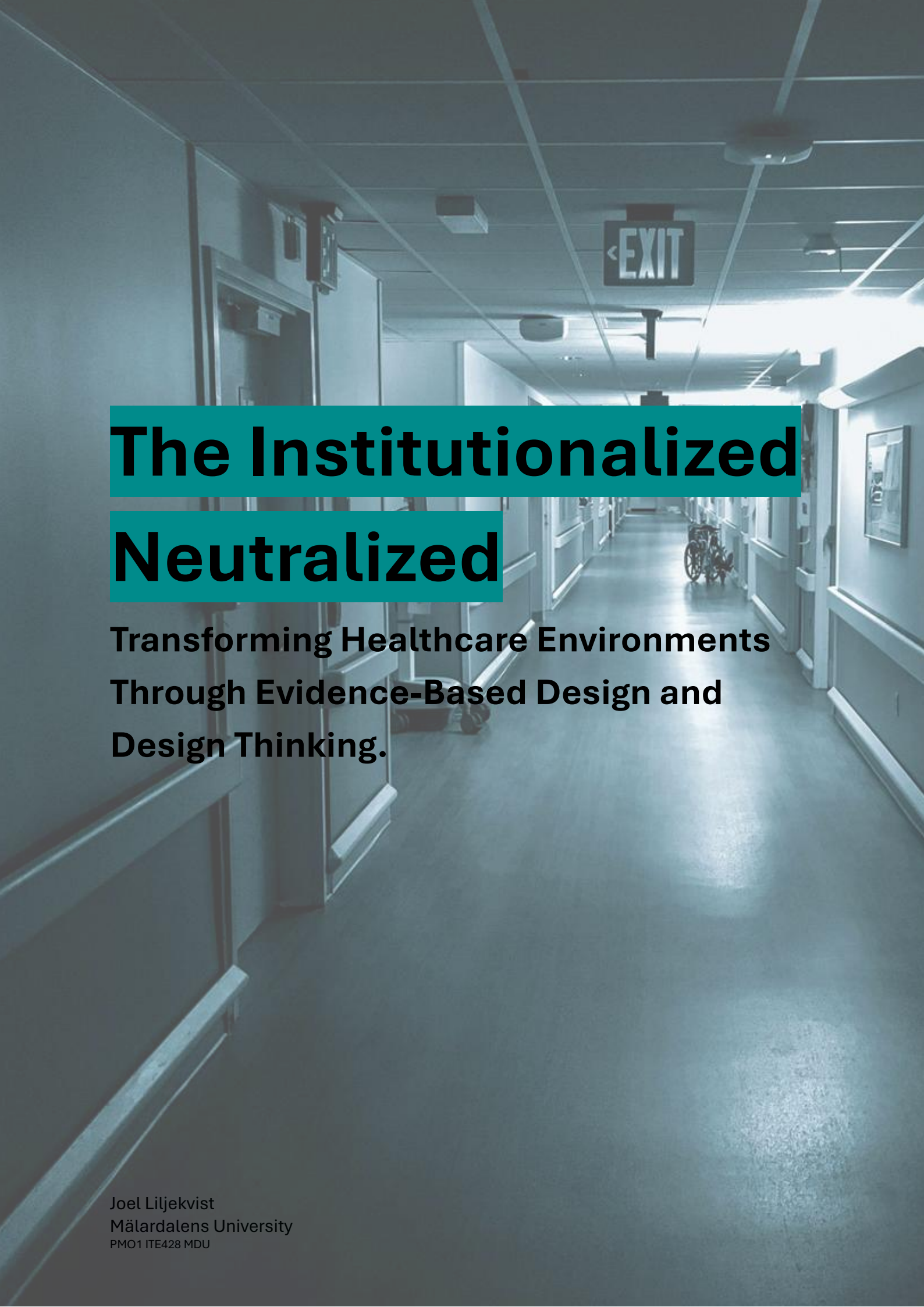

The Institutionalized Neutralized

Transforming Healthcare Environments Through Evidence-Based Design and Design Thinking.

