universität wien

MASTERARBEIT / MASTER'S THESIS

Titel der Masterarbeit / Title of the Master's Thesis

Exploring Temporal Politics of Space

An Ethnographic Case Study of an Open Plan Office

verfasst von / submitted by

Esther Dessewffy

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of

Master of Arts (MA)

Wien, 2020 / Vienna, 2020

Table of Contents

1. Introduction

"Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do."

– Steve Jobs (CEO, Apple)

This quote by the late Steve Jobs articulates a more recent turn in workplace culture, where in some select branches (of white collar work) work should no longer be regarded as a strenuous chore, but as an integral part of one's identity and an area of personal interest and engagement, a *lifestyle*, in hopes of increasing individuals' productivity and leading to an overall improvement in companies' prosperity. This turn in management culture seems to be propelled by the conviction that it is possible to install a specific ethos of "social life" in work environments, not only via structural changes but also via aesthetic compositions (see Clements-Croome 2006) that allegedly foster collaboration, communication and interaction among employees (Bernstein & Turban 2018, p. 1). Even prominent Marxist thinkers such as critical urban theorist Henri Lefebvre (see *Writings on Cities* 1996, p. 161) subscribed to the idea that designers participate in controlling people's time via spatial policy.

The idea of governing bodies and their activities via architectures and material arrangements is not specific to this era (see Foucault 1995, Guggenheim 2016, Fraser 2003). Today however, there seems to be competition between two popular forms of organizing white collar labor, namely traditional, cellular offices and open plan offices. A term that is often used to champion the merits of the latter architectural type is *flexibility*. As epitome of this new, self-organizing and pliable vision of work, the fashionable buzzword "flexibility" embellishes numerous campaigns for reframing wage labor in the 21st century. It is important however to acknowledge that this particular workplace is home to an elite white-collar workforce, who's employment is made possible through numerous international economic interdependencies and their outcomes. It is therefore in no way representative of workplaces in the 21st century. Therefore, the way flexibility is interpreted in this specific wage work context is not at all universal.

Like most buzzwords, flexibility is a canvas for diverse actors' interpretations, which renders it an amorphous yet powerful rhetorical instrument for the neoliberal organization of work and labor markets, according to Chamberlain (2018). At its core, it signifies the pliability of the material and the temporal. It pertains to work contracts and environments alike. I have learned through my field work that the modular open plan office, a hallmark of flexible work culture, does not uniformly distribute temporal agency or autonomy, in a uniform, predictable manner among employees. Through the

implication of sharing environments with others, it demands negotiation, tolerance and the ability to adapt, as most readers will understand. The questions that triggered my curiosity then were: If the open plan office is a flexible work environment, then how do employees enact their temporal agency there? Which new ways of doing time does this specific work environment enable?

I argue that developing a situated understanding of *flexibility* (and how it is enacted) requires examining one of the central artifacts of post-Fordist work ecologies, the open plan office, which for me epitomizes the ethos of self-governance through adaptation. In my opinion, such an endeavor can contribute to surpassing a superficial, lopsided understanding of temporal agency (humans' ability to schedule and organize their time) beyond shallow, idealized narratives of flexibility. I find critical theorist Nancy Fraser's diagnosis of flexibility as the successor to Fordist discipline in globalized neoliberal economies particularly compelling:

Another ubiquitous buzzword of globalization, "flexibilization" names both a mode of social organization and a process of self-constitution. Better: it is a process of self-constitution that correlates with, arises from, and resembles a mode of social organization. The hallmarks of flexibilization are fluidity, provisionality, and a temporal horizon of "no long term". Thus, what networks are to space, flexibilization is to time. (Fraser 2003, p. 169)

Therefore, flexibility as a form of governmentality in specific wage work contexts can be better understood by taking a look at how the relationship of time and space is enacted within the open plan office, that literally abolishes communicative boundaries by relinquishing spatial divisions and predefined seating arrangements. In my opinion, it is important to remain critical of the fruition of the ambitious endeavor to infuse a specific vision of work, namely flexible work, into an architectural form.

Nevertheless, the specific spatiality of the open plan office might even have the capacity to support mechanisms of *self-subjectification*, as proposed by authors like Bröckling (2016):

 "(…) first, workers are required to increase self-organization and self-monitoring; second, there is a growing coercion of workers to economize their own work capabilities and productivity; and third, everyday life in general is increasingly conducted on the model of enterprise." (ibid. p. 21)

Particularly the first two stipulations are worth contemplating, as employees are expected to negotiate their coexistence and adapt (to) their surroundings in shared work environments. Quite obviously, the fact that this kind of office architecture seems to inhibit seclusion – and integrates "Smart Working" (all sorts of information and communication technologies, ICT) – may have interesting consequences for modes of acting within in the organizational structures of a company. Regardless of the provisions made by designers of workplaces, continuous human participation and engagement are necessary for the integration of communication technologies and digital infrastructures, such as room

reservation systems. Moreover, this participation is what renders the open plan office's perseverance as such possible. Hence, it is necessary to remain critical of design and technology's propensity to reproduce particular interpretations of flexibility in regard to doing time that manifest in some behaviors, strategies or outcomes, rather than others:

In the first instance, the dream of getting rid of modernistic constraints in the first instance becomes possible because of ubiquitous technologies that allow to quickly coordinate large numbers of people. The idea that the absence of concrete implies an absence of rules and constraints furthermore ascribes too much agency to buildings and not enough to interaction rules. It runs the danger of misunderstanding a particular kind of material agency for a change in social form. (Guggenheim 2016, p. 77)

Contemplations like these triggered my interest in examining how life within the open plan office *contributes* to the way work is done within, and how flexibility as a temporal regime that allegedly guarantees freedom combined with productivity (see Chamberlain 2018) is enacted in practice.

My thesis argues that it is necessary to question the notion that infusing designers' ideas into a space will determine its outcomes. Instead, it highlights the significance of human agency and contingency: The concepts that nourish my thesis support the idea that the way we use and encounter spaces is *made* by processes and interactions that take place within and around it. Therefore, my research has a quite different take on the conception of space; it is not made at a single point in time, the conception of an architectural type, but rather in the course of the ongoing passage of time within and around it. Moreover, the ways time is enacted in a space are intimately related to its evolving material and symbolic characteristics. At the core of this thesis lies the question how temporalities, such as rhythms and the way they are organized, are made by the procedural spatiality of the open plan office, and how the spatiality contributes to "the making of time".

Additionally, my research promises to shed light on what flexibility means in this specific context, if we follow the assumption that temporal agency, people's ability to structure their time, their schedules, individual paces and work rhythms, is an inherent feature of flexibility. Therefore, the main parameters of my interest are the ways in which employees' temporal agency is informed by- and informs (as they are *free* to choose their individual location in the open plan office) the spatial material structures of their workplace. In the open plan setting, employees' personal rhythms are surely less insular than in private office rooms. I am eager to analyze how they manage their coexistence in the rhythmic amalgam of the shared space and which implications these strategies have for the temporal fabric of the office. To me, this aspect of particular interest, as it promises to shed light on how buildings participate in contemporary narratives of productivity (allegedly fostering flexibility, sustainability, personal responsibility, "flow", adaptability) that are inextricably linked to human agency to structure and design their personal temporalities through embodied practices that engage in organizing time at

work.

My main research question targets deeper understanding of how employees' ability to organize their work rhythms is circumstanced by the open plan office, and how these idiosyncratic, yet convergent schemes contribute to making the office. Three sub questions have guided my empirical work: The first one asks how employees contribute to structuring temporalities in the workplace, the second one inquires into the office's role in making temporal agency and the last question attempts to find out which visions of work inform the making of temporalities, and how they are performed in the open plan office. Closer examination of temporal agency outside the workspace, like the integration of care work or other commitments may impact temporalities within the building, might detract from developing an understanding of the material semiotics of the open plan office as such and are not subject of this investigation. A focus on the inside of the office will, in the course of investigating, unveil which strategies are employed to maintain and redesign temporal orders, by for example making employees cope with the proximity of peers (and communicative issues that this may bring), and also shed light on other, less obvious issues that may arise from this field, that could offer fertile ground for further investigation.

In pursuit of developing answers, I reviewed literature from three main pools; science and technology studies (STS), sociology, geography and sound studies. There will be a more in-depth explanation of my choices in section 2. Generally, the state of the art begins by portraying the discussion about temporalities in the social sciences and humanities, however I chose not to focus on literature about time measurement (of which there is plenty), but rather on temporal experience. Ironically, most of the literature on temporal experience seems to be less concerned with investigating the situated making of temporal experience, than on what broader concepts such as "digital capitalism" do to time. I find it necessary to indulge the idea that temporal experience is highly contextual and individual more sincerely in order to understand how these broader schemes come to play in specific settings and make their bearings more tangible. In order to gain deeper understanding of the context of my investigation, I therefore decided to review STS literature on built environments, workplaces and infrastructures. There will be emphasis on the specific ideas that helped me comprehend some of the phenomena in my field, particularly atmosphering and niching. Finally, I have decided to review literature from sound studies, not only because it offers means to understand how sound contributes to the making of spaces, but also due to its strong emphasis on rhythms, which has been handy for making sense of temporal orders in the open plan office.

Concerning theory, I am convinced that the combination of (urban) cosmopolitics (Farías & Blok 2016a, Guggenheim 2016, Stengers 2010) with the Sociology of Space (Löw 2017) contribute to understanding how temporalities are produced in spaces, as these perspectives highlight 1)

relationality: what actors are and what they are able to do depends on the relations they are embedded in, 2) multiplicity: the way things are encountered and dealt with, their ontology, may vary significantly among actors which amounts to multiple coexisting realities, 3) productivity: the capacity of arrangements and their relations to produce ever more new situations and 4) contingency or unpredictability that results from the prior points. Actor-Network Theory's take on agency (Latour 2005, Callon 1986, Law 2009) has supplied valuable vocabulary and ideas for me to conceptualize temporal agency as product of networked relations. As *cosmopolitics* in general refers to practices that engage in navigating everything within today's landscape of knowledge[1] (Robbert & Mickey 2013, p. 1), the open plan office resembles only a minute fragment of the larger cosmos of things, which consists for example of global economies, national and international imaginations of work and the temporal ethics that they infer. Despite being a "microcosmos", there are innumerable interactions and relations between the open plan office and its global context, which are far beyond my (or I dare say any single researcher's) reach. Therefore, chapter 4 will be dedicated to arguing how cosmopolitics acts within, rather than on, the open plan office's microcosmos, by explaining how it is possible that the space as such, its specific temporality and employees' temporal agency are produced within.

While devising my research exposé, I came to the conclusion that grasping temporal agency in the open plan environment requires presence at the site, due to the many tacit dimensions of temporal experience, such as rhythms, distractions and recalibrations that might be difficult to distil from interview transcripts alone. I was fortunate enough to get access to an open plan office, under the condition of a three-month internship, which made my research process an exciting and educational journey. I feel very privileged to have been granted the opportunity to learn from, work with and to have fruitful and inspiring exchanges with my research partners who have supported me on my journey, throughout the entire field work process.

Chapter 5. contains my reasoning for selecting the field of investigation and the application of ethnographic methods combined with interviewing. The rocky path to getting field access, my negotiations with research partners and a concise description of the field are outlined in 5.1. Section 5.2 traces the development of my ethnographic approach and underlying theoretical (Haraway 1988) and methodological (material cultures approach see Fetterman 2009, Tilley 2007) considerations, from before entering the field to graduation from it, which has been overshadowed by the COVID-19

---

[1] The "landscape of knowledge" refers to the present wealth of humans' knowledge, the known world. Moreover, it alludes to everything we know about and how we make sense of the worlds we inhabit through diverse, situated epistemic practices.

pandemic. I argue that paying attention to the relationships artefacts (such as office interior and materialities) are embedded in, is of paramount importance to making sense of the ways they may contribute to temporal agency. Ethical considerations and agreements about identity protection, as well as efforts to create secure speaking environments to engage with research partners (see "safe spaces" Bergold & Thomas 2012, p. 196) are discussed in 5.2.1. The material cultures approach is especially fit to investigate built environments and space (Tilley 2007, O'Toole & Were 2008), as it promises to shed light on meanings and discourses they are engaged in, as I will argue in 5.2.2. In regard to documentation of my field work I decided to make use of a journal. In sub section 5.2.3 I outline exactly how I applied it to conduct intermediary analyses during my stay in the field and which ideas have guided them (like situational analysis see Clarke 2005).

Next to participant observation, interviews constitute the second main pillar of my empirical work. My loose approach to sampling and the "natural" saturation of interview content, due to COVID-19, and my pre interview preparations are traced in 5.3. Here, I also explain why I chose to conduct semi-structured interviews, that were only loosely structured and resembled conversations instead of interrogations. I also found it important to note how I went about organizing and recording the interviews.

In order to manage the vast amount of oral, visual and written impressions I resorted to an ongoing analysis strategy (see 5.4). This means that I mapped my contemplations prior to embarking on my empirical journey, throughout my stay in the field (spontaneously; whenever I felt like some important aspect crossed my mind, and regularly on a weekly basis) and after physically withdrawing from it. I describe the documents I collected (interview transcripts, field notes and sketches) and how I approached coding and analysis (using pen and paper but also the social science software ATLAS.ti). To conclude my methods section, I chose to describe how I arranged the material in order to construct a coherent narrative for my empirical analysis, as well as the difficulties I encountered in the process (5.4.1). In order to harness my difficulties with ordering the vast amounts of interconnected and often contradictory information, I decided to 1) understand the open plan office as the focus of my investigation and use rhythms and temporalities as main analytical category through which to look at things that happen in the office and 2) use the term governance in order to make sense of employees' agentic practices in the office (which makes sense in respect to understanding *flexibility* as governmentality as discussed in the beginning of this chapter).

The centerpiece of this thesis, the empirical chapter is split in two main sections: The first one (6.1) describes employees' regulatory practices and how they are contextualized by the office space and everything within. The second one (6.2) strives to locate these practices in space; it shows what they do to the office's spatiality and to rhythms and atmospheres as ephemeral spacetimes in the open

plan office. The structure of this chapter is derived from my contemplations about temporal agency as discussed in 4.3, where I argued that temporal agency can be understood as 1) governance, which aims at governing contingency by constructing spacetimes and 2) time maintenance, which targets coping with the environment's temporality. Throughout my analysis it becomes clear that regulatory practices can be time maintenance as well as governing practices, and that the making of spacetimes as discussed in 6.2 also holds properties of both aspects (niching as discussed in 6.2.1.1 & 6.2.1.2, seems to be more on the time maintenance side while atmosphering in 6.2.2 seems to be a constructive, governance practice).

By conducting this in-depth analysis of *spatialized*[2] temporal agency and arguing that both entities are inextricably linked, I hope to contribute to literature that examines the constitution of space through a temporal lens, and research on temporalities. Truly committing to the idea that time is a situated experience, requires focusing on how temporal experience is made within a specific context. Moreover, I think it is necessary to examine one site at a time in order to gain a more comprehensive understanding of how flexibility is enacted in workplaces of the 21st century. By starting at the site of the open plan office, I hope to indulge further researchers in this endeavor and contribute to a broader understanding of how spaces contribute to temporal experience and agency. On a practical level, the outcomes of my research may not only be interesting to individuals who work under comparable conditions and are interested in how others cope, or to designers of future workplaces, who seek knowledge about, for example, how employees encounter their material environment or what the environments they design can demand of their inhabitants. Also, there is a lack of literature that draws together actor-network relations or urban cosmopolitics with temporalities, which makes my endeavor interesting on a theoretical level.

---

[2] See Massey (1999)

2. State of the Art

To commence this chapter, there will be a brief summary and argumentation of my choices in literature: The first section of the state of the art (2.1) gives an overview over a body of literature that is concerned with temporalities in the social sciences, particularly with temporal experience and the way it is embedded in broader societal structures, in order to achieve a clearer understanding of what I mean by temporal agency. The second section (2.2) strives to portray strands of STS literature that is concerned with built environments and seeks to explain how they become applicable to this thesis. The final section (2.3) briefly dives into literature on sound and acoustics and explains how it has been useful to my endeavor.

First, I examined literature from the sociology of work (Rubin 2007, Bluedorn 2007, Blount & Leroy 2007, O'Leary and Cummings 2007) that deals with workplace temporalities (2.1), and argued that it might be lacking engagement with the material and architectural situatedness of work. In order to emphasize the importance of contemplating how the material contextualizes temporality, I chose to give a brief impression of how the complex relationship between objects and agency has been argued in STS (Akrich 1992, Johnson 1988, Callon 1986, Latour & Woolgar 1986, Knorr-Cetina 1983) and how authors have discussed the link between technological innovation and temporal agency in particular (Rosa 2013, Nowotny 1989) by reviewing literature that pleas for and against making a causal connection (2.1.1).

Then, I decided to discuss readings which argue that temporal agency does not merely exist in a vacuum, but is contextualized by socio-economic structures, cultural representations and idealizations, norms, discourses, and that it is personally situated (Sharma 2014, Nowotny 1989) (2.1.2). Here, I also made some space for ideas that identify temporal regimes as instruments to exert power, by creating inclusions via synchronization and exclusions by not accommodating individuals' rhythms and temporal agency (Sharma 2014, Lewis & Weigert 1981, Freeman 2010, Novotny 2019). Some authors have also argued that temporal exclusions can also be self-induced and experienced as liberating (see Freeman 2010, Novotny 2019 and Deckner 2019).

Then, I introduce some attempts to capture the essence of temporal agency from the social sciences (Flaherty 2002, Lewis & Weigert 1981) and argue why I find them insufficient in 2.1.3. In subsection 2.1.3.1, I discuss why Wajcman's (2015) interpretation of how technology at the workplace contributes to "work intensification" might be a fruitful extension to the earlier concepts discussed above, and how I hope to contribute to an even more specific understanding of temporal agency with my case study.

The second section of the state of the art begins with a plea for combining agencement thinking with the study of situated temporalities (2.2). The study of different workplaces such as hackerspaces (Davies 2017), urban settings for care work (Sanchez Criado & Rodríguez-Giralt 2016), studios (Farías & Wilkie 2016) and laboratories (Latour & Woolgar 1986, Knorr-Cetina 1983), is outlined in 2.2.1. Then, I will discuss some theoretical concepts from urban STS (Blok and Farías 2016a & b, Göbel 2016, Niewöhner, Klausner & Bister 2016, Guggenheim 2009), how they have been applied in literature, and how they become applicable to the case study of the open plan office (2.2.2). The following subsection (2.2.3) connects different ways of thinking about infrastructure in STS (Guggenheim 2016, Star 1999, Jensen & Morita 2015, Lancione & McFarlane 2017) and debates which aspects might become particularly useful.

As I found issues surrounding sound and acoustics omnipresent in the open plan office, I decided to dedicate the last section of the state of the art (2.3) to discussions surrounding sound (LaBelle 2010, Born 2013, Revill 2016) and stating how they have contributed to my understanding of space and time and my empirical work.

2.1 The Study of Temporalities in the Workplace

There is a reasonable pool of literature on how temporalities come into play at the workplace, from the sociology of work. I came across "Time Work Discipline in the 21st Century" by Beth A. Rubin (2007), that offers an introduction to, and reviews of prior literature in Volume 17 of "The Sociology of Work: Workplace Temporalities". Rubin (2007) touches upon the complexities of the workspace in what she calls *the new economy*, and pleas for more research in this field (Rubin 2007, p. 4). The Volume seems to focus on how workplace temporalities affect and create (and vice versa) social life, however I found no attempt to integrate the agency of the workspace and how it may relate to time work. The materialities of workplace structures themselves (as a space) are not accounted for here but might in my opinion offer insights into how spatial structures may enroll users to organize their time.

A study by Bluedorn (2007) for example investigates how organizational attractiveness impacts subjective experiences of workers in the workplace, however only in regard to relationships between workers' temporal preferences and temporal structures of the organizations they are employed by. Strangely, this approach neglects possible effects of the material components of a workspace on organizational attractiveness. Blount and Leroy (2007) develop a model of individuals' situated experiences of time at work; the factors they examine, individuals' "temporal life context", the temporal structure of organizations and socio-temporal norms (p. 11), also fail to account for the

inextricable relationship between the spatial situatedness of employees and their experience of time at work and moreover lead to the neglect of the material context in which work is done altogether.

Interestingly, Blount and Leroy (2007) adopt the idea of entrainment as "(..) the process by which living organisms' pace and timing of behavior mesh with that of some cycle, rhythm, or pace in their environment" (p. 8) from the field of biology, to make sense of how human actors that become part of the workspace (like students, clients or patients, etc.). This process may influence the organization of temporal structures of a work environment, for example by acting as "pace-setters". In an open plan office, interactions with, and certain dependencies on co-workers may also act as "pace-setters", however I believe that this may also be contingent on the spatial boundaries between individuals in the workspace or the lack thereof. Alas, I would suggest that paying attention to material structures and local situatedness of individuals in an office for example, may have potential to develop an understanding of how material mechanisms that might affect entrainment, drive or at least co-construct organizational phenomena, like for example workplace attractiveness, or in the case I am trying to make, time work.

The vision informing the design of the building type "open plan office" can be easily traced to sociological theory. It argues that removing spatial boundaries may enhance contact between humans and increase not only collaboration, but also collective intelligence (Bernstein & Turban 2018, p. 1). Increasing physical proximity between individuals, allegedly encourages interactions, that form the foundation for collective intelligence (ibid.). According to Lévy (1997), collective intelligence is a form of distributed intelligence that predicts a group's capacity to perform tasks. The idea that interaction between individuals may enhance innovation and bring forth new ideas also resonates with early STS thought, particularly Fleck's (1935) conception of the genesis of scientific facts and the importance of thought collectives. O'Leary and Cummings (2007) have dealt with the temporal dimension of workspaces, however they focused on geographical dispersion of teams, and not on aspects of spatial proximity.

2.1.1 Chosen, Circumstanced or Both? Previous Attempts to Distill Temporal Agency

As scholars from actor-network theory (ANT) have been determined to prove from the onset of early STS, nonhuman actors hold a prominent place in the social, for example by delegating or being delegated by humans and holding symbolic meanings that shape and enable modes of action in a particular way (Johnson 1988, Callon 1986). Scholars like Hindsmarsh & Heath (2000) for example have dealt with the interactional constitution of individual objects, concerning the organization of collaborative work. According to Akrich (1992), designers make assumptions about actors' tastes,

competences, motives, aspirations, political prejudices, as well as how morality, technology, science and economy will evolve (p. 208). This vision (or prediction) is then inscribed in products of innovation, rendering them components of their creators' "script" (ibid.). Thus, one could similarly argue that the open plan office and the way it is structured is part of a script in which a certain set of beliefs and assumptions about productivity, or even the structuring of employees' time are inscribed by designers. Another argument for the open plan office's potential to enroll employees in certain modes of action can also be made via STS lab studies. They made evident that the material dimensions of a workspace may create specific relationalities and order human behavior, by examining sites of knowledge production (Latour & Woolgar 1986, Knorr-Cetina 1983).

Concerning time and workplace temporalities, the office and its (technological) material as well as structural composition may therefore be worth examining. The idea that technological innovation impacts or may even be in an intimate causal relationship with individual temporal experiences is well represented in the social sciences. The most prominent example is probably Rosa's (2013) Theory of Social Acceleration, which proclaims that technological development leads to a generalized acceleration of "culture" and "the social".

In "Eigenzeit", Helga Nowotny (1989) also argues a reciprocal relationship between temporal experience and technology. In contrast to Rosa, she acknowledges individual's temporal agency, which allows people to mold their own temporalities while they are embedded in wider socially given time structures. This notion of individually embedded temporalities accounts for the diversity of temporal experience, which Rosa fails to recognize. Even though Nowotny outlines a clear-cut causality between technological innovation and individuals' growing desire to increase their temporal autonomy, individual and therefore socially stratified agency is crucial here. By drawing attention to differences in people's temporal experiences, Nowotny's conception of time highlights the multiplicity of temporal experience, and the power-relations that contextualize them. For me, combining a sensitivity for multiple timeframes with actor-network theory implies that spaces, infrastructures and technological artefacts become part of such frames through participating in networks, as I shall argue throughout this section. This study strives to shed light on power exerted through temporality within an actor network.

2.1.2 Temporal Regimes: Temporality and Power

Eigenzeit, or "self-time", has also previously been discussed by Lewis & Weigert (1981). Like Nowotny, they establish that self time is a heterogenous experience. They contrast it to interaction time, which is an intersubjective experience, and therefore not in one individual's control, but collectively

negotiated. The concept of interaction time is remarkable, because certain cultural rules and conventions come to play that require repair work if they are failed (ibid.). One specific form of interaction time that might (together with individual temporal agency, Eigenzeit) add to the temporalities I am examining in this thesis is organizational time. According to Lewis and Weigert it tends to have a rational (in the Weberian sense) future-oriented focus, and less undefined time, which becomes visible in the constant calculation and anticipation of timeframes for projects. A notable statement made by Lewis and Weigert is that competing timeframes (organizational time, interaction time, self-time etc.) are stratified. For them, organizational time dominates other forms of interaction time, particularly self-time. Furthermore, structurally "inferior" timeframes are embedded in dominant ones through synchronization (ibid.). This might even be necessary to maintain "social order" through prioritizing specific temporal demands.

„By studying organizations undergoing significant changes in their temporal organization, we can better explore the processes by which embeddedness, synchronicity, and stratification break down and are reconstituted." (ibid. p. 456)

Although this perspective focuses on "the social", and its structures, and seems to neglect material and nonhuman participation, it is an interesting concept that reflects Nowotny's conception of temporal autonomy, and Sarah Sharma's Power-Chronography (2014).

Power-Chronography (an extension to Doreen Massey's Power-Geometry, which aims to dismantle the ways in which spatiality and mobility coproduce power relations in society) analyses how power structures are embedded and expressed through temporal regimes. Her approach explains how temporal regimes are results of material struggles over meaning, resources and power. These struggles not only play out in time, they also express the multiplicity of time that is not only multiple as subjective experience, but also in terms of subjectification: We not only experience time as individuals, we also experience it through representation in cultural ideas, norms and symbols in scientific representation, technologies, art, etc. Temporality and the way we perceive our temporal agency would therefore not be merely subjective phenomena, but also objectified, in the sense that they are subjected to broader normative discourses. Hence, time is as much an intimate experience as an intersubjectively contested and discussed resource. The multiplicity in temporal experiences may not only depict landscapes of power, but also contextualize inequality: "differential relationships to time organize and perpetuate inequalities" (Sharma 2014, p. 137). It is therefore not very surprising that her empirical findings show that Rosa's paradigm of social and cultural acceleration does not suffice to grasp the nuanced and contextual character of temporal experiences:

I found that what most populations encounter is not the fast pace of life but the structural demand that they must recalibrate in order to fit into the temporal expectations demanded by various institutions, social

relationships, and labor arrangements. There is a looming expectation that everyone must become an entrepreneur of time control within highly differential relationships to time. It is not technological speed that determines one's temporality; instead it results from where one fits within the biopolitical economy of time. (ibid.)

In this sense, Sharma's understanding of temporalities is much less about technological torque, which is driven by a protestant ethic of speed, but rather about structural demands, discipline, power and distribution. Its conception of power (chronobiopower) unmistakably resonates with Foucault's biopolitics and has a further reach than merely materialist approaches, because it locates power in institutions (and technologies) and their propensity to shape temporal normality. And this is where Chronobiopolitics come to play: For Sharma the biopolitical economy of time is maintained by a diffuse set of (social) actors like "workplaces incorporating wellness" for example. Alas, temporal power also materializes in social-economic distribution (who has access to certain positions that allow temporal autonomy? Who must recalibrate?), according to Sharma. While I find this hypothesis dubious when translated to the level of individual temporal autonomy, it might be relevant on the level of stratified temporal frames (see Lewis & Weigert) like the workplace:

"Capital invests in certain temporalities—that is, capital caters to the clock that meters the life and lifestyle of some of its workers and consumers. The others are left to recalibrate themselves to serve a dominant temporality" (p. 138).

