, animals, objects, or ideas as key characters. The intention of this prompt was to inspire imagination and create greater diversity in responses.

In the third question, we challenged participants to write a story using the memes and characters they had identified. This is the main reason we chose to use an online survey for this research – we wanted participants to take time to think and write a story, which they would not have in the context of an interview or workshop. There was no limit on the length of responses. While it is natural for humans to share stories, we were concerned that participants would balk at the challenge of writing a story in the context of an online survey. As such, we provided some prompts to simplify the task and increase the response rate. First, we prompted participants to consider a simple story structure or 'plot':

- What were things like before?
- What happened to change that?
- What was the impact of that change?
- How did that change lead to your ideal future?

Second, we indicated that the nature of their ideal future was of most interest, recognizing that this ideal future represented the kind of 'moral of the story' that Ganz (2011) indicates is important in shaping public narrative. We felt that such stories would best reveal aspirational social imaginaries. Finally, we told participants that they could simply describe their ideal future if they found it too hard (or had too little time) to write a story.

The survey received 72 usable responses. We noted that respondents tended to be committed, in that all questions were generally answered, some at considerable length. Demographic background showed an even gender balance (36 males and 36 females) and a wide age distribution with younger people less represented and the bulk of respondents ranging from 35-64 [specifically, 18-24 (1), 25-34 (14), 35-44 (18), 45-54 (18), 55-64 (10), 65-74 (6), 75-84 (4), no response (1)]. Geographically, the location of respondents reflects where the selected networks were stronger and weaker [specifically, Australia (12), Europe (20), Latin America (9), North America (28), Asia / Middle East (3), Africa (0)].

Initial analysis assessed word frequency using qualitative analysis software (NVivo) to identify frequently used memes and characters. We then investigated the contextual use of the most frequently used memes and characters to explain their high frequency. While this approach provided an initial overview of the data, it also demonstrated that many frequently used terms had multiple meanings or were used inconsistently. Thus, we

proceeded to inductive coding of the data in NVivo to draw out themes. The data were coded independently by both authors to identify key memes, characters, story types and story elements. We then compared codes and developed an integrated coding framework that consolidated our analyses.
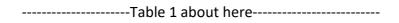
4   Results

Survey results are summarised below, starting with the memes used by respondents, followed by descriptions of characters, story types and story content.

4.1   Memes

This section identifies the most used memes in response to the survey question about the important ideas needed to guide humanity into the future. We start with memes because they are the foundation or building blocks of stories and social imaginaries.

Participants could list up to five important ideas they believed should be part of stories that guide humanity into the future. The ideas expressed were diverse and numerous; Table 1 lists the twelve ideas most frequently expressed. Survey respondents sought a different relationship with nature and with each other – more cooperative, harmonious and connected. They sought human wellbeing, equality, justice and sustainability. These goals are in stark contrast to the individualism, competition and thirst for economic growth at the heart of neoliberal capitalism. Many respondents imagined that achieving these goals would require an awakening or strengthening of particular human values, and they were ultimately hopeful that this awakening or new consciousness could be achieved.

While the memes listed in Table 1 are those on which there was most agreement, it is also instructive to examine areas of less consensus. We identified 15 occasions where participants listed processes of change, or triggers for change, reflecting diverse ideas about how change happens: 'Change is adversarial'; 'Progression forward, not idolization of the past'; 'Anyone can create change'; 'Transitioning'; 'Science-based development'; and 'we need to appeal to common sense'. Respondents also identified specific practices for change creation, including new economic practices, localism and participatory governance. These ideas were too diverse to gather into coherent themes. In short, while it was clear that most respondents sought an economics oriented towards sustainability or flourishing of life, the complexity of defining what precisely this requires comes through in the diversity and relative lack of coherence of the memes identified.

---------------------Table 1 about here-------------------------

4.2   Characters

While the structure of the survey questions encouraged respondents to categorise characters as *main characters* and *supporting characters*, the responses did not fall neatly into these categories. Instead, respondents identified a diverse cast of *protagonists* who

played a role in driving their stories towards a desired future, and a narrower cast of *antagonists* who resisted change. This simple framing of heroes versus villains is a common story trope (Abbott, 2020; Booker, 2004; Storr, 2020).

Overall, the choice of characters reflected a strong sense of justice and inclusion, empowering people and groups (including nature) that are currently damaged or disempowered by neoliberal capitalism. Likewise, antagonists were current power holders and others benefiting from the status quo, who attempt to hold the current system in place. Key categories of protagonists and antagonists, and the challenges faced by these characters, are described below with relevant quotes listed in Table 2.

----------------------Table 2 about here-------------------------

4.2.1 Protagonists

The most striking thing about the protagonists identified was their collective nature. Instead of casting a single heroic character in their stories, respondents positioned collective actors as the key protagonists. The respondents expressed a sense that a sustainable future is only possible if everyone gets involved, and many extended that agency to characters from the non-human world. Respondents also identified dedicated change agents, campaigners, and activists as key characters with the task of waking up everybody else. Respondents also frequently identified young people and children as key characters in their story, in part because of a recognition that they might have fresh ideas and in part because they will be more affected by the future than older people. Many respondents also wanted to tell stories that would address social justice concerns by giving groups that are marginalised by neoliberal capitalism an opportunity to take centre stage as key characters.

