

# Imagining better futures using the Seeds approach

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#### Abstract

Building capacities to anticipate potential futures that could unfold can help us to make better decisions in the present. However, imagining the future is not easy. To address this gap, the Seeds of Good Anthropocenes (Seeds) project has been designed to use innovative methods to undertake novel participatory processes to co-design desirable visions of the future and identify pathways of what needs to be done to get there. A core innovation of the Seeds project has been the development of an adapted Mānoa method scenarios process for envisioning more desirable futures. It has been used in a workshop with diverse people to envisions more desirable futures for specific places such as southern Africa, and northern Europe and the Canadian Arctic as well as for specific thematic areas like biodiversity and geo-engineering. The approach has been used in a variety of intergovernmental processes and has recently been adapted to take place online.

**Keywords:** Manoa method, potential futures, Seeds approach, sustainability, social innovation

## Introduction

Times of rapid disruption create novel opportunities for change; this reminds us that the future is uncertain and that big changes are possible over short timeframes (Wyborn et al. 2020). Building capacities to anticipate potential futures that could unfold can help us to make better decisions in the present (Vervoort and Gupta 2018). However, imagining the future is not easy. An entire discipline of futures thinking and foresight has evolved to unpack what these kinds of capacities might be, and to develop tools to aid in building such capacities (Sardar 2010). A big gap in the sustainability literature is a lack of explorations of potentially desirable futures that could emerge if humanity were to effect sustainable transformations (Bennett et al. 2016). To address this gap, the Seeds of Good Anthropocenes (Seeds) project has been designed to use innovative methods to undertake novel participatory processes to co-design desirable visions of the future and identify pathways of what needs to be done to get there (Pereira et al. 2019).

The Seeds project starts with identifying existing seeds, defined as initiatives (social, technological, economic, or social–ecological ways of thinking or doing) that exist, at least in prototype form, and that represent a diversity of worldviews, values, and regions, but are not currently dominant or prominent in the world (Bennett et al. 2016). We then developed a visioning and participatory scenario process that draws on these seeds as a basis to generate desirable narratives of potential futures (Pereira et al. 2018). By using actual



existing initiatives as starting points for the scenario development, we aimed to anchor the creative visions of the future in current real world initiatives and contexts so as to be able to derive more realistic pathways towards these radical futures (Pereira et al. 2018).

## **Innovative Method**

The overarching aim of this participatory method is to generate visions or scenarios of the future with a diverse group of people. The innovative method draws largely on the Mānoa scenario method that is designed to generate divergent, surprising scenarios that evolve from changes and impacts proliferating over several decades, and is best suited for creative, innovative, and transformational thinking (Schultz 2015). It was originally developed in 1992 for the Hawaii Research Center for Futures Studies (Bishop, Hines, and Collins 2007; Schultz 2015) and is distinct from the Mānoa method described by Dator (2009). In contrast to the more well-known "double uncertainty matrix" approach associated with traditional scenario planning (i.e. a 2X2 matrix) that results in a 'conceptual flatland' (See Curry and Schultz 2009), the underlying rationale of this approach is based on working with emerging issues, or weak signals, to explore their primary and long-range impacts, and the possible interconnections and outcomes of those impacts (Schultz 2015). In the Seeds approach, instead of starting with weak signals, the group is asked to brainstorm seeds of change that they think could contribute to a better future. Examples of seeds from previous workshops have included Lab-grown Meat, Slow Food and Transition Towns.

We then combined the adapted Mānoa scenario building method with the Three Horizons framework, which is a graphical approach developed to explore the change in importance of issues over time, and connect the future to the present (Sharpe et al. 2016: Figure 1). It is considered an adaptable futures tool, and is often used as an intuitive, accessible introduction to futures thinking, as well as to make sense of emerging changes (Pereira et al. 2018). When used in conjunction with scenarios, it helps to provide internal structure to scenario narratives because it depicts overlapping and often competing timelines of unfolding change. In particular, the Three Horizons approach has been applied to identify key ideas and actions that facilitate transitions from one way of doing things (business as usual) to more transformative patterns (Sharpe et al. 2016). As described in more detail by Pereira et al. (2018), combining the adapted Mānoa method based on seeds with the Three Horizons framework, our mash-up approach struck a balance between not just exploring creative, radical visions of the future, but also linking those futures to real-world projects and initiatives in the present, and considering the possible pathways and points of intervention that link the present to our future visions.





Time

Figure 1: a) A schematic of the three horizons with the third horizon building up to the future, the first horizon breaking down from the present and the second horizon the transition between the two (Source: Jan Kuiper).



Figure 1: b) The three horizons diagram adapted for the Seeds approach where participants build up an emergent future of the third horizon (yellow stickies) and break down the dominant current system (Horizon 1 in pink sickies) (Pereira et al 2018: 6).

In response to the Covid-19 pandemic and a need to shift to online workshops instead of meeting in person, this approach has now been adapted to an online environment using the software, Miro (miro.com) and this template that was designed for the process



(https://miro.com/app/board/o9J\_klK8lJA=/). As part of the Transformations Community Workshop Series, the process was adapted to allow for a group of people to undertake a process of visioning a more desirable future.

