A WALK WITH THE FUTURE

the long-term in planning

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Preface

As a young Dutch planner, I see major changes in the living environment ahead. Climate adaptation, transition to sustainable energy, transition of the rural area; the grand sustainability challenges of the 21st century. During my studies I learned about the importance of creating sustainable solutions from an integral perspective. In practice I found it was slightly more complicated than that. I started searching for how to bridge the gap between what I learned in my studies and practice. I found an answer in the long-term future. I learned and observed that the images we have of the future determine our actions in the present. But how then do we imagine this future? And how far away is this future image anyways? My fascination with the future grew by the day.

In the living room of my parents' house there is a picture of a farmer's family that used to live there. It is funny how many times I walked past that the same picture every time I visited my parents, but never *really* thought about it. I asked my parents about it and they told me the farm burned down a few years later after the picture was taken and only the main structure of the house remained. The family moved next door, and the great-great-great grandchild still lives there. As I was dwelling on the past, I soon started to think about the future. In the planning debate in the Netherlands frequently the issue arises whether or not to built new houses in the lowest lying point of the Netherlands. My parents' house is exactly there, situated at the lowest point in the Netherlands. I started to wonder, with the predictions around sea level rise, will I be able to show this house to my grandchildren? I found myself inspired by the thought that my actions in the present can contribute to a sustainable living environment for future generations. That, for me, is why the long-term provides an answer to the grand sustainability challenges of our time.

And so, I started my exploration for how planners can engage with the long-term future. But where to begin? Such an abstract concept, how could I ever write a thesis about that? I am immensely grateful for all the inspiration, conversations and experiences I had together with the practitioners I met and collaborated with on this journey. I would like to thank a few in particular. Gerda and Mark, both your enthusiasm for the long-term is what made the Soggy Paths time walk possible in the first place. Jesse for your creative efforts and your expertise in futuring that really helped improve the design, Mirte, for thinking along and your practical assistance and Hilde for making the amazing podcasts on such short notice. Also, Keimpe and Bernike for your trust in me to experiment in a planning context.

A special word of thanks for my supervisor, Peter. We share a fascination for the long-term future and I cannot express in words how lucky I have found myself to have you as my supervisor. The opportunity to be a student-assistant in NL2100, going to Springtij, being part of the Mixed Classroom team; I am most grateful to have worked together with you during this time and for your guidance when I was getting lost on my own soggy path.

Finally, my friends and family. Most of you are still probably not exactly sure what it is I did the last 1,5 year, but still supported me each and every step of the way. Among all the people that were willing to listen to me blabbing on about the importance of the long-term, I would like to thank a few in particular. Babeth, Roos, Emma, Ilse, thanks for your support as my roommates when I needed to talk about my struggles after a long day locked up in the library. Chelly for your advice, you always knew exactly what to say. Niels, that you were willing to review my thesis. Your funny, yet serious, comments really cheered me up when I was feeling

a bit lost in the process. Dad, for your comments so close to the deadline and mom for always checking in.

During this 1,5 years, I enjoyed the time of the master thesis to freely explore and learn from all the experiences I had. Now the time has come to share my journey with the world. And now, I turn myself to you, reader. I hope to inspire you to make your own walk with the future sometime.

Utrecht, June 24th 2022

Summary

The sustainability challenges of the 21st century, like climate change and biodiversity loss, require a long-term future perspective. By definition, planners are concerned with the future, or at least they should be. Observable pressing challenges in the present currently dominate over the sustainability challenges for which the effects are reflected in the long-term future. A planner can engage with the future with different methods, like visioning or scenario planning. The time horizon of these methods is often focused on 30 years into the future in line with policy goals, like the Paris Climate Agreement (2050). However, the effects of current sustainability challenges encompass beyond a lifetime. Although the future is inherently uncertain, planners need to anticipate on it. For that purpose, I explored how planners can engage with the long-term future, that covers at least 100 years.

In planning, a popular method to engage with the inherently uncertain and plural future is scenario planning. From both theory and practice, I explored substantive and procedural interventions that are used to facilitate the imagination in a deliberative environment. The images of the future in scenario planning are relatively closed, while the long-term future is far more open to uncertainty and possibilities. I therefore explored alternative ways to engage with future, from juxtaposing (scenarios) to procedural (open images of the future). To imagine such an open image of the future, we need to tackle the 'poverty of the imagination'. For that purpose, I explored the sequential three-phase learning process of Futures Literacy. In the first phase, reveal, participants become aware of their own assumption. In the second phase, reframe, a radical new perspective is given to challenge the assumptions. In the third phase, rethink, new questions can be asked drawing from the experience of the different discovered perspectives. In addition to the structure of the conversation, I explored the practice of Experiential Futures and dramaturgy. I have done so on the conviction that quantitative numbers do not inspire action, but an immersive experience does.

In order to design a long-term future intervention relevant for practice, I used an action-research approach. I used Kolb's learning cycle to systematically reflect on the process and the design. The focus is on the empirical case, called *the Soggy Paths*. The Soggy Paths is a walk through time in which the changing paths of the Dutch living environment are explored. In close collaboration with practitioners, I experimented with the design in three different contexts. The first context was the creative environment of Springtij Forum where the focus was on facilitation of procedural and substantive interventions to stimulate the imagination. The second context of the learning environment of the Mixed Classroom explored the substantive interventions more in-depth with an additional focus on learning. Combining the insights of the previous two experiments, led to the experimentation in an actual planning context, a policy process with a wicked problem at stake: the Transitional areas. With these three experimentations I deepened and refined the design and at the same time demonstrated how the design worked in different contexts.

The intervention was designed based on substantive and procedural interventions. The procedural interventions of small and diverse groups, use of facilitator, timing and a soft space are an important foundation for the creation of a deliberative environment. I shaped the substantive interventions along the dramaturgical concepts of staging, setting and scripting. I used the three sequential phases of Futures Literacy to script and stage the intervention. In the first phase of reveal, participants are asked to empathize with a generation in time, during a walk in silence. The guide then asks the participants to share their thoughts based on scripted question. In the second phase of reframe, the landscape gets a voice, a voice that often goes unheard. In a collaborative effort the voice of the landscape was prepared with inspirators. The final phase of rethink reflects on the experience.

From the three experiments I learned that the most important value of the Soggy Paths time walk is the facilitation of a *different* conversation about the long-term future. The soft space allows to discuss and learn from the different perspectives, not only from the participants but also from the landscape speaking. The interactive element is a crucial design feature in that sense. With the comparison of the three cases, I made four reflections that can contribute to an improvement of the design and inspire other procedural undertakings for an engagement with the long-term future.

The first reflection was to leave the script as open as possible, except for the voice of the landscape. The facilitation of an open conversation allows participants to share their hopes and expectations and discover different futures, which stimulates learning. The reframe of the landscape is important to script, as it should provide a radically different perspective to challenge the assumptions of the participants.

The second reflection is to facilitate the conversation about a *desirable* future. The three experiments showed that in a planning context with actual interest involved, it was more difficult to image a desirable future. The participants had trouble to let go of facts and predictions around the future. The point of the intervention is to move away from predictions and what we know and explore different possible futures. At the same time, a desirable future hopefully inspires action in the present.

The third relates to the facilitation of the reflection. It is important to make sense of the experience together with the participants in the reflection, especially in an actual planning case. In all three experiments, the far future was the most difficult to image. To connect it back to the present, a reflection should be carefully facilitated after the time walk. We experimented with it in the second case by asking participants to reflect on two questions. The first related to the experience and the other to learning. In the third case, we asked the participants to draw a future image and reflected on them with a professor with an expertise related to the wicked problem at stake.

The fourth reflection emphasized the experience of the landscape. In all three experiments the importance of the setting and facilitation of the soft space was an important contribution to the experience. Walking in the actual environment where the landscape can be seen, felt and heard gives the landscape an actual place in the conversation. At the same time, it sparks the realization that the landscape has always been here, in the past and will be there in our future.

The impact of these kinds of intervention is often questioned. The results indicate that the Soggy Paths contributed to an awareness of different perspectives, both from participants as from the landscape speaking, and resulted in asking new questions about the long-term future. A better understanding of the indicated learning outcomes is object for future research. More importantly, more research should be directed to how to use these kind of interventions in actual planning cases, in order for a better sustainable future to arise.

Table of contents

1. Introduction

In early 2020, a cartoon went viral portraying several waves threatening to flood a city on a hill. The first wave is relatively small and is titled 'covid-19'. The next thing you see is a text cloud appearing above the city which reads: 'be sure to wash your hands and all will be well'. But what the people of the city cannot see yet, is that there is a second, slightly bigger wave following the first labelled 'recession'. The original cartoon portrayed only those two waves, but after publication people started adding even bigger waves following the former two. After the second wave now comes a third wave depicting climate change, followed by fourth one that reads 'biodiversity loss'[1]. The first wave illustrates a concrete challenge that demands urgent action in the present. The challenges represented by the waves that follow, are much more abstract and their impact is not immediately observable. The cartoon represents the short-sightedness for the observable challenge(s) of the present, while on the horizon there are bigger and more long-term challenges to be concerned about. Moreover, that the future is difficult to defend when there are all kinds of urgent challenges observable in the present (Myers, 2007).

As planners we have a responsibility to be aware of the third and fourth wave. In anticipation of what kind of future we expect, planners make decisions in the present (Couclelis, 2005: 1359). Often these decisions have an irreversible effect or high costs to reverse them. And so, planners have the challenging task of creating solutions that are durable in the long-term (Hartmann, 2012: 251). However, the short term in planning currently seems to prevail a little too often over the strategic long-term future oriented field of work that planning inherently is (Couclelis, 2005). The short term is embedded in planning calculations (for example in discount rates, where costs and benefits are considered less important further into the future), in how we describe the future with negative definitions (natural gas free, describing exactly what we no longer want) and institutionally (where politicians are held responsible for past decisions rather than for the benefit for future generations) (see Pelzer, 2021a).

Moreover, the future is an abstract concept, as the future does not exist. The future is uncertain and decisions based on this uncertain future make planning inherently normative. Quantitative models can provide information based on data and trends gathered from the past, but in the end, planning for the future is about interpretation and values (Couclelis, 2005). Planners need to learn about these values, their underlying assumptions and perceptions as they guide our actions towards the future (Forester, 1999). To engage with different values and perceptions of the future, planners can use methods such as visioning and scenario planning (Zapata & Hopkins, 2007; Couclelis, 2005; Hoch, 2016). For both methods, the time horizon often centers around thirty years into the future since this is the time horizon that current sustainability policy goals are directed to (i.e. Paris Agreement on Climate Change to limit the increase of global temperature to well below 2 degrees Celsius by 2050).

However, the predictions around sea-level rise, a substantial sustainability challenges, includes a long-term future of at least 60 years (see Haasnoot et al., 2019). At the same time, this long-term future inevitably leads to a conversation about values, as it is too far way to discuss facts (Pelzer et al., 2021b). In his book The Good Ancestor, Roman Krznaric (2020) advocates for at least 100 years from a more ethical perspective (as the title suggests). This leaves a gap between the current planning horizon (30 years) and the grand sustainability challenges of the 21st century on which planners need to anticipate that concern the long-term (over 100 years). How to facilitate this conversation about the long-term future, and its underlying values, is which I aim to explore is this thesis.

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[1] See for the image: https://mackaycartoons.net/tag/recession

1.1. Research question

How can planners engage with the long-term future?

Subquestions

1a (theoretical): How is the future currently engaged with in planning?
1b (empirical): How is the future currently engaged with in planning *practice*?
2: What are alternative ways to engage with the future?
3: How can an engagement with the long-term future be designed?
4: What are the lessons for planning practice when engaging with the long-term future?

1.2. Societal relevance

As a low-lying delta, the Netherlands is at the dawn of radical transformations of the living environment in anticipation on the sustainability challenges of the 21st century. Climate adaptation is a considerable spatial claim, as is the transition to renewable energy (van Dam, Tisma & Diederiks, 2019). In light of the increasing claims on lands, the Dutch National Government published the National Strategy on Spatial Planning and the Environment (Nationale Omgevingsvisie). This national strategy presents an integral strategic vision for the long-term future of the Netherlands in 2050 (Ministry of the Interior and Kingdom Relations, 2020a: 12). Although it emphasises that the vision does not portray an end image, most policy goals are focused on this time horizon of 2050.

The Netherlands does have a tradition with taking into account the long-term future. With half of the Netherlands below sea-level, several interventions have been performed in the Dutch landscape in the past to protect the country. Although, most interventions only became possible after a devastating event, like the North Sea Flood (Watersnoodsramp) in 1953. In response, a flood defence system (the Deltawerken) was built in anticipation of future floods. Events like these are infrequent, but these kinds of extremities are expected more often in the future, especially with the predicted accelerated rise of the sea-level. In anticipation on this, the long-term future is of crucial importance to secure the continued existence of the Netherlands.

1.3. Scientific relevance

In this thesis I provide a detailed account of how to engage with the long-term future. The importance of sharing experiences and learnings from this process is recognized in for example van Asselt & Rijkens-Klomp (2002). By doing so, I demonstrate the 'intellectual and creative options, choices and rationales', that are too rarely documented (Candy & Dunagan, 2017: 137). Although future engagements are often unique in circumstance that result in tailor made events, my aim is to provide a detailed description that serves as an addition to existing literature so to make it easier for new practitioners to apply this kind of method (Nygren 2019: 33). In this way, I provide a possible way to engage with the long-term future and with the lessons learnt can help others in their own long-term future undertakings.

1.4. Outline

In search for an answer to the research question(s), I will start by providing background information on how planning currently engages with the future (part 2 – subquestion 1a & 1b). I reflect on this practice and discuss its limitations. From there I explore alternative ways to engage with the future (subquestion 2). In search of a way to engage with the long-term future, I use an action research approach. I will discuss this approach and the cases that I was involved in (part 3). In four iterative reflective cycles I will go into detail for each case (part 4 – subquestion 3). I compare the three cases and share reflections on them (part 5 - subquestion 4). Finally, in the conclusion I will answer the research question, share some final reflections

on the methodological approach and address some discussion points that can inspire future research (part 6 – main research question).

2. Bringing the future into the present

Planners have to make decisions for the future, without knowing the future. The future is unknown and over time the range of possible futures extents into an ever-increasing possibility space (Candy, 2010) (visually represented in the Futures Cone, see figure 1). Although the possibilities may seem unlimited (possible futures), the future is not a white canvas but influenced by our quantitative predictions (what we deem probable futures) and the qualitative images shaped by our values (preferable futures). For the latter, this may even be outside what is possible. However, certain possibilities are no longer possible because of past decisions (path dependency).

Figure 1: Futures cone (based on Candy, 2010: 35)
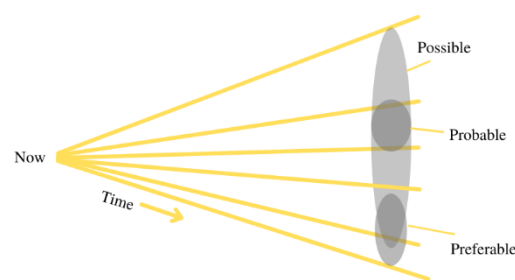
All these images of the future determine our decisions in the present (Beckert, 2013). In order to understand how to engage with these future images of the possible, probable and preferable in the present, I use the typology of the imaginative logics from Pelzer & Versteeg (2019). The classification of imaginative logics is helpful in understanding what principles underly or constitute the presentation of different images of the future to an audience (Pelzer & Versteeg, 2019: 16). The five imaginative logics capture the imagining of abstract phenomena, like the future. Each imaginative logic has a different image of the future (ranging from closed to open, see figure 2), with its own strengths and weaknesses.

The first is the doable logic that present a closed image of the future. It is also relatively closed in its narrative. It usually has a clear direction and makes the audience feel connected to a goal. This can for example happen by displaying a desirable future in a certain year in the future. The weakness in this logic is that it can exclude worthwhile alternatives.

The second is the logic of juxtaposing. The image of the future is also closed, but includes a few alternatives. By showing alternatives, the audience can learn about trade-offs and dilemmas. This is further emphasized in the scenarios by making them extreme. The weakness in this logic is the complexity of selecting the right alternative.

The third logic is of defamiliarizing. It represents a relatively open image of the future and brings another perspective to an issue. In this form it helps to use a familiar place, situation or practice and apply the new perspective, so the audience can see it through another set of eyes. The weakness in this logic is the difficulty to connecting it to solutions.

The fourth logic is the guerilla logic. This one is also relatively open, but puts more emphasis on confusion and shock to the audience. It usually is a surprising image that merges fact and value. Because of the confusion and shocking part, the weakness in this logic is that it is harder to get a message across.

The last logic in the procedural one, the most open image of the future. In this logic the intention is to set the own imagination of the audience to work. Only some generative

conditions are developed under which people can imagine. The weakness in this logic is that it is cost and time intensive and difficult with large groups.

Figure 2: imaginative logics - from closed to open image(s) of the future

Planners often engage with the future with the first two logics, doable (visioning) and juxtaposing (scenarios) (Zapata & Hopkins, 2007; Couclelis, 2005; Hoch, 2016). The former, visioning, presents what a desirable future might be like. Visions are formulated on the basis of consensus, and provide the details on how to reach that future (Couclelis, 2005). As planning is based on doing what is best for the collective good (Myers, 2007), the representation of one future image in the doable logic is helpful in aligning interests and stakeholders and in that way steer towards a common goal (Pelzer & Versteeg, 2019).

The second logic, juxtaposing, is often represented in planning with scenarios. Scenarios are multiple images of the future that portray what the future may look like. Scenarios explore possible futures on chosen external uncertainties in order to improve preparedness for change (Goodspeed, 2020). By exploring and comparing multiple futures allows for making strategic plans and decisions in the present to prepare for a range of uncertain futures (Couclelis, 2005; Zapata & Kaza, 2015; Nygrén, 2019; Hoch, 2016; Volkery and Ribeiro, 2009). Scenarios are a helpful method to deal with complexity, rooted in uncertainty. In order to understand how planning currently engages with complexity, uncertainty and plurality of the future I explore the use of scenarios more in depth.

2.1. Scenarios
It is a fact that the future in uncertain and at the same time, the impact of decisions on this uncertain future is also unknown (Volkery & Ribeiro, 2009; Goodspeed, 2020). In scenario planning multiple scenarios are created in which uncertainties and their possible consequences can be explored. Scenario planning is:

"a method of long-term strategic planning that creates representations of multiple, plausible futures of the system of interest" (Goodspeed, 2020: ix).

Possible and uncertain futures, not necessarily desirable or predictable ones, can be explored and made visible (Hoch, 2016; Volkery and Ribeiro, 2009; Nygrén, 2019). Important to stress here is that scenario planning is not a way to predict the future, but a way to think about the future (Zapata & Hopkins, 2007: 9). Scenarios help to stimulate wider debates about possible futures and can challenge conventional thinking (Nygrén, 2019). It allows to discuss different viewpoints and offers the opportunity to find common ground and learn about the trade-offs (Chakraborty, 2011). Furthermore, it can create awareness about the importance of issues (Volkery and Ribeiro, 2009; Chakraborty, 2011) and highlights connections among issues (Goodspeed, 2020). Essentially, scenarios fulfill two main functions, 1) a stretching function (participants broaden their perspective and imagination) and 2) a bridging function (bridge science with the practice of planning (Xiang and Clarke, 2003). An important distinction to be made is that between scenario workshops and scenario planning workshops. Scenario planning workshops create the actual scenarios and in scenario workshops participants engage with them (Nygrén, 2019).

In scenario planning workshops, first the most important uncertainties are identified, prioritized and analyzed. The uncertainties generally come from broader categories like demography, economics, society, technology, environment, and politics (Goodspeed, 2020). On the one hand, it is an analytical process in which trends, constraints and issues and its underlying driving forces are identified and ranked by impact and uncertainty. On the other hand, stakeholders and their values are identified (Avin, 2007). A common way to portray the uncertainties is on a 2x2 axis that result in four juxtaposing future images. In order to fulfill both the stretching function and bridging function there are three important qualities that make scenarios effective, namely: 1) plausible and surprising futures; 2) informational vividness; and 3) ergonomic design (table 1).

2.1.1. Qualities of effective scenarios

The first quality is to create plausible and surprising futures. Important aspects to create plausible and surprising futures are 1) a diversity in perspectives; 2) inconsistency and 3) comprehensiveness (Xiang and Clarke, 2003). Especially the first one, a diversity of perspectives and/or the engagement of stakeholders is well established in the literature (Nygrén, 2019; Berkhout et al., 2002; Zapata and Kaza, 2015; Chakraborty, 2011). This is important since is brings together different beliefs, values, perspectives and goals. This can help with bringing 'unexpected surprises to the uses but also helps them to take, and potentially become appreciative of, other's perspectives when looking into the future' (Xiang and Clarke, 2003: 892). The second aspect, inconsistency, not consistency helps to search for and stretch thinking about alternative futures. The third aspect, comprehensiveness is about including just enough information and analysis as is needed to explore a range of alternative futures (Xiang and Clarke, 2003).

The second quality, informational vividness, has to do with the scenario narratives and visualizations that help the audience to understand, accept and memorize the scenarios (Goodspeed, 2020). For most people, imaging the future is difficult (Pelzer & Versteeg, 2019). Some aspects that can help improve it include 1) emotional interest; 2) imaginability and 3) proximity and directness (Xiang and Clarke, 2003). Emotional interest is about a personal touch that also connects with key issues that are deemed important and/ or urgent. Imaginability is for a considerable part formed by the details and specifics used (concreteness). This is commonly done through 'highly descriptive scenario titles (labels), compelling narrative lines, and a movie-like series that shows not only the end- states but also the dynamic process that connects the present to the future' (Xiang and Clarke, 2003: 894). The last one that can make a scenario vivid is when the information content is felt close by (Xiang and Clarke, 2003).

The third quality, ergonomic design, is about three components, namely: 1) the number of scenarios; 2) themes explored; and 3) time horizon (Xiang and Clarke, 2003). Both the number of scenarios, and the themes explored (single- themed or multi- themed) have advantages and disadvantages. For the number of scenarios, usually between three to seven are recommended. A practical way to deal with the question of the number and themes of the scenarios is that both should represent a range of fundamentally different futures. Based on the dimensions of uncertainty there should be a strong difference in the scenarios. The time horizon is also not set in stone, but there are three stretching strategies that are used that help people think about the future. The first is anticipatory in which people's views are stretched from the present state directly to a point in the future. In the second strategy, exploratory, people's views are stretched incrementally by sequentially arranging the scenarios. The last strategy is a hybrid of both anticipatory and exploratory (Xiang and Clarke, 2003).

Xiang and Clarke (2003) conclude that there is not ideal combination of these three qualities. It usually will involve a trade-off between them. It requires a balanced combination that is reached by going through the trade-offs between the different aspects under each quality.

Table 1 overview of qualities of effective scenarios (from Xiang & Clarke, 2003).

Quality	Sub-quality	Description
Plausible and surprising futures	Diversity in perspectives	Bringing unexpected surprises to the users and to become appreciative of others' perspectives when looking into the future
	Inconsistency	In order to search for and stretch unexpected alternative futures.
	Comprehensiveness	Only contains as much information and analysis as is necessary to explore the range of alternative futures.
Informational vividness	Emotional interest	A people focus that includes users needs, desires, motives and values.
	Imaginability	The degree of detail, specificity and use of narrative.
	Proximity and directness	Information content should be spatially and temporally proximate to users, and presents the information in a sensorially direct way.
Ergonomic design	Theme(s) of a scenario set	Represents arrange of fundamentally different futures
	Size of a scenario set	Represents arrange of fundamentally different futures
	Timeframe(s) of a scenario set	Through an anticipatory strategy; exploratory strategy; hybrid of the two

Scenarios portray relatively closed images of the future. The opposing scenarios show dilemmas and tradeoffs for participants to learn from (Pelzer & Versteeg, 2019). Learning is an important outcome of scenario planning. Berkhout et al. (2002) even describe scenarios as 'learning machines', since scenario planning 'allows stakeholders to discuss and challenge their judgements' (Berkhout et al., 2002: 93). Based on what participants learn, it may result in follow actions (van Dijk, 2011). As Goodspeed (2020: 136) describes:

"The value of scenario planning lies mainly in individual and group learning that reinforces individual and collective decisions. Those decisions, in turn, shape institutions and ultimately the functioning of urban systems."

To provide for a deliberative environment in which learning can take place several conditions are important, namely: the number of participants, the group composition, use of a facilitator, timing and a safe space (table 2).

2.1.2. Facilitation of a scenario (planning) workshop

As Friedmann (1973: 240) states: 'learning is at its most effective when it occurs in interaction with environment'. This learning process is both individual as it is collective (Forester, 1999) and can be facilitated in scenario (planning) workshops. For the facilitation, several conditions are important. The first is the number of participants for which small groups are recommended (each group three to six participants). This allows to have a conversation where every participant is able to share its thoughts. The second is the composition of the group. In each group there should be as many different backgrounds as possible. Through discovering alternative futures from different perspectives will enrich the discussion and improve learning. The third is the use of facilitator, that helps the groups to 'stay focused on the subject, follow the schedule and let everyone talk' (Nygrén, 2019: 38). Furthermore, it can help when the

facilitator is familiar with the topic so this person can ask defining questions (Nygrén, 2019: 38). Fourthly, the timing is also important. For most people it takes a while to get into a future mindset. Therefore, between two and a half to four hours is recommended (Nygren, 2019). Finally, a safe space is required so participants feel free to explore outside their usual work field (Volkery & Ribeiro, 2009). Participants need to feel safe and have a certain foundation of trust in order to work together, to share their knowledge and participate in the first place (Forester, 1999).

Table 2 Overview of facilitation features

Feature	Recommended
Number of participants	Small groups (3-6 participants)
Group composition	Diverse
Use of facilitator	One in each group
Time	2,5 - 4 hours
Safe space	Outside usual working environment

With the qualities of effective scenarios and the facilitation features I collected important ingredients for engaging with the future. To get a more in-depth understanding of how the facilitation of the imagination works in practice, I studied the empirical example of the spatial exploration 'rehearsing the future' from the PBL Netherlands Environmental Assessment Agency (hereafter PBL). I interviewed two scenario experts, and three facilitators of the workshops (involved in both scenario planning workshops as scenario workshops - resulting from the publication) (see for a detailed description of the used methods appendix I). The interviews showed me that within the design of the scenarios there are certain elements that help to make the future image believable as how there are tools to help participants to immerse themselves in the scenario.

2.1.3. Lessons from practice

PBL is a research institute with a long standing tradition in scenario planning for the living environment. In 2019, the PBL published the spatial exploration *Oefenen met de Toekomst* (*'*rehearsing the future') and explored the future of the Netherlands in 2049 on the spatial themes infrastructure, mobility and urban development (PBL, 2020). The decision to explore the future in 2049 - thirty years into the future - was seen as practical since it is long enough into the future for fundamental changes to happen, but not as far into the future that people cannot imagine and relate to it. A thirty year period is a horizon long enough to image what can change during this time (respondent #4 & #5). In addition, as PBL is an advisory organization to the government, this time horizon related to the time horizons of which policymakers focus on (respondent #2).

Scenarios are a powerful way 'to get the future onboard' (respondent #5). They can help to find an answer to questions and challenges in another way. Normally the PBL publishes more neutral, scientific scenarios but this time chose for normative scenarios to help people imagine the future world, that the more classical distanced science approach cannot offer (respondent #5). The trick is to 'offer compelling new worlds to confuse people for a moment so that people start asking new questions' (respondent #5). With the portrayal of several possible futures images a basis is created that makes it easier to start a conversation about the future (respondent #1).

In the spatial exploration four normative scenarios were constructed to explore different possible future. Not only do they explore the possible future but also the (required) developments that may lead to this future image (Dammers, et al., 2019). The purpose was to call attention to uncertainties that are inherent to complex systems that do not require more data

or scientific numbers. Therefore, the scenarios focus on values, views, opinions and perceptions (PBL, 2020). Instead of developing scenarios with a two by two axes, with one uncertainty for each axis, a morphological scenario method was used to capture the broad range of uncertainties surrounding these normative aspects. This led to a mixing console of eleven main uncertainties. To ensure internal consistency of the four scenarios they used the grid group cultural theory (PBL, 2020).

Design of the scenario

For the design of the scenarios, it helps when examples are provided that make the future concrete. Also giving names to specific elements in the scenarios is an important contribution to the general storyline of the scenario (respondent #1). The developed storylines with examples of events leading up the future period in time (in the PBL case 2049) also provided tangibility and credibility (respondent #1). Also, by elaborating on these events, they can be seen as turning points to how the future image came into existence. This provided flexibility for participants to actively think about another decision that might lead to another future (respondent #3). Another important aspect was to include both positive as negative elements (respondent #4). On the one hand scenarios have to be radical enough to stimulate thinking, on the other hand, the scenarios have to be relevant and plausible in order to keep the participants involved (respondent #1).

In the publication of the scenario study the PBL published an open invite to facilitate an active engagement with these scenarios in workshops for those interested. Unexpectedly the requests came flooding in. Over a two year time span the PBL facilitated workshops in different organization to 'rehearse' with the scenarios.

Workshops

The goal of the workshops was to get familiar with and embrace uncertainty. To engage (or as they called it 'rehearse') with the future, participants become aware and learn about the different possibilities which allows for asking new questions and see current policy decisions in a new light (PBL, 2020). As an interviewee #2 explained:

"With a scenario study, you can think of all kinds of alternatives and how you can realize them and what they might look like. And with this, policymakers can come up with options that they had not previously thought of. Or that they had perhaps heard of, but thought that it would not be that serious. Which may have a lot of potential after all".

Scenario's stretch thinking by confronting participants with radical, but plausible futures. By discussing these images with others, participants make explicit what they find important for the future. The conversation about the future was facilitated in workshops. A typical workshop program would consist of three parts (Snellen et al., 2020). The first part provided an introduction to the general use of scenario's, the specific scenario study with a short summary of the four scenarios, accompanied by the one minute video impression that were made[2]. The second part was centered around the active engagement with the scenarios by letting the participants rehearse with the scenario in small and diverse subgroups. In the last part, the subgroups were asked to each give a short presentation on the experience followed by a plenary reflection. To help participants in the workshop immerse themselves in the scenario different tools were used.

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[2] see https://themasites.pbl.nl/o/oefenen-met-de-toekomst/

Getting into the future mindset

The first important lesson was to take enough time to help, or 'seduce' (as respondent #5 called it) people into the future mindset. It takes some time to let the participants speak the same (future) language to engage with the scenarios (respondent #3). Most participants need some time to shift from the day-to-day working activities into a future mindset. An important prerequisite is to create a safe environment where participants feel free to develop new ideas (for example by emphasizing that the workshop is confidential, and no report will be made (respondent #4)). To emphasize this element the workshop is preferably outside the daily working environment in a new (creative) surrounding.

To actively engage with the future, the participants were divided in small and diverse groups. To get the conversation going a few questions were formulated in relation to the specific issue of the organization. Instead of giving each group all four scenario to rehearse with, each group got one scenario, each a different one. This decision was made so to focus on one future to create flow within the group in which new thoughts and ideas could start to come up (respondent #5).

The random assignment to a certain scenario sometimes caused irritation among the participants. But this was considered a good thing since it was also the aim of the scenarios to speak to the emotion and have another conversation about the future. To shift the conversation from irritation to a constructive conversation it helped to ask participants to immerse themselves in a certain role. For example, to ask participants to put themselves in someone else its shoes in the future, e.g. a mother of four children living in 2049 (respondent #4). Another successful intervention was to ask the participants to first reflect on change in the last thirty years. It gave the participants a sense of time and demonstrated what can happen over a thirty year time period.

With these workshops the facilitators hope to have inspired change in participants own working practice. The workshop always ended with some reflective questions for example, how will your organization look like in the future? Is your position still there? (respondent #5). To bridge the gap from the future (insights) to the participants own working practice in the present, they tried to make it as specific as possible. For example, a question was: what will you do differently tomorrow? (respondent #4).

Shortcomings

Insights into the effects of the workshop were not actively researched. There is a strong tradition in scenario development, where a lot of time is spent on making the scenarios, while relatively little time goes into the application and landing of the study (respondent #2). The PBL workshops were a first attempt to translate the scenarios to actual impact in organizations. Yet this is uncharted territory. It remains up to further research how to get with a new future mindset back to the desk with the current workload requiring attention for the present challenges (respondent #5).

