

GENERATING VISIONS OF GOOD ANTHROPOCENES: THE MĀNOA MASH-UP SCENARIOS METHODOLOGY



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WHY THE MĀNOA MASH-UP METHODOLOGY?

The Anthropocene¹, or literally the “Age of Man”, is the name for the new geological epoch that we have entered in which humanity has become a dominant global force shaping the physical dynamics of Earth.

In the Anthropocene, we face new and diverse challenges, such as planetary tipping points, an increasing disconnect between people and nature, and widening inequalities among people. At the same time, technological progress and new social connections are opening up novel and exciting opportunities to address these challenges and could potentially create unprecedented levels of human well-being.

The Anthropocene poses highly uncertain, high stakes futures (one always refers to multiple futures, because we influence the future through our choices and actions in the present, and multiple different futures are therefore always possible). Given the Anthropocene context, it becomes vitally important for communities, citizens, policymakers, leaders and individuals to have visions of positive, hopeful futures that can help guide our choices and actions towards creating more just and sustainable futures.

This guide describes a novel methodology – the Mānoa Mashup Method - that was developed to generate visions for Good Anthropocenes – positive futures that are socially and ecologically desirable, just and sustainable. The Mānoa Mashup Method describes a workshop-based approach that uses “seeds” to generate visions of Good Anthropocenes. This methodology and process was developed at the **Centre for Complex Systems in Transition (CST)**, Stellenbosch University, as part of the global **Seeds of Good Anthropocenes** project, a Future Earth initiative involving partners from across the world.

WHAT ARE SEEDS OF GOOD ANTHROPOCENES?

Seeds², also known as ‘bright spots’, ‘weak signals’ or ‘pockets of the future in the present’, can be small-scale, experimental projects and initiatives that employ new ways of thinking or doing and exist at the margin of the current world and worldviews; or they can take the form of new social institutions, technologies, or frameworks for understanding the world that are not yet mainstream, but have the potential, or have shown at local scale to improve livelihoods and sustainability outcomes.

EXAMPLES INCLUDE:

- Massive small - a global network changing systems to unleash the power of smallness in cities. www.massivesmall.org
- Artificial meat
- Reconstructed Living Lab (RLabs) - a global social enterprise that aims to reconstruct communities through training, innovation and entrepreneurship. www.rlabs.org
- Gene editing technologies
- Knowledge Pele - a research and development advisory firm who believes in knowledge as the foundation for development. www.knowledgepele.com
- Slow Food Youth Network - an international network of young people working towards change in the field of food production and consumption. www.slowfoodyouthnetwork.org

The Mānoa Mash-up Method is an adaptation of the original Mānoa scenarios method³ combined with Futures / Foresight tools such as the Three Horizons Framework and participative experiential futuring. It is an innovative Futures / Foresight workshop⁴ process that uses seeds to create scenarios that are hopeful, positive and inspiring, and produces richer and more complex stories and visions of the futures than simplistic utopian narratives. The Mānoa Mash-up Method is particularly suited to creating scenarios 25+ years out, maximally different from the present, whilst simultaneously questioning current working assumptions.

The ultimate aim of engaging in this type of work and way of thinking is to counterbalance prevailing dystopic visions of the future that may be inhibiting our collective ability to move creatively towards a positive trajectory for our communities and the Earth. If we have visions of positive, hopeful futures, we can begin to steer towards them by making changes in the present.