Sharma's interpretation of chronobiopolitics is particularly relevant for my approach, as it also accounts for nonhuman actors. Here, discipline is established through (capital-devised) *temporal architectures* that consist of "(..) technologies, commodities, policies, plans, and programs as well as labor of others" (p. 139). Similar to Lewis & Weigert's (1981) concept of temporal embeddedness and stratification (which requires maintenance work for those who fail temporal hierarchies), she states that individuals who lack the means to devise elaborate time-maintenance architectures are relegated to improvise their own mechanisms ("sub architectures of time maintenance", p. 140). In elaborate temporal architectures, as found in organizational settings, the (chonobiopolitical) exertion of power, that is performed through embedding, synchronizing and stratifying individual and collective temporalities, also reminds of Foucauldian discipline and "creating docile bodies" via four dimensions outlined in "Discipline and Punish" (1995):

1) Cellular: determining distribution (for example by ordering temporalities via scheduling)

2) Organic: naturalizing activities (for instance through discourse and norms on punctuality and time management)

3) Genetic: controlling development over time (for example through incentivizing or rewarding

habits, and their opposites)

4) Combinatory: integrating individual action to build traction (for example by integrating individual rhythms into broader institutionalized rhythms, and the collective making and maintenance of atmospheres, see 6.2)

Whether one agrees or disagrees with Foucault's analysis of discipline and Sharma's translation of biopolitics to chronobiopolitics, these perspectives are, in my opinion, a useful backdrop against which to analyze the institutional frames that embed temporal agency in the open plan office.

Within this understanding, where heterogenous actors (technologies, norms, schedules etc) are enrolled in building temporal architectures, or more generally alongside actors competing in chronobiopolitics, Hartman (2019) proposes to utilize Queer Time theorist Freeman's (2010) notion of Chrononormativity. Chrononormativity (again, this is reminiscent of Foucault's normalizing power), enables institutions to rule without being felt, and might be understood as part of temporal architectures.

"Temporal experiences are naturalised and thereby also certain values around time (and more). However, this naturalisation is embedded in an asymmetrical system." (Hartman 2019, p. 49)

According to Freeman (2010) chrononormativity has the capacity to make people "feel coherently collective through particular orchestrations of time" (p. 3), while simultaneously enabling exclusions by not accommodating the temporal needs of others. Similarly to Sharma's chonobiopolitics, institutional forces appear as somatic facts that are stabilized through various devices. Here Freeman refers to Eviatar Zerubavel's concept of Hidden Rhythms (1985), which enact normative temporal ideals:

Manipulations of time convert historically specific regimes of asymmetrical power into seemingly ordinary bodily tempos and routines, which in turn organize the value and meaning of time. The advent of wage work, for example, entailed a violent retemporalization of bodies once tuned to the seasonal rhythms of agricultural labor. (Freeman 2010, p. 4)

Additionally, dominant actors like the state and other institutions sustain legitimacy of their particular temporal architectures (and chrononormativity) by linking "properly temporalized bodies" to narratives of movement and change, hence binding individuals in chrononormative frames (p. 4). Freeman (2010) names a couple of gendered examples of such teleological schemes for living like marriage, childbearing and rearing, etc. According to her, all of them are embedded in "appropriate" temporal slots, which also serves broader state objectives by ordering diverse personal histories in standardized "socioeconomically productive" entities (p. 5).

Not only linear temporalities like histories and biographies are embedded in larger, overarching temporal narratives; chronobiopolitics may even encompass temporal cycles (also rhythms). Freeman argues this by referring to their relative stability which promises "renewal instead of rupture" (p. 5). Cyclical order is no rarity at the workplace, as it creates a sense reliability, but on the other hand has drawbacks in other areas (spontaneity). Cooperations with external actors in particular (where an organization's control ends) are often governed through cyclical timeframes, such as and binding contracts, as this makes responsibilities transparent, interactions predictable and creates accountability. The enrollment of actors (*binding* see Freeman 2010) in teleological trajectories of chrononormativity(s) (such as organizational time rationales), may often contain moral judgment and be tied to specific understandings of justice; it is disrespectful or even unjust not to be compliant with some collective temporal norms. Adhering to temporal norms is therefore intimately connected to collective belonging, according to Freeman.

After all this contemplation about power, discipline, normality and hierarchy, the place of individual temporal agency might become somewhat obscured. I do understand it as embedded within larger structures or architectures, however in contrast to Nowotny (2019) I think it might be a little bit risky to speak of a generalizable change in perception of time (p. 74). For her, *the great temporal contradiction* lies in the simultaneous standardization and individualization of temporal experience:

"Time is split into small, standardized units to be replicated and individually reassembled at will. The result is a short-term perspective that guarantees flexibility." (p. 75)

Following Nowotny, temporal autonomy (*Eigenzeit*) is therefore performed through coping within given structures, reassembling what is offered. Deckner (2019) expands Nowotny's conception of eigenzeit to "those times that individuals design explicitly according to their needs, by actively reflecting temporal demands" (p. 93). She uses the term Heterochronia – again a Foucaultism – to describe other times: sequences "that do not correspond to normative expectations of temporally adapted behavior" (p. 95) and are inherently irreconcilable with "chrononormativity". Deckner observes that her interview-partners make a connection between narratives of social acceleration and their desire for temporal breaks: They frame these breaks, or heterochronias, as counterstrategies.

One current example in this respect could be a silent monastery or digital detox retreats. Also, in everyday life, such situations can be found which lead to the fact that one finds oneself in other times. These can be self-chosen or due to missing infrastructural or economic reasons. (p. 95)

Relating this idea to the open plan office means to look out for instances that at first glance seem to defy traditional temporal narratives of work, such as the notion of flexibility that is embedded in the spatial arrangement of the open plan office concept. Without a fixed place, for example, it is not always easy to see who is there, as I shall show in my analysis. Flexibility and temporal autonomy at

the office are therefore always to be understood within contractual, technological and spatial settings. This resonates with Nowotny's eigenzeit that locates agency within the confines of given structures. Even though heterochronia conceptually echoes dualisms between flexibility and rigid structure, availability and seclusion, online and offline in the office setting, it can only exist within these contradictions. On the one hand, it can be read as perpetuating such dualisms, on the other hand it makes visible that clear distinctions between competing temporalities (self-time, organizational time, etc.) can never be totally potent and that temporal architectures are always multiple, even from within.

To conclude this segment: Freeman and Sharma's frameworks contribute a lens through which to grasp chronobiopolitics as a field contested by heterogenous arrangements made up of diverse actors that strive to implement a temporal architecture (a sense of chrononormativity), by enrolling human and nonhuman actors, ideas, norms, narratives, science etc. This diffused understanding of power through enrollment of actors via (cultural) inscription complements the agencement-approach of this thesis. Eigenzeit and heterochronia add a personalized dimension within temporal architectures, which highlights how temporal agency is intertwined with embeddedness, stratification and synchronization with larger organizational architectures and rhythms.

2.1.3 Let's Talk about Time: Attempts to Construct a Vocabulary for Temporal Agency

For a critical analysis of workplace temporalities, it would in my opinion be necessary to develop an understanding of the material and structural ("social") relations on which temporal agency is contingent.

It was notably difficult to find sufficient vocabulary to talk about this micro-level, individually tailored, temporal agency. I decided to draw on Michael Flaherty's Time Work (2002), that attempts to develop a language to talk about how people deal with time. My understanding of temporal agency in this case study is partly derived from Flaherty's (2002) conception of practices employed by individuals to navigate different timeframes like interaction time, work time, institutional time, etc. (Lewis & Weigert 1981). I will integrate this idea into a broader framework that locates agency and power in the temporal architectures of the office.

Originally, Flaherty defined these strategies as forms of agency, "(..) that involve attempts to control, manipulate, or customize one's own temporality or that of others" (Flaherty 2002, p. 1). This area has been investigated by STS, Bruyninckx (2017) for example has examined how laboratory technicians engage in time repair, in order to cope with synchronization issues that arise from the entrainment of research and the instruments that it depends on. Flaherty's conception entails four

different modes (or rather motifs) of engaging with temporality:

1) Classic Determinism: People's temporalities seem to be determined by situational circumstances, that are out of their control.

2) Cultural Reproduction: Individuals' act as agents for cultural values such as punctuality through methods like intervention or exercising self-restraint, that tie into narratives of "(..) productivity, efficiency, self-respect, promptness, balance, and frugality" (Flaherty 2002, p. 384).

3) Reactionary Agency: Here, individuals are oriented towards solving their own problems (in opposition to serving a greater good within society), usually as a reaction to an undesirable experience of time, such as boredom or stress. "One selects a line of conduct in a self-conscious attempt to construct temporal experience that compensates for tension and drudgery during other moments of one's life. (..) these forms of time work are interstitial in that they fit within the personal crevices of social structure without challenging the status quo" (p. 385).

4) Time Play: Attempts to customize temporality for the sake of personal preferences.

Generally, these classifications pay insufficient attention to nonhumans, have an unmistakably social-determinist overtone, and may be difficult to differentiate in practice. Nevertheless, the term time work, regarded as practice and process (and if one sets aside Flaherty's ideas of enculturation) may shed light upon the temporal performances of actors within the temporal architecture of the office agencement. Paying attention to the performance of Flaherty's categories at the office might shed light on how individual temporal agency is embedded in larger chronobiopolitical discourses. Learning which beliefs these temporal sub-architectures perform, and how they are enmeshed in infrastructural contexts is a core objective of this thesis.

Judy Wajcman's conception of time work agency in the digital age has substantially added to my understanding of how technologies and digitalization in the workplace relate to individual temporal agency. "In Pressed for Time: The Acceleration of Life in Digital Capitalism" (2015), Wajcman contests contemporary sociologists' ideas of societal acceleration through technological innovation while, like Nowotny and Deckner, acknowledging the common sentiment of being harried.

Her main feat is investigating digital technologies' contribution to temporal agency; constant, instantaneous and spatially unbound communication seems to be subverting limitations posed by space and time. Work, an inherently temporal act ("Work is done in time" p. 87), is becoming increasingly difficult to quantify in terms of hours or minutes: "We know that clock time cannot capture the properties of time, and that how we experience it has to do with social norms and organizational rules, conventions and culture" (ibid. p. 88). Even though Wajcman's analysis is not so much concerned

with broader organizational time architectures, and often fails to surpass organizational "culture" as an explanation for certain technology related practices, her microlevel analysis of how technologies play out in different work settings does accredit some temporal agency to technologies, in contrast to Flaherty, who seems to look past non-humans.

As my thesis will argue, technology becomes relevant to workplace temporalities, as the way we use it is inextricably linked to our surroundings, and their temporal architectures. Technologies at the workplace therefore often amount to employees being increasingly responsible for the pace and rhythm of their work, according to Wajcman. This resonates with Nowotny's great temporal contradiction to some degree, in the sense that ordering defined units of labor becomes individualized, which might be understood as a core aspect of how flexibility is enacted in the workplace. For Wajcman, this shift of responsibility for structuring work timeframes – from employers to employees – that is commonly associated with digital technologies might be accountable for "the tendency for working time to colonize personal, family, and leisure time" (ibid. p. 88). Announcing a general shift in temporal responsibility might be a somewhat grand claim to make. Rather than a clear shift, my thesis will later argue that temporal responsibilities seem to be under constant negotiation in the in open plan office.

Her main point is that it is crucial to understand that ICT (Information and Communication Technology) at work (and in general) is embedded in "social institutions, with preexisting conventions, cultures, norms and objectives" (ibid. p. 91). This lens – regarding technologies merely as mediators of meanings, that are configured in a wider work-assemblage, and not active, independent accelerators, or more broadly, dictators of human temporality or behavior – will resurface in segment 2.4, that discusses spatial, urban and infrastructural assemblages. Wajcman's understanding of temporal agency is suitable for my material semiotics approach, as she avoids technological determinism, and instead points to the significance of contextual norms, materialities and meanings that underwrite the use of ICT at the workplace. Overall, Wajcman is certain that the diffusion of ICT into work-assemblages has changed how work is performed. She theorizes three aspects of work intensification that she relates to ICT at the workplace: the pace of work, interruptions, and multitasking. These aspects, as I shall soon portray in more detail, draw attention to the multiple and contingent meanings of technologies, that arise from their interaction with the office environment. In regard to temporal agency, the three aspects of work intensification show that temporal agency is influenced by ICT, but that a causal relationship between ICT at the workplace and productivity or stress cannot clearly be drawn. I am not sure whether general work intensification is what I found at my site of investigation. Rather, I believe to have encountered a surprisingly heterogenous topography of temporalities with peaks and valleys, which might be subsumed by the vague notion of "flexibility", as it encompasses the individualization

of work units and more generally the multiplicity of temporal experience, as I previously discussed in 2.1.2.

In contrast to Flaherty's modes of time work, Wajcman's three aspects of temporal intensification highlight the contextual character of workplace temporalities, that can not only be understood before the background of "social" and "cultural" context or personal preference. Wajcman indicates the significance of sociotechnical infrastructures and the practices that they, combined with organizational structures and norms, engender. New, ICT related working practices therefore imprint themselves in how employees structure their time management, by becoming part of, and configuring, emerging ecologies of practice. Nevertheless, it is important to acknowledge that ICT does not have effects independent of human actors, which is why Flaherty's taxonomy of time work agency alone is too unidimensional to capture the embedded character of employees' temporal agency in broader organizational and infrastructural contexts. Drawing on Wajcman, one could argue that:

1) Employees are also always part of situational circumstances, they may have access to different, or possibly even a greater variety of practices due to ICT at the workplace. Here, agency arises not alone from material and immaterial organizational structures, but from the networked character of the workplace, in which decisions may arise from the context, but do not have predetermined outcomes, as Flaherty suggests with classic determinism.

2) Indeed, Wajcman too suggests that use and dissemination of ICT (like email) may reflect workplace norms. Still, cultural norms do not exist detached from technological and infrastructural materialities, rather they might be inscribed or even enacted or enforced by them to a certain degree. Also, the new modes of acting that were opened by ICT, have reconfigured not only interpersonal, but also material and spatiotemporal relations, and therefore also cultural meanings and practices.   In addition to a limited, sociological understanding of culture, Flaherty's idea of cultural reproduction also erases individuals' agency to defy norms.

3) Flaherty's reactionary agency on the other hand seems more useful for developing a sensibility for the networked character of workspaces. Setting a pace, dealing with interruption, devising a workflow rhythm, and multitasking (Wajcman 2015), eigenzeit, or heterochronia, could probably be seen as employee's reactions to the network of meanings, practices, mediators and material affordances they are situated in at work. Nevertheless, reaction alone does not fully grasp the relational character of temporal agency, in my opinion. Granted, even the three aspects of temporal intensification theorized by Wajcman do not wholly account for the effects they might engender within the network. Based on the concept of chronobiopolitics, temporal

architectures and agencements, I propose to consider thinking about temporal agency as interactive, because such practices do not stand on their own but are contextualized by their surroundings. They may not only be contextual and relational in the sense of being embedded in wider organizational and sociotechnical settings (as proposed by Wajcman), they also impact the context they are situated in, and participate in chronobiopolitical discourses.[3]

Wajcman herself hints at the idea that the choice of temporal modality impacts rhythms and practices, although she does not relate this idea to broader assemblages of humans and nonhumans, but stays in the realm of "the social":

"Shifting between synchronous and asynchronous modalities, people are developing multidimensional time practices, creating new rhythms of work. The traditional concept of work intensification cannot fully capture this dynamic coconstruction of ICT and the temporalities of work." (ibid. p. 103)

In my opinion, Wajcman's notion of the dissolution of spatiotemporal boundaries through ICT juxtaposes the temporal and spatially situated character of office work. Does this mean that space does not matter anymore? That it is no longer an integral part of the equation of making temporalities in work contexts? Following Wajcman, material affordances and circumstances are of concern when analyzing workplace temporalities, and temporal agency. As I shall argue in the subsequent section, Architecture does matter in the configuration of (work, and time work) practices, and their temporal horizons.

2.2 Space, Urbanity and Infrastructure Matter

Devising a theoretical framework that relates temporalities to specific sociotechnical contexts such as an open plan office is not a simple task, as time does not appear only as a social construct or human experience, but also as somatic fact, independent of human intervention. There seems to be a growing interest to study urban temporalities among scholars who study cities and infrastructures.

Geographers Moore-Cherry and Bonnin (2018) for instance, have studied the temporal politics of a market streetscape in Dublin, to prove that evaluating the success of urban policy is complicated by "(…) multiple, fluid and contingent temporal framings and temporalities" (ibid. p. 1). They highlight the interplay of different temporal regimes and conclude that whether an urban planning project is

---

[3] This idea will make more sense upon reading 2.4 about spatial agencements, which highlights the emergent character of practices and meanings in urban assemblages.

seen as success or failure depends on the temporal framings we privilege. While STS understandings of agency and governance are strongly tied to the material (see Woolgar & Neyland 2013), Moore-Cherry and Bonnin emphasize on rhetorical interventions such as planning appeals and legal involvement as attempts to strategically deploy different temporalities.

Besedovsky, Grafe, Hilbrandt and Langguth (2019) propose to apply an infrastructures perspective for understanding temporalities and related dispersions of power in urban contexts:

Approaching time through the notion of infrastructures allows us to outline how time not merely reflects, but also effects, enables, constrains, and preconfigures contemporary urban life. (..) as an infrastructure, temporalities are constructed through social practices and their lasting effects. Temporalities are built upon one another to construct ever more complex structures that enable contemporary urban life. They enable and constrain, include or exclude, and produce or reproduce urban inequalities. (ibid. 584)

Conceptually blending an infrastructure approach, which is deeply rooted in agencement and actor-network theory, with a politically sensitive perspective on temporalities, as proposed in the previous section, may have the potential to enrich ANT with a sensitivity for *power*.

As I will outline in the subsequent section, an agencement perspective does have the potential to complement an understanding of the embeddedness of temporalities in built environments. First, I will give a brief overview of how different workplaces have been studied in STS. Then I will give an outline of some STS research done on urban spaces and infrastructures in order to outline some dynamics that may contextualize my later analysis of temporalities in the open plan office.

2.2.1 Workplaces in STS: Of Hackerspaces, Studios and Laboratories

Examining workspaces has a long tradition in STS: early authors have been largely concerned with natural scientists and their epistemic spaces such as laboratories (Latour & Woolgar 1986, Knorr-Cetina 1983). Later, they were followed by others that investigated engineering (Vinck & Blanco 2003, Kunda 2006). Today, studies of Space and Urbanity are a rapidly growing and very popular field in STS. In "Hackerspaces: Making the Maker Movement" (2017), Sarah Davies examines materialities of hacking and making in hackerspaces that are situated in different locations, like FabLabs, TechShops or tiny student basements. The dichotomy between the practices of hackers and visions of businesspeople and policymakers, are of special interest to her. Tomas Sanchez Criado has also made very interesting contributions to an STS understanding of space, urbanity and design. In "Caring through Design? En torno a la silla and the 'Joint Problem-Making' of Technical Aids" (2016) Sanchez Criado and Rodríguez-Giralt examine the relations between ideas of care and urbanity in post-austerity Spain with an ANT approach.

For my case study, "Studio Studies: Operations, Topologies and Displacements" (Farías & Wilkie 2016) which takes a closer look at workplaces that are engaged in "extra-scientific" knowledge work, which are somewhat under-examined in STS, offers interesting insights into workspaces that work differently than laboratories. To Farías, engaging with the studio means studying situations in and through which creation processes take place within an agencement, which is similar to what is going to be examined in this case study of the office. Design practices located in Farías' studio might fit into Law's conception of heterogenous engineering, as the artifacts that they give birth to are "heterogenous" in the sense that they are brought forth by social, technical and natural relations within the studio, and strive to build and recombine social, technical and natural elements (Law 2011, p. 5) in the intended contexts of use. The insight that "(..) studios are not architectural types housing creative processes, but emergent topologies resulting from the execution of specific form-giving operations" (Farías & Wilkie 2016, p. 13), estranges the purpose of my case study from studio studies, as I will investigate how the specific case of the open plan office (which is not a studio) fosters, enrolls and becomes part of operations and emergent topologies of practice, that are less obviously engaged in knowledge production as they neither strive to bring forth artifacts, nor establish scientific facts.

The operations in and "with" the open plan office I am investigating may not per se follow the same rationale as Farías and Blok propose for design labor in studios, where design is "an epistemic practice shaped by the problem of producing knowledge about a not-yet existing object" (Farías & Blok 2016b, p. 565). Farías' conception of the studio primarily refers to epistemic spaces that (in contrast to the early STS laboratory studies) balance practices of consumption and the aestheticization of everyday life, through the design of material commodities (Farías & Wilkie 2016, p. 209). The mode of knowledge production that may take place in the department I shall observe will certainly be somewhat different to the aforementioned laboratory or design studio settings, however I do expect to encounter it as embedded in relations to human and nonhuman actors, and meanings that are configured within the spatial arrangement.

2.2.2 Urban Agencements, Atmospheres and Niches

Ignacio Farías has also edited several volumes that apply actor-network approaches to other, larger built environments like cities. In "Urban Assemblages: How Actor-Network Theory Changes Urban Studies" (2011) and "Urban Cosmopolitics: Agencements, Assemblages, Atmospheres" (Farías & Blok 2016a) he examines spaces through the lens of ANT and contributes to the field of urban studies, by studying "(..) the search for and composition of common worlds of cohabitation" (Blok and Farías 2016a, p. 1).

Concerning urban environments, Farías and Blok (2016b) determine that an important trait of cities is their material-semiotic multiplicity that may enroll diverse actors, or be used by actors to enroll others. By multiplicity the authors address how material environments, actors' practices and design constitute the experience of spaces, leading to a wide variety of experiences that differ among actors and the web of relations they are situated in (ibid. p. 568). Therefore, actors' practices, and more generally processes, are contingent upon constellations; constellations are dependent on practices and processes, rendering outcomes of urban environments and the assemblages they foster highly unpredictable and difficult to determine. This perspective presents cities as oligoptica (in ANT terms), that reveal very little through general oversight, but great detail when closely inspected (ibid. p. 570). As ANT scholars, Farías and Blok favor the lens of the urban assemblage, which is analytically distinct through its emphasis on human-nonhuman hybridity, the flattening of scalar and nested models of urban space, and understanding the city as a multiplicity of intensities and ordering practices (ibid. p. 571/2), with a focus on controversies instead of conflict. This perspective that highlights the emergent character of (built) assemblages will be extremely useful when examining the office space, as it too takes part in a heterogenous network of human and nonhuman actors, where interests, practices and identities depend on the morphology of relations in which they are involved. My main interest lies in shedding light on emerging and multiple outcomes of the open plan office, that are undeniably rooted in the design and inscriptions of the space. The material, built structure of the office can be read as articulation of intentions that planners attempt to materialize and "engineer"; it is nevertheless crucial to distinguish these from the multiple outcomes that are brought forth by enacted relations that take place in this setting.

According to Farías and Blok, ANT has so far not shown great interest in distinguishing between spatial design and its practical appropriation (2016b, p. 564). As the architectural planning of the site targeted by my research seems concerned with enabling employees to appropriate the office to their practices, this case study might offer a modest contribution to closing the gap between spatial appropriation and design in ANT. Understanding that built environments are not only multiple in the ways they might be used or perceived, but are additionally multiple (in the sense of ambivalent) in terms of (predesigned) function, may also contribute to a more comprehensive analysis of the open plan office.

For Farías and Blok (2016a), built environments' cosmopolitics can be analyzed via three main analytical lenses: 1) agencements "point to those heterogenous and relational processes whereby material-semiotic agencies come to be constituted and exert effects in the (re)composition of the city" (p. 233), 2) assemblies "highlight those contingent and situated processes by way of which new urban concerns, constituencies and publics come together and work across difference" (p. 233), 3)

atmospheres "serve to open up questions as to the assembling and reassembling of entities, relations and embodied experiences into shared spaces of co-existence" (p. 233). The third lens becomes especially pertinent in the analysis of building types and architectures, as they make up (micro)spheres (Sloterdijk 2008) that together give "rise to a foam-like morphology (of the urban) defined by problems of co-isolation and co-fragility" (Farías & Blok 2016a, p. 238).

As Hanna Katharina Göbel points out in the same volume, some compositions attempt to stage a specific aesthetic experience (an atmosphere) by tying together elements "that sustain it and do the work of designing it" (Göbel 2016, p. 172). These practices engaged in sustaining and creating an atmosphere (atmosphering) distribute situated capacities to mediate it; this may repress other atmospheres and/or develop a distinct atmospheric agency. The Café Moskau in Berlin serves as Göbel's case to demonstrate how creating common worlds of memory is mediated through atmospheres and atmosphering. Memory contributes to how we understand, perceive and hence act in built environments, thereby resembling an important pillar of buildings' agency. Even though my site of investigation is not a historic building, Göbel's notion of memory and atmosphere can be translated to the open plan office: Here, memory is less directly linked to a historic period and its specific aesthetics, but rather to usances and rhythms that are associated with and regularly enacted in this particular architectural form. Her demonstration that "the cosmopolitics of a building undergoing architectural redesign are reordered by the ongoing active forces of memory that interfere in the courses of action" (p. 182), may be useful for understanding the agency of atmosphere for fostering specific ecologies of practice within in the agencement of the open plan office via combining and recombining sensual, aesthetic elements that contribute to a shared imaginary of the workplace. As my case study shall examine a new building, the term memory is not completely appropriate for this analysis. Göbel's point that "memory is equal to all other dimensions of a building and a contested territory in which the future is not set; rather, it is explored and imagined through various materials and interpretations of the past" (p. 183) becomes valuable for understanding the agencement of the open plan office through Jasanoff's term socio-technical imaginary. Imaginaries of what a workplace ought to be, how it shall be used and perceived, are rooted in shared memories and interpretations of work that are stabilized through rehearsals. Specific imaginaries lay the grounds on which design and policy decisions are made in the office, what future is imagined and built, rendering atmosphering at my site of investigation approachable through understanding the nexus of memories, socio-technical imaginaries of work and future prospects. According to Göbel, atmosphering activities are "organized around struggles and balancing of various conflictual forces and interests in designing a 'good' common atmosphere (in the Sloterdijkian sense) in which the memory can be inhaled and is staged in the 'right' and most appropriate way" (p. 183).

This understanding of atmospheric agency, and agency through atmosphering renders all politics atmospheric politics: They are deployed in the practice of atmosphering which is an attempt to stabilize "multiplicities into habitable spaces", thereby maintaining or challenging boundaries that uphold agencements (and corresponding ecologies of practice) (Farías & Blok 2016a, p. 238). A different way people attempt to order, make sense of and navigate multiplicities in the urban contexts is niching, which is explored by Niewöhner, Klausner and Bister (2016) in the context of psychiatric patients in Berlin. They demonstrate that people tinker with spaces, material infrastructures and institutions in order to create inhabitable niches, where contingencies are either reduced or multiplied: "niching articulates both protection and closure, thereby asking questions about the impositions raised by cosmopolitics" (Niewöhner, Klausner & Bister 2016, p. 187). According to the authors, people require atmospheres to make sense of their surroundings, "they do not simply live out in the open" (ibid. p. 190). As they show, people often employ specific practices in urban settings, that like "air-conditioning technics" aim to create "socially, biologically and ecologically viable surroundings" (ibid. p. 191). I draw from Niewöhner, Klausner and Bister (2016), that the open plan and "SmartWorking" infrastructure of my site of investigation may not move along homogenous trajectories, with institutionally set niches, but instead enable multiple pathways of practice, depending on how it is appropriated and configured by engaged actors. Alas, in this context niching may distribute agency: "In niching, agency does not belong to one agent – be it a human or nonhuman actor. Rather, agency evolves in relation and movement and becomes distributed (..) producing or reducing degrees of freedom within movement" (ibid. p. 192). The authors conclude that in urban contexts people do not plan and execute elaborate designs of their lives, but navigate their urban experience based on everyday experiences. "What works and what does not work" is commonly heavily mediated by infrastructures and institutions (ibid. p. 199). In the end, niching does not guarantee success (creating habitable spaces) but is just a mode of engaging with urban assemblages.

Michael Guggenheim specifically deals with buildings' temporalities in "Building Memory: Architecture, Networks and Users" (2009). He uses an ANT approach to theorize the temporal specificities of buildings and compares their properties to artifacts from art and science. His term *mutable immobile* expresses the mutability of architecture. Buildings are not detachable from their environments, a building may impact its surroundings, and vice versa. This leads to the idea that "buildings are not interchangeable and cannot be multiplied because of their singularity" (ibid. p. 46), because their position in a network determines the relations it is engaged in and therefore also meanings and practices that it is associated with. This indicates the specific temporality of buildings, as people (and their infrastructures, or functional systems) may simultaneously relate to the same building via different practices:

"Rather, the buildings themselves, or parts of these buildings, serve as technologies to stabilize the functional systems, by localizing specific communications and interactions, but this never prevents other communications and interactions from taking place" (ibid. p. 46).