2.1.4. Reflections

The exploration of the scenarios of 'rehearsing the future' provided me with empirical insights for how to facilitate the imagination of the future in the present. The discussed conditions to facilitate the imagination relate to two kinds of interventions, namely substantive and procedural (see Pelzer, Goodspeed & te Brömmelstroet, 2015). The substantive interventions relate to what helps participants immerse themselves in these future images. This for example includes to make it concrete by providing examples and making it personal by empathize with a person in the future. An interesting new insight was to reflect on change by going back the same number of years as the future image is made for, creating possible future events leading up to future image (making it concrete) and balance radical, relevance and plausibility (include

both negative and positive elements). The procedural interventions are in line as discussed in the literature, namely small and diverse groups, use of facilitator - to deepen the conversation, timing - time to get into the future mindset and the creation of a safe space.

Interesting to note is that next to practical considerations for the time horizon of 30 years into the future, further is considered too far away to say something meaningful about it. It also makes it difficult to connect it to the daily working activities. However, the focus on closed images of the future will not be sufficient to anticipate on the complexity of the 21st century sustainability challenges surrounded by uncertainty. As respondent #5 also recognized:

"I don't think it's enough anymore to tell once again that the climate is doing badly. We already know that. Repeating that is not enough. We need something new."

2.1.5. Limitations to scenarios (from closed to open images of the future)

Scenarios explore multiple possible futures based on dimensions of uncertainty. Engaging with scenarios allows for learning about the future, about its possibilities as about tradeoffs. Scenarios aim to stretch the imagination by representing multiple possible futures. One of the main procedural benefits of scenarios is the dialogue between participants, as the scenarios function as an useful way to start the conversation from the same predesigned relatively closed images. The substantive outcomes are more often called into question (Kallis et al., 2006). The aim is for example that by actively engaging with the scenarios can stimulate making different decisions in the present in anticipation on the explored futures. Yet, the assessment of the outcomes is quite difficult which leaves the question to what extent scenarios improves practice. Often, ideas generated in the scenario workshops are cast away by the everyday tasks (Nygrén, 2019). The process of creating the scenarios is considered better equipped for creating an impact (Volkery & Ribeiro, 2009).

Yet in the process of creating the scenarios, consensus needs to be sought to some extent in order to create the images of the future. This is a 'desirable and important built-in characteristic of any participatory action' (Nygrén, 2019: 39), but also 'reduces extreme or distinct ideas and promotes ideas that are easily accepted in a larger group of people' (Nyrgrén, 2019: 33). This is also a reason why the future time horizon of scenario planning is often 20-30 years into the future. It is a practical horizon for attention that aims to inspire short term action (Myers, 2007). On the one hand, consensus is necessary to get stakeholders aligned, on the other hand this might not be radical enough for the transformation that is required in anticipation on the challenges of the 21st century: we need to engage with the 'ever-expanding field of possibility space' the long-term future brings (Candy & Dunagan, 2017).

For that purpose, I shift the focus from the juxtaposing logic to the procedural logic where more open images of the future are central (Pelzer & Versteeg, 2019). In the procedural logic, the emphasis is on the imagination in which different possible futures can be explored on what people find important now, and in the future (Maggs & Robison, 2016). As Robinson (2004: 381) explains:

"It must be constructed through an essentially social process whereby scientific and other 'expert' information is combined with the values, preferences and beliefs of affected communities, to give rise to emergent, 'co-produced' understanding of possibilities and preferred outcomes".

An audience is invited to actively use their own imagination to imagine the future. Only some generative conditions are developed under which people can imagine. However, the problem is that most people find it difficult to imagine. The three phase learning process of Futures Literacy (FL) provides an answer to this 'poverty of the imagination' (Miller, 2018: 8).

2.2. Futures Literacy [3]

The future does not exist, but people imagine and anticipate on it every day (Miller, 2018: 2). The future is used to plan (optimization future) and prepare (contingency future). But there is also a need to consider how to prepare for and embrace uncertainty (open or novel futures) (Miller, Poli and Rossel, 2018: 59). The future only exists is our imagination and our imagination is shaped by assumptions. By becoming aware of ones assumptions, it can allow for a broader imaging of futures. By using the future differently, imagination and creativity can be stretched and can create alternative futures. As such, FL is not an exercise in predicting the future, but about imagination (Miller, 2011). The definition of FL is:

"the capacity to explore the potential of the present to give rise to the future. FL is not 'the future': it is the capacity to think about the potential of the present to give rise to the future by developing and interpreting stories about possible, probable and desirable futures" (Miller, 2007: 347).

In a collective process, desires and hopes for the future explored. These desires and hopes are based on certain assumptions that inspire actions in the present. By making these explicit in a three phase learning process, and within this process exploring different assumptions, different images of the future can be explored. Through imagining different futures, uncertainty becomes something to embrace instead of to fear (respondent #6). At the same time, with the realization that there are different future possible, other decisions can be made in the present.

Just as learning to read and write, FL is a skill that can be developed through the repetition of the carefully designed sequential three-phase learning process (Miller, 2018). Although the focus in this thesis is not particularly to develop the skill of FL, the process demonstrates how to facilitate the imagination of the unknown future. In this process the time horizon generally is between fifty and seventy years. This is expected to be 'far enough into the future that people relax their desire and anxiety to engage in 'accurate' predictions' (Miller, 2018: 103). The future is unknown either way, and a longer time horizon can allow for the existence for an open space of creativity and release the here and now (respondent #6).

2.2.1. The three phase learning process

Drawing from the learning cycle of Dewey, learning starts with an interruption in routine action (Miller, 2018: 97). For the learning process to take place, a carefully designed sequential three phase process is used, depicted in a S-shaped learning curve (figure 3). The three phases follow each other sequentially in the following order: reveal (awareness of assumptions), reframe (discover different possible futures) and rethink (asking new questions in the present) (Miller, 2007). When this process is repeated, the skill of FL develops. It is a continuous learning process through which an improving skill develops that can distinguish between different assumptions that each lead to certain futures.

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[3] For a better understanding of FL, I conducted an interview with skilled FL practitioner (respondent #6). I added references to the interview for emphasis purposes.

Figure 3 Three phases of the learning process (from Miller, 2018: 98)
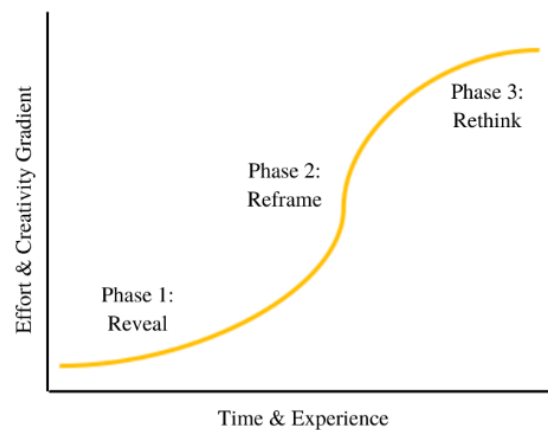
Important throughout the phases is the element of interaction. Being confronted with other perspectives allows the learning process to take place and realize there are other futures possible. The process requires that the participants know enough about the topic 'to make their thought explicit, be creative and meaningfully consolidate what they have learned' (Miller, 2018: 99). Especially for phase 1 and 2, there are several interventions to stimulate the imagination process of the participants.

Phase 1: Reveal

In the first phase of reveal, individual participants think about possible *and* desirable futures. By addressing both futures, it allows participants to realize that there are different kinds of futures possible (Miller, 2018). The distinction between what is possible and desirable is an important one to make, given that they often rest on different assumptions. The goal of the first phase is to use a heuristic that helps participants make their assumptions explicit, for example by asking the participants to describe in detail 'day in the life snapshots deemed probable or desirable in a specific year in the future' (Miller, 2018: 103). To deepen the description of the future, the iceberg model can be used[4]. This model not only makes explicit what is visible, but gradually dives deeper into what is under the surface. With the use of this model, participants gradually deepen their assumptions and beliefs.

By discussing the future images with each other, participants make their assumptions about the future explicit and can furthermore become aware of gaps. It is important to create a safe environment so participants can trust what they know and are allowed to talk freely and open about their expectations, hopes and fears for the future. Instead of using scientific evidence, this stage is mostly about discussing expectations and preferences. The goal is not to find consensus, but 'to capture the diversity of perspectives' (Miller, 2018: 103). It is therefore important that the facilitator keeps the group away from arguing about assumptions if they are right or wrong. The main task of the facilitator is to guide the process to let the collective wisdom of the group emerge (respondent #6).

Phase 2: Reframe

Phase two of reframe, is the creative, inventive and experimental phase. Central to this phase is to create new insights through 'rigorous imagining'. An alternative scenario is provided by the facilitator (or ideally coming from the group itself, but is not often prepared due to time

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[4] as was done in the attended FL workshop by the researcher.

limitations) that is based on an alternative set of anticipatory assumptions (Miller, 2018: 104). To stimulate creative thinking, this requires the right balance between estrangement and a connection to what participants find meaningful (Miller, 2018: 105). Important is that it happens within the basic rules of social science (Miller, 2007: 254). Participants are invited to discuss and play with the unfamiliar future and thereby are confronted with their own assumptions. An important feature is the diversity in the group that can strengthen creativity that is needed to imagine an unfamiliar future (Miller, 2018: 105). With the discovery of a different future, the aim is to facilitate a steep learning curve.

Phase 3: Rethink
In phase three of rethink, comparison, reflection and consolidation are central. It reviews the assumptions of participants on how they use the future in the present. This also shows the participants that different anticipatory assumptions result in different futures (Miller, 2018: 106). Based on this, current goals can be questioned and new question can be asked (respondent #6). This phase could actually be split into two phases, namely one more focused on reflection at the beginning (phase 3) and the other focused on actions following from this reflection (phase 4).

The process can be disruptive, challenging the status quo so the creation of a safe space is of particular importance (respondent #6). Another important note is that every workshop is unique, hence the specific interventions used within the three phases also should be adjusted to the specific context (Miller, 2018).

2.2.2. Towards an experience
The sequential three phase learning process of FL is useful to stretch the imagination for the open conversation about the possibility space of the long-term future. Another possibility to overcome the difficulty to imagine, is to engage participants more viscerally (Candy, 2010). For that purpose, I explore the practice of Experiential Futures. Scholars such as Candy & Dunagan (2017) argue that it is essential to experience the abstract future in order for better futures to arise.

2.3. Experiential Futures
The future is an abstract concept. In the practice of Experiential Futures, the aim is for 'a different and deeper engagement in thought and discussion about one or more futures, than has traditionally been possible through textual and statistical means of representing scenarios' (Candy, 2010: p. 3). Candy (2010) formulated three design principles that help to create a future scenario. I will shortly discuss the case of 'Hawaii 2050' to illustrate these design principles.

2.3.1. Three design principles
In Hawaii 2050, four hypothetical futures (scenarios) for the future of Hawaii in 2050 were created. For each scenario, a separate room was carefully designed and staged. The design and staging of the scenario is based on 'carefully researched and constructed narrative and historical logic' (Candy, 2010: 102). During a half-hour experience, participants were invited to actually live in the scenario. In all scenarios, the participants were implicitly assigned a role and involved in the event unfolding in front of them in theatrical setting. The participants enter in the middle of an event and in this way are drawn in, without explicitly stating what the participants are about to do. For example, participants are part of a political party conference in 2050. Candy names this design principle as 'don't break the universe' (Candy, 2010: 190).

The second principle is the art of the double take' (Candy, 2010: 202). As Candy explains:

'The four experiences deliberately pushed the bounds of credibility, each in a different direction, stretching imaginations and inviting expended perceptions of Hawaiian history's multidimensional potential' (Candy, 2010: 102).

At first the scenario seems ridiculous, but something about it is intriguing and seems possible after all given some reflection.

Another possibility to engage the audience is by providing an artifact from the future that represents a part of the future as a whole. The metaphor that Candy uses to describe this third design principle is 'the tip of the iceberg'. The artifact is the tip of the iceberg that triggers the imagination for the rest of the iceberg, as the future as a whole (Candy, 2010: 195). They should 'provoke surprise, spur conversations, and enrich the sense of possibility (…) of change to come' (Candy, 2010: 113). With this immersive experience, the future became tangible and personal that would otherwise be abstract and distant (Candy, 2010 :105).

2.3.2. Experiential futures ladder

Drawing from another experience, Candy & Dunagan (2017) formulated the framework of the Experiential Futures Ladder. The ladder moves from the abstract to the concrete in the following order: setting (subject), scenario, situation and stuff. The setting is the kind of future, moving into the scenario as the specific narrative proposition and sequence of events. Based on the scenarios it moves into situations as particular events given physical form, where the stuff are tangible artifacts. During the design of an experiential future they also found the importance of history, as "any alternative future entails or corresponds to an imaginary taking in the entire chronology" (Candy & Dunagan, 2017: 140). The creation of an understanding about a certain future, also relates to understanding about the past.

The design principles can help to create an immersive experience, yet, a crucial design aspect is finding the balance between fixed elements and what remains open to creatively explore (Candy & Dunagan, 2017: 141). Essentially, the design of an experiential future is staging and scripting of a performance. To provide more substance to the design of a performance I use the concept from a dramaturgical approach; staging, setting and scripting (see table 3). Dramaturgy is the 'sequence of staged performances' for which these three concepts help to analyze not what people say, but 'how they say, where they say it and to whom' (Hajer, 2009: 65).

2.4. Dramaturgical concepts

An example of where a dramaturgical approach was used was in 'a*n Energetic Odyssey'*. It was an immersive experience with the purpose of creating a shared desirable future (Hajer & Pelzer, 2018). Although I focus on plurality of perspectives instead of creating one desirable future, the Energetic Odyssey helps to illustrate the dramaturgical concepts.

In the Energetic Odyssey, the audience gathers around a floor projection portraying how North West Europe could successfully reach the two degree target by 2050, set in the Paris Agreement in 2015. The first concept, setting, concerns both 'the physical *and* organization situation in which the interaction takes place' (Hajer, 2009). The first showing was presented as a 'preview' to important stakeholders that are needed to make the shift towards renewable energy (both policy and business officials) in an informal evening prior to the official meeting of these stakeholders the next day. The actual physical set up of the multimedia installation was 'in a dark atrium of the Shell Research Laboratories, in a pitch dark paneled room next to the hall of the welcome dinner in the chique five star hotel The Grand' (Hajer & Pelzer, 2018: 229).

The guest to the informal meeting were welcomed by two high placed officials, one from the policy world and one from the corporate world. Followed by opening words of the

curator 'suggesting that, now was the time to shift from stifling 'frame of risk' to a mobilizing 'frame of opportunity'' (Hajer & Pelzer, 2018: 226). The organization of this introduction is part of the staging. After the introduction, the stakeholder gather around a 10 by 8 meter large square. The lights went out and in a 14 minute experience, the audience is taken on a journey by a voice over (scripting) and see the transformation the North Sea in front of their eyes in the map on the ground (staging). For the script, the characters in the performance (the dramatis personae) are determined in order to create a particular effect (Hajer, 2009). Central to the narrative was the - deliberatively chosen - elitist perspective as the crucial showings were for mainly elite actors from policy, academia and the corporate world. In the preparation of this narrative, stakeholders also directly contributed. This is an important point in order for the narrative to be persuasive a strong overall story is required in combination with considerable detail, which was facilitated in workshops. To stress the feasibility of the animation and show that is not just a nice story, 'three corporate CEOs underlined their belief in the Odyssey' (Hajer & Pelzer, 2018), another important contribution to the overall staging.

Noteworthy, in line with previously discussed safe space, is the particular importance of the setting, outside of the institutional context, or as the authors call it: a soft space (Hajer & Pelzer, 2018: 230).

Table 3: Concepts of dramaturgy (based on Hajer, 2009: 67)

Concept	Description
Performance	"The way in which the contextualized interaction itself produces social realities like understanding of the problem at hand, knowledge, new power relations."
Setting	"The physical and organization situation in which the interaction takes place."
Scripting	"The efforts to create a particular political effect by determining the characters in the performance (the dramatis personae) and to provide cues for appropriate behavior."
Staging	"The organization of an interaction, drawing on existing symbols and the invention of new ones, as well as to the distinction between active players and (presumably passive) audiences (mise-en-scène)."

2.5. Design for a long-term future intervention

In search for how to engage with the long-term future I started with scenarios, given the focus on uncertainty and plurality. The brief exploration of scenarios helped me to understand procedural and substantive interventions to facilitate the imagination. I argued for a shift from closed images of the future to more open images of the future to be able to anticipate on the uncertainty of the sustainable challenges of the 21st century. I continued with exploring alternative ways to engage with the future, based on the open procedural logic, that is more focused on facilitating the imaginative capabilities of the participants. To stimulate the imagination about the long-term future I turned to the three phase learning process of Futures Literacy. In this process participants are actively guided to broaden their imagination for an awareness of other possible futures. It is about continuously stretching the imagination of what ifs that allows to embrace the uncertainty of the future.

To facilitate the imagination even further I turned to experiential futures and used the three concepts of staging, setting and scripting from dramaturgical approach. I demonstrated

these three concepts through the empirical example of the Energetic Odyssey (in figure 4, I present the key lessons for this thesis). As the authors from this article but also others argue, I share the vision that solely sharing and discussing numbers about possible futures in quantitative predictions does not inspire action (see also Maggs & Robinson, 2016). I consider sharing stories has a better chance of generating action (van Dijk, 2011: 131). In addition, the future should be experienced for motiving action in the present (see Candy & Dunagan, 2017; Candy, 2010). By creating immersive experiences of the future in the present, the future can be made tangible and inspire change.

As our images of the future only exist in our imagination in the present (Miller, 2018), I use an action research approach to find out what these images with their underlying assumption are and furthermore, actively engage with them. I actively engage in practice, rather than researching about practice.

Figure 4 Key lessons
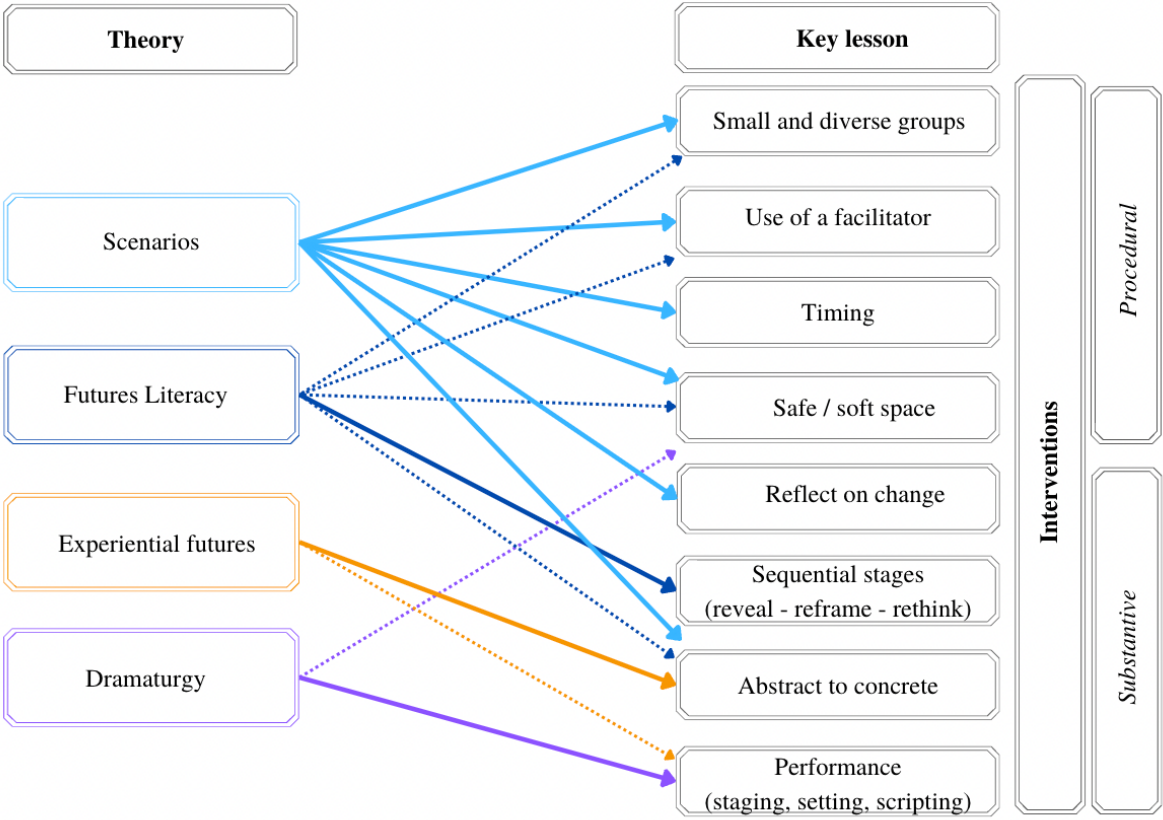
3. Methodological approach

The long-term future is inherently uncertain. Both in how current sustainability challenges will develop over time, but also how the decisions anticipating on the expected future will turn out. To unravel underlying assumptions that cause the anticipation on the long-term future I focus on planning as a 'soft process'. Planning as a soft process is 'a process of mutual learning involving interaction between a multitude of actors' (Faludi, 2000: 299). For this process of mutual learning, dialogue is a central feature (Friedmann, 1973: 237).

I consider the world to be a complex place in which meaning is created in interaction with others (De Lange et al., 2016: 115). We can learn about our values, hopes and assumptions in interaction with others, who might have different ones. I consider a sustainable future to be a construct we make sense of together. To find out what a sustainable future means for each and every one of us we have to discuss our thoughts, values, hopes and beliefs *and* experience it. With this interpretivism epistemological view and a constructionist ontological position, I find myself in line with the deliberative planning tradition with planning scholars such as Friedmann, Forester and Throgmorton. Yet, in contrast with these scholars, I do not research *about* these thoughts, values, hopes and beliefs but I actively engage with them *in* practice.

3.1. Action research

Action research is context specific and decisions are taken and reflected on them in the present. In search for way to engage with the long-term future the results and processes immediately 'have to prove themselves in practice' (Stern, 2014: 212). This is not a random process, but I structure it in a continuous and cyclical process. Within this process, reflexivity is an important aspect (Bradbury, 2015). I chose to structure the research systematically and secure reflexivity by using the learning cycle from David Kolb. With the use of the learning cycle, I describe the process of knowledge creation in detail, that can contribute to 'methodological know-how' (Stern, 2014). These insights can be used for other practitioners in their own specific context.

3.2. Reflexivity: the learning cycle

By using the learning cycle from Kolb, it allows me to document and reflect on the intervention systematically and improve transparency. I chose the learning cycle by Kolb since it concerns experiential learning (Illeris, 2006; 2009). From an experiential perspective to learning Kolb defines learning as: "the process whereby knowledge is created through the transformation of experience" (Kolb, 1984: 38). In other words, learning is a process in which an experience is a foundation for the creation of knowledge. Through an experience, knowledge is 'continuously created and recreated'. The process of experiential learning is made explicit in a four stage cycle. In the process of learning, the different stages follow each other in cyclical manner. The cycle usually, but not necessarily, starts with a specific involvement in a concrete experience. This is followed by the stage of reflective observation, reflecting on what has happened in the experience. From this stage as the observer, there is even further analytical detachment in the abstract conceptualization stage. This stage is about improving the experience. With this improvement is then actively experimented with in the next stage. This active experimentation leads to a new concrete experience and the cycle as such continues (Kolb, 1984: 31).

The learning cycle allowed me to not only demonstrate how I engaged with the cycle, but also shows by reflection how I (co-)designed each step and was involved in them. To enhance systematic reflection, I formulated one question for each phase in the learning cycle. This means that I will answer the same questions for each cycle (see figure 5).

Figure 5 Stages of the learning cycle
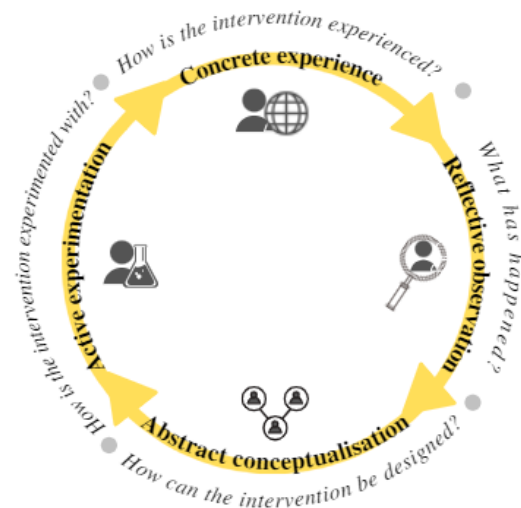
Going through the cycle multiple times allows to improve the design of the intervention but at the same time I experimented with the design in different contexts. As each case is different, the cycle can continue endlessly. I exit the cycle with a reflective observation on the last case. In part 5 I reflect on all the cycles, for both the design and the experimentation in the different contexts. I was actively involved as a designer within the different cases to fit the intervention to the specific context. With my own active involvement, I will also reflect on each phase within the learning cycle. I will do so by using the quality criteria of context, the quality of relationships and the outcomes (Coghlan & Brannick, 2014/2010 from Shani and Pasmore, 1985).

3.3. Quality criteria: context, quality of relationships and outcomes

As action research is embedded *in* practice, the criteria of validity and reliability that are often used to ensure the quality of a research are less applicable here. I was actively involved in the design process as in the actual experimentation in the different cases. To reflect on my choices and my own involvement in each experiment I formulated three quality criteria (as suggested by De Lange et al., 2016: 64). The quality criteria I will reflect on are context, quality of relationships and outcomes. Coghlan & Brannick (2014) suggest these criteria to structure the research, yet the substantiating of these criteria is left to the researcher, since every action is different and dependent on the specific context. In each stage of the learning cycle, I will go into detail for one criteria.

I enter the cycle with a first context in the abstract conceptualization stage, in which I will therefore discuss the criteria context to make sure the intervention is fit for practice. With the application of the intervention in practice in the active experimentation stage I discuss the criteria quality of relationships since this is the stage where most relations in practice are involved. In the concrete experience, I discuss the criteria outcomes where I present the results of the data I collected. I will reflect on the three quality criteria and my own experience for each experiment in the reflective observation stage (see figure 6). At the end of the research, I will present a critical reflection on these quality criteria. This reflection is an essential part of good action research (Coghlan & Brannick, 2014). I will discuss each quality criteria more in depth and give a short note on ethics, an important note to make since as a researcher I am closely working together with practitioners.

Figure 6 Overview of quality criteria per stage in the learning cycle

3.3.1. Context

With the criteria of context, I first describe what kind of context I encountered and how I ensured the intervention was suited for that context. I will do so by explicitly addressing the objective(s) of each context (Bradbury, 2015) and elaborate on the fit for a) engaging with the long-term future and b) creating an experience. The fit of context to the research purposes was for example explored in a call with the interested actors. In addition, I studied information around the context, for example from websites and provided documents. All these steps rely on my situated judgement. The fit of the context with the research purposes is the first important step in order to fit the intervention to both the research purposes as to the objectives of the context. The context influences how the intervention will be designed. Therefore I will discuss the quality criteria context in the abstract conceptualization stage. Within this stage I also discuss choices for the design of the intervention fit to the specific context by going over e-mail threads and my own notes I made during meetings.

3.3.2. Quality of relationships

Within each different context there are also different actors involved. In extension of criteria of context, the criteria of quality of relationships is also relevant. The objectives of the specific context are for a large part determined by the involved practitioners. In order for the intervention to be relevant to those involved it must be designed in close collaboration with those actors embedded in practice. I will explicitly address for each context what the relations were, the role and engagement of each actor involved, my own position and if and how the design improved by working together. I provide a detailed overview since it is based on my own situated judgement and of those of which I co-designed the intervention. I will discuss this criteria more in detail in the active experimentation stage since that is where the collaboration and interaction with the practitioners and participants most explicitly takes place.

3.3.3. Outcomes

In the stage of concrete experience, I will discuss the criteria of outcomes. This is where I collected data on the experience. The outcomes relate to the experience of the design and to the objectives of the specific context. To strengthen the quality and enhance credibility of the outcomes I use multiple methods (Stern, 2014). The general objective of each context was to

experience the long-term future. Yet, in each experiment the emphasis was slightly different depending on the overall context in which the intervention was set. At the same time the design was deepened and refined. Both resulted in slightly adjusting of the methods to the specific context by for example adding or reformulating questions in the survey. An overview of the different methods that I used can be found in Appendix I.

3.3.4. A note on ethics

As action research is conducted close collaboration with practice it also brings ethical issues to the fore (Stern, 2014). During my research I always tried to be transparent about my actions and to keep it consistent with my research purposes. Next to my method of conduct I also tried to be honor integrity by being friendly, patient and respectful to the involved (De Lange et al, 2016: 67). To those involved as essential part of collaboration, I keep the names private and use general terms to describe the practitioner. I will reflect on these ethical considerations at the end of the research.

3.4. Three experiments

I experimented with a long-term future intervention in three cases. Not only to deepen and refine the design but also to analyze how the intervention works in different contexts. There was no *a priori* logic of case selection. The design of the intervention requires an active engagement, therefore I followed the energy of where practitioners were willing to actively engage with the long-term future and were not afraid to experiment with a new format and use their imagination to do so.

A few months after starting my thesis I became a student assistant in project NL2100, a research initiative from the Urban Futures Studio (Utrecht University). With my interest in the long-term my supervisor thought this project would be an inspirational addition next to my thesis undertakings. The idea of the project was to bring together knowledge about the future of the Netherlands. With my involvement in the project NL2100 I was in the position to connect with the network of practitioners that actively - want to - engage with the future. In line with the purposes of NL2100, and my research purposes, my thesis supervisor invited me to join in the design team for a session at Springtij Forum 2021. The creative setting of the whole event and the opportunity to create a design from scratch was a nice opportunity to study the design and experimentation as my first case.

With the positive experiences and reactions from Springtij my supervisor suggested to use the format in het Mixed Classroom (MC). The MC is an elective master course in the Faculty of Geosciences at Utrecht University organized by the Urban Futures Studio (UFS) in which students and policymakers work and learn together about different techniques to imagine sustainable futures. My supervisor is the co-teacher in this course and, together with the course coordinator, designs the course. The learning environment would allow me to deepen and refine the intervention, and study how the intervention works in a different context. I studied the experimentation at the Mixed Classroom as my second case.

After the positive reactions at Springtij, the expert organizing the sessions around the Sense of Place Agricultural and natural environment (focus Nature) contacted my supervisor to learn more about the intervention. The expert is a senior advisor at consultancy firm Wing and was looking for a format to combine past, present and future in an ongoing policy trajectory. He was interested in a new working format and so my supervisor suggested I explored with the senior advisor if I could use this context as a case. In a short call we explored if the advisor could use the format in the ongoing policy trajectory and if this new context would be fit for my research purposes. The advisor was willing to experiment with this new format and I was curious to how the intervention would work when interests are involved in an actual planning

case. The use of the intervention in the Transitional areas was an interesting new context to study, and resulted in my third case.

My engagement with the three different contexts - a sustainability forum, a learning environment and within an ongoing policy trajectory with a wicked problem at stake – allowed me to experiment with the design and deepen and refine the intervention for different contexts (see figure 7). Table 4 presents an overview of the cases, comparing them on context, goal, participants and participant engagement. With the deepening and refining of each case there is also a sequential logic to the case selection. First exploring the imagination in a creative setting, to how this imagination contributes to learning, to the use in an actual planning process. Each experiment allowed me to work with enthusiastic practitioners and learn from them. I think our common drive to inspire change was what made each and every experiment an insightful learning journey.

