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Drawing fixed moments in time

Repetitively drawing to understand and
reveal consequences of growth, change,
decay and idealization within the design

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Abstract

This visual essay discusses drawing time in relation to the author's graduation project, which is based on the paradigm of a multispecies world. Three design principles are derived from this paradigm: movement, hybrid and landscape as being. These relate to different notions of time and thus on drawing time. Movement means drawing the now. Hybrid is a material structure that shows non-human presence. This materiality implies that decay has to be drawn. The landscape as being is the ongoing landscape without end. In order to draw the three principles leading to the design intervention, fixed moments in time are chosen. In this visual essay 0 years, 20 years, and 30 years are shown. Time is drawn through a repetition of plans, sections and animation stills and through drawing specific human and non-human presence. In this way repetition, growth, decay and changing actors are shown. Drawing decay opened up new design possibilities. By comparing the repetitive animation stills, drawing time became a critical tool that showed idealization within the design. This visual essay shows both the repetition of drawings, as well as the discoveries it leads to.

Keywords

Movement, Hybrid, Landscape as being, Human, Non-human, Multispecies world, Drawing

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Introduction

This visual essay discusses drawing time in relation to the author's graduation project '(not) Our Forest: An Alternative Multispecies Approach to Forest and Landscape'¹. In this project, drawing time was necessary and led to new discoveries. This visual essay focuses on both the necessity of drawing time and discovering through drawing.

The project considers an alternative to the forest strategy proposed by the Dutch Ministry of Agriculture. The goal of this strategy is to realize 37,000 hectares of new forest in the Netherlands before 2031 (Ministerie van LNV, 2020). This has the potential to mitigate climate change and generate healthy living environments (Ministerie van LNV, 2020). The strategy, however, is within an anthropocentric paradigm in which nature serves us. The project explores the possibilities of an alternative way of creating forest by locating the project within the theoretical discourse of a multispecies world. 'Multispecies world' is a term more commonly used in the field of anthropology and states that both humans and non-humans actively shape their world (Tsing, 2016). The term is often used in research that critiques large capitalist, even colonial, landscape structures, such as the Feral Atlas (Tsing, Deger, Saxena & Zhou, 2020).

On the basis of a study of this theoretical framework I chose to approach landscape architecture based on this paradigm with three main design principles: 1) Movement, 2) Hybrid, and 3) Landscape as being (Fig. 1). Designing with movement encompasses human and non-human movement. Hybrid is a term borrowed from Elizabeth Meyer and is a human intervention that emphasizes the presence of non-humans (2008). In this research the purpose of hybrids is to reveal landscapes and particular non-humans in this landscape, to human beings. The landscape as being is derived from the case of the Whanganui river in New Zealand, that was granted legal rights equivalent to those of a person in 2012 (Hsiao, 2012). Such a landscape as being should counterbalance economically driven landscapes.

Movement, Hybrid and Landscape as being relate to different notions of time. Movement is the present or the 'now'. Hybrids are, in this research, material structures with a lifespan that is considered to be about 30 years. A landscape as being is without an end, hence ongoing. Since the three are simultaneously present, they relate to one another (Fig. 2). Yet time has different effects on the total design intervention. Drawing time thus became crucial.

The site of the design intervention is the Amsterdamse Waterleidingduinen (Fig. 3). The site is part of the Dutch coastal and dune area. Water is purified here, and after purification piped to Amsterdam as drinking water. Water often originates from the great rivers in the Netherlands. However, along the Oosterkanaal, clean water is still directly retrieved from the groundwater level (Fig. 4). This is harmful to existing ecologies. Yet the main reason for its continuing existence is the importance of its buffering capacities for the economic viability of the adjacent flower bulb fields (Fig. 5). For the design proposal I decided to design a starting point in which: 1) water is no longer retrieved from the Oosterkanaal, 2) the groundwater level along the dunes rises as a result, 3) a new 'landscape as being' is defined on the now marshy soils by planting a boundary of trees and shrubs within which forest will begin to sprout, and 4) hybrids are placed (Fig. 6). From this starting point time begins to elapse.

This visual essay shows the final design drawings of the imagined passage of time. Since movement, hybrid and landscape as being correspond differently to time, I decided to show the effects of time at multiple fixed points in the future. In this essay the points shown are 0 years, 20 years and 30 years.

1

The graduation project was completed in June 2021, at the Faculty of Architecture and the Built Environment, University of Technology Delft, under mentorship of Saskia de Wit (section landscape architecture) and Luisa Calabrese (section urban design).

For the series of drawings inspiration was drawn from Michel Desvigne's series of plans for the Greenwich Peninsula (Fig. 7), which show the anticipated growth and development of the design (Duempelmann & Herrington, 2014). In addition, non-human (and human) actors are represented explicitly in these drawings. Inspiration for this was mainly drawn from the Feral Atlas, where specific non-human actors are linked to maps of imagined landscapes (Fig. 8) (Zhou, 2020).

The landscape as being is mostly portrayed at the larger scale. Growth in surface and in height is important here, since it is in the landscape as being that a forest will emerge. This also means that the main actors in the landscape change over time. Who these actors were likely to be was discussed with an ecologist. Both were portrayed by combining the previously mentioned techniques.

Drawing the hybrid at fixed points in time also resulted in having to draw various actors. Furthermore, the hybrid is a material structure. Therefore drawing the hybrid also entails drawing decay. By drawing decay it became explicit that this part of the design intervention has an end. This provided the opportunity to create an imagined reoccurring design intervention every 30 years for the hybrid. Through drawing time, a cyclical event could be imagined and used as a design intervention.

Movement is drawn by means of animation stills, which have the immersive qualities suitable for representing the 'now'. The stills are drawn from a human perspective. This was a calculated decision, since the project was only to some extent about how we can integrate the perspectives of non-humans. The main part of the project was about how we can change our human perspective. In the stills a human being therefore encounters other humans and non-humans. The same stills were made for 0 and 30 years in time, where the main differences between the stills are the different encounters. Drawing this way repetitively made for another discovery. Comparing the stills revealed that idealized situations of time had been drawn, in which a human both encounters and notices non-human presence. This made me question the limits of my design intervention. In order to represent this limit, another version of the present using the same stills was drawn in which a human being encounters nothing. The notion of idealized movements in the 'now' was discovered through repetitively drawing the stills. This way, drawing time became a critical tool that helped in analysing the design.

Drawing time in this visual essay takes the form of repetitive drawings of plans, sections and animation stills and through drawing different actors. The main elements of the design intervention correspond differently to time. Drawing with the techniques employed turned out to be successful in both showing and understanding better the consequences of growth, changing actors, decay and idealization within the design.