One can only partially relate to buildings, in presence of others "through and with the building" (ibid. p. 46). From this multiplicity of interactions combined with the stability of location, arise unruly networks, rendering the building mutable and immobile. In regard to temporalities, the multiplicity of simultaneous relations within and around mutable immobiles produce distributed times and memories that exist in a single location, giving it an emergent character (ibid. p. 47). The different practices, interests and rhythms of interacting users therefore produce distributed times. Guggenheim's perspective of temporality is compatible with Wajcman's (2015) conception of individual and situated rhythms and temporalities that are contextualized by the workplace, and the ICT that co-constitute it. Finally, Guggenheim's notion of buildings as technologies that configure – and are configured by – multiple networks and stabilize functional systems by localizing interactions, makes considering the infrastructural properties of the office plausible.

2.2.3 Infrastructure in STS

Buildings understood as roofs and walls, are infrastructures, a sequence of immobile technologies that shelter humans from elements. Yet buildings as building types, such as sports stadiums, banks, or museums have a very different relationship to social processes. As mutable immobiles, buildings provide touch points for functionally specific processes, but they do so without being technologies. (Guggenheim 2016, p. 70)

As this quote adequately portrays, buildings can be conceptualized as infrastructures, while simultaneously exceeding this definition through semiotic, "socially attributed" properties that are attached to their functions. In buildings, infrastructural (material and technological) and symbolic characteristics need to be regarded as intertwined and dynamic, as argued by Löw (2017). As mentioned earlier, this intertwinement of understandings, practices, appropriations (i.e. renovations and reconstructions) and design goes beyond the planning phase and accompanies the building throughout its use. In order to understand the office as a building type, a specific sociotechnical arrangement, I find it necessary to also contemplate its infrastructural politics.

STS literature concerned with (urban) infrastructures is relevant to my case due to the office's infrastructural effects on engendering labor at a specific site, acting as a sociotechnical basis on which such work operations and practices can take place. As a relational arrangement, the office topography can "simultaneously enable specific types of activity and function as a technological barrier for other activities or social groups" (Farías & Blok 2016b, p. 556), rendering them technologies of inclusion, and

as such, highly political according to Guggenheim (ibid.).

In "The Ethnography of Infrastructure", Star (1999) draws attention to the complexities of these "large technical systems in the making", that may become visible by paying attention to actors that are not served by it, instances of failure or *invisible* actors. An infrastructure is a fundamentally relational concept as "One person's infrastructure is another person's topic or difficulty" (ibid. p. 380). For example, rails may be infrastructure to a passenger, professional topic to a railroad engineer, and barrier to other actors. This inherent relationality of infrastructures adds an additional layer to perceiving the office merely as embedded in organized practices, and informs how perceptions, meanings and engagements form within, and along it. Also, Star's methodological proposal to pay attention to master narratives that are exposed by standards and frictions will surely prove useful in generating relevant data in the field. I argue that a sensitivity towards the infrastructural properties of the office is relevant to understand its ontology, as the morphology of the assemblage, the flux of relations between all partaking humans and nonhumans, are constitutive to how the office is experienced, what it becomes and for whom it becomes what.

The fluidity of infrastructures has been convincingly argued in "Infrastructures as Ontological Experiments" (2015), by Jensen and Morita who theorize infrastructures as ontological experiments; they are always in the making. For Jensen and Morita infrastructures are complex heterogenous assemblages, that combine technical and social aspects alike, and are never fully completed projects but enroll actors in constant maintenance, or also improvement and expansion. Like Star (1999) they acknowledge that infrastructures are relational "objects that create the grounds on which other objects operate" (Jensen & Morita 2015, p. 82), however they argue that their politics are simultaneously material and experimental. Experimental means that they constantly engage in relating and redefining heterogenous actors whose relations transform over time and are unpredictable beyond their state of realization and far beyond planning and designing (ibid. p. 83). Therefore, infrastructures' ontology is always experimental; ontologies in general are regarded as "plural, changeable and empirical phenomena" (ibid. p. 83) by the authors. The experimental is not only warranted by actors' endeavors to script technologies in a certain way, which then may work or fail, but also by the interplay of intended design inscriptions and unpredictable responses of other actors. This specific type of open plan office opens a perspective that highlights the heterogenous, multiple and emergent character of the work infrastructure, as it may shed light on how employees take part in the ordering (*designing*) of space, to enact more favorable work environments.

Lancione and McFarlane (2016) analyze body-sensory-infrastructural relations in order to trace infrastructural becoming (p. 47). Analyzing cases of sanitation practices in different urban settings, the authors focus on "disclosing cosmopolitical life at the margins as a basis for understanding the making

of urban life and the political implications that flow from that approach: cosmopolitics is a commitment to opening worlds to practices or beings that seem otherwise inexplicable" (p. 46). This raises questions about infrastructure's relation to human experiences and identities, how they may regulate sensory impressions and everyday life, and also how sensory impressions contribute to the morphology of infrastructures (as illustrated by the case of make-shift vs. private vs. public toilets in Mumbai, or the emergence of "underwear distribution infrastructure" in Turin, as an outcome of the fear of smelling bad because of lacking laundry options). The case of sanitation infrastructure makes these aspects especially tangible. Lancione and McFarlane's cosmopolitical understanding of the urban and the infrastructures that it contains, draws attention to "the immanent political charge of the multi-worlds in which we live" (p. 46), and their productive nature in relation to different actors and networks that it engages. The empirical case analyzed here helped me develop a clearer understanding of how infrastructures become complicit to the cosmopolitics of built environments, by emphasizing the contingent, multiple and emergent character of infrastructural ontologies.

2.3 Brief Excursion: Sound Studies in the Office

There will probably be many additional issues that will arise during my stay in the field, I am however rather certain that sound will play an important role in an open plan office environment. This I deduce from conversations I had with friends and acquaintances who have had work experiences in similar environments. Sound might become a contributing factor to how employees operate in the given space. Brandon LaBelle, for instance, has published several accounts on how acoustics contribute to the making of spaces. "Acoustic Territories" (2010) for instance "traces soundways of the contemporary city, rendering a topography of auditory life through a spatial structure" (ibid. p. 10), to analyze meanings of noise in specific contexts and communities. According to LaBelle, sound acts as a medium for personal and social transformations, is manifested in local practices and is involved in the making of identities.

This approach, that frames sound as an actor with the ability to form links and conjunctions which "accentuate individual identity as a relational project" (ibid. p. 10), fits well into the frame of conceiving the office as spatial assemblage, where sound may "disintegrate and reconfigure space" (ibid. p. 11), "feature as a communicational link by supporting the passing of often difficult or challenging messages" (p.12), and is "specific while being multiple" (ibid. p.13). This multiplicity of sonic materiality engenders micro-epistemologies by offering actors ways of knowing and orientation in space (ibid. p.13). According to LaBelle the "associative and connective process of sound comes to

reconfigure the spatial distinctions of inside and outside, to foster confrontations between one and another, and to infuse language with degrees of affective immediacy" (ibid. p. 10).

The stability of spaces' meaning and the relations it is enrolled in, and this is crucial to institutionalized spaces like the workplace, is impacted by the temporal and ephemeral character of sound (ibid. p. 10). In a catholic church for instance, noise may change the meaning of the space from a place of sacred ritual, to a tourist attraction. The dispersed character of sound, lacking focus and not always adhering to fixed boundaries, therefore renders acoustic spaces in flux and difficult to confine. Attempts to govern acoustic spaces (through design or policy) often grapple with difficulties prompted by the seeming ubiquity of sound, locating sources, and the uncertain temporal outlines sound may give to experiences of space. This renders acoustic space a disruptive spatiality (ibid. p. 11). In regard to the office, I shall keep in mind how sound may become disruptive, how actors order their practices and space in harmony with acoustic interferences, if and how acoustics are governed in the office and how the formation of acoustic territories informs employees' temporal agency and their embodied practices in regards to temporal maintenance.

Like LaBelle, Georgina Born (2013) shares the perspective that sound is engaged in configuring spatial assemblages through connecting actors in "Music, Sound and Space: Transformations of Public and Private Experience". Where LaBelle speaks of association (via sound), Born uses the term mediation. This is heavily criticized by authors like Revill, who claims that the term is too vague which is not aided by "the complex ontological status of sound itself, as it cannot only "(..) be thought of as a cultural object constituted via an act of attention and naming. (..) sound is also a profoundly physical phenomenon which only exists when embodied in other material" (Revill 2016, p. 245). This speaks to physical properties of sound, which "(..) unlike light, cannot travel through a vacuum and requires substantial matter, in the form of air, earth, water, (..) to embody and give it presence" (ibid.). According to Revill, sound can therefore be thought of as mediating, as it contributes to how we experience worlds (see LaBelle 2010, p. 13; micro-epistemologies), and simultaneously mediated by our experiences, imaginaries, expectations, interpretations, physical properties of spaces (echos), hearing and listening (Revill 2016, p. 245).

Revill's (2016) paper "How is Space Made in Sound?" attempts to simplify the contribution of sound to the making of spaces, by theorizing four sets of interrelated processes (effects). The effect of complexity "(..) draws attention both to the way sounds merge and mix, creating either a background to experience or a 'sound field', or the qualities and processes that enable certain sounds to stand out and indeed merge with other distinctive rhythms, timbres and tonalities" (ibid. p. 248), which for Revill implies that sonic environments can only be understood as dynamic and interdependent rather than an arrangement of individual elements (ibid p. 248). This suggests that even seemingly tranquil spaces

harbor heterophonic landscapes that may contain conflict and might be difficult to govern.

Revill also points to distinctive rhythms formed in heterogenous assemblages, that "(..) are expressive and creative to the extent that they generate both difference and the spatial relations of territory in which difference is made meaningful" (ibid. p. 10). Rhythms engender semiotic association and identification with milieus and render communication between spaces an effort to coordinate between different spacetimes. (ibid. p. 248). The sense of belonging and difference that is born by spaces' sonic specificities is the effect of the trajectory of sound's socio-material production.

The effect of acousmatism addresses the difficulties of locating sources of sound, which according to Revill becomes especially potent in built environments; "In these kinds of places where there is an increase in the relative number and intensity of reflected sounds to direct sounds, a single momentary sound can create a multitude of reflections and delocalized echoes" (ibid. p. 249). Touch at distance refers to sounds' capacity to profoundly affect listeners, with an indeterminate spatio-temporal reach (ibid. p. 250).

Revill makes the point that it is not sufficient to understand sound as an actor, it not only mediates but needs to be mediated in order to become meaningful (ibid. p. 250). Instead, he proposes that sound co-produces political effects in assemblages, which might in ANT terms be understood as mediation; "(..) it is at once a physical process and a matter of concern" (ibid. p. 253), which simultaneously carries material and semiotic properties and takes part in the enrollment of actors and processes in an assemblage. The spatio-temporal quality of sound that is highlighted by the approaches above, intuitively directed my attention to the importance of developing a sensibility for acoustics when thinking about how work is enacted in the open plan office. Following LaBelle (2010) and Revill's (2016) lines of argumentation, the ephemeral and spatially complex character of sound might, and probably will, play an important, mediating and associating role within the office assemblage.

3. Research Questions

After conducting an extensive literature research, it occurred to me that there is no literature that contemplates the temporal politics of built environments by examining temporal agency as not only expressed and circumstanced by narratives, but also as enacting spatialities (in a material sense) and simultaneously contextualized by them. In order to achieve a more wholesome understanding of how time is made in space, I wish to investigate how the spatial, material, and infrastructural properties of the open plan context impact the temporal fabric of work life.

Of course, this temporal fabric is not free of context and exists in the wake of collective narratives and visions of productivity, that seem to be inextricably linked to individuals' time work abilities (as shown by examples such as Falconer 2012, Pichère & Probert 2015, Stack 2011, and many more). As Wajcman (2015) has argued, value is directly attached to speed and latency is commonly regarded as a threat in professional environments. Taking into account the specificities of this site and how they contribute to multiple, situated ontologies of time, cannot give a holistic impression of what time means at work, and how it relates to spaces, environments and technologies, but it will contribute to existing understandings of productivity and also well-being in the workplace. It is not my intention to judge prevalent value systems and technologies that seem to favor speed, instead I am interested in their interplay with the work world, which is why my overall research question is:

How is employees' temporal agency enrolled in the agencement of the open plan office?

I borrow the term agencement (Callon 2006), as it describes an actor-network that enables its actors' agency through the relationalities that arise from it. It takes the dynamic properties of networks into account; actors' interests and identities depend on the morphology of relations in which they are involved (p. 7). The term is therefore especially relevant in the context of my research on the open plan office, as I wish to find out how relations between human and non-human actors (employees, their visions of productivity, the material structures of their workplace), their identities and their agency are configured through their interactions. Callon borrows this term from Deleuze and Guattari's "A Thousand Plateaus: Capitalism and Schizophrenia" (1998):

"*Agencement* has the same root as agency: *agencements* are arrangements endowed with the capacity of acting in different ways depending on their configuration." (Callon 2006, p.13)

The following sub questions shall help me approach my main research question:

1. *How do employees co-construct their workplace's temporal fabric?*

This question will help me explore how employees' practices participate in configuring their material surroundings and constructing regulatory practices that engage in synchronizing individual rhythms in the office. Here I draw inspiration from governance practices that engage with urban agencements: Niewöhner, Klausner and Bister (2016), who have examined *niching,* and Göbel's work on *atmosphering*. My endeavor of conducting an ethnography (as I shall elaborate in 5.) sets out to address this question and supply me with the means to illustrate the relation between employees and the open plan office as a shared environment.

   2. *How does the open plan office's spatiality contribute to temporal agency?*

This question sets out to learn about the consequences or *politics* of the open plan office and the agentic practices that engage with governing time. It addresses the frictions and tensions that may arise from interactions and arrangements between coworkers, within the material structures of the open plan office. It is important to ask, as examining frictions will make visible when and why certain, reactive practices become necessary and are deployed, and how these practices impact coexistence in the office. Interviews and informal conversations help me contextualize the knowledge collected during ethnography and add the necessary layer of how employees represent their experiences.

   3. *Which visions of work are performed through time governance practices in the office?*

The office agencement does not exist in a vacuum, as discussed earlier. Answering the question of performativity and underlying ideas and meanings that are enacted within the agencement of the open plan office will therefore be a helpful last step that will bring together the different sources of data. Analyzing how employees portray practices that engage in governing office rhythms will become feasible by examining relations between ideas of productivity and flexibility that are promoted by the office infrastructure and held and enacted by employees. This question will be addressed by interviewing administrative staff and management that has been engaged in structuring the space, as well as addressing the recent transition from the old classic office model to the open plan office in interviews with employees.

   As all three sub questions treat the relations between material and immaterial, human and non-human actors (enrolled in the open plan office) that configure practices and agency within an agencement, they shall all contribute to my exploration of employees' agency to engage in organizing timeframes in open plan.

4. Sensitizing Concepts: The Open Plan Office, a Microcosmos

In pursuit of developing answers to my research questions, I decided to draw on different disciplinary strands, mainly from STS (Science and Technology Studies) and the sociology of space. They will help me conceptualize the material, performative and symbolic properties of the open plan office's in order to find out what *temporal agency* means in the open plan office. Concepts from urban cosmopolitics (see Stengers 2010, Guggenheim 2016, Farías and Blok 2016a) and snippets of Actor-Network Theory (ANT), as articulated by Latour (2005), Callon (1986) and Law (2009), serve as my main methodical lens to analyze the field, as it lends descriptive language and a useful vantage-point to tell "(..) stories about "how" relations assemble or don't" (Law 2009, p. 141).

The theoretical lens that has been most beneficial to my research and helped me frame temporal agency is *cosmopolitics*. It has been applied in various research fields and has achieved remarkable popularity in STS, where it is commonly applied to investigate urban contexts (as discussed in chapter 4). It even proved to be very fruitful for my investigation of workplace temporality and temporal agency as I will explain subsequently. According to Robbert and Mickey (2013, p. 1) "Cosmos in this context designates the multitude of beings—human and nonhuman, living and nonliving—that together construct reality and form a collective society—a society that has always included the nonhuman despite frequent attempts to see things otherwise". Hence, the politics of a cosmos refers to all practices and rationales that strive to integrate and navigate "today's landscape of knowledge". As I have mentioned in the introduction, the open plan office is home to only a small, financially privileged section of society and does not represent workplaces as a whole. While it is not secluded from outside ideas, materials, infrastructures and temporalities, it does indulge specific ways of doing and imagining time at work, as I shall explain throughout chapter 6. For me, this renders the open plan office a fragment of the cosmos, similar to a gated community, which is constantly engaged in discursively segregating itself from other (work) worlds. Even though employees' "private" temporalities impact their time at work, the workplace's rhythms are only sparsely adaptive to individualizations. In the meantime, globally trending narratives and buzzwords like *flexibility* are employed both to define the office and enroll employees in constant construction of the office's spatiality and temporality. Hence, the open plan office is a local manifestation of the cosmos, a *microcosmos*, which is constantly engaged in producing and maintaining its boundaries to the outside world. I am interested in the ways boundaries are enacted through temporal regimes.

As a methodological guideline, cosmopolitics becomes valuable to my thesis because it acknowledges the multiplicity of things, not only on the level of how individuals make sense of them,

but also ontologically; that what they are varies among perspectives and contexts (Robbert & Mickey 2013). By converging these two focal points, cosmopolitics clarifies that how we understand things and what things *are* to us is inextricably linked. Therefore, things ontology can be as multiple as actors' perspectives. In context of the office, this realization of ontological multiplicity makes the plethora of realities that are engaged in enacting its space and temporality visible. Additionally, it opens up the possibility that whenever such engagements reassociate time and space, new issues, practices and rhythms are produced as cosmopolitical outcomes.

First, I will argue why examining space is paramount for developing an understanding of networked relations and the agency that arises in them; it allows to make sense of spatialized rhythms and implicated temporalities brought forth by phenomena and interactions within. Then, I will briefly dive into Martina Löw's (2017) Sociology of Space and explain why particular aspects have been helpful for my research (4.1) and subsequently connect them to my guiding concept, namely spatial cosmopolitics and elaborate how it helped me conceptualize temporality in the open plan office (4.2). As my research centers around temporal agency, the final section of my conceptual approach will be dedicated to constructing how I understand and go about examining the distributed faculty of *temporal agency* in the office cosmos.

According to Doreen Massey, *multiplicity*[4] can only be understood if located in space, time and material and symbolic contexts. This implies that the endeavor to *spatialize* relations, processes, practices and things becomes inevitable for deciphering "social" interactions among humans and nonhumans. Therefore, outcomes of assemblages, actor-networks, cosmoses of humans and nonhumans, are intimately entangled with spatiality:

Multiplicity has to be spatialized or it is a mere aggregate of elements, united only in consciousness. Hence:

- For there to be time there must be interaction

- For there to be interaction there must be multiplicity

- For there to be multiplicity there must be space (Massey 1999, p. 33)

Alas, taking a precise look at space, in this case the open plan office, and how it contextualizes and coproduces the meaning of beings, things, interactions and phenomena, promises insights about how spatial configurations contribute to the making and unmaking of localized time. Additionally, this

---

[4] the variety of ways in which things appear and can be used or appropriated

understanding of time as produced by spatialized interactions and processes, complements the mundane character of my analysis, which focuses less on philosophical or idealized notions of temporality (although they do emerge in analysis as they contextualize lived experiences and narratives). Instead, it attends to how the phenomena, discourses and interactions within the microcosmos of the office produce rhythms and how it mediates their temporal agency. By examining how narratives and their epistemologies of how time at work ought to be *with* the material, my approach follows the tradition of cosmopolitics: "Without reifying the knowledge-world gap, cosmopolitics nevertheless sees the gap between knowledge and being as indicative of a problem of relations in general" (Robbert & Mickey 2013, p. 2).

4.1 Space as Material Semiotic Discourse

Martina Löw's (2017) Sociology of Space has given me a more in depth understanding of space, as it has a strong focus on its dynamic and relational dimensions, as well as the constructive dual interrelationship between meaning and matter. I locate the main productive capacity of Löw's space in the (re)production of social relationships, particularly power dynamics and inequality. While this thesis does not set out to contradict her ideas, I will subsequently discuss how a cosmopolitics perspective can shed light on additional productive processes taking place in built environments[5].

Löw's sociology of space conceptualizes space as a "(..) relational arrangement [[6]] of social goods and people (living beings) at places" (Löw 2017, p. 224). For Löw, spaces are simultaneously generated by *operation of synthesis* (in German: *Syntheseleistung*), which refers to the primarily symbolic connection of spatial elements in one space through "(..) processes of imagination, perception and memory" (ibid. p. 225), and *spacing*, the placement of humans and nonhumans, and the modes of acting and specific materialities that it engenders. For investigating the meaning of temporal agency in the open plan office, this emphasis on the interrelation between material and

---

[5] The term environment allows me to express the notion that the office I am examining is merely a local manifestation of the larger cosmos or network of things and highlight the confines of its specific locality.

[6] Löw uses the German word (An)Ordnung which combines the word "Ordnung"; referring to a space's structural dimensions, with "Anordnung"; which refers to spaces being results of ordering processes and practices. Hence, this term implies that spaces are produced by the practices of social actors (who's actions are dependent on economic, cultural, spatial and legal contexts), while simultaneously limiting or facilitating possibilities for acting.

symbolic associations in a space is useful to analyze how interactions and phenomena not only "make" the office and its specific temporal fabric that consists of multiple spacetimes within (as I shall discuss in chapter 6.).

Due to the collective and procedural constitution of space (it is continuously negotiated among actors), Löw suggests that power dynamics might play a role in- and be an effect of a space's constitution, as some actors who are higher in rank may have access to more modes of action or limit other actors' options (p. 228). Here, "(..) the actor-network position resonates with Foucault, who tells us that strategy is not necessarily located in human deliberation. In short, for a material semiotics teleology may not reside in human intentions" (Law 2009, p. 149), instead, analogically to Löw's theory, it insists that material semiotic "(..) discourses define conditions of possibility" (ibid.). There may be practical, hierarchical, legal, institutional negotiations and negotiations of rights and responsibilities, taking place within the examined space. Such discourses that at first glance center around governing coexistence in a space concurrently configure moralities and display assumptions about productivity and work ethics that are embedded in the office's spacing and operational synthesis. Alas, governance becomes an interesting parameter for analysis, as it resides in spatialized discourses that are not only mediated by humans and their values but also conditioned by nonhumans, materialities and spatial context.

In a nutshell, Löw's Sociology of Space conceives spaces as generated by the relation between the material arrangement of human and nonhuman elements in a place (see *spacing*; p. 158), as well as imaginations about spaces (see *Syntheseleistung*; p. 159: the imaginations, perceptions and memories that inform how a space can be understood). According to Löw, a *place* becomes a space only due to the simultaneity of both processes. In effect this means that meanings associated with a space contribute to how it is assembled and used. This proposed synergy of material constellation and social meaning sounds reminiscent of Jasanoff's (2004) *co-production*, stipulating that "Knowledge and its material embodiments are at once products of social work and constitutive of forms of life" (p. 2), and methodically close to actor-network theory's examination of a "provisional assembly of productive, heterogenous, and (this is the crucial point) quite limited forms of ordering located in no larger overall order" (Law 2009, p. 146). Like ANT, Löw's theory acknowledges the dual nature of actors that emerges from their material and semiotic relations within and to the space, and that agency is shaped by their relations. An ANT/cosmopolitics perspective goes a step further by suggesting that practices in a network generate own materialities (or spacetimes, as I will discuss in 6.2.2). In contrast to Löw, who stipulates that social structures are reproduced by the constitution of space, I wish to achieve a fine-grained analysis of how *spatial structures* may co-produce new phenomena, particularly modes of temporal agency and practices. The application of an urban cosmopolitics lens will help me emphasize

the specific kind of productivity of the material and the symbolic, but also of phenomena and practices within spaces, as I will subsequently elaborate.

4.2 A Cosmopolitics of Time in the Office

The open plan office I am going to examine would be categorized as *spatial structure* by Löw, because the arrangement of actors is governed by rules (to some degree) and resources, and contained by an institution. According to Löw, spatial structures facilitate practices and reduce certain options for acting, which resonates with the STS term agencement (see Callon 2006), in the sense that it refers to a constellation that is assembled in pursuit of a certain objective, and is therefore teleologically charged. In short, ongoing arrangements met by *operational synthesis* and *spacing* would be somewhat predefined by the specific furnishing and interior of the open plan setting (p. 226), following Löw. Indeed, on a material level the interior design of the office seems rather rigid at first sight. As I will argue throughout my analysis and the following theoretical discussion, Löw's conception of offices as spatial structures with somewhat predefined agentic capacities might be too simple to grasp the productive, cosmopolitical character of the open plan office, particularly in regard to its emergent and dynamic temporal fabric. As I will discuss below, the open plan office as a building type, a spatial structure, can be thought of as more than a mere technology that produces or endorses specific forms of agency via its symbolism and material properties. In practice, it can be thought of as an animated ecosystem of humans and nonhumans that form a productive microcosmos.

The challenge of determining the status of buildings seems to permeate the humanities, as built environments cannot clearly be assigned to categories of "things", technologies or assemblages. On the one hand, their relationship to architects and designers resembles engineer-machine relations, as creators tend to infuse them with their visions of society and intended functions (Guggenheim 2016, p. 73). On the other hand, life within and outside the building impacts its future development, which is why it is questionable whether it makes sense to measure a building's "success" based on architects' intentions. According to Guggenheim (2016), the interplay of buildings' technological, specifically infrastructural properties (as discussed in 2.2.3) and symbolic dimensions (commonly attributed to "building types"), as discussed above, contribute to how it is embedded in societal, and urban contexts.

As types, buildings as wholes locate certain specific social functions. Banks locate 'doing banking' and family homes locate 'doing family'. It is very much part of the notion of building type that it does not specify what role individual building parts play in 'doing x'. This is not a failure of architects, or the notion of type, but it is a feature of buildings as mutable immobiles. (Guggenheim 2016, p. 75)

Therefore, a building is not merely a technology, a machine, as stipulated by architects and designers like Le Corbusier, that consistently limits and prescribes modes of acting within. Instead it is marked by specific qualities, possibilities and obligations (such as maintenance work), it may be materially adapted and its meaning in a society transforms over time. Hence, a cosmopolitical approach, that understands a building as a dynamic space that "produces its own "habits" or "customs" that take shape of immanent laws influencing the behavior of individuals" (Robbert and Mickey 2013, p. 3), frames buildings as ecologies of practice where agency within is not prescribed by the architect's intentions, but among other factors[7], by its internal life which encompasses Löw's *spacing* and *syntheseleistung*. So-called customs, laws or habits are therefore phenomena closely related to interactions; they are not solely imposed on the building from the outside, by architects, governments, urban planners or the cosmos, they emerge from merging qualities, obligations and phenomena within and the interplay of outside and inside that contribute to the buildings present and future, rendering the open plan office a local manifestation of the cosmos.

First, I argue that paying attention to how happenings within the microcosmos produce rhythms, does not suffice to grasp the complex temporal landscapes of the office: While time (particularly clock time) and the way we make sense of it through chronometric technologies, are socially constructed (Zerubavel 1980), rhythms on the other hand are physically perceived, and can only be grasped through presence at a site (here; via ethnographic methods). They are not simply factual and omnipresent such as the notion of eternally passing time; stemming from and expressing intentional or unintentional processes and phenomena, renders them and ephemeral spatially bound.

Second, they are mediated by humans and nonhumans. By mediated, I mean that the *substance* of rhythms, the way they appear to us, is dependent on embodiments and materialities, such as the availability of devices or other circumstances. Rhythms that find expression in sound are inconsequential to a deaf person, the rhythmic language of lighthouse signals only becomes legible in the dark, while radio frequency waves require devices in order to be perceptible to humans. Therefore, like sounds (as discussed in 2.3), rhythms not only *arise* from processes in the office cosmos, their presence is tied to it and mediates the way we experience a space. Alas, they simultaneously mediate a space and are mediated by it. As I will argue throughout chapter 6., spatiality (in the sense of architecture, but also the cosmos of things within) has the propensity to make, unmake and amplify rhythms.

---

[7] Such as its integration in broader networks like infrastructures, municipal politics and geography.

Third, rhythms' potential to participate in the creation and molding of temporality in a space and create distinct spatialities (as discussed in 6.2) becomes instrumental to orientation in space (in regard to what is happening where), and is therefore part of *syntheseleistung* and *spacing*. In regard to being engaged in *making a space* by mediating how we experience it, rhythms have the ability to amount to experiences of harmony or disharmony by differences in synchronization, which contributes to a space's atmosphere (as I will elaborate in 6.2.2). The productive capacity of unique rhythmic compositions, that spur the creation of emergent spacetimes, is yet another reason why I believe to have found an appropriate theoretical match in a cosmopolitics perspective. These unique spacetimes, or atmospheres may form fleeting "universes of value", comparable to an own microcosmos (see 6.2.2). As I will show in chapter 6., they were a core issue in the field and commonly associated with the degree of synchronicity of various rhythms in the office.

