

Backcasting

Summary

Students will identify a case that presents a specific future inside a certain area of human entanglement with more-than-humans. Then they relate to the predicted future by creating ideas for an alternative future. They start with envisioning the desired end-result and then they think backwards to find out what the steppingstones are to reach that future. The result is a pathway with illustrated gradual steps to reach the proposed alternative future situation.

Learning outcomes

After the teaching activity students should be able to:

- Describe a currently predicted future inside a specific case with a limited scope.
- Imagine a future scenario or situation that is alternative to the currently predicted one that includes how humans might live in entanglements with more-than-humans through new technology designs.
- Illustrate through visual images, drawings, and text in a timeline what the steppingstones are to reach the imagined alternative future as a best-case scenario.
- Explain why and how the imagined future is a realistic best-case scenario, and why the path to get there is feasible.

Outline/Content

- Introduction to backcasting
- Multiple integrated paths
- Realism and knowledge
- ABCD framework
- Explain and illustrate each step

Key readings

Joseph, Jomy (2023). *Refuturing studies: rehumanizing futures through/by design*. Doctoral thesis. Oslo: The Oslo School of Architecture and Design
<https://hdl.handle.net/11250/3058961>

Backcasting

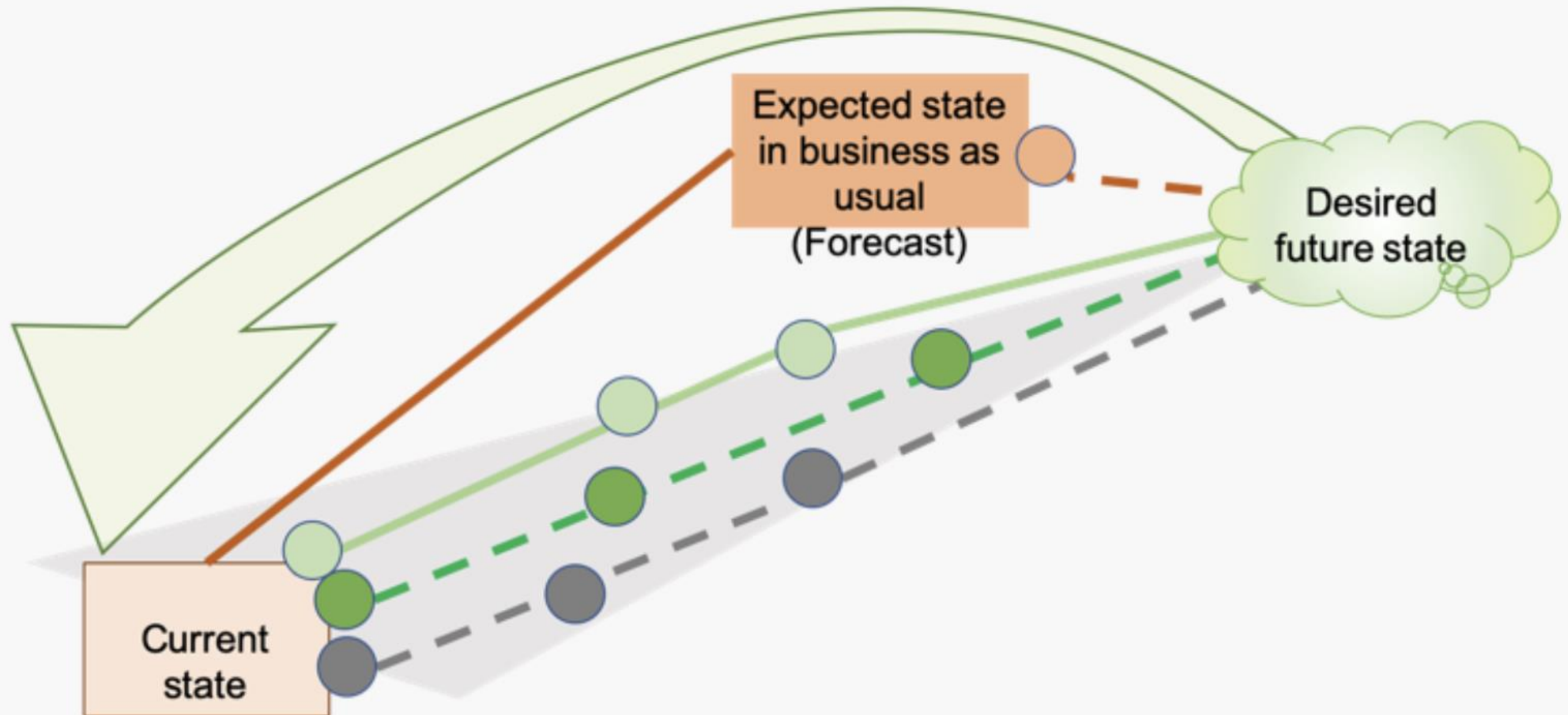
This method differs from forecasting. In a forecast, we look at current trends to predict what might happen in the future, if things continue to evolve the way that the trends suggest.