While the transformative potential in most of the stories came from empowering new characters to take on leadership roles, a small number of respondents identified people currently in leadership positions as key protagonists.

4.2.2 Antagonists

While respondents identified diverse protagonists as characters, antagonists (or villains) were of only two types: an impersonal current system; and people benefiting from that system who oppose change. Respondents sought to express a sense of the agency of the intangible economic system. Although the economic system is a human creation, its insatiable demand for growth led to its positioning as an active monster to be tamed in some of the stories. A more frequent response was to identify specific groups that benefit from the status quo, or remain ignorant to our predicament, as antagonists opposing change.

4.2.3 Challenges

The survey also asked respondents to identify the challenges that the protagonist would need to overcome to bring about their ideal future. The framing of this question was inspired by a simplified version of the well-known 'hero's journey' story structure

(Campbell, 2008). In this simple form, the hero is presented with a challenge and needs to make a choice, which leads to an outcome (ACF, 2017). The challenges identified by participants fell into three categories: the personal challenge of building the capacity to be an effective change agent; the social challenge of becoming part of a broader movement for change; and the systemic challenge of transforming systems.

4.3 Story response types

Although we asked respondents to share a story, and even offered prompts to simplify the process, many found it challenging to express their desired future in that format. Seven of the survey respondents did not complete the question asking for a story, despite responding to other questions. Among the 65 responses received, the most common and third most common response types did not meet the definition of a story, as they lacked a discernible plot, characters, or moral (Ganz, 2011), or even a setting. We coded these responses as either 'theories of change' (coded 29 times) or 'static visions of the future' (11).

Theories of change were responses that provided an argument or opinion on what needs to change to bring about a better future but did not attempt to tell a story expressing that process of change. Some of these responses included descriptions of what was problematic about the present, before positing a solution. For example:

> *Change the way we live and interact with nature.*

> *We lived in a capitalist, inegalitarian system that dominated other systems. We accumulated riches and sought pleasure. We were afraid of change, and concerned with protecting ourselves…I think we will need a major disaster, quick or not so quick, to make us pull together just to survive. Or…the young people of the world can rise up to challenge us.*

Static visions of the future described a desirable future state, without telling a story about how that vision could be (or was) achieved. For example:

> *The destination: A future where humans and non-humans share the spaces of the earth in a constantly shifting equilibrium, like tightrope walkers.*

> *An earth in balance, with living oceans, as many species as we can accommodate, and as little active carbon management by humans as we can afford to get by with.*

While these non-story responses made up more than half of the total responses, 31 responses did use a story structure. Of these, 26 were coded as **from dystopia to a better future**. These contributions told a story of how particular characters (or humanity as a whole) moved from a problematic present to a more desirable future. They were in a wide variety of styles, including fairy tales, speculative fiction, dramatic three-act arcs, and letters from the future. These stories generally integrated Ganz's story of now and story of us, but rarely included a story of self.

A handful of stories took a different approach. We coded three stories as **personal stories**. These told the story of a change that an individual had experienced (Ganz's story of self),

without drawing out any obvious lessons to support the wider emergence of sustainable futures. Another two stories described futures that, to us, were entirely **dystopian** – stories in which civilisation collapsed or humans became extinct.

4.4   Story content

The stories contributed were attempts at synthesis, bringing together the memes, characters and challenges identified in earlier parts of the survey. Some of what we can observe in the stories therefore reflects what has already been documented, however, the stories frequently brought new ideas into play and the ways they connected ideas are of particular interest. The discussion below draws on all the response types, but most examples provided are extracts from responses that used a story structure to illustrate the themes. Full responses are provided in the Supplementary Material.

4.4.1   Common ground in diagnosing the present

Whether describing a problematic now as the starting point for a story, or presenting a theory of change, respondents had much in common when diagnosing the present reality. Many described the dire state of nature, evidence of ecological collapse and the impacts of a changing climate, as in '*The earth was dying*' or '*Environmental degradation was widespread, climate change…was threatening the future of humanity*'.

In keeping with the identification of '*the system*' as a key antagonist and '*confronting the system*' as a key challenge, most respondents described aspects of the current economic system that they found problematic. One such response is typical: '*The world was based around individuals and individual values; unequal gender roles and unequal access to power. The world was competitive and harmful for all humans and for the environment*'.

Others focused more on the politics than the economic system, although in many responses they were closely related. For example: '*Power in the world was largely in the hands [of] politicians and wealthy individuals. They ignored recommendations on needed changes for a sustainable future because such changes represented a threat to their power and wealth*'. These diagnoses of the present (stories of now, in Ganz's terms) were often full of emotion, whether sadness at the parlous state of the natural world, or anger at the system and people that respondents held responsible. The stories of now offered by respondents were largely consistent with each other, and with the academic literature on sustainability transformations. In other words, the starting point of the story is well known and largely agreed, even if different respondents emphasised different aspects.

4.4.2   Common ground in desired futures

When we asked respondents to identify the most important ideas (memes) that should be part of the stories that guide humanity into the future, we did not ask them to distinguish between their visions of a desired future and their ideas about how to get there. This distinction was clearer when reviewing the stories. The memes discussed in Section 3 were all present in the stories, but some were used to describe future states, and some were used to describe pathways to those futures.