4.3 Temporal Agency: Constructing and Navigating Spacetimes

After I have pointed out the importance of locating interaction in order to distil the distinct temporal fabric of the office (see Massey 1999), I have made a case for the collective, and relational shaping of space as microcosmos. I have argued that the open plan office is constructed by the agentic capacities of humans and nonhumans by drawing together my reading of Löw, Stengers and Guggenheim. At this point, it is important to clarify how I understand temporal agency; generally, I draw on ANT which postulates that agency must be understood as derivative of networked relations. Addressing some prominent ANT conceptions surrounding agency and relating them to my research will highlight how these approaches inform my work. I will discuss several instances where employees (including myself) engage with the open plan office, how these engagements contribute to the spatio-temporal multiplicity in the office (as discussed throughout 6.2) and can therefore be framed as temporal agency.

Applying the idea that agency is shaped and produced by networked relations and vice versa, gives a diffused yet undetermined view of opportunities for acting. As the "correct" arrangement of space and rhythms are paramount to "making the office", by giving this microcosmos its distinct, provisional character, their features are not only *matters of concern* (Latour 2005) that are governed via various regulatory practices, but also mediators. These features may include rhythms of movement and sound, which mediate the human experience, agency and the synthesis of space; conversely, they are mediated by humans and space itself (*spacing*). Therefore, understanding human temporal agency necessitates a reciprocal understanding of 1) how it is mediated by space and temporalities and 2) how people engage in reassembling these matters of concern.

My primary takeaway from Latour's ANT, is the way it theorizes *mediators*. They have the capacity to multiply difference:

Mediators […] cannot be counted as just one; they might count for one, for nothing, for several, or for infinity. Their input is never a good predictor of their output; their specificity has to be taken into account every time. (Latour 2005, p. 39)

In reference to the office, spaces and rhythms multiply realities, in the sense that they are experienced differently by individuals and that they contribute to the synthesis and spacing of the office and its provisional atmospheres. As such, atmospheres and their specific ephemeral spacetimes are also mediators because they mediate and multiply human experience and agency within their given spatial and temporal horizon[8]. Hence, they are not only products of human agency but also produce or at least contextualize it. Focusing on how rhythms as "byproducts" of networked interactions are mediated by atmospheres of the office (like acoustic properties, the bodies and devices within), converge and form specific atmospheres which in turn mediate movement and interaction in the office, is congruent with an ANT understanding of mediated agency. As I will discuss in chapter 6., individuals' attempts to maintain control over contingencies in their surroundings, while collectives of humans and nonhumans have the possibility to engage in atmosphering by curating the aesthetic (including rhythmic) experience in a space, fragments temporality into various spacetimes. Temporal agency can therefore be understood for example in terms of 1) *governance* (governing contingency); by collectively constructing spacetimes via atmosphering, like establishing shared habits, and 2) as time maintenance; which I understand as practices that target coping with, or navigating the open plan context by adapting own habits to the surroundings (like niching). Both of these agentic variants are complicit in constructing unique spacetimes that mediate (individual or collective) agency and become epistemic devices by helping employees navigate and construct the office topography by *spatializing* certain functions, meanings and habits.

Besides the notion of mediators, ANT also offers means through which to make sense of how actors govern situations to achieve circumstances that they consider beneficial. The process of *translation* might be a useful way to interpret how actors (attempt to) govern atmospheres in the office, by enrolling others in their trajectories. According to Michel Callon (1986), translation is the process through which actors acquire allies that participate in stabilizing a network. In my opinion,

---

[8] In 2.2.2, I have discussed literature that theorizes atmospheres are more or less intentional orchestrations of sensory cues that create a unique bodily experience.

governing temporalities in the open plan office and more generally governance as means of temporal agency is pursued through ongoing translation, which appear less linear and systematic than in Callon's description. In the case Callon describes in "Some elements of translation: domestication of the scallops and the fishermen of St Brieuc Bay", marine biologists *translated* the issue of the declining population of scallops in order to impose their definition of the acute situation on other actors in order to gain alliances in pursuit of their solution strategy.

Something similar takes place in the idiosyncratic formats of governing office temporalities; there are some existing, yet often competing ideas about how work ought to be done. The company's administration, later even employees, have tried to define how the office is supposed to be used by determining some dos and don'ts. Beyond this initial legislation that took place in the early stage of inhabiting the open plan office, the evolving dimensions of the office, which are multiplied by its mediators made the necessity to constantly negotiate new rules and adopt new practices strikingly evident. Governing rhythms and atmospheres in the office via translation however is a less verbal process than suggested by Callon, and it is pursued by multiple actors and not only one group of people. Therefore, the four phases postulated by Callon; *problematization* (defining the problem), *interessement* (assigning specific roles or identities to other actors), *enrolment* (defining and coordinating roles) and the *mobilization of allies*, do reflect what is happening in the open plan whenever rules are made and enacted, however never at such a linear and strategic pace. The chaotic negotiation of rules (that I will discuss in 6.1) is reflected by the different degrees to which they are acknowledged, interpreted and enacted by employees and the fragility and limited temporal horizon of atmospheres.

Even though temporal agency is not so much systematically employed to govern the open plan office's temporality and there is no singular definition of issues and solutions, the scattered ideas of what it ought to be are reflected by buzzwords, such as "modern" or "flexible" which are used by interview- and conversation partners. Therefore, the circumstances in the office infuse these hollow descriptive vessels with new, situated meanings through association, reifying them in a specific way through reenactments, which I have called atmospheric polities in analysis. Maintaining these enactments entails keeping out certain activities that are deemed inappropriate and would disrupt the atmosphere's temporality. Often, this requires niching (as discussed in 2.2.2). In terms of classic ANT, niching can be understood as a practice that engages in stabilizing a network, or in the case of the office, an atmosphere.

John Law (2009) insists that actor-networks are stabilized through discourses between competing and complementary narratives that follow specific rationales. The emergent discourses

"define conditions of possibility, making some ways of ordering webs of relations easier and others difficult or impossible" (p. 149). This idea can be translated to the context of atmosphering the open plan office, where different conceptions of flexibility and productive work environments inhabit and shape the shared space. Each narrative limits conditions of possibility and is blind to certain realities that it cannot recognize. In order to handle such realities, ANT proposes that the layering and ordering of a discourse secures relative stability. If contemplated from this perspective, niching as result of the confrontation between an individual' needs, rhythm and practices with the broader atmosphere they are located in, is an expression of this layering and sorting out process. Here, the individual, or small groups of people enter a discourse with broader narratives of how to use the office and decide to maintain it by niching, or to risk disrupting it by attempting to integrate or overlay their rhythm. Hence, the stability of an atmosphere is contingent on these micro discourses and whether individuals decide to maintain broader orders or interfere.

My focus, how time "acts" and temporal agency "becomes" within the microcosmos of the open plan office, can therefore be better understood from an inwards perspective that pays attention to rhythms emerging from interrelations between materials, practices and meanings in this microcosmos of humans and nonhumans ("ecological singularities" see Stengers 2010, p. 115). Understanding temporal agency as mediated by the constantly, collectively produced space and constructed by diverse actors' attempts at translating their view to others in order to enroll them in their trajectories and discourses between complementing or conflicting narratives, complicates matters quite a bit. The first section of my empirical analysis (6.1) will be devoted to demonstrating how certain habits and practices related to cohabiting the open plan office become customs or even laws, in the second section (6.2) I will focus on how this specific microcosmos of things and people, the agencement, brings forth its own rhythms and temporalities.

5. Material and Methods

As mentioned in the introduction, my fascination for contemporary workplaces as spaces marked by competing narratives of labor and leisure, self-fulfillment and compulsions, combined with my bewilderment about the perceived advantages of open plan offices, guided my research focus toward exploring temporalities within. Therefore, it was seemed obvious early on that my place of inquiry would be an open plan office. I had some backup plans in case I would not have been able to get access to such a space, like interviewing people who work in open plan offices, or analyzing documents about how these spaces are represented by architects and sociologists. Still, these would not have been ideal alternatives to an ethnographic study, as the specific, networked makeup of the office, with all of its human and nonhuman inhabitants, and sensory impressions like sounds, odors and rhythms, would have been less tangible to me. Interviewing people from different offices would not suffice to capture the many interconnected perspectives that exist in one space and give it its own spatial characteristics. Besides, drawing on my own experience, I concluded that it can be very difficult to remember and convey details of everyday surroundings to outsiders, which is why I decided that taking a look myself would be beneficial to my endeavor. I found that being in new surroundings makes it easy to have a wonderous and curious gaze and notice many, rather banal things. On the other hand, I was soon overwhelmed with details that were fairly difficult to piece together and systematize, as they all seemed to be of *paramount importance* to the construction of workplace temporalities. For instance, I decided not to draw too much about this subsidiary's functions into my analysis, as this would not only impede anonymization but also add an extra layer to my analysis, which would force me to stay on a very superficial level.

The combination of ethnographic work and interviews was especially fruitful, as I could oscillate between my notes and interview findings and relate both sources in order to emphasize on topics and bring together multiple perspectives. Tracing how employees co-construct temporality within the agencement of the workspace (RQ 1) is much easier if one can ask more targeted questions about practices based on own observations, than asking in a general, abstract way, or basing them on assumptions. My observations and experiences facilitated the making of interview guidelines, and also helped me put my ethnographic findings and hunches in perspective. During the interviews it was also easy to engage with people as we were familiar with each other and I could sometimes relate to their experiences with the office, due to my position as an intern. By actually being there and participating in everyday life at the office, I could more easily make sense of concepts such as rhythms, niches and atmospheres, by experiencing them and relating them to my findings. Being an intern also shaped my

sense of what temporalities mean in the office; it helped me develop my focus on rhythms and experience how they are contextualized by the office's spatiality and how they contribute to it.

Relating employees' practices that engage in the making of workplace temporalities to temporal agency (RQ 2) was more based on interviews and required some degree of interpretation. Still, relating the practices they described to themes like saving time, responsibility, efficiency or more generally time maintenance and governance, was rather straight forward as I will demonstrate in chapter 6. Paying attention to when employees deem the deployment of time maintenance practices necessary, hints at frictions, and therefore sheds some light on the temporal (cosmo-) politics of the office space. I allude to the term cosmopolitics, because maintenance practices conjure own rhythms and often even spacetimes as I will explain in the section on temporal niches in chapter 6.

After identifying how certain constructive practices become time maintenance practices, the third research question draws together the two previous questions by attempting to identify how employees participate in temporal politics, by attempting to understand which visions of productivity they perform through their methods of governing workplace temporality. In the state of the art, I have described how one can conceptualize temporal regimes as *temporal architectures,* by drawing on Sharma (2014). I argue that the site of the open plan office constitutes a spatially bound temporal architecture, that is marked by the specific spatiality and the maintenance practices of employees in it. Even though I think of the office as agencement, an inherently political assemblage that is constructed in pursuit of certain goals (work) and strives to govern (i.e. limit agency) within, the ways in which work is defined, imagined and performed in it are diverse. To me, this polyphony of practices and perspectives that are enrolled in the agencement and are enabled by the office's spatiality, characterize its temporal architecture, its cosmopolitical makeup. It was often methodically challenging to make sense of these practices, how they related to each other and how they participate in governing the office; the same office can be very different to people who are present at different days of the week and sit in different areas. Without participant observation, which allowed me to trace and understand the situatedness of interview partners to some degree through experiencing the office context, it would not have been possible for me to piece the different and often contradictory statements together.

In this chapter, I will first describe my empirical field and how I got access (5.1). In 5.2 I will describe my ethnographic approach upon entering the field, and how it developed during my stay. In 5.2.1, there will be some discussion about ethics and consent, which is a delicate issue that is especially important to address in ethnographic research, as well as my focus (5.2.2), and how I went about documentation (5.2.3). Segment 5.3 gives an account of how I organized and conducted interviews

and coded and transcribed them. In segment 5.4 I will portray the process of analysis and reflect on how it contributed to the structure and the process of writing my empirical chapter.

5.1 The Field: An Open Plan Office

Securing Field Access

After many failed attempts at gaining access to an open plan office as a researcher, I started looking for internship positions. As most positions were advertised for computer or data scientists, economists and so on, I decided to apply spontaneously. In November I was lucky enough to get an interview with the CEO and the head of HR of a subsidiary. I informed them about my lack of relevant skills and my research endeavor. Surprisingly, they were curious about my thesis work and asked me to send them my exposé and slides to present to employees, in order to inform them of my research[9]. I was asked not to mention the company, and the subsidiary's name or location, and to show the CEO my thesis before publication. I soon received my employment contract and was ready to assume my position as a paid intern/ethnographer for the next three months, starting in January.

The Field

The field that I examined was confined to a separated department of a company. To precise, I was an intern at a subsidiary located within the headquarters of the mother-company. The office was on a single floor and built to accommodate 80 employees. The office was introduced to me as "modern" open plan office without fixed seating arrangements[10], an appending coffee and printing area, and rentable meeting rooms accessible to everyone working in the building (not just to this particular subsidiary). The overall building complex was fairly new and mostly rented by the company, but also by various shops, a kindergarten and other so-called infrastructures. As many comparable office complexes, it too was advertised as a hub for innovation, "a place where work and leisure meet", and as a vital part of the city's urban development strategy. Against the background of this narrative my first impression of the building was very dull and surprisingly gray and barren, although this might also be attributed to the season.

---

[9] I will get back to this point in the section on ethics and consent (5.2.1).

[10] There will be a comprehensive explanation of what this meant in practice in chapter 6.

The small size of the office and my position as an intern gave me the opportunity to be in contact with the same set of individuals and become less alien after some time. In the beginning, I was quite overwhelmed by my chores, as my co-intern had unexpectedly left and I was now in charge of her field. Luckily the office was quite empty during the first week, which gave me some time to get used to my job and get to know several people, like the employee representative. Additionally, this calm period also gave me a point of comparison for the busy everyday life.

I interviewed seven employees, and led informal conversations during coffee breaks, lunchtimes and sometimes even after hours. Being open about my role as a researcher was very important to me, even though it sometimes led to awkward situations in the beginning phase. Initially, I was very open about my research questions, but I soon noticed that people were a little bit bored with my theoretical explanations, so I only elaborated whenever people showed deeper interest. My thesis-supervisor recommended to have a concise narrative at the ready, so I decided to state that STS has expanded from the tradition of looking at how science is done in laboratories to all kinds of sites of scientific research, knowledge production and use of technologies. I explained that I was looking at how the open plan office becomes infrastructural for work and was seeking to learn this from employees' expertise. This really helped me get my point across more swiftly.

The open plan office consisted of a main office with two isles, restrooms, storage cupboards that segmented the space, small plants, in tall, column-like pots, a postal area that was next to an area with office supplies, desk rows, small closed off booths and small sitting areas. In order to preserve the subsidiary's anonymity, I made a rough sketch that shows the topography of the office; however it is not fully accurate. This way, I hope to show the way the office is segmented by its interior design, (i.e. cupboards that reach the ceiling), which creates a very specific visuality with multiple perspectives at different places, as well as a defined acoustic, which I will explain in chapter 6. Obviously, this specific spatiality impacted the way I went about research. Later in this chapter I will explain how it contextualized my perspective, the way I took notes and interacted with people.

5.2 Ethnographic Approach

The reason I chose to conduct an ethnography (including interviews), was that I knew it would allow me to test different sources of data from observation, interviewing and informal conversations against each other (see *triangulation*; Fetterman 2009, p. 573), to give my analysis more depth. After attending a seminar about ethnographic methods at the Institute of European Ethnology, I was fairly certain that analyzing employees' temporal maintenance practices in relation to a site, without physically being

there or gathering first-hand experience may be somewhat futile, no matter how many employees I would be able to interview. Material aspects and tacit dimensions of the open plan office, like acoustics, atmospheres and rhythms, turned out to be significant to the office's temporal fabric; especially in regard to how individuals and groups developed time maintenance practices to adapt. Sensory factors in general and the ways they unraveled and reassembled actors within the office became discernible to me via physical presence at the site.

As a very embodied practice[11], ethnography is a conspicuously situated way to do research. The lines between what modernist social scientists would have qualified as *object* and *subject* in this case, are completely blurred. Less than feeling observed, I became part of the office and felt responsible for *doing well* and adhering to the prevalent standards of "good cohabitation". My position as intern made it easy for me to ask questions about everyday life and discuss my ideas and understandings with coworkers. This was sometimes tricky as people often saw and explained things very differently. Instead of trying to solve these dissonances or "finding the objective truth", I decided to address them in analysis and contemplate their meanings. Therefore, I think an ethnographic approach, in which I actually visit the field and take part in everyday office life, making my situatedness as researcher within an office explicit and reflecting it, may have helped me avoid the "god trick" (Haraway 1988).

Before entering the field, I prepared myself to conduct a micro-level ethnography, with a focus on material culture and proxemics (Fetterman 2009, p. 551: "(..) the study of how the socially defined physical distance between people varies under differing social circumstances"). I thought this approach would be the most reasonable way of collecting data to answer my research questions, as the category of material culture "(..) leads us to reflect on object-subject relations (..) and social Being in the world" (Tilley 2007, p. 258). As ethnographic studies of material culture often go beyond the consideration of artifacts' design and examine the wider range of relationships they are embedded in, I expected this approach to help me shed light on how the material structures of the workplace are embedded in the temporal relations of employees during their office work time. I was aware that this was going to become a trying endeavor, but I was certain that ethnography is the only method that would allow me to simultaneously develop an understanding of a field that I am alien to, observe employees' time maintenance practices, let them explain to me why and how they engage in such practices, tell me *how things work* within this space, and most importantly explore factors that I may not have considered

---

[11] You use all your senses and your physical presence to collect data, your body impacts the way you engage with your surroundings and the way you are perceived by them.

while developing the exposé.

In practice, I am not absolutely sure if keeping proxemics in mind really helped me make sense of "social circumstances" (see Fetterman 2009). Paying attention to my coworkers' distribution and movements in the office, gave me a certain understanding of rhythms in the context of the office space, as I will show in 6.2.1. The benefits of focusing on material culture on the other hand were more apparent to me, as doing so gave me some perspective of how certain practices, frictions or changing relationships between humans and nonhumans could be generative in the sense that they altered demands for- or distributions of certain devices[12]. The awareness for the way changes in the prevalence, perceived usefulness and distribution of devices are interconnected with the way work is done in the office (and how employees' choose to enroll them), also gave me grounds to discuss that these interdependencies 1) cannot be traced without paying attention to spatiality and temporality in the open plan office 2) can generate own rhythms of practice (see 6.2.2.3).

Unfortunately, my field work was halted after the second month due to the COVID-19 pandemic. All employees were instructed to work from home, which made participant observation impossible. Still, I would not say that this last month was useless because it gave me the opportunity to change my perspective of work in the office; I had to do the same chores without the infrastructures offered by the office. Interestingly, I found myself going about my duties with ease, however I could not say if that had to do with my working environment; my supervisor was always available on the phone and my prior experience gave me the security to efficiently do my work.

5.2.1 Ethics and Consent

As mentioned above, I had met with the head of human resources and the CEO of the subsidary to negotiate the terms of my research before closing my employment contract and entering the field. I had prepared slides for them to inform employees of my endeavor and their rights as participants, as well as the main points covered by my informed consent agreement for interviews (see Annex). In addition, they insisted on reading my thesis before it gets published (as well as several other employees that I met throughout my stay). I find the idea to let my *research partners* read my thesis and comment on it very appealing, as it would put my writing into perspective and give the reader some additional background information and grounds to make up their own opinion about my findings. The seminar on ethnographic methods at the Institute of European Ethnology taught me to understand my coworkers

---

[12] An example for this can be found in section 6.1.0

as *research partners*. This proved to be a helpful concept because it portrayed 1) their expertise as inhabitants of the open plan office and 2) my research's dependency on their perspectives and willingness to share their experiences and opinions. Interviewees and observed peoples' names were anonymized, in order to protect their identities and let them speak more freely. While writing chapter 6., I tried to avoid topics that could potentially affect anyone negatively in their working environment, as anonymization might not suffice to conceal people's identity from their coworkers and supervisors.

My position as an intern in an office where everyone had been informed about my research, was met with a plethora of reactions. While some were very enthusiastic, introduced me to people they deemed relevant for my endeavor, told me about their experiences, asked me about interviews, some were clearly skeptical, and others openly refused to talk to me (which I respected). It is important to acknowledge and deal with possible ethical pitfalls of conducting participant observation in the workplace, which might come from employees being dependent on their jobs and may not be able or willing to openly decline participating in my research, after it had been condoned by the executives and the employee representative. In order to counteract them, I told all people I spoke to about my research, and only engaged with people who were open towards me and seemed comfortable in my presence. I was prepared to answer questions about my thesis and research and went into detail to the extent requested by the inquirer. Additionally, I made an effort to create so called "safe spaces" (see Bergold and Thomas 2012, p. 196) for research partners to express their thoughts in a secure and appreciative environment outside colleagues' earshot. Spending one on one time with them in the coffee area at the end of the day when hardly anyone was around anymore, or at the occasional smoking break in the yard, really helped me get an impression of individual opinions that remained largely concealed in the main office, without putting research partners at risk of compromising their popularity in the workplace.

5.2.2 Material Cultures Approach

During ethnography, one of my main objectives was to explore which embodied practices are employed in work processes and how they co-produce the office's spatial structures and site-specific temporalities. The field work allowed me to observe how employees structure their space, as they are free to move in it, and rearrange it to a certain degree, as I will discuss in chapter 6. According to Tilley (2007, p. 263):

"(..) the symbolic divisions of the house are constantly invoked through the practical actions and social strategies of social actors rather than being an inherent feature of the internal space: a dialectic between agency, structure

and meaning."

Hence, setting aside the focus on "the social", a material cultures approach does not understand spatial structures as *per se* predefined by architecture, but informed by meanings and performances of employees' embodied practices in the space. This focus on the performative and processual dimension of space proved to be a helpful methodical angle for my assemblage sensibility, as it aims at defying simplified structuralist explanations that would obscure the agency of individuals to perform time maintenance within this specific context. For instance, there will be examples in chapter 6. (6.1) that showcase the significance of not only paying attention to the present, but also focusing on the absent, as, according to the material cultures approach, "An absence of something may be as crucial as its presence" (Tilley 2007, p. 260).

In this specific case, the absence of spatial boundaries is meaningful, not only (as described in the state of the art) for designers', enterprises' or sociologists' imaginations of work, but more prominently for employees, as it requires them to negotiate the "dos and don'ts" of the shared office space. According to O'Toole and Were (2008, p. 618) "Space encompasses proximity and distance, which can have dramatic effects on communication and cultural understanding or lack of it. A place is the nexus of things and space within a given boundary, and has imputed values and interpretations", rendering spaces (like the open plan office) a dynamic field of contesting meanings and practices. These practices and meanings diverge significantly from those of the aforementioned groups, which is why a focal point of my ethnographic exploration will be employees' practices and the ways they articulate their experiences and ideas in interviews, informal conversations, distributions and movements.

5.2.3 Documentation

The only devices I used for documentation were my phone (for the consensual recording of interviews), a journal and a pen for notetaking. In the beginning, I found it rather difficult to take notes in my journal, because it felt strange not to do be frantically engaged in my internship chores. I often sat down at home after work and tried to recollect the past day, but generally found it easier to note my thoughts in the immediate aftermath of a situation. I carried my journals with me at all times (except lunchtimes; in order to maintain an *organic* speaking situation), and often revisited sections, made summaries, added notes and codes. Before each week at the office I made a recollection of the previous week and attempted small preliminary analyses of my findings so far. After a week in the office, my inhibitions faded and I started taking notes at my desk, trying not to look secretive. In the course of my stay, I frequently left my journals on my desk, even when I was away.

As an ethnography is always a very situated practice (as arguably all other scientific methods, see Latour 1993), I decided to embrace this issue by using my own reflections to enhance the reflexivity of my research. In regard to collecting data in general, and observation in particular, I am aware that observing, *looking*, produces power relations, at the very least in the sense of "othering", or objectifying the observed (Clarke 2005, p. 210). To harness this potentially problematic property of observing in a beneficial way, I thoroughly noted my contemplations and interpretations of the seen (reflections on the data collected from observing employees' performances and interviewing) in sections of my journal. I attempted to employ *situational maps,* as articulated by Adele Clarke (2005, p. 83), that serve as an exercise to "open up" data and make the researcher's perspective visible.

Situational maps are ideally employed as strategies for "(..) articulating the elements in the situation and examining relations among them" (ibid., p. 86). The credo of situational mapping is that "Researchers should use their own experiences of doing the research as data for making these maps" (ibid., p. 85), making visible that the researcher is in fact "the research instrument", and more generally shedding light and reflecting on *invisible* processes like observing, and making assumptions held by the researcher explicit. In practice, I had difficulties constructing maps, as I was frequently dissatisfied with the way I arranged my thoughts in a map format. Instead, I decided to keep the general objectives of situational analysis in mind and write up my considerations (in journals) in a list like manner, frequently revisiting them and adding to my thoughts and open questions. This was of course messier than I had originally envisioned, however it suited my thought process better and it made it easy for me to trace the development of my perspective throughout the field work phase. These "situational lists" helped me systematize my open questions and observations; they offered a solid base to build my interview questions on and focus my gaze. Employees' reflections and comments on my questions gave me feedback about what they perceived as relevant, which shed some light on their perspectives. I have tried my best to depict them in chapter 6. To me, they hint at implicit context-specific moralities and even more interestingly the *normality* of office temporality.

5.3 Interviews

Sampling and Saturation

In regard to selecting interview partners (*sampling*), I was inspired by 'the big-net approach', as described by Fetterman (2009), where ethnographers mingle with as many people as possible and narrow down the scope as they proceed. It is supposed to enable a wide-angle view of events before ensuring a microscopic study of specific interactions (Fetterman 2009, p. 553). In practice, I thought it

would be best to interview employees of different gender, ages, departments and in different positions, in order to contrast their practices and be able to understand them in context of their very diverse jobs. It was important to me to interview a technician, because I wanted to develop an understanding of how decisions concerning technological infrastructures were made and how they related to the open plan office architecture and employees' changing work practices. I followed my supervisor's advice; she recommended interviewing an executive director and I took interview requests (three of my seven interviews). Luckily, I felt like hardly any new topics were emerging during the last two interviews, because the dawn of the COVID-19 pandemic brought my interview-streak to a *natural* end[13] anyway.

Preparations

I prepared my interviewing phase for one month, by making an effort to live up to expectations of my internship, observing myself and others, leading informal conversations with employees and extensive note taking. I expected this to give me some insight into shared meanings and values of the office-community (Fetterman 2009, p. 554), in order to prevent possible faux pas and become more familiar with individuals. Also, informal conversations raised my awareness for issues that I would have missed by only observing or might not have been mentioned in a formal interview setting.

I conducted semi structured interviews, with open questions (see Annex) that looked more like topical checklists than questionnaires, and asked interview partners to draw a rough sketch of the office. Topics or questions were loosely based on my situational lists which changed throughout my stay. With each interview it became easier to maintain a good conversation flow, and I began taking notes after the interview had ended instead of during the interview. It was not important to me to ask everyone the exact same set of questions for the sake of comparability; instead I had some recurrent questions, but adapted others to individuals' jobs or things that I found particularly interesting at that time. I did not worry too much about asking *all the right questions* during the interview, because I knew that my perspective would shift in the course of my stay in the field, and that the interview guideline could only be a reflection of my momentary understanding. My thesis supervisor's advice that "the interview is never over during ethnography" (or something along those lines) gave me the confidence to revisit some topics or things that had confused me via informal conversations. Sometimes former interview partners would even approach me to expand on some things or add insights.

---

[13] It would probably have impeded interviews, as everyone was relegated to remote work from the beginning of march on.

I personally asked people if they were willing to participate in an interview, in order to at least have some personal contact prior to the interview situation, even though I had mostly established contact through work related interactions, or break-time conversations beforehand. Then, I sent an email to ask for an appointment, with the informed consent agreement in the attachment (see annex). Before starting the interview, I asked people to read and sign the informed consent agreement, and if there were any open questions about their rights or my project. I recorded the interviews with my iPhone, which all participants consented to. At the end of the interview, I encouraged interview partners to elaborate on what they deemed necessary and gave them the opportunity to ask me questions about my ongoing research and make additional statements. This often resulted in in-depth reflections about life in the office, the changing face of work relations, or personal questions about my future prospects.