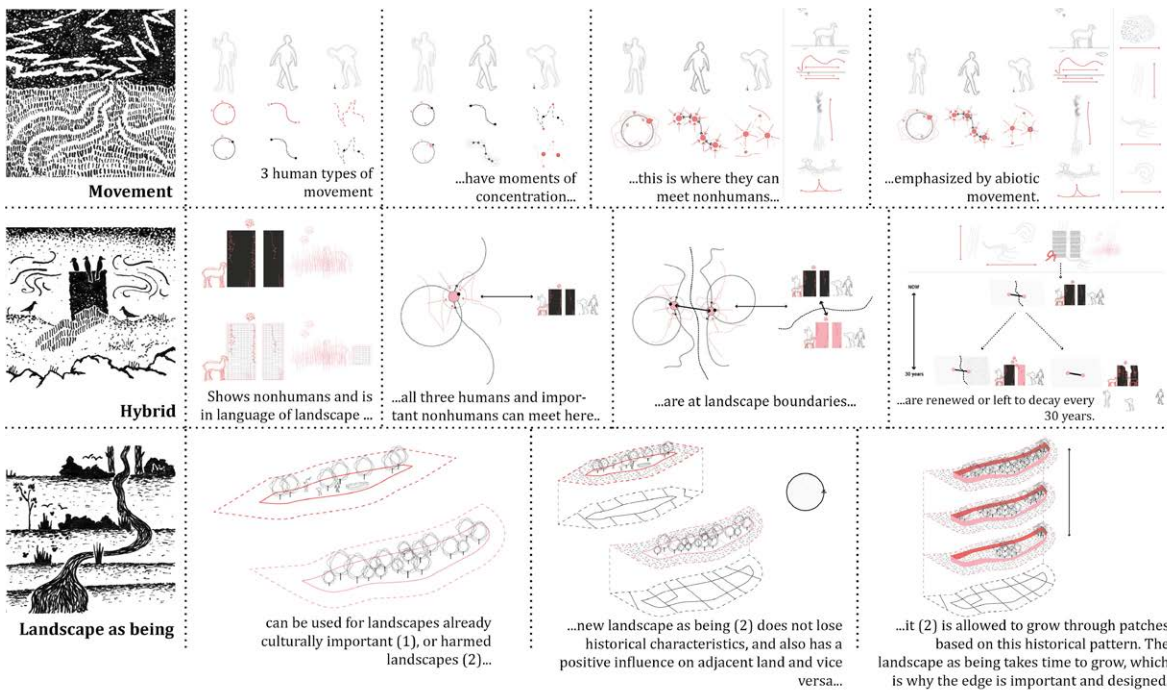


FIGURE 1 All design principles based on the paradigm of multispecies world. The upper row of drawings considers design principles for movement, the middle row design principles for hybrids, and the lower row design principles for the landscape as being.

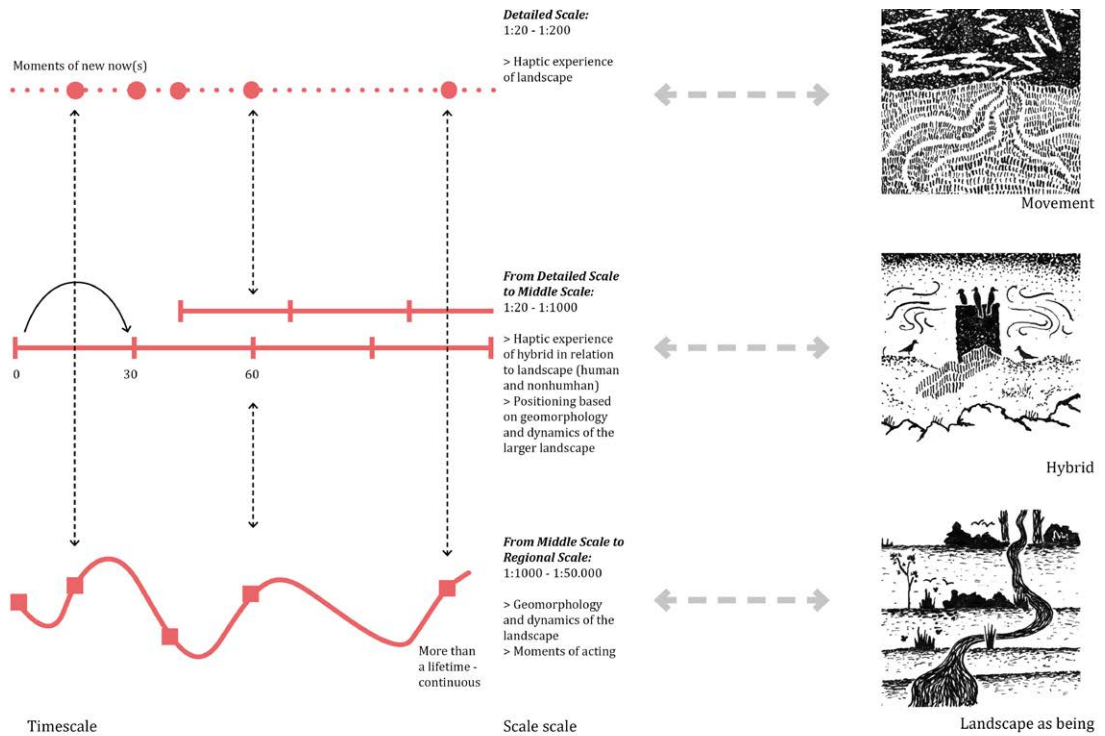


FIGURE 2 Relations of scale and time between movement, hybrid, and landscape as being. The diagram represents time in three different ways. The dots next to movement represent moments of now. The interludes next to the hybrid represent a renewal every 30 years. The curved line represents the ongoing time with events (squares) of the landscape as being. All these three times can happen similarly (shown by the vertical arrows) and are linked in that way.

