

Extended Design Brief:
The Institutionalized Neutralized

Re-designing the Institutional Common Room

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1. Introduction and Problem Definition

The municipal short-term care environment in Sweden is overall designed in accordance with the historical and socio-political legacy of the “Folkhemsrationalism”. This in turn made efficiency, equality and standardized welfare design a priority when It was introduced. In addition to this the Elder Reform (Äldrereformen), which was introduced in 1992, established a nationwide regulation for hygiene, safety and ergonomics for caretakers and residents. As these standards were incorporated clinical safety and streamlined workflows were ensured, but at the same time also created a sterile, risk-averse and institutionalized setting. This setting created a shift towards the aesthetic of clinical needs over the comfort and safety of the homeliness regarding the residents. To this day, this problem still exists albeit in some facilities being overviewed and reworked. However, this is not a nationwide decision or implementation but rather a haphazardly way of working, independent of contractors or municipalities.

This report aims to make a dive into one of the spatial artifacts effected by these reforms and transitions in a certain setting and municipality. The chosen artifact is the common room, “Allrummet”, in Sala municipality’s short-term care unit. This room acts as a hybrid micro-system as it houses the opportunity for a restorative living area for the residents while also acting as a physical workspace for the staff. It contains exposed assistive technology (training unit) as well as a highly clinical setting. Furthermore, it acts as a bypass for the different corridors housing residents.

The design problem in its core can be defined and focused on two distinct spatial frictions. The first one regards workplace hygiene and ergonomical safety, incapsulating how to maintain a clinical standard and infection control. The second one regards the psychological need for a warm, dignified and homelike setting for the elderly residents, letting space act as a catalyst for homeliness. As physical space connotes and changes the dynamic of the room and facilities it is vital to look at how this can be improved and adapted to be able to balance the clinical constraints with psychological wellbeing.

From an information design perspective, the environment of the short-term facility functions as an active, semiotic medium that in turn created constant non-verbal signals regarding some important key points, such as power, autonomy and identity (Pontis & Babwahsing, 2023). In this form of setting, the healthcare field and short-term facility, institutional aesthetics such as exposed medical devices, high-gloss wipable surfaces and repetitive clinical lightning design may act as visual reminders of the resident’s vulnerability and illness (Buse et al., 2018). As a contrast to this, a more domestic spatial setup and design may act as a visual trigger for dignity, safety, autonomy and recovery.

Therefore, the challenge lies not just within the pure architectural part but in the overall information design of space. It lies in the junction between form and function, regulations and freedom as well as between clinical safety and homeliness.



Figure 1: The current common room of the short-term care facility

2. Complexity of the Problem

The challenge of this artefact lies in its dual headed friction. On one side, clinical and ergonomical needs exist. It demands that surfaces are wipeable and easy to access for cleaning needs, wide zones for access and clearance as well as efficient lines of sight and hearing for personnel. On the other side the artifact needs warmth, both in the sense of lighting and materials, a personal identity amplifier, non-institutional textures and framing, dampening of acoustics and the catalyst for being a psychological comfort zone.

However, these different heads of friction cannot clearly be optimized away. They must be negotiated through different ways of balancing tensions, rather than stripping these away. As Dorst (2006) states a complex social and spatial challenges are often framed as a wicked problem.

These kinds of problems are often characterized by a very high level of complexity and the absence of a clear, easy and definitive solution. It may also cause a conflict between different stakeholders affected by the current wicked problem. In other words, the challenge of creating both a clinical and comforting spatial artifact lands in the realm of wicked problems and is not easy to solve by simple, linear solutions.

Furthermore, this complexity is not meant to be removed. As Norman (2010) argues, this spatial tension introduced a necessary complexity. The failure of the design comes not from the tension itself, but rather the complexity turned into complicatedness. In this case, it can be viewed as, for example, overwhelming already vulnerable residents with clinical physical distress and sterile semiotics.

In addition to this, in certain hypercomplex socio and spatial contexts a designer, architect or service enabler cannot in a simple way deliver a linear and static product. According to Dorst (2019), the goal itself is moreover the systemic transformation. It is how the environment of care is experienced, practiced and valued.

3. Methodology: User Groups and Needs Space

To be able to analyze and navigate this paradox and wicked problem, it is important to capture both data at hand but also uncover tacit knowledge. This, from both residents and staff alike. For this analysis we need to look at two different core stakeholder groups.

The first group consists of the healthcare staff and the administration of the short-term care facility. This group carries both tacit and exposed knowledge regarding operational workflows, ergonomic constraints and theory as well as regulations regarding hygiene and clinical safety. The group also carries with them workarounds that are being used today regarding efficiency, ergonomics and the spatial tensions of the facility.

The second group are the residents and in some cases their family proxies (depending on the current neurological status of the resident). The residents carry the experience of living in the facility and utilizing its space. They also carry opinions and values regarding the warmth, homeliness and dignity of said space. Lastly, interactions with staff and certain workarounds may be found. The latter regarding how they themselves have tackled possible feelings of unhomeliness.