5.4 Analysis

Analysis has no single form or state in ethnography. Multiple analyses and forms of analyses are essential. Analysis takes place throughout any ethnographic endeavor, from the selection of the problem to the final stages of writing. Analysis is iterative and often cyclical in ethnography. (Fetterman 2009, p. 576).

Coding and Analysis

After transcribing the interviews, I coded transcripts with ATLAS.ti and took notes about my thought process. After my failed first attempt at coding in which I made codes based on theory (i.e. temporal architecture, time maintenance, etc.) had left me with rather confusing and dissatisfying results (I never felt satisfied with my categorization), I decided to start again by inductively coding the documents. I began to make vague and more general code groups[14]. Later I would revisit these large code groups and make smaller, more specific subgroups. These smaller groups helped me navigate the documents, find useful quotes and relate my findings to the theoretical concepts. Coding my handwritten journal entries and situational lists was somewhat sloppier, because my perspective and codes had significantly shifted throughout the three months of participant observation and thereafter. Retrospectively, they mainly disclose my thought process during the stay.

---

[14] For instance, "time" which encompassed all topics I freely associated with time like rhythms, stress or even entrainment (as mentioned in the state of the art).

Drawings made by interview partners (depicted on p. 56) were generally alike, in the sense that all depictions of the office were confined to the area with desks, the open plan section of the office, and did not encompass the "public" coffee and printing area or the external meeting rooms. I adopted this shared vision as my definition of *the office* throughout analysis, however I will also address the "external" facilities at some point because they also have bearings on how the "interior" is used. Apart from this aspect there were varying degrees of detail, numbers of desks or arrangements, which I associated with the usual seating location of interview partners (they were usually more secure about the makeup of places they often frequented).
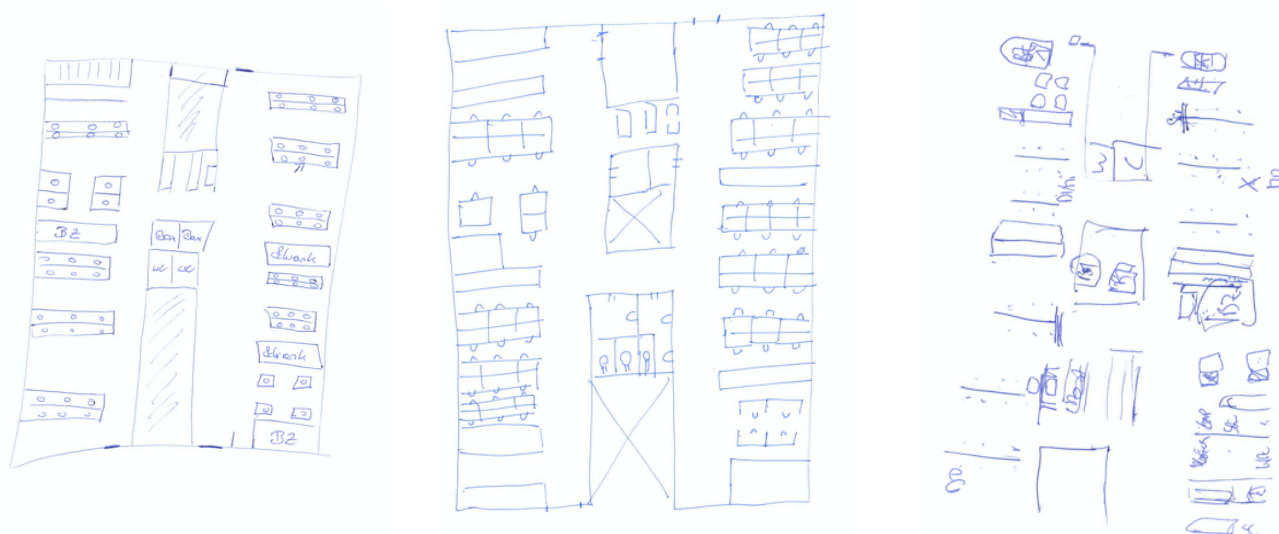
Arranging Material

Generally speaking, my analysis is built around topics that arose in interviews. I embedded them in (sometimes contrasting) reflections of my own experiences and observations and the theoretical backdrop of the sensitizing concepts in an attempt to create a cohesive narrative. This was not always easy because many topics were interconnected, and it was hard to find a starting point in general and for each segment. Even though assemblage thinking requires emphasis on relationships (*mediated* by sound and space) between actors, it is important to make some decisions about where to begin and which aspects to dwell on. As personal situatedness and perspective make it is impossible to create an "objective" depiction of anything at all, I made an effort to make these decisions transparent.

To me it seemed more feasible to examine the open plan office as a space than a temporal architecture and contemplate how temporal specificities (i.e. rhythms and temporal maintenance practices as governance) "come into being" in this space. Alas, my analysis has a strong focus on space. Time becomes an analytical axis through which to examine spatial constellations (including humans

and nonhumans in this space). One of my main difficulties was showcasing the duality of spacetime relations in the office; while temporalities emerge in a specific way in the open plan office, they also contribute to the making of space(s). Here, working with space- and urban assemblage related theoretical concepts helped me to fathom and describe the making of space through rhythms (see 6.2). I also chose to use the term governance in order to make sense of employees' agentic practices that engage in creating atmospheres, which can be understood as a time maintenance practice, as I will argue throughout chapter 6.

In the first section of the analysis (6.1), I will deal with the negotiations employees engage in, in order to stabilize atmospheres and synchronize rhythms. I felt like the thematic focus of this section is important in order to establish a basis for understanding how employees' practices contribute to the open plan office's spatiality. The second, main section of chapter 6. then builds on this fundament to give the reader an impression of how these practices coproduce space and rhythms in the form of spacetimes such as atmospheres and niches. After consulting the interview and observation material, I figured that the way employees experience *atmospheres* (compositions of sensory inputs) not only depends on visual, acoustic, etc. cues, but the way rhythms coalesce. Addressing mobility and distribution of humans and nonhumans in the office gave me grounds to explain how the coproduction of rhythms and sensory arrangements can take place in an open plan setting.

6. Empirical Analysis: Governance, Atmospheres and the Cosmopolitics of Time

Upon getting into the thicket of my empirical work, it is necessary to further discuss the relation between *governance*, *agency* and *cosmopolitics*, that I have previously touched on in chapter 4. As my research questions center around employees' agency to engage in *doing time* (i.e. temporal maintenance or governance) within the context of the open plan office, I think the notion of governance in context of a cosmopolitics perspective deserves some more scrutiny. I find its potential to reveal the plethora of agentic practices (or regulatory practices) that engage with rhythm and timing, and how they coalesce with the offices' spatiality particularly compelling. I have specifically chosen to use this term on several occasions in order to refer to attempts at achieving *singularity*; unequivocal ways to inhabit spaces (see Woolgar & Neyland 2013, p. 257). Alas, governance in the open plan office follows certain normative or moral ideals of what a space *is* and how it ought to be used, both in terms of its spatial constitution (what and who belongs where, how can it be used and experienced; *spacing* see Löw 2017) and how a space is imagined. In the case of the open plan office, governance does not only follow corporate rationales (and their specific temporal ethics, that I have discussed in 2.1.2), but also interpersonal ideals and imaginations of coexistence among coworkers, that reflect their imaginations of how to inhabit the office space. We can therefore conceive of governance in the open plan office as stratified, or at least as layered; there are national legal frameworks that govern employees' rights or economic competition, there is corporate policy, there are rules on how to use the building, informal understandings, tacit knowledge, and this is crucial to my point, employees' regulatory practices that relate to its specific spatiality. Even though there might be dissonances between some of the aforementioned levels, they are all entangled and co-constitute how employees encounter the office. The somewhat differentiated normative inclinations that are followed by the different levels of governance (e.g. the state does not care about whether it is allowed to have lunch at one's desk), create a sense of accountability. A shared, or at least established set of norms builds a sense of accountability and responsibility for maintaining order, as many interview partners have remarked.

In STS tradition, it is important to emphasize that governance is not only a function of laws, political institutions, corporations, or agreements and understandings between humans (like hierarchies), but that it can also work through technologies, mundane objects and even spaces (see Woolgar & Neyland 2013). As I will show in the subsequent chapters, governance in the shared space

of the open plan office does not only resonate through design or the intent of the architecture (its building type) and its origin (as stipulated by Foucault), instead it emerges and evolves over time and is constantly renegotiated. The empirical field of the open plan office taught me that governance resides in the interplay of both spatiality and discursively set boundaries and is dynamic with the morphology of the office agencement.

The following analysis aims at further developing Farías and Blok's (2016) concept of *urban cosmopolitics* and at showing that it offers a useful lens to gain insights about the making and unmaking of temporalities in spaces that contextualize employees' time maintenance practices. As I will argue throughout this chapter, understanding the open plan office as a network or an arrangement does not suffice to explain how rhythms and spaces are made and unmade within. The plethora of generative effects within the office, the ways in which spatially bound rhythms create new, ephemeral situations that *make space* for employees' practices, and the way these practices produce rhythms in sequential spaces, reminds less of a traditional actor-network, than a cosmos. Various examples of such effects or rather interactions illustrate my analysis and aim at demonstrating how spacetimes emerge and are governed by employees' regulatory practices, moreover how the temporal fabric of the open plan office becomes generator of rhythms, a temporal cosmos.

In the first segment of the analysis (6.1), I will elaborate how I conceive of employees' regulatory practices, the relation between their imaginations of productive coexistence (or cowork) and temporal experience and agency in the office. Here, I will discuss how regulations and boundaries are imagined as enhancing temporal experience and time at work and explain how "the laws" of the office become infrastructural to maintaining temporal orders in the office cosmos. The structure of the first chapter follows aspects of regulatory practices in the office with certain infrastructural characteristics, as discussed in the state of the art (2.2.3). The infrastructure lens highlights how regulatory practices become political by adding to the arrangement of the open plan office, and therefore contribute to its cosmopolitical milieu. First, I will give an account of their relationship to office materialities (6.1.0), in order to convey an impression of their meaning and implications for the office, its infrastructures and human relationships (6.1.1). Then, I will elaborate how they have evolved alongside populating the office, how they have contributed to its making as a *space* and the constitution of the temporal experience, described as characteristic for the open plan office by employees (and how they continue to do so) (6.1.2). Next, I will address how individual situatedness (and sensitivities) of employees impacts their reception and enactment of rules, and how these tacit understandings, established rules, regulatory practices and boundaries contribute to the making of the

office and the temporal experience that is specific to it (6.1.3), and draw my some brief conclusions about how regulatory practices become political performances in the office (6.1.4).

The second, main section will be dedicated to the spatial perspective. After I have established how regulatory practices become performances of office politics, a spatial perspective *locates* them; it shows how they work in context of spaces made of devices, places, rhythms, acoustic environments and humans and how they become generative to new spaces and rhythms. A brief ethnographic account (6.2.0) illustrating my experiences and thoughts about the spatiality of meeting in the open plan office will set the stage for the following analysis. First, I will explain what I mean by temporal ontologies by explaining how rhythms and time condition the way spaces in the open plan setting are encountered (6.2.1). This is an important step to understand the temporal politics of the office, because the way we imagine and use a space is defined by a space's ontology, which is contingent on the way it appears as a space at a certain point in time. I will then argue how temporal ontology relates to the STS concepts of niches (6.2.1.1 & 6.2.1.2) and atmospheres (6.2.2), and how these concepts relate to (self-) governance. Atmosphering is allotted a particularly large section of this chapter, because as a governing practice, it is concerned with reducing spaces' multiplicity and controlling interpretations of its ontology (6.2.2.1), via the engagement of multiple human and nonhuman actors. I will then proceed to argue that governance in the open plan office is diffused, despite attempts at ordering via atmosphering and niching. By addressing transgressions or frictions (i.e. effects of its specific territoriality (6.2.2.2) and the fragility of atmospheres, which is circumstanced by the distribution of devices and motility within(6.2.2.3), I will explain the implications of its specific, cosmopolitical spatiality for temporal agency.

6.1 Regulating Accountability, Timing Responsibility

In this section I will attempt to account for how space and its arrangements matter for the application of time maintenance practices. I argue that material characteristics of the open plan bring forth quite differentiated conceptions of responsibility. They are diversely enacted, contingent on employees' *situatedness*. The transition from the former working arrangement with small office rooms to the shared space is consistently associated with new challenges; professional, legal and interpersonal. In order to explain the link I make between such emergent responsibilities and temporal agency and experience, I will use this chapter to recount which regulatory practices interview partners have portrayed as necessary for maintaining good working relationships.

A main point that was stressed throughout the interviews is the necessity to maintain boundaries. This is reflected by the common notion of "'till here, but not further", which marks the high importance attributed to inhibiting transgressions. While there are different levels of regulation, from state mandated, branch specific laws or corporate compliance policy, concerned with flows of information, personal ideas about integrity that determine how and where people handle delicate situations, recommendations about where to make calls, to hunches about what might irritate coworkers, the essence of what makes coexisting in the office possible or even pleasant is difficult, if not impossible to isolate. Rather, it might be futile to tease the levels of regulation apart, as reasons for certain actions and the significance of regulations are portrayed very differently among employees. The information I obtained from interviews is sometimes contradictory and does not give a coherent image of which rules account for which practices, or even a clear hierarchy among regulations: It sometimes ranks corporate and national legislation as important factor for specific movements in space. Other times, this is directly disputed in favor of sensitivity and empathy for colleagues, rendering the causality or impact of a specific regulation enigmatic. Leaving the field, I did not even find distinctions between *soft* and *hard* regulations particularly conclusive in most cases, as priorities differed between colleagues (apart from compliance policy, which was performed rigorously in interviews and via regular testing). This inconclusiveness on my behalf speaks to the cryptic nature of rules that on one hand undoubtedly exist in the office but stand in stark contrast to the framing as an open, free, flexible workspace, which is also performed in interviews even though it is often seen quite critically. In my experience, office regulations (apart from compliance rules which were taught via mandatory online courses) did not have a very explicit role in the agencement. I was not told about any specific restrictions before explicitly asking about them in the interviews. Thus, it makes sense to conceptualize regulations pertaining to the use of the office as more or less porous boundaries, whose permeability is more or less stable and may vary at different points in time and in different situations (depending on perspective); therefore, I speak of *timing responsibility*.

Despite my confusion I will try to portray regulations as I encountered them[15]: as dense web of interrelated boundaries (hardly ever instructions) that aim at shielding coworkers and their emissions; be it information, the sounds of their voices, or the smell of their foods, from each other. As I will argue in this section, the *web of regulations* in the office emerges in the form of various regulatory practices and is infrastructural to the office cosmos, because it aims to make labor in the

---

[15] I am aware that employees' relationship to rules has evolved differently than mine; most of them have moved to the open plan office from a different architectural type and participated in the construction of rules as I will discuss in section 6.1.3.

open plan office *work* (i.e. legally, in terms of facilitating cohabitation or following certain temporal ethics). It becomes infrastructural for the maintenance of atmospheric bubbles, or *microspheres* (see Sloterdijk 2008), and their specific temporalities in the office, as I will discuss in the second section of the empirical chapter. Relating the distinctive characteristics of infrastructure in STS (as listed in the infrastructure section in the state of the art) to my interview- and ethnographic data on the web of regulations brought up some interesting revelations:

1) Regulations are spatially bound or immobile in the sense that they only pertain to the office space.

2) They have material outcomes, as I will show in 1.0.

3) Their *master narratives* are expressed by standards and frictions (see Star 1999). Paying attention to standards and frictions highlights master narratives' specific normative orientation, as I will discuss in section 1.1.

4) Regulations in the open plan office are ontological experiments: They are never fully completed and enroll employees in constant maintenance and negotiation (see Jensen & Morita 2015), as I will elaborate in section 1.2.

5) They are fundamentally relational: Regulations can function as barrier to some groups and simultaneously open up activities for other groups (see Farías and Blok 2016b & Star 1999), as I will discuss in section 6.1.3.

Building on these accounts and using the infrastructure lens, I will argue that the specific spatiality of the open plan does influence the emergence of often diverse and individualized time maintenance practices and regulations. The integration of these maintenance practices into the everyday varies among individuals and is contingent on the degree of stabilization of the practice (i.e. how common or formalized is it) and employees' relationships to the office. These relationships are partially characterized by the existence and stability of boundaries and regulations that aim at stabilizing the office's spatiality[16].

6.1.0 Short Excursion: Visuality, Technicians and Infrastructure in the Making

It is hardly surprising that the open visuality of the office that potentially allows easy detection of breaches, seems to play an important role for the maintenance of these highly valued relationships as well as human and nonhuman constellations within the office, as I will discuss in the subsequent

---

[16] This includes regulating human-human and human-nonhuman relationships.

account. Its openness, juxtaposed by visual barriers like separations between desks and large cupboards between departments, creates difference between spots: It is more difficult to see and be seen in some niches (especially those in corners between walls and cupboards) than in spots that are near the "corridors" which are frequented by people who commute between departments, or engage in brief conversations. In my opinion, this visuality is specific to the open plan office as a space, as it creates an uneven distribution of visuality among coworkers and different perspectives from within, which is mirrored by accounts in interviews and visual material produced by interview partners. To me, the subsequent account illustrates that the meaning of rules can only be comprehended against the backdrop of spatial characteristics, in this case the office's visuality. It also shows the material outcomes of the interrelation between visual topography (in which spaces can you see or be seen?) and office regulations that deal with the correct maintenance of devices.

Upon entering the field, the special visuality of the office struck me immediately: despite being an open plan office, there are several visual boundaries like cupboards, partitions and walls. Nevertheless, I grappled with the sensation of being constantly visible in the first week, as I had not jet gained full confidence in my abilities as an intern as well as my still awkward role as an ethnographer. As most of my tasks should have been accomplished on the computer, taking field notes felt very conspicuous and I feared damaging my still fragile relationship to my coworkers. Visibility did clearly not only affect how I imagined my position in the field (as an intern and researcher) and related to coworkers, it was also a theme that emerged throughout the interviews and was often causally associated with changing material and interpersonal relationships, or what in ANT terms would be called the morphology of the agencement. Even though interview partners' perspectives are varying and sometimes even contradictory, seeing and being seen seems to be an important aspect of cohabitation and rhythms in the office. Even though personal discomfort about always being visible was no central concern in the interviews, all employees were very conscious about possible implications of constant visibility and offered intriguing reflections about its impact on their work rhythms[17]. On the other hand, the notion of *always being seen* due to the wide, open space was often contradicted by issues of not being able to find or see specific colleagues and the associated feeling of flexibility and unwanted availability which I will elaborate later.

The most obvious implication of the open office, which was mentioned by many interview partners, was that the relative openness of the office space makes it nearly impossible to

---

[17] Further discussion about visibility can be found in section 6.2.2.2.

seclude oneself within a typical modus operandi, the everyday work life. The implications of this kind of visibility on the relations in the agencement, both interpersonal and material, become particularly tangible when examining the work of technicians in this setting. The example of technicians illustrates the way visibility interacts with specific choices in technology, and even circumstances future configurations of the office agencement as a workplace. Not only the general spatial openness of the office, but also the stable location of the technicians, required by the technical infrastructure of their desk (diverse ports and connections that are not present at other places) contributes to their visibility. For technicians this sort of visibility implied spontaneously being asked for advice and maintenance by colleagues. Fellow employees seemed to associate a technician's presence with availability, regardless of the "mandatory" ticketing system.

To me personally, news of the ticketing system first reached me when I interviewed the technician, one month into my field work. I had neither witnessed anyone using it nor had I been instructed to use it until then: "Just ask the guys over there for help if you encounter any technical difficulties" This recommendation from my first day at work had completely sufficed until the point where the COVID-19 pandemic compromised office work and the entire staff including me was relegated to stay in home office. This observation may also speak to the dwindling significance of the ticket system in the open plan setting, while it becomes necessary in the remote working context, and in contexts where the technicians remain invisible.

Even though the "help desk" constitutes a major part of technicians' jobs, the spontaneity of maintenance related interactions in the open office often undermines the agreed upon electronic ticket system:

"Concerning my domain, people tend to exploit it when they see you. "Ah! I need something from you!" Registering the ticket is neglected if you are in the open office." (Mr. A)

The electronic ticketing system allows employees to register for technical aid and categorize corresponding issues. This allows the technician to assess the urgency, area and scope of the issue beforehand and facilitates scheduling and preparing the required maintenance. For technicians, the ticketing system is meaningful far beyond pre-assessing the required maintenance, for it enables documentation of their labor. First and foremost, the knowledge harvested by the electronic ticket system is a mandatory component of the legally required internal audit, which is shown to all CEOs within the corporation to assess the technicians' work. On a subsidiary level, this knowledge may additionally act as an indicator for necessary maintenance by documenting what has been achieved and potentially even which devices are more prone to frictions with employees. Even though the interviews indicate a shift of decision-making capacities from the subsidiary to the corporate level, inventory decisions are still influenced by the subsidiary via complaints and additional requests, if they

are well argued (mostly in terms of high demand because of reliability and easy usability of certain devices or cost reduction). Here, the electronic ticketing system may act as a device to produce evidence to argue specific demands. Alas, the ticketing system is not only a scheduling- or pace-setting device for interactions between technicians and colleagues. It also plays a nonnegligible role in materializing the technological future of the subsidiary by being engaged in making inventory decisions or showing the necessity of specific training approaches for employees, hence participating in the shaping of human-nonhuman relations in the office. Even though the ticketing system mainly offers standardized engagement options (describing the technical issue in predefined categories), it offers grounds on which to argue change and therefore has potential to engender reconfigurations within the office cosmos.

The decrease of documentation of the technician's labor that comes from the shift from formalized communication paths like the ticketing system to informal communication[18], also impacts the technician's temporal experience, in regard to the past as well as planning the future. At the end of the day, it is increasingly difficult to recapitulate which tasks have been fulfilled and which require further attention in the near future. While avoiding the ticket system may be a time saving practice for some (it requires an astonishingly detailed account of the problem), it might cost the technician additional temporal repair work: Reminding coworkers to register a ticket ex post facto, dealing with frequent interruptions, being confronted with unpredictable temporal scopes of specific, spontaneously arising tasks while maintaining the personal working schedule as well as anticipating and negotiating technical futures within the office, signify the polychronic character of the technician's sub architecture of time maintenance within the open office. Caught between somewhat asynchronous yet stratified corporate temporal architectures (that bring forth material and infrastructural aspects of the office), and the sometimes turbulent relationships between employees and their devices, the technician's pace seems set by frictions.

This may sound troubling and chaotic but staying true to the agencement approach demands paying attention to the multiple meanings of visibility; being seen also creates intimacy and personal connections in the case of the technician. It is not only demanding; it is also gratifying. It creates familiarity by allowing employees to witness the technical maintenance work, to ask questions and show interest in what is achieved by the technician. Comparisons to other companies "where the technicians act behind the scenes" show that the technician associates visibility in the office not only

---

[18] I will revisit the theme of emerging and shifting communication pathways in the section about sound, from p. 99 onwards.

with interruption and informal communication, but also with not being anonymous and being valued among colleagues; technical maintenance work does not primarily occur via a remote access to employees' computers, it is a face to face interaction that often involves banter and pleasantries.

6.1.1 Of Master Narratives, Standards and Frictions

"First of all, there are clear rules and people know "'Till here and not further." If anybody goes further anyway, the ones who are disturbed have a valid point of departure to retaliate. If they would only say "Hey, I just don't approve of you eating there, because I could be sitting there tomorrow, and now everything is sticky." Nobody would dare do so, I also wouldn't." (Ms. D)

As this interview quote from Ms. D shows, regulations pertaining to cohabitation often act as boundaries that determine which practices are acceptable and which are not, but also how objects and materials are dealt with and understood. They manifest which sounds, smells and objects may enter the office, and which are classified as pollutant within the office context. In this sense, regulations, and the boundaries they erect, convey a situated morality which is confined to office bounds. Hot coffee for instance becomes a pollutant and a danger; its smell might irritate colleagues the wrong way while its materiality threatens the carpet floor's original, yet unappealing color. Alas, regulations are not only restrictions, they engage in the maintenance of the office's spatiality; they keep things "in place", they are engaged in conservation.

Additionally, the narrative that regulations install "a sense of reliability" (*Zuverlässigkeit*) among coworkers has emerged in many interviews: They establish which practices are acceptable in the office and accountability for breaches. The consensus that they are based on is not expected to be contested and gives opportunities to demand compliance. The idea that regulations give less vocal employees the means to demand compliance, outlines the narrative of *rules as social equalizers* in the office that are supposed to create a level playing field among colleagues. In this sense, the master narrative that I assign to regulations in the open plan is that they are portrayed as *equalizers*, both in an interpersonal and a spatial sense (by governing material and acoustic distributions).

They attempt to flatten the office topography in a spatial and a temporal sense: they are imagined as limiting to the individualization and differentiation of areas within the office and aim at installing *stability over time*, by predetermining interpersonal and material constellations. Governing such constellations or stabilizing environments can be thought of as *atmosphering*, as I will elaborate in the section on atmospheres (6.2.2). There, I will also discuss how atmosphering becomes a time maintenance practice, that contributes to the temporal architecture of the open plan office, so please bear with me.

Despite this equalizing narrative, the way regulations are enacted is not absolute, but always situated in the office infrastructure and related to its spatiality, as shown in 6.1.0. There were quite a few frictions between the way rules were imagined as equalizers and how they were enacted in the everyday. Hierarchy for example played a role with regard to the claiming of spaces: While employees were supposed to reserve meeting rooms in order to occupy them, it was perfectly acceptable for CEOs to address the meeting room near their seating area as their office and use it spontaneously, at will. When scheduling an interview with one of the CEOs, he set the appointment in "Mr. F' Office", which bewildered me at first, as I did not know of any personal offices in the open plan. In the interview, he explained that his job required an option for spontaneous, personal meetings, which is why he had access to the room and other colleagues refrained from reserving it. On the other hand, access to spaces was sometimes reflected by moral implications of *good or bad timing*: Occasionally, people who arrived later than nine did not find vacant desks in the main office area and instead had to take less popular seats in the "focus area", which was marked by more traffic and non-adjustable tables. This was sometimes accompanied by the remorseful statement: "I couldn't find a seat today because I was late".

Timing, and the way temporality interfered with the space also played a significant role for creating dissonance between the *master narrative* and practice: As I will elaborate in more detail in section 6.2.2, the obligation to reserve rooms in general varied at different times of the year and the day. Alas, situatedness and its implications for the enactment of regulations (whether they matter at a given point in time or not) is not only a matter of *who* you are, but also a matter of *where* you are and *what time it is*. To me, enacting regulations *properly* meant learning to understand and evaluate situations and to develop sensitivities for my surroundings.

"You need to have the courage to interfere, even if you're not affected. You just need to expand your radar and ask yourself: Am I the only one that does not care, and could anyone else be distracted by this? Does it distract them? Should I say something about it? It is a matter of empathy; there are people who care and people who don't. These are things you cannot teach anyone, and you cannot hold anyone accountable." (Ms. D)

This learning by doing mentality not only pertained to me as an intern, but also seemed to be rooted in the development of the office rules, which were established before moving in but were regularly negotiated during the first year in the office. To me, this signifies that some rules are direct results of agencement constellations and the multiple materials and their properties, as I will discuss in more detail in section 6.1.2.

Overall, there has been a strong emphasis on sensibilization towards colleagues that aims at maintaining a friendly atmosphere and a sense of "Zuverlässigkeit" in interviews and informal conversations, which offered my material for finding the master narrative of "regulations as

equalizers". To me, the German term Zuverlässigkeit encompasses temporal aspects of reliability. In context of the office it speaks to the desire to be able to know what is going to happen next, a sense of orientation, stability and inclusion that allows employees to do work in a stable setting and synchronize their work habits. In this context, establishing "Zuverlässigkeit" creates spaces where work is done synchronously, and it is easy for coworkers to gain access, to tap into the rhythm, instead of being disrupted by it.

Upon digging a little deeper, I was told that several rules concerning cohabitation and the use of facilities have been communicated to the employees before populating the new office and throughout the first year. Even though I was not able to retrieve any written documentation, interview partners were able to fill me in on some specifics:

1) Some rather mundane rules are aimed directly at limiting pollution in the shared space through regulating sound, eating habits or excessive use of spray deodorants, hairspray and perfumes to limit olfactory pollution.

2) Others govern the movement of bodies in space. They are either related to corporate policy (like the "clean desk policy", which aims at maintaining "flexibility" through keeping desks available for coworkers), or parts of industry specific national legislation (which determine the distribution of departments in space).

