



SPECULATIVE DESIGN NORMALIZATION

An introduction to speculative design practice and it's ethical imperative

J. Paul Neeley
Gemma Jones

School of Critical Design



WELCOME

The School of Critical Design

We are an experimental design school dedicated to the application of emerging methods to innovation, design and strategy.

Our professional and academic courses offer new ways for individuals and organisations to meet the critical challenges facing our planet, people and businesses now, and the for next 1000 years.

Come and explore the future with us.



J. Paul Neeley

Service Designer & Speculative Designer
Neeley Worldwide

Co-founder
School of Critical Design

J. Paul is a designer & researcher based in London. He is the director of Neeley Worldwide, a studio helping organizations create meaningful impact through speculative design, service design, research & strategy.

He has worked professionally at Unilever & the Mayo Clinic, and studied on the Design Interactions course with Tony Dunne & Fiona Raby at the Royal College of Art from 2009 - 2011. For the past 10 years he has applied in his professional practice and taught Speculative design with leading companies around the world, and as a tutor in Service Design at the Royal College of Art.

jpaul@neeleyworldwide.com



Gemma Jones

Interdisciplinary cultural researcher
and strategist specialising in
semiotics and futures thinking

Co-founder
School of Critical Design

Gemma's work explores the connections between people and their bodies, habitats, communities and planet. She works with designers and communicators to create experiences and strategies with imagination, cultural resonance and bravery.

In the decade since her masters in Culture and Creative Industries at King's College, Gemma has worked on innovation, brand strategy and design projects with organisations including Nike, Microsoft, United Nations, Uber, PepsiCo and HB Reavis. She guest lectures a course on critical research methods for design on MA Strategic Design HFG Schwäbisch Gmünd. Currently Director of Insight at Protein Agency
gemma.jones@gmail.com



15.30 – 16.00 Welcome

**16.00 – 17.30 Introduction : Expectations, specific questions, agenda
Speculative design : What is about... Why it is relevant... When is it successful... Cases...**

17.30 – 18.15 Tour ndsm terrein in Amsterdam

18.15 Drinks and snacks

**18.45 Exercises : Working in teams on selected cases
(Future Wheel, Brainstorming, Speculative Design, Implications)**

20.00 Dinner

21.15 Tea / coffee

21.30 End

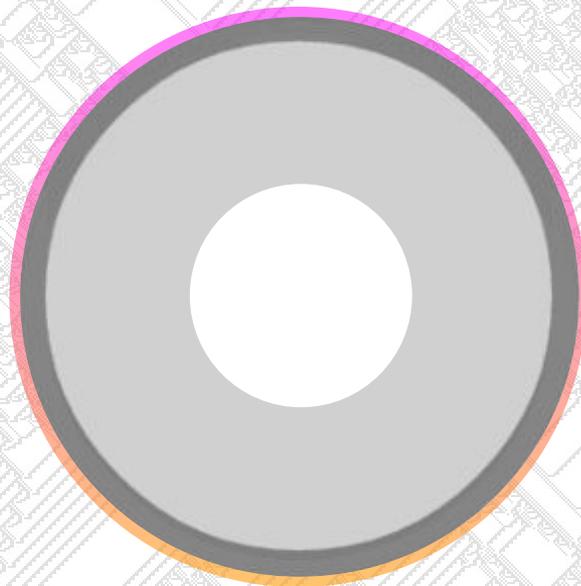


WORKSHOP GOAL

- A new approach to product and service development & innovation
- An empathetic approach to systems thinking
- Frameworks for connecting long term considerations and near term action
- Freshly ignited creativity and energy for change
- An approach to shaping organizational change, strategy and purpose



Prep : 60 seconds





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Royal College of Art

RCA Service Design

Tutor
@rca_sd



**School of
Critical Design**

critical.design
@criticaldesign_

A design studio _ creating meaningful impact _ through service design & speculative design



"Future Speculative Mobility"

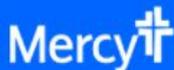
We helped moovel Labs explore new mobility concepts, responding to emerging technologies and considering the implications of these possible futures.



[Learn more →](#)

"The world's first virtual hospital"

We researched telemedicine efforts across the hospital system generating new insights on meaningful approaches and leading to organization wide telemedicine strategy.



[Learn more →](#)

"Doctor in your pocket"

We helped Cupris think about their application strategy and completed the redesign of their iPhone and Android app for launch.



[Learn more →](#)

"Preventing Homelessness"

We worked with homeless individuals, policy experts, and local councils to design and prototype services for early identification of need and prevention of homelessness.



[Learn more →](#)

Selected Clients:

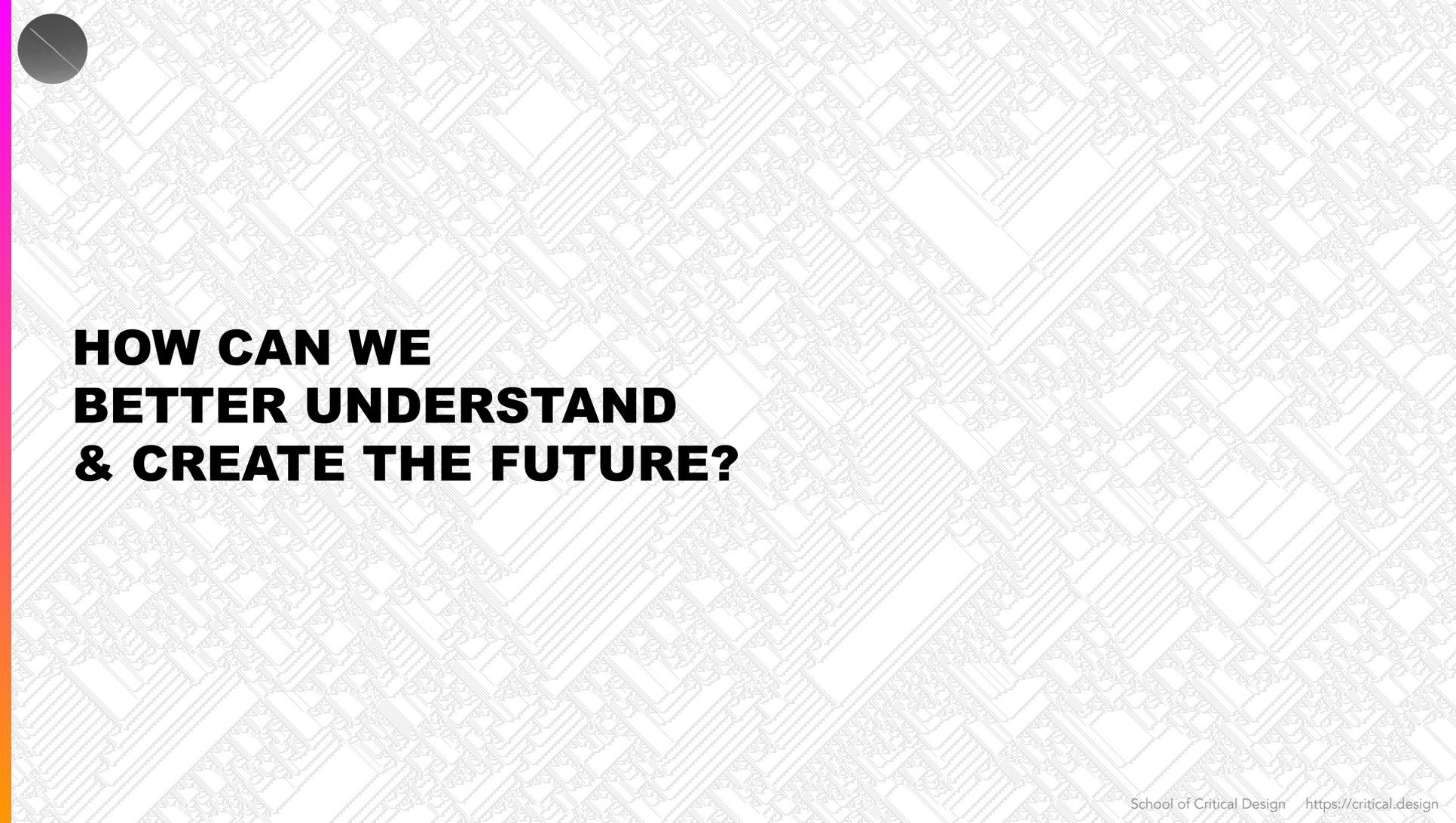


Cabinet Office



Zaha Hadid
VR Group





**HOW CAN WE
BETTER UNDERSTAND
& CREATE THE FUTURE?**

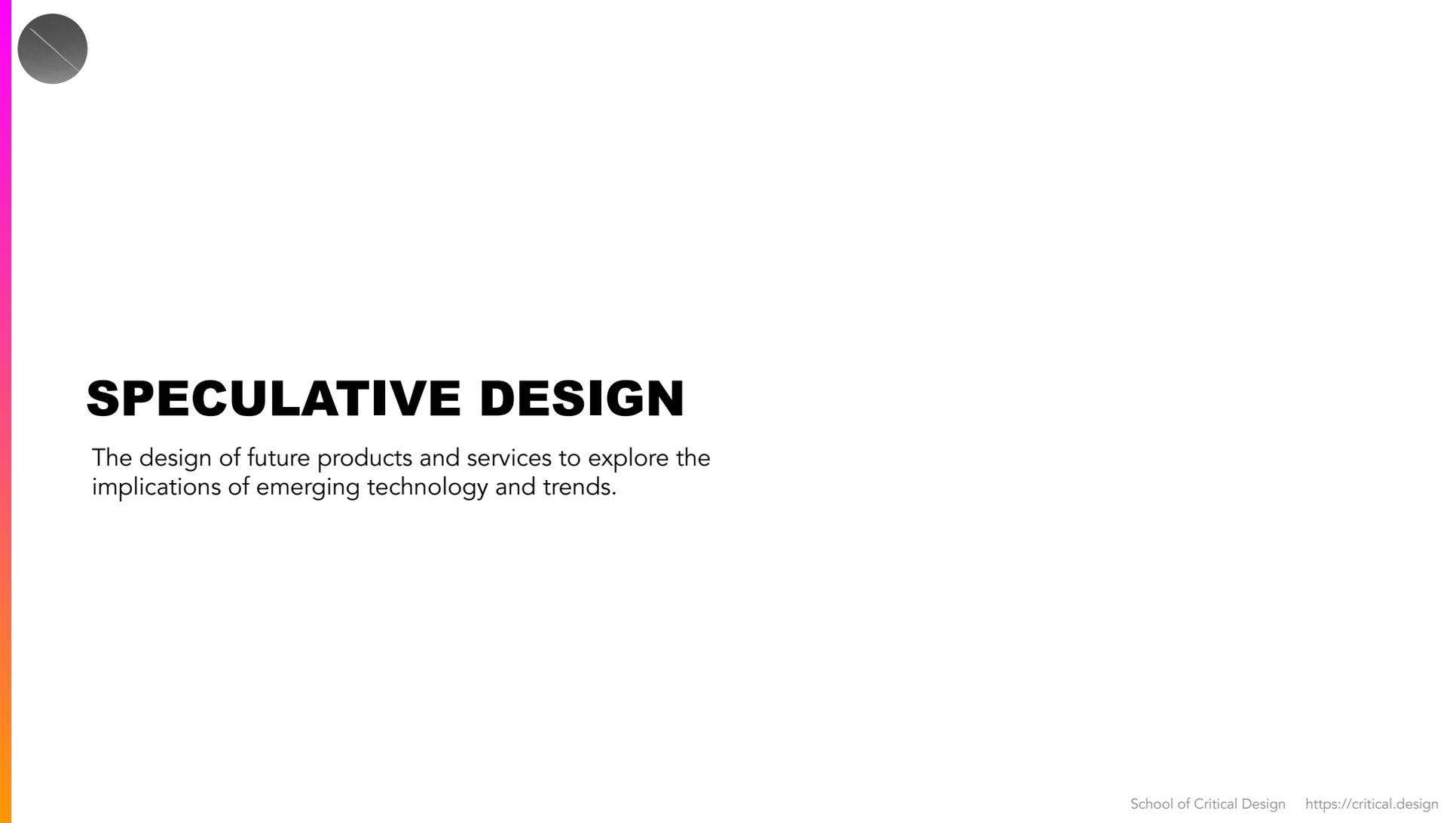


TODAY

A BRIEF INTRODUCTION

CAN SPECULATIVE DESIGN CREATE VALUE?

THE ETHICAL IMPERATIVE



SPECULATIVE DESIGN

The design of future products and services to explore the implications of emerging technology and trends.



(a)

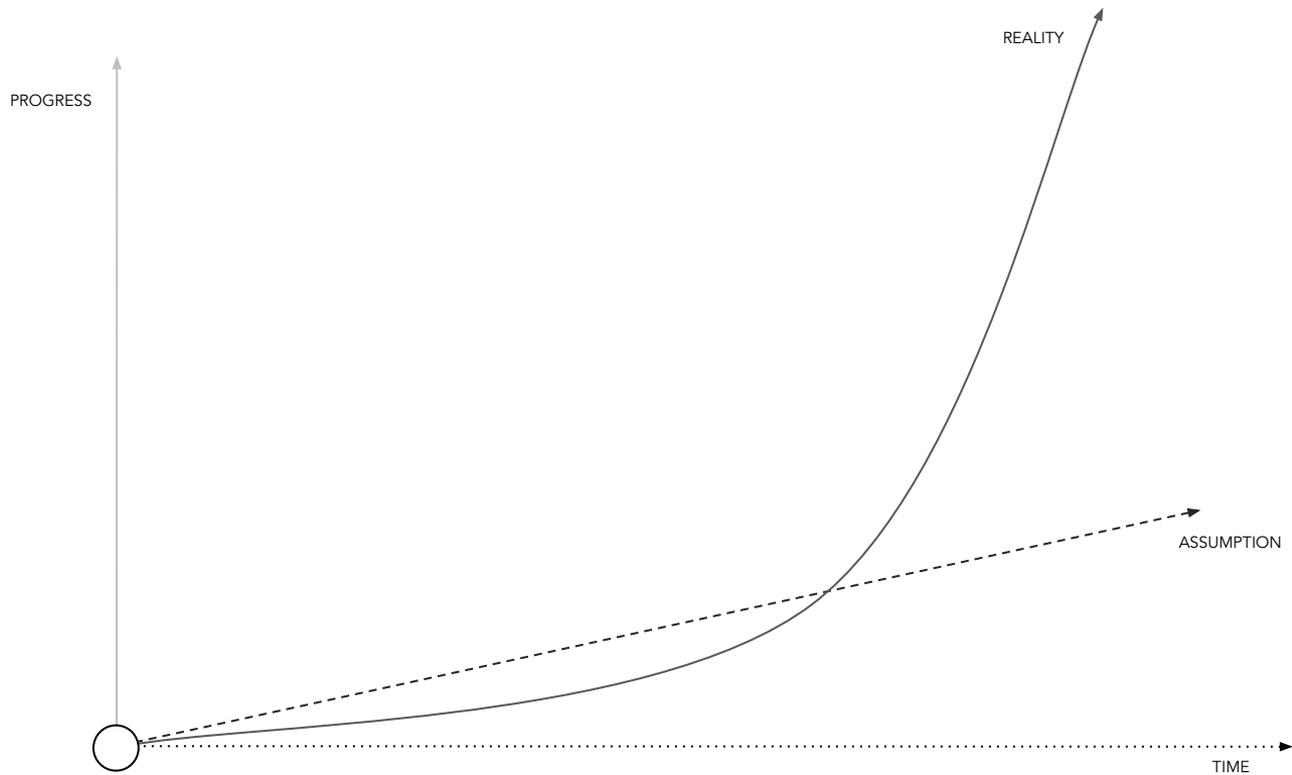
affirmative
problem solving
design as process
provides answers
in the service of industry
for how the world is
science fiction
futures
fictional functions
change the world to suit us
narratives of production
anti-art
research for design
applications
design for production
fun
concept design
consumer
user
training
makes us buy
innovation
ergonomics

(b)

critical
problem finding
design as medium
asks questions
in the service of society
for how the world could be
social fiction
parallel worlds
functional fictions
change us to suit the world
narratives of consumption
applied art
research through design
implications
design for debate
satire
conceptual design
citizen
person
education
makes us think
provocation
rhetoric

