Landscapes of Care: Photography, Film, Modern Architecture and Landscape Heritage



volume 8, issue 1 | publication year: 2023 issn: 2183-8976 [print] 2183-9468 [online]

isbn: 978-989-53640-5-3 doi 10.24840/2183-8976_2023-0008_0001_12 homepage: https://www.up.pt/index.php/sophia

©SCOPIO EDITIONS

THEORETICAL PAPERS

Filmmaking as architectural carpentry: Analysing and mediating the spatial impact of agricultural techniques

Corné Strootman

Abstract:

Food production is the largest cause of global environmental change. The debate on sustainable agriculture focuses largely on the implementation of new agricultural techniques. The impact of these techniques on agricultural landscapes is not often considered. With the film 'Tussen de kassen', I attempt to shift the current debate in a direction that allows consideration of the aesthetic and systemic consequences of the implementation of agricultural techniques on specific landscapes. 'Tussen de kassen' examines an innovative and sustainable landscape of greenhouse horticulture. More than a tool to communicate research or annotate site visits, film and filmmaking functioned as architectural carpentry. Meaning that the complete process of filmmaking (including preliminary site visits, editing, etc.) functioned as an unconventional method of knowledge production for an architectural research project.

Using 'Tussen de Kassen', I illustrate three ways in which filmmaking as architectural carpentry benefits the work of landscape architects whilst examining modern landscapes of food production;

As a tool to explore and examine the atmospheres of agricultural landscapes (1) Film is able to convey synaesthetic properties of a landscape. These are properties that belong to multiple sensory fields at once and play a part in generating 'atmosphere', the meaning a person assigns unconsciously and almost instantaneously to a space. Film allows viewers to explore the synaesthetic properties behind this initial atmosphere and (re–) examine their subconsciously assigned meanings to space.

As a method to explore unexpected entanglements in food production landscapes (2) The (architectural) medium used to analyse a site determines the understanding of that site. Filmmaking demands close engagement with a site, making the filmmaker a participant of the landscape. This results in unexpected discoveries of entanglements between agricultural techniques and other site aspects.

As a form of eidetic storytelling for landscapes of the Anthropocene (3) Narrating the functioning and conception of Anthropocenic landscapes in a causal, linear manner is problematic as it leads to 'undecidability' and inaction. Film, as an eidetic storytelling tool, combines different types of information (i.e. visual, acoustic, quantifiable, metaphoric, etc.) to mediate multivalent, openended and non-linear narratives for Anthropocenic landscapes.

Keywords: Agriculture; Sustainable food production; Filmmaking; Eidetic storytelling; Architectural Carpentry

THEORETICAL PAPERS

Corné Strootman is a landscape architect working as a designer, artist and educator. He is co-founder of KOLLEKTIEF Landscape Architecture and Urbanism and has an artistic practice where he develops experimental projects on the fringe of landscape architecture, research and filmmaking. Corné keeps lecture and teaching engagements at various institutions, amongst them ENSP-Versailles, where he integrates the use of film as a tool for landscape architecture in his teaching.

The fact that humankind needs to transition to more sustainable modes of agriculture has become all but indisputable. In 2019, a commission by the prestigious Lancet journal described the state of current global agricultural practice:

"Food production is the largest cause of global environmental change. ..[it].. is responsible for up to 30% of global greenhouse–gas emissions and 70% of freshwater use. Conversion of natural ecosystems to croplands and pastures is the largest factor causing species to be threatened with extinction. Overuse and misuse of nitrogen and phosphorus causes eutrophication and dead zones in lakes and coastal zones."

Modern agriculture and its products will become some of the key indicators of the Anthropocene in the geological strata. The industrial production of broiler chicken, for example, is "likely to leave a widespread and distinctive biostratigraphic signal in the sedimentary record."²

Simply downscaling current agricultural practices is not an option as more than 820 million people do not have access to sufficient nutrition and the world population keeps growing. Agricultural productivity needs to increase whilst simultaneously ceasing to be a damaging force to our planet.³

The debate on the approach to developing sustainable agricultural practices with sufficient productivity to support mankind has been ongoing ever since the end of the second World War. The debate has been contentious and polarised. There are those believing a full investment in technological innovation will result in sufficient and sustainable food production whilst society keeps consuming, functioning, and developing as it is. Others argue societies will need to change drastically in order to reduce consumption and produce food in a more ecological manner. Proponents of this side of the debate often look back to traditional techniques of agriculture for a sustainable mode of food production⁴. Both sides agree that radical change is needed in almost every system of food production. And both sides focus mainly on adopting certain agricultural techniques to achieve this radical change.

The spatial impact of innovating agricultural techniques

A radical change in food production techniques will have a substantial spatial impact on the landscapes humans inhabit. Agriculture takes up 50% of the inhabitable land mass and roughly

¹ Walter Willett et al. "Food in the Anthropocene: the EAT—Lancet Commission on healthy diets from sustainable food systems" Lancet (16 January 2019): 449 https://doi.org/10.1016/S0140-6736(18)31788-4

² Carys Bennett et al. "The broiler chicken as a signal of a human reconfigured biosphere" *Royal Society Open Science* (December 12, 2018): 8 https://doi.org/10.1098/rsos.180325

³ Willett et al. "Food in the Anthropocene"

⁴ Mann, The Wizard and the Prophet (London: Picador, 2019)

a third of all land on the planet⁵. It only makes sense that spatial designers have lately become vocal in the debate that surrounds the sustainability of agriculture. Notable were two large exhibitions, one organised by Rem Koolhaas and AMO in New York's Guggenheim museum⁶ and the other by Sebastien Marot during the 2019 Lisbon architecture Triennale⁷. Both exhibitions take a stance in the polarised debate on food production techniques. Koolhaas is a proponent of innovative techniques like pixel farming. Marot argues for imposing limitations on agricultural production and introducing ecological farming techniques like permaculture.