3) Then there are guidelines that aim at governing flows of information in the office. These are related to industry specific national legislation, but also to corporate compliance policy[19]. Policing certain information flows is of course related to the distribution of bodies in space, but it goes a little bit further because the containment of information sometimes requires extra measures. The necessity to document technical maintenance work in a specific, *useful* format, as discussed in section 6.1.0, also falls into this category[20].

Generally speaking, "office rules", as I have encountered them, always seemed to aim at governing the relationship of individuals to the collective. Still, the relations addressed by the regulation seemed to open up its diversified character: Situatedness on both ends of the governed relation matter. Rules that govern relationships to the more abstract entity of the subsidiary, the

---

[19] This aims at inhibiting criminal behavior, among other things by restricting information that may be relevant to value developments.

[20] Of course, there is also a lot of maintenance concerning informal information, as it is not regulated by explicit rules I will address this in the section on niching.

corporation (like the mandatory use of the ticketing system) or the state, may be more obvious and less subjected to normative discussions than ones that aim at cohabitation among coworkers. Negligence in these more immediate and sensory relations may cause much more immediate frictions with the surroundings and peers. Upon examining how rules are discussed in interviews, it seems like concerns about those that address legal norms (like flows of information)[21], as well as rules related to sensory "pollution" are performed with great verbal vigor. Especially pollution related concerns arose regularly throughout the interviews:

"Sometimes I need to eat something, like an apple for example, I won't leave my desk for an apple. But there are 18 people in my department who not only have to listen to me eating the apple, but they will also smell the apple. I am a very olfactorily sensitive person. Every time I wanted to eat an apple I asked: "Do you mind if I eat an apple?" They were all just laughing at me, but I think it is important because this is the only chance people have. If I say "I am so hungry and I don't have any food here myself. Can you please eat it somewhere else, because if I smell it then…" that is absolutely okay. When I am there it is my duty to attune to their needs." (Ms. D)

By taking a look at verbal emphasis and performance in interviews and participant observation, it becomes clear that "pollution" becomes a *matter of concern* (see Latour 2004). It does not seem totally clear to anyone what pollution means to other individuals in the office and what others perceive as such. As sensitivities and perceptions diverge (this is mentioned by all interview partners), there is no single protocol for interpreting and dealing with coworkers' affectations. Alas, these rules seem to be based on assumptions about what pollutes and also on employees' inputs as I will explain in 6.1.2. It is also interesting to observe how rules act (and do not act) as mechanisms to manifest these assumptions and individual affectations as generalized meanings of pollution in the office: As it is unclear at what extent smell and sound become a nuisance to others, a simple apple becomes a potential disruptor.

6.1.2 Regulations in the Making

In this section, I will tell the story of how rules came into being and how they are constantly negotiated and evolve. As mentioned in the introduction to this segment, regulations can be understood as ontological experiments: Their outcomes are unpredictable, they are never fully completed, they enroll employees in constant maintenance and negotiation, and change the meaning of actors over time (see Jensen & Morita 2015).

---

[21] Particularly by higher ranking employees, who see themselves as responsible for adhering to legal frameworks.

I have learned from interviews, that before moving to the new open plan office and during the first year the explanation and negotiation of office rules took place in a participatory format, allowing employees to voice their concerns anonymously via a "concern box".

"Yes, I do think that the emotion box was a really good idea. It doesn't directly change things, but it sensitizes people and you notice [what others care about]…" (Ms. D)

These concerns were then discussed in employee meetings and respective rules were established. Concerning workplace temporalities, this indicates that this maintenance practice (of negotiating rules) used to be an institutionalized practice that aimed to engage as many affected individuals as possible in order to foreclose possible conflicts. Foreclosing conflicts via creating a set of rules installs clarity and reliability, but also saves time and temporally delineates times of negotiation from other office rhythms. Organizing meetings at such a large scale in the open office implies not only finding an appropriate space for such interactions, but also crafting a temporal niche, a break from the usual workflow. As I have witnessed during the first weeks of the Corona pandemic, such forums for concern often seemed to arise at very short notice via email and strongly depended on the presence of the CEO and recent developments. The forum that was established to deal with the new office however is described as embedded in the regular employee meetings and consuming a significant portion of their time, which means that it used to be part of the organizational rhythm.

Later, when this format expired, due to a declining number of entries in the "concern box", heightened sensitivity among employees seems to substitute the rhythmically organized negotiation of clear rules, according to the accounts of the interview partners. This change is generally not portrayed as bothersome, as most interview partners felt like rules had been discussed exhaustively and that more and more "petty concerns"[22] seemed to arise. Still, this indicates a shift of responsibility from the subsidiary to the individual: Interpreting circumstances and deciding how to maintain order becomes a diffused practice, reliant on the sensitivity and knowledge of each employee. This speaks to the evolving meaning of actors; in the wake of declining platforms to produce consensus on rules, employees become the legislators, judges, witnesses and police in their cosmos. As I will discuss throughout the rest of this chapter, "enacting the office" becomes indispensable in order to manage temporal regimes that are congruent with a corporate (or subsidiary) telos in the open office architecture. In terms of employees' temporalities, the imperative to "enact the office" implies that not only maintaining order and agreeable circumstances are temporally unbound practices, but that

---

[22] Critiques that pertained to individuals and were not shared by larger collectives were portrayed as petty in interviews; i.e. complaints about people's sitting habits.

even negotiating rules to govern newly surfacing issues is no longer bound to the institutionalized rhythms of employee meetings. As this has been the status quo during my field work, and some forms of temporal maintenance are portrayed as vital to the open office structure, they are a centerpiece of my analysis.

6.1.3 Situating Sensitivity, Regulating Relations

This segment aims at disclosing my contemplations about the relationality of office regulations: As mentioned earlier, our situatedness (who we are in the arrangement, our partial perspective, the relations we are engaged in) affects how we encounter regulations, how they affect us, and which regulations we deem necessary. As discussed in the previous section, the shift from temporally delineated forums for the negotiation to diffused responsibility for interpreting circumstances and maintaining order, or enacting the office, makes the significance of situatedness for atmosphering the office especially evident. My analysis of the interviews indicates that the ways in which the web of office regulations is construed and enacted varies among employees: The performance of these rules is constantly negotiated, and these negotiations are often strongly tied to the respective employees' relationships to the open office. Here, it is important to keep in mind that personal relationships to the office are not mere products of embodied spatial situatedness but may be better understood as dynamic configurations of individual markers and office arrangements that arise more or less spontaneously. Employees' reflections indicate the significance of "individual markers" like specific professional tasks and norms (also specific legal circumstances that regulate distribution of information and bodies in space), preferences and even abilities, which are often described as emotional topics[23].

Professional tasks and norms sometimes influence: a) access to spaces by determining i.e. the department, the place one works in and professional interactions with colleagues, b) responsibilities by contractual relations with the subsidiary and individual interpretation of these relations, c) sensitivities, which in relation to professional tasks and norms are products of the aforementioned aspects of access and responsibility.

Preferences and abilities circumstance: a) access to spaces by letting employees distinguish between more and less preferred or accessible places; this is often tied to i.e. the technological infrastructure;

---

[23] I will get back to emotional topics, and the way they are perceived and handled, in segment 6.2.2.1.

where do you have fast internet access? where are there enough screens to accommodate my eyesight? where can I be without being compromised by allergy? As well as interpersonal relations and sensory factors like temperature and sound; b) responsibility: as they may alleviate from certain expectations or conversely make it harder to fulfil them; c) sensitivity for own and others' preferences may install a sense of responsibility for where to be in the office and where not be, what to do and what not to do.

These are factors that, combined with the office arrangement, determine access to specific spaces, responsibilities and sensitivities: They shape the ways in which individuals encounter, and therefore enact and construe cohabitation related maintenance practices. As I have previously discussed, this is reflected by the ways some employees feel responsible for maintaining order for the sake of others, which always relies on their personal sensitivities and estimations about how their coworkers feel (as illustrated by the next quote from Ms. B.).

Interviewer: "Are you under the impression that people are more mindful of each other?"

Ms. B: "I believe so. I think I would perceive this as an advantage (laughs), although an advantage that has been imposed upon us. I'm not sure, but I think so; everyone knows how they feel themselves and I think there are only very few who can really cope with it very well or think it is great (living in the open plan). We are sensitive to each other, because we assume that the others have the same problems. Now we are all sitting in the same boat here and somehow, we need to get through this together. (…) We spend so many hours here, so we try to leave each other alone."

Not only "leaving others alone", avoiding becoming a disruptor by sticking to rules and being sensitive to own activities, but also being sensitive to the needs of less vocal colleagues is seen as necessary maintenance work that becomes pressing, due to the looming awareness of the large amounts of time spent at the office among many interview partners. Knowledge or presumption about others' needs is derived from hearsay, concerns that have been anonymously voiced via the "emotion box", analogous reasoning; "what annoys me might annoy others" and recommendations by the corporation. Whenever individual enactments of regulations, sensitivities and boundaries, *situated perspectives*, come into discourse with the office space, there is a certain possibility that meanings, practices and relationships change, which may subjectively necessitate the making of new, or adapted regulations. This is part of what I understand as the creative potential of the office. It surfaces in nearly all examples discussed by interview partners and reveals that even these *fixed* rules are always subjected to interpretation (they are multiple, they have different meanings to different people) and engender different maintenance practices. In a later section about niching (6.2.1.1), I will show how issues that are not covered by rules bring forth temporal maintenance practices, understandings ("unspoken rules") and responsibilities.

72

6.1.4 Some Conclusions: Enacting the Office, Performing Politics

In this section, I will contemplate the temporal politics of the web/infrastructure of regulations, and what their implications are for the meaning of work and responsibilities that accompany it in the open plan office.

Throughout all interviews employees emphasize on regulations' potential to minimize distractions and interruptions in the office, which highlights the implicit objective of cohabitation related maintenance practices to *save time*. Still, it is not always easy to distinguish temporal maintenance practices, as many practices' relations to time are not straight forward, as discussed in the sensitizing concepts. As I have discussed in section 6.1.2, saving time took place when rules were established (via foregoing conflict and temporally delineating negotiations), but also more generally by quenching interruptions and integrating or synchronizing different rhythms (i.e. those related to sensory impressions) in the everyday.

The widespread consciousness that saving time or maintaining rhythms is vital to the functioning of the office agencement ("it has been imposed on us", implying that there is no other way of acting, if one wishes to maintain rhythms), combined with the master narrative of rules as social equalizers, shows that the temporal ideal in this field is a sort of diffused efficiency, that strives to engage all employees in cultivating an atmosphere which allows to accomplish as much as possible in a given time period, rather than spending the *right* amount of time in the office.

Thus, similar to individual, situated interpretations of existing regulations, understandings of work time become increasingly subjected to self-assessment and interpretation. It is no longer prescribed by contract alone, instead it is situated in the sense that it depends on individuals' sense of their professional responsibility or *performance*:

"In the end it is always about what you achieve, no matter what kind of office you are in. It does not matter how long I take to do so, except if I am paid by hours, but generally it is all about performance." (Ms. D)

This understanding of work time is not specific to the open office, it echoes (no longer new) trends towards projectified work, as discussed in chapter 2.1. The constant, or temporally diffused assessment of self and the environment might be a product of efficiency/performance-oriented models of work time combined with the nearly inescapable togetherness, the networked and emergent character of the open office. There have been several authors (Bröckling 2016, Chamberlain 2018) who argue that increased self-assessment and organization lead to worker's self-subjectification and self-exploitation, or moreover the enclosure of "private life" by work. In my opinion these are valid concerns, especially in regard to employees' well-being, however they are based on the imagined

dichotomy of "work" and "life" which is difficult to argumentatively uphold in the face of the complexity of lived realities (see Fraser 1985). As many of my interview partners have argued, work has always been part of their (social) life, regardless of the architectural form or contract it takes place in. Alas, there seems to be no convincing causality between present narratives of flexibility at work (as presented by designers' descriptions of open plan offices) and employees' well-being.

Nevertheless, the narrative shift to performance (instead of work hours) is not only expressed by contractual relations, but also by changing professional expectations in relation to inhabiting the office's constellation, its spatiality and atmospheric politics, as I will show in section 6.2.2. The transition from contract to increased self-assessment encourages to consider other aspects of shifting responsibilities that are less generalist and more specific to the open plan office and their implications of temporal agency.

"The employee gets this feeling (...) In the past, my boss always knew if I am here or not. Now he doesn't know anymore. This way, it is not necessary (...) not consciously, but this happens deep in the subconscious: "It is no longer necessary that I'm always here at the same time of day, because he (the boss) does not know if I'm here or not anyway." This way, you subconsciously feel more flexible, even though it's the same employment contract and the same structure." (Ms. D)

The way new challenges that arise in such an architecture are handled by employees as a collective, speaks to the diffusion of responsibility for maintaining the office's architecture in a spatial and temporal sense. The discursive making of regulations which is portrayed as compensation for flaws in the physical architecture, not only takes part in the performance of spatial and temporal architectures, but even the subsidiary's "social" and organizational fabric (i.e. relationships and hierarchies). According to interview partners, quenching interruptions not only targets things that cause personal nuisance, it also encompasses actively taking a stance[24] if there are signs of potential disruptions; for example if you see someone eating and you assume that this might cause discomfort to a timid colleague. Diffused responsibility for enacting the office means that individual temporal agency is experienced as not only synchronized with, or embedded in organizational time schemes, it seems that collectively performed time maintenance and governance inaugurates employees into the workforce, or even fuels the success of the subsidiary, its productive atmosphere, the agencement. This becomes apparent when paying attention to the synchronization of individual habits taking part in the construction of the office.

---

[24] This also pertains to acoustic disruptions, like chatter.

Spatially bound practices that are suspected to offend coworkers' senses, like eating or making noise, and contribute to how the office is perceived, are under constant scrutiny and negotiation. Alas, these negotiations fuel the creative potential of the office, which is often portrayed as "flexibility" by employees. Concerning the regulatory infrastructure of the office, they enable the constant adaptation of boundaries and access that are set by infrastructure, as theorized by Farías and Blok (2016b). Boundaries set by rules act as barriers to certain materials and practices, while simultaneously granting access to what is portrayed as a more stable, reliable atmosphere, or giving employees agency to address disruptions by installing a sense of accountability, as discussed in 6.1.2.

As I will discuss in section 6.2, governance in the open plan office goes beyond the infrastructure of office regulations as agent for spacing the office. It is more deeply enmeshed in its specific spatiality (the way the office is arranged or *spaced,* also acoustics or visuality, and the way it is imagined see Löw 2017) and the temporal ideal we associate with it. Regulations and boundaries become an infrastructure for atmosphering the office by distributing, *timing or situating responsibility* for atmosphering. I will further argue that the office space is imagined and understood through temporalities, particularly rhythmical sequences (section 6.2.1 & 6.2.2), while time and timing is made sense of through paying attention to more or less spatially bound atmospheres in the office (section 6.2.3).

6.2 Rhythms, Atmospheres and Spatiality: Conceptualizing a Cosmopolitics of Time

The second section of my analysis chapter is dedicated to thinking of the office space as coproduced with temporalities and rhythms of the office; its spatiality (in the sense of Löw 2017) is marked by rhythms, while simultaneously bringing forth rhythms and temporalities. Therefore, it is impossible to establish causality or disentangle these two concepts in a linear manner for analytic purposes, however I will do my best to isolate both ideas without neglecting their various conjunctions, so I must ask for your patience.

As I will argue throughout this part of my analysis, atmospheres are not only composed of objects and sensory impressions, but also of rhythms and the way they mingle. Their synchronicity is

relevant to the way we perceive atmospheres[25] (i.e. as harmonious, good, bad, disruptive aggressive, ...). Therefore, attempts at ordering rhythms (via regulations or boundaries) become atmosphering practices. Attempting to create an atmosphere via regulatory practices or tacit acquiescence that order rhythmical or other sensory compositions, is an inherently political act because it impacts how we encounter a space. Additionally, atmospheres contribute to site specific rhythms and our temporal experience of spaces.

To begin this section, I will explain how rhythms in the office *make* spaces, associated meanings, and spatially and temporally bound practices by referring to the example of meeting (section 6.2.0). Section 6.2.1 outlines some of the different rhythms I encountered in the office, and how they contribute to the morphology of spaces and atmospheres, and how they impact the way spaces are encountered. There will also be some discussion about how we comprehend space and timing via rhythms in this section (and via atmospheres in section 6.2.2). Then, I shall discuss how individuals employ niching to arrange or *design* their settings to either multiply or reduce their options for acting in a space (*see* Niewöhner, Klausner & Bister 2016). In 6.2.1.1 I will discuss the idea of spatial niches, which more or less corresponds with the classical understanding of the term: Spatial niches are sought after areas that shield people from intrusions via spatial boundaries, especially at particularly busy points in time. In section 6.2.1.2, I will argue that niches may also arise from rhythms in the office; staying late for example would be one of these strategies that seek to avoid the intersection of other office rhythms, without going anywhere else. There is of course no perfect distinction between these two categories that I have set up, however I hope they can contribute to a more reciprocal understanding of the relationship between niching and office temporalities.

In section 6.2.2 I will explain how atmospheres contribute to the temporal cosmopolitics of the office. As mentioned in the introduction to the empirical chapter, niching and atmosphering are attempts at governing, because they aim at controlling contingency and multiplicity of spaces. In contrast to niching, atmosphering is a collective process that engages multiple actors, which is why it is a useful concept for understanding *diffused temporal agency* as argued at the end of section 6.1.4. It is also concerned with governing possibilities of acting, agency, that arise from a spacetime through the arrangement of a space. This temporary arrangement, the atmosphere, is composed of sensory cues and more or less stabilized perceptions or imaginations of how to encounter it. These processes impact the enrollment of actors and nourish the web of regulations that has been discussed in 6.1. You will soon notice that there is a strong focus on frictions and disruptions in this segment. In my opinion,

---

[25] I will discuss this in section 6.2.1

they contribute to understanding the temporal politics in the open plan office: Frictions, disruptions and transgressions unveil the porousness of the space and the fragility of atmospheres within, which to me is paramount to understand the way rhythms disseminate and *time is done* in this particular architectural form.

In 6.2.2.1, I will discuss how atmospheres give a sense of spatial and temporal orientation, via the example of timing emotionally charged encounters. Then, I will argue my use of the term atmospheric polity, as entity that aims (and sometimes fails) to govern spatiality and temporality in the office cosmos via atmosphering in 6.2.2.2. Finally, I will address the intimate relationship between the movement of humans and devices in the open plan office and the making of atmospheres in 6.2.2.3 and 6.2.2.4: I argue that the location of actors and the rhythmicity of their movements contributes to the making of rhythms, desirability of places, and flows of information within the office cosmos.

6.2.0 Short Excursion: Learning, Interacting and the Spatiality of Meeting

In the beginning of my internship, my superior explained our future tasks and the company structure to me and a fellow intern in a small conference room. I started in January, it was very quiet and only few colleagues were in the office due to school semester holidays. The whole office seemed rather empty and it was unnecessary to reserve a room, by default. Then, a week later, things changed drastically, and we had to schedule our meetings beforehand, a room had to be reserved. It is important to note that as an intern, I was not able to reserve a room. When the other intern in my department announced that she was going to leave the job, she was instructed to teach me her tasks, so I could substitute her. It went without saying that we would need to occupy a meeting room to do so, in order to not make too much noise. As we were not able to make reservations for ourselves, due to lacking access to the reservation system, we either asked our superior, or just entered a vacant room. At peak times, we were sometimes intruded on by others, regardless whether the room had been reserved for us or not: It is not obvious whether the room is occupied from the outside. One could check if the room is reserved via the reservation system, but the spontaneous nature of seeking a room on short notice does not leave enough time to do so in all cases. Often, we met at off-peak times in order to avoid colliding meeting room schedules. If someone entered while we were inside, we would justify our presence by explaining that I was to substitute the other intern and *really* needed to be taught what to do before she left. To me, such considerations highlight the awareness that occupying a room, whether reserved or not, needs to have a more broadly accepted purpose, which I will address again later on, in 6.2.1.1.

Approaches towards meetings seemed to vary among coworkers: My superior had kindly arranged for me to assist the employee representative with her tasks, so I could get to know her and become better integrated in the field. This time, I was asked to meet rather spontaneously ("whenever you are ready") in the communication zone/coffee area in order to learn what to do. I often felt distracted in this area, as coworkers had coffee and conversations, and sometimes even engaged in some office banter with the employee representative. Even though she always reassured me that I would easily solve the task at hand, I was not always so confident in the beginning and tried really hard to remember everything exactly. When my confidence with the tasks grew, meeting in the coffee area became less stressful for me. On the contrary: I began to loosen up, had coffee, and could more easily follow and join the banter. I would not say that I was becoming less focused, or attentive, but rather more relaxed and engaged. In the beginning, I was slightly ashamed of asking seemingly obvious things that I used a lot of time to figure things out on my own. Later, I developed a better understanding of what a "good" and a "bad" question looks like, which saved me a lot of time and energy. This rather spontaneous, or should I say flexible attitude ("whenever you are ready") towards meeting turned out to be very comfortable after some time in the office (approximately a month), because I was able to discuss tasks and related questions shortly after completing them. I considered this beneficial, as the issues and contexts were still fresh in my mind and not shrouded by different, more recent tasks.

On the other hand, my main supervisor's approach to meeting (she was much busier as she led a department and was engaged in an additional, time consuming project at the time) being scheduled at least a day in advance, with an allotted room for a limited time period, made it necessary for me to take many notes about how I had done things, and what I had done exactly. I was not always mentally *in* the task: I had difficulties reconstructing details of calculations, recalling names of people I had contacted and so on, if I did not have notes and checklists of what I had done and questions that had arisen doing so. Nevertheless, it was an interesting experience for me to engage in constantly documenting my own work; I felt like it saved me a lot of time and energy in the beginning of every day, after breaks, and after finishing tasks, because I saw what was left to do and enjoyed crossing out items on lists.

As discussed in this brief ethnographic account, the format of a meeting, in a meeting room vs. coffee area, with reservation vs. spontaneous, with a fellow intern vs. superior, had quite an impact on the enrollment of material actors. It determined which devices were required, and how they could be used appropriately. If it was necessary to demonstrate something to a colleague, it would be ideal to use a large screen or in the worst case, find a table that allows them to sit next to you and peer over your shoulder. The material necessities that are associated with a specific meeting format would therefore impact the ontology of a space, how it is encountered.

For me personally, the measures to prepare for meetings (like documentation) depended very much on my meeting partners' style, their flexibility and the space in which the meeting was to be held and its technological infrastructures. Documentation became a time maintenance practice to me, particularly in the context of meetings, because it helped me to synchronize with others' schedules by providing a reference point from which I could, detached from my own rhythm, state of mind or contemporary work focus, jump right into a different topic at any given time (i.e. the time slot provided for a meeting). Additionally, the possibilities offered by a meeting would partly be determined by the equipment and material/architectural properties of the meeting area. Meeting in the coffee area seemed to make sense for more basic, trivial interactions like answering my questions, chatting and shorter, more spontaneous exchanges, while the meeting rooms are equipped with "skype devices" like speakers and a microphone, create a sense of privacy, and are in high demand at specific times.

As this account also depicts, temporality adds another dimension to a meeting's modality: The ways in which office rhythms, peak times, off-peak times, school holidays, lunch time, etc. impact demand and availability of meeting rooms, and the propensity of certain areas (like the office or the coffee area) to bestow an air of privacy upon interactions, speaks to the temporally (and rhythmically) contingent ontology of these spaces.

"In the afternoon you really notice that everyone is becoming louder and those who actually still need to focus on work become more aggressive because it is no longer possible [to focus]. You become very irritated because you are trying to focus but it is no longer possible to focus on work. And that is what I mean by aggressive. Not that people turn to violent means, but you notice that many people are much more irritated. […] in the afternoon, when it becomes louder, focus weakens, and you will notice that people will begin to talk even more, and it becomes even more difficult to work." (Mr. A.)

To me, this quote is exemplary for the way interview partners represent the relationship between atmospheres and temporalities. Here, rhythms in the office seem to engender alternations between *focused* and aggravated atmospheres. Even places "outside" the office, like the coffee area, are acoustically and visually quite distinct at different moments in time, and therefore offer rather differentiated environments for interacting. The necessity to occupy a meeting room may therefore also be contingent on the degree to which other spaces like the coffee area, or the office are frequented.

6.2.1 Rhythms and Ontologies

During my stay at the office, I have experienced its atmosphere as characterized by an amalgam of rhythms: From the everyday workday of employees, the housekeeping company's cleaning cycles,

weekly jour fixe and meeting rhythms, monthly monitoring of progress and the development of products or the annual cycle of school holidays which impacted the scheduling of vacation for parents (although I did not spend a year there, I witnessed the emptiness that the winter break imposed on the office).

"Generally, it works this way: the cleaning crew arrives between six and seven. The first thing they do is empty the litter bins, at least I hope so, nobody dares put anything inside anymore anyway. Then they wipe the table with a rag, I assume it's the same one they use for the whole floor. Then the boss of the crew comes and drives through the corridors with his or her automated wagon and sweeps the paths, and the rest is not cleaned during the week." (Mr. C.)

Things seemed to work smoothly, as long as rhythms were synchronized. The regular process of monthly monitoring (assembling data for this process was my main chore as intern) was a stable fixture of weekly jours fixes. This made communication with colleagues from the same department, and learning about the process easy and relatively free of frictions. On the other hand, collecting data was often not as smooth, and depended on other departments' cooperation. Even though all of them were clearly inclined to help and supply me with the necessary data (correct monitoring of their projects and positive outcomes depended on supplying the right data), it often took several attempts to get what I needed. I mainly attributed these frictions to their diverging work rhythms that I was seldom aware of. People from one particular department commonly had many appointments outside the building, busy meeting schedules and acted as bridge between multiple actors; they were engaged in a lot of synchronous communication and were difficult to get a hold of. This collided with my rather stable workday. At first, this frustrated me a little bit. I did not understand why it was still sometimes so difficult to get the right follow up information, despite receiving really helpful sounding answers. As my confidence grew, I got a better understanding of the problem and relaxed a little bit. I learnt how to deal with some things on my own, not feel annoying when sending reminders (my supervisor there taught me the skill of "urgieren", urging people for replies) or collect some information from other sources.

"You are in a company where not everything is always rhythmically ordered, because it is so small and has a relatively broad spectrum of functions." (Mr. C.)

My interpretation of why it was so difficult to get a hold of people in specific departments was reflected by interview partners like Mr. C., who also attributed the intersection of rhythms to the highly differentiated tasks that are accomplished in the office. Synchronizing habits with these other departments with very different rhythms seemed nearly impossible at times, due to the diversity of tasks and the unpredictable distributions of employees in space.

Making Atmospheres and Spaces

Apart from creating frictions in work processes or causing irritation and *aggressive atmospheres*[26], rhythms contributed to the making and unmaking of spaces via practices and habits we associate with certain atmospheres. In the valuation area, the daily rhythms, that form the typical atmosphere, were very tangible for me: Due to the close proximity to an area with a quite different demographic of employees (mostly men under 40), and the only very slight separation from the valuation area (a row of cupboards that do not reach the ceiling), the atmosphere and rhythms of this area seemed to seep into the valuation area via sound and movements. This sort of disruption is not only allowed by the lack of spatial boundaries, it also disrupts the atmosphere and spatiality of the valuation area.

The people from the area with the 'intruding' rhythms, seemed to work quite independently on own projects but commonly interacted with one another to get advice for certain problems and learn from colleagues' experiences. They often went to lunch in groups, usually also with people from other areas, whom they picked up after agreeing on a time via skype chat (not call). I was also often asked out to lunch by a group of ladies, who usually picked me up at 12 sharp. As I did not have access to skype, going to lunch together usually worked because it was routine, and they knew where to find me most of the time. When I was somewhere else, like in a meeting, or if a lunch was delayed for some reason, eating together was a matter of luck. Anyway, the rhythms of this busier, louder and more *interactive* area of the office was more dominant in the neighboring areas than in others, and often seemed to usher in certain moods[27] (at least I seemed to be conditioned to become hungry whenever I noticed that it was time for lunch). Interview partners and other coworkers seemed to feel similarly about the permeability of rhythms: The maintenance of atmospheres via mutual understandings of etiquette in distinct departments seems to be perceived as important[28], while the porosity of the office enables the intrusion of "foreign" rhythms into their habitat. According to Ms. D, noise from other

---

[26] As Mr. A's quote about *aggressive atmospheres* at the end of section 6.2.0 nicely shows, he experiences the dissonance between rhythms of people who make noise at the end of the day and those of people who still need to work as constitutive to an aggressive atmosphere. People who are not yet ready to engage in banter experience disruptions to their work rhythm by intersecting sounds that come from rhythms of people who are done with their work.

