

## **Entangled futures (spiralcasting)**

Method Chapter lab relates to	Entangled futures (spiralcasting) - <i>Futures analysis from a decolonial lens</i> – (p. 153)
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Estimated length	60 min
Intended class	Undergraduate and graduate students
Group size	12–16

### **Objectives of activity**

The purpose of this activity is:

- to introduce students to a decolonial approach in the context of futures analysis research methods in a social-ecological systems context;
- to offer a novel practical tool and approach (i.e. spiralcasting) which combines and adapts methods to help students imagine what a decolonized future may look/feel like;
- to expand students' awareness of the impact of entangled legacies on how we envision better relationships between people and nature;
- to offer a transformative experience that compels students to embrace the discomfort and uncertainty of addressing discussions on topics that tend to be avoided (such as decolonization) and allow an effective and embodied route to knowledge co-production (multi-evidence-based).

## Learning outcomes

- Identify how a plurality of pasts reflect presents, and can shape future social-ecological priorities in a particular context;
- Understand the complex relational features that characterize social-ecological system dynamics across space and time beyond linear –i.e, western or scientific– paradigms (e.g., move from forecasting/backcasting to spiralcasting).
- Increased acceptance and integration of affective and embodied sources of knowledge and worldviews to motivate action and instill deeper social-ecological transformations;
- Acquire methods and tools that foster empathy towards diversity by suspending judgment and nurturing the ability to find commonalities across differences;
- Experiment with a model to creatively adapt methods that leverage a diversity of stories, worldviews, or cosmologies as a way to empower the participation of multiple voices.

## Practical set-up

- Groups of 4–6 people
- 3 round tables (for 4–6 people each)
- 12–18 chairs

## Resources needed

- 3 flip charts
- Colourful markers
- Set of objects and materials to spark a sensorial experience (objects with different textures, smells, colors...)
- A set of material prompts that can be “objects” from the future or the past (tool that can be used: “The thing from the future” from [Situation Lab](#)).

## Background

*“We get used to horrible things and stop fearing them. We get used to beautiful things and stop enjoying them. We get used to people and stop experiencing them as personalities. Art is a means to make things real again. (...)While the Romantics only sought to actualize the beauty of the world, (...) [through enstrangement] art also as a way to make its horrors felt.” – Newton, 1997.*

The following SES method is grounded in critical theory and is designed to uncover insights for transformative change. Western science imposes the belief that a single and universal reality exists (Smith, 2022). Post-positivism considers pluralistic knowledge to be founded upon ‘invalid’ philosophical assumptions (Moon & Blackman, 2014) and, as such, Western science continues to see itself as the arbiter of what counts as legitimate knowledge (Battiste & Henderson, 2024). In particular, contemporary theories around complex social-ecological systems and their future trajectories often draw on frameworks rooted in Western sources, and importantly, on Western concepts of time. In the context of a need to decolonize methodologies (Thambinathan and Kinsella, 2021) and pluralize our frameworks (Turnhout, 2022), especially in the context of SES research methods, this activity introduces students to futures analysis and, more specifically, methods of design/experiential futures (Hichert et al, 2021).

An important perspective for our method is to reconsider and shed light on different temporal worldviews rather than the dominant ones we know. For example, future trajectories are considered from a linear progression over time, where development and progress is perceived to move from a less sustainable past towards a more sustainable future through set goals and innovation (i.e. SDGs, Vision 2033, and even the setting of management plans in National Parks etc). However, for many indigenous people, time can also be understood as a cyclical concept, rooted in knowledge of how the weather changes, cycles of human life, cycles of the moon, which is also linked to women's bodies, or even the water (Cilliers, 2018; Sinha, 2019). This also demonstrates the belief in continuity, where there is no definite start (past) and a definite end (future), the interconnectedness of cycles, and those who honour ancestors know of the intergenerational responsibility (Kelly and Nicholson, 2022).

With this, the underlying assumption of this method is that the plurality of real and imagined pasts (including the influence of legacies) may lead to a plurality of futures (Terry et al., 2024). In contrast with current futures analysis

methods that tend to assume time as linear (e.g., forecasting and backcasting), this activity proposes an approach we call ‘spiralcasting’, as a way to integrate a more circular/cyclical and relational view of time.

The integration of plural worldviews can expand the ability of people to understand the ways in which the present is lived, and how the future is imagined, and perhaps co-produced across people as well.