With backcasting, we are still aware of current trends. However, these trends might point towards an undesired future. In a backcasting scenario, we imagine a desired situation in the future that we describe. And then we describe the steps to get there.

While we do this, we can ask ourselves: what needs to change so that we can reach the desired future?
What do we do to make changes to the current trends?

Backcasting

A method to envision a desired future state, and think of potential strategies and steps to reach there



Multiple integrated paths

As you saw in the previous slide, there might not be one path, but multiple paths. And the different paths might even be integrated with one another. Perhaps we need to make changes on several accounts?

Example: to increase biodiversity in the countryside, several actors need to do something. Thus, each actor follow their own path to increase biodiversity in a step-by-step manner. The different actors could be farmers, forest owners, land protection agencies, local citizens etc.

Even for one actor, there might be several paths: one path for farmers could be to gradually reduce their use of pesticides by switching into other kinds of machinery like for example precision sowing machines and precision pesticide spraying machines. Another path could be to grow multiple kinds of crops together in one field so that each crop is less likely to be attacked. The question is which path is the most desirable?

Realism and knowledge

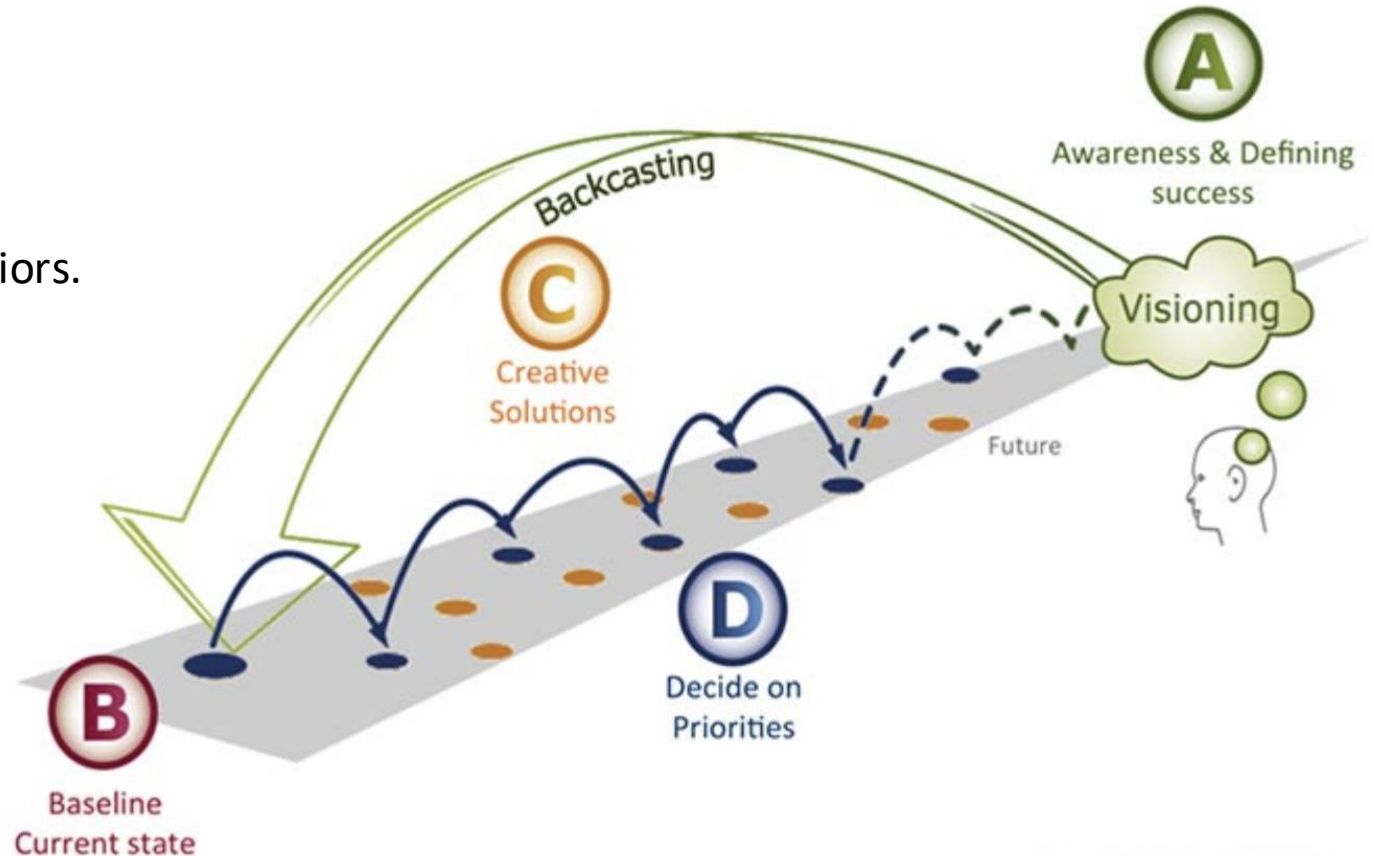
The desired future scenarios should not be utopias or dystopias. They should be as realistic as they can be in relation to the trends we see today. To maintain a certain level of realism, it is important to employ as much knowledge as we have currently.

