



Organizational space as sites of contention: Unravelling relations of dis/order in a psychiatric hospital

Thorben Simonsen and Signe Vikkelsø

abstract

For some time now, scholars have advanced an interest in the unruly and emerging aspects of organizational space while arguing for theoretical integration, wayfinding, and synthesis to overcome conceptual fragmentation of the field. Taking inspiration from recent work focusing on the tensions that emerge from the interplay of architectural design and organizational action, our paper investigates organizational space by drawing on Mary Douglas' work on purity and danger to unravel relations of dis/order in a newly built psychiatric hospital designed with a 'healing architecture'. Using ethnographic data, we analyze the everyday ordering work of nursing staff within two inpatient wards and describe how it unfolds as a response to the patients' use of the hospital design, which amplifies experiences of disorder for the nursing staff. We argue that the tensions between the ordering efforts of architects, nursing staff, and patients to make ward spaces conform to particular ideas also are an important reminder of the key insight in classic organization theory that organization involves perpetual negotiations over purpose and concerted action. Unravelling such tensions through Douglas' approach, we contribute with greater insight across theoretical preferences and conceptual differences into *how* but also *why* organizational spaces are continuously cast as 'sites of contention'.

Introduction

Scholars in organization studies have long considered how architecture matters for organization (Borch, 2009; Dale and Burrell, 2008; Kornberger and Clegg, 2004), investigating how physical spaces facilitate and/or inhibit the people and organizational practices they contain (Baldry, 1999; Baldry and Barnes, 2012; Dale, 2005; Halford and Leonard, 2006). While in many early studies, as Taylor and Spicer (2007: 325) point out, architecture was cast as stable and fixed, recent scholarship encourages a less deterministic and more processual approach to understanding the performative and unruly aspects of organizational space (Best and Hindmarsh, 2019; Beyes and Steyaert, 2012; Cnossen and Bencherki, 2018; Jones et al., 2004; Ratner, 2019; Stephenson et al., 2020; Wasserman and Frenkel, 2015). Struggling to reconcile these and other approaches in order to overcome what is considered a growing conceptual fragmentation in the field, scholars have offered integrative or wayfinding frameworks (Beyes and Holt, 2020; Stephenson et al., 2020; Taylor and Spicer, 2007; Weinfurtner and Seidl, 2018). However, despite the insightful overviews, the attempts to synthesize continue rather than settle the debates.

A recent paper by Sivunen and Putnam (2020) takes a different approach to the question of organizational space, inviting a specific focus on the interplay or 'tensions' between order and disorder. While proposing to consider the simultaneity of order and disorder in organizing is not new (Cooper, 1986; Cooren and Caïdor, 2019; Kuhn and Burk, 2014; Munro, 2001; Putnam, 2019; Vásquez et al., 2016), we take inspiration from such work to investigate relations of dis/order in a newly built psychiatric hospital designed to have 'healing architecture'. Answering Putnam's (2019: 35) call for including 'bodies, space and places, that may lead to different types of tension in the interplay between order/disorder', we revitalize Mary Douglas' (1966) work on purity and danger. For Douglas (1966: 3), the relationships between space and meaning, order and disorder are tied to broader systems of classification and the conflicting efforts to make the world 'conform to an idea'. What constitutes a source of order for some may be experienced as a site of disorder for others.

Following Douglas' methodological encouragement to 'map the full range of dangers' (1966: 4), we investigate the daily ordering work of nursing staff within two inpatient wards and describe how the designed hierarchy of open and transparent spaces amplifies experiences of disorder for the nursing staff in dealing with patient life. First, we analyze the work directed towards what the nursing staff consider to be dirt or danger in the physical spaces of the wards. Second, we analyze how tensions between professional concerns and patient conduct create 'sites of contention'. A core issue here is the role of the 'healing architecture'. The open, flexible, and transparent design of the hospital may be considered a manifestation of particular ideologies and intentions (Spencer, 2016) where design imbues physical space with purpose and prescribes possible actions (Kuhn and Burk, 2014: 159). It might also be characterized as a 'liquid architecture' that seeks to 'compose creative forces that flow, stream, and move in space' (Kornberger and Clegg, 2004: 1107), and perhaps an example of what Sivunan and Putnam (2020: 1131) call 'generative spaces'. Based on our analysis, we argue that it first and foremost provokes perpetual negotiation, at times even open struggle, among nursing staff and patients about organizational purpose: what is supposed to take place where?

While the hospital in question, like many other contemporary psychiatric facilities, is designed to reflect present-day models of care (Bromley, 2012; Vaughan et al., 2018) seeking to facilitate 'person-centered care' and 'recovery' (Jovanović et al., 2019) through open, transparent, and flexible spaces (McGrath and Reavey, 2019), our findings confirm that such designs underestimate the complexity of everyday organizational life, leading to unfulfilled promises (Timmermans, 2013: 3). Furthermore, we suggest that our analysis reactualizes a proposition in classic organization theory (Barnard, 1968; Du Gay and Vikkelsø, 2017): that organization involves perpetual negotiation over purpose and concerted action. Indeed, to organize is to deal constantly with situations where specific ordering efforts or programs of action interfere and collide with others involving tensions between order and disorder (Cooren and Caïdor, 2019: 36). Douglas' approach allows us to consider not only *how* such tensions come about, but also *why* as we follow the clashing efforts to inhabit or make space conform to particular ideas. Rather than considering organizational space as something that needs conceptual purification – and thus continuing the debate about which

approach is most appropriate – we propose the less dramatic, but in our view more relevant, approach, that the tensions constitutive of organizational spaces are especially tensions about what is to be purposefully organized.

Literature review

Despite, or perhaps because of, the richness of studies on organizational space some authors have described the field as difficult to aggregate (Taylor and Spicer, 2007), fragmented (Weinfurtner and Seidl, 2018), widely diffused and highly variable (Stephenson et al., 2020), and as drawing on a ‘wildness of spatial theories’ (Beyes and Holt, 2020: 21). Indeed, the literature on organizational space takes multiple approaches to study a wide range of topics, including leadership and control (Baldry and Barnes, 2012; Dale, 2005; Ropo et al., 2013), identity and gender (Dale and Burrell, 2008; de Vaujany and Vaast, 2014; Halford and Leonard, 2006; Wasserman and Frenkel, 2015), hybrid, creative, and liminal workspaces (Best and Hindmarsh, 2019; Cnossen and Bencherki, 2018; Hjorth, 2004; Munro and Jordan, 2013; Shortt, 2015), and studies of broader cultural and political patterns and powers (Connellan, 2013; Dale, 2005; Giovannoni and Quattrone, 2018; Leonard, 2013; Zhang and Spicer, 2014) to name just a few.