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1. Short Summary of INL1a

My previous study, named “Beyond the sentence” looked at ways of incorporating innovation into highly regulated settings (Swedish Correctional Centers). By using social innovation and situated design it aimed at analyzing the premise of installing certain international entrepreneurial programs for inmates. The main takeaway from the study was that real change cannot happen at the surface level but instead requires deeply rooted psychological safety and supporting user’s internal agency. These findings and the studies take on design in institutions with rigid systems carries itself into this project, as I will be looking into supporting residents feeling of agency and dignity within the eldercare health sector of Sweden’s municipalities.

1.1 My academic and job-related background

This proposal for further study is based on what came to me when working as a care assistant for the summer of 2026 in Sala municipality. I have since then until now worked in this field of healthcare, closely with other personnel as well as residents. I have also worked in the field of design for many years and being able to view the institution from an outside perspective with an eye for design as well as from the inside as a care giver, it positions me in a very interesting place. This position gives me the opportunity to tackle this problem from several different angles and with this proposal I aim to lay a solid foundation from which I can build upon.

2. Introduction

This Project is situated in the juncture between social innovation and human-centered design within a specific set of environments. Transformation is no longer just about digital tools or certain physical artifacts but instead overarching different system-level experiences, interpretations, feelings and sensing incapsulating spatial well-being. I have chosen within this project to look at and research the aesthetic of Swedish eldercare institutions. These in turn are possible areas for radical service as well as spatial design innovation. However, to be able to effectively take on this challenge it is important to also see behind it, looking at its roots and dismantling the dogma of the past.

2.1 Design From The Past

Contemporary Swedish elderly care; its infrastructure and institutional design is a material artifact of the mid-20th Century socio-political paradigm called "Folkhemmet" (The Welfare State). This era introduced to the Swedish system, market and institutions a highly standardized egalitarian approach to both architecture as well as the social systems. The architecture itself was deeply rooted in functionalism and the Classic rationalistic "less is more" system and its philosophy (Mattsson & Wallenstein, 2010; Åman, 1992).

Although this movement made universal Welfare standards available across the country as well as optimizing clinical efficiency across the regions and municipalities it did carry with it a static, sterile and very risk-averse environmental design. This has resulted in great outcomes when it comes to, for instance, egalitarian measures across the population, but also very heavy institutional aesthetics which in turn risks stripping patients off a sense of homeliness, nurture and care.

This research project aims to look at a potential paradigm shift and how we might use different methods and tools to collect data on which we may build a new way of tackling this phenomenon.

Can we work with the "Folkhems-rationalism" in a way it becomes tastefully designed for as many as possible whilst also retaining its inherent sterile, work-friendly and practical nature? As argued by Garud et al. (2013), innovation in institutional settings is not often a straight line but a complex process involving ma ny aspects. Therefore, a holistic view is of the highest importance for this study.

2.2 Why Sala Municipality

When taking on this challenge we need to make an entry somewhere in this system. I have chosen the municipality of Sala, my hometown and place of residence, as the primary research site and organizational partner. This is where interviews, observation and well as co-design will be conducted. I have also used the concept of Sala as a micro-cosmos. I am conducting a case study on a typical case (Sala Municipality) to achieve generalizability.

For clarification; Sala Municipality is ideal because its eldercare carries the archetypical "Folkhemmet" aesthetic while also having the standard demographic constraints found nationwide. This is due to the national legislative frameworks such as the "Äldrereformen" of 1992, (The Elder Reformation Act of 1992). This act institutionalized for example, hygiene, safety and staff protocols uniformly across all Sweden’s 290 municipalities (Socialstyrelsen, 1996). As a result of this, design innovation that proves potential in this municipality can therefore be seen as potential as a scalable blueprint for the rest of Sweden.

3. Research Proposal

3.1 Problem Definition & Aim

The current rapid change in demographic in Sweden shifts toward an ever-aging population whilst the archetype of eldercare facilities stays the same. The current environments, which based on the previously mentioned paradigm, rests on the concept of clinical efficiency, risk aversion, sterile facilitations and for instance infection control does this with the expense of human dignity.

This very sterile and clean atmosphere risks alienating the residents, patients and caretakers, minimizing them to numbers in a system rather than people in need of warm, living and inviting facilitation. This may risk aiding in cognitive decline, increasing stress, inducing anxiety and creating negative emotions on residents alike. Also, equally important, it risks creating an uninspiring, high-stress workplace for healthcare staff which in turn may aid in making the atmosphere even more troublesome.