There was again much common ground in desired futures. The six most prominent themes describing desirable futures were: human connectedness and cooperation; a new social-economic-political system; harmony between humans and nature; regenerative communities; genuine human wellbeing; and social justice. These themes are summarised in Table 3, which also connects them with relevant memes from Table 1. Mostly, the prominent themes in the stories echoed the most prominent memes identified in the earlier survey question. One evident shift was the greater prominence of economic transformation in the stories, relative to the memes. We coded 'a new economy' 12 times under memes, but at least 21 of the stories touched on shifts in economic systems. It seems that, when asked to tell a story of change, more of the participants discovered through their storytelling a need to confront the reality of the existing economic system. We also found that themes of regeneration were more prominent in the stories than the memes, perhaps reflecting a recognition that moving forward to a desired future requires repair of the damage already done to other living things.

----------------------------Table 3 about here-----------------------

4.4.3   Pathways to sustainable futures

The respondents apparently found the task of coming up with a plot for their stories the most challenging part of the process, to the extent that many avoided using a story structure entirely. For those who did write a story, defining a plausible sequence of events that would lead from a problematic present to a desired future was clearly difficult. Further, opinions on the pathways to sustainable futures were much more diverse than diagnoses of the present or descriptions of the desired future. The most common pathways identified in the stories are summarised in Table 4, with example quotes.
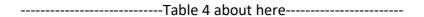
Given that the most prominent themes in the stories were about human connectedness and new social-economic-political systems (see Section 4.4.2), it is not surprising that many stories imagined human collaboration to bring about systemic change. The challenge was to imagine a trigger that would lead to such collaboration. The most common response (coded 27 times) was to tell a story in which humanity would collectively 'wake up', either developing new knowledge, awareness or values, or allowing values that already exist to come to the fore. For example: 'A small percentage of the masses awaken from the dream and develop self-awareness to varying degrees'.

In this survey, where the respondents were active change agents working towards sustainability, it is likely that most have personally experienced the kind of awakening that they describe. Their own awakening presumably inspired them to become change agents, so it is natural that their theories of change imagine the widespread replication of such a process. The popularity of 'waking up' as the imagined pathway to a viable future has been explored and problematised in previous work (Riedy, 2013, 2016). The idea of awakening is often deployed in a wishful, almost magical sense, with little consideration of whether widespread transformation of human values is realistic in the near-term or how it will come about. As a result, many of the stories read as fairy tales that used awakening as a kind of *deus ex machina* to achieve a happy ending but dodged difficult questions about how to

facilitate transformation. Nevertheless, some did propose practices that would transform values, including slowing down the pace of life to allow time for reflection and connection, embrace of spirituality, critical thinking, and reconnecting with nature.

Another substantial group of stories (17) proposed collective action through civil society movements as the key driver of transformation towards a sustainable future. Often, this collective action was intertwined with awakening, either in the sense that awakened people collaborated to drive change, or that movements got the attention of humanity and woke people up. Although less common (coded 8 times), a third trigger for transformation in the stories was some form of crisis.

Various combinations of these three triggers – crisis, collective action and awakening – made up the plot of most of the stories, and the 'theory of change' of responses not expressed as stories. Other triggers for change were proposed in some responses, including education (particularly of young people) (coded 5 times), leadership by youth movements (5), leadership by governments (5), participatory decision-making practices (3), frugality (1), spiritual activities (1) and creativity (1).

----------------------------Table 4 about here-----------------------

While many of the stories lacked a convincing theory of change, a handful wove together multiple themes while still coming across as realistic. The story below is the best example submitted. It has been edited due to space limitations, but we have tried to retain the key elements of the theory of change. It identifies heroes and villains, hints at the content of a new social imaginary (e.g. participatory governance and localisation) and combines crisis, awakening and collective action.

> *Before (now) power in the world was largely in the hands [of] politicians and wealthy individuals…They encouraged narratives--even if they themselves knew they were false--that claimed climate change was a hoax, because they knew doing so made enough people believe them that they could maintain their power. But eventually their lies caught up to them. Changing weather events brought devastation around the world, and more people started paying attention to what was really happening…They began to understand that it wasn't simply enough to agree with climate science or with a stance on a particular issue, but that they needed to DO something about it. So they became more active in politics and local, national, and global activism. They elected more and more politicians who understood the challenges both of climate change and income inequality, which are often intricately intertwined. In a few short years, the political power was in the hands of those fighting for a sustainable future--even though it wasn't easy…With the heroes now in charge, policies were enacted that forced businesses to comply with recommended sustainability practices. Money was invested in new energy-efficient technologies, and infrastructure was built to make owning electric vehicles a reasonable option. Schoolchildren learned about the ways to live sustainably…Local farmers and artisans received support from*

government, and more and more from the citizens, allowing them to grow their businesses while reducing the need to transport as many goods around the world .

5   Discussion

The goal of this survey research was to identify emerging memes and stories employed by agents of transformation and assess the likelihood that social imaginaries derived from these memes and stories can guide deliberate transformation. We will first discuss each of the elements from our conceptual framework before developing a response to the research questions.

