

# Experiential Design – Rethinking relations between people, objects and environments

Florida State University, AMPS, Architecture MPS  
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## EXPERIENCE-BASED CARTOGRAPHY: OBSERVATIONS ON THE ECOLOGY OF MENTAL HEALTH

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### INTRODUCTION

This paper is based on a speculative architectural research project at the Faculty of Built Environment at the Eindhoven University of Technology, commissioned by GGz De Grote Beek. The long-term objective of this project is to generate a set of speculative architectural scenarios, which reveal pathways for the Estate De Grote Beek to transform as a sustainable, healing environment. In specific, this paper is a reflection on the 56 maps elaborated by the author during the site analysis phase. The maps are geared towards unpacking the notions of “sustainability” and “healing environment” in the context of the Estate. This experience-based cartography helped identify the challenges and specific design targets for transforming the site into a sustainable, healing environment.

Since the 1960s, the intersection between mental and environmental health has been meticulously studied within the domain of environmental psychology, bringing to attention the way people perceive and act upon their environments, and how these environments affect the people’s behaviour. Typically, such studies rely on methodologies from psychology in combination with methodologies from architecture and geography.<sup>1</sup> This paper strives to build on the existing knowledge about the relationship between the environment and human psychology. This is done in the context of a speculative architecture research on the sustainable transformation of the Estate De Grote Beek, one of the largest mental health institutions in the Netherlands, with 13000 clients, 2000 staff, inhabiting a site of 117ha. Perception, behaviour and maintenance are strong ecological agents in such large mental healthcare institutions. The 56 maps visualise the ground conditions through four perceptive categories: landscape, the clients that inhabit it, the institution that governs it and the author’s interpretation of their interconnectedness. This paper zooms in on three thematic pairs: Landscaping and Behaviour, Landmarks and Healing, and Fragmentation and Fear. Conclusions are drawn on the intertwined conditions of mental and environmental health in urban green areas and mental healthcare institutions, comparable to the Estate De Grote Beek.

### METHODOLOGY

This analysis focuses on the intersection between physical interventions in the landscape and experienced phenomena. This intersection is documented through experience-based cartography, structured in four categories of maps: environmental, institutional, perceived and interpreted. This cartographic method is based on a combination of bibliographic research and interviews with key stakeholders of the Grote Beek. During the interviews the knowledge shared by the stakeholders was documented in notes and in an exercise of annotating and sketching over a printout of a black line topographic map of the site. Following this, the author translated these annotations into thematic digital maps. Each category explores the unique perspective of the landscape, the institution, the patients and the author.

The environmental perspective is informed by topographic data of the area and interviews with Peter Gielen (Outdoor Activity Manager) and Rob Lammers (Centre Manager and Management Advisor); the

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maps visualise topics such as biodiversity, soil, water, and ground surface. The institutional perspective is informed by interviews with Rien Castelijns (Real Estate manager and Treasurer), Janneke van Kessel (Team leader daily activities and operative in Sustainability Certification) and Eric Irausquin (Chief of Security for Estate De Grote Beek), as well as by the strategic development plan, among other internal documents; the topics in focus are the value and condition of the real estate, departments distribution, and zoning, laws and regulations. The clients' perspective is informed by an interview with Eri van den Broek and Ian Havinga (members of the clients' council of GGZ Eindhoven) and a survey of 13 clients; this category visualises the way the clients experience and perceive the site, the places they like, fear or find purpose in, and the problems they encounter.

The author's perspective is informed by metadata, interpretation and intuition. This category contains interpretations of the site workings, borrowing the logics of concepts such as the Ungers' Green Archipelago, the ecological effect of reintroducing wolves in the Yellowstone park, Jackson's Vernacular and Political Landscapes, among others.<sup>2 3 4</sup> More importantly, the author's interpretation built on these logics by accounting for the stakeholder perception and experience. This category reveals alternative operative histories of the site, which give new and coherent meaning to the interrelation between landscape, institution, and clients, and therefore can show new pathways for the site to transform into a sustainable, healing environment. This is crucial in this project, because the site currently lacks a coherent overarching vision that is able to address and accommodate its diversity of actors and qualities.