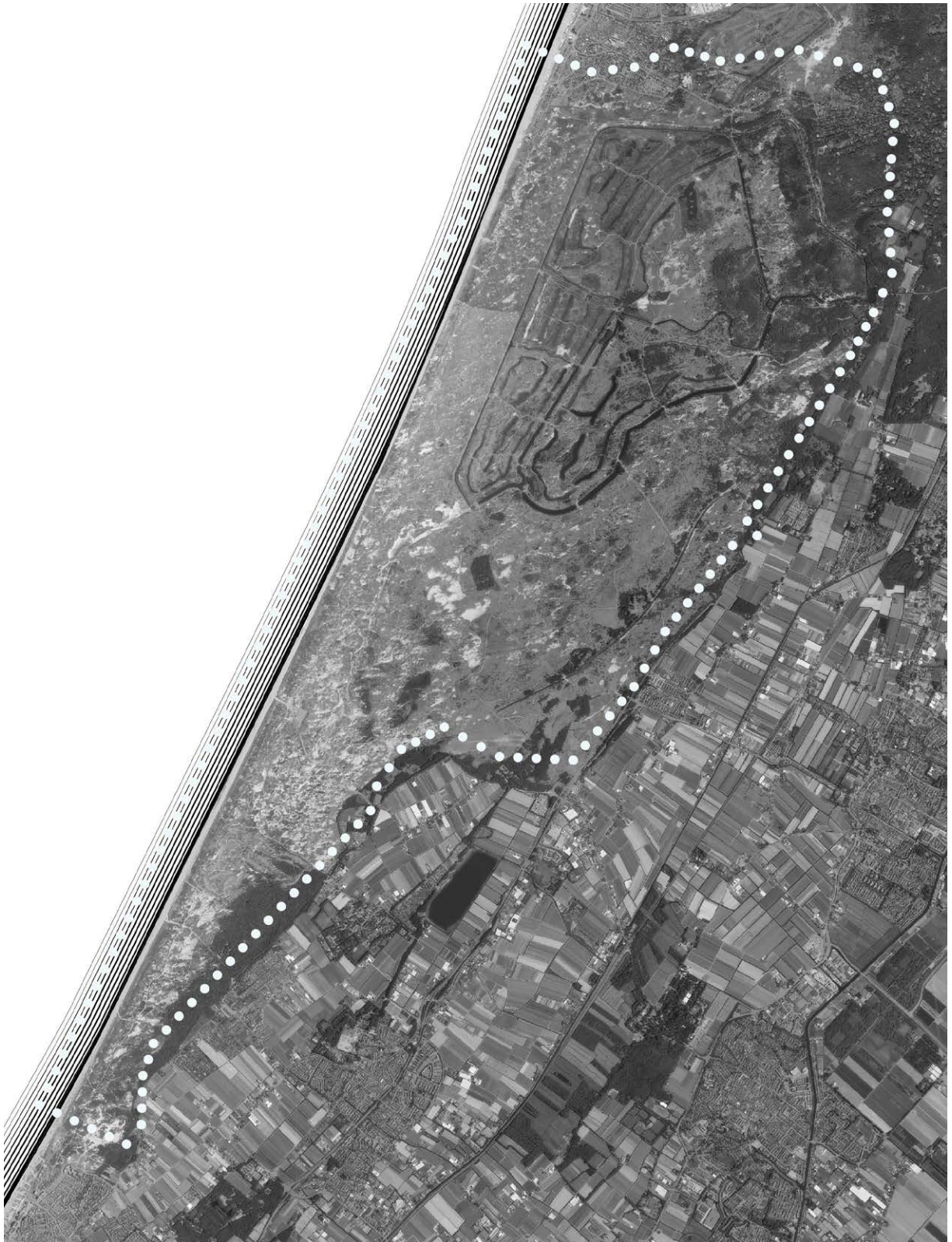


FIGURE 3
Amsterdamse Waterleidingduinen (1:50.000). The dotted line shows the boundary of what can be described continuously as dune area. The legal boundary of Amsterdamse Waterleidingduinen in fact covers a slightly smaller area (Aerial photo PDOK 2019, n.d.).

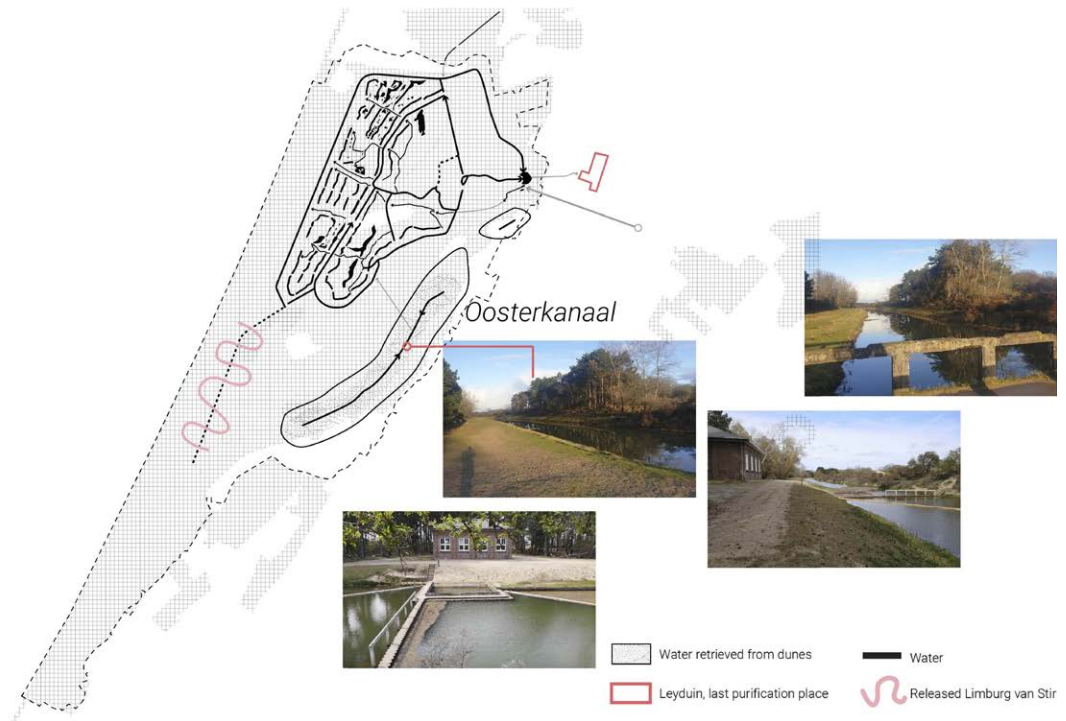


FIGURE 4
Location of the Oosterkanaal at Amsterdamse Waterleidingduinen (1:50.000).

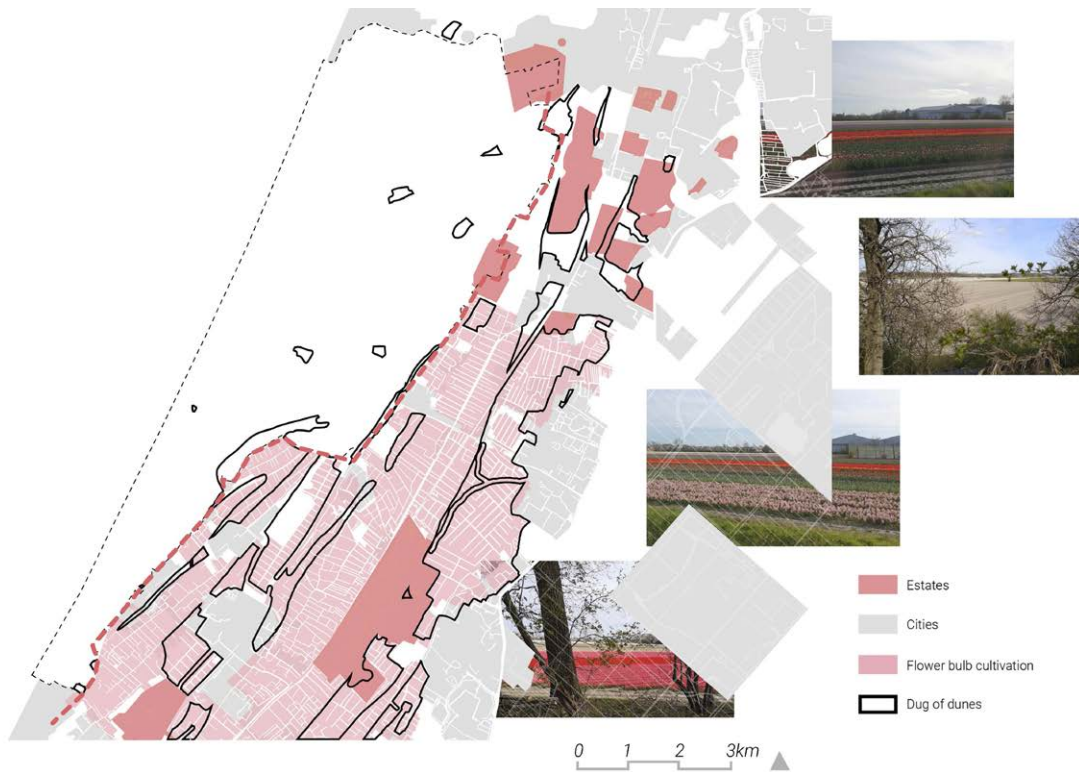
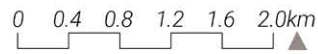


FIGURE 5
Location of the flower bulb fields along the Amsterdamse Waterleidingduinen (1:50.000). Behind the map a series of pictures show what the flowerbulb fields look like during flowering, and outside of the flowering season.
