5.1   Memes

For memes to be sufficiently compelling to spread through stories and inspire collective social imaginaries to guide deliberate transformation they need to engage affect, be quickly comprehensible, and open up new ways of thinking (Boulton, 2016; Bulfin, 2017; Chabay, 2020; Moezzi et al., 2017; Morris et al., 2019). Perhaps most importantly, they need to be shared, as social imaginaries are collectively held visions (Milkoreit, 2017). We found plenty of shared memes. First, survey respondents shared a common diagnosis or critique of the challenges facing humanity, particularly emphasising aspects of the existing economic and socio-ecological system, including humans' relationship with nature. They described social, political and economic systems that privilege the desires of elites over the needs of the many, exploiting ecological systems in a doomed pursuit of endless economic growth. Most were able to eloquently and consistently describe today's problems – what Ganz (2011) calls the 'story of now'. Respondents either implicitly or explicitly criticised the core memes of the neoliberal capitalist narrative.

Second, while respondents found it more difficult to articulate a positive future than to critique a problematic present, there was still much common ground in their imagined futures. Collectively, they imagined a new social-economic-political system where cooperative and compassionate communities worked in harmony with the rest of nature to regenerate our damaged planet, deliver genuine human wellbeing, and achieve social justice, a view elsewhere described as integrated (Waddock, 2021). As Tables 1 and 3 indicate, there is rich common ground in the memes respondents used to describe desired futures. Some memes – such as social justice – certainly engage emotions, values and identity. Others – such as harmony with nature and regeneration – open up new ways of thinking.

This common ground bodes well for the potential emergence of shared social imaginaries; however, there are challenges. Many memes summarised in Tables 1 and 3 are complex, abstract concepts and there is no consensus on how exactly they should guide the structure and function of economic systems. While the memes of neoliberal capitalism are not uncontested, decades of debate have produced a tentative settlement on how they should guide economic systems. To take a single example, compare the neoliberal idea that the purpose of the economy is to deliver growth in GDP to the idea that the purpose of the economy is to deliver human wellbeing. The former is widely accepted as an appropriate

measure, routine to evaluate, and there is much evidence as to what will deliver it, whereas there is yet no widely agreed definition of wellbeing, let alone clarity on how it can be delivered. There is a paradox here. Survey participants shared a vision of diversity and pluralism but that very diversity results in a splintering of power; diverse people and organisations put their efforts into promoting different approaches to the pursuit of wellbeing and miss opportunities for a coordinated challenge to neoliberal capitalism. A key task for progressive change agents is to reach sufficient settlement on common memes to support coordinated action, while holding space for plurality.

5.2   Stories

Despite prompting, respondents found it difficult to tell recognisable, 'tellable' stories about their desired future and the events that led there. Most who did write a story were able to tell a 'story of now' about the problematic present but far fewer were able to construct a convincing 'story of us' to inspire collective action (Ganz, 2011). Only a handful shared a 'story of self' about what drives them to pursue transformation, but admittedly, the survey did not invite stories of this kind.

Many of the stories had at least some attributes that make them likely to be shared. They often expressed strong emotions, including grief and fear, but also hope and excitement. They conveyed values and a sense of the identity of participants. Some were narratively coherent and accessible – they read well as stories. Many incorporated ideas that could help people to see the world differently, particularly around humans' relationship with the non-human world and with each other. Further, the stories were populated with relatable characters that would offer many an opportunity to see a role for themselves as an agent of transformation. This was aided by the frequent positioning of 'all of us' as characters that must play some part in transformation. Nevertheless, the stories that worked best for us as readers avoided the use of abstract collective actors in favour of relatable individuals who represented those actors. This specificity better meets the dramatic needs of storytelling and aligns with narrative theory (Abbott, 2020; Booker, 2004; Cron, 2012; Storr, 2020).

Despite these positives, there were few stories we personally felt compelled to share with others. Some felt polarising – rather than opening dialogue they offered a simple story of heroes versus villains in a world that is more complex than that. They offered little that felt novel to us as researchers and practitioners working on sustainability transformations. It is undoubtedly too much to ask respondents to an online survey to deliver fresh, original, creative storytelling on the spur of the moment. That capacity is much more the realm of artists, authors and creative practitioners with time to craft compelling stories. Nevertheless, what was missing from the stories is still instructive. The most common omission was a convincing plot to carry the action from the problematic present to a transformed future.

Many participants did not even attempt to develop a plot, sticking to descriptions of the present or future instead. Plots that participants did provide, while undoubtedly diverse in their details, drew heavily on three generic plot devices to drive the story forward: awakening, crisis, and collective action. These framings were used in various combinations, from just one to all three combined. Each is a potential pathway that those pursuing

purposive transformation might follow, but each is problematic for anyone seeking purposive transformation towards sustainable futures.

The 'crisis' plot device is the most problematic. When faced with a locked-in social, political and economic system that actively resists change, it is understandable to look to a crisis as a way to shake up the status quo and open up new opportunities for change. There have, however, been multiple 'crises' in the 21st Century, from the Global Financial Crisis, to the COVID-19 pandemic, to the creeping crisis of climate change. In each, the existing economic system seems readily able to persist with only minor revisions. Neoliberal capitalism has not been shaken from its dominance by these major events. Proponents of the crisis plot device might argue that these crises have not been big enough to trigger transformation, which begs the question of exactly how much devastation is needed to trigger transformation. Wishing for a crisis as your window to a better future seems ethically problematic and possibly naïve. With future crises likely, proponents of transformation can best take advantage of these moments if they have taken the time in advance to develop the new social imaginary—compelling visions of alternative futures and practical strategies for working towards those futures that can be rapidly implemented at times of crisis. The stories shared in the survey provide evidence that much of that important work still needs to be accomplished.