It might also be good to predict and identify what kinds of knowledge that we need to develop and/or rely on along the path towards a desired future.

ABCD framework in more-than-human design

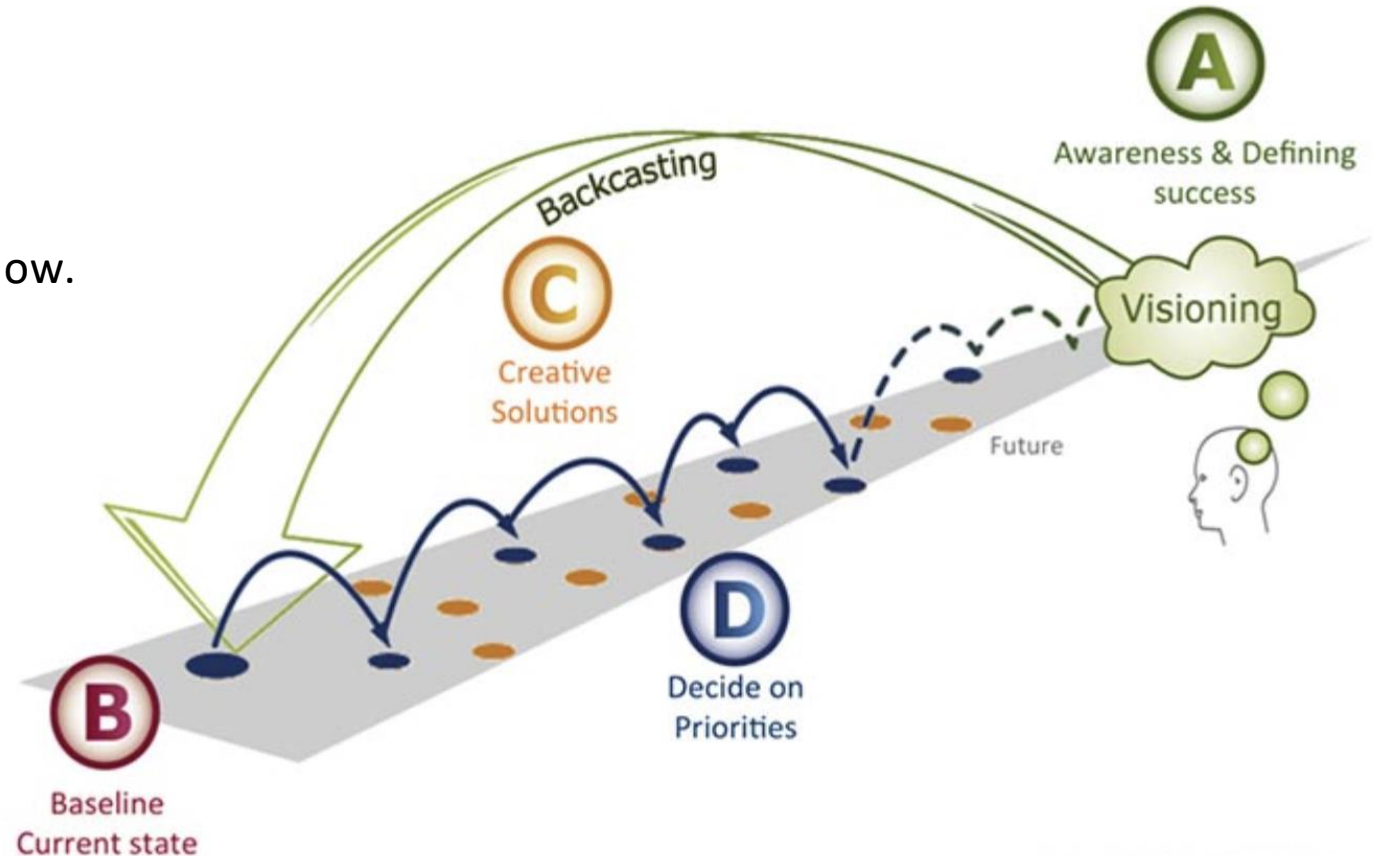
Awareness: Understand how humans behave in relation to more-than-humans currently. Clarify the risks of these behaviors. Brainstorm alternative ways in which humans behave in the future. Set these new behaviors as goals that humans should achieve in the future.

Note: the future can be in 25-100 years.