The very essence and core of this challenge lie in navigating this friction between the strictness of medical hygiene protocols and the emotional need for a more domestic and dignified "home away from home".

To try and address this socio-spatial tension, I aim with this project to develop a design and innovation framework that may aid in the construction and creation of these environments, which can be used by municipalities, private healthcare institutions and the Swedish regions alike.

3.2 Research Question(s)

This project utilizes a specific question that may act as catalysts to steer the research in a productive and direct way.

Research Question:

How can interior design and co-design frameworks balance the clinical hygiene and ergonomic demands of a professional healthcare workplace with the psychological need for a warm, domestic 'home' for elderly residents?

4. Theoretical Framework

To lay a solid foundation for answering the research question I aim to synthesize three different primary pillars of theory: environmental psychology, place-making theory and invisible design frameworks.

The first of these uses environmental psychology as well as biophilic design principles to address the various ambient and psychological dimensions of the actual space in these institutions. Specifically, I aim to apply Roger Ulrich’s (1984) Stress Recovery Theory (SRT) alongside Rachel and Stephen Kaplan’s (1989) Attention Restoration Theory (ART). These two theories may provide a toolkit which I may use for analyzing how certain specific stressors in the environment may impact vulnerable minds and in turn how intentional spatial designs, such as for example lights and color theory, may alleviate some of the negative risk effects of the current setup. For clarification, the study of these theories may aid in creating an interior design that carries the warmth that often is found in one’s own home.

The second pillar takes into consideration co-creation and place-making theories under the umbrella of design and innovation framework. This theoretical foundation may aid in working with the paradox of how reworking the layout may support two different social realities at once. It will look at, for example, how space can be used to create a sense of domestic belonging and safety for a resident whilst at the same time giving medical professionals a highly functional, ergonomic and safe workplace. To avoid using artefacts that connote directly to health, or rather declining health and need of aid, one may instead pursue interior design that emphasizes the resident's sense of homeliness.

The third and final pillar aims to look at specific concepts of so-called invisible or discreet design inventions. These concepts may help in viewing how medical equipment and assistive technology can be embedded in the environment in a seamless and non-assertive way. By looking at semiotics of certain healthcare artifacts, this theory may help in creating certain strategies that can eliminate the visual triggers of institutionalization. In this way, reaching a domestic home-feeling and design for the residents may be a more achievable process and goal. Buse et al. (2018) also provides a critical view on how the visual languages of, for instance; medical equipment may hold an inherent narrative of care but at the same time hinder the feeling of a domestic environment. It is therefore important to take into consideration the interconnectedness of artifacts and inherent meanings.

4.1 Ontology and method overview

In this project I am using a constructivist worldview. This is due to the concept of physical environments may be seen as more than just objective and static metrics. I argue that using a phenomenological epistemological stance I can work with concepts such as "dignity", "warmth" and "home" as the subjective and socially constructed concepts they are. Also using this ontology, I may easier incorporate the physically lived experiences in the study.

Furthermore, as I am aiming to use research through design (RtD) I will be using heuristic inquiry. My own intuitive and iterative process as both a researcher and care assistant may facilitate a personal view on balancing systemic and functional conflicts. I believe this may generate valuable tacit knowledge that can be used in the study.

4.2 Method 1 – Qualitative Interviews

To be able to capture lived experiences of the socio-spatial environment in the selected area of Sala municipality and its eldercare facilities I aim to use semi-structured qualitative interviews. These will serve as the primary collection method, built upon empirical data. By choosing to narrow the scope and more specifically the tension between the workplace and its staff functionality with the domestic home-feeling for its living residents, these interviews will be designed to collect narratives surrounding the daily spatial frictions that may occur.

This also included routines and more emotionally targeted responses.

4.2.1 Sampling strategy

This study will sample two stakeholder groups which carry within themselves two different but equally important angles. Together their answers and the data collected may be used to answer the previously mentioned stakeholder paradox.

Group 1: Healthcare staff and administration

This group consists of care assistants, assistant nurses, nurses and supervisors. The focus of this group will be to capture operational workflows, experienced physical ergonomic conflicts and barriers as well as strict compliance with the institution's medical hygiene protocols and regulations. The main purpose is to identify spatial barriers and conflict-points where the clinical necessities clash while trying to uphold a residential home-like aesthetic.