Neither exhibition addresses the (spatial) impact of implementing new techniques onto existing landscapes. Marot presented the visitor with four birds-eye perspectives of hypothetical (semi-)agricultural landscapes, each representing a different approach to sustainable agriculture. The images are too zoomed out to show us the aesthetic qualities, sounds, smells, views, textures and movements of the landscapes resulting from each approach. I'm left wondering how the new agricultural techniques have altered the everyday spaces of the inhabitants of the hypothetical landscape. The Guggenheim exhibition contained a series of installations showing futuristic farming practices, from pollinator robots to plants growing under infrared light. What will happen, on a systemic and functional level, when these new agricultural techniques are applied to a specific place? How will the techniques affect (among many other things) the ecological, hydrological and economic functioning of a region?

The implementation of innovative agricultural techniques, be it pixel farming or permaculture will drastically alter the aesthetic qualities and systemic functioning of agricultural landscapes. As such, the aesthetic and systemic impact of sustainable agriculture on specific existing landscapes needs to be considered.

'Tussen de kassen', a reading of a greenhouse horticulture landscape

With the video-essay 'Tussen de kassen', I attempt to shift the current architectural debate on food production in a direction that would allow consideration of the spatial impact of implementing agricultural new techniques. The video-essay will be the first in a series that examines landscapes where the most modern or pioneering food production techniques are applied. Looking at these pioneering landscapes gives a glimpse of a future where these techniques are applied more broadly. Allowing viewers to speculate on the impact of a certain

⁵ Hannah Ritchie and Max Roser, "Land use for agriculture." 2019 https://ourworldindata.org/land-use

⁶ AMO and Rem Koolhaas, Countryside, A Report (Köln: TASCHEN, 2020)

 $^{7\} Sebastien\ Marot,\ \textit{Taking the country's side},\ \textit{Agriculture and Architecture}\ (Lisbon:\ Ediciones\ Poligrafa,\ 2019)$

⁸ Marot, Taking the country's side

⁹ Deborah Gans, "Countryside: The Future and the Past" Places Journal (January 2021) https://doi.org/10.22269/210126

agricultural technique and discover ways to meaningfully contribute to the agricultural transition at hand. The video–essay was published on Archined¹⁰, a prominent Dutch online platform for articles on urbanism, architecture and landscape architecture¹¹.

'Tussen de kassen' presents a reading of the landscape of 'Wilgenlei' and 'Oosteindse polder'. Two clusters of greenhouse horticulture that are part of a larger conglomeration of horticulture and agrilogistics businesses, scattered throughout a meadow landscape north of Rotterdam (NL). The video essay is inspired by a loosely defined genre of experimental and documentary film that Film Scholar Fred Truniger coined 'Landscape Film'. Films in this genre vary widely in age and origin, but share the intent to depict and narrate specific landscapes.

'[Landscape Films] share a primarily open form, which pre-interprets the landscape for the viewer by means of a precise reading of visible and invisible clues, but do so without enforcing a single interpretation. ... These films address active viewers, who question critically what the film offers and are able to integrate information into a more broadly conceived framework of interpretation so that in the end they develop their own, mutable image of the landscape.'¹²

Truniger considers works by filmmakers like Gerhard Friedl¹³ and James Benning¹⁴ as representative examples of 'Landscape Film'. Both present readings of landscapes in a documentarian style with relatively long, still or slowly panned shots. Both develop a narrative mainly through the positioning and framing of the camera and the sequencing of shots.¹⁵ I consider filmmakers like Lukas Marxt¹⁶ and Maeve Brennan¹⁷ equal parts of the genre. Both stray further from this documentarian style by experimenting with form and technique to present a more precise and intricate reading of a landscape based on "visible and invisible clues." ¹⁸

'Tussen de kassen' combines the documentarian style described by Truniger with the more experimental use of media applied by Marxt and Brennan (see figures 1–8). Still and slowly panned shots represent the spatial and synaesthetic properties of the site. These are interspersed with images of architectural models laying out the geometry of the site and

¹⁰ Corné Strootman, "Tussen de kassen – de ruimtelijke impact van de verduurzaming van landbouw in beeld." *Archined*, 2023 https://www.archined.nl/2023/03/tussen-de-kassen/

¹¹ An English version of the essay can be viewed using the following link https://vimeo.com/797997684/c8731c94c8

¹² Fred Truniger, Landscript 2: Filmic Mapping (Berlin: Jovis verlag, 2013), 17

¹³ Gerhard Benedikt Friedl, "Knittelfeld - Stadt ohne Geschichte" (Vienna: Sixpackfilm, 1997)

¹⁴ James Benning, "Sogobi" (Sierra Nevada: ALIVE, 2002)

¹⁵ Truniger, Landscript 2: Filmic Mapping

¹⁶ Lucas Marxt, "Imperial Valley (Cultivated run-off)" (Hamburg: Blinkvideo Media Art, 2018)

¹⁷ Maeve Brennan, "Listening in the Dark" (2018)

¹⁸ Truniger, Landscript 2: Filmic Mapping, 17









[Figures 1–8] Stills from 'Tussen de Kassen'









THEORETICAL PAPERS

revealing (spatial) relationships between the greenhouse and its surroundings that remain hidden below the landscape's surface. A written narrative provides context to the images with information based on academic studies and planological documents related to the site, as well as my personal reflections as the author.