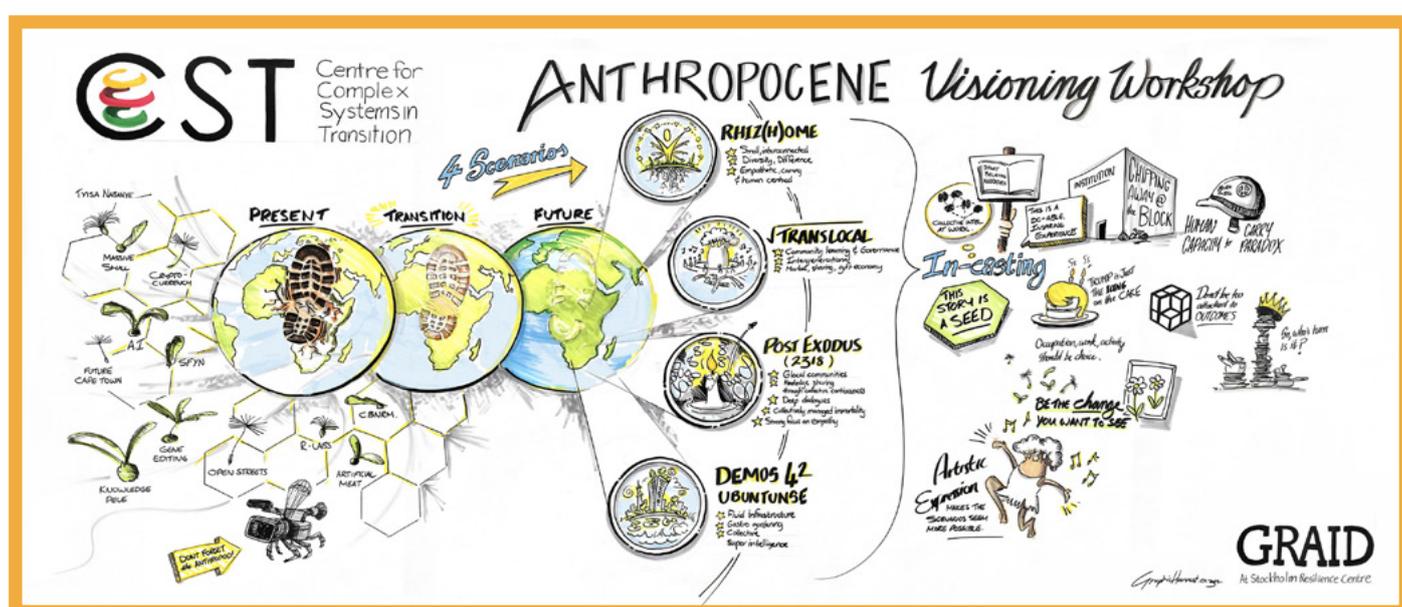
“**STORIES ARE POWERFUL THINGS: THEY CREATE OUR REALITY AS MUCH AS THEY EXPLAIN IT. THE FUTURES WE ENVISION, BE THEY POSITIVE OR FUTURES OF COLLAPSE, MAKE US MUCH MORE LIKELY TO RESPOND TO EVENTS IN THE WORLD IN A WAY THAT HELPS CREATE THAT FUTURE.**” **ALEX EVANS**

WORKSHOP DESIGN AND PURPOSE

The primary aim of the workshop process and methodology described here is to build visions of hopeful futures for specific contexts, for example, a region or community or even a topic, e.g. agriculture/food production.

These positive stories can help counter current dystopian narratives, which, because they are so pervasive, seem to be the 'norm'. The different visions also help explore alternative pathways for development, sustainability and living a good life within planetary boundaries for a region or community. This is part of the underlying philosophy of Futures Studies, which argues that the future does not exist so much as it can be made – how the future turns out depends on the actions, decisions and choices we make today.

The workshop approach – the methodology and process it employs – is a combination of facilitated group dialogue and activities using Futures / Foresight tools and methods to construct 'bottom up' scenarios. What this means is that the scenarios are constructed by means of induction – imagining the seeds leading to different alternative futures if they were mainstream and dominant in the future, as opposed to the more familiar scenarios methodology – the top down version – where alternative futures are deduced from key uncertainties that drive change in the external environment.



This workshop process works best when there is an even mix of diverse people, e.g. change activists and/or social innovators from the different seed initiatives, scientists and/or researchers, artists, policy-makers and practitioners, such as people who work in non-governmental organisations, business or international institutions. To develop good, credible stories of preferred futures, it is important to include a diversity of cultural backgrounds, ages, genders, and experiences.

The aim is to have four small groups comprised of a mix of very different stakeholders, each with distinct perspectives and values to produce four visions. The optimal group size is therefore between 20 and 28 people, with the ideal being 24 people so that breakout groups can consist of six or so diverse people per small group. The process works best if participants are pre-allocated to groups to ensure even groups sizes and within group diversity. For each small group aim to include two, or maybe three, representatives of the seeds' representatives, try to include at least one scientist, one artist, and one practitioner in each group. This intentional maximisation of diversity creates fertile ground for discussion and, ultimately, rich, diverse narratives of alternative futures. Participants stay in the same small groups throughout the three days in order to foster deep dialogue.

