



a day in [y]our life
2040 Essay Contest

Monitoring and Self-Optimization
Katja Abrahams-Lehner

A collective journey to the year 2040

During the spring semester of 2021, ETH Zurich's Strategic Foresight Hub launched an essay contest called "a day in [y]our life". The ETH community was invited to take a journey to the year 2040 and encouraged to describe a typical day in their imagined future. This booklet is the result of the initiative and contains the essay that won the public vote.

We look at the essay through three different lenses. The journey starts with the author's lens: the text submitted by Katja Abrahams-Lehner. We then put on an illustrator's lens and look at the story through the eyes of Niels Blaesi, who created three illustrations inspired by the story. Finally, we put on the Foresight lens: first we analyze the story using the STEEP Framework and then suggest a backcasting for selected aspects of the essay.

We invite you on this little journey and hope to give you playful insights into how Foresight can be used to inspire, reflect and think creatively.



Author's Lens



Illustrator's Lens




Foresight Lens



Author's Lens

The Essay

“Good morning, it’s 8:12 a.m.,” an androgynous voice gently whispers  in my ear. I am awakened by a neuroimplant (NI) in my brain, which has calculated from my vital signs that after exactly 7 hours and 33 minutes, the right moment has come to wake me up. Today I chose birdsong and vanilla scent as my wake-up stimulant.

Still lying in my natural latex bed, which uses Smart Dust sensors to record my sleep movements and optimizes hardness and temperature, I read the news projected directly onto my retina. I’m worried about the Swiss AI army on the rise again. A group of cyber-soldiers simply overrode master commands and – fortunately mostly in vain – tried to reprogram killer drones to recognize and target specific individuals for death. Dieter Bohlen died and uploaded his brain to the cloud. Not much better.

I may already be 65 years old, but I’m far from retirement. Statistically, I still have 45 years ahead of me. Thanks to the introduction of basic income ten years ago, I can finally dedicate myself to what really interests me: being creative and taking care of my family. Surveillance and self-optimization have become second nature to all of us. But like many people of my generation, every now and then I simply turn off my brain-computer interface.

Since my cortisol level is high today, I get lukewarm seaweed muesli as a breakfast suggestion. I sigh but don't protest against it. My Robutler is still charging, so I get up and prepare breakfast myself. Luckily, I enjoy manual work, as my NI confirms. On the windowsill I have a bioreactor that grows different kinds of algae and meat for me.

While cleaning up our digitally built home in the Tiny House Village in Zurich Oberland, where my husband and I have been living since the children moved out a few years ago, I find an analog newspaper article from the year 2020: it is about the then-new corona pandemic. I smile a little mockingly. How naive we were! True, the coronaviruses had finally turned into harmless cold viruses by the mid-2020s. But in 2035, returnees from vacations on Mars introduced a highly resistant super-fungus that grows and thrives magnificently in our subtropical climate. Fortunately, a promising antidote is being developed at the Department for Pandemic and Suprahuman Technologies at ETH Zurich, where I volunteer.

Meanwhile, my husband has been campaigning for 20 years to have the exam session in the summer pushed forward by two weeks.

A vibration in my forehead reminds me of my daily schedule.