The horticulture and agrilogistics businesses of 'Wilgenlei' and 'Oosteindse polder' work together in a regional organisation called 'Oostland'. The name is a response to the nearby 'Westland', as Oostland tries to resemble this innovative region lauded as the future of agriculture by Koolhaas in his Guggenheim exhibition¹⁹. The foundation for this 'future of agriculture' is a greenhouse system. The first images of the film reveal a greenhouse horticulture system as it is generally understood. A closed, controlled system with highly monitored in– and output. An architectural model reveals a mostly underground network of infrastructure that provides electricity, heating, and nutrients that allow a stable and controlled environment within the greenhouse. The captions explain that 'Oostland' does not radically change the systemic set–up but aims to become more sustainable by changing the input into the closed system. The conglomerate experiments with heating derived from geothermal sources and stimulating plant growth through exposure to CO₂ emitted by a nearby industrial harbour²⁰.

A second model shows that in practice greenhouse systems turn out to be less closed, as it is difficult to prevent leakage. Horticultural fertiliser somehow gets into the water system and influences flora growing in between the greenhouses. A series of shots show a peculiar ecosystem containing a selection of plants thriving on the high nutrition levels in the groundand surface water of 'Wilgenlei' and 'Oosteindse polder'.²¹ Local legislation aims to close the horticultural system, preventing any type of runoff altogether, a seemingly naive and unachievable goal.

The greenhouses are perhaps more closed spatially than systemically. The film shows plexiglass greenhouse facades and discrete encasings containing energy infrastructure that disclose little of what happens inside to passers-by. Planting screens the greenhouse cluster from users of an adjacent cycling route. The captions argue that the spatial closedness of the horticultural system prevents stakeholders, sustainability experts and designers from entering a more multivocal discourse on the state of the greenhouse landscapes and halts a truly sustainable transformation of horticultural practices.

¹⁹ AMO and Koolhaas, Countryside, A Report

²⁰ Van Bergen Kolpa Architecten et al. "Werkboek Oostland" (Den Haag: Greenport West Holland, 2020)

²¹Eddy Weeda, "Waterplanten als maat voor de biologische kwaliteit van oppervlaktewateren" (Wageningen: Alterra, 2011)

With 'Tussen de kassen', I argue that agricultural landscapes should be developed with an eye for existing and potential recreational, historical and spatial qualities and awareness of larger landscape systems. The landscape shots towards the end of the film suggest that for 'Wilgenlei' and 'Oosteindse polder', the key to a sustainable and livable landscape lies in the spaces in between the greenhouses²². Workers are seen using these spaces to have lunch, smoke a cigarette or have a chat. More traditional agricultural practices, like sheep grazing and the sale of produce at the front doors of farmhouses take place. The presence of these activities stimulates interaction between horticultural practice and the outside world. As such they could be developed into spaces where passers-by, stakeholders, experts and designers come in contact with horticultural processes. Equally, a conscious planting plan for the spaces between the greenhouses can (combined with environmental policy) regulate runoff from greenhouse horticulture and lead to a rich and diverse ecosystem. The development of non-agricultural spaces in parallel to implementing new agricultural techniques is essential to create liveable and sustainable landscapes.

(Landscape) Architectural carpentry

Anthropologist Melanie van der Hoorn points out that film has been used as a tool by architects and urbanists as early as the 1920's to communicate and convince wider audiences of their design approach²³. Later, as cameras became handheld and affordable, architects started using film to annotate. Architect Jaap Bakema famously brought his camera to exhibitions and project sites²⁴ and Denise Scott Brown used film during her fieldwork in Las Vegas²⁵. But '*Tussen de Kassen*' was not a specific tool in a bigger project, it was a means of engaging with-and producing knowledge on a landscape. The complete process of filmmaking (including preliminary site visits, storyboarding, filming, editing, etc.) led to valuable insights into the horticultural landscape.

American philosopher Ian Bogost is a proponent of engaging in non-traditional methodologies as a means of knowledge production. He argues that the use of unconventional methods can lead to valuable insights in any discipline. These insights are often unexpected and could not have been attained using the traditional methods of a discipline, simply because a new method requires new actions, mediates knowledge differently and invites deeper reflection. He calls this approach to knowledge production 'philosophical carpentry' (carpentry is one of the practices

²² Strootman, "Tussen de kassen"

²³ Melanie Van der Hoorn, Spots in Shots (Rotterdam: nai010, 2018)

²⁴ Melanie Van der Hoorn, "Filmische schetsboekjes en hippe projectpresentaties. De films van Jaap Bakema" Archined, 2020 https://www.archined.nl/2020/12/filmische-schetsboekjes-en-hippe-projectpresentaties-de-films-van-jaap-bakema

²⁵ Robert Venturi, Denise Scott-Brown, and Steve Izenour, *Learning from Las Vegas - Revised Edition*. (Cambridge: MIT Press, 1977)

he believes could lead to new insights in philosophy)²⁶. With '*Tussen de kassen*' I, as a landscape architect, used filmmaking as a form of architectural carpentry. Even though I have not found any direct references to Bogost's notion of carpentry in the work of (landscape) architects, many have taken on his approach in spirit. Artists Bas Gorter and Ernst van der Hoeven, for example, used loom–weaving as a method to develop thoughts on urban planning.²⁷ Landscape architect Christophe Girot used film to explore the effects of movement (specifically movement by car) on landscape perception.²⁸ Landscape architect Rikke Munck Petersen, together with Mads Farsø, developed the notion of film as a resonance tool to "*represent and stimulate resonances between a sensing body and its surrounding*"²⁹, and applies this tool in her design studio teaching. Visual artist Sophie Czich's video 'As the Facade bends' uses film as an architectural manifesto, an active work–document and an archive of architectural collages simultaneously³⁰.