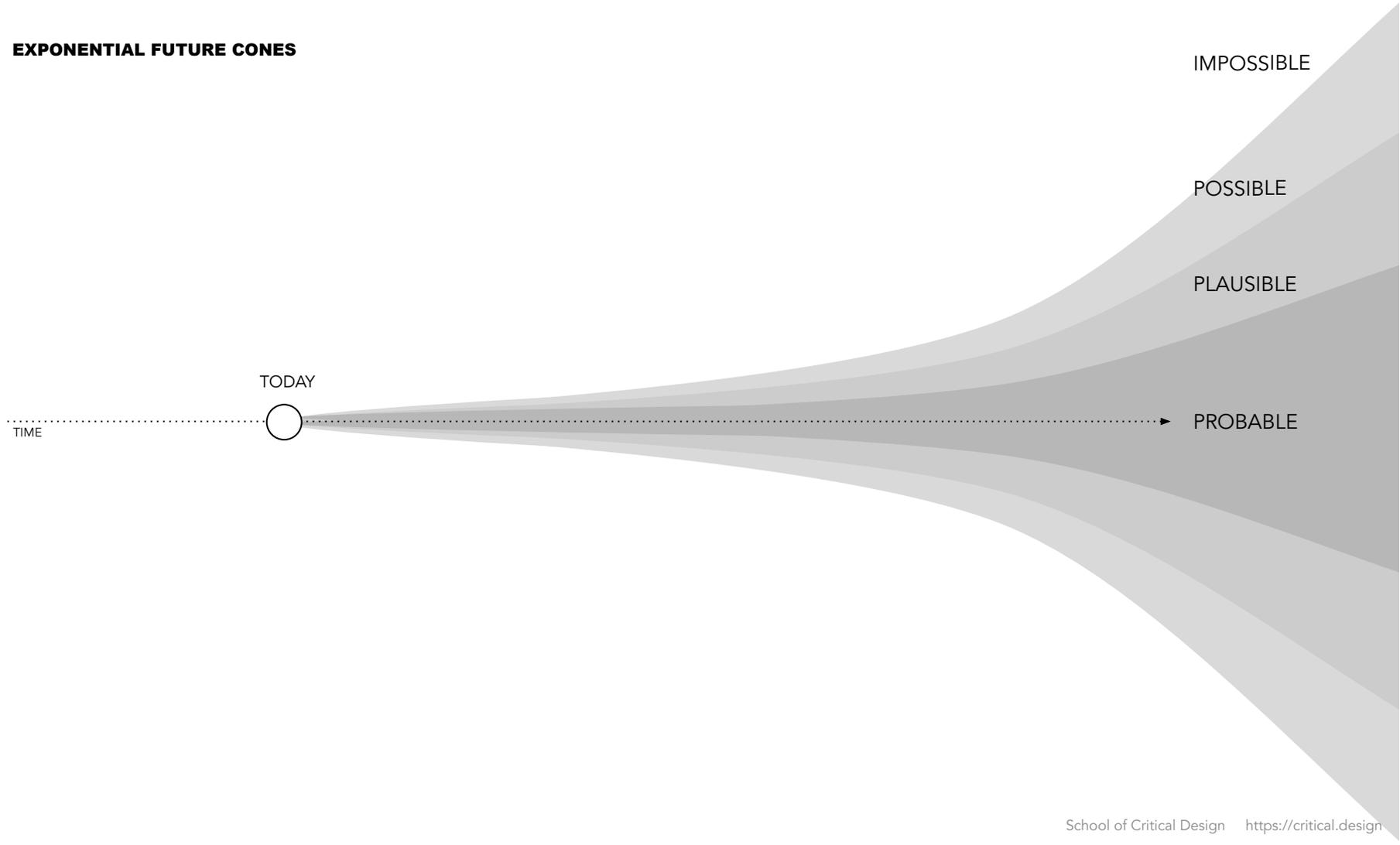


AMARA'S LAW



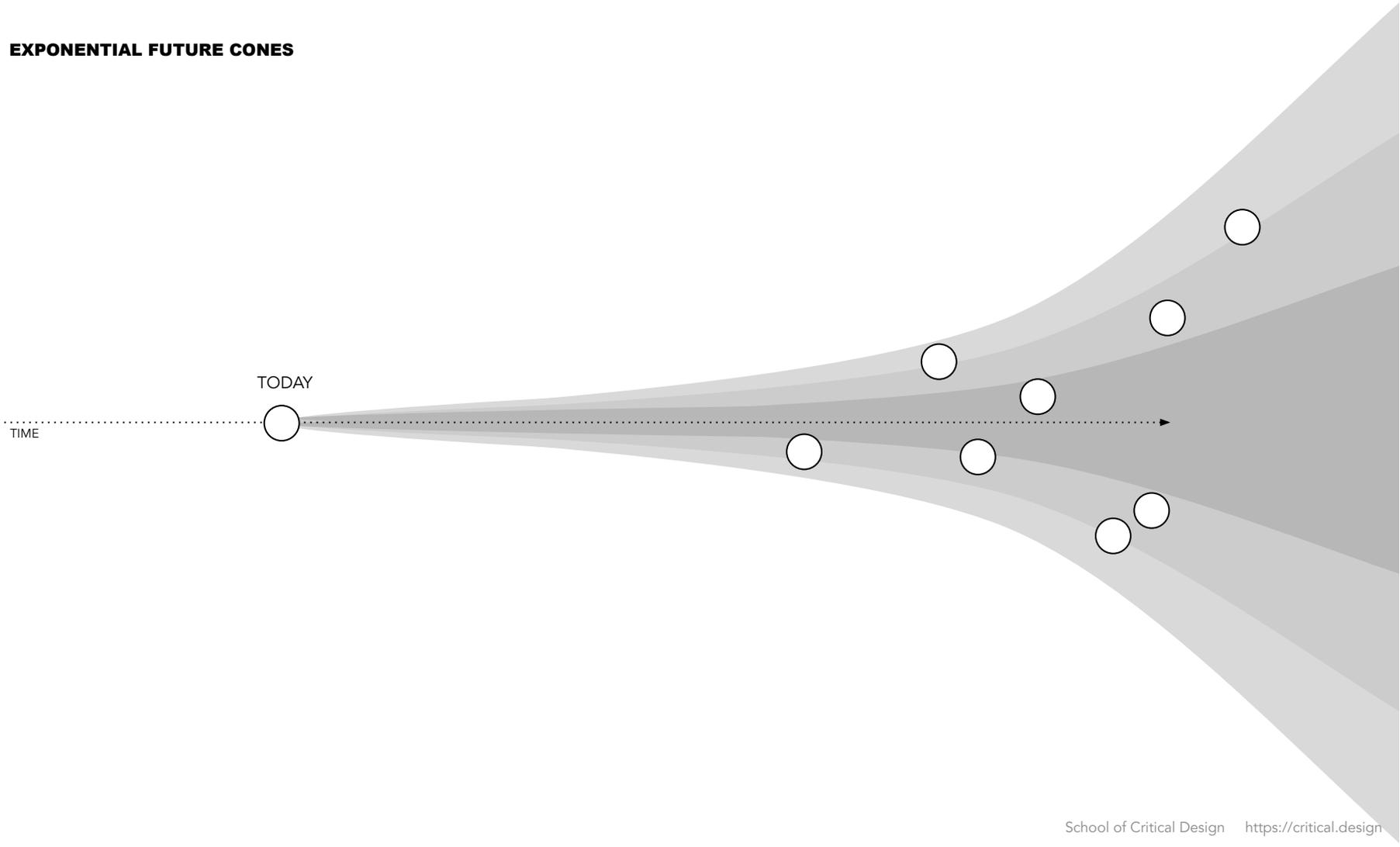


EXPONENTIAL FUTURE CONES



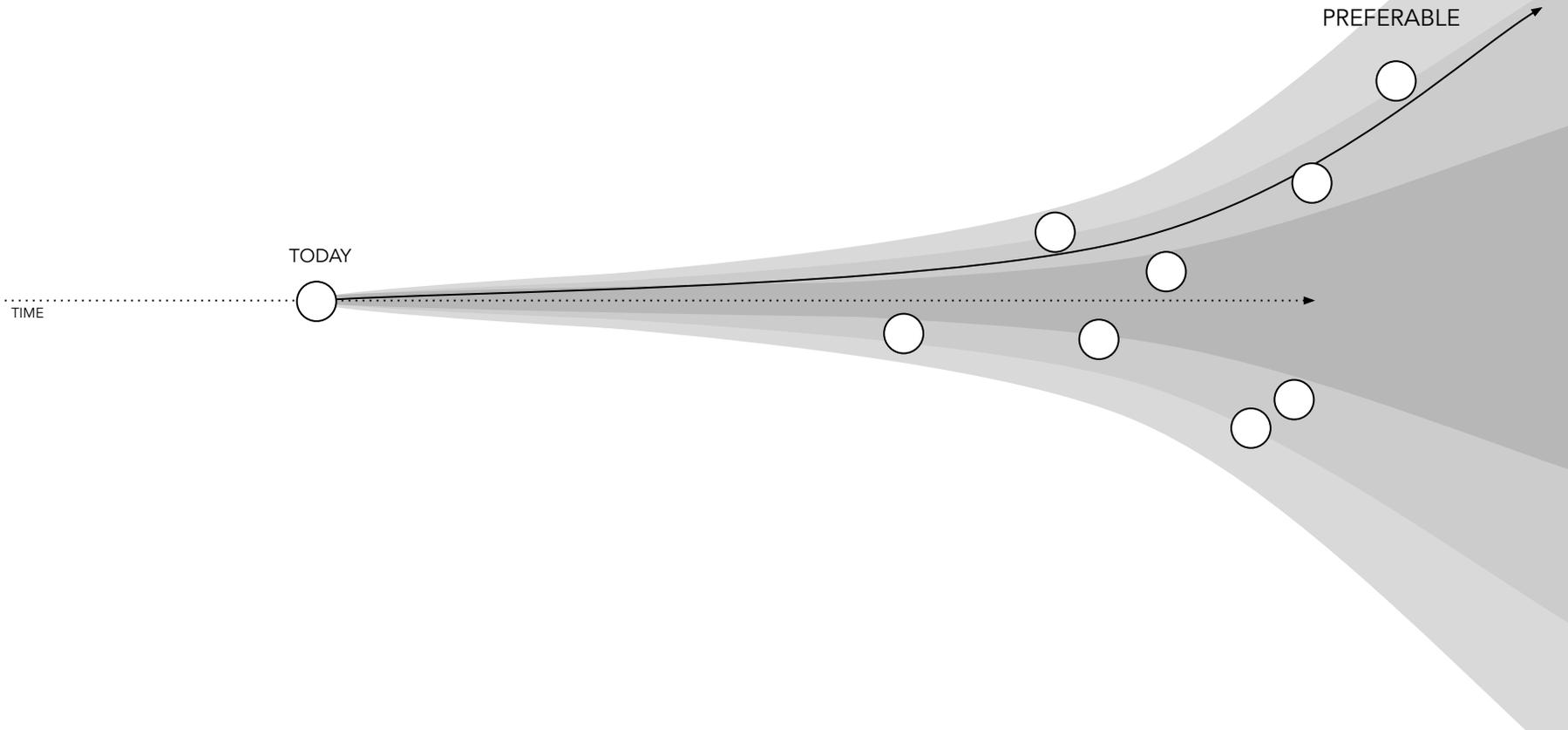


EXPONENTIAL FUTURE CONES



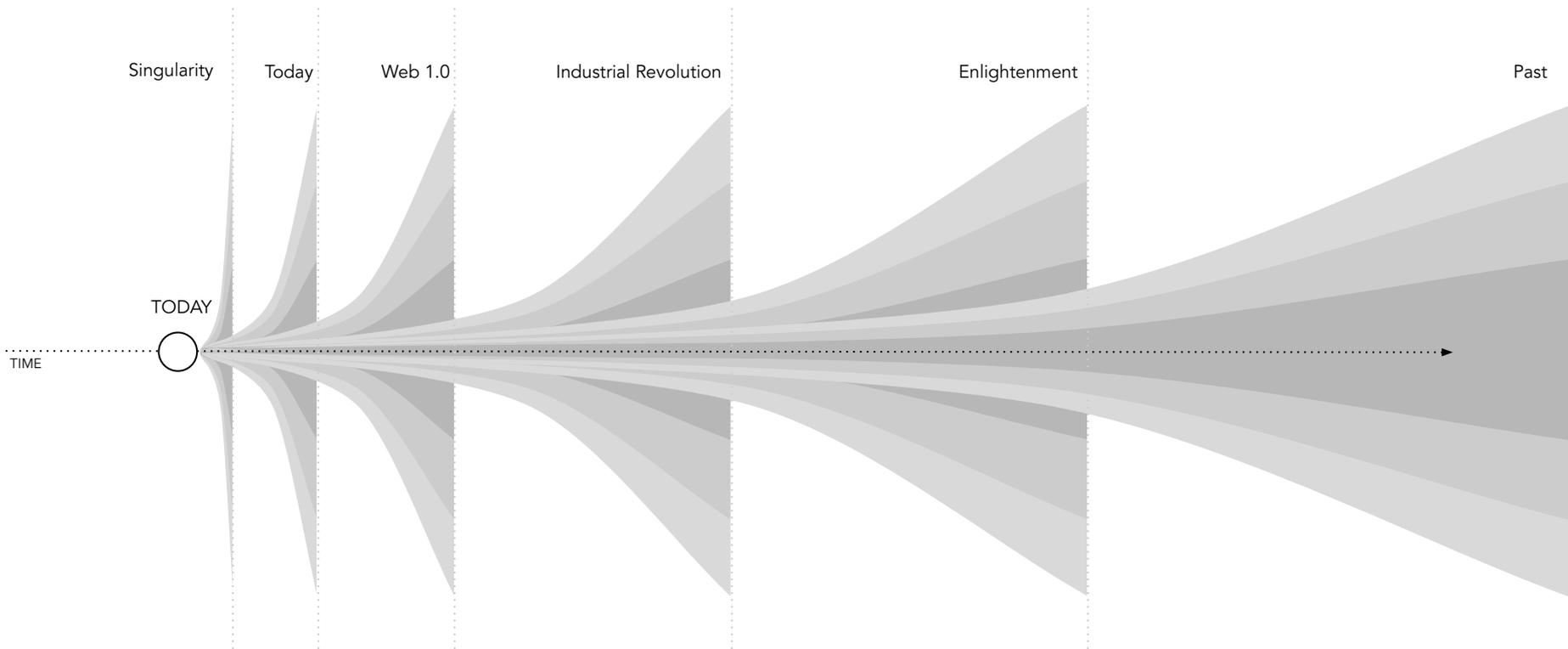


EXPONENTIAL FUTURE CONES





POSSIBILITY DILATION





SPECULATIVE DESIGN IS / IS NOT

NOT FANTASY

NOT UTOPIC OR DYSTOPIC : COMPLEXITY

ABOUT MESSY PEOPLE