3.1 Potential Data Collection Methods

To be able to capture said experiences and knowledge, both tacit and open, I have chosen three different ways to work with data collection.

Semi-Structured Qualitative Interviews

I aim to use interviews with the staff as well as with the residents. In some cases, as previously mentioned, I will be using family proxies. The interviews will be based on an assortment of questions targeted to capture both hidden and exposed knowledge. Furthermore, it will be targeted at how the respondents feel, connote and experience the facility and its different areas with an emphasis on the common room as the common ground between both groups. I will also try and find out different current workarounds and ways to utilize the space today in ways perhaps not intentionally meant for.

Visual & material probing

As a second method I will use material probing to seek further knowledge regarding reactions and feelings of different materials, textures and lighting. The focus groups that will contain staff and residents will be presented with material swatches, as well as different light sources, colors and intensity, different layout configurations and possible color overhauls for walls, floors and roofs. This aims to go beyond the verbal limitations that may exist in a dedicated qualitative interview and seeks to reach more emotional reactions to different physical triggers.



Figure 2: Example of inhouse visual and material probing (generated by Google Gemini AI)

Generative Co-Design Workshop

As the third and last data collection method I aim to use a co-design workshop. This will engage staff, architects, planners and administration as well as residents and potential family proxies using different scaled modular toolkits. Paired with these there will be material boards containing resources for texture swapping and tryouts. This in turn may be a catalyst for collecting data on how the affected stakeholders would like to see the facility themselves when able to think creatively and freely.

It may also stimulate them to think outside the box and create an information transfer between residents and staff by looking at different re-zoning alternatives.

3.2 Potential Data Analysis Methods

Regarding analyzing the data collected in the different methods I aim to use thematic analysis and iterative framing. In accordance with Braun and Clarke (2006) systematic coding of, for example, interview transcripts and observational notes may be used to point out and isolate recurring themes. In this case, the themes of interest would be different spatial barriers and perceptions regarding materials, lighting, textures and colors as well as the rooms overall aesthetic.

As Dorst and Cross (2001) mentions, iterative framing may be used as insights gathered from the field may continuously reshape the very foundational understanding of the design problem. This in turn may enable aligning the perspectives and regulations regarding the clinical safety requirements with actual spatial proposals. This also aligns with the concept of complexity not necessarily needing to be removed, but rather that complicatedness is the main problem. When iterating towards a proposal for a solution, we may work with complexity rather than purging it from the process.

4. Design Brief Generation Process & Core Principles

In accordance with Dorst (2015) the design brief will be developed via an iterative framing process. This process will be moving from the initial observation of the site into a theoretical synthesis. The brief will act more as a catalyst, a generative foundation for possible spatial changes in the future. Also, different kinds of material interventions may be iterated without needing to finalize a rigid final layout.

4.1 Motivation of the Design Brief with Reference to Course Literature

The resulting brief takes its root in three different primary pillars of theory. These together will form an iterative way forward, utilizing the complexity and focusing on avoiding the complicatedness of this wicked problem, or rather, turning the wicked problem into a ground for potential change, growth and adaptation.

Invisible and discreet design

One way of handling the constant visual reminders of the institution is to work with invisible and discreet design. One way of this is as Buse et al. (2018) argues to integrate for example storage solutions that in turn conceal medical devices that currently are not in use. This in turn may alleviate the feeling of institutionalization while at the same time creating a more stress and clutter-free environment for both residents and staff alike.

It is also important to take note regarding the identity-making that space conveys to its inhabitants. In accordance with Pontis and Babwahsingh (2023) the space acts as a continuous semiotic medium which in turn creates non-verbal signals regarding important factors such as identity, independence and the habitant's health status. Therefore, it is not only effective in countering stress but also aiding in decreasing the sense of institutionalization thereby strengthening the resident's sense of self-worth, dignity, health and independence.

Environmental Psychology and Restoration Theory

In accordance with Ulrich (1984) as well as Kaplan and Kaplan (1989) using stress recovery theory (SRT) and attention restoration theory (ART) may create a higher sense of homeliness and warmth as well as dignity. Using different circadian rhythm lightings, warm led lights, natural materials such as wood textures as well as biophilic design integration, such as large-scale plants for stress reduction may create a sense of safety, warmth and homeliness in the environment.

To be more specific regarding the SRT, it is a key emphasize of this that utilizing biophilic may act as a catalyst for triggering subconscious physiological recovery. In example, this may be reduced blood pressure and lowering of the resident and staffs' cortisol levels. This acts as a counteragent for the stress that often is induced when working in healthcare environments or being exposed to very strict and clinical settings.

Furthermore, the ART shines light on how natural textures and visual patterns may provide something called "soft fascination". It allows people experiencing this to replenish their mental energy and lower the fatigue of the mind. This is due to natural elements in a natural way capture our attention and thereby letting it rest upon non-invasive sensory inputs.