## **LANDSCAPING AND BEHAVIOUR: A MATTER OF CONTROL**

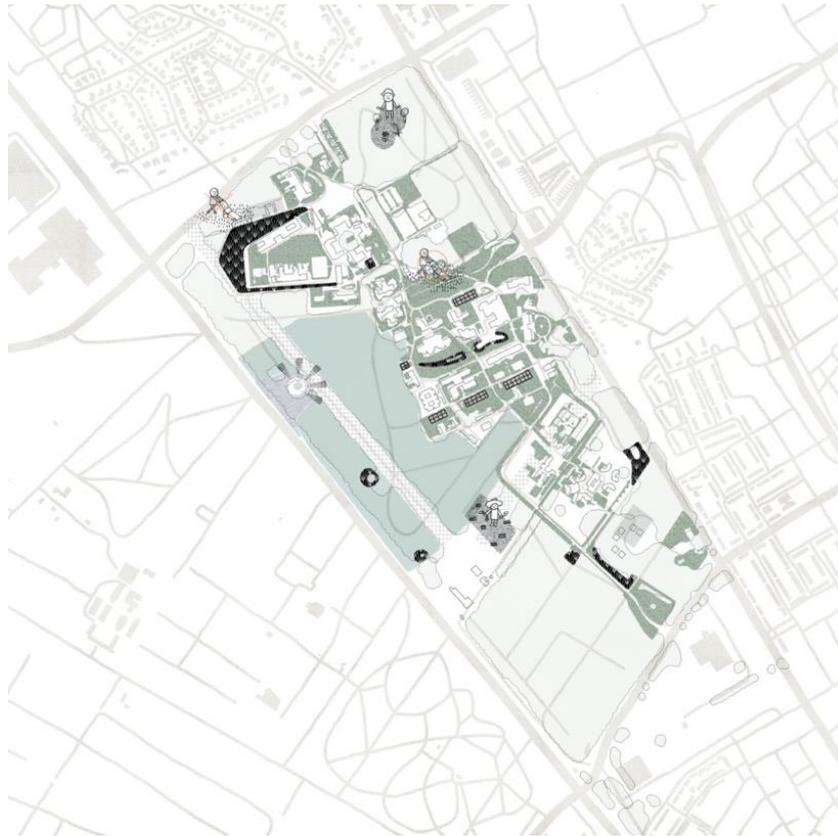
Due to new regulations in 1993, the fences were taken down rendering the site accessible to the public.<sup>5</sup> The institution's full control over people's behaviour transitioned to a partial control, distributed as a gradient. In 2019, the institution is relying on a combination of surveillance and landscaping interventions as a means of guiding behaviour. Despite these efforts, in some areas the park users sometimes engage in undesirable, disturbing or illegal activities. This gradient of active control results in two relationships between behaviour and landscape. Where control over behaviour can be established the landscape is made wilder and diverse. In areas, where behaviour cannot be influenced through institutional means, the landscape is to be made tame and accessible.

Due to surveillance and social presence, around the three clusters of buildings, where behaviour control has been established to satisfactory levels, so this triggers the institution to reduce control over the landscape. There, the lawns are cut less frequently letting the fields grow taller and more diverse in species. This makes them less accessible for walks but more attractive as nesting grounds for birds. This opens the possibility to reduce expenditure through landscape management, while also opening the opportunity to improve biodiversity, and thus re-wilding the park.<sup>6</sup>

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*Figure 1. Extent and types of landscape maintenance*

Due to nature conservation laws and low accessibility, behaviour control is unattainable in the forests. Currently, traces of unwanted behaviours such as prostitution and drug use can be found in some forests. Control or patrol in this area would be too costly might result in a whack-a-mole game between the security guards and the perpetrators, additionally it might disturb biodiversity.<sup>7</sup> The institution's intended solution is programming the landscape, so that it incites desirable behaviours in the visitors. This translates to tactics, such as routing and water management, which improve accessibility and channels the movement, and adding small recreation pavilions, which encourage desirable activities.

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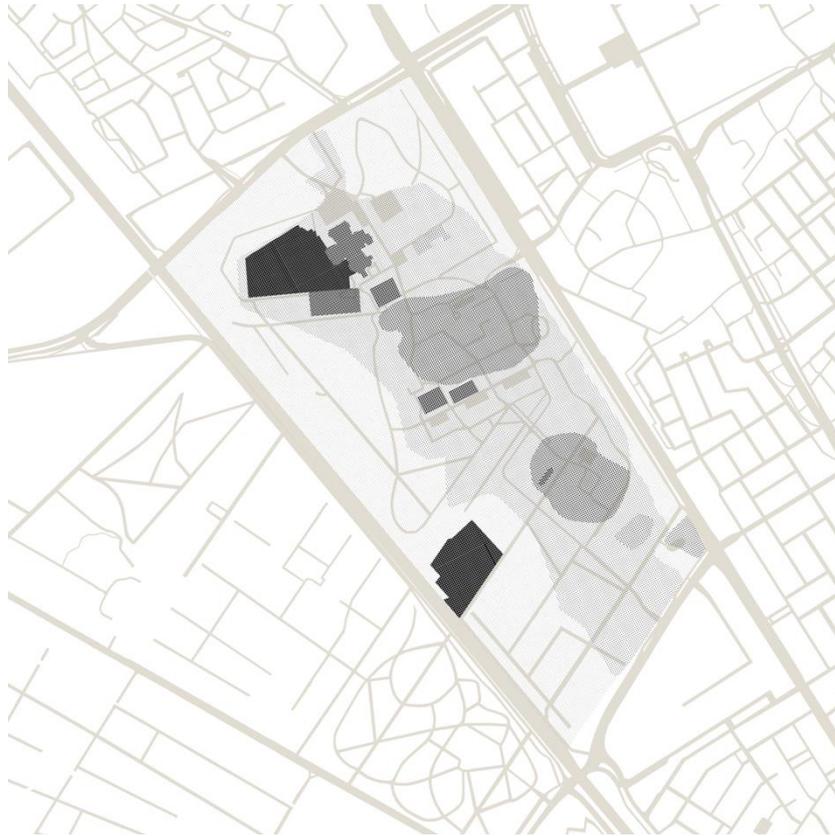