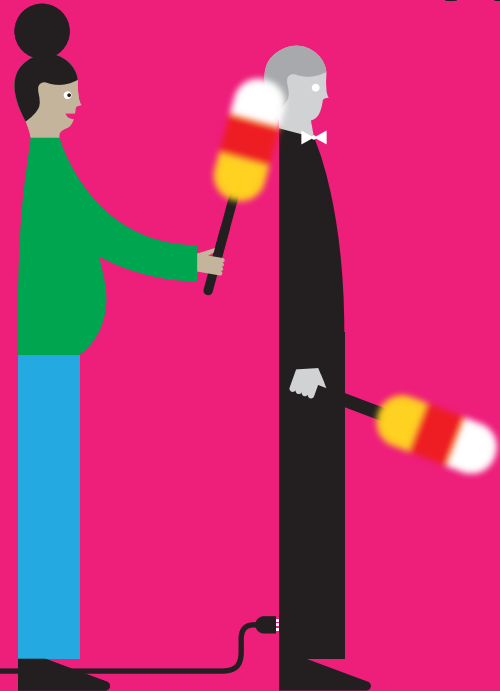
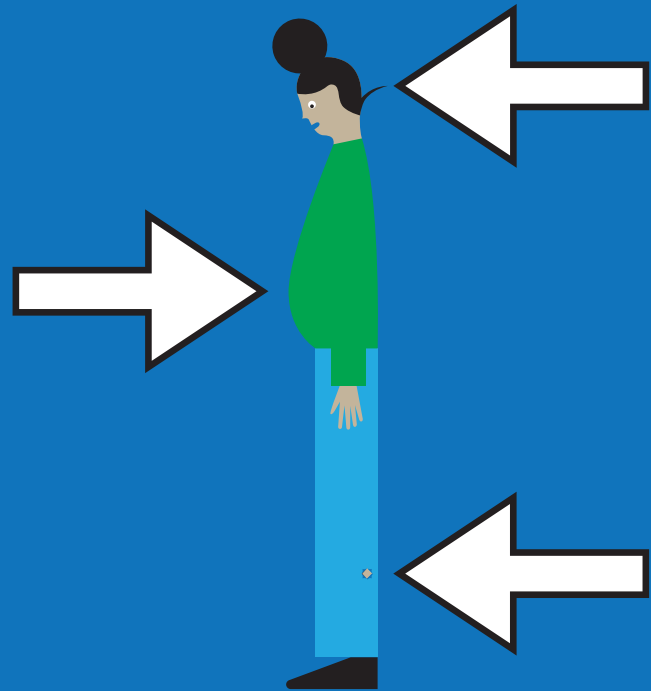
An autonomous airtaxi called Ruber takes me to the other end of town to pick up my grandchild. My daughter wants to load basic Norswegish into her language center today. She needs it for an environmental project in Scandinavia, coordinating the resettlement of inhabitants from the archipelago islands to the mainland, as the islands are now below sea level. If she is lucky, she will be able to meet in person with Greta Thunberg-Musk, the prime minister of the newly formed state of Norswegen. My daughter's husband has to take it easy at the moment: they have decided that he will carry their second child so that she can focus on her career.

On my way back, I go shopping for regional fruit and vegetables at the Nostalgia Market, which takes place once a month on the grounds of the demolished Theater. You can still pay with old Swiss francs, although cash is no longer accepted now that the cyberyuan has become our only global cryptocurrency. Tomorrow, Coolio – our intelligent village-community pantry – will probably complain in a rattling voice that only he is responsible for ordering food.



Illustrator's Lens







Foresight Lens I

STEEP Framework



What are the underlying assumptions of this story?

In what kind of a world do we find ourselves in this essay?

What are the assumptions made for the year 2040?

How is it different from the world we live in today?

Which assumptions are plausible? Which ones are not?
Which ones are desirable? Which ones are not?

Which ideas are surprising? And which ones are not?

Which ideas might not evolve as described in the story,
yet inspire us when thinking about what could be?

Where do we currently see trends heading in the direction of the story?



STEEP Analysis - A Foresight Method

STEEP analysis is a useful framework to apply in scanning work that considers the Social, Technological, Economic, Ecological/Environmental, and Political domains. Other similar frameworks incorporate considerations like Legal, Ethical and Demographic (STEEPLED) or Regulatory factors (STEER).¹

What initially looks like a fun story can be analyzed using the STEEP framework. We examine the text in depth for underlying assumptions.

These assumptions are then categorized into social, technological, economic, environmental and/or political domains and serve as a springboard for discussions about possible future developments.

More often than not, assumptions can be assigned to more than just one domain. We live in a complex world where the domains are interconnected and influence each other.

In the following analysis, the assumptions have been assigned to one main domain as well as to others using color tags. Depending on your perspective, you might assign the assumptions to another main area or formulate them entirely differently. This analysis is not set in stone but rather serves as a starting point for a nuanced discussion.