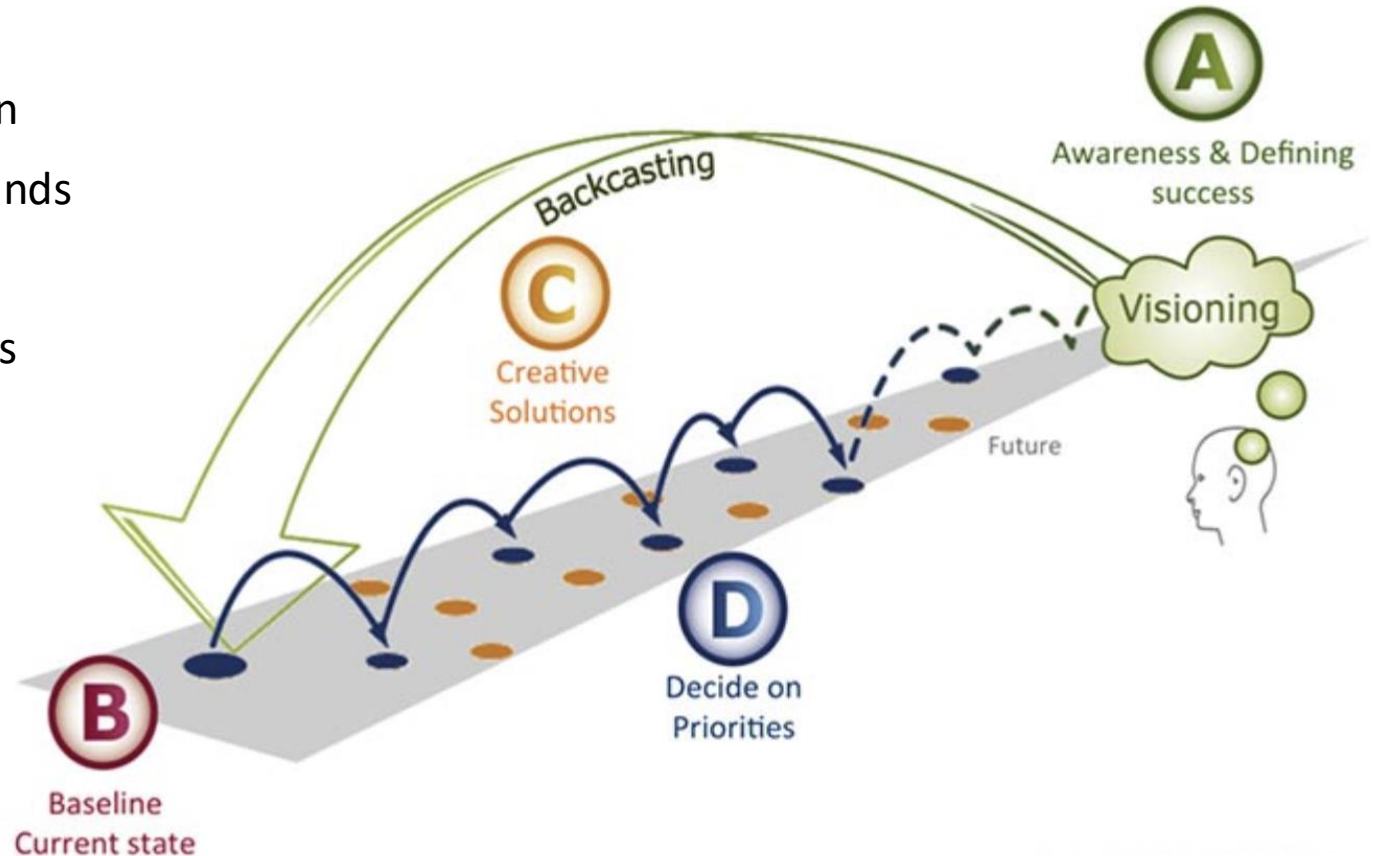
ABCD framework in more-than-human design

Baseline: When we have created a vision of where we want to be, we need to take an honest look at where we are now. Find concrete examples of how humans affect more-than-humans, and how humans relate to more-than-humans, or don't relate to them at all. Now we have established a "creative tension" between **A** and **B** that is **C**.