Figure 2. Gradient of control over behaviour of park users. (Dark - More control; Light - Less control)

## LANDMARKS AND HEALING: THE EVOLUTION OF A HIERARCHY

The amelioration of mental health is the central focus of all activities and operations at the Estate De Grote Beek. The healing process happens in stages, taking place across several locations and departments. At each stage the clients regain independence and access to new activities and facilities. Due to their therapeutic significance, some locations become landmarks of the client community.

The art forest is located in the northern part of the site, where outdoor therapeutic activities take place, and more importantly where the clients regain independence.<sup>8</sup> There the art and crafts works are made using found objects in the forest. This evolved as an activity that takes place in the forest itself and not only in the workshops, generating a series of larger art objects, created over a long period of time, and permanently on display. These objects and the experiences they generated now act as landmarks of the mental healing process, which the institution and the clients proudly show to visitors. These are landmarks produced by the healing process during their healing process.

Similarly, the institution gives landmark treatment to places, which it finds important the way it enables the personal and economic development of the clients. Here it is useful to look at the Bed and Breakfast and the Ketelhuis, these are places which were re-structured to accommodate workforce from the client community. In this way landmark creation is intended as a fuel to the healing process because it states publicly, visibly and structurally that healing through client empowerment happens there.<sup>9</sup> Here, representation seems to be intentional, and brings to effect new spaces of healing and regaining independence. This independence is in the form of employment and income opportunities, as opposed to self-expression as in the art forest.

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Figure 3. Migration of patients. (1-intake/crisis; 2-stabilisation; 3-socialisation; 4-integration)



Figure 4. Places of confinement and of regaining independence (A, B, C D – confined and crisis units)

## FRAGMENTATION AND FEAR: THE MATERIALISATION OF BORDERS

Beyond barriers and fences, fear and disturbance can fragmentate the way a landscape is perceived. As physical and non-physical barriers appear, some parts of the park become inaccessible, and thus begin to disappear from the daily routines and experiences of the clients and visitors of De Grote Beek.

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The 150 kV powerline that passes adjacent to the southern edge of the historical core is a visible barrier, even though it does not physically prevent passage. Some of the more vulnerable clients are afraid to walk under it, making the southern park areas virtually inaccessible to that group.<sup>10</sup> The psychological effect of the 150 kV powerline in combination with the reduced social presence, seems to strengthen the perception that the southern area is dangerous and disturbing. In this way, perceived threats can materialise barriers and fragmentations.

Clients of the forensic care facility in the north (TBS) are often stigmatised and perceived as dangerous. This presents an invisible barrier that causes site fragmentation. Some of these clients have a permission to exit the facility to join outdoor activities. This is a reason why both park visitors and other clients avoid visiting this area.<sup>11</sup> Thus, the TBS facility generates a strong mental fragmentation of the physical environment. As this area remains desolated, for some this creates the opportunity to squat and camp. This increases the perceived fear and further solidifies the fragmentation.