Working on the video-essay revealed to me three ways in which filmmaking-as-carpentry benefits landscape architects working on the transition towards sustainable agricultural landscapes; (1) As a tool to explore and examine the atmospheres of agricultural landscapes. (2) As a method to discover unexpected entanglements in food production landscapes. (3) As a form of eidetic storytelling for landscapes of the Anthropocene.

Film as a tool to explore and examine atmospheres of agricultural landscapes

I initially decided to work with film in 'Tussen de kassen' to annotate, examine and convey the synaesthetic properties of 'Wilgenlei' and 'Oosteindse polder'. "Synesthetic properties are usually seen as qualities of the senses that belong to more than one sensory field at once"31. Film is, more than any traditional architectural medium, able to convey (some of) the synaesthetic properties of a place. Representing simultaneously the visual, temporal, acoustic and (to a certain extent) tactile qualities of what is in front of the camera³². Synaesthetic properties are the foundation for what philosopher Gernot Böhme calls 'atmosphere'³³.

- 26 Ian Bogost, *Alien Phenomenology, or What It's Like to Be a Thing* (Minneapolis: University Of Minnesota Press, 2012) 27 Independent School for the city. "Urban tissue weaving" Accessed 30–09–2023 https://www.schoolforthecity.nl/
- 2/ Independent School for the city, "Urban tissue weaving" Accessed 30–09–2023 https://www.schoolforthecity.nl/urban-tissue-weaving/
- 28 Christophe Girot, "Landscape: Beyond the margins of vision." in *Emerging Landscapes: Between Production and Representation.* Ed. D. Deriu, K. Kamvasinou, and E. Shinkle (Farnham: Ashgate Publishing Ltd, 2015)
- 29 Rikke Munck-Petersen and Mads Farsø, "Resonance and Transcendence of a Bodily Presence: How a filmic mapping of non-visual, aural and bodily relations in space can strengthen the sensory dimension in landscape architectural design." in *Architecture Filmmaking* ed. Igea Troiani and Hugh Campbell (Bristol: Intellect Ltd, 2019)
- 30 Sophie Czich, "Where the facade bends. An architectural critique in the form of an animation" *Archined*, 2021 https://www.archined.nl/2021/09/where-the-facade-bends-an-architectural-critique-in-the-form-of-an-animation/
- 31 Gernot Böhme, "Atmosphere as Mindful Physical Presence in Space" OASE issue 91 (2013): 29
- 32 Truniger, Landscript 2: Filmic Mapping
- 33 Gernot Böhme, "Atmosphere as the fundamental concept of a new aesthetics" *Thesis eleven, critical theory and historical sociology* vol. 36 (1993)

An 'atmosphere' is a descriptive tool used in everyday speech. 'Atmospheres' can be applied to spaces, things, people or events (a room of people, for example, can have an atmosphere that is tense, friendly, frigid, etc). Atmospheres "fill the space with a certain tone of feeling like a haze." As a descriptive tool, 'atmospheres' have an in-between status, being not merely in the mind of an observer nor fully attributable as a quality of the perceived. To Böhme, "atmosphere is the common reality of the perceiver and the perceived," generated by the interaction between the two. Through 'atmospheres' a person assigns meaning unconsciously and almost instantaneously whenever they enter a space. Film transposes something that resembles the synaesthetic properties of a site, allowing the viewer to 'feel into' that site and generate 'atmosphere' without a physical presence.

The aforementioned James Benning often seems to play with the relationship between synaesthetic properties and the 'atmospheric' meaning derived from them. His film 'Sogobi' portrays the Californian desert in 35 still shots, each with a duration of at least 2 minutes³⁷. Because of the long display of a single landscape image, viewers slowly become aware of the synaesthetic properties behind their initial unconscious reaction. Take a shot towards the end of the film, revealing the remains of a forest fire. As a viewer, I instantly recognize something is not right, even before spotting the last flames on the branches of a smouldering pinetree. As these flames slowly die, I realise it wasn't just the flames that stirred an unconscious feeling of unease, but a combination of textures, sounds and movements; The eerie quiet of the forest, interrupted every so often by a crackling sound. A thick white cloud reveals itself to be smoke by moving too fast and unpredictable to be fog. The combination of these aesthetic qualities led to the unconscious designation of meaning to the landscape.

Benning sometimes subverts the atmospheres generated by the viewer. After establishing a sense of serene and pristine wilderness through a series of landscapes containing hillsides, forests and lakes, a low flying helicopter disturbs the quiet. Throughout 'Sogobi', a number of human traces (like billboards, ships and cattle) question the initial sense of pristine wilderness, forcing the viewer to wonder how much of the landscape is the result of human intervention. By presenting visual and synaesthetic traces, Benning alters subconsciously assigned 'atmospheres'.