The method we are introducing is combined with the concept of transformative learning by Jack Mezirow, where one acquires new knowledge that will essentially prompt us to reevaluate the assumptions and beliefs we have previously held to be true (Mezirow, 2006). It begins with a "disorienting dilemma", where stories from others, or surprising feelings or impressions challenge our existing understanding. It then goes beyond just adding to what we know, but fundamentally changes the values and perspectives of things. We then deeply evaluate the spiral identities, decisions we have made and the future plans.

To do this, we draw from and adapt existing arts and design-based methods that can be effective at triggering surprise or ‘enstrangement’ (Newton, 1997; Shklovsky, 2015/1917) as well as integrating and inspiring plurality in terms of perspectives and sources of knowledge (Tengö et al., 2014; Bentz et al., 2022). We combine tools from ‘experiential futures’, a set of methods used to co-produce knowledge related to what the future may feel like to research participants (Hichert et al, 2021). This set of methods allows researchers to design “catalytic situations” (Candy, 2014, p. 37) that help participants imagine answers to transformational social-ecological research questions. We further complement this with storytelling and participatory prototyping (using *cadavre exquis* or exquisite corpse) to:

- include an affective, trans-rational and transverbal dimension (words, images, reactions,..),
- highlight how stories uncover legacies related to the coloniality of power, knowledge and being, and,
- provide a platform to explore the future in ways that empower all voices and center stories while highlighting the complex time-space interconnections (complex system view) that exist in past, present and future systems.

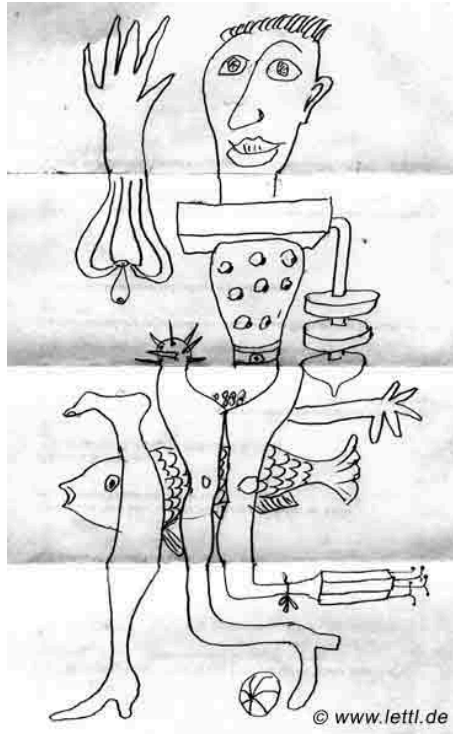
## Overview of the activity:

The activity is divided into three distinct components:

- an experiential icebreaker to help participants overcome the inertia that tends to occur when attempting to imagine the unknown (status quo bias).
- three prompts (one per time frame) where participants imagine, reflect and integrate (through the use of drawings, words, or short pieces of writing, etc.) what the past, present, and future feels like to them.
- a discussion of the resulting outcome as an “exquisite corpse”, to identify the differences and commonalities produced through the process.

## Process Summary

The process consists of two main parts to allow students/participants to prepare for the collective process by adopting an open mindset and attitude. This phase includes an “enstrangement” step (icebreaker) which consists of priming, inspiring and becoming open to different emotional and sensorial (embodied) information or insights. The second part of the process directs participants into a structured reflective and creative activity to explore, integrate and co-shape narratives that entangle multiple pasts, presents and futures. The format of the activity seeks to represent a deeply transformative experience that engages the whole body and taps on multiple modes and sources of knowledge. This phase concludes with the development of a product – an exquisite corpse (Figure 1) – that constitutes the artifact used to prompt further reflections and discussion on the intertwinedness nature of pasts and futures, and the implications of this plurality when we decenter or allow the de-linking with Western/modern assumptions.



**Figure 1.** Example of an exquisite corpse (*cadavre exquis*), this case only shows illustration but the artifact can include drawings, symbols or text.