NOT PREDICTIVE : WORK IN MULTIPLES

FOR UNCLEAR CONTEXTS : EMERGING TECHNOLOGIES & TRENDS

ENGAGING THROUGH PROTOTYPES : SUSPENSION OF DISBELIEF / LOOSEN REALITY

ANSWERS THROUGH QUESTIONS

ABOUT RADICAL ALTERNATIVES : REFRAMING



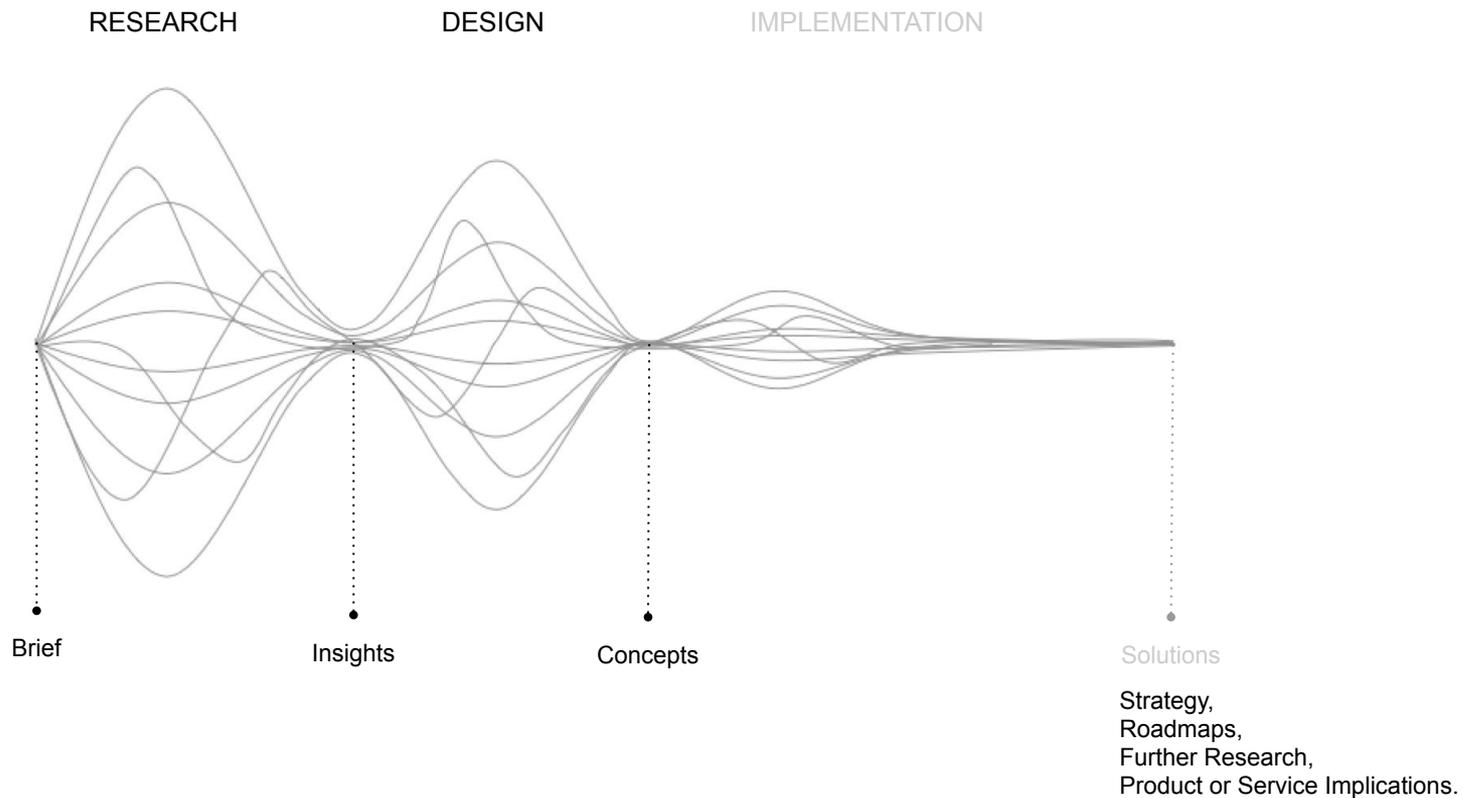
**SPECULATIVE DESIGN CAN HELP US
EXPLORE, BETTER UNDERSTAND,
& CREATE THE FUTURE**



CAN SPECULATIVE DESIGN GENERATE VALUE?