¹ Foresight The Manual, p.21, 2014, UNDP Global Centre for Public Service Excellence

STEEP Analysis



S

T

Ec

En

P

Indivi-
dualization

social

New
pandemic

social

Basic income

political social

Neuroimplant/
brain-
computer
interface

social technological

Robots and
AI as
everyday aids

social technological

Optimized
consumer
goods

economical environmental

Nostalgia
market with
regional
products

economical social

Meat
farming

environmental technological

Retirement
age
increased

economical political social

Self-
optimization
and monitoring

technological
economical social

Need for
individual
creativity

social

Reproduction
decoupled
from women

social technological

Travel to
Mars

technological

Retina
projection

technological

Silver
economy

economical social

Subtropical
climate in
Europe

environmental

New conflicts
with/duo to
AI

political social technological

Conscious
offline times

social

Higher life
expectancy

social

Life in tiny
house
villages

social

Knowledge
transfer via
neuroimplant

technological

Autonomous
air taxis as
public
transport

technological

Global cyber-
currency
replaces cash

technological
economical political

Resettlement
projects due
to climate
change

environmental social

New state
entities

political



Foresight Lens II

Backcasting

How can we build a bridge from today to the described future?



What are the necessary changes for the described world in the essay to come true?

Trying to build one big bridge that explains and reconstructs everything can be pretty overwhelming. The STEEP analysis helps us to approach this task systematically. We can then build several small bridges, focusing on one of the changes described in the story at a time.

Where do you find it easy to build a bridge to the future in the essay?

Where is the foundation for a change already laid in the present?

Which changes seem like a big jump with no connection to the present?



Backcasting - A Foresight Method

Defines a desirable future and then works backwards to identify major events and decisions that generated the future, to allow organizations to consider what actions, policies and programs are needed today that will connect the future to the present.²

There is not just a single way to get from today to the future. There are many, depending on where you start and the assumptions you make along the way.

Building these bridges helps us to formulate specific future-relevant questions that we can then discuss with experts in the appropriate field.

This approach forces us to think step-by-step about all that is required for a change to occur. By thinking in small steps, we might encounter an inspiring idea that we would not have thought about otherwise.

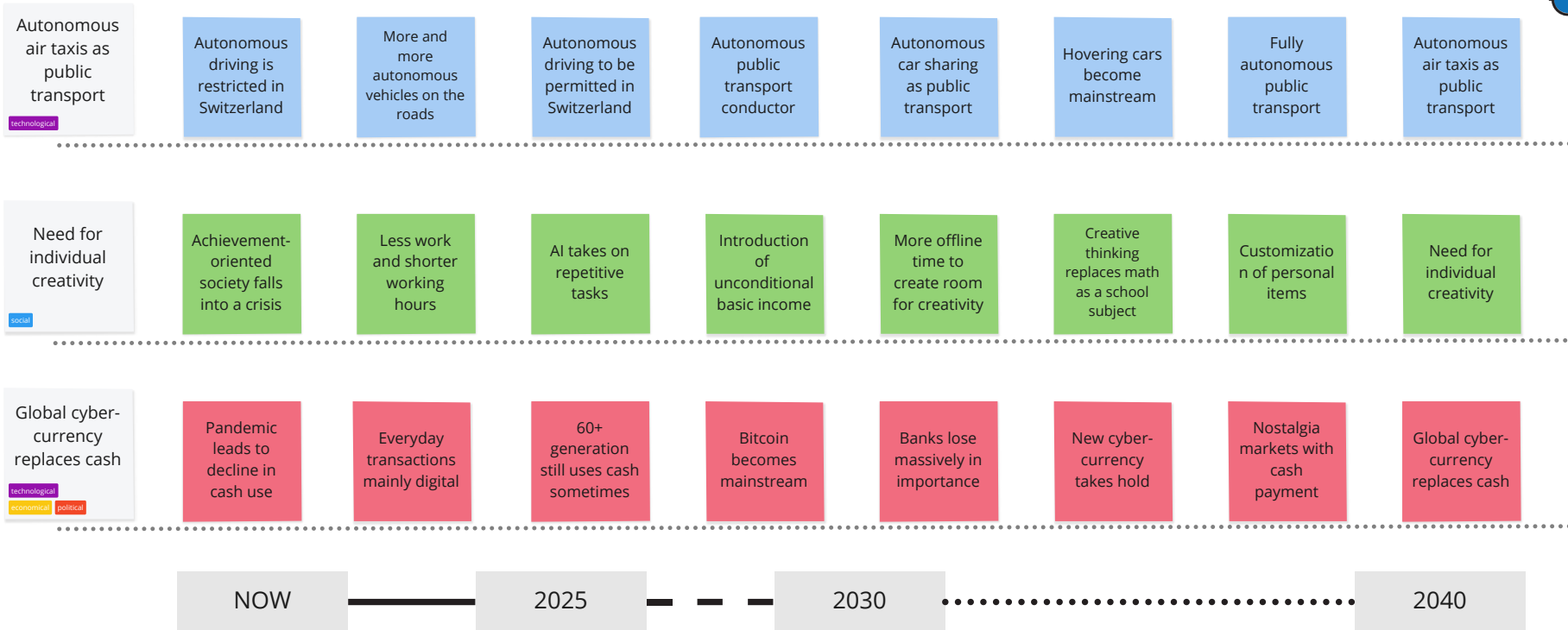
Backcasting also enables us to estimate whether certain developments are plausible, and if we can already see trends pointing in that direction.