The second plot device – awakening – is ethically preferable to wishing for a crisis. Earlier, we criticised the 'magical' use of this plot device in many of the stories. The stories disagreed on who needs to awaken and had little detail to offer on how awakening will occur, how it will spread, and what happens differently as a result. Nevertheless, there are practical steps that change agents can take to rouse more people to take transformative action. Among many, these possibilities include: creating opportunities to learn about and critique the problematic present; actually creating new social imaginaries built on powerful and resonant memes that offer inspiring visions of alternative futures; providing people with opportunities to act that can help them take a first step; building movements that help individuals to connect to others; facilitating dialogue among people with different perspectives; and sharing stories of personal awakening to the need for transformation that can inspire others.

The third plot device – collective action – is only problematic in the sense that it was often tied to awakening and few stories advanced plausible theories of how collective action would develop out of our present context. Nevertheless, collective action is attractive because of its consistency with the cooperative future most respondents desired. For collective action to deliver transformation, two things are needed. First, more people need to get involved—the 'all of us' protagonist. Part of the power of social movements comes from their numbers. People are more likely to join social movements after 'waking up', so the actions already listed above can help to multiply the potential scale of collective action. Second, collective action needs to be coordinated towards a shared goal. Otherwise, social movements can conflict and undermine each other. Of course, one of the things that can help to provide such coordination is a common storyline around which discourse coalitions can form (Riedy, 2020) – in other words, the shared social imaginary that is the focus of this paper.

5.3   Social imaginaries

If the memes and stories shared in the survey were to form the basis of a shared social imaginary, what would be its capacity to support deliberate transformation? One of the most positive findings is that the inclusive nature of such imaginaries and their insistence that 'all of us' need to be part of transformation would allow many to imagine a role for themselves in the unfolding story of transformation. The key role attributed to collective action similarly invites many to find their place in social movements and play their part in making change happen. This positive finding is undermined, however, by the tendency of some stories to exclude particular actors as 'villains'.

More importantly, there is a vagueness, abstractness or intangibility to most of the stories that makes social imaginaries built from them unlikely to inspire audiences towards transformative agency. In reading the stories, we rarely felt transported to the future world the respondents hoped to create. Narrative theorists identify detail and concreteness as crucial to capture the attention of readers and viewers (Heath & Heath, 2007; Storr, 2020). In fiction, creating this type of detail is called 'worldbuilding' and it makes fictional worlds feel fleshed out and plausible. Creative practitioners, writers and artists are increasingly offering such worldbuilding through genres such as climate fiction and solarpunk, but there was little evidence of their influence in the survey responses.

Following on from this point, social imaginaries built from these stories would lack plausibility. This is largely due to the lack of well-reasoned plots to carry us from the present to the future. But in addition, most of the stories dodge issues of power and conflict, calling on awakening and collective action without probing how the powerful defenders of neoliberal capitalism would react to protect the status quo. Again, writers and artists have begun to explore imagined pathways to sustainable futures; Kim Stanley Robinson's *The Ministry for the Future* (2020) is arguably the most fully imagined theory of change in climate fiction.

6   Conclusion: lessons for transformation

The big picture evident here is that most of the transformational change agents we surveyed lack a clear theory of change for overcoming neoliberal capitalism's powerful narrative. The results of this survey of knowledgeable social change agents, who have presumably been thinking about changing the socio-economic system for some period of time, reflect one of the core problems in overcoming neoliberal capitalism: a lack of sufficient agreement about the core memes or ideas to drive coordinated action. We hoped that the future visions of change agents working to transform economic systems would reveal new social imaginaries to challenge neoliberal capitalism. It is clear, however, that these imaginaries are still forming and contested; there is no compelling alternative here to the core memes that have made neoliberal capitalism's story repeatable and powerful.

Nevertheless, what we can see here are seeds that could grow into transformative social imaginaries if cultivated and further developed. Participants imagine a process of awakening to allow a critical mass of humanity to see the problematic nature of the current economic and political system and work collectively to pursue transformation. They envision a future

built on a cooperative, harmonious and connected relationship with nature and each other. And they seek a future that delivers human wellbeing, equality, justice and sustainability. From these seeds, it is time for change agents and scholars to consolidate their imaginings into *compelling* stories with emotionally-charged, resonant memes—a new social imaginary in which humans and nature alike can flourish far into the future. With such a social imaginary as the basis, new actions can be taken towards bringing that world into reality.

There are several specific practices change agents could adopt to enrich social imaginaries for transformation. First, continued dialogue to develop shared storylines that can inspire coordinated action is crucial to challenge the dominance of neoliberal capitalist narratives. This coordination needs to be achieved without compromising important values such as diversity and recognition of complex systems. As such, this is not a call for simple, monolithic stories like those that support neoliberal capitalism, but it is a call for believable stories that together present a compelling vision of an alternative path.

Second, change agents need to tell stories that replicate easily – stories that people want to share. Replicable stories are stories that: engage emotions, values and identity; are rapidly comprehensible, accessible and defensible; encourage dialogue rather than polarisation; open up new ways of thinking; and are plausible – not too utopian or dystopian. Rather than expect change agents to suddenly become master storytellers, it will be more fruitful to engage with creative practitioners, writers and artists that are already skilled storytellers and imaginers. Genres such as climate fiction and solarpunk already offer rich imaginaries to draw on.