In order to overcome this state of affairs, several attempts have been made to offer ‘integrative’ or ‘wayfinding’ frameworks. Drawing on Lefebvre’s theory of spatial production, Taylor and Spicer (2007) suggest that existing research on organizational spaces can be sorted into three categories: studies of space as distance; studies of space as the materialization of power relations; and studies of space as experience. Furthermore, they argue for theoretically and empirically integrating these in analyses of organizational spaces across micro, meso, and macro levels. In contrast to Taylor and Spicer’s foundation in Lefebvre’s theory, Weinfurtner and Seidl (2018) present an ‘inductive’ synthesis of the literature on organizational space. They present a ‘toolbox’ comprising three constitutive elements (boundaries, distance and movements) and four spatial themes (the distribution of positions in space, distance and movement, the differentiation of space, and the intersection of distinct spaces) which they encourage future studies of space to connect to in order to ‘substantiate their findings more effectively’ and ‘promote the

generation of cumulative knowledge' (Weinfurter and Seidl, 2018: 27). Beyes and Holt (2020) also address the movement from previous analyses to contemporary process studies of space, identifying four 'twists' in the spatial turn in organization theory: space as 'site', 'contestation', 'multiplicity', and 'poetics'. They argue that each twist brings forward particular aspects of organization theory's 'topological imagination', adding important insights vis-à-vis two common illusions: the illusion of transparency (that spatial reality is confined to a cognitive world of imagined representations, i.e. that meaning determines matter); and the realist illusion (that space is physically located in a world of material things from which meaning arises). They consider themselves 'wayfinders' on a journey that they hope will lead to 'a spatial imagination that is bolder, more expansive, less timid in its own wayfinding through what space, as conceptual operator and empirical sphere, can do' (Beyes and Holt, 2020: 21). Finally, in a recent article, Stephenson and colleagues (Stephenson et al., 2020) review the organizational literature that casts space as a process, offering five orientations of organizational space scholarship, labeling them respectively as 'developing', 'transitioning', 'imbricating', 'becoming', and 'constituting'. They discuss these orientations in relation to four spatial constructs – 'movement', 'boundary', 'assemblage', and 'scaling' – as well as juxtaposing them to four 'key building blocks' – 'physical structure', 'distance', 'workplace arrangements', and 'spatial scale' – that they have identified as historically important in the literature on organizational space.

The integrating, wayfinding, or synthesizing models each provide insightful overviews of the field and approaches to the questions of order and disorder in the organization of space. However, their conceptual differences also seem to confirm rather than overcome the analytical diversity of the field. It is not clear if the different categories, constructs, tools and twists are to be pursued in separate empirical analyses or if they are intersecting analytical dimensions to be located within a single empirical phenomenon or case. In considering these efforts of organizational scholars to tidy up theories on organizational space, we suggest that unravelling the clashes of orders that arise in the organization of space, rather than installing conceptual order, will afford greater insight into what organizational spaces are, what they mean, and why they oscillate between order and disorder in practice. Indeed, striving

for conceptual purity, to use the language of Douglas, pushes the relations of dis/order to the periphery of organization theory. As a result, the conflicting nature of organization is overlooked. In the following, we introduce the approach of Mary Douglas to understand relations of dis/order in the organization of space.

Dirt, danger and social organization

Throughout her work, Douglas (1921–2007) was concerned with social orders as systems of classification that give symbols their concrete meaning. With an interest in comparative religion and structuralist social anthropology, she aimed to understand culture by studying social organization through symbols and rituals and their place in a total structure of classifications. In the 1966 book, *Purity and danger*, Douglas (1966: 48) argues that pollution and danger beliefs are inherent in the establishment of social order and that conceptions of dirt in generalized forms emerge out of a culture's ideas about order and disorder. Notions of dirt, disorder and rituals of cleanliness in a culture must be understood within 'the full context of the range of dangers possible' in that given universe (*ibid.*: 4) and tied to an understanding of how power and social order are established and maintained. In *Cleaning and tidying we are*, Douglas argues, involved in a perpetual process of arranging and '...positively re-ordering our environment, making it conform to an idea' (*ibid.*: 3). Demarcating boundaries and punishing transgressions have as their 'main function to impose system on an inherently untidy experience' (*ibid.*: 5). This way of understanding dirt invokes a substantial dynamic between two connected conditions: a set of ordered relations and a contravention of that order (*ibid.*: 44). In a later essay, Douglas elaborates on the concept of dirt in the following way:

For us dirt is a kind of compendium category for all events which blur, smudge, contradict, or otherwise confuse accepted classifications. The underlying feeling is that a system of values which is habitually expressed in a given arrangement of things has been violated. (1968: 198)

Handling dirt, drawing boundaries, protecting borders and categorizing things considered to be anomalous are examples of efforts to manage what Douglas (1966: 44) calls 'matter out of place'. Dirt, thus, is above all a spatial

category. In her thinking, direct connections are drawn between physical states and social organization, between matter and meaning, with perceptions of danger functioning as ‘a spontaneous coding practice which sets up a vocabulary of spatial limits and physical and verbal signals to hedge around vulnerable relations’ (*ibid.*: xiii). Beliefs about dirt and danger reinforce social pressures, which are spatially organized, and spatially organizing.

While danger-beliefs are embedded within a larger social order, danger does not exist in and of itself. Situations, patients and objects, for instance, might *become* dangerous through certain events but are not a priori discernible as such. Some dangers are great and others small, but invoking danger can, for all practical purposes, become an important aspect of legitimizing action towards (re)establishing order. Avoiding danger can, therefore, be seen as the attempt to relate form to function in the pursuit of unity in experience, which is why danger arises when form seems to have been attacked (*ibid.*: 3, 43, 130). Labelling a patient as dangerous, for instance, makes it possible to identify appropriate actions in *this* or *that* particular situation, and avoiding danger (re)affirms and strengthens the definitions to which they do not conform (*ibid.*: 48). Mapping what she calls ‘the full context of the range of dangers’ (*ibid.*: 4) thus becomes the analytical task when examining the way systems of classification work in the social ordering of everyday life. In particular, she directs our attention to how order is established and maintained by spatial means. Notions of dirt or disorder signal the concrete instances in which boundaries are transgressed, where rules are violated, where order is contravened. These situations reveal relations of control and power and, more specifically, underlying ambitions of creating or maintaining a certain socio-spatial order. In the following, we draw inspiration from Douglas’ approach as we investigate the interactions between nursing staff and patients within two wards at the psychiatric hospital, but first we describe the empirical context and our choice of methods.