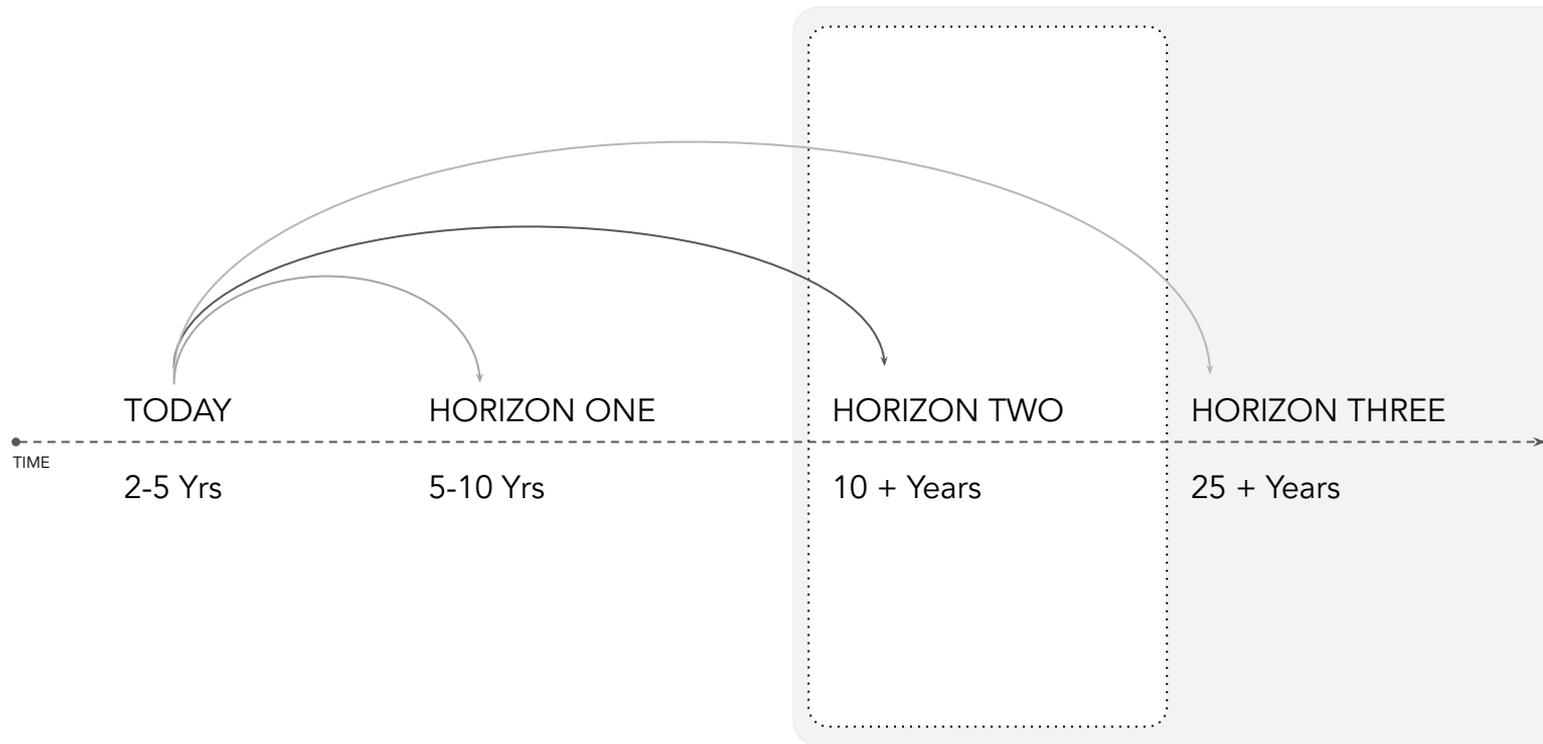


FAMILIAR DESIGN APPROACH



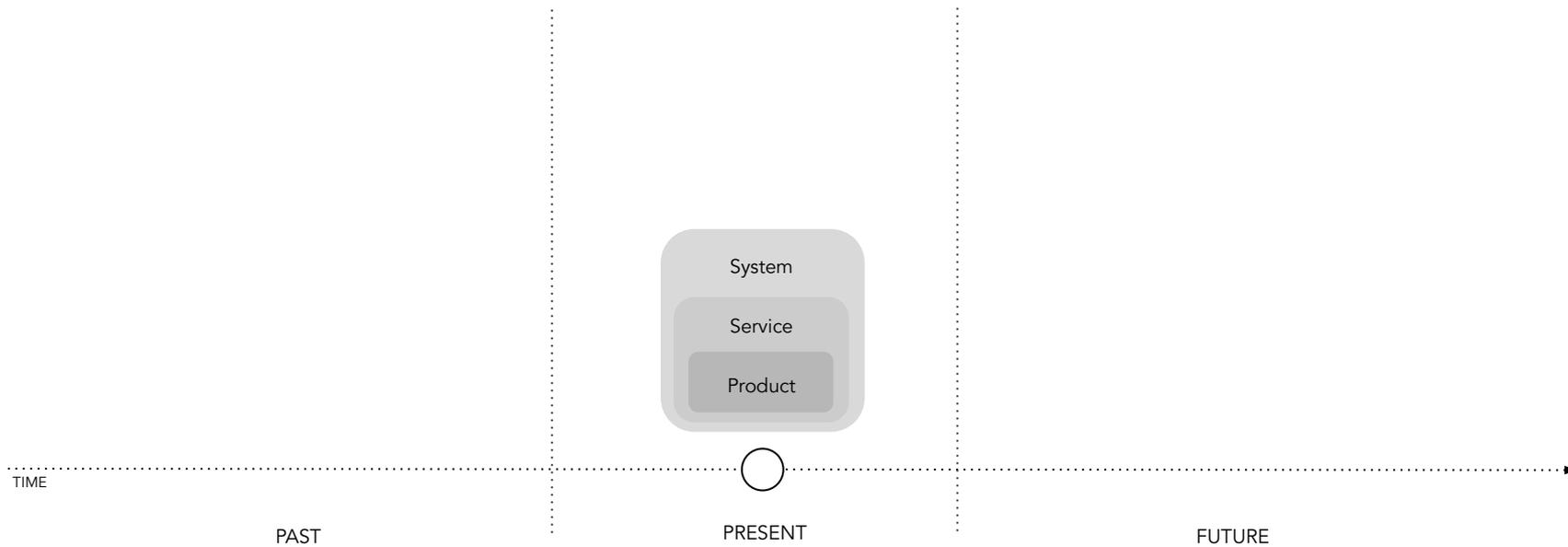


NEW TIME HORIZONS



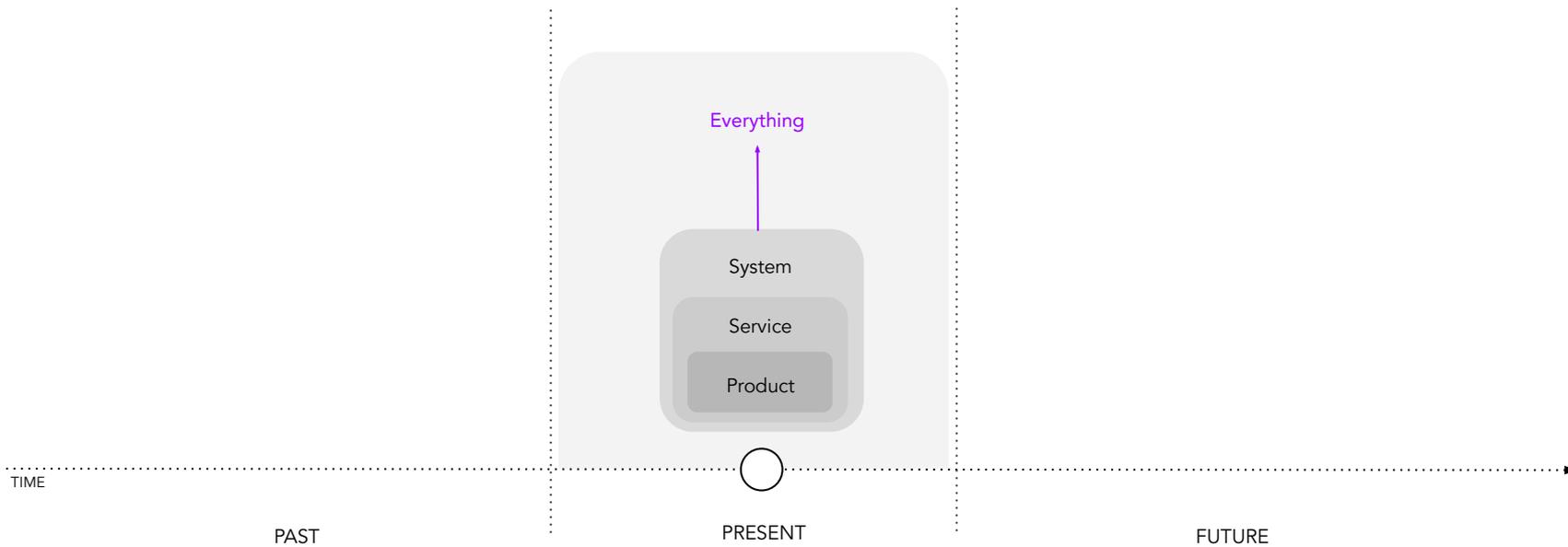


DEFINING EVERYTHING



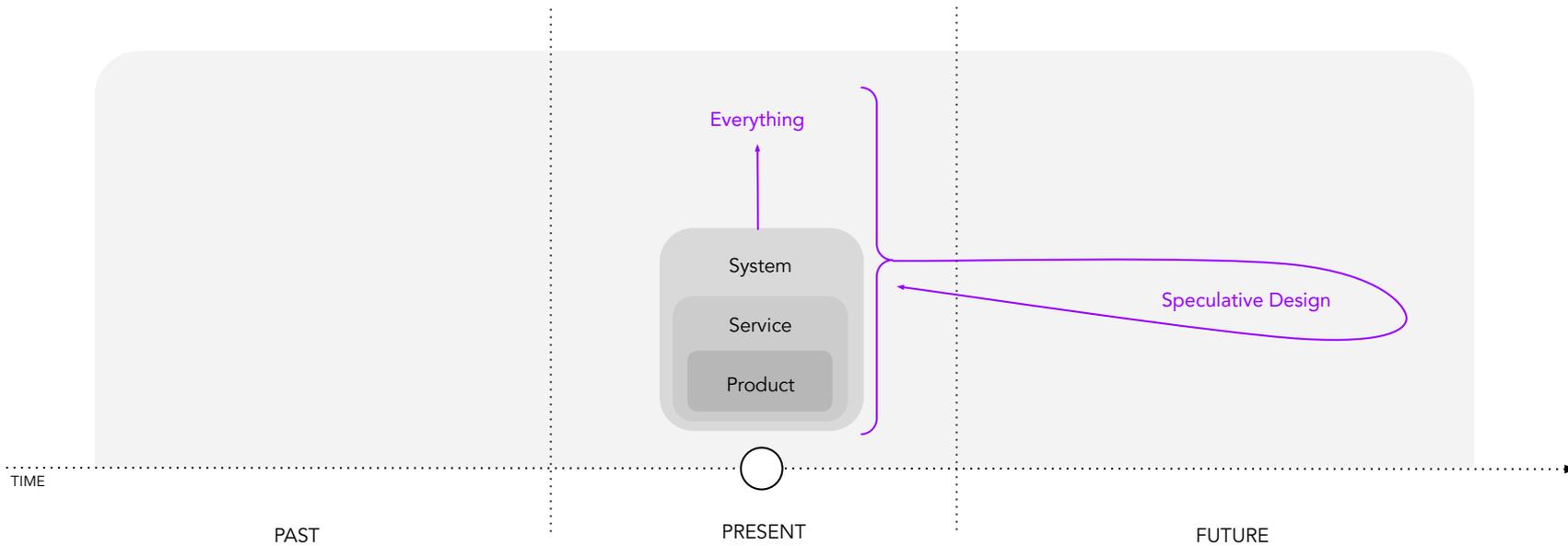


DEFINING EVERYTHING



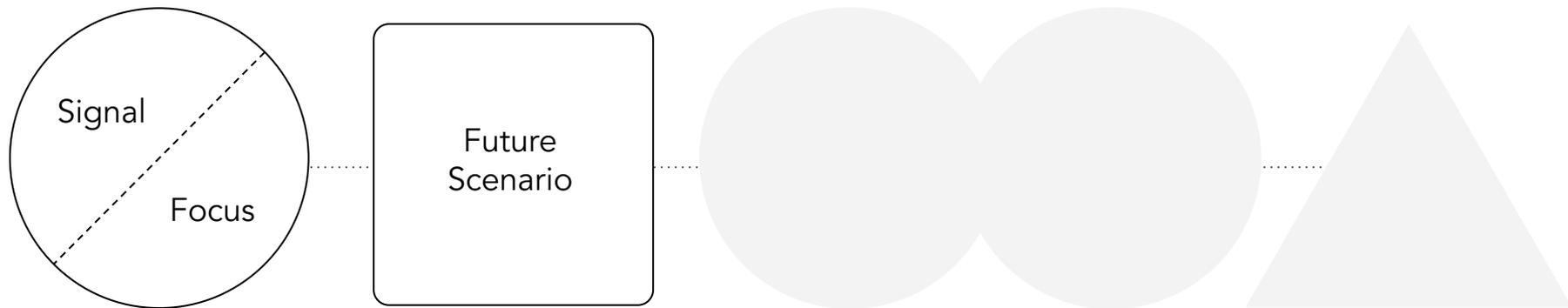


DEFINING EVERYTHING



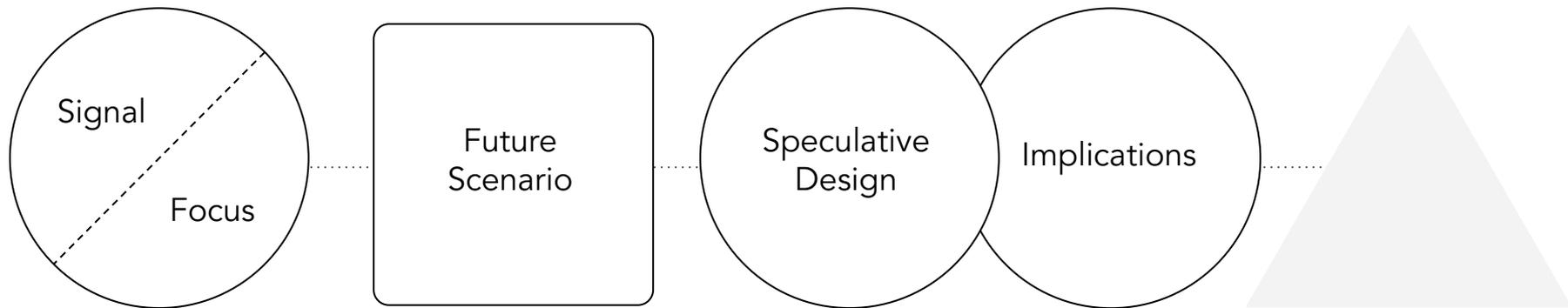


TRADITIONAL TREND & FORESIGHT WORK



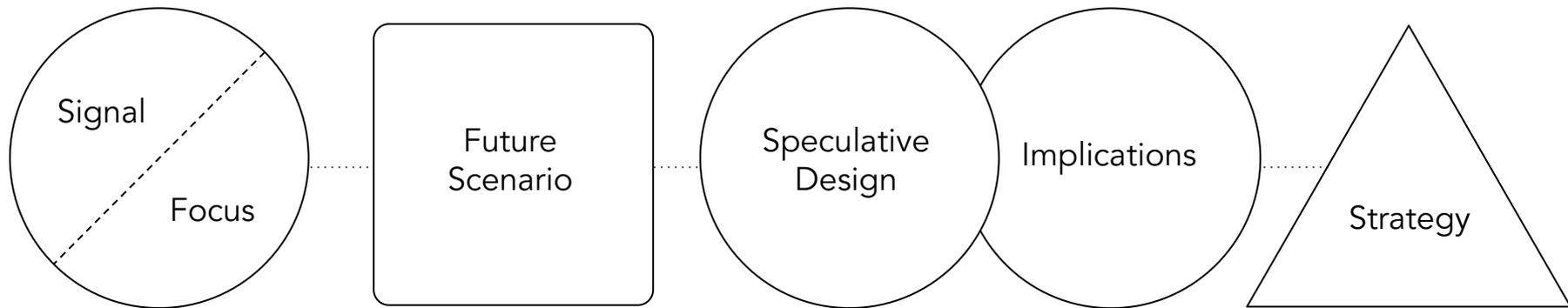


TRADITIONAL SPECULATIVE DESIGN APPROACH





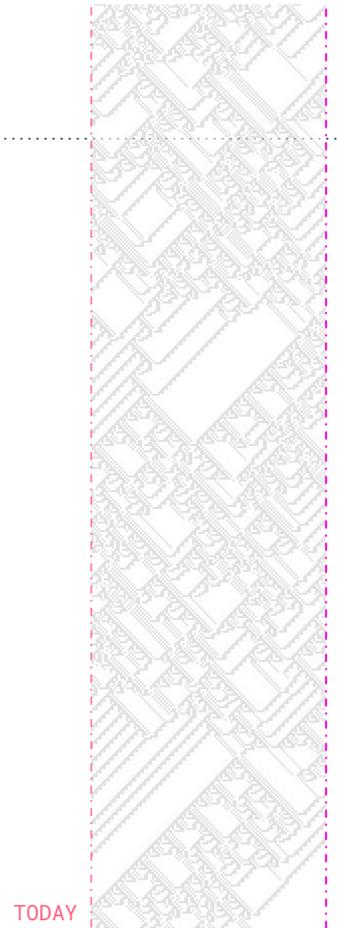
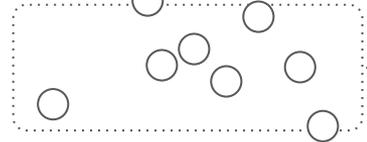
NEW OPPORTUNITIES FOR VALUE CREATION