Each group is given three very different seeds. Seeds must be fundamentally different from one another to construct comprehensive, complex scenarios. Use the **STEEP** categories to choose seeds from different domains or origins: **(S)**ocial, **(T)**echnological, **(E)**conomic, **(E)**nvironmental and **(P)**olitical. Find examples at goodanthropocenes.net or use your own. It is imperative that these seeds differ from one another, or are from different categories or domains, and it works well if seeds are mixed with a technology 'wildcard' such as Artificial Intelligence. Other good technology wildcards (technologies that exist already today, but we don't know what they will look like once matured) include genetic editing tools, cryptocurrencies and artificial meat.

The total time needed to conduct the workshop process described here is three days (see suggested agenda design). Good facilitation is a critical success factor for this type of workshop, so an experienced facilitator - ideally with knowledge of Futures / Foresight methods - is required. This facilitator needs to be supported by four co-facilitators – these can be less experienced - who are workshop participants doing light facilitation in the breakout groups as the process unfolds.

The resources required include a plenary venue where paper can be stuck onto walls, as well as three to four smaller breakout rooms where paper can also be stuck onto walls. A complete list of required workshop materials is also provided below.

The ultimate purpose of this workshop is to create Visions of Good Anthropocenes that differ markedly from the more generic futures that currently surround us. At the end of the three day process these visions are in the format of scenario narratives, but can, thereafter, be easily converted into other formats and/or media. In addition to the Visions, the experience of going through such a workshop process also has outcomes such as:

- a shared understanding and language that uses the future to help make better decisions and choices today;
- a shared understanding of the dynamics of transformation in the Anthropocene, including options highlighting the importance of resilience, adaptability and dealing with complexity; and
- for some participants, a transformative experience at the individual level.

AGENDA DESIGN AT A GLANCE

EVENING BEFORE START OF WORKSHOP		Introduction and orientation around the topic of the Anthropocene and sensitization around the importance of dialogue and futures literacy – the concept of working with the future to change the present.
DAY 1: From Seeds to Scenario Skeletons	MORNING	FUTURES WHEEL SESSION <ul style="list-style-type: none"> • Overall process explanation and Futures Wheel demonstration • Allocation of participants to 4 small diverse groups • Allocation of 3 diverse/divergent seeds to each group • Each group builds 3 Futures Wheels using seeds
	AFTERNOON	CROSS IMPACT MATRIX & INFLUENCE MAPPING SESSION <ul style="list-style-type: none"> • Populate seed cross-impact matrixes • Create influence map from Futures Wheels (interactions between 'impacts' and 'sub-impacts' of the seeds as mature conditions) • Decide on scenario skeleton and describe it
DAY 2: Deep Dive into Scenarios	MORNING	<ul style="list-style-type: none"> • Recap previous day and orientate to Three Horizons as 'pathways practice' / systemic change / transition space • Create vivid scenario narratives
	AFTERNOON	THREE HORIZONS FRAMEWORK SESSION <ul style="list-style-type: none"> • Connect the future to the present by mapping out Three Horizons frameworks • Capture learnings and insights • Preparation for sharing in plenary the next day
DAY 3: Share Scenarios & Learnings, Reflect and Generate Action Points	MORNING	EXPERIENTIAL FUTURING & IN-CASTING / REFLECTION SESSION <ul style="list-style-type: none"> • Present all scenarios, findings, learnings and insights – the more creatively, the better. • Collective in-casting conversation: "So what?" • Summary conversation & next steps: "Now what?"



TIP: ASK PARTICIPANTS TO IMAGINE POSSIBLE IMPACTS OF MATURE SEEDS.

For example: "If this is true, what are the immediate impacts; what are the first changes we would see?" (first concentric circle of stickers). Make the answers concrete, make them real-world, make them changes we would see in daily life.

STEEP-V AND VERGE

STEEP-V domains are (S)ocial, (T)echnological, (E)conomic, (E)nvironmental, (P)olitical and (V)alues. For example, ask: "What are the Social consequences of this seed in its mature condition? What is the Political impact?" etc.

VERGE is a general practice framework for futures work. It is a way to frame and explore changes in the world. The framework is composed of six domains of human experience: **Define, Relate, Connect, Create, Consume, and Destroy**. For example, ask: "How do we DEFINE ourselves and the world around us with this seed in its mature condition? How do we CREATE goods and services? Where does our waste go to - what is it we DESTROY? What do we CONSUME?"