Empirical context and methods

A newly built psychiatric hospital

Our study took place at a newly built psychiatric hospital in Denmark, with approximately 200 hours of fieldwork conducted by the first author shortly after its inauguration in 2015. The hospital is considered to constitute a ‘healing architecture’ with transparency, openness, and flexibility in the spatial disposition of wards. Even if the notion of ‘healing architecture’ is becoming increasingly important within health care design (Lawson, 2010), it is not specified what a recovery-oriented ‘healing architecture’ would look like. The design office, therefore, found inspiration elsewhere, making their own interpretation. The intention was to create natural interaction between staff and patients through the widespread use of glass to promote visibility, and a mix of formal and informal common areas, establishing what the architects termed ‘a hierarchy of spaces and stimuli’. They hoped to reduce work practices that maintain any distinctions between ‘them and us’, i.e., between patients and staff. The inspiration for this aesthetic and spatial organization was derived from modern offices, as the lead architect explains:

... the whole thing about being able to see and understand what is happening. After all, that’s something from our own world, our working life. The concept of transparency was actually taken from office building conference rooms and moved down. [...] It [transparency] might be even more important when in doubt about what’s real, and who’s who. (Interview 2017)

The hospital wards are designed to support a progression from absence of stimuli to their gradual reintroduction, reflecting ‘recovery’ as a modern psychiatric treatment model. Beginning hospitalization in the building’s most private and ‘safe’ space, the patient room, patients are expected and encouraged to gradually move into semi-public spaces (e.g. corridors and common areas) where their first encounters with others are thought to take place. Entering and engaging with the building’s most public spaces (e.g., cantina and atrium) signals that the end of hospitalization is approaching. In this way, a trajectory towards recovery is built into the very form and function of the building.

Nursing work at the wards

The nursing staff work at the wards in eight-hour shifts with formal tasks consisting of keeping patient records, administering medication, planning care activities, as well as performing care. However, nursing staff highlight the development of relations to patients as the most important aspect of their work, especially in relation to safety and security. 'We care *a lot* about safety', explains one deputy head nurse. Safety is an integrated part of many organizational routines, undergirded by formal requirements and reinforced by documents. These safety concerns are closely related to an ongoing classification of patients and patient behavior, e.g., scoring their risk of violent behavior, of suicide, and determining a patient's degree of 'terrain freedom'. This information is continuously updated and accessible through the electronic patient record, but the majority of nursing staff prefer to make their own firsthand impressions of patients at the beginning of every shift, as they find that patient behavior observed yesterday might have changed today. By making rounds on their own, nursing staff build relationships while getting an overall atmosphere of the ward; something they find crucial in order to 'minimize the risk of violence and conflicts – and to avoid [the use of] coercion', as one nurse put it. While the 'recovery-model' is considered a guiding principle, nursing staff at these wards also question its appropriateness, because they find most of their patients too ill or distressed to comply with it. Medication, safety, and ensuring a calm ward atmosphere were considered a priority.

Fieldwork, data, and analysis

The empirical material reported in this paper was collected as part of a research project on 'healing architecture', spatial organization, and psychiatric practice (Simonsen, 2020). The project was developed in close conversation with key stakeholders from the hospital's management and research department, which also approved the research plan. The project was fully funded by the University where the researchers are affiliated. Before fieldwork commenced, information on the research project was given to the wards' head nurses, who then informed staff and patients when relevant. Formal consent was given in the form of a written statement that the research could be conducted on site, just as a declaration of confidentiality was signed

by the first author. Access was negotiated as part of the project design and concomitantly agreed verbally with staff in each ward.

Although tensions over research ethics may arise when social scientists study health services in medical institutions (Hoeyer et al., 2005), the everyday practices at the site made it uncomplicated to gain access to inpatient settings because various members of hospital staff constantly moved in and out of wards. In accordance with local hospital practice, written informed consent was not obtained, but patients were asked whether or not notetaking would be alright when in direct conversation. Verbal consent was obtained when possible. Confidentiality was ensured for all participants and all names are altered in the analysis. The hospital itself is also anonymized and the second author does not know the real names of participants.

Fieldwork took place at the hospital between June 2016 and August 2017. The methods applied to produce data during this time were primarily participant observations (Delamont, 2011) and shadowing (McDonald, 2005) of nursing staff. The first author followed nursing staff at work, observing their encounters with patients and interactions with colleagues. This included a focus on how and why they moved in and through ward spaces, which activities took place where, and when and where tensions arose. Observations were jotted down in notebooks and subsequently quickly written up. Shadowing as a method was particularly relevant for gaining insight into how and why tensions between ward spaces, professional perceptions and patient behavior emerged in and through everyday ordering efforts within the inpatient settings because of its emphasis on the direct study of contextualized actions (McDonald, 2005: 470).

To support observations, seventeen semi-structured qualitative interviews (Kvale, 1997) were conducted with staff focusing on their experiences with working in the new wards and their perceptions of ward spaces. This includes three interviews with head-nurses, one with a head-physician, five with nurses, three with auxiliary nurses, one with a care worker, and one with the lead architect. The interviews with nursing staff were structured around various themes including open questions on the impact of the built environment, such as 'How do you experience working in these new settings compared to your previous place of work?'. During interviews, respondents

were asked to describe ward spaces in relation to typical work tasks and were given a diagram to help focus attention on the spaces. Interviews lasted 60 to 90 minutes and were conducted during or after fieldwork, which made it possible to address particular situations observed during fieldwork. All interviews were recorded and transcribed verbatim.

NVivo software was used to analyze the data from both wards. The coding showed that staff were highly engaged in moving things, displacing patients, and relocating activities to what were considered more appropriate places, especially because these activities seemed to be animated by an interest in avoiding disorder, alleviating tensions. For this reason, we began to map out all these kinds of ordering efforts, primarily based on fieldnotes from participant observations and shadowing. Douglas' work offered a way of understanding these activities as part of a systematic ordering of things and people in accordance with a particular system of classification. Based on Douglas' suggestion to map 'the full context of the range of dangers', fieldnotes were recoded resulting in a 'list of disorders' with activities and situations where staff (re)moved objects, cleaned spaces, and sanctioned behavior. For each type of disorder, data were analysed to pinpoint the situation in which it arises, the spatial tensions it involves, and the underlying threat that is posed.