TRADITIONAL SPECULATIVE DESIGN

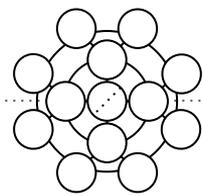
Signals



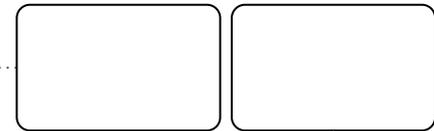
TODAY

FUTURE

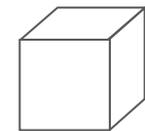
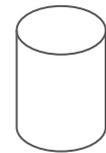
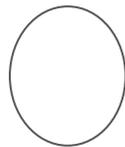
Future Wheel



Future Scenarios

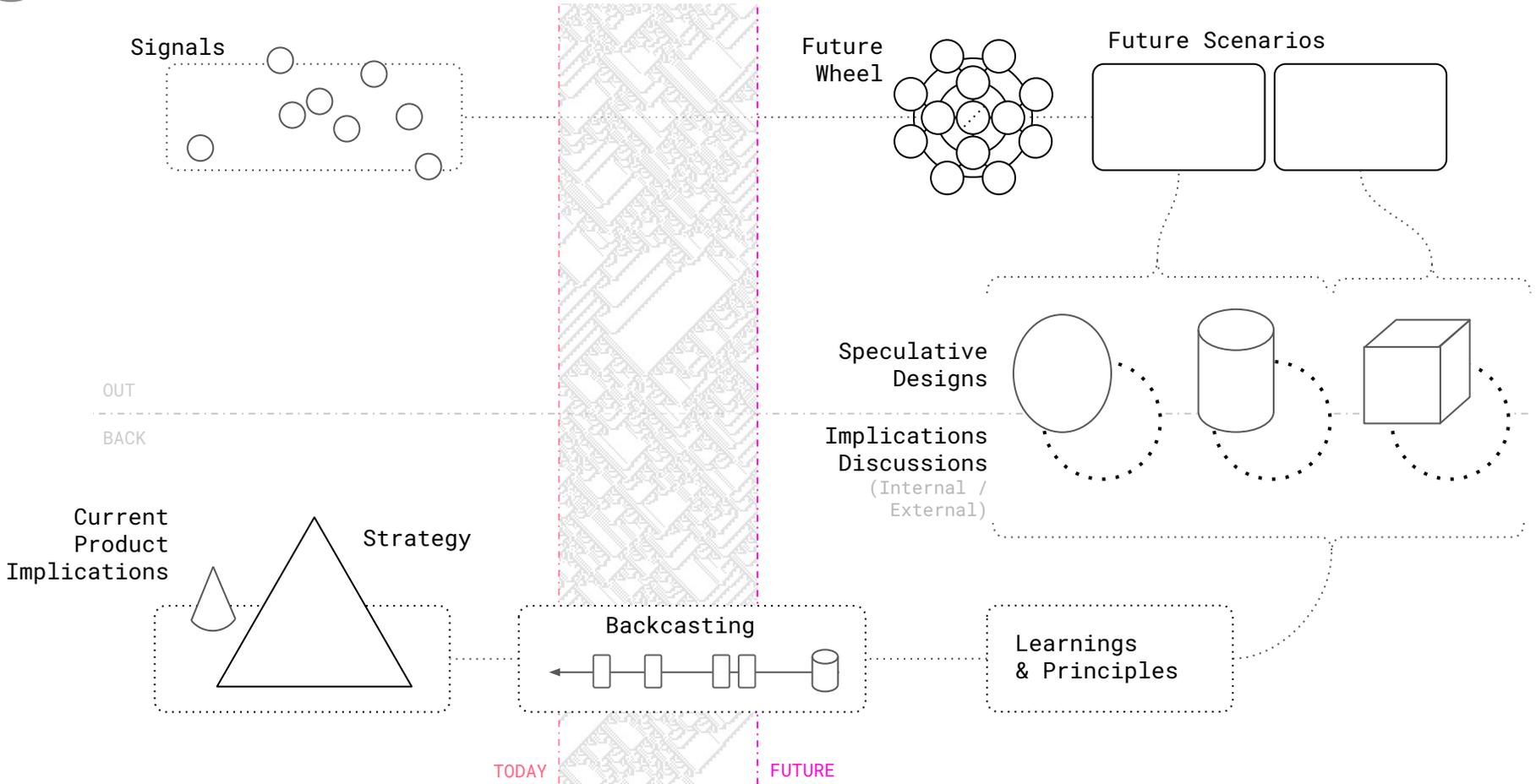


Speculative Designs





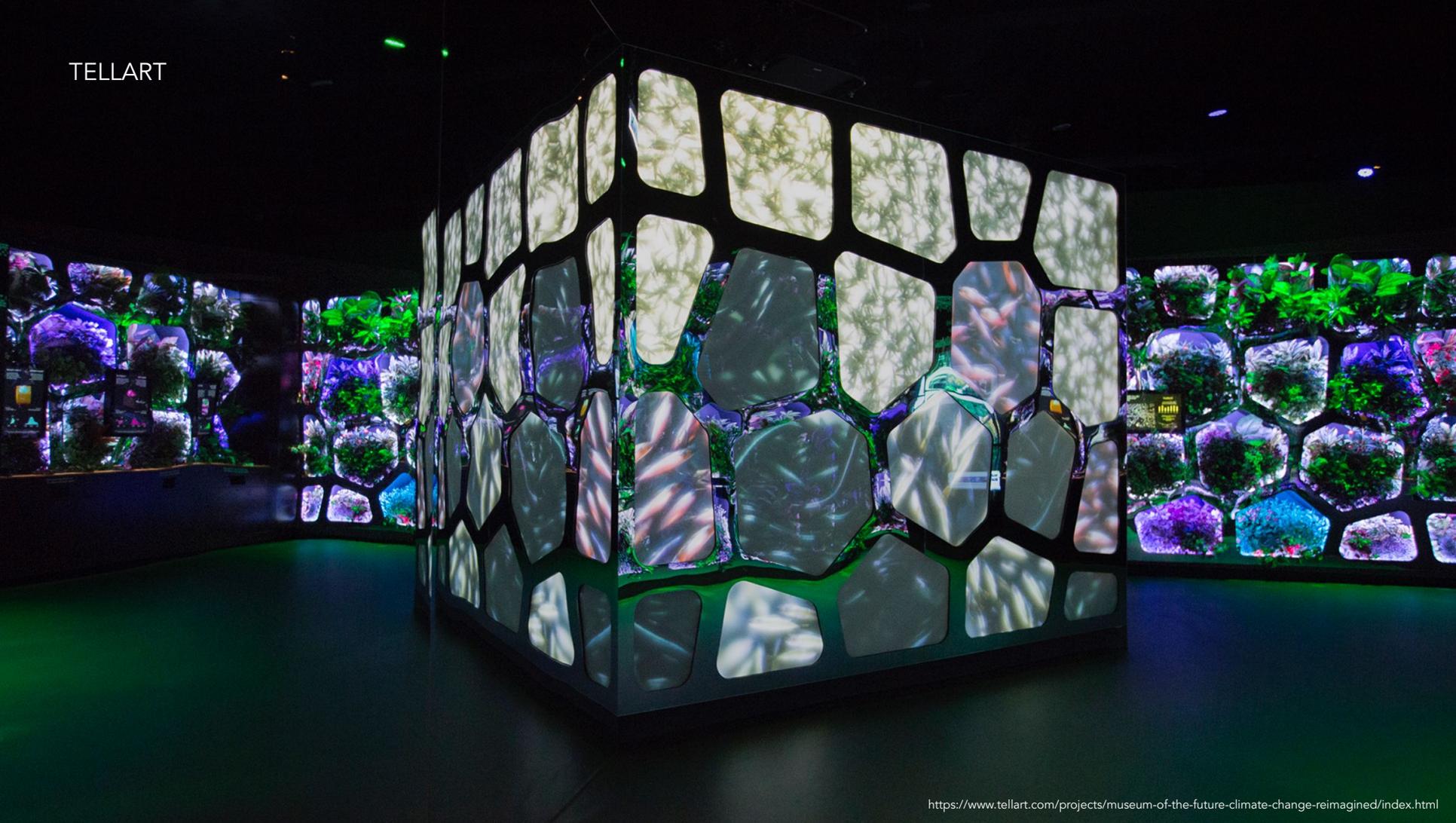
CLOSING THE LOOP



THE EXTRAPOLATION FACTORY



TELLART



SUPERFLUX



GOOGLE X

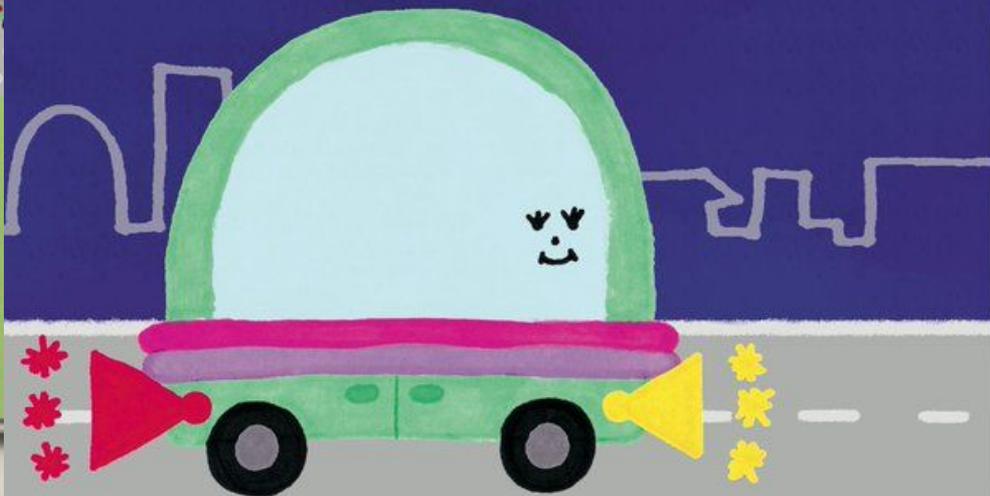


MOOVEL LAB



<https://extrapolationfactory.com/Alternative-Unknowns>

Where Do Cars Go at Night?