Group 2: Residents and family proxies

This second group will consist of residents and their families as well as proxy interviewees. The focus will be on the residents' experience of spatial dignity, homeliness and the comfort found in the institution's visual aspects. For residents with cognitive decline, for example dementia, semi-structured proxy-based interviews will be held with next of kin. However, in choosing family members to interview, it is key to directing these interviews towards members of the family that has experience of the resident's interaction with the environment, preferably long term.

Interview protocol and visual probing

The protocol for the interview will be structured around touchpoints of the different stakeholders, spatial mapping as well as uncover key knowledge from staff and residents. Instead of pursuing more abstract questions, the interviews will use visual and material probing. Using image boards presented to the participants, I aim to find out how the experience of different contrasting spatial configurations that come in different forms, such as highly exposed to integrated and concealed.

This visual probing method will act as an epistemic catalyst for;

- Uncovering tacit knowledge regarding how certain exposed medical equipment may impact stress, anxiety and the perception of the institution.

- Exploring the potential practical workarounds that the staff use to make spaces more human without violating safety and hygiene regulations.

- To identify mutually accepted visual and material trade-offs that do maintain clinical standards while at the same time masking different institutional triggers.

Analytical approach and ethical rigor

In accordance with Braun and Clarke (2006), the interviews will be recorded by audio and transcribed thereafter analyzed using thematic analysis. The coding will be focused on identifying recurring patterns regarding spatial barriers, efficiency in the workplace as well as the residents and staff's perception of materials and space.

As this method incorporates recorded interviews it is vital to thoroughly consider the ethical implications. Furthermore, given the vulnerability of the residents, informed consent will be obtained directly or with legal guardians and/or proxies. This will ensure that participation is voluntary whilst at the same time guaranteeing full anonymity.

4.3 Method 2 – Co-Design (Generative Workshops)

To venture beyond only using interviews for gathering knowledge I aim to incorporate co-design through generative workshops. This is to be able to capture actionable and constructive insights. This is grounded in participatory action principles where co-design sees stakeholders, in this case specifically healthcare staff as well as architectural planners, as active co-creators of knowledge. By using artifacts and spatial simulation this workshop aims to bridge the gap that exists between more abstract design theory and the actual physical lived environment of eldercare residents.

This workshop will be divided into two interconnected parts:

Part 1: The workplace & layout workshop

Participants: Healthcare staff (mainly care assistants and nurses) and unit supervisor from the administration of said eldercare facility.

Method & Tools: A modular layout kit with scaled models representing a typical resident room, hallway and main area will be used.

Output: The goal of the workshop is to find spatial configurations and mappings that highlight potential workarounds and structural changes acceptable to the staff working in the eldercare facility.

Part 2: Material and invisible design probing

Participants: This will include healthcare staff, architects, residents and where applicable, family members that can act as proxies.

Methods & Tools: Here I aim to utilize material boards consisting of textures, non-clinical color palettes, different types of wood finishes and different mockups for solutions to medical devices.

Process: The goal of this process is to find out what may neutralize visual triggers of general feelings of institutionalization for the residents, as well as care staff.

The participants may evaluate how different choices within the tools may alter the atmosphere of the facility. They may thereafter sort, modify and if wanting co-create design changes that may aid in as previously mentioned alleviate the feeling of institutionalization.

Output: The best-case scenario would have it so that this workshop could produce different guidelines regarding the materials as well as different design heuristics that may show how equipment can be embedded or concealed to create a more neutral atmosphere. It can also lead to new designs and constellations being created that can act as catalysts for imbuing the facility with a more home-like aesthetic.

Synthesis and data generation

These workshops may create data that can be used alongside the qualitative interviews. Together they may lead to design frameworks not only rooted in theory but also in environmental psychology and place-making. This while also being validated by constraints and the reality of the facility.

5. Research Design

To be able to capture how the healthcare environment is experienced by its residents and the staff at hand, this project will be using qualitative and design-focused approaches based in research through design (RtD). This will in turn be combined with participatory action principles.