## Detailed steps & suggested script

### 1. Introduction:

“Today, we’re embarking on a journey—a journey through time, but not in the way we might usually think about it. Most of us have been taught to see time as a straight line, moving forward from the past, through the present, and into the future. But what if we told you that time doesn’t have to be a straight path? What if the past, present, and future were all connected in a complex web, influencing each other in ways that we might not always see, and also other people’s timelines having an influence on your time. This session is about breaking away from that linear, Western-centric way of thinking (de-linking). Instead, we’ll explore a decolonial perspective—a way of seeing the future that recognizes the deep, rich, and diverse histories (both blessings and traumas) that have shaped us, and how these histories continue to shape our present and our futures”

## 2. Positioning and de-linking (5 min)

In order to embark the journey with an open mind, heart and body, we'll undergo a full-body experience that reminds us that we are not only brains and eyes. This is to be better attuned to welcoming difference, uncertainty and getting uncomfortable with what is deemed as "strange". Inspiring ourselves in the arts, we'll seek *enstrangement* (Shklovsky, 2015/1917) or a way to become unfamiliar with the familiar, to start seeing or sensing what we have now become to familiarize/numbed to, to notice.

- a) Stand up, close your eyes, put your hands in front of you (palms facing upwards) and open the senses. Be prepared to listen, smell and to be touched.
- b) Now open your eyes and be prepared to engage your body in movement. If you're comfortable, start spinning around in your place for a few seconds. Stop and look around. Now, look at the objects on the table and explore them with your hands, eyes or whole body. Think about what these objects "spark" on you.
- c) Before we move on, close your eyes for 10-15 seconds and gather your feelings, thoughts, reactions and discomforts. Keep them with you throughout the activity. Let's now move on to the next phase.

## 3. Entangling futures-pasts (spiralcasting)

You'll be working with your peers at your table throughout this whole phase. We'll offer a few prompts to guide you from the past into the future, and then circle back to the result. The goal of this activity is to co-create a single artifact (an exquisite corpse) on the sheet of paper provided. This sheet is divided into 3 parts covering past, present and future. The goal is to fill in each of these parts as a group based on your group discussion. Use drawings and text. You will then fold the sheet of paper (hiding what you did) and pass it on to the next table. It is important to swap papers between groups to allow for surprising connections and also to reinforce the idea that you may 'inherit' a baseline that was not of your choosing.

### a) PASTS (10 min)

Close your eyes for a moment and imagine yourself stepping back in time. We want you to think of a moment deeply rooted in your cultural background, your family's history, or a significant event that has left an **indelible** mark on

your life and understanding of the world. This can be a positive or negative mark (a treasure/gem or a wound). It could be a story of resilience, of wisdom, or of bravery that can represent important lessons for the future.

Now when you are ready, open your eyes and capture this on paper.

Remember that you can draw symbols, scenes, or people, or write down the thoughts and emotions that come to mind. There's no right or wrong way to do this—just express what feels meaningful to you.

Make sure to leave some traces or hints that the next group can start working from. When the group is ready, fold the paper to hide the main part of the composition.

*(Swap papers - moving it to the next table, you will receive a sheet from another group)*

### **b) PRESENTS (10 min)**

Now, you will outline a present without knowing the past that is being handed to you in the sheet. Without knowing what the other group has reflected on previously, and continuing your own logic of reflection from the phase before, you will now consider how your social-ecological context in the present is a testament of the legacy of the past in both positive and negative ways.

You will now consider how the past has shaped the world you live in today. Reflect on how the knowledge you know today, the ideas that are spread in this world, the power you have or don't have influence your life and wellbeing now, how they influence things that matter to you.

Continue the story from the previous group and use words or images to express how you perceive the impact of your past legacy in the present (you may highlight both positive and negative aspects). You can capture these ideas again in illustration and/or text.

*(Swap papers - moving it to the next table, you will receive a sheet from another group)*

### **c) FUTURES (10 min)**

Now, imagine a future where the legacies of colonialism have been transformed into new ways of thinking, of knowing, and of being. A future where knowledge is no longer dominated by Western or Eurocentric



perspectives, but is enriched by diverse voices, traditions, and wisdoms from all cultures.