'Tussen de kassen' aims to do just this. Subverting intuitive readings of the landscape of 'Wilgenlei' and 'Oosteindse polder' by presenting its synaesthetic qualities. The video essay combines still images shot with a 10mm wide–angle lens and panned images shot with a 50mm close–up lens. The images initially reveal a reading of the landscape that supports the notion of

³⁴ Böhme, "Atmosphere as Mindful Physical Presence", 114

³⁵ Böhme, "Atmosphere as Mindful Physical Presence", 112

³⁶ Giuliana Bruno, Atlas of Emotion (New York: Verso, 2002)

³⁷ These long duration shots are a trademark of Benning's work

greenhouse horticulture as a stand-alone, highly technological system (as established in the Guggenheim exhibition). Shots of geometrical water systems, plexiglass facades and a quietly humming electrical substation only reveal themselves to be film instead of photo through movements of the manicured lawns they are placed on. They establish the still and estranging feeling of a high-tech landscape far removed from many of our everyday lives.

As the video-essay develops, the images start to reveal a fuzzy landscape that comes across as equal parts futuristic and traditional. Both agricultural and urban. A single family house with a brightly flowering garden stands in between the greenhouses. So does a fading green container filled with sugar beets, fresh from the field. A man drives past sheep and chickens on an electric motorbike. Brambles overgrow a bin left in a ditch. A person walks their dog along the plexiglass facades. Again, the synaesthetic properties play a part in revealing the urban frills. The sounds of a plane taking off from an airport in the vicinity or the fading noise of heavy traffic invade the still, high-tech environments. Suggesting a concentration of urbanity nearby. Most of 'Wilgenlei' and 'Oosteindse polder' do not feel highly technological, but slow-paced, slightly messy and almost leisurely. Although visually different, the images of the video-essay bring to my mind the term 'Desakota'. A concept often used to describe the areas of large South-East Asian urban conglomerations that are both densely populated and have a high agricultural productivity. Places where urban and agricultural forms of land use intermingle and are often inseparable³⁸. The images and synaesthetic properties of 'Tussen de kassen' challenge the notion of horticulture as a stand-alone system separate from its surrounding natural and urban landscapes.

Film confronts the viewer with synaesthetic properties that challenge the preconceived meaning assigned to a landscape. Unexpected combinations of images, sounds and movements alter our attitude towards a space in a way that is not quite conscious, but certainly rooted in a precise reading of a landscape.

Filmmaking as a method to explore unexpected entanglements in food production landscapes.

During the making of '*Tussen de Kassen*', filmmaking quickly became a structuring principle for me to systematically explore 'Wilgenlei' and 'Oosteindse polder'. Urbanists Andrea Kahn and Carol Burns argue that the (architectural) medium used to analyse and represent a site determines our understanding of that site. "*Graphic tools inform and bracket how designers think*." A model, plan drawing or diagram may include or omit certain information, simply

³⁸ Kees Christiaanse, "Green urbanism. Models of a dense and green urban context" in *Textbook* ed. Kees Christiaanse and Jessica Bridger (Rotterdam: nai010, 2018): 162–178

³⁹ Andrea Kahn and Carol Burns, "Why site matters" in *Site matters: Strategies for uncertainty through planning and design* ed. Andrea Kahn and Carol Burns (London: Routledge, 2020): 8

because of the representational limitations of that medium. Equally, different representational media require different approaches to a site and different methodologies to produce and process knowledge. It is interesting to compare '*Tussen de kassen*' to '*Werkboek Oostland*'40 with this notion in mind.

'Werkboek Oostland' is a spatial analysis of the Oostland greenhouse conglomeration. It is produced by a collaboration of local horticulturalists, government officials, engineering offices, agriculture scientists and an architecture office. The publication perpetuates an image of 'Wilgenlei' and 'Oosteindse polder' as efficient, productive, closed and autonomous. Some aspects of the landscape merely need a little tweaking to remain functional in the future.

The collaborative takes a layered approach to understanding and representing the region. An analysis of geospatial data is presented in a series of thematic maps that highlight different characteristics of the region. The maps reveal the age of the different greenhouse developments, their primary form of produce, all buildings designated as 'housing', and so on. The layered approach is a useful tool to discover spatial patterns and large scale landscape processes that remain imperceptible when physically present on a site. However, it presupposes that different aspects of a landscape can be understood separately from one another. Unexpected (spatial) relationships between the different layers remain undiscovered⁴¹.

'Tussen de kassen' reveals a different reading of the landscape. 'Wilgenlei' and 'Oosteindse polder' become a system of greenhouse horticulture intentionally and unintentionally entangled with its surroundings. Where historic structures still influence current development. Nutrient runoff affects planting. And the spatial configuration of the horticulture system influences the discourse on sustainable development. The video-essay shows how altering one aspect of the greenhouse clusters will have diverse and unexpected consequences on the wider landscape.