Findings: A range of dangers at the psychiatric wards

The spatial order of the psychiatric hospital reflects the 'recovery-oriented approach' in that the open, transparent, and flexible spaces seek to facilitate social encounters and support the development of empowering relationships. Despite the intent of this design and the treatment model in place at the site, a significant amount of time and resources are spent on (re)moving objects, cleaning spaces, and displacing patients from one area to another. This spatial ordering work takes place, we argue, as efforts to establish order on the wards and ameliorate the experience of disorder, with the physical spaces of the inpatient setting, in turn, functioning as both the site and source of organization. The 'healing architecture' of the site constitutes a particular spatial order that affords patients high degrees of mobility and few spatial boundaries, arguably amplifying the experience of mess and potential danger

in the eyes of nursing staff. We unravel these relations of dis/order as we analyze the situated work taking place in and across a variety of physical spaces in the inpatient settings, taking a micro-perspective on how systems of classification are at work in these efforts. Following Douglas, we focus on situations in the daily ward life that animate routine work as well as interventions in patient conduct. In the first section we give an overview of the salient activities and concerns of the nursing staff that reflect how the manner in which patients inhabit the ward spaces collide with the nursing staff's perceptions of a safe and orderly ward. In the second section we illustrate how and why nursing staff take action to alleviate a sense of immediate and looming disorder.

The untidy experience of life in the open wards

The inpatient wards unfold off main arterial corridors placed in close proximity to fitness rooms, laundry rooms, and kitchens to facilitate easy access and use. This spatial order is intended to facilitate patient mobility in and out of the wards, as well as gently affording social encounters that help patients gradually recover across varying degrees of socially challenging spaces. However, the actual use of these adjacent spaces is limited because many patients are compulsorily detained and because staffing levels do not allow nursing staff to leave the wards, essentially turning the wards into closed units. This means that activities such as the management of laundry are left for nursing staff to handle, even though this was one of the tasks that the open spatial order was supposed to help patients gradually master. Because patients cannot do their own laundry in the appropriate spaces, some try to do it in their patient rooms, attempting to dry it in the outside courtyard afterwards, while others simply leave their dirty linen and clothes in the hallways or in the shared social spaces. Nursing staff, therefore, spend a lot of time on first collecting laundry, then taking it to the laundry shaft or the laundry room outside the ward, and finally bringing it back to patients. This mundane governance (Woolgar and Neyland, 2013) is of course a matter of ensuring a hygienic setting, but the effort going into managing this symbolic dirt is not insignificant, as avoiding the courtyard becoming a drying room, the hallways into a collection point, and the shared social spaces into personal spaces, is all about safeguarding against an 'untidy experience', ensuring that

objects (clothes and linen) and practices (washing and drying) remain place-appropriate, and as such protecting spatial boundaries from transgression.

Ensuring a 'tidy experience' at the ward means that staff during shifts make sure that things are kept in their proper place: medicine in the medicine room; cutlery in drawers; lighters in locked cabinets; shaving equipment in the office and so on. This ongoing ordering work is an integral part of any health institution informed by concerns for maintaining a professional setting where equipment is ready at hand and the workplace is safe, but the 'healing architecture' of the wards adds new concerns for the nursing staff. For example, two rooms at the far end of a ward designed for social interaction and leisure activities, are, more often than not, locked by staff because they find them to present a real threat of suicide by strangulation (the rooms have electrical cords and curtain strings, which patients had previously attempted to use). In addition, staff have poor visible access from the office space at the opposite end of the ward, making it difficult to ensure oversight and safety. In fact, staff no longer actively surveil this area, as one nurse explained: 'It quickly becomes the culture; well, now they're just locked'. Here the tensions between intended use and perceived danger are quite tangible. With staff locking the two rooms and moving the couches from these rooms to the unbounded space and shared environment adjacent to the staff office, the spatial order of the wider ward environment acquires new meaning and raises new concerns for the nursing staff. Here we see a particular reordering of matter and meaning, with the moving of furniture reconfiguring spatial relations of dis/order on the ward. While the two rooms are seen as dangerous, the environment in front of the staff office, where patients now congregate, is increasingly used as a leisure space, a place for social encounters.

Shared spaces are frequently labored over by staff, not only to keep a clean ward, but to ensure the right circumstances for what they consider accepted social interaction, i.e. interaction that resembles the social behavior of a patient ready for discharge: being able to interact with other patients and conduct oneself in common areas designed to accommodate peaceful, friendly exchanges. The Environment is designed to be the ward's most social space and has comfortable furniture. However, nursing staff find it challenging to manage in terms of ensuring place-appropriate conduct. Located centrally between the nursing station, the courtyard and the seclusion room, it is a

nodal point for passage and interaction on the ward with few spatial features to suggest appropriate use. The risk of disorder is imminent, keeping staff occupied with regulating and correcting what they consider inappropriate behavior. Remarks such as; 'stop shouting', 'mind your own business', 'you can't be in there', and 'don't do that' are frequently used by staff to correct patients putting their feet on the table, being noisy or physical, using dirty language, or talking about something in the wrong place. The nursing staff feel they have to police particular topics that are reserved for other rooms, despite the open and inclusive design of the Environment. Let us give an example:

While shadowing a nurse, the first author and a nurse small-talk with four patients, discussing personal experiences, but as one of the patients begins discussing her medication, the atmosphere changes from calm and sociable to confrontational. The patient talks about how she experienced the effects of a drug, clearly unsatisfied. The nurse and the patient begin to discuss its clinical effects, clearly disagreeing with each other and the other patients go completely silent. As the patient gets aggravated, the nurse suddenly tells her: 'It's stupid to talk about medication out here'. While The Environment's spatial order invites social interaction, the nursing staff intervene when they consider something to be inappropriate. The nurse explains that discussions about medication should take place in 'suitable spaces' – in conference rooms or the patient room – because patients should not learn about each other's treatment. The underlying concerns are to protect patient confidentiality, but also to avoid conflict and disorder across the ward. Although the hospital is meant to spatially support the 'recovery-oriented approach' and animate the gradual increase in social interaction, the nursing staff feel they must actively intervene to ensure that sociality does not turn into dangerous situations with breach of confidentiality, disrespect of professional expertise, or violent confrontations. Utilizing the spatial order as a reference-point to sanction the patient talking about medication, the nurse evokes her formal power to enforce a particular social order, categorizing the topic of conversation as 'out of place'.