-  Hybrid
-  Water infiltration system
-  Dune
-  Forest
-  Biological flower bulb fields
-  Savannah
-  Wetland
-  Grasspolder - wetter
-  Prepared for biological flower bulb fields
-  Oosterkanaal
-  New waterway for flower bulb fields
-  New paths
-  Planted boundary

FIGURE 6

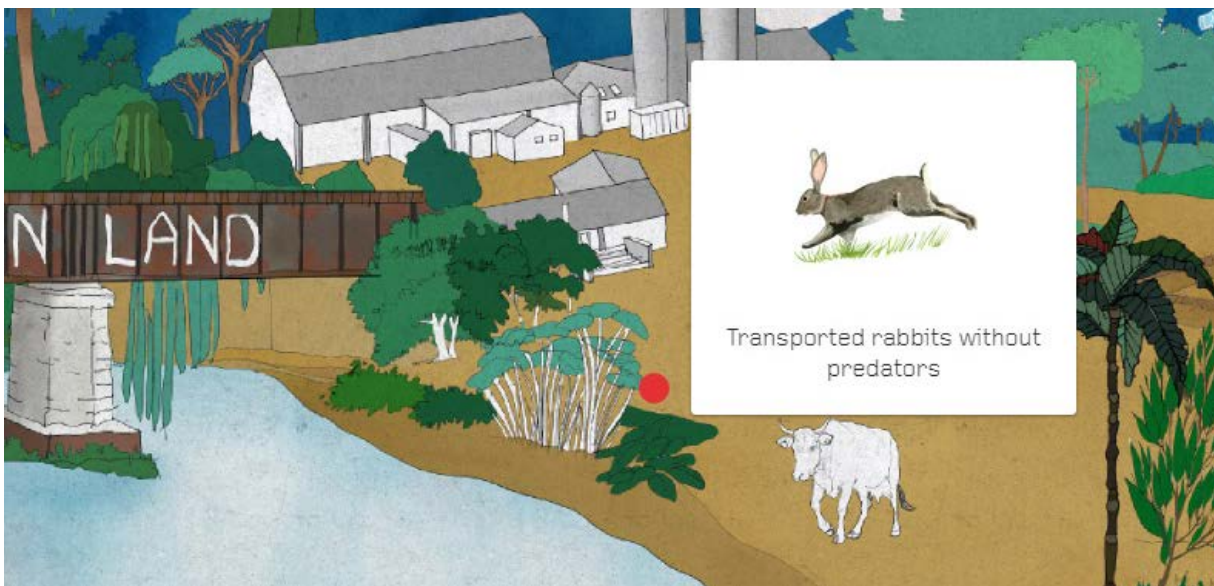
Starting point of the design (1:20.000). The design proposes the starting point mentioned in the introduction. The starting point consists of letting go of the Oosterkanaal, letting the groundwater level along the dunes get higher, setting the boundary for the landscape as being and placing the hybrids



FIGURE 7
 Design drawing for Greenwich Peninsula project by Michel Desvigne, 1997-2000 (Duempelmann & Herrington, 2014, 12). Time is anticipated in the design (Duempelmann & Herrington, 2014). The drawing shows this through the growth of trees and the number of trees. The spatial configuration of the design changes but remains visible.



a



b

FIGURE 8
 Invasion by Feifei Zhou, 2020 & Detail of the mapping 'Transported rabbits without Predators' (Zhou, 2020). The mapping is a fictive space where multiple events in time happen in the same mapping. The mapping shows a landscape of (colonial) invasion. There are multiple dots found at the mapping that all relate to an actor. In the case of this mapping, the actor (often a nonhuman) is causing invasive problems through human made infrastructures. The mapping thus shows both a fictive space that analyses human invasive behaviour, and links this to actors operating in this system

Visual Essay

Oyrs

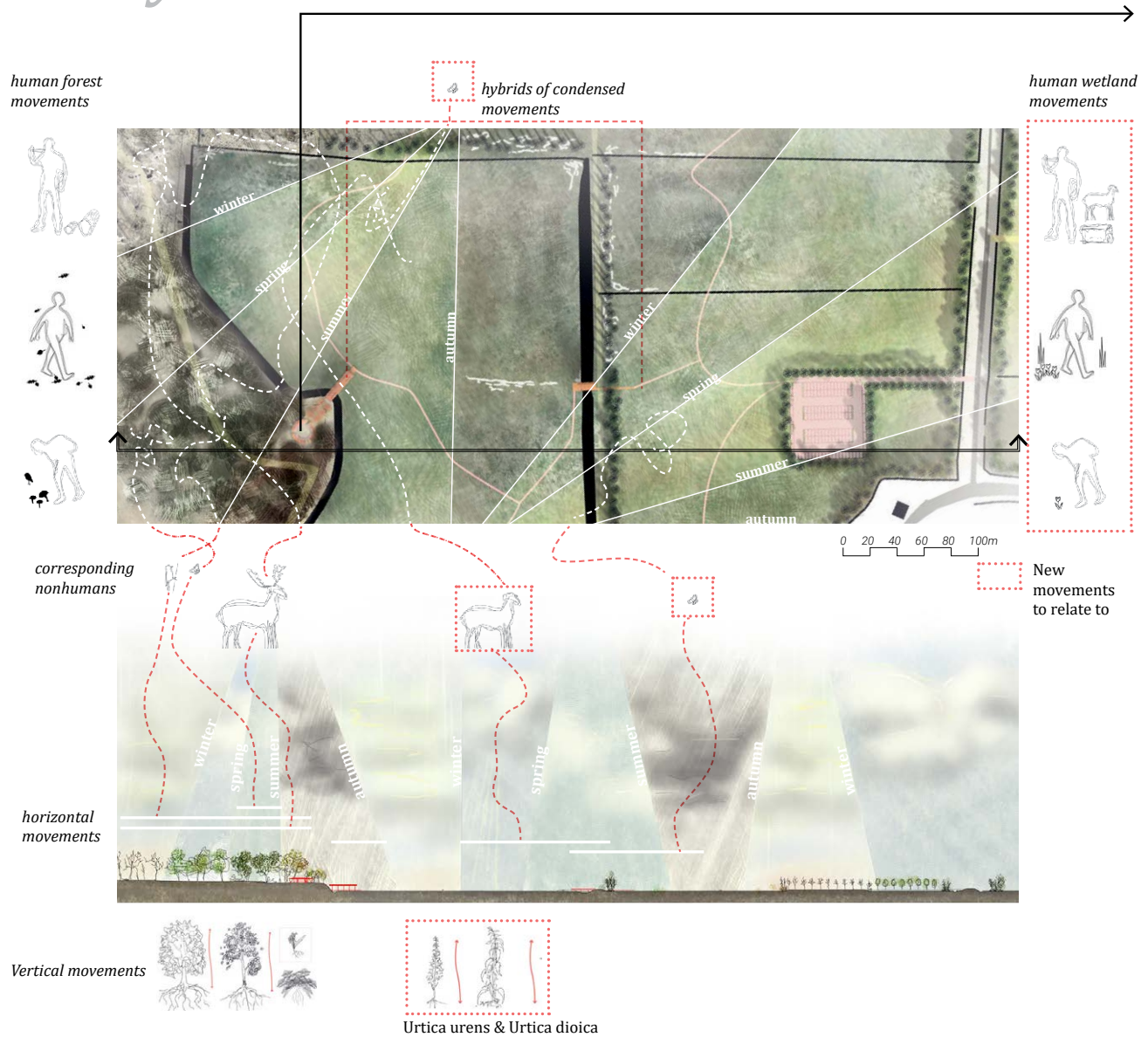


FIGURE 9

Drawing the starting point (1:1000) and accepting 'unwanted' moments of time. The drawings show the main area of the design as an open field. Yet, at the 1:1000 scale the drawings also show non-human and human actors that are present at this time. Since the design considers a beginning instead of a fixed outcome, the main non-human actors in some of the fields will likely be nettles (*Urtica dioica* & *Urtica urens*). By including them as an explicit intended consequence of the design, the usually unwanted nettle becomes an accepted part of the design.

