il giornale dell'ARCHITETTURA.com
MAGAZINE LIBERO E INDIPENDENTE SULLE CULTURE DEL PROGETTO E DELLA CITTÀ

Femke Feenstra: from problems come the most significant changes

Femke Feenstra: from problems come the most significant changes

The design approach of the Rotterdam studio, to bring greater well-being, especially in the healthcare sector, through design research

Published 11 December 2023 – © riproduzione riservata

In the late 2010s, architecture in the Netherlands was in a state of crisis. ***Femke Feenstra****, a Dutch architect and interior designer, who became the 10th partner and the first female partner at Gortemaker Algra Feenstra (GAF), grappled with a choice: a strategy of fee reduction to compete or explore alternative avenues to provide architecture that fosters a healthier society without compromising their financial stability.*

Having always been inclined towards the social aspect of design, Feenstra early recognised the potential of scientific collaboration and alliances to create better environments for healthcare. This led to a paradigm shift that now defines the Rotterdam-based architecture firm as a leading research-for-design firm. Rather than lowering fees, at that crucial juncture, GAF Architects chose to invest in research.

il giornale dell'ARCHITETTURA.com
MAGAZINE LIBERO E INDIPENDENTE SULLE CULTURE DEL PROGETTO E DELLA CITTÀ

This interview delves into Feenstra's approach to multidisciplinary scientific research for architecture and its role in dispelling biases and long-held ideas in the healthcare sector, fostering design solutions that enhance people's health and well-being.

Over the last decades, technological developments in neuroscientific research have improved our understanding of the built environment's impact on human health and well-being. How has this influenced and enriched your architectural practice?
Architects often need to remember the wealth of scientific knowledge at our disposal, such as how we are influenced by sound, greenery, daylight, physical activity, and wayfinding. The synergy between scientific research and design enables us to address complex problems and inspire transformative shifts. In the healthcare sector, while medical professionals offer numerous solutions to enhancing patient health, architects must question what unique contributions to the environment can positively impact patients' well-being.
Consider our observation that hospitals often implement extensive in-bed exercise programs to keep patients active. Our Reactivating Hospital proposal stemmed from our research, revealing that only 15% of general hospital patients require bed rest. We aimed to shift the hospital mindset, encouraging patient activity outside their beds for improved recovery. Our spatial interventions within the wards facilitated this shift, ensuring smoother transitions from room to corridor, to department, to the rest of the hospital while establishing an 8-hour rhythm of activation, relaxation, and sleep.

For architecture to effect change in entrenched mindsets, we must prioritise the education of individuals about the vital role of the built environment as a tool for aiding diverse populations. At what stage in your projects do you actively engage with this perspective?
Bij Ons (With Us) is primarily an educational initiative to heighten caregivers' awareness of the profound impact of the built environment, particularly on individuals in need, such as those with conditions like dementia.
Our approach involves workshops and personalised toolboxes for stakeholders, comprising materials such as diverse colour palettes, scientific data cards, textures, and reference images. These toolboxes offer guidance on effective design strategies based on scientific insights, facilitating enhancements in visibility, incorporation of desirable scents and sounds, and

strategically introducing haptic attributes and light properties to regulate biological rhythms. By empowering caregivers as co-designers, known as "care-designers," Bij Ons sustains the architect's vision even after their involvement ends. This fosters an organic and dynamic design approach that remains responsive to the evolving needs of patients and their relatives.

Introducing innovative design approaches sometimes affects the jobs performed within an environment. Have you required implementing transitioning strategies to tackle this?

Zierik7, a residential care facility, is an excellent case illustrating the importance of involving clients, staff, caregivers, and patients in workshops to help transition to new environments. Through this process, I discovered that successful design solutions require encouraging stakeholders to consider how the new environment will positively impact their future practices. This often necessitates a significant shift in their established routines, emphasising the need for a comprehensive understanding of the underlying design concept, which can take time.