[27] Something similar is discussed in 6.2.2.3; here too moods or atmospheres seem to emerge rhythmically with broader office atmospheres.

[28] To me this speaks to enacting office boundaries via different, spatially contingent practices.

departments influences her work rhythm and inspires her to adapt her working hours to the rhythmicity of these acoustics.

"(…) my level of concentration depends on how many people are in department X, because they are the area that produces the most noise, because they make the most phone calls. And they make so many phone calls, that it doesn't make sense to go outside to make a call. Obviously." (Ms. D)

The way Ms. D. frames the legitimacy of making phone calls in the open office, points to the importance of frequency and rhythm; the more calls you make, the more reasonable it is to stay put instead of seeking a niche. To me this marks an interesting nexus where the logic of minimizing noise pollution and the temporal normality of work and the ethics of time efficiency meet to form the atmospheric amalgam of different spatial entities. The way employees assemble in areas is roughly ordered by departments, and therefore simultaneously via work habits and their rhythmicity (people from a certain department make many calls, which is also why they accumulate in a certain area).

Here, issues arise for people whose work rhythms are atypical for their department, or asynchronous with department rhythms; Ms. D. for example finds her duty to make many calls at odds with the atmospheric politics of the area she would usually work in and the rhythms of her colleagues there, but is inclined to stay anyway, for professional reasons (being in the vicinity of "the right colleagues"). The high frequency of calls and the associated noise level in "department X" indicate how rhythms (and acoustics) can relate temporality to space, as increased frequency of specific sounds contributes to the making of spaces in a twofold way: On the one hand, the way spaces are used (see *spacing,* Löw 2017) and the intimately linked site-specific temporality, or rhythmicity of a space, are indulged by atmospheric components, like in the example I discuss here, acoustic habits. On the other hand, this material (also acoustic) composition of rhythms contributes to the interpretation of spaces (here: which practices become acceptable in them), or as Martina Löw (2017) theorizes, *Syntheseleistung*. According to her, imagination, perception and memory charge spaces with symbolic meanings that contribute to how they are used, their *spacing*. This coproduction of atmospheric norms, rhythms and spaces also emerges from Ms. D.'s interpretation of where and when it is acceptable to make calls in the office. It impacts the way she uses spaces, and in doing so her habits take part in the enactment (and spacing) of spaces and the maintenance of atmospheres and their site-specific rhythms.

Making Ontologies in Time

Maintaining (i.e. not disrupting) the collective "productive" work atmosphere (which is associated with accomplishing tasks according to interview partners) is pursued via regulations and boundaries that aim at synchronizing individual rhythms, or at least keeping them from colliding via material and spatial

segregations. Rhythms therefore affect office regulations and when and how they come into effect; occupying a meeting room has a completely different meaning in peak and off-peak times as discussed earlier in this section. Therefore, the meeting room's ontology is multiple not only in the sense that the room serves different purposes, is encountered from different standpoints and is afflicted by different meanings, it is also contingent on times and rhythms, which I will refer to as temporal ontology. The ontological question ("what *is* a space?") is amplified in the open plan office, as the multiplicity of perspectives and their truths is appended by a space's plural, temporal dimension. Thus, in order to thoroughly answer "what is a space?", it becomes crucial to address not only the multiplicity, but also the plurality of forms to encounter areas at different times and ask "what is a space at a certain point in time?".

According to Ms. D. and Ms. B., *peak times* refer to times of high attendance: They do not always affect synchronicity of rhythms and atmospheres negatively, however they definitely impact how the office is encountered and how employees distribute themselves in the office, as I will explain in the following two sections. Generally, peak times are not appreciated by interview partners. Interview partners and other coworkers have alluded to "needing to flee from the office rhythm", as I will elaborate in sections 6.2.1.1 and 6.2.1.2. i.e. to interact with colleagues, "leaving the office in order to think", or being least productive at peak times.

 "It depends on the day… on Mondays, Tuesdays, it's worse. That is the downside here, with the remote days, however it has nothing to do with the open plan office. We have to bundle all meetings on specific days, because of remote working. And here, we have appointment frenzies on Mondays and Tuesdays. That means that people already arrive at eight or half past eight… I'm not here on Wednesdays. On Thursdays and Fridays, they arrive at half past eight or nine. (…) And department X becomes really restless at half past eight, half past nine. Until then I find it pleasantly calm." (Ms. D.)

"[Peak times are] before lunch, from nine to twelve, because then there is a lunch break. Many people are gone during the lunch break, so it is a little bit calmer. On the other hand, there is a lot of running around… difficult. But of course they [peak times] are the two or three hours before lunch and two or three hours after lunch. Still, it is hard to determine because many people have off-site appointments (…) the number of people here varies, it depends… it also depends on holiday times. Of course it is much more pleasant during the holidays because less people are here, that's out of the question." (Ms. B)

It seems rather paradoxical then, to think of the office cosmos as fertile ground for individual rhythms, if people feel disrupted by effects that are its direct result and are hindered from pursuing their chores in order to maintain a productive atmosphere. The making of new, controlled spacetimes that accommodate employees' needs, beyond pervasive rhythms, highlights the creative potential of the open plan office. I will dedicate sections 6.2.1.1 and 6.2.1.2 to the exploration of so called spatial

and temporal niches and explain how their making relates to rhythms and spatiality in the open plan office.

6.2.1.1 Spatial Niches

Throughout the course of my internship, I developed a tacit understanding about when it was legitimate to be where, in particular where to meet. As discussed in 6.2.0, I Initially experienced spatial niches as spaces to transfer knowledge. They would prevent you from disrupting colleagues in the process and they helped my superior shield herself from requests and focus on our conversations. In this segment, I will explain how niches and their technological infrastructures contribute to normative inclinations that strive to determine how niches should be used. I will then discuss how these inclinations impact the way employees encounter niches and how this relates to their perception of the office and timing interactions. Then I will address the situatedness of niching which speaks to the way access to niches is distributed among coworkers and argue why differentiating between niches matters.

Enrolling Devices I: Adapting Spaces

In my training phase, the meeting rooms with their specific technological infrastructure, like ethernet outlets and especially large screens on the wall, were central to my job initiation. The screens became a particularly prominent part of the pedagogical trajectory: they served to demonstrate how to do, or where to find things, particularly in folder systems. Later, when the holiday time was over and regular meetings and jours fixes became more common, screens were used to display outcomes, demonstrate what has been done, compare results, and even to read emails together in case of discrepancies. In a jour fixe setting one could say that they engage others' in the production of evidence, by letting them bear witness to demonstrations of pending issues, problems, product developments, and other calculations that were commonly visualized via Excel charts. Charts that were meant to keep track of processes and responsibilities were referred to as evidence charts; they were often the centerpiece of jours fixes in my department and guided many discussions. Another department's jour fixe, that I was allowed to witness, was more structured along protocol; all participants seemed to know what happened next. Here the individual participants' presentations of their achievements and overviews of things that were pending reminded me of school presentations, as they took place in the order of the seating arrangement and were followed up by feedback from superiors and a CEO. They seemed to follow similar schemes and covered the same topics. Data for accompanying representations had to be sent in beforehand and was displayed on a large projector for everyone to comprehend.

Both the well accepted pedagogical and the demonstrative uses of the meeting room show the normative inclination towards using the meeting room as an interactive space; using the meeting room to quietly work next to a colleague or write emails, seemed to be less legitimate than having an intense phone call inside (yes, not only in situ interactions are legitimate), or a discussion with a colleague. For example, I was told by a colleague over lunch, that he had real difficulties working in his department, and that he spent a fair amount of his workday in the vicinity of the external conference rooms, anticipating their vacancy. I imagined this strategy to be somewhat unpleasant, because of the high likelihood of being kicked out by people who had made reservations. Whenever someone picked me up to discuss something work related (whether scheduled or spontaneous), and a solitary colleague was occupying a free meeting room, it was always easy to take over the space on the grounds of needing to discuss something.

The consequence of this prioritization of synchronous communication in meeting rooms, paired with the common necessity to schedule these interactions beforehand, generally reduces the possibility to communicate spontaneously, according to Mr. E.:

"It is not only the disruption, the noise, that automatically emerges. It is not *desired* that many people talk. And that is why the exchange of information must be organized. It is practically never spontaneous, and therefore becomes less and less."

Allusions to the undesirability of verbal communication within the bounds of the shared office have also been made by other interview partners like one of the technicians, who is still in the process of teaching his colleague. As the length of their interactions is not always predictable, they cooperate in the communication zone/coffee area that is neither subjected to any particular acoustic norms, nor is the duration of their stay limited by coworkers' reservations (unlike the meeting rooms). Still, its noise level was impacted by employees' rhythms: During busy office hours, the coffee area always seemed to be rather calm in my recollection, it seemed to be most frequented in the morning, after lunch and later in the afternoon.

Situatedness

Concerning different experiences with niching, spatial niching was mentioned by a number of people, to my surprise especially by people in more senior positions, even one of the CEOs. This surprised me, as the CEOs have a small meeting room in their area, which was even referred to as Mr. F's office when making the appointment for the interview. Generally, this particular room is supposed to be available to all employees of the subsidiary upon reservation. On the other hand, accounts of employees showed me, that it seems to be commonly accepted that it is mainly meant for CEOs, and that it is bad manners

to use it except for interactions with CEOs. For CEOs on the other hand it seems to be common practice to just occupy a meeting room;

"(…) if I feel like I need my peace for fifteen minutes, I'll just go inside any room and say now I'm not available." (Mr. F)

To me, this indicates the situatedness of niching: While organizational hierarchies impact the use of facilities and mobility[29], it is important to acknowledge that things are not that simple in regard to the relation between spatial and temporal niching: easier access to meeting rooms does not generally make temporal niching unnecessary, as interviews with more senior employees and CEOs show. Rather than status, access to spatial niches seems mostly tied to practices (what do you need the room for?) and office rhythms (peak times vs. off-peak times). Therefore, individual situatedness in regard to professional tasks and norms[30] does matter, but rather in terms of legitimizing niching in the shared environment via practices tied to individuals' jobs, than merely status.

Niches as Layers in the Spectrum of Temporal Flexibility

As I have described in 6.2.0, the coffee area's spatial properties, in the sense of Löw (2017), are quite distinct from those of the meeting room or other areas. I argue that places' distinct spatiality, being the consequence of combined material and semiotic effects (*Syntheseleistung* and *spacing*), but also timing and rhythms, has implications for how and when they are used by employees and what they *do* as spatial niches. In order to make this point transparent, I will make a rough distinction between two kinds of spatial niches: the *internal*, and the *external* niche. There is of course no clear distinction to be made, as all spaces in the office bear properties of both categories, but it shall help to roughly understand the characteristics, differences and similarities of niches without losing focus of their ontological multiplicity and temporal plurality.

The meeting room for example has the capacity to shield both internal and external actors from each other, whereby it is not perceived as external to the shared space of the open plan office. Still, it is sought out mainly to "protect" *from* the shared environment; either to discuss topics that are personally or legally sensitive, or for tasks that require quiet and focus, like in the case of the CEO (as I will discuss later) and my learning process as mentioned above (although access varies of course). Generally, one could say that employees mainly imagine and understand meeting rooms as spaces that

---

[29] There will be more discussion about office mobilities and their relation to atmospheres in section 6.2.2.3.

[30] As discussed in 6.1.3.

materially shield them from the open plan office's disruptive spatiality[31] (like its acoustics, movements, open visuality and general porosity). On the other hand, meeting rooms' capacity as a niche is temporally limited, as one has to schedule meetings and presume to be disrupted by coworkers who have either booked the space or spontaneously attempt to use it.

On the other end of the spectrum, leaning more towards an internal niche, there is the coffee area. I call it internal, because it is perceived and used as a shared space which does not require scheduling. As mentioned earlier, it is used to congregate during break times, like around lunch or in the beginning or the end of the workday (which varies), and sometimes even for interactions of a more professional nature or solitary work. Office rhythms are often felt in the coffee area; moreover, it is part of the shared space, it is not thoroughly external to the office. Even though the coffee area is rather vacant throughout most of the day, it offers no guarantee of privacy, of course. It acts as a shield or buffer to the shared office, as the employees come to discuss private and professional matters, that require little to no protection, i.e. they are not sensitive. The objective for using these spaces is more associated to avoiding acoustic pollution and creating commotion, as mentioned by Ms. D. who feels compelled to leave the office for calls.

"If I had to make phone calls all day, I could also not always leave the office. Now I do so. I always say I walk around more than I work, because I always leave the office for phone calls." (Ms. D)

Still, the coffee area may also provide a temporally less limited sanctuary from the busy shared office, as discussed by the technician, Mr. A:

"Because I cooperate with G. a lot, it is more convenient outside [the coffee area/communication zone], because it is calm. It is almost even calmer than inside [the office]. And because we still work on many projects together, and I am still introducing him to how our systems operate, it is quite convenient outside." (Mr. A.)

While this sort of niche poses fewer temporal limitations because there is no official scheduling, the lack of distinct policies regarding noise, movement and so on, contribute to spatial niches' temporal ontology, as discussed in 6.2.1 and 6.2.2.

While both kinds of niches, the "external" and the "internal", become part of office rhythms, as discussed in 6.2.0, they have slightly different positions on the spectrum of what temporal flexibility can be in the office: On one end there is the necessity to self-govern in order to comply with imagined office orders (internal niches tend more towards this one), on the other end there is the freedom to choose an appropriate place or appropriate a place to one's needs (external niches tend more towards

---

[31] For a more detailed discussion see 6.2.2.2, Disrupting Polities, Rearranging Space: Sound as Disruptor of Atmospheres.

that end). While using "external" niches mainly aims at getting protection from the office and being independent of its disruptive spatiality and rhythms, the (temporally relative; this depends on demand and frequency) necessity of finding a free slot acts as a barrier to accessing such spaces. This renders achieving independence from pervasive office rhythms more difficult than the contrary, which would be self-governing acoustic emissions and adapting individual working rhythms by seeking an internal niche. The spontaneous possibility to do so makes internal niches more readily available, which emphasizes the significance of self-governing rhythms via synchronizing with broader rhythms (or as I shall discuss throughout 6.2.2, the atmosphere) instead of following personal work rhythms. This differentiation of niches' advantages and accessibility, which is conditioned by hierarchy (in the case of the CEO) and office temporalities (in regard to availability) implicates the layering of niches. This layering is intimately tied to their temporally spontaneous (micro) spatiality that exists in relation to the overall spatiality of the whole open plan office.

6.2.1.2 Temporal Niches

Not only do synchronous interactions become decreasingly spontaneous (or rather somewhat disincentivized) due to the limited number of spatial niches, the understanding that scheduled, synchronous interactions legitimize spatial niching, makes spatial niches less eligible for *other* practices in peak times. Hence, infrastructural ontologies expressed by the layering of spatial niches may limit the accepted possibilities of spatial niching and require temporal niching for activities that "do not necessitate" meeting rooms.

"I arrive at 07:00. From 07:00 to 09:00… I cannot stay late at night because of my son (…) I'm here at 07:00, because it is peaceful here from 07:00 until 09:00. (…) From 07:00 to 09:00 I do all the email work and things, and I can achieve twice as much than between 09:00 and 14:00." (Ms. D.)

This quote shows Ms. D.'s attitude towards disruptive sound coming from other departments; instead of accommodating the space to her needs, or finding a different area that fulfils her needs (for example by calling out colleagues, communicating her concerns to superiors, going to a small conference room), she works around the problem by changing her schedule. The reliability of certain office rhythms allows her to tailor her temporality to instances that allow her to complete her work, while the facilities/spaces that protect from disruptions are reserved for synchronous interactions. Knowledge about office rules and rhythms (i.e. when is department X loud?) gives employees a sense of orientation helping them find temporal niches. I argue that niches in the open office are not mere protective spaces, but can be better understood as temporal loopholes that are crafted between rhythms and offer protection from disruption and a sense of privacy. Temporal niches are usually quiet

or calm times like school holidays, bridge days, off-peak times, or during conferences that host large portions of the staff. They must not be *inside* the office; the "remote day" for example is described as a time where one can really focus and work on things that require a lot of concentration without distraction by all interview partners:

"(…) sometimes you just need some peace where you can sit down and say "ok, now I can think." Or if something is urgent, I can take it home, or do it on Friday on my remote day and sit at home, in my office, and think." (Mr. C)

All but one interview partner considers the remote day as a time for more focused, productive work. The prevalent opinion seems to be that the remote day was institutionalized by the company to avoid overcrowding, which might be unnecessary in the case of this subsidiary as the office provided seems to be large enough to host all employees at once, or at least offer all of them a desk. Interestingly, using the remote day to compensate for the office's deficits is even explicitly proposed to employees of a certain department:

"(…) Mr. F. even tells the people in department X to use the remote day to work with the Value Creation Software or something like that, because then they can get some peace." (Mr. E)

The way the remote day is understood and enacted as temporal niche, reflects the appreciation that not only interactive practices like synchronous communication (i.e. teaching, conveying knowledge, comparing results and setting goals) require niches. It seems to be understood that solitary work, like the meticulous typing in of data, calculating but also asynchronous communication might need refuge from the office clutter. In contrast to spatial niching, the prime objective of temporal niching is not only protecting the office rhythm, the agencement from acoustic "pollution", but rather to protect the individual rhythm from pervasive rhythms of the office. This also applies to spatial niching; Interview partners do emphasize the importance of containing certain information, warranted by compliance and industry specific regulation, however this seems to be a rather formal aspect.

"If we talk about these kinds of topics [i.e. value development], we can't do so in the open plan office. We need to go inside a chamber, and there we are (…) that's why we hold the jour fixe entre nous, because there are sensitive topics. And I am very careful with these things. I trust everyone, it's not suspicion, but I am legally obliged to be very careful here [in the open office]." (Ms. D)

In my stay in the field I was astonished how well regulating information flows seemed to work in this rather densely populated space, however it is indistinguishable whether interactions were outsourced to meeting rooms to safeguard sensitive data, or to protect the office from noisy discussions. Either way, it comes at the cost of disincentivizing synchronous communication in the office. Hence, reasons for niching in the open office speak to certain priorities, like the prioritization of collective rhythms over individual rhythms.

Additionally, the desire for more potent boundaries exhibits the tediousness of finding such niches in the shared environment. The pervasive, polyphonic and often unpredictable character of rhythms in the agencement impedes the maintenance of personal workplace temporalities. As I will address in the section on atmospheric polities, the way rhythms become disruptive/pervasive, contributes to how we encounter atmospheres and spaces, regarding productivity in particular. Often, coinciding rhythms bring forth unanticipated circumstances that require new, spontaneous maintenance practices. "Better" spatial delineations are expected to help maintain specific orders and rhythms in atmospheric polities[32], and also facilitate niching. As further examples will show in section 6.2.2, attempts at atmosphering within polities (like fixed seating arrangements or other site-specific ways of dealing with issues), that aim to install reliability and order, can also be understood as temporal maintenance practices.

6.2.2 Atmospheres as Temporal Distributors

"In terms of sensory impressions, I don't think it [the atmosphere] is a success. In comparison to the campus of company X they did not do a good job. I find the surfaces' haptics really bad. For me, they also failed to create pleasant optics… at least we are lucky to be olfactorily neutral. However, I must admit that I am very sensitive, but I usually don't object because that is my own issue. It can occur that coworkers take off their shoes in the office, which is alright. Still, I smell it because I am extremely… but that is my problem, I can't change anything about it. I can't forbid it; it is my problem." (Ms. D.)

This small glimpse at a coworkers' portrayal of the office's atmosphere, hints at the intimate relationship between spatiality, in Löw's (2017) dual sense (and also its sensory implications), and the politics and governance of spaces. Questions concerning which practices and behaviors are deemed acceptable, influence which impressions (like smells) *are supposed* to contribute to the atmosphere, and which become disruptors and matters of concern. As discussed in section 6.1, the dense *web of office regulations* that is performed via various regulatory practices, becomes infrastructural for governing what happens in the office space. It strives to accommodate and enact employees' imaginations of how to make work easier or even possible by synchronizing habits and rhythms. Conceptualizing office regulations as infrastructure helped me understand that the way regulatory practices or boundaries are enacted and encountered is highly situated and relational (as discussed in 6.1.3). Additionally, they are continuously adapted to perceived basic conditions for doing work in the

---

[32] There is a more detailed discussion of this term in 6.2.2.2.

office[33] and under scrutiny whenever such perceptions evolve. While I have dealt with the way time flows into navigating, negotiating and evolving these infrastructures of boundaries on the level of coworkers (section 6.1), and how rhythms and temporality configure spatiality (also normative inclinations about how a space ought to be used), this final, main section is dedicated to the analysis of how the material (i.e. sensory) composition of spaces, the *atmosphere*, contributes to the experience and governance of temporality in the office and coalesces with these boundaries.

As mentioned in the section on atmospheres in the state of the art, Göbel (2016) defines *atmosphering* as practices that engage in composing a specific aesthetic, sensory experience, an atmosphere, in order to reduce the multiple ontologies of a space. In Göbel's sense, atmosphering is an ordering practice that mainly involves stabilizing the memory and meaning of a space via visual compositions. In my opinion, one can extend her notion of atmospheric politics (the struggles over how a place is perceived; its epistemology and what it means and what it should be used for; its ontology) and its temporal implications (as memory practice) beyond the visual design and redesign of an architectural space, to the ongoing governance and futuring, also via the composition of other sensory experiences and rhythms. I think atmospheres have a dual relationship to temporality:

1) They may be ephemeral and emergent, as I have discussed in the section on rhythm and ontology, where I have argued that the meaning of spaces varies at different points in time. As amalgams of sensory impressions, they are constantly in flux. One atmosphere will probably never totally resemble another, however there are perceived commonalities like noise levels or other factors such as reoccurring tensions (is the boss in the office today?) that give them a certain similarity and help us make sense of them.

"The atmosphere… I know that the atmosphere is different when he is here. When he is absent, it is very easygoing, comfortable and leisurely. And if he is here… its busier and there is a lot to do." (Mr. F.)

2) Upon considering that a sizeable portion of these sensory impressions arise somewhat spontaneously (as products of the relations in the office, like human sounds or occasionally even lighting), the way these impressions coalesce to form an atmosphere depends on the rhythmicity of their occurrence and the concurrence of rhythms. Alas, atmospheres in the open plan office can be understood as a more or less orchestrated arrangement of rhythms and practices that bring forth sounds, smells and other impressions (like a breeze of fresh air that comes from a window that has been opened because it is just too hot today).

---

[33] This has been discussed in section 6.1.2.1

Orchestrating Time through Atmosphering

Atmospheres in the open plan can, as I will argue, be understood as collective orchestrations of time (and space), creating a temporary sense of coherence, familiarity and reliability via spatial arrangements, but are simultaneously fragile and permeable. Whether interview partners characterize an atmosphere as "good" or "bad" seems to be related to how easily they can make sense of their surroundings:

"It is very unpleasant to me if my back is facing the open space. If someone is sitting behind my back, I find it even worse because I can't see what they are doing. It is an archaic sensation that has nothing to do with "this person is looking over my shoulder, I feel observed". No, it is simply about the need to be near the wall." (Ms. D.)

As the previous quote shows, difficulties to comprehend surroundings, what the person behind you is doing, are experienced as very unpleasant. While the synchronicity of rhythms in the office or the reliable placement of objects and people for instance can contribute to symphony of rhythms, interferences (particularly unexpected noises and movements that cannot easily be assigned a location or origin) and intruding rhythms from other departments concoct a cacophony. As argued in section 6.2.1 the degree of *smoothness* to which rhythms coalesce, informs how employees encounter atmospheres in the office. For me, Martina Löw's conception of space is helpful for understanding how the interplay of material and symbolic factors may let us experience places as *spaces with distinct characters*. Atmosphering, in the sense of Göbel on the other hand, strives at governing this experience by orchestrating the content of spaces both materially and symbolically (what is appropriate, what should be done here).

In terms of temporality, atmospheres and their sensory specificities seem to bring forth temporally bound (and spatially not so bound) rhythms: During my stay in the field, I noticed that different rhythms (that originate in a space), interests, practices etc. do seem to bring forth somewhat spatially distributed atmospheres and times, as discussed by Guggenheim (2009)[34]. In my experience, the passage of time felt very different in areas: In accounting, there did not seem to be such stark contrasts between mornings, lunchtime and the afternoon. People remained rather calm and tended not to rush to lunch at once, but in small groups. The area was almost never completely empty (not even in the late evening), and there seemed to be a constant humming of quiet conversation and the steady rattling of keyboards. As I have discussed in section 6.2.1, this is in no way representative for the office as a whole: the valuation area or "department X" have very different temporal structures.

---

[34] There is more discussion on this in chapter 6.2.2.2.

Lunchtimes are very defined, the frequency of phone calls is much higher, there is greater differentiation between "peak times", the everyday and off-peak times. Still, I would not say that spaces' temporalities are completely distributed in the open plan office. Atmospheric diversions were not clear-cut, rather they seemed gradual and highly dependent on spatiality. The degree of porosity of material boundaries as well as distances seemed to determine the distribution of atmospheres in space.

In relation to Guggenheim's conception of spatially distributed (and segregated) times, it felt like the office's architecture and fragmented spatiality with various atmospheres impacted the fluid and overlapping sensation of time which varied in different spaces but was not bound to singular spheres. The passage of time in the accounting area felt more fluid and less segmented, while spending time in the busier "department X" and afflicted spaces, was segmented by mealtimes, regular meeting times and other rhythms: Almost as if rhythms in the office are amplified by their specific atmospheric politics, and spatial and material relations between areas (like in the case of the valuation area). Hence, the distribution of rhythms and spacetimes for specific interactions is intimately related to material spatial arrangements (6.2.2.1), especially boundaries and distance (6.2.2.2) and movements of devices and bodies (6.2.2.3), as they have different degrees of ability to detain and distribute rhythms in the office. As argued earlier, motility of rhythms is a matter of concern in the office, as it seems to determine employees' perceptions of atmospheres.

6.2.2.1 Making Crevices for the Personal

Some of the interviews displayed a common concern about the relation between spaces and the right timing to address certain topics. In many cases it is clear where and when (not) to discuss certain issues, especially those related to compliance policy and national legislations governing specific information flows. Appropriate handling of less explicitly regulated interpersonal issues, mainly referred to as "emotional topics" in interviews, was characterized as more enigmatic. The difficulty of finding the right setting for emotionally charged issues was often subject to complaints and portrayed as puzzling and hindersome. Emphasis on these issues varied among interview partners: few portrayed "emotional topics" rather disdainfully, as somewhat frivolous and infantile (the terms *kindergarten* or *circus* were used in this context), while others highlighted the informative nature of emotional exchanges (here the display of emotions was described as *authentic*, with the potential to raise awareness for important concerns). Alas, appreciation for opportunities to openly display emotions was viewed ambivalently among employees (with a slightly gendered bias).

"Anywhere many people assemble, the pecking orders and very personal issues become visible, things pop up that look like in a kindergarten. Things just repeatedly come through and I always say: humans go to kindergarten and with increasing age they become quirkier again." (Mr. C.)

"I don't have this absolutely authentic exchange of information that I used to have anymore. If a conversation took place in my own room, I would have said "Close the door". We just used to close the door behind us and spoke right away. Sometimes you just explode, it can happen to anyone, even I am sometimes angry about something. In the past we simply said, "Please close the door now", then we talked things out, instantly, in the emotion. Then the issue was resolved. Now you need to find a place. (…) Everybody notices. Every little problem becomes immensely meaningful, because suddenly "Now we have a problem, now we need to look for a place. Either you make a mountain out of a molehill, or you have to bulldoze the mountain early on, by not addressing it. I don't like either option in a leadership position, because it is important to me that coworkers communicate problems to me. In the open plan office, this is impossible." (Ms. D)

Ms. D's quote nicely conveys the frequent concerns about not finding the right time and place to articulate spontaneous emotionally charged issues that arose in most interviews and numerous informal conversations. The perceived lack of space for spontaneous, emotionally charged encounters relinquishes them from everyday life in the office, and relegates them to scheduled appointments according to employees, which is said to deplete them of their *authenticity*. Alas, this implies that many employees link spontaneity, immediacy and everydayness to genuine information, while they see a distorting potential in scheduling or delaying emotional interactions (similar to Mr. E's opinion on how exchange is inhibited by the office structure). To me the issue of timing and setting "emotional topics" is another instance where space is constructed by the interplay of imaginations about what is appropriate (which is also established via rules) and its material (and human) compositions.