Filmmaking asks for a close engagement with the site. As a filmmaker, I spend a considerable amount of time on site filming, visiting and revisiting locations. More than a passive observer, I became a participant in the studied landscape. I felt the warmth emanating from the greenhouses on a cold winter day and chatted with workers curious about the camera. It led to a more intimate understanding of the site beyond the direct topic of study and helped uncover unexpected entanglements between greenhouse horticulture and other landscape aspects. The way in which a camera indiscriminately records further helps this process, as it allows the filmmaker (as well as the viewer, later on) to reflect on things that went unnoticed during the site visit. Some of the slowly panned shots of planting along a canal show Rigid Hornwort. As Hornwort is an indicator species of high-nutrient levels in surface water, this was the starting

⁴⁰ Van Bergen Kolpa Architecten et al. "Werkboek Oostland"

⁴¹ Marialessandra Secchi and Marco Voltini, "They do it with layers – How design by layers is killing urban complexity" *OASE* Issue 107 (Rotterdam: nai010, 2020): 74–87

point of research into the water quality of the region. The presence of Hornwort had escaped my attention during the visits, but became obvious during editing.

The editing process brings together images from separated locations taken at different times. Revealing spatial patterns and large scale landscape processes that remain imperceptible when physically present on a site, much like the layered approach. But where the layered approach observes 'Wilgenlei' and 'Oosteindse polder' at a distance, editing keeps the researcher in close relation to the site, able to perceive things in the periphery that didn't seem important when recording, but turned out to be significant. Filmmaking develops an entangled⁴² understanding of a landscape. By placing the researcher (or designer) directly on the ground, in front of-and in the same world as the topic of study, we can look for unintended and unexpected consequences of our human actions⁴³. It stimulates a more complete evaluation of the impact of new agricultural techniques, in line with the current state of the planet

Film as a form of eidetic storytelling for landscapes of the Anthropocene.

"Techniques of analysis, data collection processes, etc. [lend] identity to a site, since design actions are themselves definitive acts." He landscape architect James Corner calls this process 'imaging', stating: "how one "images" the world literally conditions how reality is both conceptualized and shaped." Fred Truniger refers to the same process as narrating or storytelling. He goes as far as to say that the act of narrating is one of two ways in which humans transform landscapes, the other form being construction. Narratives actively define how we act in, experience and understand spaces: "a prominent hill, for example, becomes the Acropolis by means of a story." He veloped 'Tussen de kassen' as a video essay to experiment with forms of storytelling for Anthropocenic agricultural landscapes.

Representation plays an important role when developing a narrative. Any type of representational medium can be used to construct an image of a landscape, from photograph, to spoken word, pie-chart, painting, or audio recording. Often compositions of different media are used. The selection of types of media, and the tone and style of the composition do as much of the narration as the represented content. The medium oftentimes is the message⁴⁷. Corner notes that landscape architects often fall back on a limited number of techniques.

⁴² Donna Haraway, Staying with the trouble (Durham: Duke University Press, 2016)

⁴³ Timothy Morton, "The Mesh" in *Environmental Criticism for the Twenty-First Century*. Ed. Stephanie LeMenager, Teresa Shewry and Ken Hiltner (New York: Routledge, 2011): 19–30

⁴⁴ Kahn and Burns, "Why site matters" 8

 $^{45\,}James\,Corner, \\"Eidetic operations and new landscapes" in \textit{Recovering Landscape}\ ed.\ James\,Corner\ (New\,York: Corner, Corner,$

Princeton Architectural Press, 1999): 153

⁴⁶ Truniger, Landscript 2: Filmic Mapping 171

⁴⁷ Marshall McLuhan and Quinten Fiore, The Medium is the Massage (London: Penguin Books, 2008)

"Whether [looking at] maps, paintings, collage, performance arts, or cinematic and digital media– I am struck by the range of types and forms of representation in comparison to the relatively small number of techniques used in the landscape, architectural, and planning arts."

Designers often rely on pictorial techniques that treat landscapes as static and singular. Corner sees this as a lost opportunity for "emancipation, heterogeneity, and open-ended relations among parts" of the landscape⁴⁹.

Anthropologist Nils Bubant points out that "the *increasing impossibility of distinguishing human from nonhuman forces*" is an "*important and unsettling feature of the Anthropocene*." As such, it is impossible to develop a meaningful singular narrative when working with Anthropocenic landscapes. Linear and singular narratives of Anthropocenic events and landscapes are what Bubant calls "*undecidable*" These narratives simply state it is impossible to say with certainty why, or because of whom, an Anthropocenic landscape came to be. These narratives do not convey the richness and multitude of observations of intermingling human and non-human processes that caused the uncertainty. 'Undecidability' often leads to inaction, as it can't be said with certainty what can be done to rehabilitate a landscape, or who to hold financially responsible for the actions that need to be taken. Politicians and companies often actively use the 'undecidability' of singular narratives to avoid responsibility⁵². This is visible in a minor way in '*Werkboek Oostland*'. The document admittedly intends to minimise pollutants and improve water quality, but also states it is uncertain how much horticulture contributed to the current situation⁵³. 'Undecidability' helps the conglomerate avoid taking explicit responsibility for the region's poor water quality.