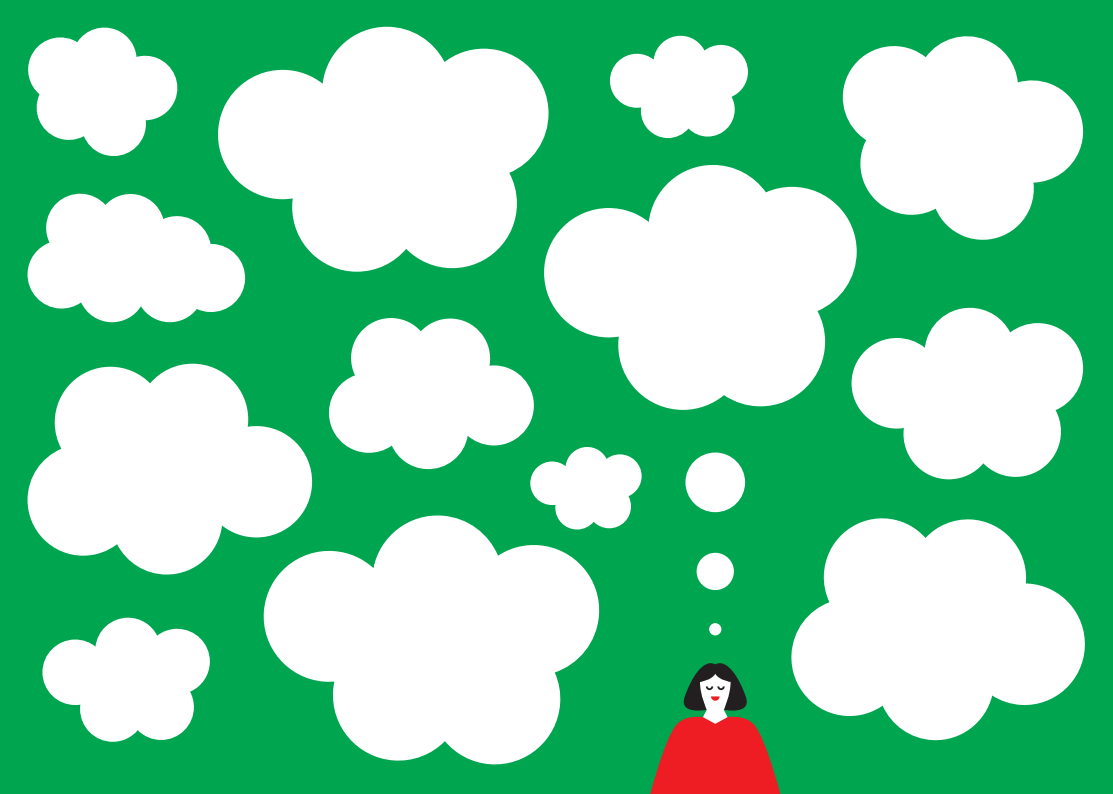
On the next page, we have done backcasting for three of the underlying assumptions in the text.

How would you bridge the story's other changes from the future back to the present?