Table 4 Overview of cases

	Context	Main goal	Participants	Participant engagement
Springtij Forum 2021	Sustainability forum	Inspiration for awareness about temporality	Forum audience (max. 50)	Passive
Mixed Classroom '21-'22	Master course organized by the Urban Futures Studio	Learning about futuring	Policymakers (15) & students (15)	Active / passive
Transitional areas	Policy trajectory with a wicked problem at stake	Inspiration for a future perspective for the wicked problem	Stakeholders (max. 30)	Active

Figure 7 Overview of the cases within the learning cycle
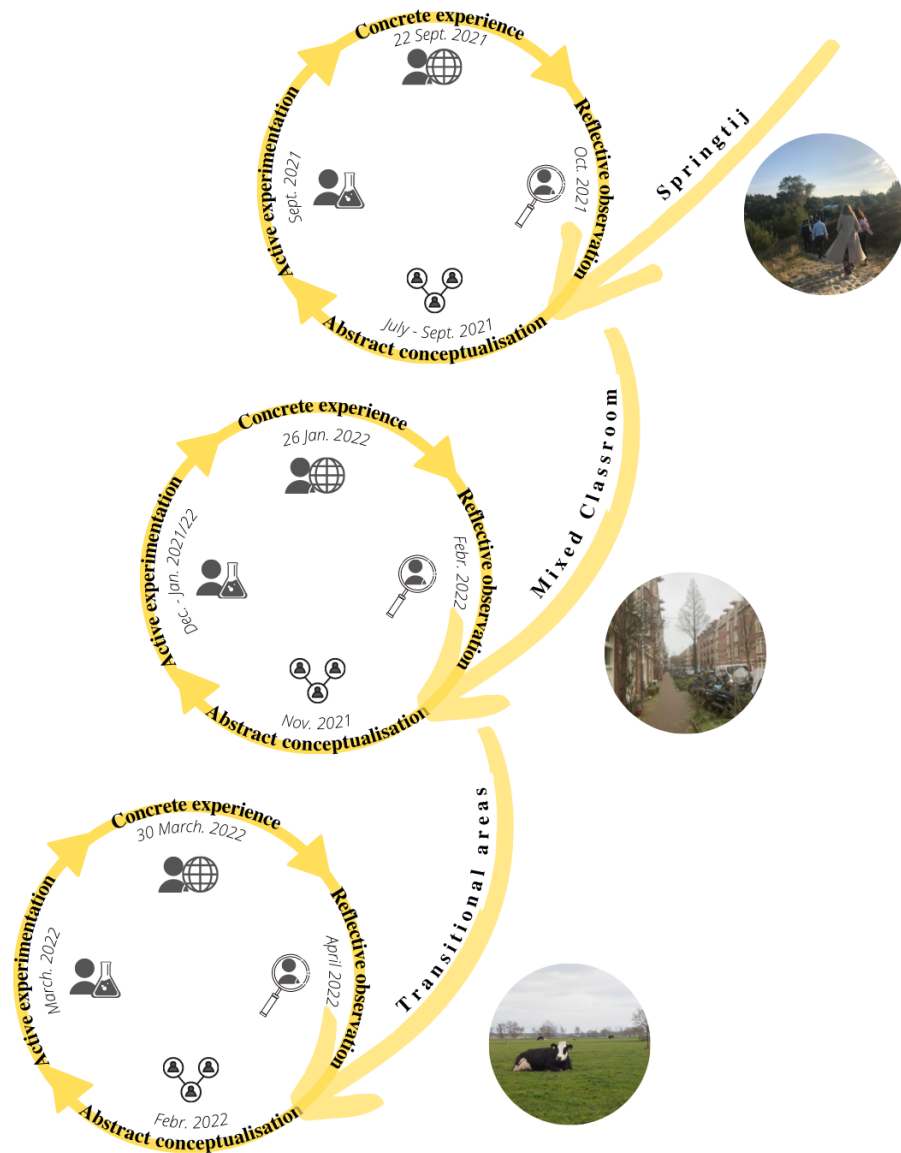
4. Design of long-term future intervention

With the use of the learning cycle, I explore and reflect on how planners can engage with the long-term future. Within the learning cycle I do not only deepen and refine the design but also analyze how the design works in different contexts. I experimented with the intervention in three different contexts. With every new abstract conceptualization stage, I enter a new cycle. I start with the context of Springtij Forum (cycle 1). I actively experimented with the intervention, collected results from the concrete experience and reflected on both the results as on the process. With the lessons learnt, I improve the design and at the same adjust it to the next context of the Mixed Classroom (cycle 2). An active experimentation followed and I collected the results from the concrete experience and reflected on them and on the design process in general. All my lessons learnt so far brings me to the most planning like context; the Transitional Areas, an ongoing policy planning process with a wicked problem at stake (cycle 3). I adjusted the design to this context, actively experimented with it and collected results from the experience. With the reflection on this experiment, I exit the cycle. I compare and discuss the different experimentations in part 5.

4.1. Cycle 1

Concrete experience

Reflective observation

Active experimentation

Abstract conceptualisation
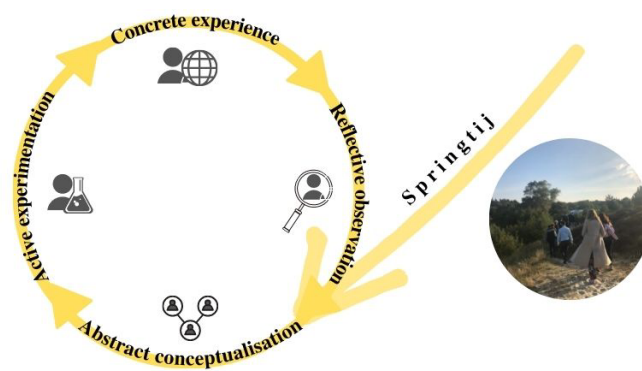
Springtij

Cycle one starts with the design for an intervention at Springtij Forum 2021, with the purpose to experience the long-term future (4.1.1.). Collaboratively the intervention was designed and experimented with on this sustainability event (4.1.2.). I collected data on the facilitation of the concrete experience (4.1.3.) and finally will reflect on previous stages with the quality criteria of context, quality of relationships and outcomes (4.1.4).

4.1.1. Abstract conceputalisation
How can the intervention be designed?

The design of an intervention is always dependent on the context. For that purpose I will first discuss the context of Springtij Forum. Afterwards I will elaborate on the design of the intervention and highlight some crucial design choices.

Context

Each year Springtij Forum (hereafter Springtij) is hosted on the Dutch island Terschelling (the 2021 edition from 22 – 24 September). The mission of Springtij is the accelerate the sustainable transition in the Netherlands. Springtij aims to bring people from the political arena, government, businesses and knowledge institutes together in an environment with art and nature to inform, confront and inspire to take action for change. Springtij has an – relatively high – entrance fee and attracts certain experts and high placed officials/ practitioners. The program is organized around integral sustainability challenges from a 'sense of place': the residential environment, the mobility environment, the industrial environment, the green-agricultural environment and the water environment. To realize systematic changes within the Sense of Place, interventions at various levels are needed, of which 'future for the living environment' was one[5].

Every edition has a certain theme and for the 2021 edition it was 'listen'. The broader tagline underneath it is about listening to the voices that are not immediately heard. During this time spatial planning was prominent in both the political and social debate. The total sum of spatial claims for nature, housing, agriculture, renewable energy and climate adaptation simply cannot be met. Choices need to be made not only for today, but also for the future generations (the unheard voice). These spatial choices are not so easily reversed, so they should not only 'fit' today, but also for the future generations. At Springtij, we wanted to explore how to create awareness about the long-term / temporality of spatial decisions. With a setting such as Springtij invites to experiment with other working methods. The creative context allowed to have a different conversation by for example listening to an unconventional voice such as the future generation. A different conversation where people dare to share visions in order to do the right thing in the short term[6].

For a session around the concept the long-term my supervisor, as organizer of the sessions around the session for a future of the living environment, connected to an expert working at Deltares (a water research institute), involved in program Sense of Place: water. The water domain is one of the fewer fields with a strong tradition in long-term thinking. In the area of water security, it is common to think on longer time scale and anticipate on the uncertainty that it brings. In line with my thesis research and my student assistantship in NL2100 my

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[5] See https://www.springtij.nu/programmaopbouw/
[6] Sentences from this paragraph are extracted from the introduction text to the sessions of 'a future for the living environment' from the Springtij 2021 website (website no longer available)

supervisor invited me to join the design team. The design team was kept small, with only one more colleague from Deltares who joined us.

I considered the context of Springtij fit for my research purposes as the creative context is central to the whole event to share new perspectives on sustainability challenges. The participants are invited to leave their thoughts at the main land and experience the desires in their heart. There were some minor practical limitations (like location and 1,5 hour time slot) but apart from that the context was open to freely experiment. With the design team we frequently met to design long-term future intervention fit for the context.

The Soggy Paths: a walk through time

In January 2021, the Dutch edition of the book *The Good Ancestor: how to think long term in a short term world* by Roman Krznaric (2020) was published. The book sparked an interest in the long-term and started to circulate in our network. The first ideas for our intervention originate from this book. One of the water experts saw potential in the imaginative exercise called Human Layers (Krznaric, 2020: 76-77). The exercise is based on the seven-generation principle, that is about taking into account the effects of present day decisions on the next seven generations. It relates back to the questions: how am I a good ancestor? For that purpose, it helps to reflect on your own ancestors. Such an imaginative exercise should create awareness about time and how humans are interconnectedness with the living environment (Krznaric, 2020).

With our desire to create an experience of time, the concept of the seven-generation thinking seemed useful. The format takes participants out of the here and now, out of the deadlock of the current planning debates, and with the personal element makes the future more tangible and connects it to the effects of our own actions in the present. Also to start in the past helps with the realization of the choices in the past to set the right context for the future.

The session was named the Soggy Paths, a metaphor for the Dutch history with planning. As on the website of Springtij explained:

"Our great-grandparents created the Netherlands. Untamed lands became farmland, the Zuiderzee was transformed into the Ijselmeer and residential areas in the meadows. And now we are influencing the landscape for those who will inhabit the Dutch delta in the future."

At the same time, with the natural island environment of Terschelling the time walk would also literally be soggy.

The goal of the Soggy Paths was threefold. First and foremost, to let participants experience the long term, and experience those spatial choices in the present always have a long-term effect. The second, to let participants experience that the biophysical condition of the Netherlands and occupation are interrelated. The third goal was to have a honest conversation about the crucial long-term choices that are now before us. In line with the three goals, we could start to design the intervention. With our desire to create an actual experience of time, we carefully staged and scripted the session within the setting.

Design choices: scripting, staging, setting

The challenge was to not make it too complicated, but still make it an exciting experience. After exchanging some ideas how the intervention could look like, we got help from a systematic/process expert to make sure the environment, content and work format optimally came together.

Scripting

In the Soggy Paths the participants make a walk through time to explore the changing paths of the living environment of the Netherlands. At first the idea was to let participants reflect on crucial decisions that need to be made for a sustainable future. With this line of thought the time periods along the time walk would be +30 years (given many current policy goals for 2050), +100 years (given investments in infrastructure) and +150 years (to practice with thinking about sustainability for future generations in line with the Good Ancestor). To fit into the event format of time slots of one and a half hours not all seven generation time periods were included. Which would mean the following: 1850, 1950, 2021 (present at the time), 2121 and 2171. In each time period we would structure the conversation in line with the sequential phases from Futures Literacy: reveal – reframe – rethink. To inspire the conversation in each period in time, a design choice was to work with inspirators to inspire the conversation in each time period as a reframe.

To create an immersive experience, we shifted from the 'crucial decision angle' and make it more personal by asking participants to empathize with a generation, as if living in that time. The time walk starts in the past with our great-ancestors and ends in the future with our great-great-grandchildren. To start the conversation, in each time period the guide ask the participants a question to make it personal. This is related to the first FL phase of reveal. To make the experience even more tangible, we would ask inspirators to actually *be* the voice of the landscape. A voice that is not often heard (which also relates back to the general theme). The inspirator would respond to the participants and share how it was feeling, what is was hearing and seeing. In this way, the inspirator provided another scenario (second phase of FL - reframe). Participants could then reflect on the landscape. This is the first part of the third phase (rethink), but solely as a reflection, not to bring the lessons back to the present / formulate new actions, that was left for the reflection on the whole time walk experience[7].

Apart from the question by the guide, the script was completely left open. Only the structure of the sequential phases of FL was a hard criterion. However, within the script, for the purpose to create an experience, we asked the guide and the inspirator to always speak in the present tense to actively invite the participants to immersive themselves into the period in time. In case of a historic time period, participants *are* in 1851, and 2021[8] is the future. Same goes for the future, participants *are* in 2171, and 2021 is the past.

Staging

We asked important voices in the planning debate, who would be present at Springtij already, to be inspirators. During the time walk, they would represent the voice of the landscape as the reframe. To create a more tangible experience my supervisor came with the suggestion to make the inspirators represent a specific landscape. With the different expertise's we made a tentative distribution: 1) the river; 2) the woods; 3) the city; 4) infrastructure; 5) cultural landscape; and 6) soil and water. The chosen landscapes were quite overarching, covering the landscape system applicable for the whole of the Netherlands.

The session would be introduced by a general moderator to explain and position the importance of the long term and temporal planning and the relation to the unheard voice of the landscape, followed by a short overview of the time walk. After the introduction the participants would collect around their assigned inspirator. We would assign the participants in the walk-in

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[7] Within the limitation of a 1,5h time slot we divided the time for conversation equally over the periods in time. With resulted in a tentative distribution of 15 minutes introduction, around 5 minutes at the beginning to 'get into' the experience, 2 minutes from one year to the next and again 5 to 'transfer' back to the present, 10 minutes for conversation in each time period and again 15 minutes for the plenary reflection (in which each planning would share its experience form the time walk, still in the role of being the landscape).
[8] Springtij was in 2021, therefore the time period in the past and in the future also refer to 51/71.

to ensure small and diverse groups, since the purpose is to discover diverse range of perspectives. Each group is accompanied by a guide to facilitate the conversation, let everyone speak and ask follow up questions to deepen the conversation. Six groups would make the time walk simultaneously, although in their own pace. So, each group would consist of one guide (moderator), one inspirator (the voice of the landscape), and, depending on registration, maximum of twelve participants. This number of participants was considered the maximum in order to facilitate a fruitful discussion.

At the beginning of the time walk, the guide shortly repeats the outline of the experience and shares the questions for participants to think about during their walk to the first period in time. To really let participants immerse themselves in a generation in time, the team chose to let participants walk in silence from one period in time to the next. At first the idea was to let participants discuss their thought transferring from one period in time to the next, but the silent walk as a form of meditative state was considered more fruitful. With the beautiful nature setting of Terschelling participants could take in the landscape and dwell in their own thought for a few minutes before discussing their thoughts with other participants.

After the time walk, there would be a plenary reflection led by the moderator asking the inspirators to share their experiences. Due to the limited time, we chose to make the connection between the different landscape by only letting the inspirators reflect and not go into detail for the experience of the participants.

Setting

Within the general setting of Springtij as a sustainability event, as discussed before in the context, we wanted to make use of the landscape on the island. The idea was to let the intervention take place on the beach to actually experience sogginess. In the sand we would put large numbers of years to guide the groups through the walk. With the formalization of the program the setting in mind was also used for an introductory session in the program to 'land' on the island. To surprise the participants with a new environment we made the decisions to make the walk through the heath, adjacent to the Forum terrain.

4.1.2. Active experimentation - Springtij
How is the intervention *experimented* with?

On a late Monday afternoon, 1,5 week before the actual experience, in preparation for the actual experience at Springtij we scheduled a briefing sessions with the inspirators and guides.

Quality of relationships
Within the network of the designers were already several experts working with/on the long-term future in planning. We asked some important voices in the planning as inspirators, already intending to be present at Springtij. They were asked both on their familiarity with the topic, openness to creative formats and their specific expertise.

On behalf of the designers, I presented the design and elaborated on the role we assigned them. What was scheduled as an one hour meeting extended to a meeting of almost two hours. Many questions were asked and many suggestions made. Among the inspirators there was an engaging discussion about several design choices. Overall, the format of the intervention was considered quite complex. Through their engaging and critical comments several crucial design choices were made. The result was a more structured and consistent format. I will discuss a few critical changes in the design relating to the time periods, the conversation structure and the

representation of the landscape. What was meant as a briefing, turned into a collaborative effort (see figure 8).

Figure 8 Overview of quality of relationships Springtij Forum 2021

Periods in time

The design team suggested the time periods 1850 – 1945 – 2021 – 2051 – 2171. For the inspirators these time periods seemed rather strange. For consistency purpose one expert suggested to use hundred year periods. Since the purpose was to experience time, another expert asked, rightfully so, why the present was included. By including the present, the expectation was that it would cause too much discussion about facts. To temper the urgency of the now we excluded the present. This resulted in the following time periods: 1851 – 1951 – 2051 – 2171[9]. With the comments about the time period, the question also arose to what kind of future we were moving. Soon everybody agreed that in order to structure the conversation and inspire action it would have to be a desirable future.

Structure of the conversation

In relation to the time periods, another discussion point was related to the amount of years back into the past and into the future. It was questioned if the participants would have enough information to say something about the history and the future going back and forward over a hundred years. As an alternative it was suggested to change the structure of the conversation. This would mean that the landscape first shares its story and participants reflect on it. After some back and forth arguing for pro's and con's of this structure, the group was finally convinced that it would frame the conversation too much. Also, this kind of structure is not in line with the FL process, what I also pitched in as crucial element. If participants would struggle to imagine we gave the guide the job to ask (follow up) questions.

To start the conversation in each time period, the design team suggested to start the conversation with a question. During the silent walk, participants could think about this question. It was emphasized that this walk needed to be in silence, to come into a meditative state to contemplate your own thoughts. At first this was a different question for each time period, building on each other, taking it one step deeper into the conversation as moving along the time walk into the future. The inspirators all agreed it would be easier to ask the same question for each time period. Participants would know what was expected of them as going along, and create a kind of flow in the experience. The conversation between the participants and the landscape would already provide enough information. The different question during each time walk would unnecessarily complicate the experience leading the focus away from

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[9] The preference for consistency for the final time period was 2151, however since the workshop title was already uploaded in the forum program changing it was considered to be too confusing.

imagining the time periods. In the design team we decided upon the descriptive question: what does my life look like? How does the landscape in which in live look like?

Final discussion points

After the suggestions from the inspirators in the briefing session there were still some discussion points in the design team. The first, a recurring discussion point, about the inspirators representing a general or a specific landscape (e.g. the river, the city). Since the exercise is about moving in time and expected to be difficult enough already to do, the focus on one landscape within the given time for conversation was considered too complex. My supervisor and I argued that representing one specific landscape would make the landscape more tangible in the experience. Underneath it was already the expectation that the inspirators would talk from their expertise either way. The inspirators also already agreed with the specific landscape voice we had assigned them (see figure 9).

Figure 9 Overview time walk with guides and inspirators – starting in 1851
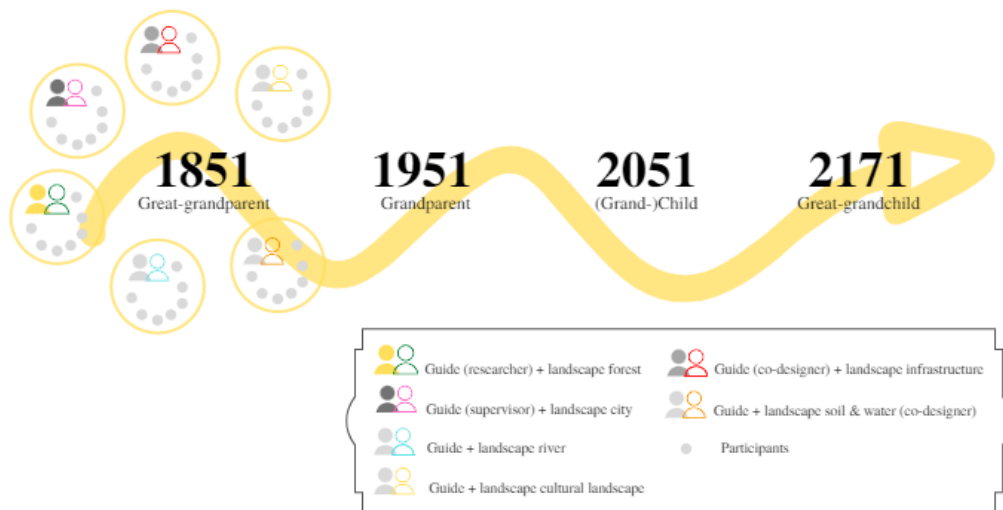
Another discussion point was about the structure of the conversation in the future. The Deltares experts suggested to let the inspirator start the conversation in the future and let participants respond to it. The reason for this suggestion was that it was expected to be more difficult for the landscape to respond to the participants in the time for the conversation (around 10 minutes), than to have the inspirator as the landscape first tell a story and have others respond in the remaining time. After considering both sides, and my commitment on following the phases of FL, we decided to keep the conversation structured the same for each period in time (first participants – phase of reveal; second voice of the landscape – phase of reframe).

With the decision on these final points, the format of the intervention was left to the actual experimentation on Terschelling (see figure 10 for overview and appendix II for the final script). For the preparation of the voice of the landscape we only gave two points of attention to the inspirators. The first to think about text for the different time periods, but to lean on their existing expertise. The second that throughout the session, they would fulfill their role of being the landscape.
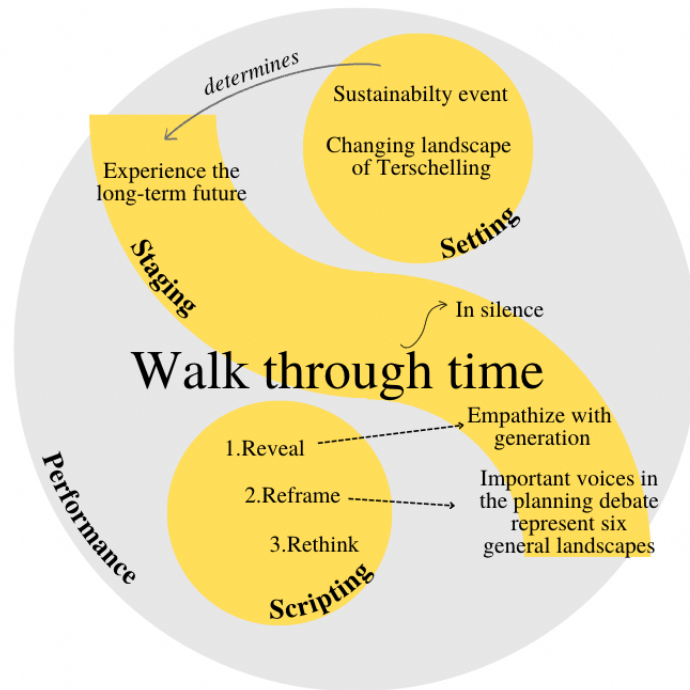
The day of...

On a sunny Wednesday morning in late September, all the participants attending Springtij went with the boat from the mainland to the island. After some time to walk around and connect to the island we were welcomed on the Springtij Forum grounds. Afterwards all the participants went to their first session, of which the Soggy Paths walk was one.

The session was introduced from the plenary tent by the moderator, chief government advisor on the rural environment (also an inspirator representing a landscape). The two co-designers from Deltares set out the walking route the day before. We were very lucky with the changing landscape adjacent to the Forum terrain. We could make the walk from the plenary forum tent over a narrow path to the dunes, over the heath, into the woods and finally back through the woods to the beginning over the dunes to the Forum tent. From the walk from 1951 to 2051 a yellow strap was placed in the middle to indicate the passing of the present (at the time 2021). Since it was not allowed to disturb the natural environment by placing large number of years in the surroundings, a practical solution was to carry a large flip over on which the years were written (see figure 11 for an impression and appendix III for a further impression of the walking route).

Figure 11 Impression Springtij

4.1.3. Concrete experience – results Springtij
How is the intervention experienced?

With the first experimentation at Springtij, my aim was to assess the procedural and substantive interventions with the facilitators (inspirators and guides) (see for a detailed description appendix I & questionnaire in Appendix IV). Informally, I also looked out for indications of learning among the participants. Although not scheduled, most groups also reflected in their own landscape group before going to the plenary reflection. I made notes during the reflection in the group in which I was the guide, as in the plenary reflection in which the inspirators shared their experience.

Outcomes

The intervention was highly appreciated, as it was rated as the best session of Springtij. The workshop scored a 9.3 out of 10, the highest rating of all 55 workshops. One third of the participants left a review in the Springtij app and reviewed the workshop as inspirational, imaginative and experiential.

From the questionnaire and the (informal) reflections, both plenary and within the groups, there is the indication that participants experienced the awareness of time (goal 1) and the interrelation biophysical condition and occupation (goal 2). Especially in the plenary reflection where each inspirator shared its experience, showed that each landscape moves different through time. Infrastructure for example experienced quite rapid changes while the forest changes slowly. In general, all groups experienced a lively and open conversation with an active engagement of all participants (goal 3). As one respondent was stated to be surprised with:

"How serious people were taken it and how they were touched by the connection with other generations (in past and future)" – respondent guide river.

Procedural interventions

There was not really a surprising new insight with the answers relating to the procedural interventions. There were already quite solid as both the theoretical and empirical observations already demonstrated. We facilitated small and diverse groups which allowed for enough participants to inspire the conversation and still have a conversation where everyone has the opportunity to speak. The facilitator, as guide, was found helpful in deepening the conversation by asking follow up question and making the experience more personal. The facilitator restrained from participating in the discussion and only facilitated the imagination of the participants. The reflection at the end was a bit short, so either the timing should extent a bit, or the guides should be more strict on the conversation time in each time period.

The location was found very inspirational, also the changes in landscape helped to walk through time. One respondent mentioned that it would have been even better if there was water along the route. All groups reported to have had an experience in an open and safe environment where participants felt free to talk. Walking through a changing landscape also contributed to experience of moving through time. For example respondent inspirator forest: 'A physically different place with walking in between helps'. One participant also left a similar comment in the app stating that the experience created a true Springtij feeling.

Although not directly indicated from the participants as a flaw, the guides and inspirators stated that their participants had difficulty imagining the far past (1851) and far future (2171). But also in one group were it seemed easier to imagine the far future, than thirty years from now. Both the personal question empathizing with a generation for a time period and the consistent 100 years intervals to demonstrate change worked out well. Yet the actual immersion into a generation was also reported difficult:

"Empathy of participants was difficult to get to the generational role" – inspirator landscape city.

Participants might need more 'creative prompts' to image and immerse themselves in a specific period in time. This is a fine line, between what should be left open for 'the wisdom of the crowd' and what is already scripted by the designers. The story of the inspirator as the landscape helped to deepen the conversation. In order to do so, the inspirator representing landscape river stated:

"In preparation, I have read up on the landscape. That also inspired".

For credibility, facts are important within that story. The use of inspirators was a good decisions in that sense. For another time, it is not necessarily an expert that needs to represent the landscape, it showed that representing the landscape requires preparation.

An interesting observation was in one of the groups where a participant started the conversation about the future in 2171 as living on Mars. The guide of the group experienced a change in the group. The participants lost their creative flow that they build together throughout their move up to the final period in time. This was so unexpected that a conversation about this future image was difficult to have. Since the scripting was to let participants share their thought about the future first, it was difficult for the inspirator as voice of the landscape to anticipate on this future image.

Within the timing it would be a good idea to include a group reflection next to the 15 minute plenary reflection so participants can make sense of the experience. The next step is then how to facilitate this conversation.

4.1.4. Reflective observations
What has happened?

With the first experimentation of the intervention I will reflect on the whole process by reflecting on each stage of the learning cycle with the accompanying quality criteria. I reflect on the quality criteria by going through my own notes for all the meetings, both with design team as the briefing session with the inspirators. A rich information source was in the long e-mail threads before and after meetings, mostly with the design team exchanging and discussing ideas. Documents, scripts and PowerPoints were made along the way with ideas for the intervention. Looking back on this first drafts has allowed me to trace the steps we have taken leading up to the final event. After the intervention I wrote some preliminary pieces of texts for my research which I shared with my supervisor. We discussed these texts based on his comments. These meetings also helped me to reflect on the experience.

Context (abstract conceptualization)

The purpose of hosting Springtij on an island is to invite the participants to leave their habits at the mainland to be open to new ideas and solutions. With the intervention of the Soggy Paths we staged a different conversation about the future, including two perspectives that often go unheard (fit to the theme of this years edition), namely the future generation and voice of the landscape. The experiential format fitted the creative environment in which Springtij positions itself and probably stimulated the creativity of the participants to with us on this journey as well.

Quality of relationships (active experimentation)

With our shared interest in the experience of the long-term, the collaboration within the design team was an energetic experience. We had intensive contact leading up to the final date. Each of us made suggestions and contributed to the discussion of design choices for, in our opinion, the best possible experience to the participants. All of us also contributed to the time walk either as guide or inspirator.

With the scheduling of the briefing session we had the expectation of just informing the inspirators on the design and providing more information on the representation of the landscape voice. It turned out to be engaging interactive session from which we adjusted a few design choices. It became more a co-production, which also created ownership among the inspirators. In complete trust on the performance skills and expertise of the inspirators we only provided two points of attention in preparation for their role of being the landscape.
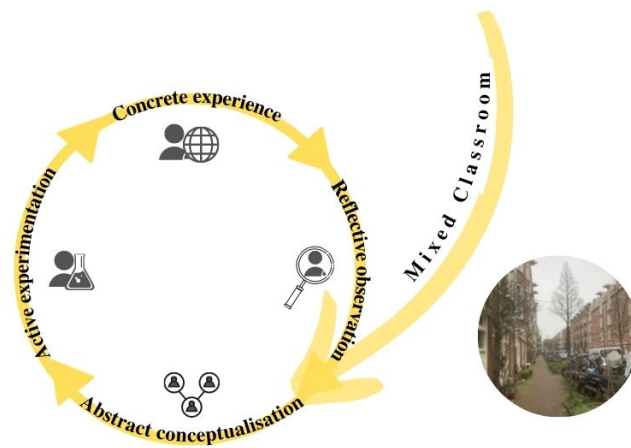
Outcomes (concrete experience)

The reaction from this first experiment were really positive, both from participants and from the inspirators and guides. The results indicate that the three goals formulated beforehand (experience the long term, experience interrelation biophysical condition and occupation and having a honest conversation about the crucial long-term choice) were all experienced. The focus of this first experimentation was to get a better understanding of the important features for the imagination. The reviews and group observation indicate learning but was not further researched. For the design also a few improvements can be distilled.

The far past and far future were considered most difficult to imagine. Beforehand, we considered making mood boards to help participants imagine the periods in time but in the end, decided to go for the simplicity of an honest conversation. We also expected it would frame the conversation too much by providing certain images (especially for the future). The experience of just a walk in nature, talking to each other was considered a stronger and simpler format. For the next experiment this might be a possibility to explore to help with the imagination.

What was more implicit in the results was the preparation of the inspirators representing the voice of the landscape. Although the inspirators were experts in the landscape they would represent, they all reported on doing some research beforehand (see for example preparation story river in appendix V). Their expertise and preparation helped with providing details to the participants so their imagination could be stimulated for a specific time period. It was not only the expert knowledge that contributed to this experience. It might also be helpful for the guide to do some preparation to inspire the conversation with examples to get the conversation started. For the next experiment this is an important addition in the active experimentation stage and the quality of relationships within it.

4.2. Cycle 2

With the new context of the Mixed Classroom I start cycle two (4.2.1.). With the adjustment to the new context and the improvements to the design, the intervention was experimented with (4.2.2.) I will present the results in the concrete experience stage (4.2.3.) and afterwards reflect on previous stages with the quality criteria of context, quality of relationships and outcomes (4.2.4.).

4.2.1. Abstract conceptualisation
How can the *intervention* be designed?

To fit the intervention to Mixed Classroom, I will first elaborate on the context. Afterwards I will describe how the intervention was designed for it and at the same time, I revisit the substantive interventions in order to better help participants suspend disbelief, as the results indicated in the first case.

Context
The Mixed Classroom (MC) is an elective master course in the second teaching period (November – January). I was familiar with the course as I participated as a student in the previous edition ('20-'21). In this unique teaching format, students and national and local policymakers learn together about – the imagination of – sustainable futures (see Hoffman et al., 2021). Students have to write a motivation to get accepted into the course and policymakers voluntarily apply and are selected on their professional involvement with the theme topic.

The theme of this year's edition was the 'Conflict between transitions'. A central goal of the course is to discuss and analyze "how to deal with the long-term, the inherent uncertainty of the future and the techniques of futuring relevant for dealing with the planetary crisis of the 21st century". Participants in the course study and reflect on the ways the future is imagined with for example existing and new practices like back casting, scenario's, science fiction and design thinking (Urban Futures Studio, nd).

My supervisor (also a teacher in the course) already discussed with the course coordinator if the Soggy Paths could be part of the course program. The course coordinator was already familiar with the intervention as he was involved as a guide in the first experimentation at Springtij. The learning goals of the course aligned with the main goal of the intervention, namely experiencing the long-term. At the same time, the course objective is to understand how this kind of experience works. This emphasis on learning allowed me to assess learning outcomes of the participants, while they learn how the intervention works.

The creative learning environment and working together with two experts in futuring (the course coordinator and my thesis supervisor) were ideal circumstances to further deepen and refine the design. Together with the course coordinator, my supervisor as a teacher in the course and some practical assistance from an UFS intern we collaboratively designed the intervention fit for the context. Two weeks before the start of the course we started to discuss how the Soggy Paths intervention could be designed fit for the context of the MC. Half of the course program is already set (for example, fixed dates for guest speakers) but the other half is left open to experiment with the techniques of futuring. During the course we frequently scheduled meetings, called and e-mailed to script the meetings with the policymakers and students, in preparation for the eventual experience.