The nursing staff's efforts to enforce spatial boundaries also focus on placing patients in the rooms deemed appropriate to their mental condition, e.g. that a patient stays inside The Seclusion Room and out of The Environment.

Because ward doors cannot be locked, patients tend to leave The Seclusion Room incessantly to enter the ward environment, prompting staff to take action to get them to return. For instance, during a severe manic phase, a female patient, 'Helene', repeatedly left The Seclusion Room, shouting, singing and playing music, causing the nurse 'Sophie' to repeatedly intervene and engage in what we might call boundary work:

Sophie shouts in a friendly tone: 'Helene, go back into The Seclusion Room'. One minute later, she comes out again and rambles something incomprehensible. She is very loud and the other patients in The Environment turn towards her. Not long after, she is out again, but this time bringing her cell phone, blasting loud music. The music roars through the entire ward and she tries to sing along while dancing. Once again, Sophie leaves the office and brings Helene back to The Seclusion Room.

The reason to make a patient stay inside The Seclusion Room and the protective isolation it offers is to keep them from receiving too many stimuli, but also to ensure that the wider ward environment is not disrupted, which could harm other patients' recovery. This spatial sorting of patients or boundary work was a recurring scene during fieldwork with nursing staff seeking to establish and maintain the purpose of a room and its boundaries to other rooms, including patients' own rooms. While patient rooms are defined as private spaces and patients are allowed to domesticate them with personal items, nursing staff often use these rooms as 'buffer zones' in tense situations in which they can place patients considered potentially dangerous or disorderly. The following excerpt illustrates how a patient, 'Jackie,' is perceived to be 'too angry' to reside in the wider ward environment:

Jackie is angry. She snaps at people and speaks in an aggravated tone. Staff assesses that she needs medication and five staff members escort her to her room at the far end of the ward. Carina, the nurse with the medication, positions herself next to Jackie, with the colleagues remaining in a semi-circle in the door opening. Jackie gets up and gestures angrily with her arms all the while Carina tells her not to be so angry. She is asked to take a seat and relax, but Jackie refuses. She exits the room and walks down the hallway. Two staff members exchange glances and grab Jackie's arms with a rehearsed hold. They return her to the patient room, place her in the bed and maintain their hold. Jackie is aggravated, but does not resist.

While the spatial order of the wards makes the recovery-oriented approach manifest, nursing staff use considerable time managing the patients' use of

the open architecture. With Douglas, we understand that the recurrent ordering work is tied to staff's experiences and their interest in making the wards conform to their ideas of a well-ordered and safe environment. However, as spaces are designed to promote movement and social encounters with few design elements suggesting a particular use, the staff's sense of spatial disorder is constantly evoked by the way patients' inhabit the rooms. In the following section we look more closely at how nursing staff seek to order ward spaces and handle patients. In doing so, we show how they seek to manage tensions between the architectural order of the site and their perceived dangers.

Managing tensions, ordering space: emerging 'sites of contention'

Ward rules prohibit patients entering each others rooms. The key reasons for this are safety and to prevent the exchange of contraband such as drugs, but it also relates to the staff's overall interest in having a sense of control over ward spaces: 'we don't know what they're doing – they have to be visible', as one nurse explains. The following chain of events shows how the patients' use of rooms is perceived by staff as potentially dangerous or disturbing and how they seek to enforce their sense of spatial order. In the situation we follow 'Susan', an auxiliary nurse, when two patients, 'Maria' and 'Tina', are found together in The Seclusion Room:

Maria and Tina are seated in the outdoor, cage-like extension of the The Seclusion Room. Their backs rest against the transparent glass doors, making it impossible to open them. Susan discovers this and tells them that they are not allowed to be together in each other's rooms. She knocks on the door, waves her hands and tries to speak to them through the glass, but they disregard her and pretend she is not there.

Although the ward is designed to allow easy access and interaction, sitting next to each other in The Seclusion Room is perceived as potentially dangerous by staff, because of unpredictable patient behavior and also because it is against ward rules. Earlier during her shift, Susan overhears Tina saying that she wants to strangle herself. Even though Tina and Maria are 'just sitting there', Susan decides to mobilize her colleagues to help get them out of the room, classifying the situation as dangerous due to the threat of suicide

and violation of rules. Susan explains her concerns to her colleagues, arguing that they must intervene.

Susan leaves the room and asks all of her colleagues to help her deal with the situation. They collectively enter the Seclusion Room, placing themselves in a semicircle outside the closed glass doors, watching the two patients, who remain seated with their backs turned. 'They are a bad influence on each other', says one. 'Can we simply push them?' asks another, indicating that they could try to force open the doors. The others discuss what to do to get them out of there. 'They just want attention', a third contends, suggesting that they simply leave them alone.

Clearly, the staff agree that ward order has been breached, but how to manage the situation is not straightforward. The indeterminacy of the situation makes the nursing staff consider different approaches to the situation. Disorder is further animated by the different questions posed by nursing staff, opening up for multiple possible meanings. Importantly, fixing meaning in this instance is also about coming to terms with the role of the space. Thus, the presence of multiple possible meanings introduces instability – the grounds for negotiation – with the clashing of orders furthering the process of negotiation, which in the following directs staff towards managing a range of different objects within Tina's room instead. While planning what to do, the nursing staff suddenly start to discuss which objects to remove from Tina's room instead of how to remove the patients from The Seclusion Room, thereby changing the spatial focus of the intervention. Staff withdraw to the office to discuss the situation. Then Susan returns and approaches Tina, who is still seated next to Maria and says that they have decided to inspect her room: 'If you want to be present, now's the time!'. The patients ignore her.

Armed with plastic bags and blue sanitation gloves staff walk over to Tina's room. They begin removing various objects: shoelaces, bags, clothes, towels, and sandals. They also lock some seeds in a cupboard. Apparently, Tina knows a good deal about botany, and they are worried that some of the seeds might be poisonous. They inspect the skirting boards, her beanbag, and the bed. The bags underneath the bed are also removed. Susan and her colleague focus on examining the room and only pause to ask each other if an object is dangerous or not. All clothes are put into bags and placed within the office together with the other items collected. Tina's room is almost empty. Only drawing materials, pencils, paper, and slippers remain.