Third, stories need to support transformative agency by including characters that people can identify with, so that they can see a role for themselves in deliberate transformation. The stories that worked best from our respondents were those that used individual, named characters to represent collective actors. Sharing personal stories of successful transformation in the present, and future visions that include sufficient worldbuilding to feel tangible and real, are two practices that show promise. Ganz's suggestion to weave together a story of self, story of now and story of us may also help transformative imaginaries to emerge.

Finally, more work is needed to develop, or build familiarity with, plausible transformative pathways. The general theory of change evident in the stories – of a crisis that triggers awakening and collective action – is plausible but vague. Unpacking and narrating the pathways through which individuals develop new values and move from individual concern to collective action can help to address one of the most common barriers to transformation – most people do not have a clear sense of what actions they can take to make a difference.

It is important to note the limitations of this study: a relatively small number of participants who are far from representative of global diversity; the challenge of writing a compelling story rapidly in the context of an online survey; and the possibility that the meanings needed for a transformative social imaginary will come from sources other than these change agents. Future research could start to address these limitations by seeking stories from a larger, representative sample, perhaps through online platforms that give participants time and multiple ways to respond, including via different media. Such research

could also specifically engage creative practitioners, authors and artists who are more experienced with story creation. In addition, research could look at expressions of social imaginaries in 'everyday imagination' (Moore & Milkoreit, 2020) by studying the images and text already produced by change agents and shared publicly, rather than asking them to use a structured survey process.

7   Acknowledgements

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Table 1: Ideas (memes) for stories that guide humanity into the future.

Idea	Description	Example responses	# of times coded
Harmony with nature	Humans are part of nature and need to maintain a harmonious relationship with other living things. Rather than seeing nature as a separate resource, we need to recognise our interdependence with ecosystems and our important role as the conscious stewards of life on Earth. Some participants called for something stronger than harmony – a respect or love for nature, beyond any utilitarian value.	'Harmony with nature'; 'cherish the interdependence between humans and nature as part of the biosphere living in harmony'; 'reconnecting (with nature)'; 'balance'; 'stewardship'; 'symbiotic, non-destructive relationships between humans and the rest of nature'; 'dirt under the fingernails'; 'respect for all living creatures and ecosystems'.	47
Social justice / equality	All people are equal and have the same inviolable human rights. Where this principle is violated, changes are needed to deliver freedom, justice and fair outcomes. Some participants drew attention to particular instances of injustice, for example calling for 'gender parity', 'intergenerational and geospatial justice' and 'environmental justice'.	'Equality – all people should be treated as equals and inequality should be sought to be removed'; 'Social justice and human rights'; 'freedom and justice'; 'Fairness…We…need to address the extreme wealth & income inequality in both rich and poor countries'	39
Ecological sustainability	Humanity needs to reduce its environmental impact on the Earth so that the biosphere can continue to sustain us. Responses coded to this category expressed ideas that are familiar from sustainability discourses, such as the 'precautionary principle', 'circularity', 'resilience' and 'sustainable use of resources'. While sustainability means many different things to different people, most responses coded to this category had a utilitarian focus on survival.	'Sustainable use of resources'; 'Clean (non-fossil fuel) energy sources'; 'Implement sustainable development from the bottom up'; 'precautionary principle'; 'Survival'; 'the need to live within sustainable limits'; 'develop sustainable stewardship of natural resources'; 'maintaining integrity'.	34
Awakening	Humans need to develop the wisdom and awareness to change our practices. This means committing to our	'Replace ideology with sensefulness in the climate discussion'; 'being good ancestors'; 'The right size';	34

Idea	Description	Example responses	# of times coded
	personal growth, developing empathy for others and waking up to the negative impacts of the systems we have created. It requires that 'human beings are self-aware and reflective and that this consciousness includes the world around them and beyond them'.	'The power of self awareness to develop better relationships with others and wiser decisions'; 'applied empathy'; 'Maturity'; 'Foresight'; 'experiences which cultivate wonder, awe, deep connection to self, others, and nature'.	
Compassion	Our relationship with other people should be one of kindness, compassion and cooperation. Rather than seeing ourselves as primarily in competition, we need to recognise that 'being collaborative and kind is an intrinsic part of being human'. A sustainable future will require us to work together, with kindness and respect, to look after our shared commons.	'Compassion'; 'cooperation'; 'sharing'; 'love'; 'kindness'; 'Friendship and care for each other'; 'respect and mutual respect'; 'We are a co-operative and compassionate species'.	32
Human wellbeing	Our shared goal should be wellbeing for all, and this is not delivered by focusing on material consumption and economic growth. Health, happiness and dignity are what matters for quality of life.	'Human well-being and contentment'; 'The focus of society should be sustainable, inclusive wellbeing'; 'a good life for all far into the future'; 'wellbeing shared by all'; 'happiness'; 'shared prosperity on a healthy planet'; 'human dignity'; 'Focus on Quality of Life over Quantity of "Stuff"'; 'health – physical, psychological, emotional'.	31
One connected humanity	We are one interconnected species and 'we succeed or fail together, through our joint efforts'. Our strength is in cooperation, collaboration and community. We need to recognise our shared common ground and work together to achieve a sustainable future.	'The positive impact of understanding that we are all interconnected'; 'Interdependence'; 'we are all each other'; 'No more borders'; 'our existence is determined by our interrelations with one another'; 'a collective mode of living'; 'we need each other'; '"We all" as opposed to us vs them'.	30
Hopeful agency	We can bring about a sustainable future and we all have something useful to contribute towards that goal. This	'We all have something to give'; 'We can make a difference'; 'cooperation is possible'; 'we all have	15