Step 1: As a group, brainstorm 'seeds' and decide on 3 that will be used, making sure to have one that is more political, one that is technological, and one that is ecological. This draws on the STEEP (Social, Technological, Economic, Environmental, and Political) framework to ensure a broad diversity of topics are covered.

Step 2 : Describe the 'seed' in its mature condition i.e. when it is no longer marginal, but is the dominant way of doing things. Write this on a hexagonal sticky note to place this in the middle of the Miro board so as to be able to build a Future wheel. An example of using the seed, 'Lab-grown meat' and writing it in its mature condition, could entail stating that '75% of global meat consumption comes from lab-grown meat and not directly from livestock.'

Step 3: Construct a Future Wheel of the first seed (See Schultz 2015).

Starting from its mature condition, build a wheel outwards using sticky notes in another colour, describing what the first order implications of this seed could be across the five STEEP dimensions. For example, an environmental implication of lab-grown meat is that there are less GHG emissions from livestock. An economic implication is that whatever livestock grown meat is available is very expensive, making livestock farming very lucrative. Then go on to describe the second order implications using another colour of hexagonal sticky note (e.g. as 'real meat' is so expensive, most people are vegetarian and this has cultivated a booming business for crop farmers around the world) and if there is time and interest, even describe some third order implications using a different colour (e.g. people are eating less meat and more vegetables and are therefore generally healthier). The result is Figure 2.



Figure 2a: Example of a Future wheel in Miro and b) from an in-person workshop in Southern Africa (Source: Pereira et al 2018: 6).



Step 4: Do this for the other two seeds

Step 5: 'Clash' the seeds together using two different approaches. The first is a cross-impact matrix where you use a matrix to identify the potential impacts of one seed on another (Figure 3). The second is by connecting the future wheels together by highlighting reinforcing connections and those aspects that are completely different (Figure 4). For example clashing Lab-grown meat and Transition towns could result in every local town having their own community-owned meat laboratory so they do not have to rely on large-scale business for their access to meat products.



Figure 3: A Cross-impact matrix table a) in Miro and b) from the in-person workshop in southern African (Pereira et al 2018: 6).



Figure 4: An example of three future wheels being 'clashed' with each other, using string as a way to make connections (Source: Pereira et al. 2019).

Step 5: Individually, briefly describe the world that is starting to emerge



Stories that have emerged from this approach included visions of living in harmony with wild nature, adapting living trees as housing and using technology for creating greater empathy or the emergence of a benign Artificial Intelligence that emerges with the spirit of togetherness or 'Ubuntu' to improve transparency in decision-making from local to global levels. (Pereira et al. 2018; Raudsepp-Hearne et al. 2019). Figure 5 presents an illustration of how these final narratives emerge from the initial seeds that each group brainstorms.



Figure 5: Stories of better futures for northern Europe starting with diverse seeds and building into fleshed out narratives (Raudsepp-Hearne et al 2019).

## Conclusion

This adapted Mānoa method has been used now in a variety of different processes, including for UN Environment's GEO 6 report (Pereira et al. 2019), the Intergovernmental Science-Policy Panel for Biodiversity and Ecosystem Services (IPBES) (Lundquist et al. 2017; Pereira et al. 2020), as well as in different geographies, such as southern Africa (Hamann et al. 2020) and northern Europe (Raudsepp-Hearne et al. 2019). It is an adaptive facilitation tool that lends itself to a variety of different contexts, including online. As such, there is potential for it to be used not only to promote futures thinking capacities in a wide range of individuals from different contexts, but also to generate novel visions of more desirable futures.

Furthermore, it is applicable for use not only as an academic project, but also for a wide range of stakeholders seeking to use the futures to help define strategies in the present. As potential 'seeds' themselves, it can also be an appropriate tool for social innovators and entrepreneurs to be able to situate their work within a broader societal context and through



this practice to identify key allies with whom to align for most impact (a type of 'bricolage' see Olsson et al. 2017).

"It's tricky, but important to get in spaces with multiple kinds of minds and multiple experiences and to put yourself into that, but then to release and let go and watch the group work their way around it because there's certainly not one or 10 or a hundred people building the good Anthropocene, it's millions and millions..." (Participant in southern African workshop, Source: Pereira et al. 2018: 9).

The Seeds approach is an innovative facilitation tool that can bring diverse perspectives together to help imagine a more sustainable future for the planet. As such, it has the ability not only to generate more enabling narratives for better futures, but also to galvanise action towards enabling these futures. The more we are able to create captivating stories of how the future could look, the more likely we will be able to see what kinds of decisions we need to make in the present to help these come to fruition. This is a core capacity for enabling the kinds of transformative change that we need to build a more prosperous future.

#### Bio

Dr. Laura Pereira is a sustainability scientist based at the <u>Copernicus Institute of Sustainable</u> <u>Development</u> and the <u>Stockholm Resilience Centre</u>. Laura is interested in sustainability transformations in the Global South, focusing on food systems and biodiversity conservation. She is passionate about participatory research, in particular the use of futures thinking tools for enabling transformative change.

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