Improving the Soggy Paths: suspension of disbelief
To let participants immerse into a specific periods in time I explore a few features that help 'suspend disbelief'. Suspension of disbelief can be defined as: 'a willing decision to put aside

certain set, or sets, of beliefs in order to adopt for a certain time the set of beliefs generated by the work of fiction before one' (Galgut, 2002: 197). The future is only in our imagination and it is up to the storyteller to let the participants immerse in a specific story. Hence it is about the willing suspension of disbelief instead of belief. Yet to engage the participants in the future world, the story should be as realistic as possible (Galgut, 2002: 192).

To help participants better suspend disbelief Frittaion et al. (2010) observed several important features. The first one is to use the present tense. For example, with imagining the future in 2050, participants *are* in 2050 and 2022 is then the past. The second is the use of historical examples as a reference point. For example, when imagining the future of 2050, as participants are in 2050, an historical example could be a description of a certain event in year 2039. Through the context of history participants make sense of the present and the future (Frittaion et al., 2010). In relation to this point, another important feature is the use of recognizable names and places. This helps participants to relate to a story.

Overall, these four features of using the present tense, making it personal, give historical examples and recognizable names should position themselves within a future image that contains 'enough recognizable elements to be relevant, be unfamiliar enough to challenge existing mental frameworks' (Frittaion et al., 2010: 1157). With this short inspirational side step I return to the design.

Design choices: scripting, staging, setting

From the beginning it was uncertain if the walk could take place physically, due to expected covid-19 restrictions. Before the Christmas break we had to make a decision about the form of the walk. Unfortunately, we had to cancel the physical group walk. To still let participants experience the time walk the teachers suggested to make a podcast. Luckily, the UFS has a communications officer with the skills to make a podcast. But with this decisions we also lost an important feature of the experience, the interaction and sharing of perspectives that stimulate the imagination. Within the possibilities we scripted, staged and set the experience in this context.

Scripting[10]

With the format of the podcast, we decided to script the whole experience as a time walk with the landscape. We would design the script where the landscape is also the guide, guiding the participants from the past to the future. To spark the imagination of the participants, given the lack of group interaction, the course coordinator thought it would be nice to take the participants actually through time by providing some historical examples. For the past we could use some well known historical events, but for the future this requires a more delicate balance. On the one hand to provide enough information to trigger the imagination, but on the other hand open enough for participants to give their own interpretation to it.

After sharing a short time line with a few events leading up to the periods in time, we would ask the participants to image and relate to the generation living there. The podcast would leave some time for participants to wander around and think about this generation. The landscape then introduces the generation living in that period in time. To make the thoughts of the participants we would ask them the same personal question (what makes you happy? What keeps you awake at night?) and write the answer down. Together, providing of historical examples and the personal question aimed to inspire the phase of reveal.

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[10] change of year 2171 to 2151 to have consistent steps of 100 years. And from 2152 to 2152, as transition into 2022

After a short silence, the participants would be instructed to start walking again, while the landscape would share its story (phase of reframe). With the rich and diverse expertise on board of the policymakers we soon agreed that it would be an interesting learning experience for the policymakers to represent the voice of the landscape. So policymakers would provide input for the voice of the landscape that we would insert in the general landscape script.

To help the policymakers with choosing a specific landscape, we would ask them to send in a policy document representing their work. We would group them in four general landscape themes based on the sent in documents. In groups they would prepare a voice for a landscape. We guided them through the process in three steps to make them comfortable with and immersing themselves as being the landscape. As an expert in futuring the course coordinator knew how important facts were for the imagination so suggested as a first step to ask the policymakers to do a little historical research into the landscape represented in their sent in policy document. From there on, we would dedicate a separate interactive session on the transforming of the human perspective to the landscape speaking. In line with the periods in time from the time walk we would first dive into the generational perspective. With this basis, we provided a toolbox of sentences to transform the human perspective to the landscape speaking.

After the landscape shared its experience, the participants were asked again to write down their thoughts that were going through their mind now that they heard the landscape speaking (start of phase rethink).

Staging

To facilitate interaction, we would facilitate an online meeting to reflect on the experience together. The policymakers in the group they made the voice of the landscape for, the students could sign up for which landscape they would like to take a walk with (max. of 4 spots per landscape). Before this meeting, participants could make the walk in their own time. We would instruct the participants to bring and paper, so the guide could instruct to stand still to write down their thoughts. We would start the audio by introducing the guide, the landscape, always present, but easily forgotten. Afterwards, we would ask a few questions to let the participant to anker them in the here and now, connecting to the surroundings. With each transfer from one time period to the next we would use the same music to create flow in the experience.

Setting

The intervention was used in the learning environment of the MC to learn about ways to engage with the long-term future. For the full experience of the podcast, we encouraged the participants to make the walk in an environment where the chosen landscape could be seen, felt and heard.

4.2.2. Active experimentation - Mixed Classroom
How is the intervention *experimented* with?

The policymakers got assigned an active role in making the experience by asking them to represent the voice of the landscape. In three steps we actively scripted the voice of the landscape as we guided the policymakers to immerse themselves into this role.

Quality of relationships
To fit to the expertise of the policymakers, we asked them to send in a document representing their work. Policymakers represented mostly worked for Ministries, but also a few from a

municipality, in different departments. Based on these documents we made a distribution of the policymakers into four general landscape groups: energy, water, built environment and rural environment. Early December we scheduled a meeting for the policymakers to get to know their group and discuss their chosen policy document. In the next session, two weeks later, we as the design team would guide the groups in an interactive meeting to shift from the human perspective to the landscape perspective and make the landscape more specific to their liking. Given this format with the policymakers solely responsible for giving the landscape a voice in four time periods, it allowed the policymakers to also listen to the podcast and experience the time walk (figure 12).

Figure 12 Quality of relationship Mixed Classroom

Step 1: Historical research

In preparation for step 2 we asked the policymakers to do a little historical research. By going back to the past, helps to realize how much can change over a hundred year time period. It helps to prepare the mind for future possible changes in the same number of years.

For time period 1852 and 1952 there were asked to search for and describe developments or events that fit with the chosen sent in policy document. For example, we suggested to look for a historical newspaper article or an historical image (online whiteboard Miro (see appendix VI). With this individual assignment we hoped the policymakers would make the time to dive a bit deeper into the landscape relating to their policy document. To give them the preparation to create context around where we are coming from and dive even deeper with transferring it in the interactive meeting to a generational and personal perspective.

Step 2: Development of the timeline in an interactive meeting

Each member of the design team moderated a group of policymakers representing a specific landscape. We prepared a digital time line in Miro (an online white board) and a script to fit the learning experience in the two hour time slot. I left the script quite open, but the course coordinator recommended to make it more specific by adding follow up questions we could ask to help policymakers make their imagination more explicit. For example a question where the imagined generation lives or what kind of work he/she is doing (see script in appendix VII). This might seem rather odd to mention, as it is common to ask question to deepen the conversation. But by instructing each design team member to do so, we hoped for the same level of depth in the imagination.

We started to develop the time line from the human perspective, starting in the present. We shifted the focus from 'being a policymaker' to a personal experience by asking the questions: 1) what makes you smile every day?; and 2) what keeps you awake at night? For example, in the group I facilitated, a participant was happy to live close to Kralingse plas and to take a walk there. But at the same time was worried about the major challenges ahead and

46

the capacity to deal with them in his own organization. From there we went back in time, asking the participants to empathize with the generation living in that time. With both their own personal knowledge and from what they found in their historical research we asked them to answer the same two questions.

From the past moving towards the future, we invited the policymakers to imagine a desirable future. Again, empathizing with the generation in that period in time and asking them to make their imagination explicit with asking the same two questions. In a way, the policymakers made a version of the time walk, yet the reframe of the landscape was missing. This is what they were responsible for.

With the general overview from the human perspective, we invited the policymakers to make the general landscape theme more specific to what they found in their personal time walk experience. This resulted in the following specific landscapes: energy transformed to Slochteren (peak lands and gas fields in Groningen); water to the Zuiderzee/ Ijsselmeer; built environment to inner city; and rural areas to farmland. The policymakers in each group were responsible for the overarching voice of the landscape, but we chose to let each policymakers write the voice of the landscape for one period in time to their preference. With the help of the assignment we asked the policymakers to shift from the personal perspective to the landscape perspective.

Step 3: Assignment representing the voice of the landscape

As homework, the policymakers were given an assignment to transform their human experience to the perspective of the landscape (see appendix VII). With inspiration from the short films of 'Nature Is Speaking'[11] I assembled a toolbox of sentences to help the participants formulate their landscape stories. With these sentences I nudged them towards imaginative features such as using the present tense, making it personal, provide (historical) examples, using recognizable names and places (see textbox for an example of a piece of text from the landscape farmland in 2152). The policymakers were invited to send it in for feedback so I could give some final comments to improve their story. This mostly included comments about making it more specific and keep the perspective of the landscape throughout the story. Most policymakers had the tendency to transfer back to the human perspective. During the Christmas break the story could simmer for a while. In the beginning of January we scheduled an optional meeting for the policymakers to integrate the stories of each policymaker, responsible for one time period, to one coherent story for the landscape.

Look at me flourishing with all those different crops – carrots, cabbage, potatoes - in beautiful lanes and circles growing together and waiting to be harvested and at my borders those beautiful grasslands and flowers. I know this hasn't been always the case. In my far corner you find some threes that were still there 150 years ago, and they tell me about the dark times where chemicals and single crops made me sicker by the day. Those chemical fertilizers were finally abolished after the breakthrough at Wageningen university in 2138 on how to grow and use fungi for every type of farmland. Building with nature at its finest. Me and my brother sister farmlands have never felt so alive and have never been able to yield this much.

A podcast

During the preparation phase in December it was still uncertain if the walk could take place physically. During that time we still hoped to make the walk in the environment where the landscape could be experienced in small groups. For example, to let the group Ijsselmeer for Water actually make the walk along side the Ijsselmeer. With changing the physical walk to an

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11

individual walk with a podcast the landscapes of Slochteren for Energy and Ijsselmeer for Water were a bit too specific. Still, the general idea of the landscape was clear. We would just ask participants to walk where the general theme of water / energy could be experienced (see figure 13).

Figure 13 Individual time walk in own chosen environment
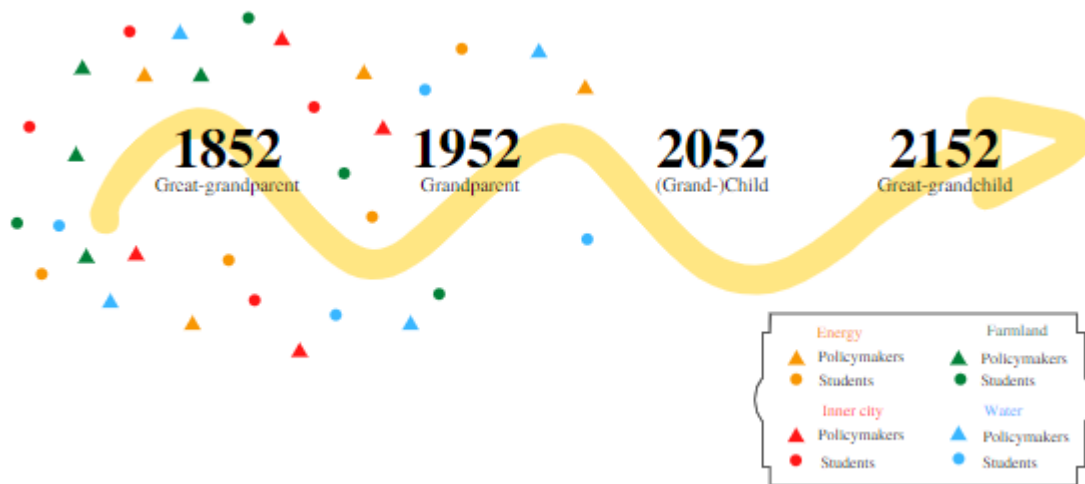
With the four different landscape stories could now be implemented into the general script of the time walk. For the general script of the experience I was in the lead, but with suggestions from both the course coordinator and my thesis supervisor. With the first spoken try-out of the script by the communications officer, the script also altered on the same question to reveal the assumptions of the participants to a different question for each period in time. Considering the participants would make the walk in their own comfortable surroundings and thus absence of a new stimulating environment (figure 14; see script in appendix IX).

For each landscape a different podcast file was made, lasting between 30-35 minutes. The general scripting of the experience remained the same for each one (introduction – time walk – historical examples - generational perspective in the four periods in time – voice of the landscape) only the reframe text from the landscape was different (see figure 14 for an overview).

Figure 14 Overview staging, setting, scripting Mixed Classroom
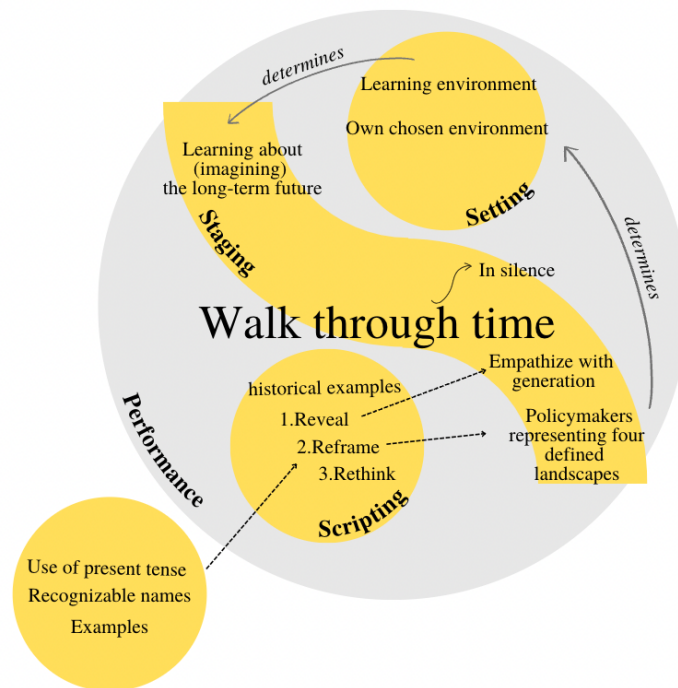
The day of…

On a bit cloudy, but dry, Wednesday morning at the end of January all the participants made the Soggy Paths walk individually. The policymakers were not involved in the overall scripting of the experience and could therefore also participant in the podcast time walk. We explicitly asked to make the walk in an environment where the environment could be experienced (e.g. walking near a solar field for energy; walking next to a canal for water; walking in the inner city; walking in farmland) and fortunately many did (see figure 15). For students it was a stressful period with exams and deadlines at the end of the period and this walk in nature in that sense was a relaxing experience.

Later that afternoon, we had four interactive meetings for each landscape group to share experiences and reflected on the time walk.

Figure 15 Four pictures taken by the participants in their own chosen environment. From left to right: inner city, energy, farmland, water

With the experimentation at the MC, I could deepen and refine the substantive interventions. By this time, I take the procedural interventions for granted and no longer asses them. Instead, within the learning environment, I focused on learning outcomes of the participants. After the time walk, the participants were asked to fill out a questionnaire (see for a detailed description appendix I and questionnaire in appendix X). I also included a section about sensitivity for the long term to get a better understanding of how the long-term currently plays a role in policymakers work environment and in the studies of the students.

To facilitate the learning process of the participants we scheduled an online reflection for each landscape group, moderated by one of the design team. We used a Miro board for participants to first brain dump some reflections based on two questions. The first question asking about their experience. The second questions about what participants take with them from the experience. After some time to write down their thoughts on post its we facilitated a group discussion around it.

A month after the course ended two meeting were held with policymakers to reflect on the whole course. The Soggy Paths also appeared in the conversation, which gave me extra input on the learning experience of the policymakers. There was also one policymaker who was a participant at Springtij, which allowed me to ask question about the comparison of the participant experience.

Outcomes

The results indicate the importance of experiencing time and making the interdependency of humans with nature tangible. Both the policymakers and the students expressed that the time walk was a special experience. As one participants left as a comments on Miro: "Sometimes creativity is more important than the hard facts".

The first part of the questionnaire included three questions about sensitivity for the long-term. Interesting were the answers to the first question related to what was considered to be the long term future. 27% of the participants responded 50 years. The most given answer among students was 50 years and for policymakers 15 years. One policymaker surprisingly answered 500 years:

"100 years is already beyond your own life expectancy. 500 years is no longer imaginable, although 200 years actually already is" – respondent 17.

Most answers to why this was considered the long term were related to predictability and the possibilities of change to happen during this time. I would have expected the long-term future for policymakers to be 30 years, as it is where most policy documents focus on. That is also were most drew the limit, as one policymaker explains:

"Because in 30 years the world will have changed so much (as it did in the last 30 years) that it's practically impossible to predict what the world will be like. That's when planning becomes extremely difficult" – respondent 25.

However, the importance of thinking about the long term was recognized. Responses related to either to work towards a goal in the future, being aware of the consequences the decisions of today will have on the future or for future generations. As a respondent explains:

"It makes you see the bigger picture. It prevents you from working on irrelevant questions, that seem imminent now but that don't make sense in the greater perspective" – respondent 13.

In addition, although the importance is recognized, the long term is not particularly explicit in the studies/ work of the students / policymakers (see likert scale questions in appendix XI).

Learning

All responses to learning outcomes relate to either one or both of the important learning goals of the Soggy Paths (i.e. experience the long term and experience interrelation biophysical condition and occupation). The development from the time walk from the past to the future inspired the awareness of change of time. It creates awareness on a deeper laying of how things came to be and how we value them nowadays and the realization that we now influence the future with our decisions. As a respondent walking with landscape water explains:

"Becoming aware of the fact that water has always been there in our lives, in history, and will still be there in the future. It has seen so many things! Crazy to realise this" – respondent 9.

A student reported on an important learning outcome to have become aware of a different future by listening to the landscape in the podcast:

"I noticed that I had a hard time imagining the future of farmland (even though I studied sustainable farming for a while in my bachelors). If I think about 2152, I think about really green and resilient cities, and the walk made me realise that this I because there is a lot of futuristic images about green and futuristic cities, but not for what farmland would look like". – respondent 15.

For the policymakers, who wrote the story for the landscape, also stated to have experienced a completely different perspective. The policymakers had to think of the feelings of the landscape, the emotional side, and talking in the I form. This was difficult at first, because the tendency was to write from a policymaker perspective. It was found interesting to look at the landscape from a different perspective, not just from a technical point of view as is usually done in their daily working life. By doing so, it created the awareness that actions have an impact on the landscape.

Important in the learning experience was the tangibility. Not only to make it personal with daily issues in the future choices, but especially reflecting on how life was in the past. Specifically for the policymakers the interactive preparation meeting for the voice of the landscape with the development of the time line demonstrated how the landscape developed throughout the years. This process already started in the first step, with doing the historical research. It sparks the realization that the world can be totally different in 50-100 years and this future will also have its own challenges.

The temporal aspect showed that we need to work towards ways to create possibility in which every generation can solve its problems, instead of working towards a final plan for the country. The time walk helps to realize that the stories goes on. That the landscape it is not finished after a certain number of years. As a policymaker mentioned: 'We are not finished (*in 2030)*, there will always be a new challenge'. It not only relates to future awareness but also in the whole time line. As another policymaker stated: "We are building on the generations before us, as will the future generations will built on our choices".

Substantive interventions

For the experience itself, most participants (65%) reported 1952 as the year to imagine most tangibly. Most participants imagined their grandparents. Knowing their stories and also personal knowledge of history lessons helped to imagine this time period. The majority of the participants answered to the question 'what went well during the time walk' on the ability to imagine. The (historical) examples and the personal generational role, as the personal role of the landscape were found most helpful. The place where you walk that is related to the actual landscape you are listening to helps to imagine the landscape as actually speaking.

For the preparation of the voice of the landscape, the policymakers reported on finding it important to have examples of the past to help them imagine. The policymakers were asked to do some historical research about the landscape. This really helped them to imagine the landscape and from there onwards as actually being the landscape. As a policymaker explains:

"Finding material about what the world looked like in the past. That helped the visualization of a benevolent future, I think" – respondent 5.

The examples given in the hundred year transition period into the future were more difficult to imagine for participants. Participants needed more time to imagine the events, as for the past participants already have an image for it. For the example of future events participants needed more time to visualize them and develop a feeling for it. Moreover, for international students it was also difficult to imagine the past. They reported that the time walk was too focused on the Netherlands. With no relations to the landscape make it difficult to imagine. The absence of memories from the place to fall back on hampers to imagination.

A specific design choice was to let participants image a desirable future. In one of the groups at the end of the discussion this design choice was shortly addressed. A student mentioned that it might be too hopeful and if we should not be more realistic. I could not have summarized our choice to do so better than one of the policymakers did:

"I think as policymakers it is important to think about those positive futures, because what else would we direct our efforts to?"

Policymaker comparison of Springtij – Mixed Classroom

One policymaker already made the time walk at Springtij as a participant. This time the policymaker contributed to writing a story for the landscape. Due to the different format (individual podcast walk) the policymakers were also able to make the time walk as a participant. This allowed the policymaker to compare the two experiences and came up with some interesting observations. For example, walking with a group, in silence, through the unfamiliar landscape of Terschelling creates a certain kind of bubble. In the podcast, walking alone, in a probably familiar environment has a different experience to it. Within a group, as participants share their story, others also get inspired from these stories. It allows participants to learn from each other as well as from the voice of the landscape and the guide. As the policymaker stated in the feedback interview: "it is easier to connect with the experience of other people than to the landscape". In the podcast format the landscape and the describing of the events is more dominant. Although this time, the podcast format with just the voice of the landscape helped to imagine the landscape, instead of a person talking as the landscape at Terschelling. A policymaker also mentioned that the interaction element in the preparation phase for writing the story of the landscape really helped:

"You need other people to stretch your own imaginative capabilities" – respondent 3.

The second experimentation with the intervention at the Mixed Classroom allowed me to deepen and refine the ideas around the substantive interventions and explore outcomes related to learning. This time we actively designed the learning process of the policymakers to represent the voice of the landscape. I will now reflect on the phases with the accompanying quality criteria. I reflected on them by going through my own notes for all the meetings we had as a design team and the e-mail threads before and after meetings. We shared and discussed ideas and in time the eventual structure became clear. Another rich source of information were the Miro boards that were used for the interactive meeting with the policymakers to develop the time line and the reflection on the actual time walk with all participants.

Context (abstract conceptualization)

In the learning environment of the Mixed Classroom I enjoyed a lot of freedom to experiment with the (design of the) intervention. With the opportunity to work with the course coordinator and my supervisor that actively research ways to engage with the future was an ideal situation for me to deepen and refine the intervention. Both were also familiar with the intervention from the previous experiment at Springtij through own involvement in the design (supervisor) and active participation (course coordinator). I was in the lead for making the design fit to the context, but we worked collaboratively as I always got constructive feedback and suggestions to improve the design. Within this learning context it was possible to take the time to experiment with how the voice of the landscape can be prepared and to what kind of learning it results. In this context, we put more emphasis on the actual co-creation of the experience by actively engaging with the policymakers in a separate session.

The connection with the theme of this years edition 'Clash of Transitions' was not so explicit. We discussed the idea for the physical walk to let four policymakers each representing a different landscape. So within each conversation there would be four different landscapes. Due to the changing the physical walk to a digital podcast we stayed with the simple and structured format to make the walk with one landscape. I suggested to make the connection after the reflective break-out rooms, but since it was the last session of the course, there was no longer time to do so. The preference was to go more in depth into the different break out rooms than to overwhelm the participants with information.

Quality of relationships (active experimentation)

The voluntary commitment of the policymakers to participate in the course really helped to make the experience as successful as it was. An important moment was the preparatory meeting to prepare the voice of the landscape. That morning the Coalition Agreement was published which was cause for a lot of work that afternoon. Only a few policymakers had to cancel the meeting all together, a few still were able to make be partly present, but luckily most of them made the time to come. We assigned the policymakers an active role in the process. A crucial part of experience, and their own learning experience relied on this session.
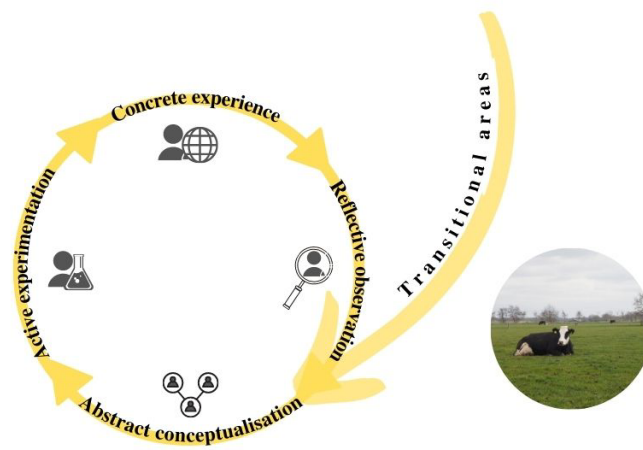
To fit the learning experience of writing the voice of the landscape to the daily working environment of the policymakers we divided them – to the best of our abilities - in the sub groups based on the policy documents they submitted. The expertise of the policymakers could also be fully put to use in this way and at the same time make the experience more believable.

Within the practical limitations, we had the challenging task of letting participants individually imagine. The overall script with the examples, making it personal and the landscape perspective helped participants to imagine. Walking through the actual environment where the landscape could be experienced was also indicated important. Yet the results also show an improvement for – leaving room for interpretation for - the imagination of the future. More guidance for the imagination might be helpful. In a physical walk this would come more naturally by a guide asking follow up questions and as participants also learn from the conversation with each other.

Important to take into account that participants know enough about the subject. A few internationals also participated in the course and for them difficult to imagine as it was too focused on the Netherlands. As discussed before in the FL process and to suspend disbelief, it is important that participants know enough about the topic to be creative. Here the interaction element also seem to provide a solution. Participants learn by sharing their stories and shows that different images of the future are possible. Since the interaction element is of crucial importance during the experience the focus is on a physical walk with a group. The reflection after the time walk helped to make sense of the experience and make the lessons learned explicit.

Concrete experience

Reflective observation

Active experimentation

Abstract conceptualisation

Transitional areas

Cycle three starts with the new context of the Transitional areas. The design was slightly adjusted to fit to the specific context but draws on the best practices from the first and second experiment (4.3.1.). Three stakeholders from within the process were asked to collaborate to present the voice of the landscape (4.3.2.) I will discuss the concrete experience stage (4.3.3.) and afterwards reflect on the previous stages with the quality criteria of context, quality of relationships and outcomes (4.3.4.)

4.3.1. Abstract conceptualization
How can the *intervention* be designed?

With the use of the design in an actual wicked problem at stake, the context is of critical importance. I will first elaborate on this context and afterwards how the design was adjusted accordingly.

Context

In May 2019 the Council of State (Raad van State) ruled that the Program Approach to Nitrogen (Programma Aanpak Stikstof: PAS) can no longer be used for granting permission for activities that cause nitrogen emission in (the area of) vulnerable Natura 2000 areas. The PAS allowed for compensation of nitrogen in the future that resulted in critical deposition rates in the present. In practice, this led to a stop in permit procedures to reduce nitrogen deposition and restore nature quality in line with European guidelines (Wageningen University & Research, nd). The resulting nitrogen crisis became high on the political agenda. A societal challenge, in which different actors are involved with diverse and conflicting interest. On the one hand there are interests around room for nature (increase biodiversity) and on the other hand how to provide a future perspective for farmers. Especially intensive agriculture has a high nitrogen deposition. In so called transitional areas, these interests collide. A consultancy firm was hired to help the different stakeholders explore a new story for the future. The challenge was how to get from the current crisis to a long-term perspective that inspires action in the present. With the use of imagination and future perspective we were looking to bridge the conflict of interest.

The context was an interesting addition as it would involve experimentation with an actual wicked problem. The intervention would be part of a larger inspiration trajectory. The purpose was to formulate a new perspective for the transitional areas by moving away from interests and find underlying values in the past, the present and the future. At the same time, the topic was also a very political sensitive one. Within the context of this serious topic, we were unsure if the stakeholders[12] would be willing to engage in such an intervention. To make sure the intervention was suited for the context I worked in close collaboration with a senior and a junior consultant. With the experience from the previous experimentation the design was as good as crystalized. We only had three preparatory meetings as a design team and only limited e-mail contact (only about some content related questions to the junior advisor).

Design choices: scripting, staging, setting

In this context different interest connected to different landscapes were involved. The choice for the landscape was thus of crucial importance. As for the experience is it also important that the walk takes place where the landscape can be seen, felt and heard. We discussed the possibilities together with a partner at the consultancy firm, an expert in the rural area. A lucky

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[12] Stakeholders in the process included: the national and provincial government, nature organizations, agriculture organizations and farmers.

coincidence was that she was already familiar with the intervention as she was asked as an inspirator at Springtij, where she gave a voice to the landscape the river. Given the size of the group and in order to facilitate a good discussion in small groups we choose to make three groups each with a different landscape. Within the exploration we found a connection of the intended landscape to the three pillars of sustainability (People – Planet – Profit). When we hit that realization, the landscapes were finalized. The landscapes that would be represented would be: 1) soil and water system (natural landscape - planet); 2) productive grassland (production landscape - profit); and 3) recreation landscape (cultural landscape - people). I was responsible for the scripting of the time walk and the senior and junior advisor were responsible for the introduction and reflection, connecting it to the specific wicked problem at stake, which resulted in the staging.

Scripting

Before starting the time walk, we would ask the specific landscape to introduce itself in the group. We suspected the stakeholders would need some help to imagine the time periods, letting go of their interests and expertise. To help start the conversation and stay in the time walk experience, we decided to use historical examples again. I adjusted the script with the historic information about the area requested by the junior consulted from experts from the consultancy firm. For future examples I used the script of the MC. For the first phase of reveal we asked the participants to think about the following questions during their silent walk: 1) what makes me happy? 2) what keeps me awake at night? To create a certain flow in the experience we decided to keep the question the same for each period in time. After sharing the answer to these two question, the landscape would share its story (phase of reframe). Three stakeholders from within the process would be asked based on their expertise to represent the voice of the landscape. We would again help them in a preparatory session to immerse themselves as actually being the landscape. After the story of the landscape the moderator would ask the participants to reflect on it (start of phase rethink)[13].

Staging

The meeting would start with an update from the different stakeholders. After a lunch we would go outside to the starting point of the time walk. The junior consultant found a location in an area where the challenges could be experienced. We visited the location (a biological farm) and accidentally found out the owner of the property was great at telling her personal story in the area and the challenges they face at the farm. We decided to ask her if she could introduce the area on the farm before starting the time walk. With the decision to stage it this way before the time walk already make the challenges more tangible. It already creates a different mindset and moves the stakeholders from the abstract to the concrete.

After her story we would go out into three groups, each group accompanied by one of the design team as the guide, and an inspirator representing the voice of the landscape. We assigned the participants beforehand to ensure diverse groups. The three groups would make the time walk simultaneously, although in their own pace. We set out the walking route beforehand with A3 boards with the periods in time on them. This way we could easily walk in silence from one period in time to the next.

After the time walk, the three groups would first reflect in their own group by drawing a vision for the future for the landscape they made the walk with. Afterwards, a professor in

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[13] Two hour's available. 15 minutes for introduction, 1 hour for the time walk (10 minutes for conversation), 1 hour for reflection (20 minutes for visualization future image; 10 minutes research questionnaire; 30 minutes plenary reflection).

land use planning would compare the three images and reflect on them. Together some general lessons would be formulated.

Setting

We would walk through the actual farmland where the cows were grazing. We often enjoy the landscape walking along side it, but now we would be in it. The specific location was chosen as an example of where the challenges collide. To make the connection in the policy trajectory to concrete landscape, instead of abstract policy documents.

4.3.2. Active experimentation - Transitional areas
How is the intervention *experimented* with?

In such delicate processes with many different interests involved, it is important to set the right context. To make the story of the landscape believable, we decided to ask three stakeholders from within the process to represent the voice of the landscape on their expertise. The senior advisor contacted three people if they would be willing to be an inspirator, representing the voice of the landscape. To help them prepare and script the voice of the landscape we had an interactive meeting.

Quality of relationships

With a few days before the actual experience, I facilitated an interactive meeting for the three inspirators to prepare the voice of the landscape. The senior and junior advisor were also present for possible necessary content related details. The inspirators were asked on openness to such a creative experiment and on their expertise relating to the landscape we had already chosen. As stakeholder in the process, they know what is going on and what the challenges are. At the same time, they could frame their voice of the landscape in a certain way depending on their own interests. We tried to cover this in the preparatory meeting by first making it personal and afterwards transforming it to the feelings of the landscape. The responsibilities were clear and strictly executed (figure 16).