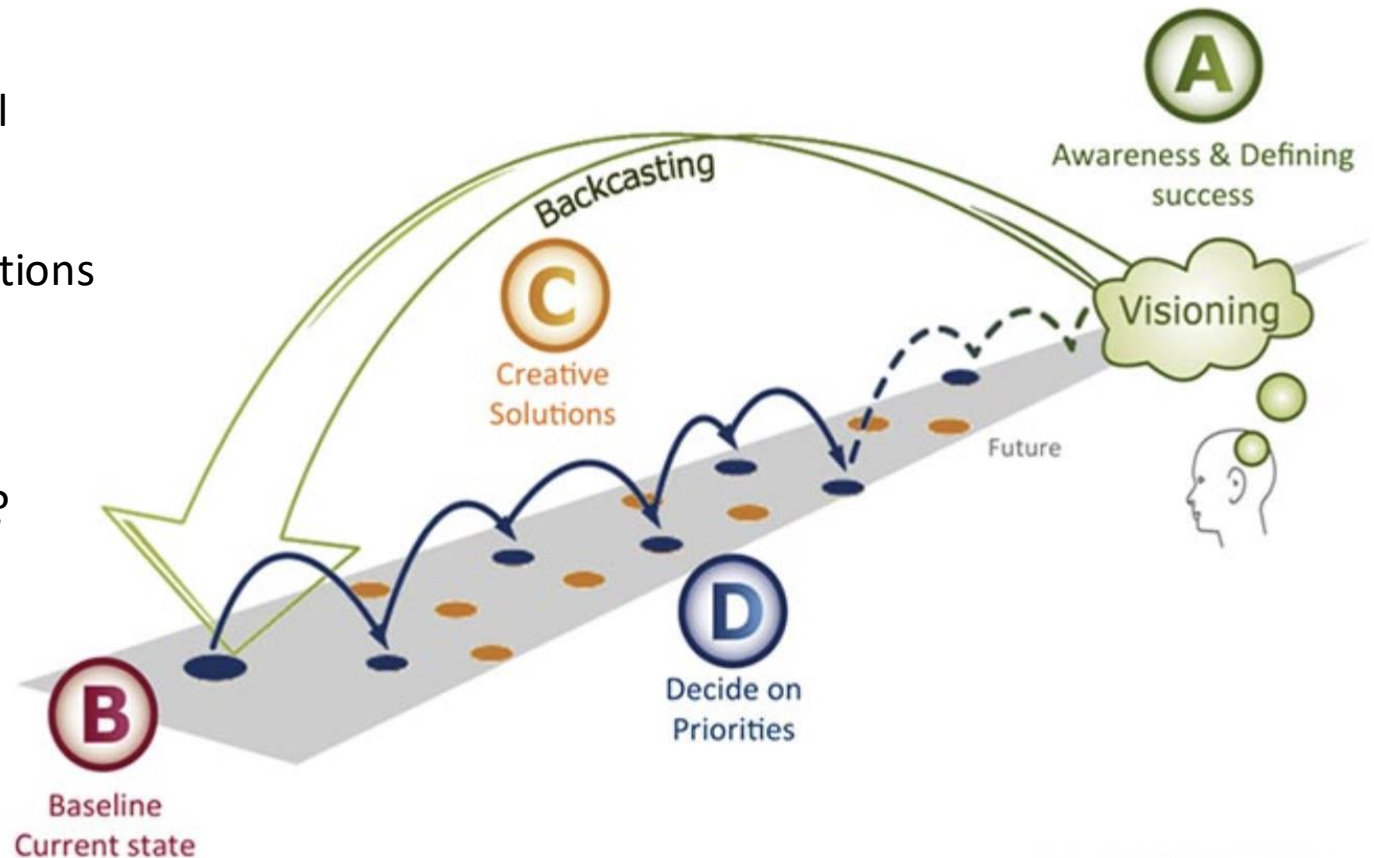
ABCD framework in more-than-human design

Creative solutions: In the creative tension between **A** and **B**, we now ideate what kinds of creative solutions that might appear step-by-step on the path from how things are now to how we would like things to be in the future.



ABCD framework in more-than-human design

Down to action: Finally, we take a critical look at the different creative solutions we created in **C**. We prioritize which solutions might work better than others by asking the question: how does this solution help us move towards the desired vision? And how might this solution act as a platform for future steps?



Explain and illustrate each step

For each step, it is not enough to indicate what the step could be about in keywords or headlines. There should be an explanation of each step and how you imagine that this partial solution works and is one of the steps on the path towards the desired future scenario.

The explanation should also be illustrated either through a sketch or photo annotation where you show how this partial solution might play out.

You can make the illustrations by hand, take photos of them and upload them to digital whiteboards where you can also draw the timeline, collect photos and other visual material along the timeline.

References

Bibri, Simon Elias (2018) Backcasting in futures studies: a synthesized scholarly and planning approach to strategic smart sustainable city development. *European Journal of Futures Research* 6. Article 13. 1–27. <https://doi.org/10.1186/s40309-018-0142-z>

Edelholt, Håkan (2022). Trapped in complexity: worlds and the methods they make. In *Relating systems thinking and design*. 2022 Symposium University of Brighton, Brighton, UK, October 13-16, 2022.

Edelholt, Håkan, and Joseph, Jomy (2022). Design disciplines in the age of Climate Change: systemic views on current and potential roles. In *proceedings of Design Research and Society*, June 25 – June 3, Bilbao, Spain, 1-13.

Edelholt Håkan, Joseph Jomy, and Xia, Nan (2020) Walk the talk: towards an ecological futures framework for our designed cultures. *Design culture(s) Cumulus*, June 16-19, Rome, Italy 2020.

Joseph, Jomy (2023). *Refuturing studies: rehumanizing futures through/by design*. Doctoral thesis. Oslo: The Oslo School of Architecture and Design
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