As we found in our Reactivating Hospital project in collaboration with Diakonessenhuis Hospital, mock-ups proved to be an effective means to aid Zierik7's staff transition. Furthermore, these mock-ups facilitated interdisciplinary collaborations for research purposes. For instance, they have been instrumental in understanding spatial attributes that affect the wayfinding process for patients with dementia. However, I realised that relying solely on mock-ups is insufficient; collaborating with social designers for staff's transitional phases can accelerate the improvement process. This is why we plan to conduct evidence-based design research on Zierik7 in the coming half year.

Zierik7 recently won the EHD 2023 Awards Live Judging Design for Health and Wellness. Delving into the project's fundamental concept, I noticed the pervasive themes of dignity and compassion intertwined within the notion of a home, evident in every aspect of its design.

Indeed, Zierik7 brought forth a compelling vision from the client, emphasising the creation of 93 individual homes rather than a typical elderly care facility for 93 individuals. Embracing this notion, we proposed 93 front and back doors, ensuring each housing unit resonated with the essence of a personal home. To evoke a sense of familiarity and community, we oriented all 93 front doors to face the adjacent park. I took a rope and estimated the length of the façade required for this, which resulted in the organic layout that characterises the project.

Furthermore, the project's location was carefully chosen to facilitate seamless integration within the neighbourhood, serving as a means to reintegrate residents into society. Utilising the proximity of a nearby school and the future park, we advocated for the inclusion of a care home within the public park. This strategic initiative significantly strengthened the residents' sense of belonging and community, fostering empathy among schoolchildren and neighbours.

Acknowledging the asymmetrical layout of a project like Zierik7, one might intuitively assume it contradicts traditional wayfinding strategies, yet a recent study by Sheynikhovich, Ramano, and Alkachroum indicates otherwise. Building upon this, I've noticed how transitional spaces like corridors utilise various sensory landmarks and activating elements to enhance physical and cognitive health and orientation. These strategies resonate with much of your previous research. Could you share insights into the specific implementation of these wayfinding strategies within the context of this project?

Zierik7 embodies our comprehensive research on dementia care, emphasising the role of smell and sound in evoking forgotten memories and stories and the specific wayfinding needs of individuals with dementia. Balancing strategies for the individual narratives of the residents with abstract concepts posed a significant challenge, prompting us to find a solution that accommodated both current and future generations of residents.

To address this challenge, we adopted a circular layout with minimal dead-end corridors, introducing the concept of neighbourhoods distinguished by distinct room attributes. Converging at the central point, these neighbourhoods featured prominent landmarks that served as activating spots. The wide corridors were transformed into interactive spaces, offering engaging elements such as puzzles, music, stories, sensory walls, outside views for a connection with nature, or even the opportunity to eat and cook. Differentiated by attributes and scale, even the smallest landmarks, such as little cupboards integrated next to each back door, provided an opportunity for personalisation. These design strategies encouraged residents to stay towards the centre of the complex, fostering proximity to landmarks and neighbourhood rooms and facilitating easy navigation throughout the facility. Instinctively letting residents acknowledge they are home.

One last question: Freedom is an essential right that often diminishes for the ageing

population in care homes. How does your utilisation of artificial intelligence for architecture help tackle this issue, and where do you locate the equilibrium point for ensuring a positive integration of artificial intelligence and human interaction?

Considering the increasing ageing population, AI offers extensive opportunities for advancements in the healthcare sector and has become indispensable for feasible home hospitalisations.

At Zierik7, we introduced the concept of living cycles. We translated it into living circles, allowing different groups based on the stage or type of dementia to access freely varying parts of the facility. Electronic sensors and GPS trackers for living circles have enabled us to restore a sense of freedom for the residents, especially considering that we have 93 front doors to the park.

In our Future Hospital research, we emphasised the integration of home care, highlighting the necessity of AI in managing safety concerns while maintaining a high quality of life. Furthermore, our pilot project, Carebnb, bridges those returning to an empty home after hospitalisation. Distinguished from traditional rehabilitation homes, Carebnb involves regular individuals providing care and companionship, facilitated by an integrated system of professional support reliant on AI.

- READ THE ARTICLE IN ITALIAN LANGUAGE