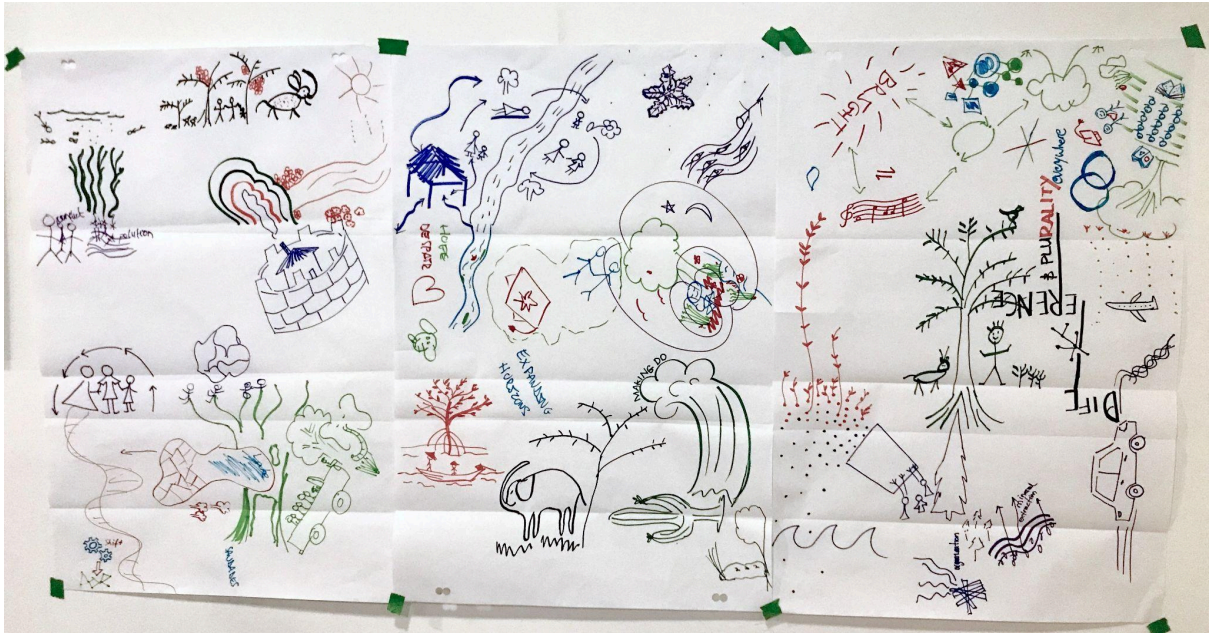
As you envision this decolonial future, think about how education, power, and identity could be reshaped. Based on the priorities you identified in the past and the key positive and negative elements that were captured in your present, explore and illustrate how the new future could be shaped. Elements that you may represent or capture can derive from answering the following questions:

What would institutions of learning look like? How might communities govern themselves differently? How would our understanding of identity evolve in a world where all forms of knowledge are valued equally?

#### **d) Plenary share-back (10 min):**

In this section, we ask each group to unfold the sheet they completed to reveal the whole image. Spend a couple of minutes observing the result as a composition with elements from each table. Look at how each time frame connects to each other, whether there are similar, surprising or very contrasting elements depicted. Observe the thoughts and emotions this triggers, what stands out or what surprises you.

Now ask all groups to pin up their sheets to a wall or place them on the floor so everyone can see all exquisite corpses at once (see example in Figure 2).



**Figure 2.** Example of 3 group compositions that resulted from the activity while pinned to the wall.

We suggest some reflection prompts to guide the plenary share-back:

**Connecting the dots between Past, Present, and Future:**

How did the process of reflecting on your past, present, and future help you recognize the ways in which past legacies continue to influence your life today?

How much difference/distance and similarity/overlap do you find across the compositions and within each composition?

What part of your ‘legacy’ is a central element of your future? Can you tell the difference between pasts, presents and futures?

What social-ecological priorities emerge in the depicted futures?

**Embracing plurality and relationality:**

Did you find yourself open to considering adding on to the present or a future after another group?

What was it like to ‘inherit’ elements that were not your own?

How were you able to work with or around these elements and transform them into something of your choosing?

Can you relate to what others depicted? Do you notice key commonalities or synergies?

What does this “image” of the future show in relation to embracing complexity and uncertainty while integrating different forms and sources of knowledge?

## **Evaluation/assessment**

Individual reflection - letter format (450 words maximum):

This activity ends with the opportunity to write a short letter to your “grandchildren” to tell them your takeaways from this. This individual written piece allows you to further reflect on your experience and insights from this method, and also practice your own storytelling skills. You may structure the letter in any format you wish but make sure to address at least 3 of the following questions:

- What did you learn about how the past could shape decisions about the future in your specific social-ecological context?
- Did you notice any change on how other people’s experiences could have an influence on your perspective about key social-ecological priorities?
- Did engaging with stories from different backgrounds and in different means (illustration, words, oral) foster a sense of empathy and understanding?
- As a result of this activity, do you feel more empowered to imagine and advocate for a future that values diverse voices and worldviews?
- How much of your ideas, choices or takeaways of this activity were rooted in emotion rather than reason?
- Did this activity inspire you to try out or develop new methods, or further adapt this one?

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