Tina's room is essentially empty, stripped of all objects considered potentially dangerous. Although it is her private room, it remains an institutional space accessible to staff at all times. The clash between two orders is evident: between a room ordered in accordance with a patient's perception of a livable, private space and the staff's resolution to re-order the same room in accordance with the perceived risks that objects within that space constitute. Danger is invoked through the classification of the patient as suicidal, and managing the situation becomes a matter of removing items that might be used to that end. The objects, then, are not intrinsically dangerous but might become it. Their properties do not change, but their classification does.

Approximately ten minutes after the inspection of Tina's room, Tina and Maria come out of The Seclusion Room and Susan tells them about the inspection. They pretend not to hear Susan and start to walk down the corridor:

Susan tells them that they are not permitted to walk together, but Tina just smiles roguishly and Maria insists that they can talk to each other if they want. They continue demonstratively down the hall. 'Damn it, then I'll go with you', says Susan bluntly, following them down the corridor.

Despite securing the room and alleviating the immediate threat of suicide, Susan seems reluctant to leave Maria and Tina alone. The ward's spatial order affords movement from one end to the other, allowing patients to walk full circle around the courtyard at its center. Although acting in accordance with the intended design, following the architectural program of action, the two patients' actions within and across these ward spaces are considered problematic. Evidently, the spatial order enables Maria and Tina to provoke Susan, using the space as a place for teaming demonstratively up and averting staff. Patients walking down the corridors together is usually not a problem, on the contrary, in line with the recovery-approach it is considered a positive progression in treatment, but Susan's reaction clearly shows that she does not approve in this instance. Tangible tensions emerged because of the patients' movements through ward spaces and the staff's perceptions of those movements, casting the emerging organizational spaces as disorderly. Clearly challenging her authority, she wants Tina and Maria in line of sight, she explains, and follows them down the corridor. The corridor and the far end of the ward are also considered 'risk zones' due to lack of visibility and audibility.

Like most other rooms at the ward, they can change status from being seen as accommodating spaces for care and recovery to being risky zones, depending on the way patients inhabit them.

Discussion: Organizational space as ‘sites of contention’

In the analysis of the ongoing ordering work of nursing staff and their interactions with patients within and across various ward spaces designed as part of a ‘healing architecture’, we see how relations of dis/order emerge and clash in the mutual constitution of organizational space. The friction-free space of the inpatient settings animate and arguably amplify tensions between the intended use of spaces, professional concerns, and patient conduct, despite architects, nursing staff, and patients all wanting to support recovery. Just like psychiatric nursing does not unfold as the simple realization of a ‘recovery-oriented approach’ (Waldemar et al., 2016), neither is the architectural design simply read as a spatial grammar (Simonsen and Højlund, 2018) or authoritative text (Kuhn and Burk, 2014) for the social order on the wards. Following Douglas’ encouragement to map the full range of perceived dangers allows us to suggest why this is so: while patients inhabit rooms, hallways and areas in ways they find meaningful, on many occasions nursing staff experience the resulting effects as signs of a looming chaos. The seamless interfaces of ward spaces invite mobility and inhabitation that forms a constant risk of disorder in the eyes of nursing staff, and in their interactions with patients the spatial order of the site becomes a matter of negotiation and contestation.

While all buildings may have such sites of contention, we suggest that the ‘healing architecture’ of the inpatient settings is particularly prone to produce tensions and amplify relations of dis/order due to its spatial openness and functional indeterminacy. Contrary to the architectural determinism found in nineteenth-century asylums, the lack of physical and functional partitioning in the modern psychiatric hospital studied here animates nursing staff to enact a sort of social architecture in its place, exceedingly carrying out a situated responsive type of ‘housekeeping’ (Deacon and Fairhurst, 2008). What is supposed to take place where becomes an important point of conflict between staff and patients with constant negotiation between divergent kinds

of reasoning. This might not in itself be surprising, especially because a psychiatric ward is a complex arrangement of medical, legal, organizational and social practices and a place where demands of care and control co-exist and at times ‘rub up against one another uneasily’ (Brown and Reavey, 2016: 11).

Nonetheless, the ‘liquid architecture’ (Kornberger and Clegg, 2004) of the ward spaces intended to enable social interaction, hope, movement, and relational potential seems to amplify features and tensions of organizational life that otherwise might be less salient. Interestingly, similar open and versatile spaces characterize newly built or refurbished shopping malls, hotels, and private homes (Jones, 2018), suggesting that the contemporaneous design of hospitals are perhaps driven by broader cultural ambitions and aesthetic preferences rather than by medical principles and care programs alone (Adams et al., 2010). In fact, the architects took inspiration from modern office buildings rather than mental healthcare facilities, seeking to stimulate mobility and spontaneous encounters. As such, the hospital building makes manifest many of the design principles and spatial forms characteristic of what Spencer (2016) calls ‘neoliberal architecture’: a friction-free space designed to liberate the subject from modernist and bureaucratic constraints.

Whether such spaces are indeed ‘neoliberal’ or potentially ‘generative’, as suggested by Sivunen and Putnam (2020) in their study of activity-based organizing, is secondary to the fact that they certainly change the grounds upon which meaning is constructed (Kuhn and Burk, 2014: 149) in contemporary organizations. While an obvious limitation of our study is that the patients’ perceptions of ward spaces are not directly explored, we do, however, show how the spatiality of perceived dangers of nursing staff is tied to the dynamic interplay between matter and meaning on the wards. As such, we confirm that tensions between architectural design and organizational action are constitutive of organizational spaces, and with Douglas we show how such tensions emerge because of particular systems of classification. Following from this, we also see an important link to key arguments in classic organization theory, which might be helpful for better understanding why dilemmas, contradictions, and tensions are constitutive of organizational space.

For Chester Barnard (1886–1961), a pioneer of the field, what distinguishes an organization is the existence of a collective purpose that unites its members in concerted action for a shorter or longer period. The absence of purpose, meanwhile, will change the dynamics of the group entirely and potentially lead to a disintegration of the organization. However, he also explains that establishing a collective purpose is difficult to delimit and express and fundamentally involves the construction of something that is distinct from an incidental collection of individuals:

It is something that is clearly evident in many observed systems of cooperation, although it is often not formulated in words and cannot be so formulated. In such cases, what is observed is the direction or effect of activities, from which purpose may be inferred. (Barnard, 1968: 86)

Barnard does not write about space but on the necessity of inculcating belief to support organizational purpose. However, tensions in organizational space, we posit, may well be understood exactly as tensions regarding organizational purpose both at the overall institutional level and in the everyday life of inhabitants. Eventhough ‘recovery’ is the agreed-upon purpose of the organization in question, other well-known and well-described tensions, such as those between control and care, obviously still play an important role despite the architectural intentions, and so do multiple other partially co-existing, partially colliding purposes in the organizational life on the wards. In Douglas’ terms, as we have shown, tensions are all about arrangements of space to realise one, rather than another, competing idea. With Barnard we are reminded that this is a core challenge of organizational space. With the open and interpretative flexibility of contemporary architectural designs, combined with the increasingly complex organizational nature of, in our case, psychiatric practice, it is not surprising that organizational spaces may become even more contentious sites and sources for clashing orders.