idea by
Susanne Purucker

illustrated by
Shiori Clark

published by
moovel lab

Harvest



LITENGÅRD table-top farm makes itself at home in any kitchen

Mood

Since the first-generation of the LITENGÅRD range hit homes in 2025, fans have been hacking their way to benefits beyond the original flatpack kit. **Lidia Zuin** caught up with neuroscientist and bioartist Robynn Kim, and Lana Womalk, the Head of Wellbeing at IKEA, to hear more about the new Ambiosense features of the most recent updates to LITENGÅRD – and what it means to introduce mood enhancing scents and sounds into kitchens around the world.

It was a sunny afternoon when I met Lana and Robynn in the convivial kitchen that Robynn shares with five other families in the autonomous municipality of Solarvind. Surrounded by the smell of freshly baked pumpkin pie and a comforting fragrance (that I couldn't quite put my finger on), we talked about the Ambiosense experience: the new sound and scent hardware that Robynn's collective developed while huddled during seasonal Covid-19.

"We are each using the early versions of LITENGÅRD to earn @GRÖN tokens and harvest resilient greens that feed our families and neighbours." They add that this daily ritual has fostered "a profound sense of connection and security among our community."

It was during these tweaks to LITENGÅRD that the bioartists developed the Ambiosense experience, a feature that enables this table-top farm to synthesize organic scented compounds which are known to improve mental health. After being approached by IKEA, the collective integrated these features into the circular updates released for the range, making the restorative and mood enhancing effects available to everyone.

"Our daily rituals have fostered a profound sense of connection and security among our community."

"We had already factored in the need for neuro-adapted sound and other sensory compounds that enhance mental health when we first developed LITENGÅRD," adds Lana, "but we were keen to create a more rounded ambience in collaboration with Robynn and the other bioartists, so we could really deliver a powerful experience in homes around the world." ▶

After applying and receiving a @GRÖN token grant, the collective exchanged it for a homestead on a few acres from the International Land Release programme. "Our home community nurtures generative research," Robynn explained.



Images by Adam Glover

LITENGÅRD

Social tokens are ready for exchange when the family harvests their greens in the newly released 2031 model; the Ambiosense user interface for sound and smell



Lana says these new features are especially relevant in times of community isolation during the dark months of winter, when homes are under increased pressure to meet people's emotional needs. "In the home visits we do, people talk about how LITENGÅRD makes them feel safer and more in control of their home environment. It's a very intentional and adaptable product that brings a biophilic boost to interiors and contributes

to family economies, while also having a profound impact on people's moods," says the Head of Wellbeing at IKEA.

With this new series of rural and farm Ambiosense experiences adapted to LITENGÅRD, users can tune up or down depending on your unique mental health needs. "You can go from full-farm to very light sensitivities, like an evening on a ranch in Montana," explains Lana.

For Robynn, the chance to release a new programme presented even more opportunities to create holistic experiences. "This is why I developed a mood setting that I called BIO.me, which you can also use to grow a blend of slightly sweet herbs," they say. "We use them to brew a neuro-activating tea which has a whole range of palliative and physiological benefits."

Both Lana and Robynn are excited by the possibilities these new features of the LITENGÅRD range introduce. "We believe that customers can benefit from these additions, and also take inspiration from bioartists to develop their own blends," says Lana. Already thinking ahead to next year's circular release, Lana adds that IKEA is keen to grow a whole portfolio of community-curated settings for the Ambiosense experience, starting with Robynn's very own BIO.me. ▶

"You can use a mood setting, that I called BIO.me, to grow a blend of slightly sweet herbs, which has a whole range of palliative and physiological benefits."

Family mealtimes are more memorable with fresh greens and mood-boosting smells



Photos copyright Inter IKEA Systems B.V.

Designing the Future of Life at Home

Using design fiction to see ahead



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What might life at home for the average household look like in, say, ten years time? A small group of friends who share a deep passion for ‘the future mundane’ think it could feature a LITENGÅRD table-top farm alongside the kitchen clutter and mealtime mess of everyday life. Did you spot the fake advert we made for it a few pages back?

We caught up with Julian Bleecker from Near Future Laboratory and our editor-in-chief Katie McCrory to hear why they used design fiction as a way to imagine a more meaningful future that’s better for body and mind – and how they conjured LITENGÅRD out of thin air to make an important point.

Let’s start with the most important question: what is design fiction?

Katie McCrory (KM): I love the way Julian explains it: You’re sent to a home ten years into the future but you only have five minutes until you’re sent back... What would you grab? You can’t bring a flying car, but maybe you’d grab a magazine or a packet of crisps. Design fiction is a way of creating these everyday future items, and they tell us different things than looking at 3D renderings of impossible forms of transport.

“We conjured up LITENGÅRD – literally, little farm – a fictional product that captures the needs and dreams of the ideal future at home.”

Julian Bleecker (JB): I like to say that design fiction is like exercise for our imagination, because it uses that muscle to think about other possible futures beyond the obvious, like going to Mars. Rather than asking what the future of travel will be like, we might start by thinking about the future of the travel ticket and have something that expresses the whole journey. Design fiction is more of a mindset than a technique; it’s a way of framing questions that encourage an open and curious approach.

Why are you bringing design fiction into how IKEA imagines the future of life at home?

KM: I’ve always been curious about how to use storytelling and insights to innovate, but collaborating with Near Future Laboratory helped us think about the future in a more relatable and everyday way. It’s been really fun to use the IKEA Life at Home Report 2021 as our starting point because it doesn’t just tell us what people want from their homes in the future, but how they want to feel living there.

JB: And IKEA is a company that touches so many parts of people’s lives. Together, we can imagine everyday futures through humble, ordinary things, which gives us a modest perspective on someone’s home in the next decade or so. Quite simply, design fiction is a democratic way of talking about the future. ▶

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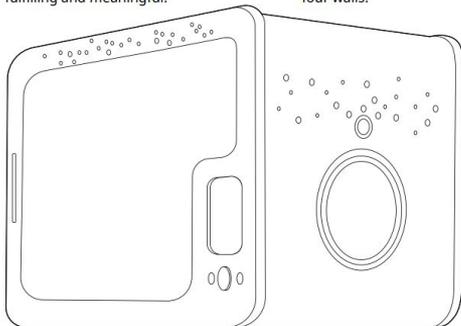
LITENGÅRD
We imagined a ventilation system that runs through a certified Leave No Trace bioplastic that is entirely biodegradable when parts are updated through circular range releases

KM: Exactly. This taps into our values and our Democratic Design principles at IKEA too. We want to imagine a future where people have great mental wellbeing, and imagining what this life feels like points us towards opportunities that we might not get to if we only talked about product innovation.

JB: In a sense, the real opportunity comes from not just imagining what a future chair looks like or is made of, but also imagining what the occupant is experiencing and how their life can be fulfilling and meaningful.

How is design fiction featured in this magazine?

KM: We took some key insights from the IKEA Life at Home Report 2021, which showed us that people want their ideal home to be cleaner, greener and safer. We also know that feeling good about home helps us feel good about ourselves. This got us thinking about fresh air and the senses – especially taste, smell and sound – and the increased need for security, community and connection within and beyond the four walls.



LITENGÅRD
Design drawing

“You’re sent to a home ten years into the future but you only have five minutes until you’re sent back... What would you grab?”

JB: So we imagined a near future where indoor home garden appliances are ubiquitous and ordinary, even in urban contexts. We imagined a device that also produces a biome which circulates natural chemical compounds given off by plant growth, and a subtle audio mechanism that produces “farm fresh” sounds. That’s when we conjured up LITENGÅRD – literally, little farm – it’s a way of turning the report’s insights into a fictional product and service that captures these needs and dreams of the ideal future at home in a way that’s relatable. And we also wrote the kind of article that would promote this product and its benefits in a magazine made ten years from now.

What will happen next?

JB: This is just a starting point for ongoing conversations about a more habitable world where people feel belonging and purpose. Let’s keep talking about intentional and adaptable living. With design fiction, it’s not a leap to go from home furnishing to the experiences we have at home and what that means for the world. With the reach and impact that IKEA has, I’m excited to see what more we can imagine together.