Overall perceived disturbance plays a strong ecologic role. For instance, socially disturbing presence decreases the recreational use of the southern area of the park, which might eventually have a positive effect on biodiversity. This represents the site' variation of fear-driven ecology, as exemplified by the Yellowstone park.<sup>12</sup> These dynamics reveal why the processes described in Landscaping and Behaviour are not applicable throughout the site. Especially in places, where surveillance seems both uneconomical and unecological, as street lights and cameras bring expenditures in installation and maintenance but might also disturb the animals at night.<sup>13</sup> In recent years the institution has been looking for tactics of how to influence behaviour in such areas, but so far has only resorted to forest maintenance.<sup>14</sup>



Figure 5. Fences and barriers

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Figure 6. Fear and Disturbance (Noise, high speed transport, 150kV powerline)

## REFLECTION ON THE ECOLOGY OF MENTAL HEALTH

The three pairs reviewed in this paper offer some lessons of how the ecology of mental health works in Estate De Grote Beek. Organising the terrain into meaningful areas, is not only a matter of physical conditions, but depends strongly on psychological conditions and experiences. The pairs affect the site's structure along these aspects: the formation of meaningful areas, the emergence of landmarks and the demarcation of borders. This somewhat reflects the relationship of the vernacular and political landscapes defined by JB Jackson.<sup>15</sup>

People's experience of the landscape generates wanted and unwanted behaviours. The institution reacts by changing the maintenance patterns of the landscape. In turn, the users might change their perception of the place, which might change their behaviour. Amidst this, the institution is continuously striving for an equilibrium as this ecosystem is also affected by a broad range of factors, such as birds' nesting habits, legal frameworks, urban biodiversity agendas, financial constraints, sustainability requirements, drought, among many others.

Amelioration of mental health is the central activity of the site and naturally it loads the importance of places, these hierarchies translate themselves into increased social presence, careful maintenance. Yet it is also visible that the clients and the institution might have a contradicting definition of what the important places are. The site's double role as an urban park and a mental health facility exacerbates some of the challenges. Phenomena such as Powerlines, illegal activities or draught, gain a stronger and more tangible effect on people's behaviour. This comes to play in the site's fragmentation and patterns of use, the reduced social presence can accommodate illegal activities, but it makes the landscape more readily available for urban wildlife.

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## CONCLUSION

This paper explores the mechanisms of three thematic pairs in the context of De Grote Beek. “Landscaping and Behaviour” exposes how landscape maintenance affects perception, perception affects behaviour, and behaviour affects landscape quality, testifying to the institution’s continuous strive of equilibrium in the ecosystem. “Landmarks and Healing” traces how the therapeutic process generates symbolic places, and vice versa, revealing therapy as a major driving force in the establishing of hierarchies. “Fragmentation and Fear” outlines how visible and invisible structures fragmentate the site and affect patterns of movement, attesting to the environmental impact of perception.

While this cartographic method was developed through this specific site, it attempts to excavate an ecology of mental health, revolving around the perspectives of mental and environmental actors, qualities and conditions. This paper presents the three major entwined pairs observed in De Grote Beek. The experience-based cartography should be seen as a tool for reading landscapes through their complexity of material and immaterial dimensions. By curating the selection of themes and perspectives this method could potential be adapted for a range of societal challenges. This allows the overlaying of a broad range of perspectives (organisational, human, non-human) and the generating of new readings of a site, which in turn can be used as the foundation to create new stories and shared future scenarios. In a true spirit of sustainability, this method aspires to generate ways of hearing the quietest of voices, and a way of witnessing the smallest of events, so that we can design while hearing the full orchestra of actors.

## ACKNOWLEDGEMENTS

This research is done at TU Eindhoven, on the commission of GGZ Eindhoven. This cartographic study and the project in general, would not have been possible in such depth without the full engagement and openness of the persons interviewed. In this regard, there are many more experiences and observations presented to me by the interviewees, which due to practical constraints could not be included in this paper but shall be addressed in the speculative scenarios as much as possible. Finally, I want to thank Daeun Lim, a Korean illustrator who helped me in exploring the visual language of the maps.

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- <sup>5</sup> Peter Gielen, *On the landscape use by clients and maintenance activities*, interview by author (23 May, 2019).
- <sup>6</sup> Ibid.
- <sup>7</sup> Eric Irausquin, *On the security risks and crime, and the interaction between the forensic clinic clients and security guards*, interview by author (18 June, 2019).
- <sup>8</sup> Peter Gielen (23 May, 2019).
- <sup>9</sup> Peter Gielen (23 May, 2019); Rien Castelijns, *On the realised and planned real estate interventions*, interview by author (8 February 2019).
- <sup>10</sup> Eri van den Broek and Ian Havinga, *On the experience of clients in Estate De Grote Beek*, interview by author (26 August, 2019).
- <sup>11</sup> Ibid.
- <sup>12</sup> “A rewilding triumph: wolves help to reverse Yellowstone degradation,” Randall, Cassidy.

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<sup>13</sup> Peter Gielen (23 May, 2019); Eric Irausquin (18 June, 2019).

<sup>14</sup> Peter Gielen (23 May, 2019); Rien Castelijns (8 February 2019).

<sup>15</sup> John Brinckerhoff Jackson (1984).

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