Because space, routines and human emotions cannot be measured by using numbers alone, this study will use a constructivist and phenomenological perspective. Research through design acts as a practical tool where iterative processes containing sketching, probing and testing different spatial concepts gather data and create knowledge. Using this combination of theory and practice allows for a deeper and more focused exploration of the paradox of the stakeholders. That is, between clinical hygiene and physical requirements as well as the residents need for a warm, nurturing and home-like environment.

Validity and triangulation

Ensuring quality and academic rigor is vital for a well-created process. Therefore, this project is based on data triangulation. This is done by cross-referencing insights collected from the staff of the facility with the experience of residents and their families. At the same time, my own field observations and experience based on my vocation as a part-time care assistant, as well as a researcher, are used in comparison and analysis. This combined method and practice may aid in the projects' goal of staying well-grounded while also creating practical and actionable results for future implementation in healthcare facilities and spaces.

6. Project Plan

Phase 1: Contextual Inquiry & mapping (Months 1–2): This phase consists of the initial formal access to Sala Municipalities eldercare facilities that are the foundation of the study. Here a focused literature review on environmental psychology, color theory as well as different design methods combined with passive observations may take place. This gives me the key framework for mapping current behavioral patterns and different points where friction may occur between residents, family members and staff.

Phase 2: Empirical Data Collection via Interviews (Month 3): This period I will focus on conducting semi-structured interviews together with the staff of the facility as well as with the residents. In some cases, the proxies of the residents will be interviewed. Additionally, visual probing with staff and residents will be done. This aims to capture known and unknown ergonomic and hygiene constraints from the faculty as well as spatial triggers and sense of homeliness from the residents. Thematic analysis will be used to analyze the findings.

Phase 3: Co-Design & Framework Development (Months 4–5): During these later months, I aim to hold workshops with the focus on working with different layouts and materials. This will be done together with the staff and the other stakeholders. By using mockups of various sorts and different materials to test, iterate and co-create different configurations and solutions I hope to build data on how to tackle the stakeholder paradox.

Phase 4: Synthesis & Final Writing (Months 6): At the end of the project, one month of time has been allocated for compiling different findings, finalizing the design framework and to answer the core research question. I will document how different choices regarding materials, spatial layouts and potential workarounds can transform the institution and its facilities into more home-like environments.

7. Partners in the Project

For this project I have limited the partners to key stakeholders. This is due to being able to work directly with the ones involved regarding the socio and spatial dynamics of the eldercare facility in Sala municipality, focusing on the groups mainly stricken with the paradox:

Primary Organizational Partner – Sala Municipality

The organization of the municipality, in this case the relevant administrative section such as “Vård och omsorgsnämnden”, serve as the host for selecting the primary case site. They will provide access to said facility and represent the organizational aspect and driver as well as implementer of future possible recommendations and design changes.

Frontline Healthcare Staff

This partner group consists of care assistants, assistant nurses, nurses and key administrative personnel. They act and represent the operational reality of the facility. The participation of this group ensures that suggested design changes and implementations stay viable both ergonomically and logistically. They also act as safeguards towards implementations and their hygiene restrictions and needs.

Residents and Family Proxies

This group adds essential insights into the emotional aspect and subjective feelings of a “home away from home” regarding the spatial design as well as the design choices of workplace tools and configurations. Family proxies act as the voice of those residents that are vulnerable, such as residents suffering from dementia, so that they will be accurately represented.

8. Expected Results & Impact

The main goal of this research is to answer the initial questions. To this, creating transferable and highly actionable results that may aid in environmental challenges being solved while capturing the lived experiences of residents. The combination of addressing issues that both healthcare staff face as well as more personal hinderances of the residents may lead to a healthier, warm, nurturing and likable experience and accommodation. If the data is strong enough to build upon, thereby initiating a paradigm shift in the municipality it can thereafter be applied to other municipalities. Hopefully, that may in time spark a shift on a national level.

Furthermore, the data collected and thematically mapped in this project may lead to a contribution in the research field. Either the study will continue already established research, building upon what is already there or it may create its own foundation for which other researchers may venture forth with their own studies.

In the best of worlds, the results of this study may lead to both creating a shift in the paradigm, sparking new ways of working with and thinking about eldercare facilities within the municipalities of Sweden while also serving as a source of new academic material and metrics. This may in turn lead to new interesting studies that can further the discourse in the field or adjacent ones, opening new research possibilities.

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