Figure 16 Quality of relationships Transitional Areas

For the preparation for the voice of the landscape I used the format from the previous experiment in the MC. The junior advisor asked the three inspirators beforehand to already do a small historical search into their landscape. In the interactive meeting I followed the same script as I used in the MC (see script in appendix VI) with first the development of the timeline on a personal level and afterwards asking them to transform it to the voice of the landscape in

an assignment format with a toolbox with sentences. I offered to provide feedback to their stories before the actual experience. Two out of three send it in and I provided minor suggestions to help make it more specific and stay consistent with the landscape voice.

The text box below shows an example of a piece of text from the recreation landscape in 1952.

"You celebrate the freedom and people are building! Not only houses and factories, but I too am getting more space. I have to giggle a little at the roadside tourism. People sit down alongside the roads. Not to enjoy the greenery of me, but the innovation and technology. With a can of coffee and a folding chair, you watch the triffic go by".

The meeting went quite smoothly and each of the three inspirators provided a lot of input to my questions (see Miro board in appendix XII). There were no further adjustments to the voice of the landscape in relation to what we prepared (see figure 17).

Figure 17 Overview time walk with guides and inspirators – starting in 1852
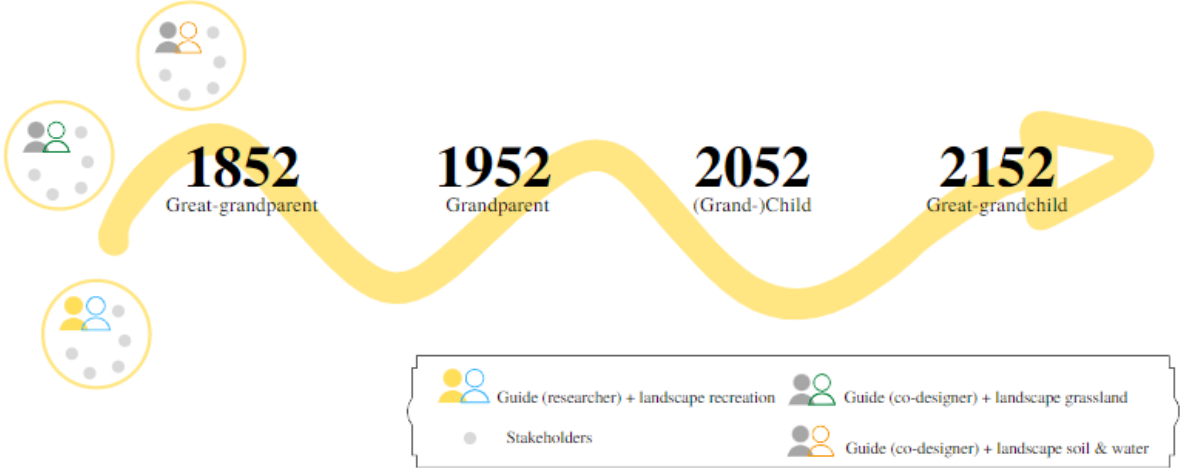
As I was sending out the script, I got an e-mail from the senior advisor saying he got a call from one of the inspirators that was skeptical about what the intervention will achieve. The inspirator was looking for specific results and had the feeling it would just be a fun afternoon. For us as the design team this emphasized to clearly state to the participants why we are doing the intervention and in the final reflection to make the link with the issue we are facing (see overview in figure 18 and final script in appendix XIII, XIV & XV).

Figure 18 Overview staging, setting, scripting Transitional Areas
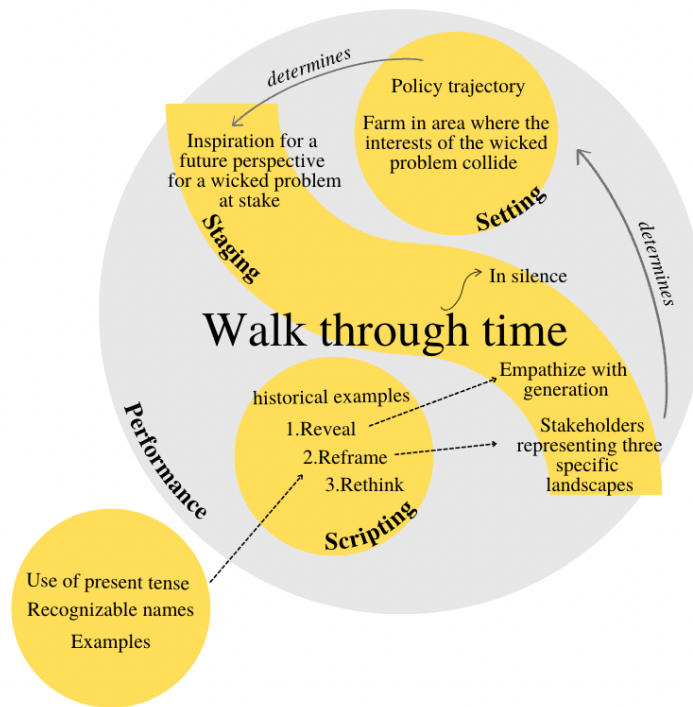
The day of…

At the end of March, on a slightly sunny Wednesday afternoon we gathered on a biological farm in the area of *Binnenveld*. First some practical matter at hand were discussed. After a lunch, prepared with local ingredients, we went outside for the introduction of the farmer that shared her personal story of the life at the farm, the surroundings and the challenges present. Afterwards the senior advisor asked everybody to close the eyes and become aware of the present moment. Afterwards he introduced the voice of the landscape. Everybody could open the eyes again and we divided over the three landscape groups. The specific landscape introduced itself after which we started the first silent walk through the cow grazing in the land, to the first time period, 1852. After the time walk, the three groups were asked to draw a desirable future image for the landscape they made the time walk with. Afterwards we reflected on the three images with professor in Land Use Planning (see figure 19).

Figure 19 Impression Transitional Areas
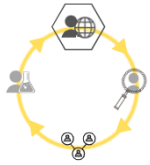
With this experimentation in policy trajectory with a specific wicked problem at stake I assessed both the substantive interventions as the learning outcomes from the experience (see questionnaire in appendix XVI). The time walk was on voluntary attendance and so we were with a small group of stakeholders. This actually turned out to be a good thing since we could now facilitate a more in-depth conversation with the stakeholders. In the plenary reflection an integration between the three visualization of the future landscapes was made and lessons were formulated. Both the junior advisor made notes during this reflection. The input was used in the final product the consultancy company was hired to make.

Outcomes

The context of the Transitional areas was a special one. It was not just solely inspirational but within a policy process to connect it to. We searched for desirable future images and underlying values, in both past and future, of the landscape in transitional areas. Not only as inspiration but also to explore how to get to a desirable future.

In general, the results showed an awareness of time and the connection of humans with the landscape. As a participant with landscape soil & water reported: "an integral approach by zooming out". The open conversation to discover multiple perspectives was highly appreciated. Almost all participants mentioned this about the intervention. For example: "Taking time for the conversation" – participant recreational landscape, and "Good conversation; sharing of ideas" – participant landscape soil & water.

The application to the specific wicked problem at stake was a bit of a search. The far future was difficult to connect to new actions in the present: "2152 is actually too far away. At least to connect it to a development perspective" – participant recreational landscape. The senior advisor also questioned the time horizon:

"The question is whether it (the time horizon) is functional for the spatial changes. Maybe for urban planning and infrastructure, I can imagine. These are long-term processes. For the rural area, what we are dealing with, I wonder if it is functional to think about this long-term (…) When you make the farming system extensive, these development stages are pretty fast in the Netherlands, something it takes a few decades, but it goes pretty fast."

Nevertheless, a few lessons were distilled from the plenary reflection from the integration between the three visualizations of the future landscapes with a professor in Land Use Planning. The first is the confidence in our ability to adapt when needed and trust in positive developments. The development of the blue-green adaptation is a valuable development in which we nowadays invest and will be happy to have done so in the future. The second is the focus on ecology and the connection between nature areas. This provides room for species to move around and support biodiversity. The third is to make choices. The focus can be on which challenges are location specific and link other challenges to it. Important is to relate it to other scales. The connection between the overall system, on national and international scale as the local implementation of measures.

The most important value might have been to have a different conversation:

"I really had the feeling it breaks the conversation open. That people sat there differently than in the previous meeting we had, for example. That really has a lot of value" – junior advisor.

Learning

Participants (*n*= 8) were asked on the learning they gained from the intervention (see Rhisiart, Miller & Brooks, 2015; table 5). Although there is a low *n*, the results indicate learning about the own values and other possible futures. As a participant with recreational landscape responded: "interesting to hear about the images of others". Or as participant with grassland reported what went well in the time-walk: "Conversation (extra character speaking); diversity of perspectives". Participants were less convinced with finding new solutions for the wicked problem at stake although they did report on asking new questions about the future of the transitional areas. The intervention contributed somewhat both to discover a desirable future image and to understand the problem better. Most of all the participants learned about temporality: "good to reflect in time zones" – participant landscape grassland. A participant with soil & water reported as the most important learning outcome: "the future cannot be predicted".

Table 5 Learning gained by participants 1 = completely disagree; 7 = completely agree).

Rank	1	2	3	4	5	6	7
The intervention made we aware of what I think is important in the future.		1			2	5	
The intervention made me aware of different possible futures.				1	2	5	
The intervention made me better understand the issue of the Transitional Areas.		1		2	4	1	
The intervention helped me to discover a common desirable future.			2		4	2	
Through the intervention, I feel that we have come closer to finding solutions.		1		4	2	1	
The intervention made me ask new questions about the future of the Transitional Areas				2	3	3	

Substantive interventions

The environment where the walk took place, where the wicked problem could be experienced, contributed to the imagination. As a participant with landscape grassland said: "being in the area gives the area a place in the conversation; an experience". It also contributed to the facilitation of another conversation about the future: "the environment provided peace and quiet".

In the reflection with the co-designers we reflected on the imagination of the participants more in depth based on our experiences as guides. The senior advisor said: "I just made it personal, then they can get out of their heads and tell their own personal story". What also helped with the shift in conversation in the past were including well-known examples in the story of the landscape. People could immediately relate to the story from their personal experience. For the far future this was more difficult: "When going into the future there was a slight tension, because interests come to the surface." – senior advisor. Participants got stuck in stating facts, discussing how the world would be. This might possibly have to do with the examples the guide gave to help participants imagine that might have put too much emphasis on climate adaptation. They were meant as challenging images, but the story of the landscape was exactly in line with this prediction, which affirmed a certain image of the future which was difficult to move away from.

In the past it was more based on sharing personal stories and exploring the diversity of perspectives. The future was more focused on finding one desirable future instead of exploring diverse perspectives. The senior advisor therefore tried to shift the conversation back to values. What helped for the junior was: "It really helped that the landscape text was really positive.

Also, from the positive aspects of the past and how we can use that for the future. The diversity of the group also contributes here. Some participants are more pessimistic than others and that is a nice addition".

4.3.4. Reflective observation
What has happened?

With the third experimentation with the intervention in an ongoing policy trajectory I could deepen and refine the intervention even further. I will now reflect on the phases with the accompanying quality criteria. I reflected on them by going through my own notes for all the meetings we had as a design team and the e-mails before and after meetings.

Context (abstract conceptualization)
The intervention was used as inspiration in an ongoing policy trajectory for a wicked problem at stake. With the purpose to inspire, the use of the intervention lived up to that purpose in the process. At the same time, this new context allowed me to deepen and refine the intervention even further in an actual planning case.

Quality of relationships (active experimentation)
The transitional areas are a political sensitive topic with stakeholders with different interests involved. As the design team we actively searched for a soft space to allow the imagination to come forth. With my previous experiences I could easily divide the tasks of what I needed when and from whom. Accordingly, the advisors would follow up on these actions. For example, after we decided on the landscapes to be represented, the senior advisor contacted three stakeholders from the process to ask them to be inspirators. They were selected on the assumption of an open and creative mindset. The three different inspirators with their own expertise helped to connect and inspire the conversation relevant to the wicked problem at stake. With the preparation they could formulate their thoughts beforehand and with their expertise facilitate an extra dimension to the conversation in the group.

Outcomes (concrete experience)
We expected that the stakeholders might have some trouble to image the periods in time. I even considered asking the inspirators to bring an artifact representing the time period to help with the imagination of the stakeholders (inspired by the design principle 'tip of the iceberg' from Candy (2010). Both advisors were not a big fan of the idea as it was considered complicated enough for the inspirators to step into the role of the landscape. In the end, we decided to just provide historical examples in the script for the guide. Yet the collaborative knowledge of the group made clear these examples were not needed. They provided too much of a frame. The examples were too much related to climate adaptation which resulted in 2 out of 3 future images of half of the Netherlands under water. Only one future image was on the specific level of transitional area where the session was located.

To move the participants away from predictions, the prepared story of the landscape might be helpful. In the recreation landscape group the desirable future involved the image of the Netherlands half under water. I am doubtful as to whether this was truly a desirable future from a personal perspective or based on what is already circulating on future images of the Netherlands. By providing a really positive future image can trigger that there are futures possible. This requires to strictly script the voice of the landscape in the preparation phase.

To steer the group away from discussion about predictions the guide also has an important role. Predictions also have a certain kind of conformity in them, portraying one future image, while the goal is to explore a range of perspectives. The guide can ask follow up questions and direct the conversation back to values. The staging at the beginning is also helpful for that purpose. The personal story by the farmer as an introduction before the time walk worked really well to set the stage and raised a lot of questions from the stakeholders.

From the beginning we as the design team were somewhat worried if the stakeholders were open to such an open imaginative intervention. One inspirator confirmed our worries after the preparatory meeting for the voice of the landscape. After the intervention the senior advisor got a call from this inspirator, actually while we were in the meeting of evaluating the experience, and asked if the view on the experience had changed. The inspirator said to be surprised with how well the intervention worked and was satisfied with the experience. Although the results did indicate that the time horizon of the intervention seemed a bit too far for the wicked problem at stake to connect it to actions in the present. We tried to make it more concrete by drawing a desirable future and reflecting on the drawings with a professor from Land Use Planning. This requires more attention in the future.

5.   Reflections from the three experiments

With the three experiments about 80 people have walked the Soggy Paths to the future, and 25 inspirators have represented 13 different landscapes. We started with staging and scripting an intervention for the creative context of Springtij, inspired by the seven-generation principle to make the experience of the future personal and tangible. In addition, drawing from Futures Literacy to stimulate the imagination, we gave a voice to the landscape as a reframe. I further deepened and refined the intervention in the learning environment of the Mixed Classroom and finally in an ongoing policy trajectory of the Transitional Areas, an actual wicked problem at stake.

Although there is not one optimal design, since staging an intervention is always context dependent, the three experiments allowed me to compare the use of the substantive interventions to some extent. I will elaborate on them in four main reflections and end with a synthesis of all these reflections for future time walks.

5.1. Open script

The first reflection is to leave the script as open as possible. In all three experiment the time walk was scripted along the phase of Futures Literacy (reveal – reframe – rethink). With the results from the first experiment at Springtij I was under the impression that participants needed more 'creative prompts' to image the periods in time. For the individual podcasts of the Mixed Classroom, historical examples were included to help with the imagination leading up to the phase of reveal. In the third experiment of the Transitional Areas these historical examples were used again to help get the conversation started. It turned out the examples for the future framed the conversation too much into a certain direction. The three experiments showed that interaction is a crucial element for the imagination to come forth. The script should be left as open as possible with only the question posed by the guide to start the phase of reveal scripted. In order to create flow in the experience, it is useful to use the same question for participants to think about during their silent walk towards each period in time.

In the project Sustainability in an Imaginary World (see Bendor et al., 2017) participants also reported on difficulty to imagine the future. For the development of the project, the researchers addressed this issue by 'pushing the open-enedness even further to alleviate participant concerns as to whether they are 'getting it right' or 'understand' what is going on'. This remains a design challenge to strike the right balance between freedom while 'avoiding creating too much anxiety, bafflement or boredom' (Bendor et al., 2017). I would agree to leave the script as open as possible and only create possible scripting options for the guide to deepen the conversation and/or trigger the imagination.

However, the open script does not apply for the voice of the landscape. At Springtij the inspirators were used to perform and we left it to them to prepare the voice of the landscape. It did demonstrate that this role requires preparation. To suspend disbelief it is important to be personal, speak in the present tense, use historical examples and recognizable names. Therefore, for the MC the preparation phase of the voice of the landscape was designed in three steps and was later also used in the Transitional areas. The first to do historical research, the second to develop a time line in an interactive meeting and the third to make the assignment that provided a toolbox of sentences to develop the voice of the landscape. Especially the first step is important as it allows the inspirators to develop a foundation of where the landscape is coming from and from there built on what might be possible in the future. To connect is from the past to the future and from a human perspective to the landscape speaking we facilitated this shift in step two. This step can be skipped, yet with the facilitation of an interactive meeting the images can be discussed and deepened that might allow a stronger deepening reframe.

5.2. A conversation about a *desirable* future

To inspire participants for action, we decided in the first design for Springtij to imagine a desirable future. In the comparison of the three cases, in the first two (creative environment at Springtij and learning environment of the MC) the imagining of a desirable future seemed easier to do. The third experiment, as the most like planning practice, with different interests involved, this seemed more difficult. What I observed, and also reflected upon with my co-designers was that the participants rather projected their knowledge into the future than describing a desirable one.

Also, at hindsight, two out of three inspirators representing the voice of the landscape also leaned too much on facts while the assignment was to formulate a desirable future. When the future image of the inspirator is too much in line with circulating predictions (i.e. in the third experiment half of the Netherlands under water) makes it difficult to shift the conversation into another frame and only reaffirms the dominated images of the future. Although facts are important aspect to imagine a certain future, the purpose of the reframe is mostly to stretch imaginative capabilities of the participants. The goal is to explore different perspectives and realize there is a difference between possible and desirable futures. It is important to explore the different perspectives instead of discussing predictions of one future image. The inspirators could rely on their own knowledge but particularly got the assignment to stretch their thinking. Beforehand I had not expected this images to be that persistent and difficult to step out of to image a desirable future. In order for participants to suspend disbelief, the reframe should have considerable detail, yet still create enough friction with the dominant images of the future to challenge mental frameworks (Miller, 2018; Frittaion et al. 2010).

One possibility to address this issue is by instructing the guide to move the conversation away from facts and to the personal element and underlying values. It is helpful to have discussed the values of the past as a reference to what might be, or still will be, important in the future. To emphasize the shift towards a desirable future, the voice of the landscape can also represent an extremely desirable future to trigger the participants on all that is possible. It is also important here to have small groups of participants. With only a limited number of participants, for example in the third experiment five participants per groups, allows within the time to discuss and deepen the conversation to underlying assumptions and values.

5.3. Time for reflection

All three experiments indicated that the long-term future was the most difficult to imagine. At first, as discussed in reflection one, I thought this was a problem that needed to be tackled. In the end, the results indicated that it is more important to have a *different* conversation about the future. The Soggy Paths time walk creates an awareness about the long-term and the temporality of decision. It also stimulates the realization that the landscape has been and always will be right beside us humans. It is often said that awareness is the first step for change, but especially in the third case, the connection with the actual urgent wicked problem at stake was difficult.

For that, the discussion and reflection at the end is a crucial part of the intervention. Bendor et al. (2017) found this to be of crucial importance to the experience. We experimented with it by drawing future images for the three landscapes and afterwards reflecting on them with an external expert on the wicked problem at stake in the rural area. The far future was considered too far away to connect it to the developmental change rate of the rural area.

It was suggested to change the time horizon to the changing pace of the landscape relating to the wicked problem at stake. Yet the experience of temporality should stay in tact, demonstrating that the landscape is finished in a certain year. The far future (>100 years) at least creates that feeling. Therefore, my suggestion would be to experiment further with facilitation of the reflection in order to fit it to the specific context to inspire action.

5.4. Experience of the landscape

In all three experiments, the results indicated the importance of the location where the landscape could be experienced. In the first experiment on an island in the changing environment from the heath and the woods. In the second experiment we stressed to the participants to make the walk in an environment where the landscape could be experienced. In the third experiment relating to a wicked problem in the rural area, on the farmland of a biological farmer. With the specific wicked problem at stake the chosen landscapes were also quite specific. The conversation among the stakeholders first started by the general images of the period in time and only after the inspirator spoke as the specific landscape did the conversation change to the landscape the group made a walk with. By literally making the walk through the landscape of which is given a voice during the experience, the experience becomes tangible and personal. It positions the landscape within the conversation reminding us that the landscape is in our past and will be there in our future.

A walk outside through the landscape provides a soft space, as Hajer & Pelzer (2018) also observed important for the imagination to come forth. In the second and third experiment some participants found it difficult to imagine the past generations in relation to the landscape. Important to emphasize is that participants first explore the living environment of the generation in reveal, afterwards the inspirator shares its story to a specific landscape (reframe) and then connect the generation to the landscape. As the international participants from the MC also pointed out is that imagination is situated, and when the landscape is too specific, it is difficult to imagine. For that, the group interaction also provides a solution.

5.5. Future time walks

With these four reflections I explored what interventions can be solidified in the design and which are open for the specific context. I do so with an overview along the dramaturgical principles of staging, setting and scripting (see image 20). The context (setting) determines the goal (staging). Within the setting, the intervention can be scripted. The time walk follows the three sequential phases reveal – reframe – rethink. The script should be left as open as possible for participants to explore in interaction in small and diverse groups. To start the conversation, the guide asks the same question for each period in time and helps the participants to empathize with a generation. The participants first walk in silence to contemplate their own answer and afterwards can discuss them in the group.

Only the reframe of the voice of the landscape is strictly scripted in a collaborative effort with inspirators. In the text for the voice of the landscape it helps to provide examples, use the present tense and use recognizable names. Following from the chosen landscapes is the actual location (setting) where the time walk takes place. A walk in the environment where the landscape can be seen, felt and heard facilitates the experience and a soft space where the imaginative capabilities can come forth more easily.

The final phase of rethink is dependent on the goal of the context and requires further exploration. The setting is both related to the overall context in which the intervention takes place and the physical environment where the walk is made.

Figure 20 Overview staging, setting, scripting

Figure 20 Overview staging, setting, scripting
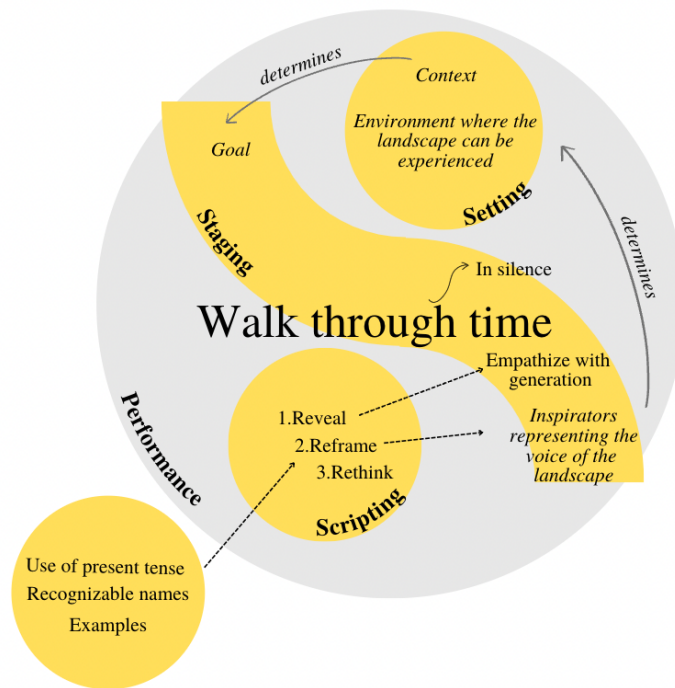
6.   Conclusion

In this final part, I will provide an answer to the main research question and discuss the main research findings (6.1.). Afterwards I reflect on the methodology and the ethnical component (6.2.). At last, I address the discussion and the possibilities for further research (6.3).

6.1. An engagement with the long-term future: the Soggy Paths

At the beginning of this thesis, I argued that the challenges of the 21st century require a long-term future perspective. Although the future is surrounded by uncertainty and often remains abstract, planners need to anticipate on it. In this thesis, I have explored how planners can engage with the long-term future (>100 years). The Soggy Paths time walk is an example of a way to do that.

The Soggy Paths time walk is a procedural imaginative logic that engages with open images of the future. Drawing from the sequential three phase learning process of Futures Literacy, Experiential Futures and dramaturgy the intervention was designed. In three different context I experimented with the intervention. From the three experiments I learned that the most important value of the Soggy Paths is the facilitation of a *different* conversation about the long-term future. The soft space allows to discuss and learn from the different perspectives, not only from the participants but also from the landscape speaking. The interactive element is a crucial design feature in that sense. The four periods in time along the time walk also stimulated the awareness about temporality. By thinking in temporal scales, participants realized that each period in time has its own and sometimes yet the same challenges. Furthermore, it created awareness that the landscape is not finished in a certain year, but will also be there after that.

The comparison of the three experiments demonstrated that there is not one final design applicable to all who wish to walk the Soggy Paths to the future. The intervention is always context dependent. Yet, with the comparison I formulated four reflections that are most likely applicable to any kind of long-term future engagement. The first reflection is to leave the script as open as possible to let participants interactively discover possible futures. Only the voice of the landscape needs to be strictly scripted to provide a reframe to the participants. The second reflection is to facilitate a conversation about a *desirable* future. Especially in an actual planning case with a wicked problem at stake (as in the third experiment), participants had more difficulty to image a desirable future and got stuck on interests and facts. Possible solutions are to guide the conversation back to the personal element, reflect on the values discovered from the past, script the voice of the landscape extremely desirable and ensure a diverse group composition. The third is related to the reflection on the experience. Again, in an actual planning context like the third experiment, the connection of the far future to the actual wicked problem at stake can be experienced as a bit far away. This requires further experimentation in the future to connect it to the problem at hand, yet still facilitate the experience of temporality. The final reflection is the experience of the landscape. Walking through an environment where the landscape can be seen, heard and felt gives the landscape an actual place in the conversation. It also highlights the fact that the landscape is an inherent part of time, present in our past and in our future.

6.2. Methodological reflections

Action research is context specific and the usual quality criteria used in the positivist tradition of validity and reliability are not very useful here since I was actively involved *in* practice. This is not to say that the research is not relevant for others. With the use of the learning cycle I systematically documented and reflected on the research process. To enhance systematic reflection, I answered the same questions that I linked to the stages of the learning cycle. In line with them, I formulated my own quality criteria, namely context, quality of relationships and

outcomes and reflected on them in each of the experiments throughout the learning cycle. In addition, the learning cycle in itself already includes a reflective observation stage. By doing so, new insights or new forms of meaning can emerge while reading. Readers can use the results and/or insights in their own context and use it as a basis for future research (De Lange et al., 2016: 66).

Another reflection is related to the small *n*. Learning is considered an important outcome of these kind of interventions yet is difficult to measure. In the first experiment at Springtij I observed a first indication of learning and only actively included learning in the second (Mixed Classroom) and in the third experiment (Transitional areas). Learning is a process, as the learning cycle that I used in this thesis in itself already demonstrates. Next to a questionnaire right after the experience, a reflection on learning some time after the intervention might give more insight into the learning experience and the impact of the experience afterwards. In the course evaluation of the Mixed Classroom with the policymakers, the Soggy Paths was touched upon, but a more in-depth evaluation would have provided more insight into the learning experience of this specific intervention. Even better would be to also include a pre-questionnaire to establish a baseline.

A note on ethics

As the research was embedded in practice, it brings some ethical responsibilities. I worked in close collaboration with practitioners in each experiment. Throughout the three experiments, I have always tried to be as explicit and transparent as possible about my research purposes and my expectations in relation to those I collaborated with. I hope to have acted with integrity with all those involved. Many were busy practitioners and I have always tried to be patient and respectful in the process of creating the experience together.

The creative environment of Springtij and the learning environment of the Mixed Classroom had a high experiential level. I worked in close collaboration with my supervisor and discussed most of the decisions in detail before putting them out into the world. In the third experiment of the Transitional areas, the context was more sensitive with an actual wicked planning problem at stake. The sensitive context also required a more delicate approach. As in the former two, I hope to have ensured my ethical responsibilities by first collaborating closely with a core design team (first circle), then collaborate with inspirators (second circle) and together experiment with participants (third cycle). The circle slowly grows, extending the relation with practitioners, building delicately on the former circle to ensure the best possible fit for the context.

With the learning cycle I hope to have systematically taken the reader with me on the journey of the design of the intervention. I hope to have done justice to process as an actual soggy path it has been in itself. I take full responsibility for the interpretation of the results and the discussion of them in this thesis.

6.3.   Discussion and future research

There are many ways to engage with the future. In this thesis I explored one in depth: the Soggy Paths time walk. The Soggy Paths time walk is a way to break out of the urgency of the now and facilitate a *different* conversation about what kind of future we want to move towards. It creates a personal experience and shift the conversation to values. The use of a procedural imaginative logic requires an active facilitation. It is a time and resource intensive process since every context is different. Every time it requires careful organization. As Candy (2010: 111) also stated: "the design of an experience is a creative act, not an algorithmic, logico-mathematical procedure". Yet, we need to have this conversation about the future. As in the first experimentation a co-designer stated the importance of these kind of interventions: "We need to tell stories; a debate about our values is needed".

The first two experiments at Springtij and the Mixed Classroom demonstrated that the intervention is not specifically planning focused, although the reframe specifically represents the landscape. The landscape has an inherent aspect of time in it, as it has always been here, stretching out into time from our history to our future. As in the Anthropocene literature better known as an experience of 'deep time'. A term that covers 'the gradual change of earth system's' (Hanush & Biermann, 2020). How planners can develop this deep time orientation further is an object of further research.

The intervention actively searches for a soft space to explore different perspectives of the future. Within the process of exploring these different perspectives it is important to be aware of the perspectives that are included. Within a policy process or an elite gathering at Springtij there is certain sustainability bubble. It is important to be aware of that and consistently reflect on questions such as: Who's future is it? What is the desirable future? For who?

The exploration of different perspectives is rather uncommon in planning. Planning is a field of work that searches for consensus for collective action for the public good (Myers, 2007). A shared future image can inspire change and structure actions in the present. The Energetic Odyssey, used in this thesis to demonstrate the dramaturgical concepts, is an example of this. Yet the point of the Soggy Paths time walk was to experience that the living environment is not done or finished after a certain policy goal is realized. Especially with the current sustainability challenges this is an important notion. For that purpose, I used the procedural imaginative logic. Essentially I assigned time horizons to the imaginative logics. For doable and juxtaposing that represent more closed images of the future and are useful for the short term, while the open images of the procedural logic are better suited for long-term. This point is something to unravel in further research.

What became clear already after the first experimentation at Springtij was the learning process of the inspirators representing the voice of the landscape. By making the inspirators responsible with an active role in the intervention creates ownership. The inspirator representing landscape the river at Springtij for example said to have used the voice of the river in another meeting. Policymakers from the Mixed Classroom reflected in the course evaluation on using their personal experience to emphasize with generation in time in their policy work and using their historical research in positioning a policy document. For future research it might be interesting to further look into the learning process of the inspirators.

A final recommendation for future research is how to further apply the development of Futures Literacy in planning. As already in the first interview came up; both present oriented people and future oriented people are needed, "but it would be nice if a person could evoke (…) the characteristics for each to a certain extent" (respondent #1). This is exactly what Futures Literacy does. By strengthening this skill, the more room for uncertainty one is able to create and live with (respondent #6). For that, we have to search for ways to make a walk with the future on a regular basis.

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Appendices

Appendix I: Elaboration on research methods (quality criteria outcomes)

For the first part of the research, I focused on scenario planning as current way to engage with the future.

Interviews

In addition to the abstract theory, I conducted five interviews to establish a better understanding of the substantive and procedural interventions to facilitate the imagination. A main strength of doing expert interviews is to get in depth understanding about a certain topic (Bogner and Menz, 2009). I explored a practical case of scenario planning more in depth, namely 'rehearsing the future'. I interviewed two scenario planning experts and three designers / facilitators of the scenarios (workshops). I also conducted an interview with a skilled Futures Literacy practitioner to gain a better understanding of the theory (see table 6). In addition, I participated in an online Futures Literacy workshop.

      The interviews were semi structured, which made flexibility and anticipation on the responses of the interviewee in the interview possible (Bryman, 2012). The interviews were held and recorded online via MS Teams and had a duration of around one hour. The interviews were transcribed and analyzed manually. In the interviews I coded for the process phases of the workshops and the conditions that were used to help participants imagine the future.

      I use numeric codes to preserve the anonymity of the respondents.