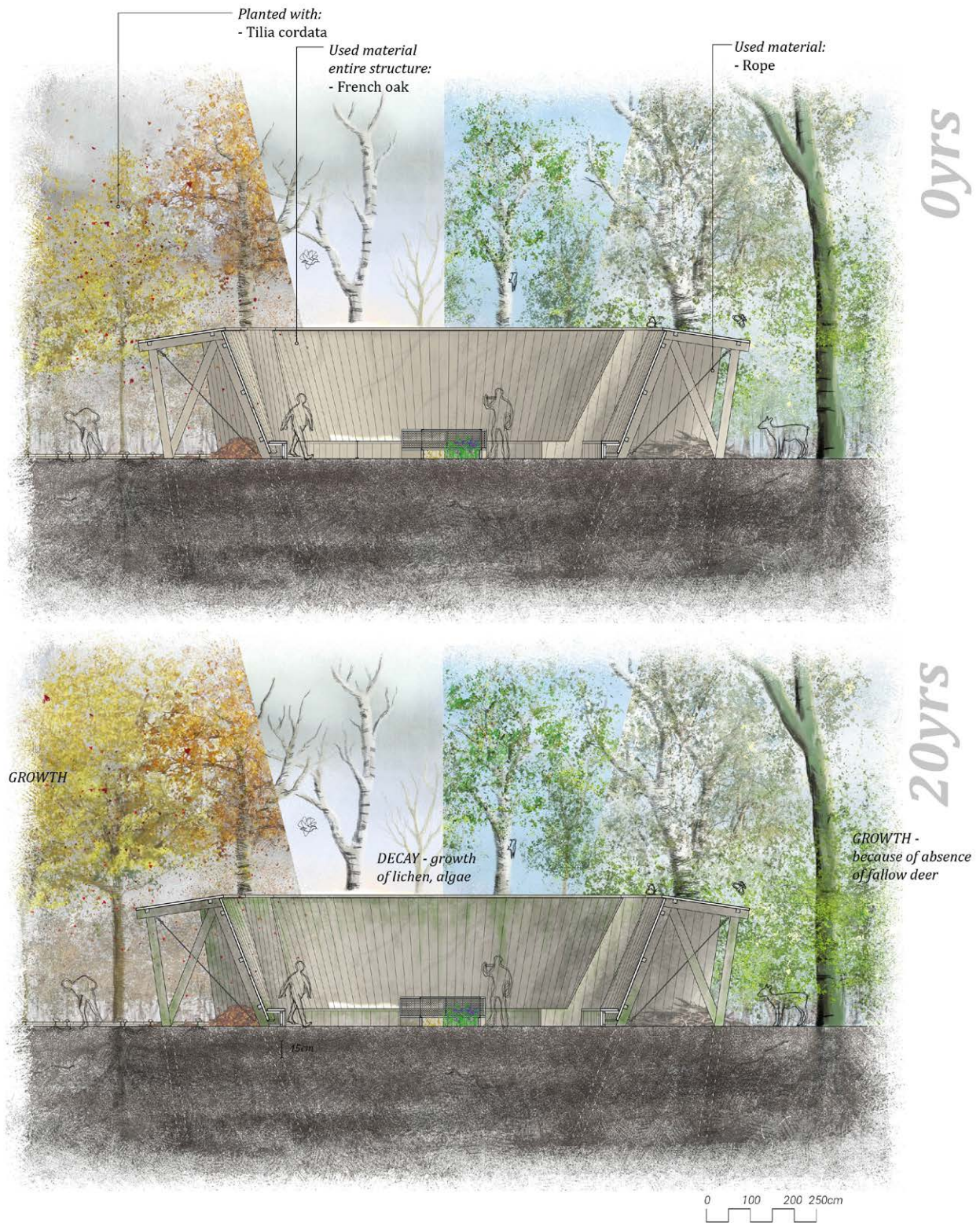
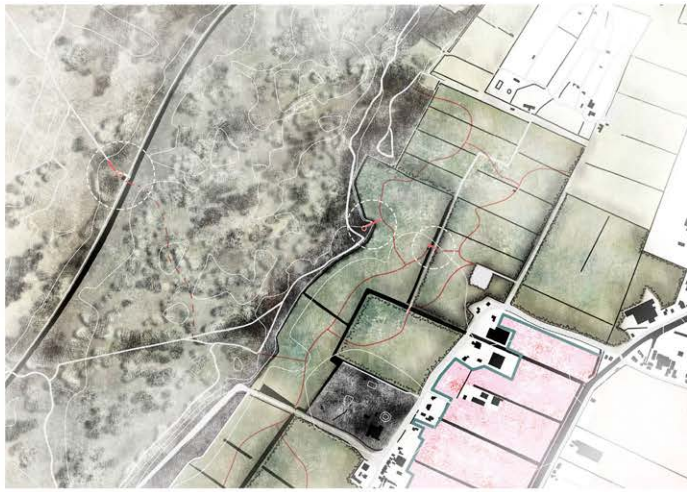


FIGURE 10

A hybrid and drawing decay (1:50); starting point and 20 years from the starting point. The hybrid when it is new corresponds to non-human species (sometimes wanted, sometimes unwanted). This particular hybrid corresponds to tree tops and to butterflies and birds present in these tree tops, fallow deer, the nettle and the *Vanessa atalanta* butterfly in order to raise awareness or acceptance of these. But the hybrid is a material structure, which means that it decays. Drawing decay showed how time, which is actually present in the form of non-humans (lichen, algae, mosses, fungi) takes over a wooden structure.

0yrs



20yrs



30yrs



FIGURE 11

Drawing growth (1:5000). At the same time, the landscape as being, which in this case evolves into a forest, continues to grow. There is a particular patchwork of growth in the forest related to human intervention. Part of the design is that the landscape as being is developed in patches. This means that humans intervene by, for instance, mowing or letting sheep graze in parts of the fields. This is shown in a series of plans.