Spatial Information Design and Zoning

A third way of working with the complexity is venturing into the different zones of the rooms (in this case the common room) and work with different solutions. For example, using dampening rugs, soft lighting and intuitive elements and props for wayfinding may create a clearer differentiation between the social area from more restorative pockets of space. In general, going from seeing space as an open all in one location to more differentiated zones may aid in creating a natural home environment.

In accordance with Pontis and Babwahsingh (2023) interior architecture must guide movement, give purpose and set boundaries without cognitive friction. When this does not work as intended or is not implemented open-plan layouts risk to force incompatible activities into the same space, which in turn risks creating conflicts and tension between logistics and relaxation. This is a perfect storm for introducing unnecessary stress, friction and problematic interactions.

One way of utilizing spatial design of zones is to reduce complicatedness. By working with clear spatial visual cues that tell the residents or staff of each areas function, these briefs potential solutions may lead to reducing the cognitive load, especially for sensitive residents, such as those suffering from dementia. This may in turn lead to solving the previously mentioned unnecessary complicatedness. As Norman (2010) mentions, it may then keep and manage the necessary complexity of the spatial artifact, without purging it.



Figure 3: A prototype of how theory can be used in changing the common room (generated with Google Gemini AI)

5. Ethical Considerations

When working with this type of project and design brief, in specific regard to vulnerable participants such as residents that suffer from various neurological impairments, it is of utmost importance to thoroughly work with and keep in mind the ethical considerations. It is important in all projects and cases, but in this one it must also extend beyond mere administrative compliance. The ethics in this brief function also as a generative framework for inclusive representation, dignity and cognitive accessibility.

Information Accessibility and Autonomy

In coherence with information design principles, it is of great importance to make sure processes regarding the collection of consent is in adherence to match the cognitive capacity of the participants. It is vital to be able to communicate research intent in a clear framing to avoid complexity that may hinder autonomy and a self-sense of dignity. Furthermore, to be able to sustain autonomy without inducing cognitive fatigue or distress for the participants is of importance.

Empirical Proxy Representation

As this facility houses residents that may suffer from various cognitive impairments, such as dementia, family proxies may act on their behalf as crucial co-interpreters regarding both spatial and emotional needs. As mentioned by Buse et al. (2018), using proxies allows researchers to capture lived experiences and unknown values of residents that usually does not have a voice. Taking a dedicated ethical perspective on this issue, it becomes clear that these voices need to be taken into consideration just as equally as residents that do not suffer from certain impairments. This in turn may lead to a stronger ethical representation for the foundation of the design brief.

Operational Resect and Workaround Integrity

Regarding the staff of the facility, data collection must take into consideration the ongoing workflows of the clinical perspectives. The usual high cognitive workload for the personnel must also be considered. In other words, ethics regarding this specific domain needs to capture staff workaround and the possible operational stress but doing so without instigating institutional vulnerability. This in turn may allow for a more honest analysis of possible areas with friction without hurting the participation anonymity.

6. The process of creating the design brief

My initial ideas for this project came about after my summer work period in said short-term facility in Sala. Being a health care staff myself, albeit just being a care assistant, I have seen the facility from the perspective of the staff.

However, as many discussions have unfolded between myself and the residents as well as their families I have gotten a unique point of view on current aesthetics.

I also have a former history within design and design thinking. My initial bachelor's degree was within information architecture where the program focused heavily on design in various ways. I studied, among things, color psychology, multimodal techniques and visual implications.

Using these previous studies and my own tacit knowledge I quickly noticed how the current facility was lacking in the field of homeliness, warmth and home-like aesthetics.

After coming to this realization, I ventured further and started looking at its causes and roots. This is where I stumbled upon the previously mentioned Folkhemsrationalism (the welfare rationality) as well as the Elder Reform act which in turn was the guiding principle for hygiene, safety and staff protocol nationwide (Socialstyrelsen, 1996).

With all this in mind I concluded that reworking this rigid system would be an interesting way forward. Can design thinking, scientific design theory and iterative improvements make a different setting possible? Can we reach a new systemic shift in how we design and co-create shared spaces in the Swedish health care system, more specifically the eldercare facilities? These are questions that this design brief hopes to venture into and be able to provide feasible basic foundational data to be further studied and worked upon.

Final Words

When viewing the initial wicked problem from the eyes of a participant and as an outsider, both inside and outside the community affected by these institutional structures and design frameworks, one may feel a slight sense of hopelessness. The problem seems to be rooted within the very foundation of the system it lives in. But, when looking at the design problem not as a solid, rigid and unmovable system but instead as a complexity that may be iterated, slowly improved over time by using feasible research methods for collecting data and acting upon it, one feels a bit more hopeful. Surely the systemic shift won't happen overnight, but in working with the complexity and not against it shows that there are possibilities for change, not so drastic it would be hindered at the very discussion table.

As Leonard Cohen so thoughtfully once sang; there is a crack in everything, that's how the light gets in. And that is how I see the future possibilities for the Swedish healthcare, and more specifically, eldercare system in terms of both aesthetics overall, homeliness, dignity, reasonable work environments and clinical efficiency.

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