Table 6 Overview interviews

N.	Organisation and occupation	Relevance	Date and duration
#1	*Future strategist at Futureconsult*	Designing scenarios & facilitating scenario workshops for different organisations	20-05-2021 58 minutes
#2	*PBL senior researcher policy evaluation & future exploration*	(Publication of) scenariostudies for nature, environment and water, author guide to use scenarios in environmental policy, organization scenario workshops	31-05-2021 55 minutes
#3	*PBL scientific researcher in spatial planning*	Scenario study 'rehearsing the future' and facilitating of the adjacent workshops	20-08-2021 53 minutes
#4	*PBL Deputy head of department Urbanisation & Transport*	Scenario study 'rehearsing the future' and facilitating of the adjacent workshops	01-09-2021 56 minutes
#5	*PBL Deputy head of department spatial planning and quality of the local environment*	Scenario study 'rehearsing the future' and facilitating of the adjacent workshops	02-09-2021 64 minutes
#6	*Teacher 21st Century skills at the Hanzehogeschool Groningen / Futures Literacy Consultant of UNESCO*	Skilled practitioner (in Futures Literacy Laboratories)	31-05-2021 54 minutes

For the three experimentations I used multiple methods. In table 7 an overview is given of the used methods in each experiment. The transcripts of the interviews and group reflections and other data can be found in separate file for privacy reasons.

Experiment 1: Springtij

The first experimentation with the intervention was surveyed with the co-producers (guides and inspirators, n=11). The questionnaire included agree/disagree questions and open questions to gain more detailed information about the experience (see questionnaire in Appendix IV). Informal notes were taken during the (plenary) reflection. The participants could also leave a rating and a comment in the forum app. Also a feedback interview was conducted with a designer from the core team. Through the use of these different methods the aim was to establish a better understanding of the procedural and substantive interventions.

Experiment 2: Mixed Classroom

The intervention was evaluated with the participants and co-designers through a survey at the end of the walk (n=26) (see questionnaire in Appendix X). The questionnaire included four sections. The first section included questions about the long term. The time walk was about the long-term future. This section was included to get some general information about what participants consider to be long term. The second section included questions about the experience of the Soggy paths; the third section was only for policymakers participating in the Mixed Classroom who wrote a story for a landscape; and the fourth and final section included general information questions about the participant, anonymously. The survey included different kind of questions, ranging from selecting an option, likert-scale questions, open-ended question to get more detailed information. A few questions came from the first survey and therefore allowed comparison.

After filling out the survey, a 35 minute reflection in four break out rooms divided by landscape theme was held and recorded via MS Teams. Nine policymakers were present and seventeen students. There was a mix of students and policymakers from different fields, although all with an interest in sustainability. Small break out rooms (six to nine participants) were made for a reflection together on the walk. Two questions were included on the accompanying miro board to get the conversation going: 1) what was your experience; and 2) what do you take with you? At least one policymaker who wrote the story for the specific landscape was present in the break out room and the students who went on a walk with that landscape. The moderator in the group (two teachers of the course, an intern and the researcher) made sure all the participants were able to share their opinion. All groups had a diverse consistency. Policymakers from different policy area and students with a different masters, also international students. Both the questionnaire and group conversations were coded for learning outcomes (i.e. learning about time, interrelatedness between humans and landscape), imagination (i.e. design choices of making it personal, giving examples).

Also a feedback interview was conducted with a policymaker that was both a participant at Springtij and in the MC. In the MC the policymaker contributed to the design.

A reflection with the policy makers on the whole course was also scheduled a month after the course ended. During these group conversation the Soggy Paths intervention was also discussed. I analyzed the relevant parts for a better understanding of the learning experience of the policy makers. These provide some first insights into the impact of the intervention.

Experiment 3: Transitional areas

The intervention was evaluated with a survey among the participants (n=8) and the inspirators representing the voice of the landscape (n=3) (see questionnaire in appendix XVI). For

comparative purposes the survey included a few questions that were also included in the first and second experiment. Additionally a few likert scale questions were included in relation to the specific planning context. The questionnaire was coded in line with the codes from the other cases.

In the reflection informal notes were taken by the researcher and the junior advisor from the consultancy. In this reflection, a connection was made between the experience of the time walk to the policy process. The three landscape groups were asked to draw a desirable future image. The resulting three future images were then discussed with a professor in land use planning. This discussion was documented by the researcher and the junior advisor.

The whole process from design to experimentation was also evaluated with the two co-designers in a one hour online interview, recorded and transcribed manually. The interview was coded for improvements in the design and lessons from this specific context to other possible future experiments.

Table 7 Overview used methods per case

Case	Participants	Co-producers
Springtij		
Questionnaire		N=11
Rating in forum app	N=24	
Group observation	N=60	
Feedback interview		N=1
Mixed Classroom		
Questionnaire	N=17	N=9
Group reflection 1	N=3	N=5
Group reflection 2	N=5	N=1
Group reflection 3	N=5	N=2
Group reflection 4	N=4	N=1
Feedback interview	N=1	
Group interview 1 (course evaluation)		N=5
Group interview 2 (course evaluation)		N=2
Transitional areas		
Questionnaire	N=8	N =3
Group observation	N=11	
Feedback interview		N=2

Slide 1

Verslag van Briefing
Zompige Paden naar 2171
Springtij 2021

Woensdag 22 September 2021
Inloop: 16:30
Tijd: 16:45 – 18:15

Slide 2

Beleving van de impact van beslissingen op de lange termijn
Verkenning van de veranderpaden van de ruimtelijke inrichting van Nederland door een temporele verplaatsingsoefening

Slide 3

Overzicht workshop

Wandeling ± 2 min.   Wandeling ± 2 min.   Wandeling ± 2 min.

1851   1951   2051   2171

Tijd: 17:05- 17:16   Tijd: 17:18 – 17:29   Tijd: 17:31 – 17:42   Tijd: 17:44- 17:5
(11 min.)   (11 min.)   (11 min.)   (11 min.)

Wandeling ± 5 min.   Wandeling ± 5 min.

Plenair: Nu, 2021

16:30 inloop   18:00 reflectie
16:45 opening   18:15 einde
17:00 wandeling naar 1851

Slide 4

Inspirator: rol van het landschap

Landschappen
Stad (rood)
Rivier (blauw)
Cultuurlandschap (geel)
Infrastructuur (paars)
Bos (groen)
Bodem en water (oranje)

Slide 5

Blokje 1: inloop + opening

16:30 inloop
- Toedeling groepen per landschap: stickers uitdelen
- Groepjes per landschap samen laten zitten voor plenaire opening

16:45 plenaire opening door moderator + loods
toekomst voor de ruimte
(10 min.)

- Idee van stilte (thema Springtij) kort herhalen
- Doel sessie toelichten: bv. Kathedraal denken en generatie denken, stem van het landschap; stem van toekomstige generatie

Slide 6

Blokje 2: tijdswandeling

16:55 gids vertelt over tijdwandeling
(iedereen verplaatst zich in de rol, maar de spotlight staat op een duo)

1851   1951   2051   2171
Rol: je opa/oma van je opa/oma oftewel betovergrootouders   Rol: je opa/oma   Rol: je kinderen of kleinkinderen   Rol: je achterkleinkinderen of achterachterkleinkinderen

+ introductie landschap aan groep
17:00 start wandeling

Samenstelling elk groepje: Gids / moderator
Inspirator: landschap
deelnemers   Spotlight op een duo

Slide 7

17:05 - Jaar: 1851
- Gids begeleidt de groep en wandelt over de hei 'terug in de tijd' naar 1851
- Tijdens de wandeling verplaatsen de deelnemers zich in hun betovergrootouders
- In stilte denken zij na over de vraag: **hoe ziet mijn leven eruit? Hoe ziet het landschap waarin ik leef eruit?**
- Bij aankomst in 1851, gids vertelt: Welkom in 1851, ik ben de betovergrootouder van <eigen naam invullen>.
- Ter plekke vraagt de gids aan een of twee mensen om te vertellen hoe het is om hier te leven, wat ze zien, voelen, ervaren.
- Het landschap reageert op het duo en vertelt wat het landschap ziet en ervaart
- De overige deelnemers, luisteren en observeren en kunnen deelnemen aan het gesprek.

1851   1951   2051   2171

Nu

Slide 8

17:18 - Jaar: 1951
- Gids begeleidt de groep en wandelt over de hei 'vooruit in de tijd' naar 1951.
- Tijdens de wandeling ontwikkelen de deelnemers tot hun grootouders
- In stilte denken zij na over de vraag: **hoe ziet mijn leven eruit? Hoe ziet het landschap waarin ik leef eruit?**
- Bij aankomst in 1951, gids vertelt: Welkom in 1951, ik ben de grootouder van <eigen naam invullen>.
- Ter plekke vraagt de gids aan een of twee mensen om te vertellen hoe ze leven en wat ze zien, voelen, ervaren.
- Het landschap reageert op het duo en vertelt wat het landschap ziet en ervaart
- De overige deelnemers luisteren, observeren en kunnen deelnemen aan het gesprek
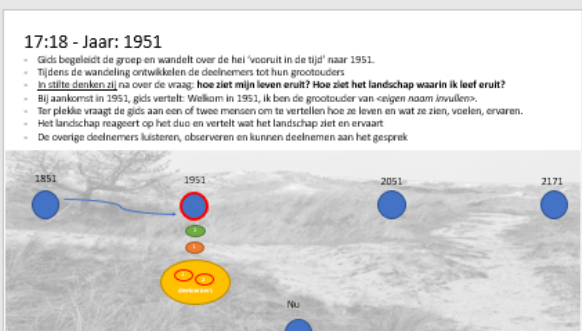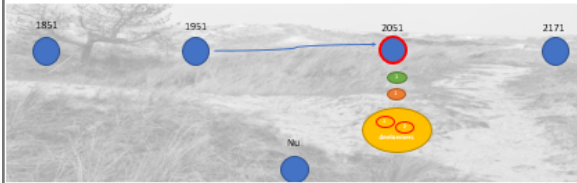
1851   1951   2051   2171

Nu

9

17:31 - Jaar: 2051

- Gids begeleidt de groep en wandelt over de hei 'vooruit in de tijd' naar 2051. We wandelen naar een gunstige toekomst.
- Tijdens de wandeling ontwikkelen de deelnemers zich tot een volgende generatie (hun kinderen, kleinkinderen)
- In stilte denken ze na over de vraag: **hoe ziet mijn leven eruit? Hoe ziet het landschap waarin ik leef eruit?**
- Bij aankomst in 2051, gids vertelt: Welkom in 2051, ik ben het (klein)kind van <eigen naam invullen>.
- Ter plekke vraagt de gids aan een of twee mensen om te vertellen hoe ze leven en wat ze zien, voelen, ervaren.
- Het landschap reageert op het duo en vertelt wat het landschap ziet en ervaart
- De overige deelnemers luisteren, observeren en kunnen deelnemen aan het gesprek

10

17:44 - Jaar: 2171

- Gids begeleidt de groep en wandelt over de hei 'vooruit in de tijd' naar 2171. We wandelen naar een gunstige toekomst.
- Tijdens de wandeling ontwikkelen de deelnemers zich tot een volgende generatie (hun achterkleinkinderen)
- In stilte denken ze na over de vraag: **hoe ziet mijn leven eruit? Hoe ziet het landschap waarin ik leef eruit?**
- Bij aankomst in 2171, gids vertelt: Welkom in 2171, ik het achterkleinkind van <eigen naam invullen>.
- Ter plekke vraagt de gids aan een of twee mensen om te vertellen hoe ze leven en wat ze zien, voelen, ervaren.
- Het landschap reageert op het duo en vertelt wat het landschap ziet en ervaart
- De overige deelnemers luisteren, observeren en kunnen deelnemen aan het gesprek

11
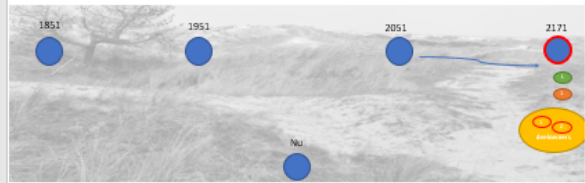
17:55 Wandeling terug naar plenair

- Gids vraagt de groep om tijdens de wandeling terug naar het nu (2021) in stilte na te denken over de vraag: Wat neem je mee naar het nu, bijvoorbeeld voor je werkpraktijk?

12
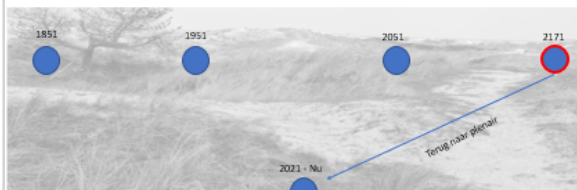
Blokje 3: reflectie

18:00 Plenaire slotreflectie door moderator

- Hoe heb je de tijdsreis ervaren? -> vraag aan landschap om reflectie te delen
- Belang van temporaliteit, paar korte reflecties
- Relatie tussen verschillende groepjes / thema's leggen (hun afhankelijkheid)

13

Aandachtspunten

Moderator:
- Let op de tijd!
- Verplaats jezelf mee in de tijd met de deelnemers als betovergrootouder, grootouder, kind/kleinkind en achterachterkleinkind. Duo's krijgen het woord.
- Wees op tijd. Er staan borden op de hei die de route min of meer aangeven.
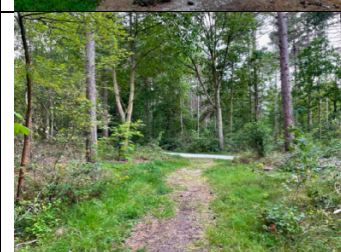
Landschap, voorbereiding:
- Denk aan tekst bij de verschillende jaartallen, maar leun vooral op je bestaande expertise
- Gedurende de hele sessie vervul je de rol als landschap
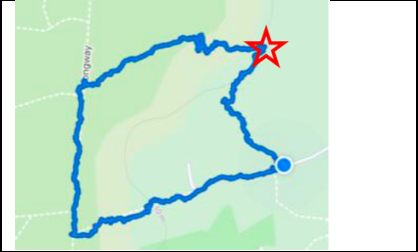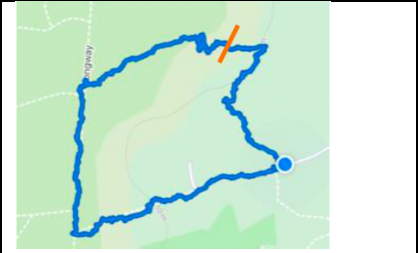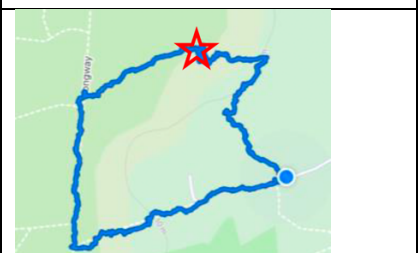
Moderator & loods toekomst voor de ruimte:
- Invalshoek: Belang lange termijn en denken in veranderpaden
- Beknopt, want zelf ervaren is nog krachtiger

Appendix III: visualization of the walking route at Springtij

Plenary opening		
1851		
1951		
Passing the present		
2051		
2171		
Plenary reflection		

1. Hoeveel deelnemers telde jouw groepje?_____

2. Zorgde het aantal deelnemers voor een goede discussie?   Waarom wel / niet?

3. Het aantal deelnemers was: te weinig   /   precies goed   / te veel

4. De groep was divers: eens   /   oneens
   a. Waarom was de diversiteit goed / niet goed?

5. De workshop duurde: te kort / tijd was voldoende / te lang

6. De locatie werd als inspirerend ervaren: eens   /   oneens

7. Er was een open en veilige sfeer in de groep: eens   /   oneens

8. Mijn rol tijdens de sessie: gids   /   landschap

9. Wat ging goed?

10. Wat kon beter?

11. De vraag ter overdenking tijdens de stilte wandelingen tussen de jaartallen maakte het mogelijk voor deelnemers om zich te verplaatsen in de tijd (in een rol):

                                        eens   /   oneens

   • waarom wel/ niet?

12. Door het inzetten van een gids kwam er meer diepgang in het gesprek: eens / oneens
    a. Waarom wel / niet?

13. Hoe had je het gevoel dat het gesprek werd beïnvloed door de stem van het landschap?

14. De kennis van de inspirator was essentieel om de rol als landschap te vervullen:

                                        eens   / oneens

   • Waarom wel / niet?

15. Voor het besef van lange termijn denken…
    a. Was het verleden: te ver weg /   precies goed / te dichtbij
    b. Was de toekomst: te ver weg /   precies goed / te dichtbij

16. Wat viel je het meeste op tijdens de tijdswandeling?

17. Wat nemen de deelnemers mee uit de tijdswandeling?

18. Heb je nog andere opmerkingen over de sessie?

De rivier, Springtij 2021

1870

Ik ben een stroom met veel gedaantes. In mijn tocht vanuit de bergen neem ik overal wat mee. In het lage land zakt zand op stille plekken naar de bodem. Mijn bodem komt hoger te liggen, zodat ik mezelf verstik. Dat dwingt me dan een andere route te vinden.
Ik speel een spel met mijn eigen afzettingen en met de menselijke bedijkingen. Die krijg ik als het moet wel klein. Want ik neem altijd de kortste weg omlaag, uiteindelijk naar zee.

Ik geniet van het verschil van zomer en winter, ik kan me terugtrekken als een kalme stroom, maar kan ook gaan kolken en razen. Dan ga ik alle kanten uit het land in, zeker als ijzige schotsen mijn waterstroom blokkeren. Soms doet het me pijn dat daarbij mensenlevens verloren gaan. Maar ik lever hen ook vruchtbaar slib, voor voedsel en bouwmateriaal.
Ja, het leven hier is geven en nemen. Vaak gaat dat in goede harmonie. Maar als ik teveel genomen heb gaan de mensen weer aan me sleutelen. Dan wordt er gegraven en wil men mij bedwingen. Als ik teveel gegeven heb gaan ze baggeren zodat ze met hun scheepjes niet meer stranden op mijn banken van zand en grind.
Langzamerhand krijg ik het trouwens steeds benauwder, ik moet mezelf geweld aan doen. Ik geloof niet dat mijn omgeving mij echt begrijpt.

1970

Ik ben in een eeuw tijd een flink stuk korter geworden. Mijn slingers zijn geamputeerd en mijn bewegingsruimte is met bijna tweederde ingeperkt. Ik ben voortdurend in gevecht met mijn basis, mijn bedding, en vraag me af hoe lang ik nog bestand ben tegen het geweld van de menselijke overheersing.
Ik tart regelmatig hun overmoed. Niet omdat ik dat zo graag wil. Ik kan gewoonweg niet anders. Soms win ik het, maar overall lever ik steeds meer in.

Ik ben verhard, zit vol met wezensvreemde artefacten en ben ingesnoerd door bruggehoofden, havens en verharde dijken. Steeds grotere schepen doorklieven mij met grote snelheid en eisen een steeds rechter parcours.
Ik mis de vis, die geen stand houdt tegen de vieze troep die in mij geloosd wordt en die ook geen plekken meer vindt om te paaien en te schuilen.
Met de vis verdwenen ook de vissers, waarmee ik het best gezellig had. Zwembaden langs mijn oevers, met dat prettige geluid van joelende kinderen, zijn verdwenen Het is vaak letterlijk een dooie boel. Het is zo veel eentoniger en fletser dan ik me van vroeger herinner.
Mensen noemen mij nu normaal, genormaliseerd. Ik vind dit ronduit abnormaal.

2070

Stukje bij beetje krijg ik, zo hier en daar, wat meer de ruimte. Niet altijd van harte, maar het helpt wel als ik mijn ware aard toon. Als bij stress mijn bloeddruk oploopt en ik mijzelf een dotterbehandeling geef door rommel langs mijn oevers op te ruimen.
Die stress loopt trouwens behoorlijk op. Het wordt alsmaar warmer. Zou het daaraan liggen dat er een steeds groter verschil zit tussen mijn pieken en dalen?
Allerlei apparaten tappen trouwens warmte bij me af. Misschien willen die mij van m'n stress afhelpen?

Er is tegenwoordig wel lekker veel leven in de brouwerij. Er wordt volop gestruind, gevist en gezwommen, en steeds vaker ervaar ik de geuren en kleuren van vroeger, het ruisen en ritselen van bladeren, de zachte strelingen van begroeide oevers.

Van de bergen tot de zee hebben mensen me volgezet met sensoren en andere apparatuur. Ik heb daar geen last van maar snap ook niet goed wat daar de zin van is. Ik vermoed dat de mensen me op die manier beter willen leren kennen. Nou, als dat helpt om mij minder stress te bezorgen dan juich ik dat alleen maar toe.

2170
Zoals ik me aanpas aan zomer en winter, aan zand of klei, steen of grind, zo lijken de mensen dat ook steeds meer te doen.
Ze hebben veel meer variatie in hun schepen, soms veel soms weinig, soms groot, soms klein, afhankelijk van mijn dieptes. Harde kades en bebouwing snoeren me niet meer zo hinderlijk in, maar bewegen mee met mijn schommelingen. Dat is fijn, want ik breng al die menselijke inspanningen en zeker hun levens niet graag in gevaar.
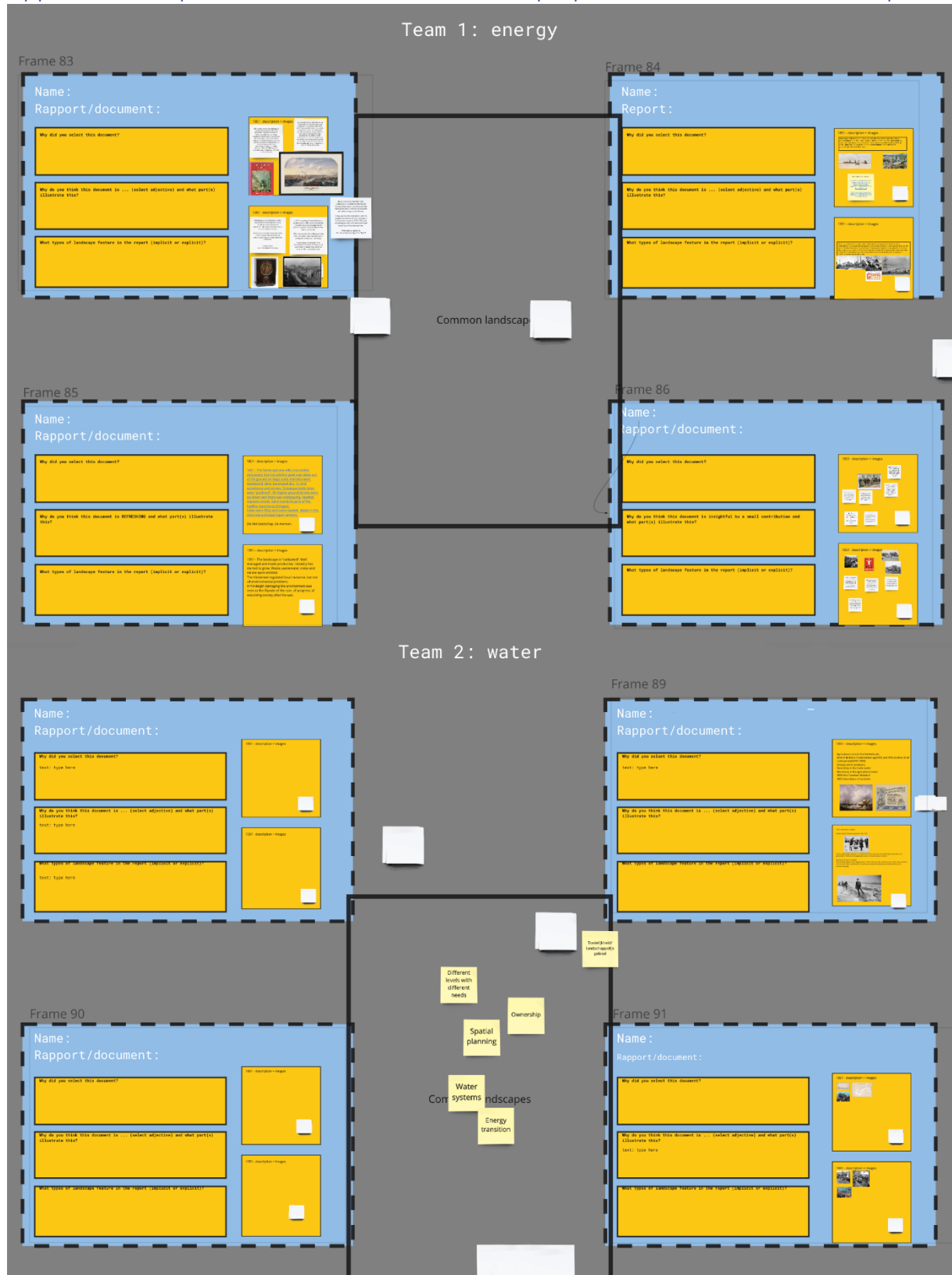Het valt me op dat mensen mij beter begrijpen; dat ze accepteren dat ik niet anders kan dan mijzelf te zijn. En wat ik bewonder is hoe inventief ze zijn om in te spelen op wat ik van nature te bieden heb. Slimheid, dat is kennelijk hún natuur.

Ik ben niet alleen maar een stroom die van hoog naar laag afzakt. Ik speel een voortdurend spel met mijn omgeving, we reageren op elkaar en zoeken steeds naar nieuw evenwicht. Het land met alles wat daar leeft draagt mij en ik vorm het land. Ik voel het leven in mij en vind mezelf steeds opnieuw uit. Niet alleen als rivier, maar als rivierlandschap.

	1870	1970	2070	2170
	Normaliseren/ afleiden/ stroomverbetering; handel en industrie primair	Nieuwe technieken, vooruitgangsgeloof; belangen van landbouw, visserij, volksgezondheid is issue, negatieve effecten zichtbaar	Klimaatverandering dwingt tot nieuwe keuzes.	Symbiose, flexibiliteit en veerkracht
scheepvaart	Veel klachten vanuit duitsland. Pleidooien voor stroomverbetering ipv afleiding. Winterbed vergroten Rotterdamse waterweg 1863-1896	1906, 1907, schepen liepen vast op zandbanken in de Waal -> normalisatie Steeds grotere zeeschepen Afsnijden van bochten	Schepen worden kleiner	Redundant systeem
waterveiligheid	Ramp 1807 en 1820, (ijsgang), onderzoek en discussie. Ging richting afleiding, naar overlaten en andere nieuwe watergangen. Stroomverbetering zou te grootschalig zijn. Dijken rommelig Mt dynamiet en buskruit wordt ijs gebroken bij	Rampen 1916, 1926, 1953 Normaliseren zodat overlaten konden worden opgeheven	Grotere verschillen in afvoer, meer robuustheid nodig. NBS	Europese afstemming, groter stroomgebied om slimmer te reguleren

	ijsgang, ook stoomboten vanaf 1861			
natuur	Steeds meer verlies aan paaiplaatsen, gradienten	Opkomst natuurbescherming	NBS, mens heeft soorten geholpen, geherintroduceerd	Zee dringt verder land in.
milieucondities	Relatief schoon, nog weinig industrialisatie en verstedelijking/ riolen ; maar ging snel slechter. 1909 vereniging tegen water, bodem en luchtverontreiniging!	Riool, rampen bovenstrooms Aandacht verschuift van waterkwantiteit naar (ook) kwaliteit	Schoon. Vol met meetapparatuur, sensoren.	
Bewoning etc	Verspreid, ook in winterbed, kleine steden.	Vanaf 1930 autosnelwegen	Mensen bewegen meer mee, ook met delfstofwinning. Mensen genieten ook meer, zwemmen weer	
visserij	Rond 1900 steeds meer overbevissing en vervuiling	Geen riviervisserij meer	Aquacultuur en landbouw, biobased grondstoffen	
landbouw	Hoogconjunctuur landbouw 1850-1882, investeren in dijken!	Rond eeuwwisseling aandacht voor verbetering landbouwgrond. Afwatering, rvk wet 1924		
Dijken en kunstwerken	Waterschappen namen de regie ipv particulieren, 1861 overstromingen als trigger. Regels voor beplanten en bebouwen van dijken; eerste harde (basalt) dijken, hoger, bredere kruin	Stuwen en sluizen; rivier wordt steeds meer een kanaal	Sensoren, fijnregeling, overstroombare dijken. Ook warmteonttrekking, energiewinning.	

Team 1: energy

Frame 83

Name:
Rapport/document:

Why did you select this document?

Why do you think this document is ... (select adjective) and what part(s) illustrate this?

What types of landscape feature in the report (implicit or explicit)?

Frame 84

Name:
Report:

Why did you select this document?

Why do you think this document is ... (select adjective) and what part(s) illustrate this?

What types of landscape feature in the report (implicit or explicit)?

Common landscape

Frame 85

Name:
Rapport/document:

Why did you select this document?

Why do you think this document is REFRESHING and what part(s) illustrate this?

What types of landscape feature in the report (implicit or explicit)?

Frame 86

Name:
Rapport/document:

Why did you select this document?

Why do you think this document is insightful to a small contribution and what part(s) illustrate this?

What types of landscape feature in the report (implicit or explicit)?

Team 2: water

Frame 89

Name:
Rapport/document:

Why did you select this document?
text: type here

Why do you think this document is ... (select adjective) and what part(s) illustrate this?
text: type here

What types of landscape feature in the report (implicit or explicit)?
text: type here

Name:
Rapport/document:

Why did you select this document?
text: type here

Why do you think this document is ... (select adjective) and what part(s) illustrate this?

What types of landscape feature in the report (implicit or explicit)?

Different levels with different needs

Ownership

Spatial planning

Water systems

Common landscapes

Energy transition

Frame 90

Name:
Rapport/document:

Why did you select this document?

Why do you think this document is ... (select adjective) and what part(s) illustrate this?

What types of landscape feature in the report (implicit or explicit)?

Frame 91

Name:
Rapport/document:

Why did you select this document?

Why do you think this document is ... (select adjective) and what part(s) illustrate this?
text: type here

What types of landscape feature in the report (implicit or explicit)?

<u>13.45 Plenair voor indeling in break out rooms</u>
- MIRO en opdracht delen via de mail

Group 1 Energy   Group 3 Built environment
Group 2 Water   Group 4 Rural areas

Break out rooms
- Eventueel kennismakingsronde
- Benadrukken dat zij dit als groep gaan doen en samen verantwoordelijk zijn voor een goed eindresultaat
- Overview opdracht geven voor mensen die evt weg moeten tijdens de sessie – schrijfopdracht volgt per mail en spreekt hopelijk voor zich
- In de groepen polsen of beleidsmakers die overblijven na 16 uur tot 17uur doorwillen. Eerst aankondigen dat dit een mogelijkheid is en dan in het tweede uur polsen.
- Invullen miro

<u>14:00 We starten vanuit het heden (2021)</u>
Hoe ervaar jij het onderwerp van je document in het dagelijks leven? Maak het zo tastbaar mogelijk.
- Waar ben jij iedere dag blij mee?
- Waar lig je 's nachts wakker van?

Voor de moderator: 1) het kan hier helpen om een voorbeeld te geven. 2) modereer het delen van antwoorden scherp: steeds 1 minuut pp bijv.
Beleidsmakers beantwoorden eerst deze vragen voor zichzelf op post it; vervolgens bespreken in de groep; moderator vraagt wie wilt delen; rest van de groep kan reageren.

BLOK 1 'TIJDSLIJN' (inleven in generaties)
<u>14.12 JAAR 1851</u>
Eerst bespreken wat er is gevonden in het historisch onderzoek. Vervolgens vragen om hier een persoon bij te bedenken.
Leef je in in je voorouder; hoe ervoer die het onderwerp van je document? (Denk aan wat je hebt gevonden bij je historisch onderzoek).
- Waar ben jij iedere dag blij mee?
- Waar lig je 's nachts wakker van?

Voor de moderator: 1) moedig beleidsmakers aan om de voorouder eerst echt voorstelbaar te maken: waar en hoe woonde en leefde zij/hij, beroep, evt naam? 2) Let wederom goed op de tijd, ook bij het delen van antwoorden op de vragen (steeds 1 minuut pp?)
Beleidsmakers beantwoorden eerst deze vragen voor zichzelf op post it; vervolgens bespreken in de groep; moderator vraagt wie wilt delen; rest van de groep kan reageren.

<u>14.24 JAAR 1951</u>
Eerst bespreken wat er is gevonden in het historisch onderzoek. Vervolgens vragen om hier een persoon bij te bedenken.
Leef je in in je voorouder; hoe ervoer die het onderwerp van je document? (Denk aan wat je hebt gevonden bij je historisch onderzoek).
- Waar ben jij iedere dag blij mee?
- Waar lig je 's nachts wakker van?

Voor de moderator: 1) moedig beleidsmakers aan om de voorouder eerst echt voorstelbaar te maken: waar en hoe woonde en leefde zij/hij, beroep, evt naam? 2) Let wederom goed op de tijd, ook bij het delen van antwoorden op de vragen (steeds 1 minuut pp?)
Beleidsmakers beantwoorden eerst deze vragen voor zichzelf op post it; vervolgens bespreken in de groep; moderator vraagt wie wilt delen; rest van de groep kan reageren.