Idea	Description	Example responses	# of times coded
	cluster of ideas expressed a hopeful sense of agency for transformation, and a sense of responsibility to take action.	the power to create this vision together'; 'agency'; 'hope'; 'solidarity'; 'responsibility'; 'doing our part'.	
A new economy	Achieving a sustainable future will require redesign of our economy to work for people and planet. This category is closely connected with the one above on 'human wellbeing', but this particular cluster was focused on new economic mechanisms, such as universal basic income, rather than the overall economic goal.	'Economy is designed by humans, so we can redesign economy'; 'Basic income guarantee'; 'Sustainable enterprise'; 'de-growth: reducing consumption but being mindful of not creating further inequalities in this way'; 'new creative ventures and businesses'; 'economy in service to society and nature'.	12
Regeneration	There is a need to repair the damage that has been done to the Earth and regenerate healthy ecosystems to support life.	'Regeneration'; 'a thriving environment is possible'; regenerative agriculture'; 'regenerative design'; 'natural world is restored and all people enjoy being part of it'.	6
Diversity	Diversity and pluralism should be valued, both for its intrinsic value and as a source of resilience.	'Diversity and plurality are important'; 'cultural pluralism'; 'part of the problem has been growing uniformity and monocultures'; 'part of the lesson/solution…centres on the power of diversity as a fundamental strength in overcoming disruptions'.	6
Localism	Part of a sustainable future will involve connecting to our local place and strengthening local decision-making.	'Re-localization'; 'refocusing on local community relations'; 'empowerment of individuals and local communities, decentralization, diversity and smallness is better adapted to local conditions, aim at deep local embeddedness'; 'locally grown/made products'.	6

Table 2. Types of characters identified and the challenges they face.

Character Type	Description	Sample Quotes	# of times coded
Protagonists			
All of us	Collective actors, all of humanity, or a representative of all of us	'Everyone', 'team humanity', 'everyday normal people', 'the mainstream', 'all living things', or representatives of all of us, e.g., 'a nobody, someone who is unimportant, seemingly yet through their actions does influence the world in which they live', *'a middle-aged middle class woman of color in the global north'* or *'a reluctant hero'*. 'Everyone has to be' a character in the story of transformation.	34
Nature and non-human beings	Collective actors comprising all beings, nature, and the natural environment, as well as individual species as representatives of nature	'Landscape/country', 'the environment…expresses its unhappiness at how it is being treated', 'diverse non-human beings who co-create the future'; 'nature -- as ally and inspiration'; 'all the creation, that is suffering', 'the dodo'.	20
Change agents	People who believe climate change is a real problem and act on that belief, change communities, the 'woken up'.	'…People Doing the Work to build shared prosperity on a healthy planet', 'the small percentage of the masses who are self-aware and self-educated, and have awakened in varying degrees from the dream', 'elders', 'shamans', 'sages', 'the converted'.	20
Youth	Young people and children affected by the future	'A teenager with amazing ideas and passion [who] needs to convince old traditionalists to listen to her'; 'a 10 year old girl in Africa', 'fresh person who has just emerged into adulthood, with the world at his/her feet', 'Greta Thunberg'.	16
Communal actors	Collective actors at various scales: families, teams, collectives, communities, society	Groups will need to 'transcend individuality, speak truth to power, balance their daily life and work with the actions needed for change'; 'a movement of change agents (as opposed to individual leaders)'.	10
Current leaders	People already holding leadership positions who can 'wake up' and use their power to bring about change	Scientific experts, 'organizational leaders', business owners, governments and politicians, 'Powerful people', 'Politicians and business leaders', religious leaders.	13

Marginalized groups	Groups that are marginalized by neoliberal capitalism or in other ways.	'Underprivileged people', women and indigenous people, 'men needing to learn humility and the value of mothering, care, responsibility and love'.	9
Antagonists			
Powerful people opposing change	Existing power holders who are benefiting from the current system and consequently opposing change, and misguided/ignorant people.	'Old white men in economic and political leadership positions who cannot think differently and delay change'; 'greedy short-termists'; 'powerful people/organizations opposing change to protect short-term interests'; 'climate change deniers who refuse to acknowledge the science and don't believe anyone should tell them how to change their lives'; 'looney left & radical right…represent blinkered views'.	8
The system	The current economic system with its orientation towards endless growth, positioned as the villain	'The technocratic, oligarchic, ecodidal, domicidal system'; 'the traditional system of perspectives or norms'; 'central banks, large financial institutions, black marketeers, the state, and all of us who are comfortable with business as usual', an 'entrenched system', characterised by '*rampant capitalism and neoliberalism*'.	6
Challenges			
Personal development and capacity building	For protagonists to lead transformation they need to build their own capacity as change agents.	Letting go of outmoded beliefs, selfishness, 'conservative views' or 'bad assumptions inherited from previous generations'; 'the realisation that they are important and can shape their world'; leading by example.	29
Confronting the system	The need to confront an entrenched system – the main antagonist from above.	'*Remake the economy in service to society and nature*'; '*speak truth to power*', '*get the attention of humanity*' and '*convince everyone that a shift is needed*'.	20
Making connections	The challenge of connecting to others that are engaged in similar work and to nature.	'Lack of connections to others with the same desires/purpose'; need to 'transcend individuality', 'reconnect with nature', or 'recognise deep interdependence'.	16

Table 3: Common ground in story descriptions of the desired future or goal.