Conclusion

The theoretical understanding of organizational space has been characterized as fragmented and as drawing on a ‘wildness of spatial theories’ (Beyes and Holt, 2020), leading to numerous attempts at synthesis and wayfinding

(Stephenson et al., 2020; Taylor and Spicer, 2007; Weinfurtner and Seidl, 2018). Our paper takes inspiration from Putnam's (2019) encouragement to focus on spatial tensions rather than supporting one or the other of these attempts. Using the work of Mary Douglas on the relationship between broader systems of classification and experiences of danger and disorder as a vehicle for studying such tensions in two psychiatric wards designed to have 'healing architecture', we have shown how nursing staff engage in ongoing ordering work to remedy an untidy experience of the way patients inhabit the spaces and to (re)install their sense of organizational order.

In discussing this core finding, we argue that the functional indeterminacy and openness of the hospital space in our case, and the clashes between orders it gives rise to, may be indicative, if not symptomatic, of spatial tensions found in other such types of 'liquid architecture' (Kornberger and Clegg, 2004). We suggest that unravelling such tensions with the approach of Douglas offers greater insight into not only *how* but also *why* they emerge, with organizational spaces, in turn, functioning as both the site and source for attempts to make the world conform to an idea. As such, we see a link between contemporary work taking a tension-based approach (Kuhn and Burk, 2014; Putnam, 2019; Sivunen and Putnam, 2020), Douglas' encouragement to pay close attention to the work of particular systems of classification in the production of social order, and the partially forgotten focus in classic organizational theory on the crucial albeit difficult role of purpose in any organization (Du Gay and Vikkelsø, 2017).

The topic of tensions in organizational space is not a subset of a literature on organizational space, we argue, but a defining feature, exactly because of the fundamentally precarious nature of *organization* where one person's order is easily another person's chaos. Understanding organizational spaces as sites of contention encourages us to empirically unravel the negotiations about what is supposed to take place in each case. Rather than seeing organizational space as something that needs conceptual purification – and thus continuing the debates about which approach is most appropriate – we propose the less dramatic but in our view more relevant approach that the tensions constitutive of organizational spaces are tensions about what is to be purposefully organized.

references

- Adams, A., D. Theodore, E. Goldenberg, C. McLaren, P. McKeever (2010) 'Kids in the atrium: Comparing architectural intentions and children's experiences in a pediatric hospital lobby', *Social Science and Medicine*, 70: 658-667.
- Baldry, C. (1999) 'Space - The Final Frontier', *Sociology*, 33: 535-553.
- Baldry, C. and A. Barnes (2012) 'The open-plan academy: space, control and the undermining of professional identity', *Work, Employment and Society*, 26: 228-245.
- Barnard, C. (1968) *The functions of the executive*. Boston: Harvard University Press.
- Best, K. and J. Hindmarsh (2019) 'Embodied spatial practices and everyday organization: The work of tour guides and their audiences', *Human Relations*, 72: 248-271.
- Beyes, T. and R. Holt (2020) 'The Topographical imagination: Space and organization theory', *Organization Theory*, 1(2): 1-26.
- Beyes, T. and C. Steyaert (2012) 'Spacing organization: non-representational theory and performing organizational space', *Organization*, 19: 45-61.
- Borch, C. (2009) 'Organizational atmospheres: Foam, affect and architecture', *Organization*, 17: 223-241.
- Bromley, E. (2012) 'Building patient-centeredness: Hospital design as an interpretive act', *Social Science and Medicine*, 75: 1057-1066.
- Brown, S.D. and P. Reavey (2016) 'Institutional forgetting/forgetting institutions: Space and memory in secure forensic psychiatric care', in E. Welke and P. Walgenbach (eds.) *Institutions Inc*. New York: Palgrave Macmillan.
- Cnossen, B. and N. Bencherki (2018) 'The role of space in the emergence and endurance of organizing: How independent workers and material assemblages constitute organization', *Human Relations*, 72(6), 1057-1080.
- Connellan, K. (2013) 'The psychic life of white: Power and space', *Organization Studies*, 34: 1529-1549.

- Cooper, R. (1986) 'Organization/Disorganization', *Social Science Information*, 25: 299-335.
- Cooren, F. and P. Caïdor (2019) 'Communication as dis/organization: How to analyze tensions from a relational perspective', in C. Vásquez and T. Kuhn (eds.) *Dis/Organization as communication: Exploring the disordering, disruptive and chaotic properties of communication*. New York: Routledge.
- Dale, K. (2005) 'Building a social materiality: Spatial and embodied politics in organizational control', *Organization*, 12: 649-678.
- Dale, K. and G. Burrell (2008) *The spaces of organisation & the organisation of space: Power, identity & materiality at work*. New York: Palgrave Macmillan.
- de Vaujany, F.-X. and E. Vaast (2014) 'If these walls could talk: The mutual construction of organizational space and legitimacy', *Organization Science*, 25: 713-731.
- Deacon, M. and E. Fairhurst (2008) 'The real-life practice of acute inpatient mental health nurses: An analysis of "eight interrelated bundles of activity"', *Nursing Inquiry*, 15: 330-340.
- Delamont, S. (2011) 'Ethnography and participant observation', in C. Seale, G. Gobo, J.F. Gubrium and D. Silverman (eds.) *Handbook of qualitative research*, London: SAGE.
- Douglas, M. (1968) 'Pollution', in D.L. Sills (eds.) *International encyclopedia of the social sciences*. New York: Wiley Macmillan.
- Douglas, M. (1966/2009) *Purity and danger*. New York: Routledge.
- Du Gay, P. and S. Vikkelsø (2017) *For formal organization: The past in the present and future of organization theory*. Oxford: Oxford University Press.
- Giovannoni, E. and P. Quattrone (2018) 'The materiality of absence: Organizing and the case of the incomplete cathedral', *Organization Studies*, 39: 849-871.
- Halford, S. and P. Leonard (2006) 'Place, space and time: Contextualizing workplace subjectivities', *Organization Studies*, 27: 657-676.
- Hjorth, D. (2004) 'Creating space for play/invention: Concepts of space and organizational entrepreneurship', *Entrepreneurship and Regional Development*, 16: 413-432.