KM: I’d love to make design fiction an everyday part of how we work, so that we ask ourselves better questions that get us closer to the dreams of our customers. Life at home is a constantly evolving story, so design fiction feels like an exciting way to carry on telling it. ●



Julian at work,
Venice Beach



Katie at home,
Copenhagen

RCA SD + GLOBAL TELECOMS COMPANY



NDA

RCA IDE + GLOBAL MOBILITY COMPANY



NDA

NEELEY WORLDWIDE + FORTUNE 500 RETAILER

NDA



NDA



DEEP EMPATHY

TANGIBLE FUTURE EXPERIENCE : IMPLICATIONS VS APPLICATIONS
: INTERROGATION OF REACTIONS

CREATIVE SPACE

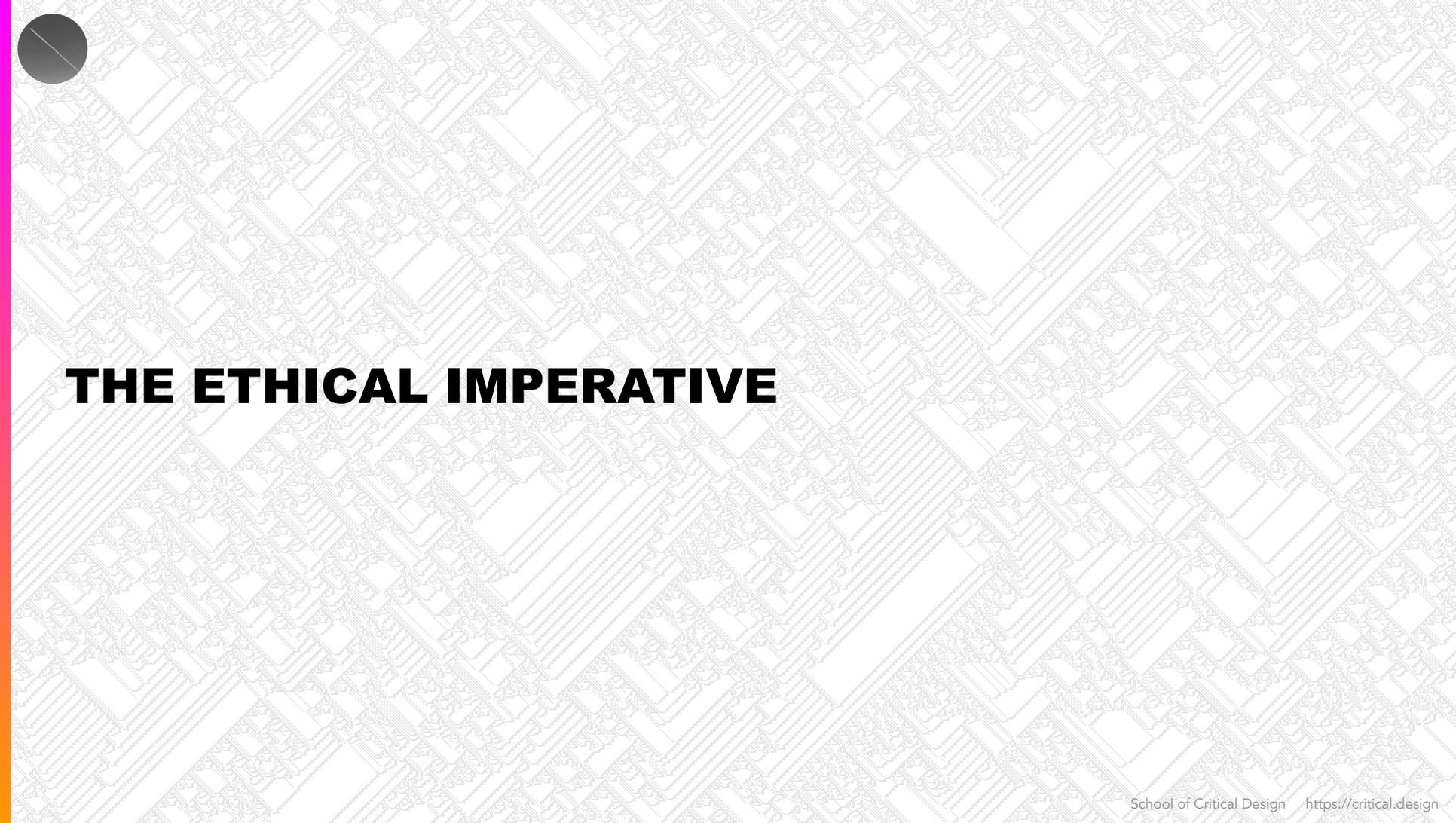
INNOVATIVE THINKING : DREAMING : THOUGHT LEADERSHIP

ENHANCED DECISION MAKING

DISCUSSION SPACE : PERSPECTIVE IN UNCLEAR CONTEXT : RADICAL ALTERNATIVES
: TRIANGULATION : HEDGE RISK



MORE PLEASE!



THE ETHICAL IMPERATIVE



Alan Cooper ✓

@MrAlanCooper



Billion-Dollar-Startup-Idea: Arduino-powered artificial wrist that wears a Fitbit and tells my insurance company I'm doing fine.



Techmeme ✓ @Techmeme · Sep 20, 2018

John Hancock, one of the largest life insurers in the US, will now only sell policies that track fitness and health data via wearable devices and smartphones (@suzannebarlyn / Reuters)

reuters.com/article/us-man...

techmeme.com/180919/p39#a18...

9:37 PM · Sep 20, 2018

41 Retweets 6 Quote Tweets 150 Likes



ANTICIPATION

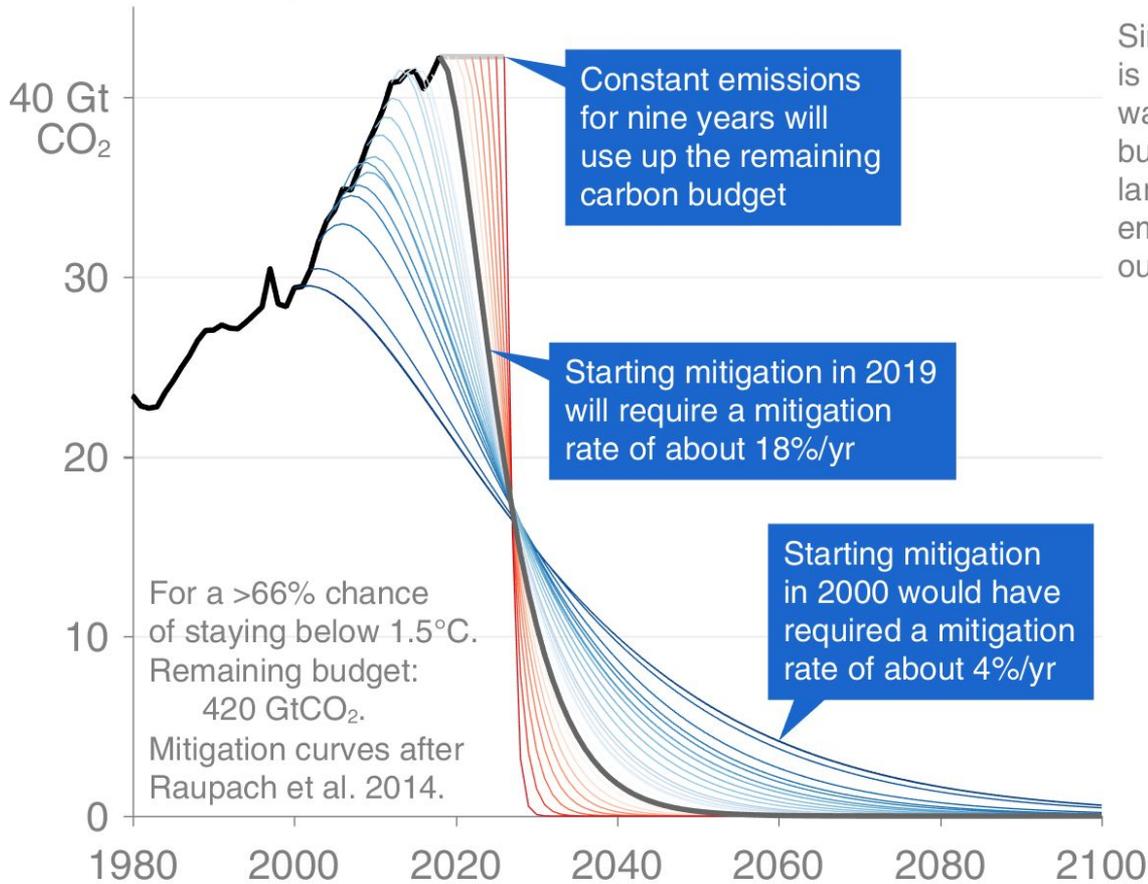


Steffen Fielder 2010

“New AI fake text generator may be too dangerous to release, say creators”

The Guardian

CO₂ mitigation curves: 1.5°C



Since 18%/yr mitigation is impossible, the only way to achieve this budget is with very large "negative" emissions: pulling CO₂ out of the atmosphere.



THE
PRECAUTIONARY
PRINCIPLE
RULES, OK?!

OTHER EARTH
YOU
FEELING

FRACKING
IS
SUICIDE

FOSSIL FUEL
ERA OVER

NATURE
ISNT
CAPITAL

ONOM
OSTING



TIME TO PANIC

“Catastrophic thinking”

The New York Times



“If you take this ... IPCC report literally, the decade of the 2020s is about to be the most important years in all of humanity.

We’re about to enter one of the most creative, meaningful, transcendent eras of human history — simply because we must.”

Eric Holthaus

Whatever you are doing right now is probably not as important as addressing global warming.

We must become a net zero emissions carbon neutral world before 2040 if we want to continue to enjoy our current state into the future, avoid run away warming, and pass on a world to the next generation that is at all similar to our own. The window for mitigating action on climate change will close in the next decade. We must help governments, companies, and individuals take radical action today. Let's understand this urgency, and embed this existential issue into all of our thinking and everything we do. What can you do today to enable change?

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<script async src="https://code.climate.studio/js/climatestudio.js"></script>
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<https://climate.studio>





“All imagined futures lacking recognition of anthropogenic climate-change will increasingly seem absurdly shortsighted. ...will be seen to have utterly missed the single most important thing we were doing with technology.”

William Gibson



[a]

affirmative
problem solving
design as process
provides answers
in the service of industry
for how the world is
science fiction
futures
functional functions
change the world to suit us
narratives of production
anti-art
research for design
applications
design for production
fun
concept design
consumer
user
training
makes us buy
innovation
ergonomics

[b]

critical
problem finding
design as medium
ask questions
in the service of society
for how the world could be
social fiction
parallel worlds
functional fictions
change us to suit the world
narratives of consumption
applied art
research through design
implications
design for debate
satire
conceptual design
citizen
person
education
makes us think
provocation
rhetoric

[c]

acknowledgment
problem reframing
design as interface
generates wisdom
in the service of everything
for how we want the world to be
non-fiction
everything now
functional non-fiction
change the world to suit everything
narratives of equilibrium
applied values
research and design
impact
design for survival
dead serious
concept to design
sapien
living thing
enlightenment
makes us act
restitution
action



LET'S DESIGN THE FUTURE

Speculative Everything (Book)

Design Fiction (Book)

Experimental Realism: (Design) Fictions and Futures (Book)

Near Future Laboratory Podcast

School of Critical Design <https://www.critical.design>

Speculative.Edu <https://speculativeedu.eu/>

Design Futures Initiative <https://www.futures.design/>

Primer Conference <https://www.2022.primerconference.us/>



THANK YOU!

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