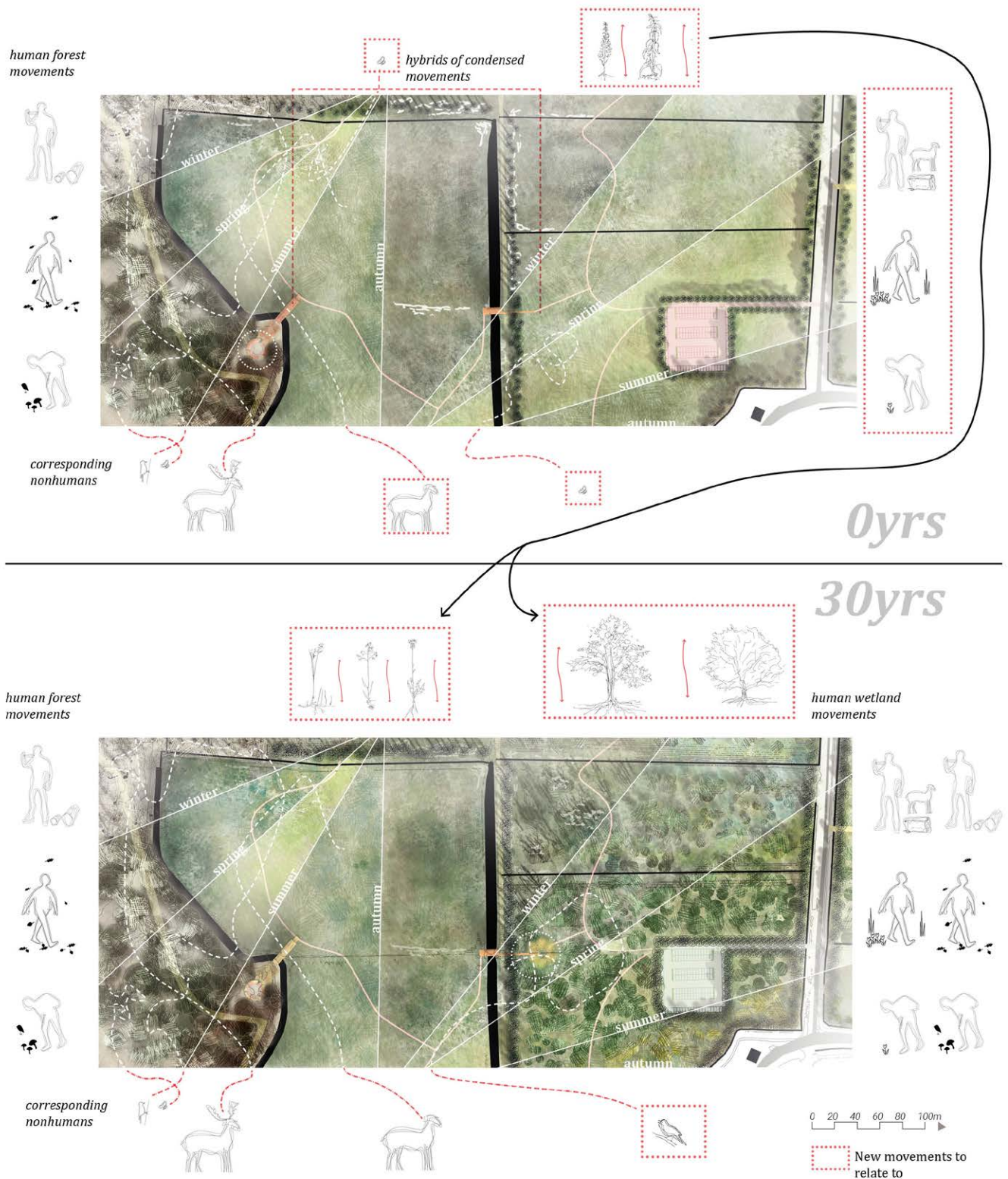


FIGURE 12

Drawing change (1:1000). The drawing of growth in terms of succession in a landscape also has to do with a change of actors. Succession also means that other non-humans arrive on the site. This is shown by drawing the species and linking this to where they are likely to arrive on the site. The seasons are drawn because not all non-humans are present on the site all year round.

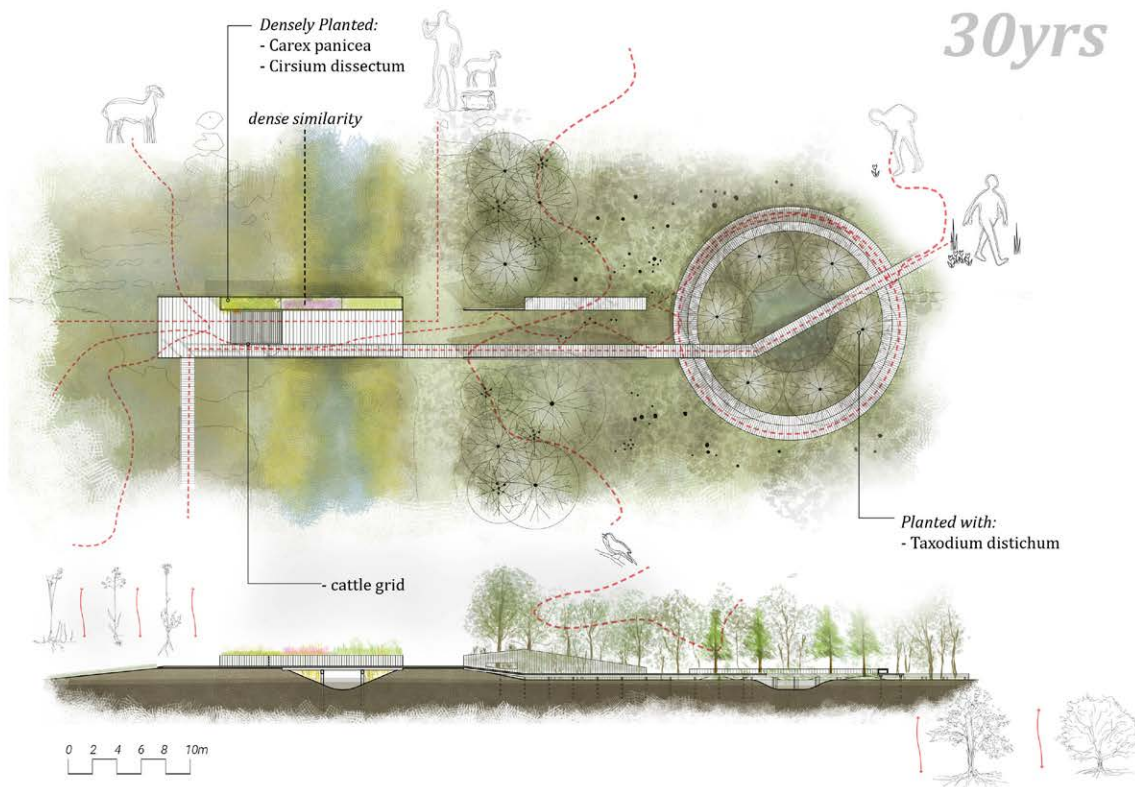
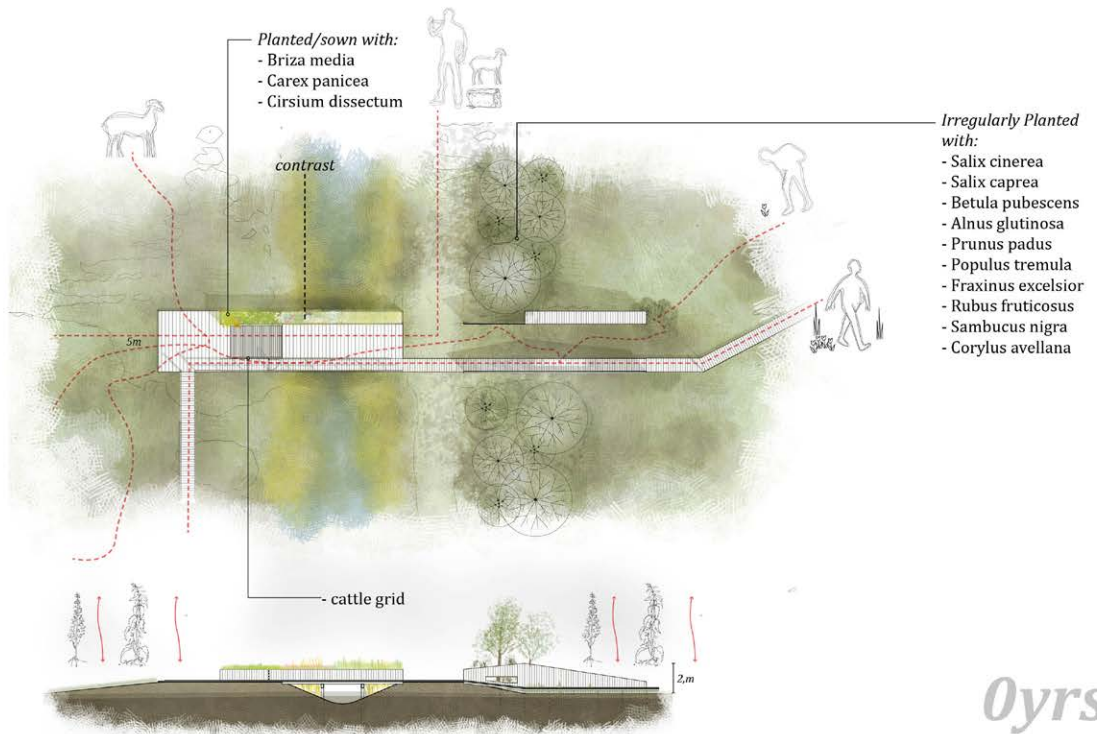