In his South–East Asian case studies, Bubants reveals how locals create stories of spirits to grasp Anthropocenic events and landscapes. The spirits are draped in mysticism but very much based on real life observations. Their stories combine human and non–human events that seem related but are hard to put together in traditional, linear narratives. The spirit narratives allow the locals to move forward in their Anthropocenic landscape. Using storytelling as a coping mechanism, to fuel protests and activism, and to generate new forms of income.⁵⁴

```
48 Corner, "Eidetic operations" 163
```

⁴⁹ Corner, "Eidetic operations" 166

⁵⁰ Nils Bubant, "Haunted Geologies: spirits, stones and the necropolitics of the anthropocene" in *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* ed. Anna Tsing, Heather Swanson, Elaine Gan and Nils Bubandt (Minneapolis: University of Minnesota Press, 2017): 122

⁵¹ Bubant, "Haunted Geologies" 127

⁵² Bubant, "Haunted Geologies"

⁵³ Van Bergen Kolpa Architecten et al. Werkboek Oostland

⁵⁴ Bubant, "Haunted Geologies"









[Figures 9-16]
Stills from 'Tussen de Kassen' showing the use of different media in the essay









The spirits are an example of what James Corner calls 'eidetic images'. Images with "metaphoric agency" that present a combination of different types of information, "picturable ... acoustic, tactile, cognitive, or intuitive" to create "a host of associative possibilities." Through utilizing a variety of analytic and analogous imaging techniques, otherwise disparate parts can be brought into productive relationship" Eidetic storytelling is heterogeneous and open–ended and provides a means for understanding and moving forward with Anthropocenic landscapes.

As is clear in figures 9–16, '*Tussen de kassen*' aims to function as eidetic storytelling as it creates an open–ended landscape narrative based on different types of media and information. The final result does not provide a clear and definitive image of 'Wilgenlei' and 'Oosteindse polder'. It does allow scientific, political, spatial and phenomenological observations to intermingle and leads to a clear and reasoned course of action that could be taken to make the area more sustainable. Eidetic storytelling also makes '*Tussen de kassen*' accessible to a wider audience. As it communicates a wider variety of information through different forms of media, it makes a niche subject more graspable for viewers without prior knowledge. This made it possible to share the video–essay on a popular architecture platform. I think it shows how film can be useful to communicate the processes at play in anthropocenic landscapes within their context and enrich the discourse on the transition to sustainable agriculture.

'Landscape architectural carpentry' in times of climate crisis

The scientists behind the Lancet-commission, referenced at the beginning of the essay, state that "a rising number of environmental systems and processes [is] being pushed beyond safe boundaries by food production, [and] methods of food production need to be urgently reviewed." In the first part of this essay I argue that (landscape) architects should be part of this urgently needed reviewing process. The discourse on sustainable agriculture needs to move beyond agricultural techniques in the abstract and include the aesthetic and systemic consequences of implementing these techniques in specific landscapes. By presenting a reading of a landscape where innovative agricultural practices take place, 'Tussen de Kassen' aims to enrich the current discourse.

The second part of the essay outlines three ways in which filmmaking as architectural carpentry benefits the work of landscape architects whilst examining modern landscapes of food production. It is by no means an exhaustive overview and points at many subjects that could be explored deeper and further. A common thread of the anthology is film raising awareness

55 Corner, "Eidetic operations" 163

56 Corner, "Eidetic operations" 153

57 Corner, "Eidetic operations" 163

58 Corner, "Eidetic operations" 166

59 Willett et al. "Food in the Anthropocene" 449

of the position of the researcher/designer. Be it their literal position in the field, as film allows the exploration and examination of the 'atmospheres' that flow forth from a synaesthetic experience of the site. Their intellectual position and approach, as filmmaking functions as a methodology to discover interrelations of agricultural landscapes. Or their political position, challenging narratives of 'undecidability' by applying film as an eidetic image to convey Anthropocenic landscapes as multivalent and non-linear.

For me, developing 'Tussen de kassen' as a video-essay was an experiment. To find my place as a spatial designer in a transition where this discipline has not traditionally been a part of. To develop an approach to site-specific research in times of ecological crisis. And to explore forms of representation for Anthropocenic agricultural landscapes. Eidetic storytelling turned out to be a fruitful experiment in representation. And filmmaking-as-carpentry is a helpful way to approach agricultural landscapes. I am sure other experiments in architectural carpentry would lead to other promising forms of representation, methodologies and approaches to the urgently needed review of agricultural practices.

Bibliography

AMO and Koolhaas, Rem. Countryside, A Report. Köln: TASCHEN, 2020

Bennett, Carys. Thomas, Richard. Williams, Mark. Zalasiewicz, Jan. Edgeworth, Matt. Miller, Holly. Coles, Ben. Foster, Alison. Burton, Emily and Marume, Upenyu. "The broiler chicken as a signal of a human reconfigured biosphere" *Royal Society Open Science* (December 12, 2018) https://doi.org/10.1098/rsos.180325

Benning, James. "Sogobi." Sierra Nevada: ALIVE, 2002

Böhme, Gernot. "Atmosphere as the fundamental concept of a new aesthetics." Thesis eleven, critical theory and historical sociology vol. 36 (1993): p. 113–126

Böhme, Gernot. "Atmosphere as Mindful Physical Presence in Space." Space. Building atmosphere, OASE issue 91(2013): p.21–32 https://www.oasejournal.nl/en/Issues/91/AtmosphereAsMindfulPhysicalPresenceInSpace#021

Bogost, Ian. Alien Phenomenology, or What It's Like to Be a Thing. Minneapolis: University Of Minnesota Press, 2012

Brennan, Maeve. "Listening in the Dark." 2018

Bruno, Giuliana. Atlas of Emotion. New York: Verso, 2002

Bubant, Nils. "Haunted Geologies: spirits, stones and the necropolitics of the anthropocene." *Arts of Living on a Damaged Planet: Ghosts and Monsters of the Anthropocene* edited by Tsing, Anna. Swanson, Heather. Gan, Elaine. Bubandt, Nils. p.121–141. Minneapolis: University of Minnesota Press, 2017