² Foresight The Manual, p.15, 2014, UNDP Global Centre for Public Service Excellence

Backcasting





What is your vision of a day in the year 2040?

What about this story inspired you? Could you imagine living in the world that is described? What kind of world would you like to live in?

Travel to 2040!

Depending on your age, think back to a day 5, 10 or even 20 years ago. Where were you back then? What was your daily routine life like? How did you communicate with your friends? How long did a trip to New York take? Did you always carry your phone charger around with you? What would you find in your pocket? Did you read the news every hour?

What about today? What does your routine look like? What is in your pocket? How do you travel? Where do you go? What do you assume you can 'normally' do in your daily life? How likely is this going to change? What if it does?

Get in touch and share your vision with us or participate in the next essay contest organized by ETH Zurich's Strategic Foresight Hub.

Strategic Foresight

In times of increasingly rapid change, growing complexity, and critical uncertainty, responsible governance requires preparing for the unexpected. Strategic Foresight is required whenever there is a high degree of uncertainty surrounding changes to the relevant future context.

Foresight uses a range of methodologies, such as scanning the horizon for emerging changes, analysing megatrends and developing multiple scenarios, to reveal and discuss useful ideas about the future.³

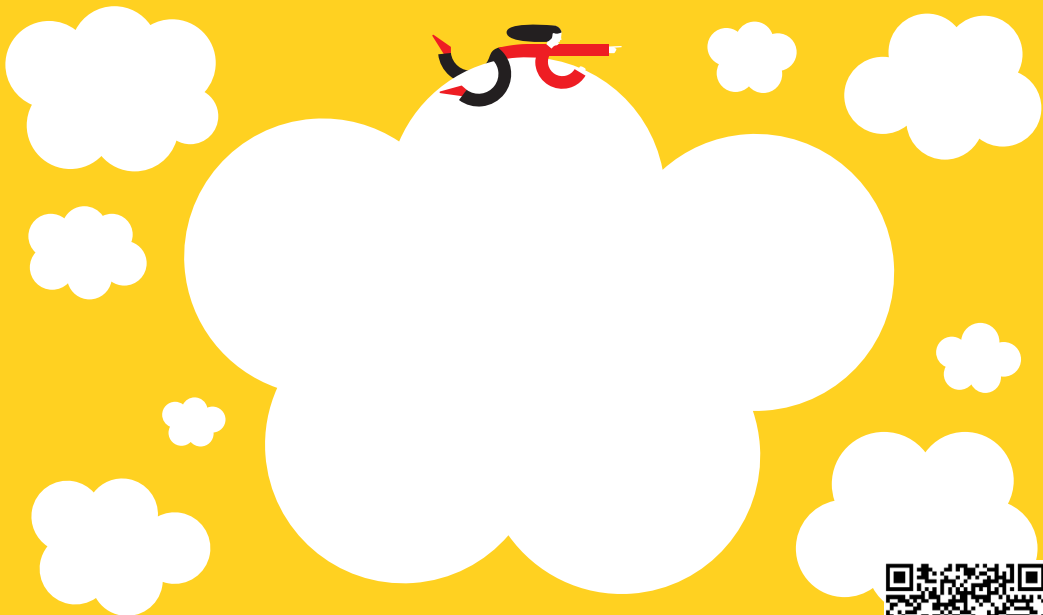
³ <https://www.oecd.org/strategic-foresight/whatisforesight/>

ETH Zurich's Strategic Foresight Hub

ETH Zurich has established the Strategic Foresight Hub based within the Office of the President to deep-dive into the intriguing territory of long-term trends and plausible futures. The Hub's core mission is to advance a deeper and more profound understanding of how the university, our society and the world at large could evolve in the future. The intent is to look beyond the obvious.

The Strategic Foresight Hub provides the space, guidance, tools and methodologies to all those interested in engaging with "what could be". The power of strategic foresight lies in its ability to engage a wide range of stakeholders in a creative and non-partisan manner to facilitate new, refreshing perspectives concerning future developments of relevance. The team helps others to reflect upon the implications that various future contexts might carry.

Contact: foresight@ethz.ch



Author: Katja Abrahams-Lehner
Illustrations: Niels Blaesi
Concept & Design: Strategic Foresight Hub