FIGURE 13

Drawing new hybrids based on change (1:200). Drawing decay led to the possibility of introducing a recurring design intervention every 30 years. After 30 years, different actors are present and through the hybrid a new way of relating to these can take shape. In the hybrids shown, this results in changing the shape of the hybrid after 30 years.

0yrs



30yrs



FIGURE 14
Part of the course of the walk that shows different moments of now. The walk remains the same.

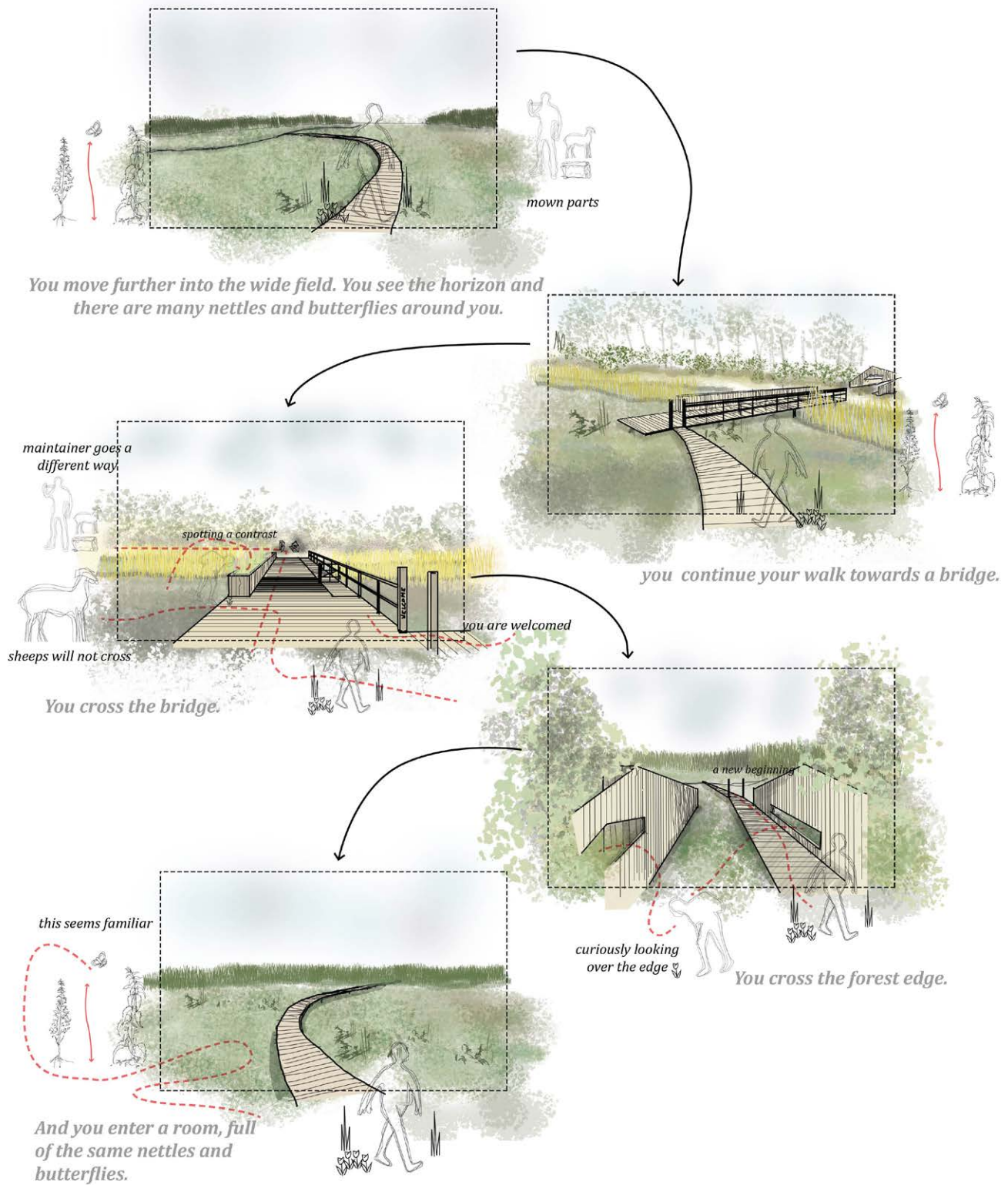


FIGURE 15

Drawing two moments of now. The same walk is drawn. Throughout the walk, all important non-human and human encounters are represented through drawing, sound and narrative. The landscape remains rather similar, but there are subtle differences. The non-humans change, and this is noticed by the main character: a visitor (layman) to the site. They notice how, after 30 years, there are different plants present and there is even someone studying this.