- Hoeyer, K., L. Dahlager, and N. Lynøe (2005) 'Conflicting notions of research ethics: The mutually challenging traditions of social scientists and medical researchers', *Social Science and Medicine*, 61: 1741-1749.
- Jones, G., C. McLean and P. Quattrone (2004) 'Spacing and timing', *Organization*, 11: 723-741.
- Jones, P. (2018) 'Private finance initiative hospital architecture: towards a political economy of the Royal Liverpool University Hospital', *Sociology of Health and Illness*, 40: 327-339.
- Jovanović, N., J. Campbell and S. Priebe (2019) 'How to design psychiatric facilities to foster positive social interaction: A systematic review', *European Psychiatry*, 60: 49-62.
- Kornberger, M. and S.R. Clegg (2004) 'Bringing space back in: Organizing the generative building', *Organization Studies*, 25: 1095-1114.
- Kuhn, T.R. and N. Burk (2014) 'Spatial design as sociomaterial practice: A (dis)organizing perspective on communitative constitution', in F. Cooren, E. Vaara, A. Langley and H. Tsoukas (eds.), *Language and communication at work: Discourse, narrativity, and organizing*. Oxford: Oxford University Press.
- Kvale, S. (1997) *InterView - En introduktion til det kvalitative forskningsinterview*. Copenhagen: Hans Reitzels Forlag.
- Lawson, B. (2010) 'Healing architecture', *Arts & Health*, 2: 95-108.
- Leonard, P. (2013) 'Changing organizational space: green? Or lean and mean?', *Sociology*, 47: 333-349.
- McDonald, S. (2005) 'Studying actions in context: a qualitative shadowing method for organizational research', *Qualitative Research*, 5: 455-473.
- McGrath, L. and P. Reavey (2019) *The handbook of mental health and space: Community and clinical applications*. London: Routledge.
- Munro, I. and S. Jordan (2013) "'Living Space" at the Edinburgh Festival Fringe: Spatial tactics and the politics of smooth space', *Human Relations*, 66: 1497-1525.
- Munro, R. (2001) 'Unmanaging/Disorganisation', *ephemera*, 1: 395-403.

- Putnam, L.L. (2019) 'Constituting order and disorder: Embracing tensions and contradictions', in C. Vásquez and T. Kuhn (eds.) *Dis/Organization as communication: Exploring the disordering, disruptive and chaotic properties of communication*. New York: Routledge.
- Ratner, H. (2019) 'Topologies of organization: Space in continuous deformation', *Organization Studies*, 41(11): 1-18.
- Ropo, A., E. Sauer and P. Salovaara (2013) 'Embodiment of leadership through material place', *Leadership*, 9: 378-395.
- Shortt, H. (2015) 'Liminality, space and the importance of 'transitory dwelling places' at work', *Human Relations*, 68: 633-658.
- Simonsen, T. (2020) *The spatial organization of psychiatric practice - A situated inquiry into "healing architecture."* PhD Thesis. Copenhagen Business School.
- Simonsen, T. and H. Højlund (2018) 'Rummets grammatik - Helende arkitektur i psykiatrien', *Politik*: 22-42.
- Sivunen, A. and L.L. Putnam (2020) 'The dialectics of spatial performances: The interplay of tensions in activity-based organizing', *Human Relations*, 73: 1129-1156.
- Spencer, D. (2016) *The architecture of neoliberalism: How contemporary architecture became an instrument of control and compliance*. New York: Bloomsbury Publishing.
- Stephenson, K.A., A. Kuismin, L.L. Putnam and A. Sivunen (2020) 'Process studies of organizational space', *Academy of Management Annals*, 14: 797-827.
- Taylor, S. and A. Spicer (2007) 'Time for space: A narrative review of research on organizational spaces', *International Journal of Management Reviews*, 9: 325-346.
- Timmermans, S. (2013) 'Seven warrants for qualitative health sociology', *Social Science and Medicine*, 77: 1-8.
- Vásquez, C., D. Schoeneborn, and V. Sergi (2016) 'Summoning the spirits: Organizational texts and the (dis)ordering properties of communication', *Human Relations*, 69: 629-659.

- Vaughan, L., S. Sumartojo, and S. Pink (2018) 'Patient-Centered Care and the Design of a Psychiatric Care Facility', in L. Vaughan (eds.) *Designing cultures of care*. New York: Bloomsbury Publishing.
- Waldemar, A.K., S.M. Arnfred, L. Petersen and L. Korsbek (2016) 'Recovery-oriented practice in mental health inpatient settings: A literature review', *Psychiatric Services* 67: 596-602.
- Wasserman, V. and M. Frenkel (2015) 'Spatial work in between glass ceilings and glass walls: Gender-class intersectionality and organizational aesthetics', *Organization Studies*, 36: 1485-1505.
- Weinfurtner, T. and D. Seidl (2019) 'Towards a spatial perspective: An integrative review of research on organisational space', *Scandinavian Journal of Management*, 35(2): 1-30.
- Woolgar, S. and D. Neyland (2013) *Mundane governance: Ontology & accountability*. Oxford: Oxford University Press.
- Zhang, Z. and A. Spicer (2014) "'Leader, you first": The everyday production of hierarchical space in a Chinese bureaucracy', *Human Relations*, 67: 739-762.

the authors

Thorben Simonsen gained his PhD at the Department of Organization, Copenhagen Business School by investigating the spatial organization of psychiatric practice. He is currently an Assistant Professor at the Department of Business IT at the IT University in Copenhagen. His research interests converge around problematics relating to space, digitalization, organization, and health/care.

Email: thsi@itu.dk

Signe Vikkelsø is Professor (mso) at the Department of Organization, Copenhagen Business School. Her research is located at the intersection of organization theory and science and technology studies and her projects investigate the relationship between task and organization including the role of materiality. She publishes in organization and STS-journals and her books include *For Formal Organization: The Past and Present in the Future of Organization Theory*, Oxford University Press.

Email: ssv.ioa@cbs.dk