This collection of infographics is a visual journey through the development, the application, and the communication of our approach in designing for transforming practices. The purpose of the upcoming pages is not to propose clear-cut solutions regarding how to address societal issues, but rather to sketch a landscape of learnings, experiences, and opportunities for a specific kind of transformation to happen. One could see this collection as a teaser for a bigger journey through uncharted territories of transforming practices. Buckle up and we hope you enjoy the journey.

Marlene Johansson

As a designer, leader and design researcher, I am obsessed with eliciting societal transformation through creativity and design. With my 20-year experience as a psychologist and designer, I want to crack the cages that constrain our conventional ways of thinking and operating, by opening up possibilities to dream and shape purposeful lives and a healthy planet. With creativity and design intertwined in the transformation, we are gonna make it!

Malin Johansson

I'm interested in TP because I'm interested in understanding how to shape purposeful lives and a healthy planet. In my research and practice is focusing on the unique value of entrepreneurs within the CCS, and how it should be. A driving and catalysing force, fed by a multitude of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a multitude of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a majority of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a multitude of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a majority of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a multitude of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a multitude of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a multitude of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be. A driving and catalysing force, fed by a variety of values, skills, competences and more. It's a way of working that helps to lift design and creativity to where it should be.
DESIGNING FOR TRANSFORMING PRACTICES

Designing for Transforming Practices is a way to approach and engage with the world in co-responsible ways. For many years now, humanity has witnessed, with growing concern, a relentless increase in the number and impact of societal challenges. Values, such as respect and equality for all beings, can no longer be taken for granted. Companies are called upon to develop new formats of value exchange. Time, it is a repository, an attitude, an aspiration, a quest. For instance, Hummels et al., (2019; Hummels, 2021) argue that companies develop alternative abstract paradigms and related activities, such as re-designing material arrangements and related activities, enables us to explore, together with a plurality of actors, alternative ways of embedding culture and triggering new attitudes and behaviors. To initiate and curate multidimensional synergies, driven by beauty, diversity and meaning, the transformation of practices is a must. It is a repository, an attitude, an aspiration, a quest. The socio-technical revolutions that companies have produced relate to paradigmatic shifts. Scientific and engineering developments in interaction with natural resources and the establishment of new infrastructures open up new ways to engage and transform our reality, building new formats of value exchange.

PARADIGM SHIFTS

PARADIGM SHIFT IN COMPANIES’ VALUE PROPOSITIONS

Tensions in paradigm shifts are asking for the transformation of practices. After the emergence of a new paradigm, previous paradigms continue to exist, although they are losing their explanatory power. The attribution of finding new out of major social paradigms, we see that shifting to a new paradigm is difficult. The simultaneous existence of different social paradigms and the tendency for old paradigms to die out, new paradigms by definition do not replace, and are based on different sets of values and beliefs. Given these tensions, we propose that it is essential to develop alternative abstract paradigms, organizations, and models that might address societal challenges. They are often called the “paradigm of changing paradigms.” It is needed to bring in new emerging paradigms to fruition, while respecting the historical development of the paradigm (Hummels, 2022).
**DRIVING PRINCIPLES**

Images every actor in a trans-systemic process of transformation, working together. Co-development means noticing each other, learning the control game, finding a common language, and developing competences (knowledge, skills and abilities).

Through co-development we let people engage in an experience, be safe and free to show their vulnerabilities, to recognize, surprise, through reflection.

Co-development and co-creation involves using a range of methods, which include: workshops, interviews, prototypes, exhibitions, media and more that provide tools for interacting.

These prototyping can be experimented, documented, reflected upon and tested in relation to past learnings.

We are situated and our actions are shaped. What does that mean? As beings, other humans or not, we are fully connected with the environment that we are embedded in and inseparable from the ecological. And so we work with, rather than against the entities, with the skills that we embody.

Our practices are connected to our context. Therefore, when designing for Transforming Practices, we must work with global societal challenges by acting in a way, depending on the specific context, with local actions, on local practices.

We are arriving at the understanding that the concept of sustainability is multifaceted and is realized through relational and fair businesses, based on collaborative decisions and value sharing.

Humans is a key resource. If we engage through an organization, what is beautiful is what is meaningful for you, how do you make it meaningful and meaningful for your purposes, how does something turn on and expand, always and everywhere.

Aesthetic and beauty can refer to small details, as well as the experience of the entire system. Through design, we can propose transformative visions and design for beauty.

Hummercus (2017)

**ACTIVITIES IN TRANSFORMATION**

Designing for Transforming Practices relies on carrying out a series of actions. The activities can be divided into two categories: 1) design actions and approach; it is important to establish a contract about the challenges and opportunities. During the later phases of the design process, interviewing a high pace can still be beneficial, to address the perception of reflection and reorientation, so as to produce new knowledge network both for the specific project, and for the development of skills and experiences in Transforming Practices. Before all activities are set in motion and along the entire process, it is necessary to weigh actors on their attitude and approach. It is essential to establish a contract about the design code of conduct for discovering and orientating on the collaborative process.

Transforming Practices, such contract is considered necessary in a constructive process of trust and openness.