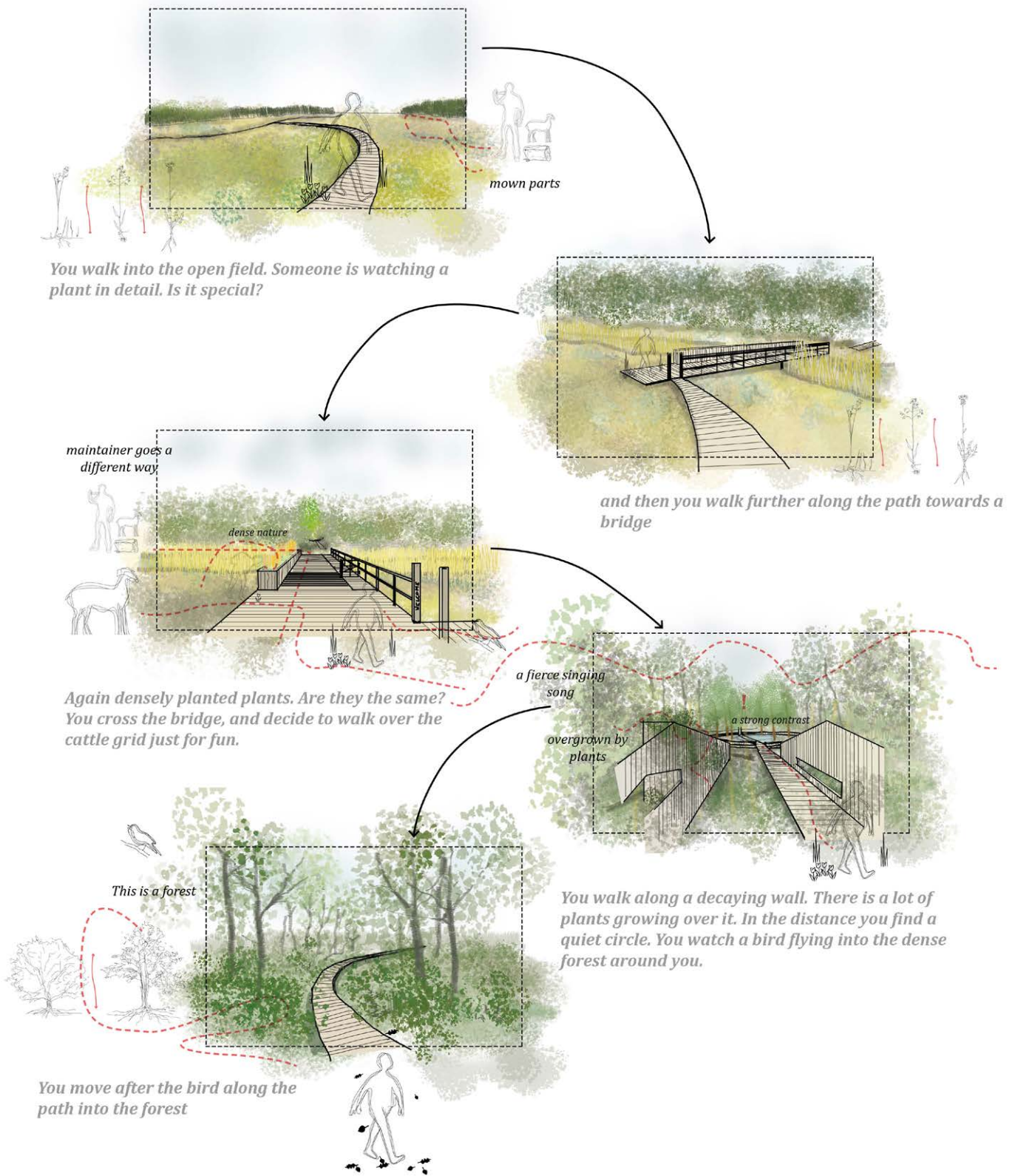


FIGURE 16
Drawing two moments of now.

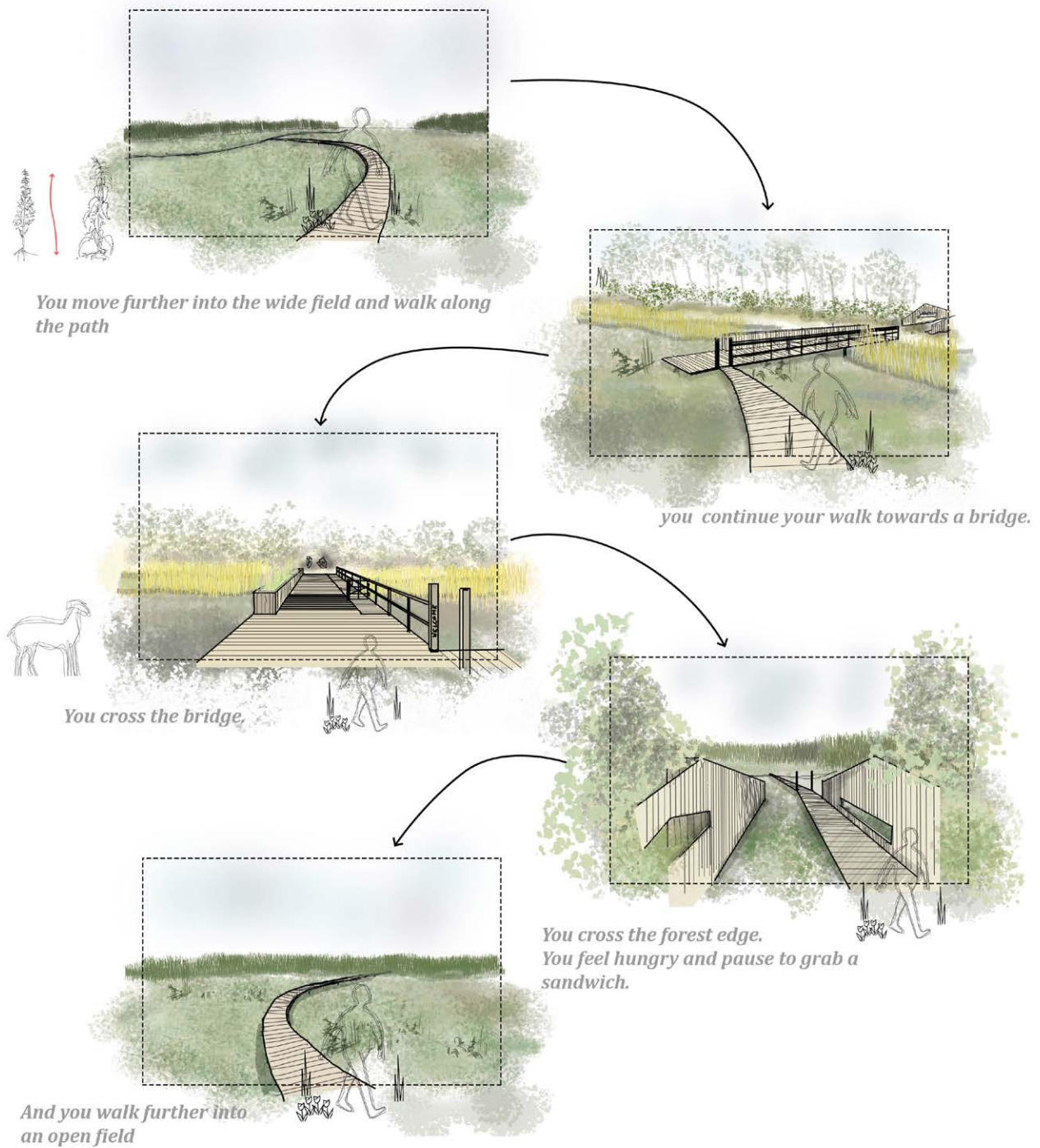


FIGURE 17

Drawing an unidealized moment of now. An unidealized walk shows few encounters with non-humans. The non-humans are hardly noticed by the human being who walks through the site. This was discovered by repetitively drawing different moments of now. Drawing this series in an unidealized way, made it possible to question whether the previous drawings of the design intervention were too optimistic. Drawing time thus became a critical tool by which the design could be analysed as well.

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