The output of this brainstorming is placed on hexagon stickers using a different colour in a concentric circle around the mature seed. This is the primary wave of change and consequences. The second order wave of change/impact/implications/consequences is derived by building another concentric circle around the first one and asking what the impacts of the impacts are and/or seeing what impacts/change results from the combination of first order impacts. The exercise can be repeated for third order impacts.

Small group facilitators must ensure that changes/consequences/impacts of the mature seeds are pushed to the extreme, as long as the resultant content is plausible.

For the Visions of Good Anthropocenes workshop using the Mānoa Mashup Method, three Futures Wheels are constructed and placed next to one another or in a triangle shape on a wall covered with paper so that lines, arrows and shapes can be drawn to connect the output of the Futures Wheels.

CROSS-IMPACT MATRIX

When the Futures Wheels exercise is done, participants fill in a cross-impact matrix using their three seeds as seeds (not in their mature state). This involves using a template with the seeds listed vertically and horizontally to see what impact they have on one another.

Participants keep the first seed as a constant, independent variable and brainstorm the effect (if any) it would have on the other two seeds. The exercise is repeated by taking turns to keep the other two seeds independent and seeing what effect that has. The exercise is meant to be creative and participants are asked to 'clash' the very different seeds together and explore what emerges.



Small group co-facilitators should check by posing questions for a wide variety of cross impacts, covering different aspects of reality, for example; family structure, community, economy, governance, work, arts and leisure, vices and crimes, ecology and the environment, media and community, transportation, education, subcultures, religion and myths, core values, world views, and paradigms.

The output of the cross-impact matrix is written on large Post-its and added to the Futures Wheels wall space.

INFLUENCE MAPPING

Small group participants then contemplate all the content they have generated using the techniques described above and do an 'influence mapping' by identifying (drawing lines and arrows and using symbols and different colours, for example; green for complimentary and red for contrasting links) to show the interactions between 'impacts' and 'sub-impacts' of the seeds as mature conditions combined with the 'clashing together' of seeds as seeds.

Typical co-facilitator questions that would be posed to the group at this stage include:

1. Do any of the impacts support or link to each other?
2. What changes might amplify or accelerate other changes? (Identify vicious and virtuous circles)
3. What changes might balance or constrain other changes?

By this time participants would also have been exposed to the Three Horizons framework (see below) so deep changes and a future that collides with the present in the second horizon also start to become apparent. This is how the skeleton scenario (the outline of a picture of a completely different future and a vision of a Good Anthropocene) begins to emerge.

The end of this phase of the workshop involves small group participants sharing their skeleton scenario with the other groups by means of three fictional future statistics (data points), a headline, and an artistic depiction (in any medium).

THREE HORIZONS FRAMEWORK

The Three Horizons Framework⁷, which is explained to all participants in plenary before any group work starts is used in this workshop setting for two reasons; 1) to enrich scenario narratives describing what has to change, and to recognise that change, and 2) to explore pathways, both backwards and forwards, to alternative hopeful futures of a Good Anthropocene.

Three Horizons Framework is a graphical approach developed to explore the change in importance of issues over time and connect the future to the present. It is 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. Emerging change will challenge our current assumptions and, over time, today's decisions, policies, and products will become obsolete. The Three Horizons Framework illustrates how strategic issues change over time and helps by asking people to explore emerging change in relation to today's dominant systems, vis-à-vis desired futures.