Theme	Relevant memes	Example quotes	# of times coded
Human connectedness and cooperation	One connected humanity; compassion	*They began to focus on relationships and well-being over achievement and wealth.* *Each person knows and realises they are interconnected and is valued and with a purpose.* *Step by step, together. All of us. Forever.* *A society where people are sharing resources.*	27
A new social-economic-political system	A new economy; localism	*Re-socialisation towards of a less capitalist environment* *I look to a future where we can maintain the kind of labor specialization that we have today, fund organizations that solve problems and defund organizations that create them.* *A new economic paradigm is created that puts people and planet before profit.* *Global economic free markets were replaced by local forms of production and consumption.* *The economy was redesigned to mirror the environment. Circular.*	21
Harmony between humans and nature	Harmony with nature; ecological sustainability	*People working within and as part of natural systems is a story of us returning to our roots. It is foolish to think we will return to using fire for light and hunting our food unless forced to with a total collapse of society. Instead, we must embark on a future in which we return home to mother nature, but we will do so bearing the fruits of technological advancement.* *She smiled at the glowing solar-powered lamps lighting her path home – and at the cozy scenes she saw through brightened windows. Yes she could still hear the bugs chirping and the small birds settling down*	18

Theme	Relevant memes	Example quotes	# of times coded
		to roost all around her – the trees nearly filling the overhead space above her.	
		Nourish the land so it may nourish you.	
		Our duty to the universe – the stewardship of life on Earth.	
		Humans started to connect with nature, farming, walking, biking and gazing at the stars rather than into flatscreens.	
		The goal is for humans to learn to live in harmony with the environment so they become friends.	
Regenerative communities	Ecological sustainability; regeneration	*An earth in balance, with living oceans, as many species as we can accommodate, and as little active carbon management by humans as we can afford to get by with.*	16
		The city is sustainable – subsidizes solar, has effective circular economy policies.	
		Over time, as policymakers, business, and citizens all started to row in the same direction (low carbon at core, but focused on justice as well), the options they had for powering their lives, eating, moving around, and much more became more sustainable, circular, and regenerative.	
		Different societies started taking shape: more frugal lives, energy efficiency and reduced consumption, widespread adoption of clean technologies, ecological restoration and protections, diverse local economies, decentralized food/energy systems.	
Genuine human wellbeing	Human wellbeing	*They began to focus on relationships and well-being over achievement and wealth.*	14
		The well-being community promotes an economy which benefits both people and planet.	
		Then the government saw the light and started to create policies and programs to foster greater wellbeing.	

Theme	Relevant memes	Example quotes	# of times coded
		The sole focus should be on human and planetary wellbeing, not wealth or money or efficiency or volume of output (or any of the other tired economic tropes).	
Social justice	Social justice / equality	*Create social justice across gender, race, location, sexuality, religion, age, ability and educate equally to create true opportunity for all.* *Poverty is eradicated.* *Everything is more equal.* *It should be collective, non-exclusive, and equitable.*	12

Table 4: Pathways to sustainable futures.

Pathway	Example quotes	# of times coded
Waking up to new knowledge, awareness or values	*The earth was dying but only a few people were awake and strong enough to see it and accept it…They began to focus on relationships and well-being over achievement and wealth.* *A small percentage of the masses awaken from the dream and develop self-awareness to varying degrees.* *After decades of relatively ineffective lobbying and protest on isolated issues, leadership within the environmental-progressive movements woke up to the fact that we need to change the whole system.*	27
Collective action through civil society movements	*After scientific evidence of climate change started to accumulate, civil society, led by children's movements, started to mobilize and put increasing pressure on decision-makers and peers to change our behaviour and functioning.* *If we could pick one idea that should guide humanity in the future, it's that we have the power, and we can make a change.*	17
Crisis as trigger for change	*The change came when a series of unprecedented weather events destroyed many pollutant manufacturing sites. Abandoned by technology, people turned to values as a way of responding to the environmental crisis.* *I think we will need a major disaster, quick or not so quick, to make us pull together just to survive.*	8
Education	*Schoolchildren learned about the ways to live sustainably, the same way that schools once began to teach children about the nutrition guidelines and the dangers of smoking.* *More education on responsible consumption (e.g. setting realistic goals for how much 'stuff' one really needs to be comfortable.*	5
Youth movements lead the way	*The current global climate strike movement grows and creates networks of connected young people and allies who are focused on changing the system for a better future for themselves and future generations. More inspiring young leaders come forward. They demand the right to vote at a younger age and they call on political and business leaders tackle the climate crisis, inequality and*	5

Pathway	Example quotes	# of times coded
	biodiversity loss. The momentum for change builds until leaders are inspired or forced to act.	
Governments lead the way	*Then the government saw the light and started to create policies and programs to foster greater wellbeing.*	5
	I believe an ideal future with regard to sustainable development can only be brought about by endeavours that include both top down procedures (like, e.g., national plans for the SDGs) and bottom up deployment.	