Corner, James. "Eidetic operations and new landscapes." Recovering Landscape edited by Corner, James. p.153–169. New York: Princeton Architectural Press, 1999

Christiaanse, Kees. "Green urbanism. Models of a dense and green urban context" Textbook edited by Christiaanse, Kees. and Bridger, Jessica. p.162–178. Rotterdam: nai010, 2018

Czich, Sophie. "Where the facade bends. An architectural critique in the form of an animation" Archined, 2021 https://www.

archined.nl/2021/09/where-the-facade-bends-an-architectural-critique-in-the-form-of-an-animation/

Friedl, Gerhard Benedikt. "Knittelfeld - Stadt ohne Geschichte." Vienna: Sixpackfilm, 1997

Gans, Deborah. "Countryside: The Future and the Past," Places Journal (January, 2021) https://doi.org/10.22269/210126

Girot, Christophe. "Landscape: Beyond the margins of vision." *Emerging Landscapes: Between Production and Representation*. edited by Deriu, D. Kamvasinou, K. and Shinkle, E. Farnham: Ashgate Publishing Ltd, 2015

Haraway, Donna, Staying with the trouble, Durham; Duke University Press, 2016

Independent School for the city. https://www.schoolforthecity.nl/urban-tissue-weaving/ Accessed 30-09-2023

Kahn, Andrea. and Burns, Carol. "Why site matters." Site matters: Strategies for uncertainty through planning and design edited by Kahn, Andrea and Burns, Carol. p.1–13. London: Routledge, 2020

Mann, Charles. The Wizard and the Prophet. London: Picador, 2019

Marot, Sebastien. Taking the country's side, Agriculture and Architecture. Lisbon: Ediciones Polígrafa, 2019

Marxt, Lucas. "Imperial Valley (Cultivated run-off)." Hamburg: Blinkvideo Media Art, 2018

McLuhan, Marshall. and Fiore, Quinten. The Medium is the Massage. London: Penguin Books, 2008

Morton, Timothy. "The Mesh." Environmental Criticism for the Twenty-First Century. edited by LeMenager, Stephanie. Shewry, Teresa. and Hiltner, Ken. p.19–30. New York: Routledge, 2011

Munck-Petersen, Rikke and Farsø, Mads. "Resonance and Transcendence of a Bodily Presence: How a filmic mapping of nonvisual, aural and bodily relations in space can strengthen the sensory dimension in landscape architectural design." *Architecture Filmmaking* edited by Troiani, Igea. and Campbell, Hugh. Bristol: Intellect Ltd, 2019

Ritchie, Hannah and Roser, Max. "Land use for agriculture." 2019 https://ourworldindata.org/land-use

Secchi, Marialessandra and Voltini, Marco. "They do it with layers – How design by layers is killing urban complexity." The drawing in Landscape Design and Urbanism, OASE (Issue 107) p. 74–87. Rotterdam: nai010, 2020

Strootman, Corné. "Tussen de kassen – de ruimtelijke impact van de verduurzaming van landbouw in beeld." *Archined*, 2023 https://www.archined.nl/2023/03/tussen-de-kassen/

Truniger, Fred. Landscript 2: Filmic Mapping. Berlin: Jovis verlag, 2013

Van Bergen Kolpa Architecten. REBEL. Wageningen University and Research. SWECO and Grootscholten Consultancy. *Werkboek Oostland*. Den Haag: Greenport West Holland, 2020 https://greenportwestholland.nl/wp-content/uploads/2021/09/Werkboek Oostland digitaal feb20.pdf

Van der Hoorn, Melanie. Spots in Shots - Narrating the built environments in Short Films. Rotterdam: nai010, 2018

Van der Hoorn, Melanie. "Filmische schetsboekjes en hippe projectpresentaties. De films van Jaap Bakema" *Archined*, 2020 https://www.archined.nl/2020/12/filmische-schetsboekjes-en-hippe-projectpresentaties-de-films-van-jaap-bakema/

Venturi, Robert. Scott Brown, Denise. Izenour, Steve. Learning from Las Vegas - Revised Edition. Cambridge: MIT Press, 1977

 $Weeda, Eddy.\ Waterplanten\ als\ maat\ voor\ de\ biologische\ kwaliteit\ van\ oppervlaktewateren\ Wageningen:\ Alterra,\ 2011\ https://edepot.wur.nl/176480$

Willett, Walter. Rockström, Johan. Loken, Brent. Springmann, Marco. Lang, Tim. Vermeulen, Sonja. Garnett, Tara. Tilman, David. DeClerck, Fabrice. Wood, Amanda. Jonell, Malin. Clark, Michael. Gordon, Line J. Fanzo, Jessica. Hawkes, Corinna. Zurayk, Rami. Rivera, Juan A. De Vries, Wim. Majele Sibanda, Lindiwe. Afshin, Ashkan. Chaudhary, Abhishek. Herrero, Mario. Agustina, Rina. Branca, Francesco. Lartey, Anna. Fan, Shenggen. Crona, Beatrice. Fox, Elizabeth. Bignet, Victoria. Troell, Max. Lindahl, Therese. Singh, Sudhvir. Cornell, Sarah E. Srinath Reddy, K. Narain, Sunita. Nishtar, Sania and Murray, Christopher J. L. "Food in the Anthropocene: the EAT—Lancet Commission on healthy diets from sustainable food systems" *Lancet* (16–01–2019) https://doi.org/10.1016/S0140-6736(18)31788-4