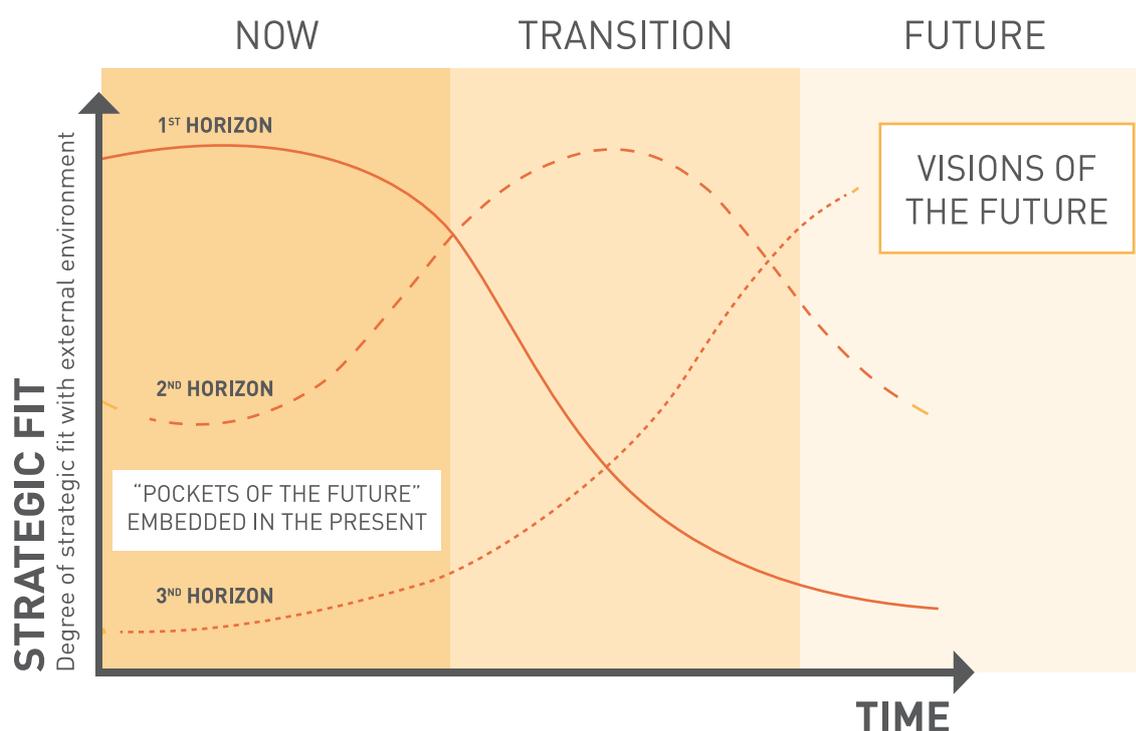


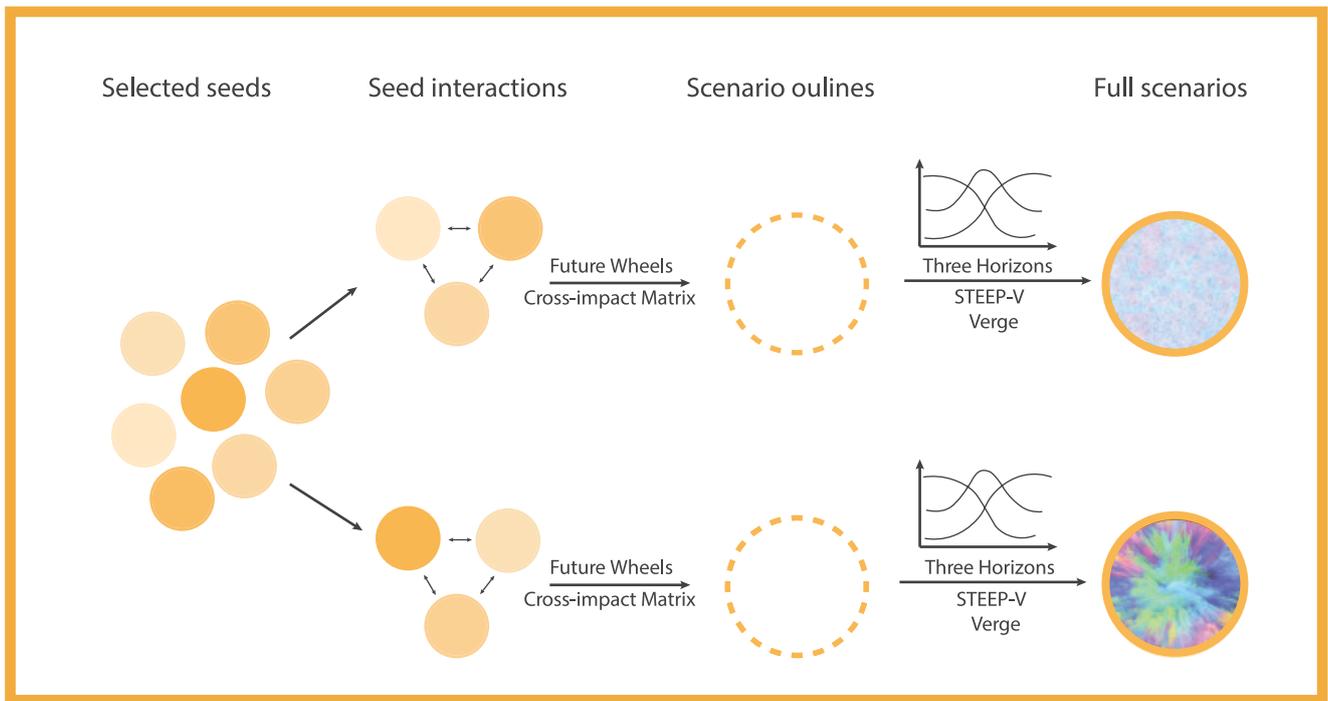
Participants embellish and flesh out their skeleton stories by populating a Three Horizons template, writing descriptions or statements on small Post-it notes starting with the first Horizon (H1) as follows:

1. The first horizon (H1) consists of the dominant patterns and paradigms of how the world is now and how it works now (in any area, for any topic). There is a high degree of prevalence/strategic fit with what is valued, where money flows, how decisions are made, the dominant practice, the dominant institutions, and the dominant models. This can, and does, change, sometimes dramatically, and the future could look very different because, as it continues into the future and its external environment changes, the current prevailing system loses fit.
2. Using a different colour Post-it, start populating the top right of Horizon 3 (H3), which is the desired future – the skeleton Good Anthropocene scenario and its future aspirations. H3 is what could change, what the future could be like. It will not have a high degree of prevalence/strategic fit with the present. H3 emphasizes the new, the transformative, the visionary, the break with past traditions and current assumptions.
3. Work backwards to the present on H3 still using the H3 coloured Post-its and ask if there are any “pockets of the desired future” in the present – these are the seeds. They exist now, but they are marginal, or niche, or an inspirational practice. They do not have a high degree of prevalence or strategic fit. They are emergent.
4. Staying with H1 and H3, ask what has to decline (sometimes dramatically) on H1, and what has to grow (sometimes exponentially) on H3, for the desired future to realise. This will begin population in the ‘transition’ phase.
5. Now populate Horizon 2 (H2) using a third colour of Post-its and describe the transition phase. What needs to happen in this space for fundamentally new patterns of H3 to occur? H2 then, is the medium term, and becomes a space of both conflicts and options. H2 is the intermediate space in which the first and third horizons collide. This is a space of transition, which is typically unstable and messy. It is characterised by clashes of values in which competing alternative paths to the future are proposed. It is the space for identifying actions and options, the space where one can make change happen. There is no fixed definition of what ‘mid to long term’ means. The timeframe is defined by the content of the impacts of the seeds as mature conditions.

Small group participants are given ample time to flesh out and embellish their stories given all the content that has been generated with the different tools in combination with the mapping out of their Three Horizons Frameworks. They can also refer to Jungian archetypes⁸ and the VERGE questions again to enrich their narrative of a far-out future that is hopeful, positive and that works for humans and nature in the Anthropocene.

It is essential that the co-facilitators capture all learnings and insights generated throughout the different futuring activities.





EXPERIENTIAL FUTURING

The final activity for the collective participatory building of Visions for Good Anthropocenes is for participants to share their visions in a creative, immersive manner. This is where experiential futuring comes in.

Experiential futures refers to a set of approaches that bring alternative futures to life in the present. It is essentially a future brought to life materially or performatively, or both. It is all about engaging with futures using design, performance, film and materiality – objects and things – as well as media and modalities that have not traditionally been used so much.

Participants are given complete freedom as to how to do this, and this is where the role and participation of artists in the group becomes invaluable. Examples include role-playing, dance, visual art, objects and theatrical performance. It is very powerful and inspiring and allows participants to feel, sense, experience and mentally rehearse Good Anthropocene futures that are fundamentally removed from the present and its challenges.



IN-CASTING AND REFLECTION

Sharing learnings and insight from the process is essential and typical of futures work, as going through the futuring process is often more valuable than the final output.

This is a collective group dialogue exercise with the aim of comparing and contrasting the scenarios - visions of the Good Anthropocenes – as well as the transition space and potential pathways for transformation. It involves the facilitator initiating conversation by posing a series of questions such as:

1. What are common themes? Contrasting themes?
2. What are the underlying values and assumptions?
3. What can you learn from the scenarios?
4. Which images outshine / override ambient (dystopian) futures?
5. Any awesome ideas?
6. Identify pathways / leverage points / critical issues
7. Which scenario offers the most opportunities? Which presents the most challenges?
8. How would your organization or community need to evolve or transform to thrive in each scenario?
9. What new allies or resources would you need?

The closure of the workshop involves a summary conversation around how to use the scenarios, communicating and disseminating the visions, and where to from here for the different participants and stakeholders.