It is important to start working right from the beginning with all actors, to the transparent of intentions involved actors are not used to continuously mobilize the challenges and changes, their personal perception as well as the from the perspective of the organization and community that they support. The collaboration does not follow traditional rules applied by the current innovation system. It is not only collaborative in nature, but it is more horizontal.

The dynamic emergence of new challenges along this collaborative process, requires a continuous redefinition and efforts to link and transform existing systems. In this process, the collaboration of actors moves forward, some learn, some enter, some stay. In this process, the constellation of actors evolves: some leave, some enter, some stay.

Humans, in an endangered planet, co-developing our habitability space, shall be grounded in the comfort of the past systems.

New, complex, interconnected systems are made of variables and unpredictable situations, sizes, and practices. When designing for Transforming Practices, these systems complexity is expanded and connected. This means that the focus is not only on some details but considering and working with them in their entirety.

An AD is doing, giving an understanding of practices and project, in a way that all actors feel included, share joint actions beyond comprehension, and their ways in the process of collaboratively and fully understanding and changing parts of the system. The activities can be carried out more than once and in any order, although we generally start from the two activities "continuous orientation" and "immerse and empower." The pace of jumping from one activity to another is all about the pace of the specific project, and for the development of skills and experiences in Transforming Practices.

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Continuous constructive dialogue for tuning the contextual understanding, and in what context. Therefore, when designing for Transforming Practices, such contract is considered necessary in a constructive process of trust and openness.
Designing for transforming practices is an approach that transforms current practices into more sustainable ones. In the course of complex processes of responsible co-development, a variety of outputs are produced. Such outputs, however, are not the end-goals in and of themselves. Rather, we see them as manifestations that inform the transformation of existing practices. Each of these outputs constitutes alternative practices while at the same time it is constituted by practices.

Transformation happens on different levels, at the same time. All three agents of transformation need to take place. In order for an alternative practice to be established, the meaning of values and aspirations changes: it is imperative that all actors involved in the process embody such transformation; the transformation is reached by carrying out together a set of activities, those activities produce new compositions of socio-material entities; the transformation needs to be situated in a specific context, characterised by specific elements.
To approach and respect complexity inherent to transforming practices, we need to collectively take into consideration a multitude of perspectives and goals. And equally important is to be able to individually move within this multiplicity of perspectives. The use of lenses make this possible. The list of lenses is extensive and it continues to grow, informed by the various experiments and discussions conducted through transforming practices activities.

These lenses enable to characterize:

(i) the perspective taken by each of the participants in terms of their motivation, values, behavior, social situation, and so forth (e.g., cultural lenses such as power distance index – uncertainty avoidance – individualism vs. collectivism – masculinity vs. femininity – long-term vs. short-term orientation – indulgence vs. restraint) (Hofstede, 1991)

(ii) the scales of human, geographical, temporal relationships (e.g., scale lenses such as micro, meso, and macro considerations)

(iii) the modes of engagement in co-creation (e.g., engagement lenses related to ownership – responsibility – accountability)

Micro-meso-macro

To observe and operate on various levels of attention, transforming practices consider three lenses inspired from evolutionary economics and sociology: the micro, the meso, and the macro. These lenses are often utilised to consider various societal levels as well as their dynamics.

The meso lens, at the center of this triptych, may be defined as one set of rules and the agents following these rules. The micro lens is taken into perspective when one set of rules is followed by a unique agent. The macro lens relates to many sets of rules followed by as many intertwined groups of agents. Therefore, these three lenses are connected: the meso is an interrelation of micro lenses, and the macro lens is the interrelation between meso lenses, involving multiple rules and related agents.

The apparent variation of complexity while shifting between lenses invite for different objects of attention and different approaches in design.

1st/2nd/3rd-person perspectives

The variety of viewpoints in transforming practices enriches both the variety of insights, and the scope of solution opportunities. The 1st, 2nd, 3rd-person perspective lenses help to identify such viewpoints and to consider multiple stakes.

The 1st person perspective lens invites to design for oneself, considering one's own experiences, social involvement, and action possibilities. It is empowered by intimate rationales.

The 2nd person perspective lens invites to design for a specific person or a comprehensively accessible group of people, considering their experiences, social involvement, and action possibilities. This approach is still situated yet encompasses richer observable and describable experiences.

The 3rd person perspective lens suggests a more global consideration on society and ecosystems, away from any specific and situated cases. It demands for expertise and a rather objective view on ecosystems.

Taken separately, these three lenses provide different sets of values to work with towards transformation. Combined, they provide new values contributing to each and all perspectives.

The complex relationship between actors is made comprehensible and operationalizable by the use of lenses engaged in the project as well as their permutations throughout the project. It allows to discuss the complexity of the nested challenges at stake, while at the same time remaining open to unexpected developments.

Possible, plausible, probable, preferable futures

Hancock and Bezold (1994) describe four perspectives on the future: the possible, the plausible, the probable, and the preferable future. These four lenses clarify the amount of uncertainty towards the future.