14.36 JAAR 2051
Leef je in in iemand om wie je geeft die leeft in de toekomst; hoe zal die het onderwerp van je document ervaren?
- Waar ben jij iedere dag blij mee?
- Waar lig je 's nachts wakker van?

Voor de moderator: 1) moedig beleidsmakers wederom aan om goed te bedenken in wie ze zich inleven, bijvoorbeeld een (klein)kind: waar en hoe woont en leeft zij/hij, wat voor beroep? 2) Let wederom goed op de tijd, ook bij het delen van antwoorden op de vragen (steeds 1 minuut pp?)
Beleidsmakers beantwoorden eerst deze vragen voor zichzelf op post it; vervolgens bespreken in de groep; moderator vraagt wie wilt delen; rest van de groep kan reageren.

 14.48 JAAR 2151
Leef je in in iemand om wie je geeft die leeft in de toekomst; hoe zal die het onderwerp van je document ervaren?
- Waar ben jij iedere dag blij mee?
- Waar lig je 's nachts wakker van?

Voor de moderator: 1) moedig beleidsmakers wederom aan om goed te bedenken in wie ze zich inleven, bijvoorbeeld een achterkleinkind: waar en hoe woont en leeft zij/hij, wat voor beroep? 2) Let wederom goed op de tijd, ook bij het delen van antwoorden op de vragen (steeds 1 minuut pp?)
Beleidsmakers beantwoorden eerst deze vragen voor zichzelf op post it; vervolgens bespreken in de groep; moderator vraagt wie wilt delen; rest van de groep kan reageren.

15.00 PAUZE

15.15 Blok 2: Stem van het landschap (nog steeds in break-out rooms)
- Korte reflectie: wat viel op in de vorige opdracht?
- Moderator stuurt van thema naar specifiek landschap(selement).
Voor de moderator: 1) beleidsmakers schrijven eerst voor zichzelf op welk landschap(selement) zij voor ogen hebben op een post it; vervolgens bespreken in de groep. 2) het kan hierbij helpen om een voorbeeld te geven. Bijv. een landschap(selement) besproken op Springtij (de rivier, de stad).

- Toelichting opdracht stem van het landschap (apart document toegestuurd)
  o Verdelen jaartallen: elke beleidsmaker 1 jaartal (maar doen het wel als groep!!)
  o Voorbeeldzinnen om verhaaltje te schrijven als stem van het landschap
- Wijzen op mogelijkheid feedback: woensdag 22 december 14:00h inleveren verhaal van 200, max. 250 woorden in Engels.
- Beleidsmakers peer feedback moment laten afspreken. Beleidsmaker sturen (uiterlijk) 10 januari teksten naar elkaar en geven elkaar feedback.
- Vorm wandeling 12 januari

- o Per groep beslissen: plek in de buurt OF digitaal.
- Bespreken of de beleidsmakers die overblijven (geen practitioners profile) nog bijeen willen komen om 16u om aan verhaal te werken.
- *Tijd over: Brainstorm op MIRO voor gevoel van het landschap, kunnen ze gebruiken voor inspiratie voor het verhaal*

<u>15.45 PLENAIR</u>
Herhaling van acties en vooruitblik ervaring met studenten januari.

Timeline in interactive meeting on Miro

Exercise

We have experienced how our ancestors and the people we care about will live in the future. But what is the experience of the landscape? Now we are going to explore this experience of the landscape. For example: natureisspeaking.org

You have the honorable job of representing the landscape. A voice that often goes unheard. You will give it that voice. How is the landscape feeling? How does it relate to all human activity and developments of time?

First, divide the four different years in time over the team members so that each year in time the landscape is represented by a different person. The years in time are: 1851, 1951, 2051, 2151.

Second, try to identify how the landscape feels. To do so, you can revisit the MIRO board to see how the people were feeling.

Third, for the time walk experience on the 12th of January we ask you to prepare a short story in English of max. 200 words. From the sentences below you can find some inspiration to make

this story. We would like to help you by giving feedback on your first draft. For this, you can hand in your story before December 22th 14:00 via e-mail and we will provide feedback before the Christmas break.

In short, each person prepares one short story for a specific year in time for the landscape they are representing. For the time walk, each year is covered with a short story from one policymaker. We will ask you to present this during the time walk on the 12th of January with the students and the other policymakers.

Representing landscape: ....

1851 Policymaker 1	1951 Policymaker 2	2051 Policymaker 3	2151 Policymaker 4
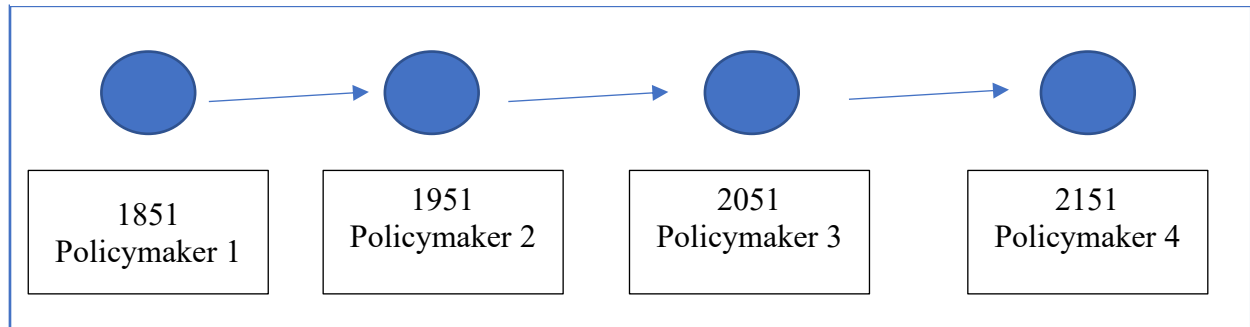
Points of attention
- Although everyone represents a different year in time, you represent the landscape with the whole group.
- Always speak in the present tense (for example 1851 is the present, 2021 then is the future).
- In your story, use examples of events and use recognizable names and places.
- For the future; what are possible developments that lead to this future.
-

Sentences toolbox
1. You can find me … (where people experience the landscape)
2. To you, I am … (how humans use the landscape)
3. I feel … (emotion), because … (explain situation)
4. Do you remember the time when … (historic example). That was … (feeling)
5. Humans use me to … (do something) and that makes me feel … (emotion), because … (explain why)
6. I give humans … (what the landscape provides for humans)
7. Because of humans I am … (state of being)
8. Do you know … (example of a place). Things are different there. In that place … (explain the difference)
9. I am … (emotion), because … (things living in the landscape doing something to the landscape).
10. I am changing … (speed of change). Are you aware of that?
11. I would like to say to you …. (what you would like to say to humans/ advice).
12. I am grateful that … (humans did this or that for me)

Appendix IX: Script Soggy Paths Mixed Classroom (all landscapes)

Hello. Welcome in the present, in the now. Today you and me are going to walk through time.
 Me? I am your guide. The ground you walk on, the wind you feel, the flowers you smell. I am all around you. I am in your history, your present and in your future. I am always there, but easily forgotten.
So first, let's find you a place to start your walk. A place where you can wander around and experience me. Bring a pen and paper, I would like you to write some of your feelings and thoughts down during our walk. But don't worry about that. I'll let you know when to stop and when to start walking again. You can shortly press pause to grab that pen and paper if you haven't done so yet.

<short silence for listeners to press pause>

You can pause at any time. I'm your temporal assistant, not your deadline dictator. Please pause me now. We will continue as soon as you have arrived at the location, when you are ready to start this journey with me.

<silence - for listeners to pause the audio to go to location>
Welcome back. Before we start walking. Can you stand still for just a moment?

Look around.

Do you see me?

<short silence>

Can you smell me? Feel me underneath your feet? …Around you?

<short silence>

This is the landscape speaking.

<short silence>

You can start walking now. As you slowly start to walk, do you notice anything peculiar about me?

<short silence>

Are you happy with what you see of me? Or are you worried about me?

<short silence>

Can you imagine? That people have walked here ages before *you* were here. I am always there. I stretch out into time. From here back to billions of years ago. And far into the future.

<short silence>

Let me take you on a journey through time. If you allow me, I will take to you to those who came before you, your ancestors. And I will guide you to the generations that will come after you. Aren't you thrilled to meet them?
<short silence>

Today I want you to meet a specific part of me, the landscape of Slochteren (energy), Ijsselmeer/Zuiderzee (water), the inner city (built area), farmland (rural area) Let me introduce myself shortly before we continue.

You never really see me, but that I am always there. The electrons, pulses, movements, cables that allow you to move around and fall in love, and that allow you to get addicted to all kinds of devices.

I can trigger so many different emotions. I can be calm and represent the slow unfolding of time, I can be dangerous, I can help you to move when the wind is right, allow you to survive when thirsty, and I can make you wet and cold when you are not properly dressed.

I am a place where people like to meet, where there is always something to do. It is said that languages and cultures change, but that I remain. Yet with climate change we are reminded that I am not indestructible, but vulnerable.

I am usually quiet. But when you listen carefully you can hear foods, plants and all sorts of things growing inside me. The diversity in the my farmlands varies significantly, mostly it is monoculture, but I prefer a polyculture. I can take many forms, from extensive fields to small patches.

<short silence>

Do you feel my presence? How I am always there, right beside you, in so many forms, shapes and sizes.

Now that you have got to know me a little bit better, are you ready for your time walk?
<geluid van transitie 'woosh' gedurende deze hele alinea> Let me first take you to 1852, as we travel back six generations, do you remember the public revolts against dynasties all over Europe? It led to the introduction of new forms of democracy: republics and constitutional monarchies. Latin America was still trembling from the Bolivarian revolution just a few decades earlier. China was still an empire, with relatively little interest in the rest of the world. And different coalitions fought for the abolition of slavery.

Can you imagine what life must be like back in 1852? I would like you to think about your great ancestor living in that time. Do you know where your great ancestor lived? << voetstapjes van iemand die met je mee wandelt> Maybe he or she saw me every day? While you think about him or her for a few minutes, let us be silent.

< 5 minute soft piano music>

<<1852 role great great ancestor>>
I would like to introduce you to someone, your great-ancestor, living here in 1852. Can you see them walking right next to you? Take a moment to feel how you are related, to feel where you come from.

Did you already find out if I was part of his or her daily life? Maybe I was cause for worries? What will your great ancestor say when you ask about what keeps him or her awake at night?
Stop for a moment to grab that pen and paper you brought with you. Can you write down the answer? Go ahead!

<<silence: time for listeners to write down thoughts>>

Did you write it down?

If you're ready, you can start walking again and I'll share some of my worries with you.

<<text landscape Slochteren, Ijsselmeer/Zuiderzee, inner city, farmland in 1852>>

I am energy.
You use all kinds of constructions and inventions to use me.
I like the windmills, I count around 9000 right now. I help them to pump water, mill grain, saw wood, make paint, oil, paper and textile among many other things. And for me that is a pleasure, since the windmills are beautiful and the wind is almost undisturbed.
You also enjoy me on your ships. At sea, the wind it is the only source of power, you catch me with large masts and sails. Inland ships are also towed by horses and even people, for which I also provide, in food.
       What I don't like is that you now started to dig and dry my peat, turf. This affects me quite seriously. A lot of people are digging for peat in me. It is hard work and the face of the earth is changing dramatically, peatland and marshes are transformed in lakes, and later in barren land, without any charm. You use it in your cities, to heat your houses and power the factories and shipyards.
       My landscape keeps changing. You have even started to dig up my energy that has been covered in the earth for ages. My coal seems to make you happy. I have my doubts. I do not like the open pits, the mines and the black smoke.
You should not forget that all life is energy, animals and humans alike. I provide you and animals with what you need in order to survive, to do your work, to farm, to catch fish, to travel over long distances.

For more than 600 years I have flowed freely deep into these lands, changing what used to be a small lake into a proper sea.
I am no longer growing, that has stopped with the dykes that you, humans, have built around me, but I still flow freely in and out with the daily tides
Many of you live next to me, trading, fishing, swimming and sheltering from and on my banks.
Of the small fishing vessels that sail daily on me there are already more than 1500, and I feel more coming every day. This worries me a bit for what is yet to come.
Recently you have also started digging channels around me, you don't like to use me to sail the long way to Amsterdam, you prefer shorter and more stable waters.
You try to manage me in more ways nowadays. I feel disturbed. Do I need to remind you about the floods? Do you remember 25 years ago I flooded into the places which you call friesland, drente and overrijssel, I think Schokland will never be the same after everyone left there.
Now I hear that you are talking about taming me, building a large barrier to stop me from flowing freely where I want. I don't see that happening anytime soon if I am honest. I hope you come to other solutions and let me remain free.

More and more often toxic fumes blow through my streets. I can barely see and all I hear is your kind throwing up. In your murmurs I keep hearing this word: cholera. I have reached the limits of my growth. I am trembling because of the heavy industries that look at me from the outside of my city walls. The people living within me are on the move more than ever. The carriages drive over me faster, stronger, more stable and more often. It sometimes even feels as if a two-wheeler drives through me, but I must be mistaken, maybe due to my old age.
Since a couple of years I hear steam whistles that come to me through rails instead of roads. I feel as if I'm in transition. The changes go so quick that I cannot feel the hand of the mayor's public governance anymore. I used to feel like a place of destination, but more and more I feel like I am a hub. More of you travel through me and walk on my streets, but less of you stay forever and regard me as your home. My mobility is more than good for my age, but I'm not quite sure if it will give me more prosperity or whether I will face larger threats than ever before.

I see the farmer coming, along with Joris the horse and his plough. He's coming to try it again; clearly, trying to loosen me. It's autumn, the ground is cold and hard so it will be a heavy task. I love the scratching feel of the plough on my back. I'm wondering what kind of crops he will sow this time; it changes every time. Secretly I'm hoping for a bit of manure, I could use some extra energy and power to survive the coming winter.

How does that make you feel when you hear about my worries? What kind of sensations do you feel right now? Can you stop for a moment and write it down for me?

<<silence: time for listeners to write down thoughts>>

Are you done writing?

You can start walking again.

<geluid van transitie 'woosh' gedurende deze hele alinea>We will continue our journey towards 1952, we travel 100 years ahead in time. During this century poverty is really starting to decline in the Global North. Many farmers quit, to ride the new wave of mass production. The world holds its breath, twice, as we endure two World wars. New international organizations are formed, like the United Nations in 1945. In 1952 Europe is still recovering, yet there is hope, the dawn of progress.
This time you might more easily recognize the person we are meeting, your grandparent. Think about him or her during your walk. << voetstapjes van iemand die met je mee wandelt>> How did he or she experience me? Off you go. I'll meet you on the other side.

< 2 minute soft piano music>

<<1952 role ancestor>>
I can hear someone humming. Do you hear that? Ah, I see where it is coming from. It is your grandparent. I told you, it would be easier to recognize your relative this time. How old is he or she at this moment, in 1952? Do you know?

Let's say hello.

Can you tell me something about your grandparent? Is he or she happy with me? Maybe you can ask what puts a smile on his or her face every morning? I would like you to write it down again. Can you do that for me?

<<silence: time for listeners to write down thoughts>>

Go ahead, write it down!

<<silence: time for listeners to write down thoughts>>

Did you finish your writing? You can start walking again when you are.

I am not so sure I am as happy as your grandparent these days.

<<text landscape Slochteren, Ijsselmeer/Zuiderzee, inner city, farmland farmland in 1952>>
I am energy.
After some cold and very harsh years, I can sense a bit of optimism in your eyes. I can feel you humans crawling around on my skin, building and making new things.
In the past hundred years, you used up my energy reserves in the form of peat and you have moved to using coal to warm your houses and power your factories. Strange thing, you also produce

something called electricity using coal to the south, in Zwolle. This causes a lot of smoke which does not always make the plants happy that root in my soil. But it does not happen that often, so we can handle it.

I wonder why you are so busy. All your activity makes me nervous, and you are building more and more on top of me. In some places, that makes it hard to breathe and regenerate.
I feel restless as you come closer and closer to the natural gas that I am hiding underground. It is precious to me, because I have built it up over the course of centuries. I am afraid of what you will do when you find it. Would it come to that? That you take this treasure from me? As you have done before with my peat and coal?

I am powerless to withstand your efforts as I feel exploited, using up my carefully built-up resources. I wonder if you have noticed how the air is changing since you started living here, thousands of years ago. But there were a lot less of your kind then, and they did not take anything from me. Except for the roots of the occasional tree you wanted. You humans are only short-lived…could it be that your kind does not remember how it looked around here when humans first came here?

You can find me between the Afsluitdijk and the provinces of Noord Holland, Friesland and Flevoland.
To you, I am a landscape for recreation, fishing, shipping, nature values and the largest fresh water reservoir of the Netherlands. I feel locked up but also calm, because of the closing of the last hole of the Afsluitdijk in 1932; it has reduced the risk of my flooding to zero.
Do you remember the time when the Zuiderzee flood through to northwest storm in January 1916. That was awful. People died, people got hurt, thousands of them lost their houses and the economic damage was huge. From that moment your plans to close me off came in an acceleration. Cornelis Lely submitted his plans for me already in 1917.
You wanted to let me disappear and that makes me feel unwanted, because I can't be where I want to be. Now I am an inland lake instead of a rough sea. But I am okay for now. I give humans a place to entertain, to make money and fresh water. Because of humans I am calm and in control now.
I am curious, because more and more water is taken from me due to a need for land for the humans to live and work. At the north side, the people took at least 460 km2 from me to create a place for fertile farmland and food supply. Do you even see a place for me? Or am I just a burden?
I am changing due to the amount of water that comes in fast from other parts of Europe to me. Are you aware of that? I would like to say to you be aware of the decisions that you make, particularly about the fast draining of the water in higher grounds. There you may need to hold the water longer for possible future drought.
I am grateful that you gave me such a great deal of functions, I am related to you in so many ways. you can't live without me. Will you keep that in mind when planning for the future?

Lately, I keep reminiscing about a century ago. How astonished I was about the remarkable transitions that appeared to happen so quickly in succession within and around me. And how the nature of my own being transformed accordingly with it. It was as if I had evolved into something different all together.
However, looking back nowadays those transitions feel so gradual and benign compared to what you have in store for me now. The mayor's city hall is buzzing with radical schemes and designs of mutilating me beyond repair. It riddles me with anxiety. As mobility appears to trump all of my distinguished features. More specifically, the automobile seems to be my compulsory poison of choice.
To accommodate all those rapidly multiplying new vehicles, you intend to wreck innumerable of my most precious and lauded building blocks. Some of which are centuries old, and have come to identify my character for so long. Furthermore, many of the canals that have served me so well for so many centuries are warranted for obsoletion. All to facilitate highway after highway. Slashing right through my heart and core from every angle. I can only image what all those exhaust fumes will do to my lungs. I truly hope the mayor and his cohorts know what they're doing. Guess only time will tell.

Time has passed. Many things have happened. I think there is still a metal remnant of the last great war, perhaps a bomb. I am still owned by the same family, and the farmer comes to work on me every day. Nowadays, he is using a tractor. He needs one. Since I've been rejoined with my neighbors, I have

grown in size enormously and it's simply not possible to work with me with small human hands for what they want from me in such a short time.

Life is more monotonous these days. The food I receive is plenty, but always the same. The crops I produce are the same. Over, and over again. I am astounded, however, that the amount of food that comes from me is ever increasing. And, what is the farmer doing to me? I feel intoxicated. I feel that apart from the crops, there is not much life left in me. The worms, moles and mice are slowly leaving me. I work so hard, I have never been so productive, yet I feel so weak. Am I getting old and unproductive? Or is there something else going on?

What thoughts are going through your head right now when I tell you about my feelings? Did a specific part surprise you? I'm curious. Can you write it down for me?

<<silence: time for listeners to write down thoughts>>

If you are ready, let's continue our journey to the next century, to 2052. You can start walking again.

<geluid van transitie 'woosh' gedurende deze hele alinea> After a period of recovering the world found itself again in a series of frightening events: the building of the Berlin wall in 1961, nine- eleven... Reports about climate and the environment are starting to pile up. The Conference of the Parties in Libreville in 2034 was also an interesting in that light, wouldn't you agree? The Time Rebel movement grew immensely during that time that's for sure!

Let us do a little exercise. Let's imagine a desirable future for a young child you care about living in 2052. Maybe your own child, or a child of a friend? << voetstapjes van iemand die met je mee wandelt> Does he or she enjoy my presence? In what kind of landscape does he or she live? Take a few minutes in silence to think about him or her. I'll see you there. This special person is also there to meet you.

< 2 minute soft piano music>

<<2052 young person you care about in the future >>
Do you feel that? The touch of someone grabbing your hand. It is the young child that you care about. Are you as curious as I am to how the life here in 2052 is? What is the most pressing thing on his or her mind right now? Can you stop for a moment and write it down?

<<silence: time for listeners to write down thoughts>>

Although there still might be worries, I feel hopeful. Let's start walking again and I'll tell you all about it.

<<text landscape Slochteren, Ijsselmeer/Zuiderzee, inner city, farmland in 2052>>
I am energy.
I have changed dramatically over the past 100 years. First for the worse, I was afraid to see in which direction you were headed. But recently I have started to feel a lot better. The trembling has stopped, after years with heavy seizures. The last decades have been a period of transition. In the beginning you changed me, used me for your own benefits mostly – extracting natural gas and endless constructions in search for profits; more recently you have helped me to heal. Probably the trembling and the signs of a starting fever helped you realize that you needed to change your behavior. And I am so happy you did. There is probably no human nearby that knows nothing about me and the consequences of humans' past actions.
I am still energy.
You still use me to acquire the energy and materials you need for living. I'm okay with this: seeing humans thrive within my boundaries gives me joy. Now however, the humans and I are indeed much more in balance. I can keep the remaining supplies of natural gas, as you developed alternatives that won't make me ill. My whole surface is now adapted to these new energy carriers, rife with

cables and pipelines and storage facilities. Windmills as far as the eye can see, producing electricity and hydrogen. Fortunately, you chose to import me too, to make sure that I wouldn't collapse under all your needs. This feels all right. I'm happy to provide for you and facilitate your prosperity, as long as you respect and care for me in return. I hope that these developments have shown you that you need to be adaptive to thrive. Becoming less dependent on me would help you become more resilient to changes in the future.
I am still energy – and probably always will be.

You can find me between the Waddenzee and the regions North, East and West of the Netherlands. You can experience me swimming, floating, sailing through me or from the strong dykes. To you, I am still a source of pleasure. I provide fresh water and you use me for recreation and exploring nature. You want to forget the danger I can bring, you ignore me.
I feel a bit afraid, because I am not sure I will be able to provide fresh water in the future. Due to sea levels rising it will be necessary to restore my open connection with the Waddenzee, so I can move with the sea and get more space.
Still, I am so happy to see you enjoy my waters. You use me for recreation. You go sailing and swimming. You walk along my shores. Although restricted, you can still go fishing. I am happy that you decided to have fish protected and fishing for consumption forbidden. It makes the life inside me fully flourish again.
Do you remember the time when Ramspol couldn't prevent the flooding of Zwolle? My water level has become higher in the last decades and the storm was enormous. The rivers that feed me were too full. I couldn't help it. That was so awful and frightening. People and cattle died, houses were destroyed.
Only after I show you my force, you take immediate action. You gave me lots more space. The major of Zwolle even put me in the spotlights and showed that you care about me.
I am changing fast; with the current space you give me, I can't keep up with climate change. Do I need to remind you of that? I would like to say to you that you need to take me seriously. Or I show you the hard way that I need more space. I remain a threat to water safety because I am too much restrained between the dykes that enclose me.

I am all over the country. You don't have to travel far to find me. I've seen a lot. For you I am a place to enjoy life. In the past, you used to come to shop, now mainly to meet eachother. People like me. I give them a sense of identity. They like that I am very old and yet new. Everything around me has changed so much in past years. I now see high windmills in the surrounding area and solar panels in the houses outside me. I hear you like that. That wasn't always the case. Many of you have walked down my streets with signs, fireworks and booing. Your mother and father were also present; even the mayor joined in. Change evokes resistance. Now it seems the most normal thing in the world again. I like that they saved me all those windmills and came up with other solutions to keep me warm. My breath doesn't smell so awfull anymore: all cars are clean and parked outside me. I enjoy seeing the kids playing in the street again.

Too much, has happened in the last few decades. Climate change has taken a big toll on simple farmlands, like me, but also on the life within me. I have missed the rainworms, moles and beetles rummaging through my soil for too long. Floods have taken over me and my crops, as well as extreme droughts. The circumstances have taken the best of me and I feel guilty, not being able to provide for the people and cattle that need to be fed.
 We must not forget though, that there always is, and will be, a silver lining to all of this. I hear you talking of research that shows great results with practices from organic agriculture, such as mixed cropping. I can feel productive again, like I did a century ago, but also healthier and stronger. I feel as if I'm ready to face the future, able to provide food for many years to come. I believe that when we work together, from a holistic view of the climate and agriculture, we will be able to move forward, for me to become healthy again, delivering healthy produce and contributing to environmental wellbeing.
What is the first thing that pops into your head right now? Do you notice anything changing in your feelings towards me? I would like you to write it down again.

<<silence: time for listeners to write down thoughts>>

Let's continue our journey, to the next century, to 2152. You can start walking again when you are ready. Take your time. Remember, we do this on your pace, no need to rush, no deadlines to catch here. I can imagine you are becoming a little light headed as we have already traveled through time over almost seven generations. Feel free to press pause for a moment. Otherwise we will slowly continue.

<geluid van transitie 'woosh' gedurende deze hele alinea> After some fall backs in old behavior, there was also a lot to celebrate, like the signing of the non-use agreement on solar geoengineering in 2061, do you remember? That things were not always easy was painfully made clear in 2089 when the most prestigious water engineers from Jakarta rapidly needed to come to the Netherlands to help out. I think it was international news. Or what about in 2114 with riots of action group TechNO against the ever growing power of artificial intelligence?
But as the old saying goes, no rainbow without a little rain. The future is looking bright again. I would like you to think about your great-grandchild or the great-grandchild of a friend. << voetstapjes van iemand die met je mee wandelt> Where is he or she living? Close to me perhaps?
You can think about this child for a few minutes in silence.

< 2 minute soft piano music>

<<2152 young person you care about in the future >>
Take a moment to take it all in. I see so many things. What do you see?

<<short silence>>

Let's meet the future generation we care about, living here, in 2152. Who is there to meet you? Your great grand child, or perhaps a representatives of a society that you hold so dearly? Do you see him or her standing in front of you? Can you ask, what is he or she grateful for?
Can you write it down for me?

<<silence: time for listeners to write down thoughts>>
Have you written it down?
You can continue your walk. Let me share with you what I am grateful for.

<<text landscape Slochteren, Ijsselmeer/Zuiderzee, inner city, farmland in 2152>>
I am energy
I am speaking to you from a place called Slochteren, although you don't call it that anymore. Not just because Slochteren – along with most of the northern region - is now under water, also because the old boundaries (and names) have faded. Even though communities are still rooted locally (whether on land or floating in the ocean), you now consider yourselves citizens of earth. You are more connected with Earth, and with me as well. I am happy that you see me as the truly collective good that I am.
I still give you warmth, food, light, movement and life force. This happens in a whole new way compared to the old days, do you remember? Something has changed fundamentally.
I felt exploited, by what you used to call the economy. So I joined forces with my friend Water and slowly flooded the low-lying areas all around the world. This has disrupted your way of living and reminded you of your place in the cosmic order. Your life is now much more centred on my regenerative nature. For example, you used to put a price tag on me. Nowadays you are no longer required to pay for using me. You use what you need on a local scale, because new technologies have turned scarcity into abundance. You are giving back to me, by restoring fertile soils, forests and other natural qualities.

And at last, you have discovered that I am not something external, to be extracted. I am everywhere, connecting humans, nature and technology.

For me it feels like I am reborn, like everything is back in balance and connected. I am grateful that you have found back your place in the world, and your connection with me.

The past years have been turbulent for me. Sometimes I long back to the days in which my life was a bit more calm. However, I also feel that I am getting used to my more dynamic nature. I feel that the people living around me have adapted to this as well.

In the past years I have said goodbye to some old friends, but I have also welcomed new ones into my life. I have gotten more space to move and breath for which I am grateful. I do pity the ones that have had to look for new homes as a result of this. However, in return I am surrounded by unique nature areas such as marshes and new islands. These provide habitats for birds which I really enjoy.

Over the years more and more windmills have arrived in my water. A development that I did not like at first. But it has proved to be a place that can host diverse wildlife, provide space for the new sea farmers. I am happy to welcome them as they honor me in my full potential.

Maybe in a way I am going full circle, and I have regained some of my wilder characteristics that I also had when I was still the Zuiderzee.

Although my bad breath disappeared decades ago, I still feel a bit asthmatic and short of breath because of all the concrete sidewalks, squares and asphalt roads that used to be running over me. Nowadays, despite my age, I feel lighter, as if a weight was lifted from my shoulders. The mobility is hovering over me and I see lots of wooden and bamboo buildings. The grey of concrete and asphalt was replaced by the green of grass, bushes and trees. Vehicles no longer touch me, but only gently caress me with the wind they leave as they pass by over the green. People and animals are walking more than ever and tickle my skin. I am grateful that you finally started to listen, because I kept telling you green has always been my favorite color! My friends around me, Mr. Country and Ms. Sky finally stopped laughing at me because of my grey clothes. I don't know if we can ever get our hands on such a beautiful white coat that we used to get, but I sure do like my green coat in summer and my orange one in autumn. The mayor was even handed a ribbon for my bright green color. I have the feeling people like the mayor more than they used to, they listen to him and I can hear you saying 'hi' to each other once again in my busy streets. I feel like a home again, for humans, insects and lots of other animals species. The past few years I even saw some animals I never saw before… And my friends Mr. Country and Mr. Sky also didn't recognize them!

Look at me flourishing with all those different crops – carrots, cabbage, potatoes - in beautiful lanes and circles growing together and waiting to be harvested and at my borders those beautiful grasslands and flowers. I know this hasn't been always the case. In my far corner you find some threes that were still there 150 years ago, and they tell me about the dark times where chemicals and single crops made me sicker by the day. Those chemical fertilizers were finally abolished after the breakthrough at Wageningen university in 2138 on how to grow and use fungi for every type of farmland. Building with nature at its finest. Me and my brother sister farmlands have never felt so alive and have never been able to yield this much.

Subsequently the size of me and my brothers and sisters have been diminished. Large parts of my land have been given back to nature and turned into swampy land, heather or forest. But also you started living on my land more and more. Not that I notice it that much. The materials you use are nature-based and their waste is so limited and impossible to harm me anymore for which I am really grateful. The other way around happened as well. We farmland invaded their space as well. After two centuries of exclusion we have entered city territory. They call themselves city farmland and although they can be a bit pretentious at times, we love our extended family.

Is this in line with the future you imagined? Or did it change now that you heard my story? I think you know what I am about the ask. Go ahead, right it down!

If you are done writing let's travel back together to the present. What an insightful journey is has been. At least, I thought so. I leave you to silently contemplate your experience for a few minutes. I'll see you soon.

What did you think? What was it like meeting your great-grandparents?

And what about the future generation?
I will give you some time to write it down.

If you would describe your experience in one word, what word would it be?
When we come to a close, take a picture with your digital device. Of what you see right now, of me, solidified in your direct surroundings.

I'll hope you remember how you feel right now, and that you take me with you.

Go in peace now.

For a better understand of futuring, this survey asks about your experience of the Soggy paths time walk.

The survey includes four sections. The first section - sensitivity for the long term; second section - experience of the Soggy paths workshop; third section is only for policymakers participating in the Mixed Classroom who wrote a story for a landscape; fourth section - general information (anonymously)

The survey will take approximately 10-12 minutes to complete.