ANTHROPOD: If finances allow, an “Anthropod” filming station where all participants can drop by in private and share their reflections and impressions of the process is highly recommended.

GRAPHIC HARVESTING

Finally, if resources allow, the use of graphic harvesting is highly recommended for the in-casting phase and to capture the different visions that were created by the groups.

Graphic harvesting, also known as graphic recording, is the process of listening and synthesizing information into hand drawn images in real time. According to graphic harvest specialists, it adds “engagement and energy to a room, increases group learning and supports participants’ memory retention of the content over time.” It also facilitates the production of user-friendly and effective outputs with which to communicate and disseminate Good Anthropocene visions.

See the Good Anthropocenes whiteboard sketch video as an example: <https://youtu.be/m247-ZdguLE>

COMMENT: It is very difficult to learn insights from scenarios and radically alternative futures/visions from a report or presentation. A visceral sharing and the conversation around the experience makes it much more meaningful and likely to instigate action.

PRACTICAL DESIGN: VENUE, MATERIALS AND PREPARATION

Start with basic workshop supplies and ensure that the workshop venue is appropriate; this includes a plenary venue that can comfortably accommodate all participants, and where flipchart paper and templates can be stuck onto walls.

In addition, three to four smaller breakout rooms are needed (the plenary room can double up as a breakout room) where paper and templates can also be stuck onto walls. Each of these rooms should have a flipchart stand with a lot of paper and an extra flipchart stand for the facilitator in the plenary room, thus at least five flipchart stands, six is ideal. Participants will alternately be sticking hexagon-shaped stickers and small Post-it notes onto flipchart paper, so rooms require either wall space, or a large table on which to work. The Mānoa Mashup Method relies on sticking three flipchart papers containing Futures Wheels side-by-side on a wall, so regardless of a table in the breakout room, wall space still needs to be adequate.

MATERIALS SPECIFIC TO THE VISIONS OF GOOD ANTHROPOCENES WORKSHOP INCLUDE:

1. 12 Seeds briefing sheets (3 for each of the 4 groups) containing a summary description (a few paragraphs with a web link is fine) of the seeds allocated to each group.
2. 400 (100 per group) large (6"/15cm) hexagon-shaped, self-adhesive paper sticky notes⁹ in a minimum of three different colours per group to be used for the Futures Wheels activity.
3. 60 large (6" x 8" / 15cm x 20cm) self-adhesive Post-it notes in four different colours (or coloured paper with glue) to be used for the Cross-Impact Matrix activity.
4. 5 pads of 3" x 3" / 7cm x 7cm sticky Post-it notes containing 90 sheets per pad (in at least four different colours) to be used for the Three Horizons activity.
5. A printed hand out for each group containing the VERGE prompters (explained above), as well as a list of common cognitive biases¹⁰ (as a reminder to everyone to guard against these), plus a list, or diagram of the Jungian archetypal characters¹¹ to help enrich scenario narratives if needed.

In addition to the workshop materials specified above, some templates of the tools/methods (described in more detail below) are required. Most can be hand drawn on flipchart paper. This includes:

- A Futures Wheel template using an example seed and demo hexagon stickers for the facilitator to explain the exercise.
- 5 Three Horizons templates; one for each group in each breakout room and one in the plenary room for the facilitator to demonstrate its use.
- 5 Cross-impact matrix templates; one for each group in each breakout room and one in the plenary room for the facilitator to demonstrate its use.

BASIC WORKSHOP SUPPLIES INCLUDE:

- Name tags (a small notebook on a lanyard works well for this purpose), which also indicate to which group a participant belongs.
- Flipchart markers; mostly black, but also include green and red for the Influence Mapping exercise. Supply a minimum of four per group consisting of two black and one each of red and green.
- Thin black marker pens for writing on hexagon sticky notes and Post-its. Supply a minimum of four per group. Prestik (Blu-tack) and masking tape for sticking paper onto walls.
- Some bright, fluorescent coloured markers for the facilitator who may want to highlight captured ideas on flipcharts in plenary.

TIP: Check with the venue beforehand for permission to stick flipchart paper onto walls using Prestik (Blu-tack) or masking tape. These should not damage walls, but cannot be used if there is wallpaper, artwork or artistic paint effects in the venue.

TIP: Default to over-supplying thick and thin black marker pens for any workshop as they tend to dry up and get mislaid. Any surplus can always be used for subsequent workshops.