The possible future is about everything one can imagine even beyond reasonable; the plausible future is a narrower scope considering what may be possible considering current knowledge; the probable future relates to what is more likely to happen considering current appraisal of the situation and of the trends. The preferable future lens is specific as it includes transformation: it describes how today we would want to work towards futures in becoming.
The fully functional ‘Station of Being’ was developed and officially opened in the Northern Swedish city of Umeå in 2019. The design provides a more pleasant waiting experience for commuters: from waxing time into time to reflect, to feel, and to be.

The aim of the Station is to make public transport more attractive and promote increased use, thus having positive environmental impact by lowering the carbon emissions of the city.

Developed through Transforming Practices, the Station of Being project was design-driven, addressing a societal challenge in a locally specific way and involved multiple stakeholders. The end result is a fully functional prototype that elicits a new type of experience and thereby influences related behaviour.

The project drew upon a wide-ranging group of local stakeholders. This includes stakeholders involved in the design and research process, such as students and staff from the local design school (Umeå Institute of Design), as well as key actors of the system in which this design project was situated (e.g. public transport company, a real estate owner, a local power company, etc.) and several companies involved in the production of the station.

The Station of Being is an example of a type of Transforming Practices output we call "experiential futures.”

As a fully functional prototype that can be experienced by the public, a possible new future becomes visceral, perceivable, and directly impacts the daily life of people and surroundings by affording new behaviours: thus, prompting "transformation.”

Importantiy, the transformation prompted by the Station of Being extends beyond this specific design artifact and the specific challenge it aimed to address.

Zooming out, the design and the process create a ripple effect, with practices beyond the use of public transport, kindling further transformations along the way. For example, in addition to having an impact on the use and perception of public transport infrastructure, the Station of Being contributes in a concrete way to establish a vision for Umeå as a Smart City and to embrace the capacity and skills of the involved stakeholders to develop this vision further.

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How to address the dynamics of mediated human-world relations, where new technologies are not there yet, and which might not be there for the upcoming decades or even century?

To address this question, we explore how taking a first-person perspective influences the imagining of probably, plausible, possible and preferable futures, as well as the influence of the kind of human-technology relations we use for this.

In the RWS Expedition 2050, we have explored how design can support the executive agency of the Dutch Ministry of Infrastructure and Water Management (Rijkswaterstaat) to discuss a range of futures, so that it is better prepared to anticipate and deal with the changing situation in the Netherlands over the coming 30 years. We created various short stories of persons living in 2050, physical discussion tools, as well as connected speculative prototypes of technologies that might live in 2050. We facilitated several discussions within a cross-section of the Dutch population using these designs.

The stories, discussion tools and probes were used both internally and externally to enrich and discuss the (re)organisation of Rijkswaterstaat. At the same time, the project served as a concrete case to extend an ecological and enactive account of imagination towards the realm of design research. Where most existing design approaches leave the notion of imagination implicit, or where made explicit, are characterizing it as a cognitive process only happening 'in the head', we studied how the stories and objects provide a framework for shared imagination (Smith et al., 2021; Hummels et al., 2021).

The CRISPR toolkit is a handy suitcase to bio-engineer the environment, more specifically blue-green algae, also known as cyanobacteria. It is one of the prototypes developed for RWS Expedition 2050.

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"Imagination, as understood in ecological and enactive terms, is not a merely mental activity individuals do by themselves, but a shared and embodied activity scaffolded by their social and material environment. The design is shaped by and is itself scaffolding the imaginative process." (van Dijk and Rietveld, 2020; Smith et al., 2021)

This study is conducted by the department of Industrial Design, TU/e, in collaboration with Design Drone and RWS. https://www.expeditierws2050.nl/
In the project, different forms of transformations emerged due to different scaffolding within the transforming practical process.

Throughout the project, different forms of transformations emerged due to different scaffolding within the transforming practical process.
Design Competence and Experience Centre

MISSION by initiating and nurturing multidimensional strengths

VALUES with curiosity, creativity and making

VISION for sustainable futures

PURPOSE exists to catalyse ecosystems and transform existing practices into more sustainable ones

NEW LEARNING ECOSYSTEMS

In recent years, we have been working with numerous stakeholders, including schools, universities, and businesses, to develop new models for education and training. This has involved experimenting with different approaches to teaching and learning, as well as creating opportunities for students to engage in practical, hands-on activities. As a result, we have been able to develop a range of innovative programmes that are designed to support the development of new skills and competencies.

Our approach is based on the idea that learning should be an active and engaging process, where students are encouraged to take ownership of their own education and to develop the ability to think critically and creatively. We believe that this can be achieved by providing students with opportunities to work on real-world projects, and to collaborate with others in a variety of settings. Through these experiences, we aim to help students develop the skills and knowledge that they will need to succeed in the future.

Acknowledged narratives (Kuhn, 1970). Over the past 20+ years we have been working with education systems that acknowledge the existence of diverse perspectives and worldviews. The work of researchers such as Doll (1986), Hummels, and Lévy (2021) has helped to advance this understanding, and we believe that it is essential for the development of new learning ecosystems.

We are committed to fostering a culture of innovation and experimentation, and to working with others to develop new approaches to education and training. Through our work, we hope to contribute to the development of new learning ecosystems that are designed to support the needs of tomorrow's learners.