Section 1: long term

1. **How many years into the future do you consider long term?**
2. **Why do you consider this number to be long term?**
3. **To what extent do you agree with the following statement (1= fully disagree; 7= fully agree):** The long term is explicit in my every day work / studies
4. **If you would like to elaborate on your answers about the above statement you can do so here**
5. **To what extent do you agree with the following statement (1= fully disagree; 7= fully agree):** In my studies / work, I reflect daily on the consequences for the long term
6. **If you would like to elaborate on your answers about the above statement you can do so here**
7. **To what extent do you agree with the following statement (1= fully disagree; 7= fully agree):** I include the long term in everything I do for my work / studies
8. **If you would like to elaborate on your answers about the above statement you can do so here**
9. **Can you name a reason why you think it is important to think about the long term in your work / studies?**

Section 2: Questions about the soggy paths time walk experience

10. **The landscape that I walked with today was...**
    a. Energy
    b. Water
    c. Inner city
    d. Farmland
11. **If I were to describe my time walk experience in one word, it would be:**
12. **Can you explain shortly why you chose this word to describe your time walk experience?**
13. **What is your most important learning outcome of walking the Soggy paths from 1852 to 2152?**
14. **Which year could you imagine most tangibly?**
    a. 1852
    b. 1952
    c. 2052
    d. 2152
15. **Can you explain shortly what you imagined for this year?**

16. **What did you find most surprising during the time walk?**
17. **Can you name three things that went well during the time walk?**
18. **Can you name three things that can be improved in the time walk?**
19. **Can you describe in two sentences where you walked today (your walking route)?**
20. **Can you explain how the environment where you walked contributed to your overall time walk experience?**
21. **Do you have any other suggestions or comments about the time walk?**

Section 3: Only for policymakers participating in the Mixed Classroom
If you did not write a story for the voice of the landscape as a policymaker in the Mixed Classroom, you can skip these questions.

If you prefer to answer in Dutch, you can do so for the following questions.

22. **I wrote the voice of the landscape for…**
    a. Energy (slochteren)
    b. Water (Ijsselmeer)
    c. Built environment (inner city)
    d. Rural area (farmland)
23. **What did you learn during the writing process while giving the landscape a voice?**
24. **Can you explain shortly how you experienced representing the voice of the landscape?**
25. **What was most helpful in the preparation phase in the december meetings to immersive yourself as actually being the landscape?**

Section 4: general information
26. I am:
    a. A policy maker participating in the Mixed Classroom
    b. A student
27. **What is your year of birth?**
28. **What is your gender?**
    a. Male
    b. Female
    c. Prefer not to say
    d. Other…
29. **My field of work/studies is…**
30. **My employer is… (only for policymakers)**
    a. Ministery
    b. Province
    c. Municipality
    d. Waterschap
    e. Other…

Appendix XI: Mixed Classroom results descriptive statistics long term

	Students (N=17)	Policymakers (N=9)	Total (N=26)
Minimum	10	15	10
Maximum	200	500 / 50*	500
Average	63	82 / 30*	70
Mode	50	15	50
Median	50	30	40

*One policymaker answered 500 years, excluding this answer, the average is 30 years.

Likert scale question: The long term is explicit in my every day work / studies (N= 26)

| 1 fully disagree	3.8%
2 moderately disagree	19.2% (-> most policymakers)
3 slightly disagree	11.5%
4 neutral	3.8%
5 slightly agree	**26.9% (-> most students)**
6 moderately agree	11.5%
7 fully agree	23.1%

Likert scale question: In my studies/ work, I reflect daily on the consequences for the long term (N=26)

1 fully disagree	7.7%
2 moderately disagree	15.4%
3 slightly disagree	**26.9% (-> policymakers & students)**
4 neutral	15.4%
5 slightly agree	0%
6 moderately agree	23.1% (-> most students)
7 fully agree	11.5%

Likert scale question: I include the long term in everything I do for my work/ studies (N=26)

1 fully disagree	3.8%
2 moderately disagree	**23.1% (-> most students)**
3 slightly disagree	15.4%
4 neutral	11.5%
5 slightly agree	**23.1% (-> most policymakers)**
6 moderately agree	19.2%
7 fully agree	3.8%
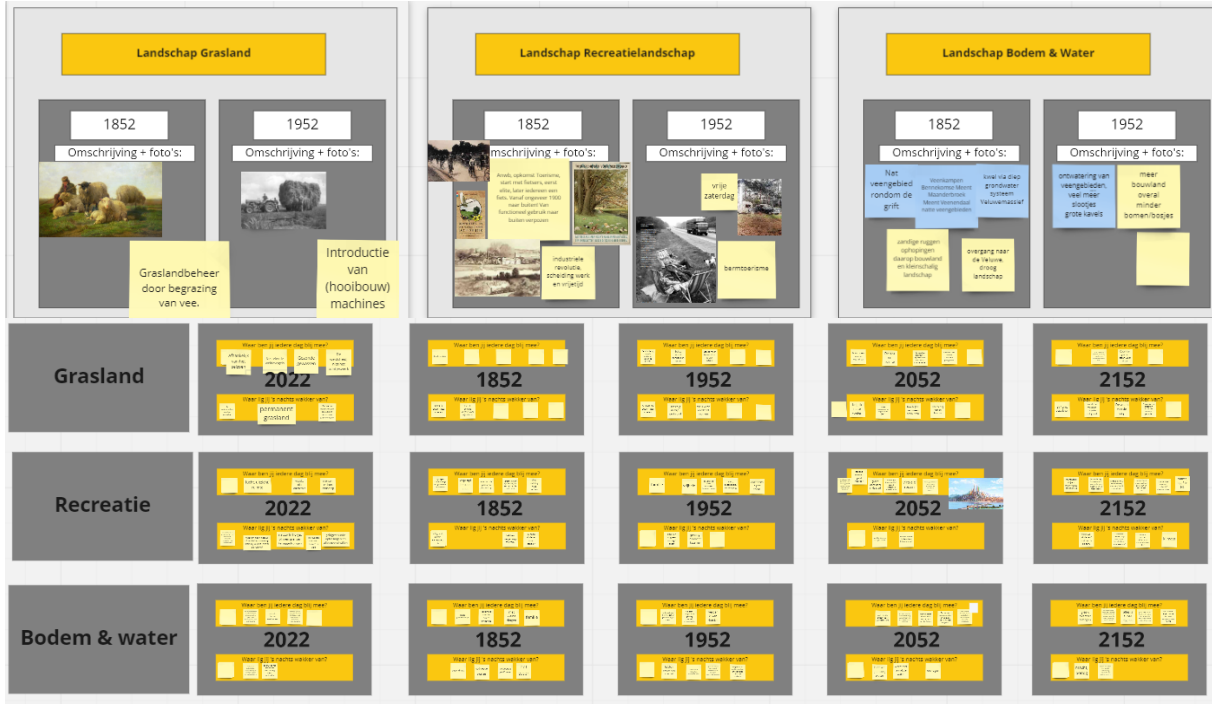
<u>Voorbereiding</u>
- Bordjes met jaartallen in gebied uitzetten
- Groepsindeling (zo divers mogelijk)
- Papier en stiften voor toekomstbeeld tekenen

<u>Blokje 1: Opening</u>
12:45 introductie op het erf, indien mooi weer buiten.
   i.   Boerin: context gebied, waar zijn we (gebied), wat speelt hier, wat zijn belangrijke ontwikkelingen in het gebied (woningbouw, N2000, stikstof)?
   ii.   Organisatie: positionering wandeling tov vraagstuk beleidsontwikkeling overgangsgebieden (diversiteit van perspectieven/waarden tijdens de wandeling resulterend in een gezamenlijk toekomstperpectief tijdens reflectie)
   iii.   Organisatie: algemene introductie stem van het landschap

"Vandaag maken we een wandeling door de tijd. Ik loop vandaag met je mee. Wie ben ik? Ik ben de grond waarop je loopt, de wind die je voelt door je haren, de bloemen die je ruikt. Voel je mijn aanwezigheid? Ik ben overal om je heen. Ik ben het landschap. Ik ben in je verleden, in het heden, en ook in je toekomst. Ik ben er altijd, maar ik word snel vergeten. Vandaag ga je op pad met een specifiek deel van mij, namelijk bodem & water, het grasland en het recreatielandschap. Zij zullen je meer vertellen…"

   iv.   Uiteen in groepen
        a. Bodem & water
        b. Grasland
        c. Recreatielandschap
   v.   Gids vraagt landschappen zich voor te stellen aan hun eigen groep

<u>Blokje 2: wandeling</u>
13:00 Start wandeling

Bij elke stop (jaartal 1852 – 1952 – 2052 – 2152) gaat het gesprek als volgt:
1. Gids deelt historische ontwikkelingen
2. Wandeling in stilte waarin deelnemers zich verplaatsen in generatie dmv de vraag: waar ben ik iedere dag blij mee? Waar lig ik 's nachts wakker van?
3. Bij aankomst in jaartal delen deelnemers verhaal
4. Landschap reageert op verhaal deelnemers
5. Deelnemers kunnen reageren

1852

13:05-13:16

13:00

14:00

2152

13:46-13:58

2052

13:32-13:44

1952

13:18-13:30
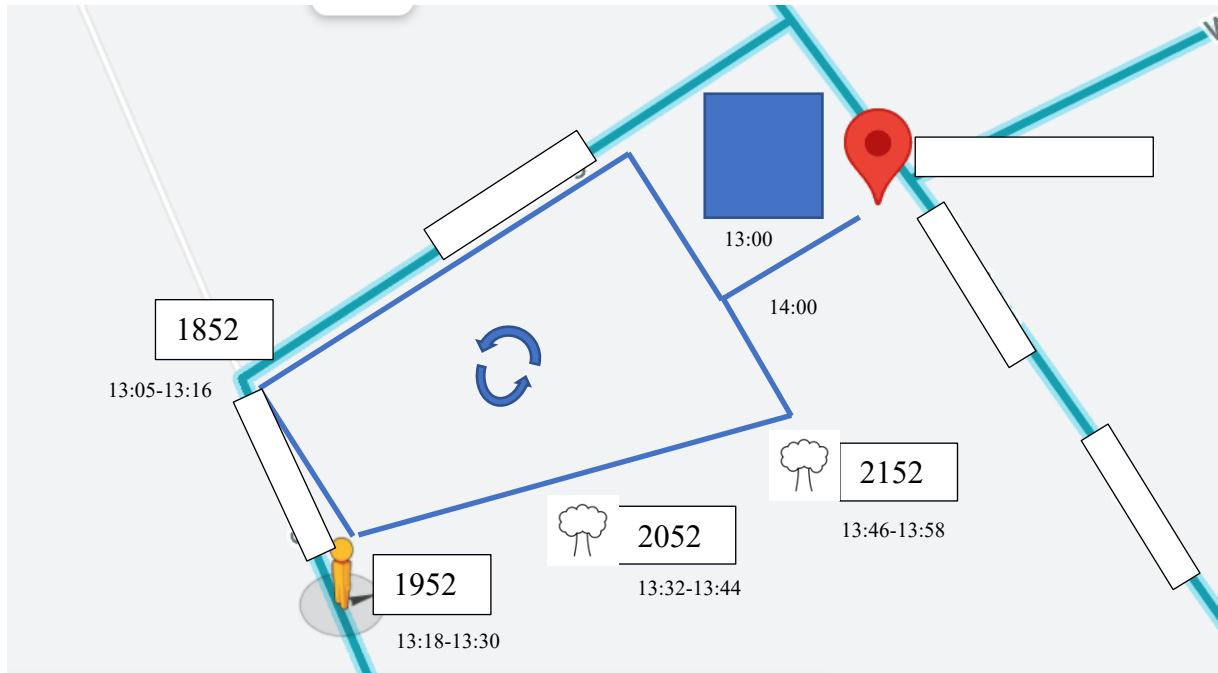
Blokje 3: reflectie
  i.   14:00 Reflectie in groepen, begeleidt door gids
        a. Elke groep tekent / visualeert samen op tafel aan toekomstbeeld van landschap op basis van waarden
  ii.   14:20 Vragenlijst onderzoek
        a. Professor land use planning bekijkt tekeningen voor plenaire reflectie
  iii. 14:30 Plenaire reflectie
        a. Vraag aan landschappen: Wat viel je op tijdens de wandeling?
        b. Hoe plaatsen we de ervaring in het grotere geheel?

Laten we onze wandeling door de tijd beginnen. Ik neem je mee naar degene die voor jou op deze aarde rondliepen, je voorouders. En ik neem je mee naar de generatie die na jou komen. Laten we beginnen in 1852. Daarvoor reizen we zes generaties terug in de tijd.

Verspreid over Europa vonden publieke opstanden plaats tegen dynastien. Het leidde tot nieuwe vormen van democratie: republieken en consitutioneel monarchien. In Nederland kende de landbouw veel kleine gemengde bedrijven met wat koeien, een paar varkens voor vlees en paarden als trekdier. Het was vrij moeilijk om het hoofd boven water te houden, vooral op de arme zandgronden. De akkerbouw was vooral gericht op het produceren voor eigen consumptie. De rest van de productie werd op de lokale markt verhandeld. Het landschap veranderde rond 1800 met de slagenverkaveling. Hierdoor ontstonden er lange slagen en stroken in het landschap.

Kun je je voorstellen hoe het leven in 1852 geweest moest zijn? We wandelen in stilte naar 1852 waarin ik je wil vraag te denken aan je overgrootouders die toen leefden. Waar was je voorouder blij mee? En waar maakte hij of zij zich zorgen om?

==< wandeling in stilte>==

<<1852: overgrootouder>>

Ik zou je graag aan iemand introduceren, je overgrootouder. Zie je hem of haar voor je? Neem een moment om te voelen hoe jullie verbonden zijn.
Waar was je voorouder blij mee? En waar maakte hij of zij zich zorgen om?

==<<deelnemers delen hun verhaal>>==

Eventueel doorvragen als gesprek moeilijk op gang komt: Weet jij waar je grootouder leefde? Was het landschap deel van hun dagelijks leven?

==<<landschap reageert op deelnemers, bv 'zo was het ook voor mij in 1833 toen …' >>==

Hoe voelt dat nu je het landschap hebt gehoord?

==<<deelnemers delen hun verhaal>>==
Laten we onze reis voortzetten, 100 jaar vooruit, naar 1952.
Na 1850 stijgen de prijzen van dierlijke producten harder dan voor plantaardige producten. Het werd de hoofdtak van veel argarische bedrijven. Door verslechten van economische omstandigheden in jaren 1920 probeerden veel bedrijven de productiviteit per arbeidskracht te verhogen om nog voldoende inkomen te genereren. Inmiddels houd de wereld voor de tweede keer haar adem in als er een tweede wereldoorlog plaatsvindt. In 1952 is Europa nog steeds aan het herstellen, maar er is hoop, we staan aan de vooravond van vooruitgang.
Deze keer zul je makkelijker je voorouder kunnen voorstellen. Het gaat namelijk om je eigen ouders, of opa of oma. In onze wandeling in stilte denken we weer na over de vraag: Waar was je voorouder blij mee? En waar maakte hij of zij zich zorgen om?

==< wandeling in stilte>==

<<1952 grootouder>>

Zie je je ouders/grootouders voor je? Waar was je voorouder blij mee? En waar maakte hij of zij zich zorgen om?

Eventueel doorvragen als gesprek moeilijk op gang komt: Hoe oud is jouw vader of moeder, opa of oma hier, in 1952? Kun je me wat vertellen over hun leven?

Hoe voelt dat nu je het landschap hebt gehoord?

We gaan naar ons volgende jaartal, 2052.
De wereld bevindt zich in een periode van herstel. Met de opkomst van de Europese Unie, officieel in 1992, en het gemeenschappelijk landbouwbeleid kwam de intensieve veehouderij in een stroomversnelling. Naast productie wordt ook natuur belangrijk en worden verschillende Natura 2000 gebieden aangewezen. Tegelijkertijd verandert het Nederlandse landschap snel. De bloeiende weilanden vol insecten en vogels hebben plaatsgemaakt voor strakke groene grasakkers. Ook internationaal was het onstuiming en kwam tot zijn hoogtepunt op de Conference of the Parties in Libreville in 2034.
Laten we ons een wenselijke toekomst voorstellen, voor een kind dat leeft in 2052. Misschien is het je eigen kind, of een vriend of vriendin. Waar is hij of zij blij mee? En waar maakte hij of zij zich zorgen om? Denk daarover na tijdens onze wandeling, in stilte.

< stilte wandeling>

==2052 jong persoon om wie je geeft ==

Wat zie jij voor je als je denkt aan het kind dat hier leeft in 2052? Waar is hij of zij blij mee? En waar maakte hij of zij zich zorgen om?

Eventueel doorvragen als gesprek moeilijk op gang komt: Hoe ziet een dag in het leven eruit? Wat doet hij/zij? Wat heeft ervoor gezorgd dat het er zo uit ziet?

Wat is het eerste wat in je opkomt nu je het landschap gehoord hebt? Voel je iets veranderen in je gevoelens voor het landschap?

We reizen nog eens honderd jaar de toekomst in, naar 2152.
Dat dingen niet altijd makkelijk waren bleek wel in 2089. Hoogstaande water ingineurs uit Jakarta kwamen naar Nederland om ons te helpen samen te leven met het water. Onze relatie met het landschap veranderde. Het was internationaal nieuws toen Nederland daarna verder ging onder de naam 'Verenigde Eilanden'. Met technologie hadden we een haat-liefde

verhouding. Er was meer vrije tijd, maar tegelijkertijd waren er in 2114 ook rellen van de actie groep TechNO die protesteerde tegen de groeiende macht van articifical intelligence.

Maar zoals het eeuwen oude gezegde gaat, er is geen regenboog zonder een beetje regen. De toekomst ziet er veelbelovend uit. Laten we denken aan de toekomstige generaties waar wij om geven. Wie zal er jij daar ontmoeten in 2152? Een achter- achterklein kind, of een vertegenwoordiger van een samenleving die je zo lief is. Waar is hij of zij blij mee? En waar maakte hij of zij zich zorgen om? Denk aan hem of haar tijdens onze wandeling, in stilte.

<mark>< stilte wandeling></mark>

<<2152 jong persoon om wie je geeft >>

Neem nog even een extra diepe ademhaling om te landen in het moment. Neem het allemaal in je op. Wat zie jij hier in 2152 voor je achterkleinkind? Waar is hij of zij blij mee? En waar maakte hij of zij zich zorgen om?

<mark><<deelnemers delen hun verhaal>></mark>

Eventueel doorvragen als gesprek moeilijk op gang komt: Hoe ziet een dag in het leven eruit? Wat doet hij/zij? Wat heeft ervoor gezorgd dat het er zo uit ziet?

<mark><<landschap reageert op deelnemers >></mark>

Komt dit overeen met het landschap dat jij voor ogen had? Of is het veranderd nu je het landschap hebt gehoord?

<mark><<deelnemers delen hun verhaal>></mark>

Laten we terugkeren naar het heden. In de reis terug naar heden, laten we in stilte onze ervaring nagaan. Overdenk nog eens jouw beeld van de toekomst, van 2152 en houdt dit vast. We zien elkaar terug in 2022.

<mark><wandeling in stilte ></mark>

Introductie

Ik wandel vandaag met jullie mee, ik ben het recreatielandschap en ik ben nog best jong. Recreatie betekent dat jullie mensen op een ontspannen manier en voor je plezier je vrije tijd doorbrengen. En vrije tijd bestaat gewoonweg nog niet zo lang. Pas in 1960 werd de werkvrije zaterdag ingesteld. Recreëren betekent letterlijk opnieuw scheppen. Weer opleven, verkwikken. En waar kan dat nou beter dan buiten in een mooi landschap? Als recreatielandschap pas ik me altijd aan op jullie wensen. Steeds weer word ik anders ingericht om aan te sluiten bij nieuwe trends. Hoe jullie je willen ontspannen of juist inspannen, betekent vaak weer een verandering voor mij om er voor te kunnen zorgen dat jullie je vrij kunnen bewegen en kunnen genieten.

1852 Ik ben er gewoon, het is voor mij vrij rustig. Mensen blijven dichtbij huis en werken hard om hun kostje bij elkaar te krijgen. Kinderen spelen op het erf en vermaken met alles wat ze buiten vinden. Maar lang spelen ze niet, want als ze 12 zijn kunnen ze al best een handje uitsteken om te helpen om het land te bewerken. Want er moet gegeten worden.
De meeste mensen bewegen zich lopend. Ontspanning is er nauwelijks. In de zomer zijn de dagen lang en in de winter is het lang donker. In het dagelijkse ritme volgen jullie dag en nacht en van de seizoenen gevolgd. Ik besta nog nauwelijks als recreatielandschap. Ik ben er gewoon en de dagelijkse rituelen spelen zich dichtbij huis af. Het is meer een kwestie van overleven.
Af en toe trekt er wel een rijtuig langs, dat is een bezienswaardigheid! Een kleine groep rijke mensen gaat zich vermaken op hun buitens. Dat doen ze al een paar generaties. Ze gaan bijvoorbeeld jagen. En gebruiken daarvoor lange lanen en bossen die ze er speciaal voor aan hebben gelegd. Of ze kijken uit over het water, als ze een buiten aan een mooie rivier hebben kunnen bouwen. Maar dat echte bewuste genieten van mij, is maar voor een hele kleine groep weggelegd. Een groep die rijk en hoogopgeleid is. Ze komen vooral uit de grote stad. En dat vind ik wel jammer. Waarom kan niet iedereen van mij komen genieten?
Maar het is wel precies die groep elite uit de stad die zich om mij bekommert. Aan het eind van deze eeuw richten ze zelfs de eerste natuurvereniging op. Om de natuur te beschermen, maar ook om van de schoonheid ervan te genieten. En wat ik helemaal leuk vond is de ANWB. Wie heeft dat nou kunnen verzinnen? Straks heeft iedereen nog een fiets. Stel je voor! Die verenigingen zorgen er ook voor dat er meer en meer mensen van mij kunnen genieten, want meneer Thijsse neemt ook schoolklassen mee naar buiten.

1952 Zo, wat hebben we roerige tijden meegemaakt. De angst is nog te voelen in het landschap. Linies en kunstwerken die ingenieus ontworpen zijn om hele vlaktes onder water te kunnen zetten als er dreiging uit het oosten komt. Vanaf betonnen torens turen mensen over het landschap om te kijken of er geen Russen aan komen. Van de koude oorlog krijg ik het ook koud. Want er zit angst in jullie en dat zie ik om mij heen.
Maar de vrijheid wordt ook gevierd en er wordt gebouwd! Niet alleen huizen en fabrieken, maar ook ik krijg meer ruimte. Ik moet een beetje grinniken om het bermtoerisme. Mensen gaan zitten langs de wegen. Niet om van het groen in mij te genieten, maar van de vernieuwing en de techniek. Met een kannetje koffie en een klapstoel kijken jullie naar het voorbij zoevende verkeer.
Na de nare ervaringen in de oorlog wordt er flink ingezet op gebruik van de grond, zo veel mogelijk voedsel produceren vraagt om een efficiënte inrichting. Daar word ik niet perse mooier en aantrekkelijker van. Hoewel er in sommige delen van het land ook met smaak ingericht wordt, met bosjes en singels. Daardoor voelt het toch alsof je in een oud landschap bent waar je prettig kunt vertoeven. Er worden picknickweides en recreatievelden aangelegd.

En wegen en parkeerplaatsen, zodat jullie je makkelijk naar buiten kunnen bewegen. Want dat gaan jullie doen, als de eerste vrije zaterdag een feit is en de werkweken verkort worden. Ineens bestaat er zoiets als vrije tijd. En die brengen jullie met elkaar door en daar hebben jullie mij voor nodig! Dus daar pas ik me op aan, met mooie fietspaden en wandelpaden. Altijd pas ik me aan, aan jullie behoeften en trends. Samen vieren we de vrijheid!

2052. Na de corona-crisis en de Oekraine-oorlog van de jaren twintig steeg ik enorm in populariteit! Na jaren in de verdrukking te hebben gezeten kreeg ik ineens weer ademruimte. Het werd maar voor lief aangenomen dat ik er was en steeds werd er wat van mijn toegankelijkheid en schoonheid afgeknabbeld. Door het uitbreken van veeziektes sloten boeren -begrijpelijk- de paadjes af die het nou juist zo leuk maakten. Industrie, steden en wegen konden zich uitbreiden en steeds slokte dat weer stukjes groen op. Onderzoekers toonden keer op keer aan hoe belangrijk een mooi groen landschap voor mensen om zich gezond te voelen, maar het was aan dovemansoren. Want ja, de economie moet kunnen groeien en daarvoor moeten we ondernemen, bouwen en reizen. Ik zag jullie steeds jachtiger worden, de bezoekjes buiten werden korter. En jullie gingen liever voor weinig geld de grens over, om daar mooie landschappen te bezoeken. Terwijl je mij hier achterliet. Sommigen begonnen wel een beetje landschapspijn te voelen als ze wandelden of fietsten door een stil en kaal landschap. Kleur en geluid vervaagden en maakten de wandelingen minder mooi. Het besef hoe belangrijk een mooie omgeving is, kwam pas echt in de lockdowns. Toen niemand meer mocht reizen, zochten jullie mij weer op. Een herwaardering voor groen dichtbij huis en vakantie in je eigen mooie Hollandse landschappen!
Maar verdorie, wat bleken er eigenlijk weinig mooie paadjes en groene plekken te zijn. En wat kom je veel mensen tegen. De dieren die hier in mij leven schrokken er ook een beetje van, waar konden ze nog rustig hun ei uitbroeden? Er waren ineens overal mensen die een hersenommetje gingen maken omdat ze digitale punten van Erik Scherder krijgen en elkaar af konden troeven met de meeste kilometers. Het belangrijkst voor mij was dat ik jullie weer zag en dat jullie zagen hoe je mij een beetje verwaarloosd hadden. Stukje bij beetje ontdekten jullie mij weer en gingen jullie me zelfs ruimte en aandacht geven. Eindelijk kreeg ik weer de kans om te bloeien. De natuur in mij kreeg ruimte, grote robuuste gebieden waar jullie uren kunnen komen struinen. En daar waar ik het het moeilijkst had, net om de natuurgebieden heen, is nu, in 2052, van alles te doen. Daar staan boerderijen waar dieren, planten en mensen welkom zijn. Er zijn nieuwe singels geplant en paden aangelegd, daar kunnen jullie komen sporten en kinderen spelen. Ik ontvang jullie met open armen, want inmiddels kan ik weer tegen een stootje. Ik ben alleen nog ene beetje jaloers op mijn Franse familie, want zij hebben prachtige plekken van herinnering. En mijn Engelse familie is helemaal te gek, daar is iedereen overal welkom, vanwege een "right of way". Dat zou ik hier ook wel willen!
We zijn aanbeland in 2052 en via netwerken door het groen die bij de voordeur beginnen, kunnen jullie al lopend of fietsend naar de grote robuuste natuurgebieden waar je uren kunt dwalen als je wilt. Stilte en duisternis geven ruimte om na te denken.
Ademruimte. Dat is wat jullie mij en jezelf hebben gegeven.

2152 Ja, dit vinden jullie vast ook spannend. We staan in 2152. En ik ben echt enorm veranderd. Net als altijd pas ik me aan aan de omstandigheden. Is fietsen bijvoorbeeld in de mode? Dan word ik toegankelijker door de aanleg van paden waar je op kunt fietsen. Maar er is nu wel iets heel groots veranderd in Nederland, en dat komt niet door trends in hoe jullie je als mensen vermaken. Nee. Nu is het basaler. Doordat de zeespiegel is gaan stijgen, nog veel sneller dan jullie ooit voorspelden, is er een grote volksverhuizing op gang gekomen. Ineens ging iedereen op de hoge zandgronden bouwen. Daar werd het zo druk. Ik kon het nauwelijks aan. Ineens is

de Veluwe een soort stadspark geworden in plaats van een nationaal park zoals het in 1930 begon. Gelukkig zijn de veranderingen wel goed gedaan en zijn de Nederlanders keigoed in ontwerpen van landschappen. Daar ben ik beroemd mee geworden, want iedereen wil het zien. Het vervoer is grotendeels onder grond verdwenen, dat hebben jullie van de mollen afgekeken denk ik. En ook in de lucht bewegen jullie je, net als de vogels. Er is dus minder land, maar er zijn meer mensen. En jullie hebben meer vrije tijd, want veel van het werk hebben jullie slim geregeld met robots. Daardoor is er tijd om je te ontspannen, wat jullie graag doen. Dat gebeurt dat vooral in bootjes door eindeloze moerassen in het westen. Maar daar moet je wel oppassen. Je moet er onder klamboes slapen als je gaat kamperen op de vlotten in de moerassen, want malaria ligt overal op de loer. Het is superleuk als je gaat varen naar de drijvende boerderijen. Daar kun je genieten van lekkere kaas van waterbuffels. Dat is nog lekkerder als je die in een salade doet met watermeloen die je hier zo vers in de haventjes kunt kopen, lokaal geproduceerd, want daar heeft Nederland de ideale temperatuur voor. En 's avonds duik je Assen en Arnhem in, want dat zijn het nieuwe Amsterdam en Rotterdam. En Amersfoort ligt aan zee!

Appendix XVI: Questionnaire Transitional Areas

Om de Zompige Paden wandeling beter te begrijpen als manier om over de toekomst na te denken, gaan de vragen in deze vragenlijst over jouw ervaring van de tijdswandeling. De vragenlijst duurt ongeveer 5 minuten om in te vullen.

Tijdswandeling
1. Het landschap waarmee ik vandaag heb gewandeld:
    a. Bodem & water
    b. Grasland
    c. Recreatielandschap

2. Als ik de tijdswandeling in een woord zou omschrijven, dan zou dat woord zijn:

3. Kunt u kort uitleggen waarom u dit woord heeft gekozen?

4. In hoeverre bent u het eens met de volgende stellingen (1= volledig mee oneens; 7 = volledig eens):

	1 Volledig oneens	2 Oneens	3 Enigszins mee oneens	4 Neutraal	5 Enigszins mee eens	6 Mee eens	7 Volledig mee eens
4a. Door de interventie ben ik mij bewust geworden wat ik belangrijk vind in de toekomst.	○	○	○	○	○	○	○
4b. Door de interventie ben ik me bewust geworden van verschillende mogelijke toekomsten.	○	○	○	○	○	○	○
4c. Door de interventie begrijp ik het vraagstuk rondom de overgangsgebieden beter.	○	○	○	○	○	○	○
4d. De interventie heeft geholpen om een gezamenlijk gewenst toekomstbeeld te ontdekken.	○	○	○	○	○	○	○
4e. Door de interventie heb ik het idee dat we dichterbij oplossingen zijn gekomen.	○	○	○	○	○	○	○
4f. Door de interventie ging ik nieuwe vragen stellen over de toekomst van de overgangsgebieden.	○	○	○	○	○	○	○

5. Wat is uw belangrijkste leer les van de tijdswandeling van 1852 naar 2152?

6. Welke drie dingen gingen goed tijdens de wandeling?

7. Welke drie dingen kunnen beter in de wandeling?

8. Hoe droeg de omgeving waar de wandeling plaats vond bij aan de ervaring van de tijdswandeling?

9. Heb je nog andere opmerkingen of aanvullingen over de tijdswandeling?

Algemene informatie

1.Wat is uw geslacht?
     a. Vrouw
     b. Man
     c. Wil ik niet zeggen
     d. Anders, namelijk

2.Wat is uw geboortejaar?

3.Waar werkt u?
     I. Een ministerie
     II. Een provincie
     III. Een gemeente
     IV. Een natuurorganisatie
     V. Een landbouworganisatie
     VI. Een landbouwbedrijf
     VII. Anders, namelijk …

Om de Zompige Paden wandeling beter te begrijpen als manier om over de toekomst na te denken, gaan de vragen in deze vragenlijst over jouw ervaring van de tijdswandeling. Het eerste deel gaat over de tijdswandeling zelf. Het tweede deel gaat over de voorbereiding van de stem van het landschap. De vragenlijst duurt ongeveer 5 minuten om in te vullen.

I: Tijdswandeling
1. Het landschap waar ik een stem aan gaf:
    a. Bodem & water
    b. Grasland
    c. Recreatielandschap

2. Als ik de tijdswandeling in een woord zou omschrijven, dan zou dat woord zijn:

3. Kun je kort uitleggen waarom je dit woord hebt gekozen?

4. Kun je kort beschrijven hoe het was om de stem van het landschap te vertegenwoordigen in de tijdswandeling?

5. Wat vond je het meest verassend tijdens de wandeling?

6. Welke drie dingen gingen goed tijdens de wandeling?

7. Welke drie dingen kunnen beter in de wandeling?

8. Heb je nog andere opmerkingen of aanvullingen over de tijdswandeling?

II: Voorbereiding van de stem van het landschap
1. Wat is je belangrijkste leer les geweest in het schrijven van de stem van het landschap?

2. Wat was voor jou het meest behulpzaam in de voorbereiding om echt het landschap te zijn?

3. Heb je nog andere opmerkingen of aanvullingen over de voorbereiding?

Algemene informatie

1. Wat is uw geslacht?
    e. Vrouw
    f. Man
    g. Wil ik niet zeggen
    h. Anders, namelijk

2. Wat is uw geboortejaar?

3. Waar werkt u?
    I.   Een ministerie
    II.   Een provincie
    III. Een gemeente
    IV.   Een natuurorganisatie
    V.   Een landbouworganisatie
    VI.   Een landbouwbedrijf
    VII. Anders, namelijk …