In regard to arranging emotional exchanges, time seemed to play an essential role: in the evenings, when most employees were gone, there seemed to be a surge of conversation. It would be wrong to say that topics were not work related, I would rather say that opinions about all sorts of processes, sensory or interpersonal experiences surfaced and were debated. It seemed like the daily rhythm transformed the office from a place of more or less solitary work to a lively space that fostered heated debates and gave room for expressing and exchanging opinions. I often encountered rich descriptions about the histories of specific legal frameworks, passionate explanations about taxation systems, politics, how to deal with certain clients, and generally more in-depth knowledge and discussions about "how things work around here".

"At a certain point, when you get to know people and their private backgrounds, the private and the professional mixes a little bit. So, you talk about professional topics, but sometimes private questions come up too. I think it is difficult to separate these things and that they contribute to what we understand as work; things are not always purely professional, the human aspects are fundamental." (Mr. A)

Atmospheres as rhythmical and sensory compositions not only offer some spatial orientation (as they let you feel where you are and how to behave there, like with calls), their relative rhythmicity also renders them time measurement devices in a certain way (when is it time to address "emotional topics"). As everyday rhythms play into the frequentation and acoustics of spaces, the sensory cues arising from an office's atmosphere might indicate "what time it is" in this place. Time measurement might by itself be a misleading term, as rhythms allow you to make sense of time by feeling what is going on around you, what acting appropriately is at *this moment in time*, and also understanding temporal relations (through repetition and the everydayness of rhythms; like "when is it okay to go home?"). Alas, offering spaces for emotional interactions, such as niches or small meeting rooms alone is insufficient; the temporal telos they are embedded in, whether scheduling is necessary, may, under certain circumstances exclude certain spontaneous interactions from taking place in the open plan office. On the other hand, whenever the peak times and the accompanying regulatory practices receded, the space tended to open for conversations that could not have taken place during busier hours: In the afternoon, around five, things tended to be more relaxed and casual conversations were not uncommon in the office. When a particular CEO was in the office, the atmosphere was also noticeably more solemn and tense than when he was not there.

Understanding atmospheric agency in the office as rhythmical *with* the office flows, means acknowledging its role in the cosmopolitics of an office; its emergent ontology that coalesces with agencement timeframes and rhythms, sets boundaries between different ecologies of practice not only spatially, but also temporally. In this sense, atmosphering practices, like making rules, negotiating certain behaviors (verbally or nonverbally), separating different areas, are part of the repertoire of temporal agency, as they aim at stabilizing specific, coexisting temporal regimes. Alas, atmosphering in the office seems to be a twofold time conscious governing practice: 1) because it not only accounts for office rhythms, by establishing atmospheric cycles around them; 2) concerning governance the version of reality (ontology) that it strives to establish creates *inclusions* and *exclusions* in terms of the possibility to address specific issues, and simultaneously reduces contingency and possible arenas for struggles that may emerge from unanticipated constellations.

6.2.2.2 Thinking Spatially

The loose, porous architectural division of the office and its materiality contribute to the fragmentation of the open plan cosmos into several territories that are not static entities, but temporally and atmospherically contingent and multiple, as discussed earlier (they are often referred to as "home base" by interview partners). In order to address these atmospherically differentiated, temporally (via

alternating rhythms reflected by atmospheres) and spatially delineated entities, I decided to use the term *atmospheric polities*. For me, this term captures the simultaneity of boundaries and porosity toward the office (maintained by atmospheric politics), as well as the cosmopolitical disposition of such entities as parts of the open office agencement. Nevertheless, polity has a territorial connotation, which offers a methodical axis along which to consider their atmospheric specificities, as mentioned in the previous chapter. Conceiving of atmospheres as sequential (or temporally plural) and exploring their temporal boundaries, for example, might also be an option, however I have some difficulties structuring two intense months in the field in a chronological order of atmospheres that more or less rhythmically emerge in different areas. The term polity also becomes useful to emphasize that they have internal teleologies: To me, polities in the open plan office are entities (of employees, their emissions and the devices they enroll) that aim at governing or creating stability in their territory via atmosphering.

"It [the open office] demands considerably more of human cohabitation than the single office. Everything is manageable, you can see for yourself; we have been in here [the open office] for some time. You can see the formation of groups, you can see incompatibilities in behavior between different departments with very different styles of working." (Mr. C)

Understanding Distributions and Constructing Atmospheric Polities

To me, a substantial part of enacting the office via atmospheric politics refers to the distribution of bodies in space, that is not "naturally" given by fixed seating arrangements or architectural divisions and walls. Differences in individual relationships to the office (see individual markers) and spatial segmentation necessitate fragmentations into smaller entities or *atmospheric polities* within the agencement, according to interviews. The general distribution of departments in space had been decided before moving in, as it is also determined by corporate compliance policy and industry specific legislation to some degree, as mentioned earlier. I use the term polity, because these spatial entities have own ways of dealing with issues, interpreting rules, more or less distinct atmospheres and rhythms that are easily perceptible, and a remarkably stable set of citizens who have very in-depth knowledge about each other's individual markers, as well as some capacities to mobilize resources[35]. Their smaller size (in terms of space and people) compared to the entirety of the office, the similarity of chores and responsibilities (that are often connected to each other) and the familiarity among members make them tangible governance entities for my analysis, with site specific time maintenance practices that limit contingency and conflict to some degree. I draw the categorization into different

---

[35] Compare to Ferguson, Y. H., Mansbach, R. W. (1996)

atmospheric polities from interviews and informal conversations, where employees frequently performed boundaries of "them and us", when referring to their "home base" and comparing it to others. Additionally, there was a considerable amount of reflection about the meaning of the so called "home base", possible reasons for such groupings or orders, and their affliction with office space:

"You should be able to personalize the places you spend a lot of time in, so you can feel at home there. An office where I don't know where to find a place to sit if I arrive at nine is very bad. It's very bad because then I won't feel the need to get up in the first place." (Mr. C.)

"(…) naturally everyone is looking for roots and feels like they need a home base. Now the question is, if the area itself is also a home base: How small does this home base need to be? Does there really need to be a personalized desk? Or does it simply mean to always be in the same area as *my people*? That is dependent on personality. There are some people who need more and some who need less. Regardless, I find it indicative that no matter the size of a group, or how often they meet, if it is the same constellation of people, they always sit in the same arrangement. Even in meeting rooms. For me this is a sign that people prefer sitting in a familiar setting, and that it helps them." (Ms. D.)

Indeed, quite a few interview partners frame the desire for familiarity and a stable location in the office, or at least stable spatial orders and seating arrangements as *natural*, and therefore *naturally* reproduced via spacing[36]. As discussed in section 6.2.2, *spacing* (human and nonhuman distribution in spaces, and the use thereof) as well as imaginations of how a space ought to be used, contribute to the dynamic ontology of spaces. Alas, the imagination of a natural working habitat in the context of open plan work environments, constructs certain aspects of spacing, how it is interpreted or identified as natural and necessary. Therefore, it is not surprising that office polities or rather their human inhabitants are vaguely ordered along certain facets of perceived kinship, that might for example be related to professional tasks or departments.

Additionally, there are material segmentations made of small plants, facilities like tiny conference rooms and office supplies or storage furniture. Generally, the material segmentation of the office is not tailored to the size and needs of departments (most areas host more than one department). It is not portrayed as particularly *useful* in the interviews as it fails to fully segregate atmospheric polities or so called "home bases" acoustically and visually.

"And this permanent visibility (…) I don't care whether people can look over my shoulder and see if I am working at all. I don't care, it just gives me this feeling (…) to not be able to close the door. That everyone thinks I am always there, always available. If I was in an a little bit more secluded home base, they would have to come to

---

[36] This reminds of Foucault's (1995) conception of discipline; particularly naturalizing practices via discourse and narratives.

me before addressing me. That would at least be like a half-closed door. To call out something from here to there is no problem at all. There is no inhibition to do so at all." (Ms. D)

In this case *useful* refers to the propensity to somehow shield from unanticipated or unwanted interactions and pervasive rhythms. Remarkably, all interview partners strongly emphasized that unanticipated interactions are not generally a nuisance, but that they are necessary sometimes because they ease the exchange of information, especially in urgent cases. The aspect that is deemed bothersome about this kind of permeability between departments, is that it becomes more difficult for the recipient to predetermine degrees of urgency; it is not required to announce interactions and their topics. This sort of perceived unpredictability impedes synchronization of rhythms. Put bluntly, it also limits employees' agency to deter interactions within the realm of office etiquette.

Still, the desire to work completely secluded all the time (like in traditional office settings) is not uttered. Instead, some interview partners have voiced a longing to determine specific times at which they cannot be disturbed. This ambivalence towards the space's porous segmentations is expressed through employees' suggestions how to improve the office: First, most of them say that *it is how it is* and cannot be improved. Then, they propose enhancing barriers between departments, to protect from disruptive sound and make it easier for departments to maintain their atmospheres. To me, the desire to time or synchronize interactions with the atmospheric polity, emphasizes atmospheres' character as orchestrations of rhythms, where the level of synchronicity impacts the way employees assess its *quality*.

The permeability of atmospheric polities on the other hand, which is a main characteristic of the office's spatiality, not only matters in the context of sound, visuality and the distribution of coworkers and timing their interactions; it simultaneously enables the distribution of resources in the office, across atmospheric polities. As devices become part of aesthetic and practical arrangements, the way they are distributed contributes to atmospheres and also reconfigures relations between coworkers. They are therefore not only engaged in spacing, but also play a significant role for the possibilities and practices employees attribute to their workspace and their relationships to- and distributions in the office, as well as rhythms; therefore, the placement of devices is an important tenet to the construction of the office as a space.

Enrolling Devices II: Creating Spaces by Synchronizing Habits

"(…) they (management) actively approached us and said: "Look, there is an advantage! Now we can wish for new equipment. Who wants to have two screens?", and so on. Then you were able to register (these wishes). "Who wants an extra lamp?" There are lamps that have been acquired by the subsidiary. The ceiling lights are enough for some, some say "I can't see anything", others say "We need to turn it off" because it is too bright for

them. We all have different needs, and this way I have a lamp of my own and can at least individualize my desk a little bit." (Ms. B)

As this quote illustrates, lamps were imagined as devices that would bypass possible conflicts and trouble resulting from varying sensitivities among colleagues. This not only speaks to their imagined role as devices that can contribute to order by installing flexibility (making the space flexible to individual needs), but more importantly to the imagination that devices can even out or *synchronize* individual rhythms, by allowing employees habits to coexist without disrupting each other with their individual lighting needs. I understand this attempt to orchestrate individual rhythms, by bypassing the collective decision (and possible conflicts) of when to turn on the light, as well as the sensory implications of lighting, as regulatory practice that aims at atmosphering.

Originally, these lamps were meant to be mobile, which would require their owners to store them in their personal lockers every evening and use them whenever they become necessary. According to Ms. B., employees tend to leave the lamps at their desks in the evening and just seem to remember who needs them, and accept them as reservation devices, instead of using them to adapt different places to their own needs. In this regard, lamps are also enrolled in atmosphering and spacing by stabilizing certain seating arrangements. Overall, I must say that lamps did not play any role in other interviews and I did not notice them in the office because rather few people seemed to use them.

Disrupting Polities, Rearranging Space: Sound as Disruptor

"I find it very annoying, that the areas are not properly segregated. The cupboards do not insulate against noise at all, their only use is adding storage space. Have You had the opportunity to visit Company X? Then You know the difference, then You know what I mean. […] If I sit over there [indicates area on sketch] I can understand every word that this person over there says, because no noise insulation measures have been implemented. Well, there are some measures, there are noise insulating ceilings, the floor is slightly elevated in the home bases so it can swallow some acoustics. These are the only noise insulating measures here." (Ms. D.)

Concerning barriers between polities, acoustics seem to be a prominent matter of concern. In this section I argue that sound has the potential to interfere with atmospheric polities' spatiality and temporality and beget emergent *heterochronias* (see Deckner 2019).

Generally, I find it impossible to make sense of the open plan office's territoriality without examining the role of sound in the making of space (implying how space is imagined and enacted). All interview partners have accounted for its potential to transcend boundaries between home bases and disrupt the territoriality of polities, in one or the other way. As discussed in the beginning of section 6.2, the differentiation of atmospheres (and their sound) into more or less separate areas, offers orientation in space and time. If atmospheres become territorially and temporally bound epistemic

tools for understanding what a certain space means at a certain point or sequence in time, the dissolution or destabilization of such boundaries may lead to bewilderment, discomfort and spatial and temporal disorientation. Laughter and cheerful banter for example contribute to and signify a laid-back, relaxed atmosphere, that might even have an air of breaktime. While this sensation is often exclusive to the inhabitants of a certain polity, it can be agitating to neighboring areas, that have less reason to experience glee at this specific point in time.

"Usually you can hear the people in department X laugh the loudest. This really agitates people in neighboring departments where there are less occasions for laughter." (Mr. C)

In the case of laughter, the atmosphere that it stems from is usually not transmitted to neighboring areas, but rather seems to confront employees with the asynchronicity between atmospheric polities, making obvious what they might be missing out on, at this very moment. This sort of dissonance between acoustic impressions and situated atmosphere reminds of Deckner's term *heterochronia* (2019); in this specific instance the term may apply to invading sequences that do not correspond with an atmospheric polity's *chrononormativity* (see Freeman 2010). This sort of interference is confrontational, because it disrupts the sensation of coherence and synchronicity that is garnered by *collective orchestrations of time*: Laughter in specific office polities highlights diversions in time perception, meanings assigned to time at work and temporal experience. In contrast to Deckner's (2019) investigation, where heterochronias appear as strategies employed by individuals who react to oppressive chrononormativity, heterochronias in the open plan office may also emerge spontaneously, as outcome of the shared, porous office environment, and highlight differences in temporal experience and agency; the permeability of boundaries between polities might cause difficulties of maintaining temporal order or synchronicity in the native polity.

As discussed above, this dislocating effect of heterochronias in the shared environment is arguably rather engendered by acoustics than visuality, because of the specificities of sonic materiality in the open environment, and sound's propensity to help people make sense of spaces. Like collective orchestrations of time (that can cause exclusions by denying people the possibility to tap into certain rhythms), sound also plays a role in configuring distinctions between *inside* and *outside* (see LaBelle 2010): It pays no attention to visual and most material boundaries, casting doubt on their potency and the overall stability of a spatial arrangement. In the open office, it therefore disintegrates the stability of atmospheric polities and dilutes their territoriality:

"(…) everything is open here; that means you can hear everything from here all the way to department X." (Mr. A)

Additionally, the interference of unrelated topics causes confusion and distracts from individual and departmentally organized duties, which calls the notion of home bases into question. If you feel as close to coworkers who are located at the opposite end of the office, as to your team, "your people", because they sound like they are next to you, it clearly juxtaposes your idea of a natural need for kinship, spatial order and rhythmical stability.

"When department X and Y are making calls and the hotline too, you basically listen to five different, incoherent topics in the background and every one of them is constantly getting louder, because everyone wants to be understood. This makes working really difficult." (Mr. A)

Astonishingly, the attempts to govern acoustics in the office are limited to the noise insulating floors and ceilings, and to the rules regarding phone calls in the office, that diverge by polity and frequency of calls. This speaks to the low prioritization of internal boundaries and the vision of the office as shared space rather than a patchwork of small polities, during planning. Regardless, the employees' efforts to maintain atmospheric polities that have more or less distributed rhythms and atmospheres, often contrast the acoustic territoriality of the office architecture which leads to disruptions in spatiality and temporality.

The encounter of atmospheric polities with spatially unbound acoustics (and rhythms) is a core component of the cosmopolitics of the open plan office, as it emphasizes the productive character of the office agencement that brings forth new space over time[37], but also distributes temporalities in space via dislocated rhythms. On the one hand, polities' attempt to self-govern by 1) creating cellularity (see Foucault 1995) within[38], 2) establishing a somewhat stable population of team members, 3) relying on a certain degree of consensus in specific matters (whether making calls, eating and drinking, other practices are acceptable within) and 4) maintaining relatively stable rhythmicity as observed in lunchtime habits or movement. On the other hand, sound creates unanticipated relations between colleagues on opposite ends of the office, while simultaneously disconnecting others from their carefully curated atmospheric polity, whenever their voices are drowned out by other noises, or sound distributes asynchronous rhythms throughout the office. This associative and rearranging potential of sound becomes especially evident in an open plan setting where it is evident that little attention has been payed to acoustic materiality in the planning phase.

---

[37] This capacity has also been addressed in the section on rhythms and ontologies.

[38] i.e. via determining the distribution of bodies in space as discussed in the previous part.

6.2.2.3 Making Spacetimes with Movements

This final section of my analysis strives to conceptualize the making of spacetimes through movement. The notion of motility emphasizes the embeddedness of mobility in the topography of access of the office space and raises questions of where to go and where it is possible to be. I argue that in the open plan office, spatiality is coproduced with mobility patterns or rhythms. First, I will address how the placement of devices (as mentioned earlier in 6.2.2.2), contributes to the distribution of employees via constituting a specific topography of access, which contextualizes motility. Then, I will discuss how employees deal with unpredictabilities occurring because of movements in the office, and how this is related to time maintenance. Then I will discuss motility. The term motility implies that the ability to move is situated (in terms of professional hierarchy, location, preferences etc.) as it differs among coworkers. Finally, I will argue that movements and rhythms are coproduced via an example that highlights the complex relationship between regulations and mobility rhythms.

Enrolling Devices III: Distributing Access, Making Mobility

Double screens were a very common feature and seemed to play an important role for the distribution of employees in the office. Similar to lamps, they seemed to indulge a similar use as reservation devices among some coworkers, because there seemed to be a relatively clear understanding about who needs them for work, and who has requested them in the first place:

"Once I came here (to the office) and there was only one (screen) here, and two over there. And I'm not here much (at a desk), even when I am here a lot (at the office) (…) and they are actually for people who are used to working with them. Then it is of course not very polite if you occupy the desk with two screens. By the way, if you have used a desk's docking station once, then the place will remember your screen settings." (Mr. E)

In contrast to lamps, screens were never meant to be mobile, which contributes fixed features to the topography of access in the office. Contemplating the office's topography of access raises questions about who can access which place. This depends on individual markers and timing; employees who have problems with eyesight or usually work with programs requiring a lot of screen space (like Excel), often seemed to be drawn to desks with two screens to accommodate their needs. Furthermore, screens are not only spatially fixed, the meanings and understandings that are tied to them as access points contribute to the degree of flexibility to which the desks can be used (who can use a desk under which circumstances). These meanings and understandings are conditional to the temporal atmospheric architectures of atmospheric polities, as they contribute to order and pace of work. Working with certain programs and on certain tasks is way easier, and swifter with two screens. Knowing where to sit and where not to sit saves time in the beginning of the day. It requires a certain degree of awareness and sensitivity to others' needs but does not extend over the whole workday and

is therefore not particularly time consuming. The loose visual segregation of polities, as well as the possibility to use a desk with two screens when vacant, also played a role in the mobilization of resources, as described in this quote:

"(…) they (accounting) have always had two screens, in contrast to everyone else. And only a few of them. Then some people said: "Aha, why only accounting? That's strange…". Then, for the first time, people started thinking "Why do they all have two (screens)?" (…) because they (accounting) said they needed two screens, right in the beginning (before moving to the office). That is why everyone else started thinking and came to the conclusion that it is quite convenient. And if I don't need it, then it's on anyway and it doesn't use up a lot of space, because it is not very large and it is useful ninety-five percent of the time." (Ms. B)

Being able to see *how* others work, and how their work rhythms may have changed due to screens, created a sense of awareness for the technologies they use and facilitated the spread of these technologies across atmospheric polities, as well as consent about who deserves prioritized access to them. Alas, this uneven topography of access and visual porosity does not necessarily engender conflict and disruptions as one might expect, instead it contributes to the temporal architecture by indulging negotiations about meanings of jobs and their infrastructural requirements, understandings about coworkers' abilities and needs, and the extension of the technical and regulatory (see section 6.1) office infrastructure. According to interview partners, two screens at one desk will soon be the new standard at the office, which speaks to the dynamic potential of the open office, in this case altering or evening out of this topography of access.

(Un)Predictable Movements

As discussed above, the open office's topography of access (expressed by the distribution of devices across polities, and the opportunities they supply) and spatial segmentation that loosely divides polities, contextualize employees' relationships to the office. Equivalently to the vague spatial segregation of polities, via boundaries and atmospheres, polity membership is also not always set in stone; there are a few employees that commute between different polities according to their personal preferences, access points or professional relations: A few people have officially fixed places (like technicians) but are still not always present there, most reside in the same atmospheric polity (usually one that has been assigned to their department) but switch desks, and some employees always seem to be in different places. Even though there are degrees to individual mobility, it adds to the unpredictability of workplace temporalities, due to the spatial and temporal uncertainty associated with interacting:

"I check if he is at his usual desk. If he is not there, I send him a WhatsApp "Where are you?", or simply call his phone. To be honest, I find it too tedious to walk through the whole office and to check the other side (…) I don't take the time to do so. Actually, I most commonly send an email "Where are you?". And then I get "Here and

there". Then I go there. Even though our office is relatively small, it can be too large at times. For me. (…) It is important to me that people sit approximately at the same place, so I can find them. (…) Mr. X, he is in a different area every single day. Looking for him is too tedious, I only send him emails. (…) I only have personal contact with him when he approaches me. If I need something, I won't look for him." (Ms. D)

This quote depicts employees' common claim to make more use of communication technologies in the open plan office than in the traditional single office setting, in order to gain some overview over temporal unpredictabilities,. Mobility in the office is generally viewed ambivalently throughout the interviews: On the one hand the unpredictability that it causes is seen as tedious, and is governed through time maintenance strategies that aim at reducing the necessity to spend work time on moving through the office (like replacing synchronous communication with asynchronous communication). On the other hand, mobility is imagined to have positive impacts on the work environment, because it is strongly associated with a sense of freedom from the scrutiny of superiors. This is juxtaposed by interview partners' expression of the importance of being near "the right people", the distribution of departments in polities, the semi-fixed spatial arrangements in polities, and is at odds with the open visuality of the office.

Motility

The ability to commute is circumstanced by individual markers and regulations as discussed in section 6.1; some jobs require specific technological infrastructures that are tied to their desk (i.e. technicians), others are more or less bound to places by internal policies (i.e. human resources) or loosely bound by department memberships, more or less spontaneous cooperation with coworkers, preference or routine. To me, commuters' accounts are especially useful to shed light on the specificities of polities, as they have grounds for comparison and are attentive to site specific norms and citizens' individual markers, because they need to fit in. The subsequent interview partner for example prefers to work in the area designated for accounting, because it seems to be the calmest area to her:

"(…) I consciously chose to sit with accounting. Normally, I would sit on the other side and not there. But the other side is much busier. It is louder, it is… the whole department X, Y, Z, they are simply the loudest ones. In accounting work is done quietly. That is why I have made the conscious decision to sit there and it really helps." (Ms. B)

In the interview she remarks that sound is not even the most potent disruptor to her; the movement of bodies seems to be a greater distraction. She, and others too, blame this on the "classroom-like" alignment of desks which has been described in chapter 5.1. Desks are arranged in rows of six; three people sitting next to each other with another three facing them. This way there are corridor-like patterns where many sit back to back. The resulting frequent movement behind your back is described as unpleasant and often startling.

The choice of desk therefore is related to the traffic situation and one's sensitivity to movement, which is a reason for the low popularity of the "focus desks" that seem to be relatively comfortable and well shielded by desk partitions (depicted in the top right corner) at first sight. In the beginning I often wondered why they were mostly vacant in off-peak times: Six out of seven interview partners describe them as dysfunctional, due to their location near the exit, which leads to the rather heavily frequented printing facilities and coffee area/communication zone. Many find them unappealing because their desk height is not very flexible, and it is impossible to work standing, compared to the other "normal desks". Alas, mobility rhythms in the office contribute to the distribution of employees, by creating temporally and spatially variable disruptions (i.e. noise and movement in the morning, when everyone arrives) that render specific areas inconvenient to individual workflows[39]. Again, the degree to which these rhythms are experienced as disruptive is codependent on individual sensibilities and abilities. The spatial and temporal situatedness of these office rhythms, and the varying impacts they have on employees, also contribute to the open plan office's spontaneous and often unpredictable topography of access.

Settling Down

To Ms. B, the unofficial rules in accounting decrease this kind of contingency and have the potential to minimize interruptions:

„Accounting agreed that Ms. X. always sits at the same desk, Ms. Y. sits at the same desk, Ms. Z. sits at the same desk (…) so they agreed on a seating arrangement. This agreement is not official, but it works. There are also people who switch places (…) when Ms. X. is in remote, then I sit at her desk because I know it is vacant. It is next to the window, I like sitting there. (…) I actually like switching places. There are a few of us, but generally people stick to their department areas." (Ms. B)

These unofficial regulations that stem from agreements and also sensitivity to coworkers' needs and preferences, install a sense of reliability and reduce motility in this polity; they stabilize movement and location. Ms. B's choice of citizenship is therefore reinforced by the congruency of accounting's sub architecture of time maintenance (i.e. their rhythms), their atmospheric polity's teleology, with her own individual markers and needs: In regard to her preferences and abilities, but also with her professional tasks, and within the bounds of workplace norms. Hence, commuting or choosing a place to settle, can also be understood as time maintenance practice, because according to my interview partners, it stems from avoiding disruptions, or enhancing job related processes:

---

[39] Again, this depends on individual sensitivities etc.

"It has become more difficult; people approach me less. Before moving here, when I had my own office, people used to approach me more. These were conversations where you didn't even do anything afterwards, except for sitting together and listening to coworkers' complaints for half an hour or offering advice or new perspectives. But you had this safe haven and it didn't happen under the others' gazes. Now, if somebody comes and only begins to stutter, and does not ask me about something factual or professional concerning my work (…) Wumm the others are there and hear everything. So, it is really difficult, but at least I have the advantage that I have a lot to do with others because of my job. This means I can connect these things: "Let's go inside a meeting room, because I need some work-related information." Or something like that. But still (…) people have more difficulties approaching me." (Ms. B)

In her function as employee representative, location does matter. Being in a calmer area of the office may not always be helpful in this respect. However, as this quote shows, motility is prerequisite to the ability to craft spatio-temporal niches in the open office. Being endowed with professional obligations that require many interactions facilitates niching, because it becomes necessary in order to fulfill the function as employee representative. Without stable architectural boundaries (of single offices that host the ever-same coworkers), the employee representative is responsible for compensating this deficit, by masking interaction time slots as work time to enable discretion, which displays a new facet of *enacting the office*. Using the pretense of "work time" for professional topics, to distract from the necessity of other spontaneous and unpredictable interactions, also becomes a time maintenance practice because it allocates a time and place to interactions that require discretion in the open plan. The necessity to compensate for missing architectural niches also accentuates the pervasiveness of rhythms in the open plan office: It leaves little room for interactions because they are experienced and regarded as disruptive. At the same time interactions are disrupted, or rather intruded on by the temporal normality of polities.

Timing Movements

The need to "go somewhere" is not just a result of more or less spontaneous office arrangements, it often also signalizes frictions between asynchronous rhythms, which are experienced as unpleasant and disruptive, as addressed in 6.2.1. Deciding whether an issue is worth interrupting a coworker's workflow, assessing how this might be perceived by other coworkers and how, where and when to approach issues gains importance in the porous open plan environment. Making such decisions is a temporal maintenance practice, because outcomes directly contribute to the temporal (and spatial) location of interactions and impacts office atmospheres. While some interactions are either embedded in (like department jours fixes) or intersect with (like spontaneous interactions) collective office rhythms, the necessity to "enact the office" through time maintenance strategies shows how rhythms are stratified in the office (see Sharma 2014). The subordination of individual rhythms to atmospheric

polities is considerably unequivocal among interview partners: Ms. B's ability to mask interactions or Ms. D's contemplations about when and where to initiate interactions, and which setting is appropriate for which interaction, show that motility in the office might be more or less given, but is nevertheless circumstanced by individual time maintenance strategies and situational evaluations that speak to employees' awareness of the need for niching. Sensitivities towards atmospheric polities (and their imagined teleologies) therefore add to the topography of access that contextualized employees' motility. Similarly, this account shows how Mr. E's contemplations about his work environment influence his mobility patterns:

"(…) I used to have a fixed place in the back next to department X and I will not say what happened then, there are probably different versions (…) I thought "Ok, then I won't look for another fixed place." Instead it is not stupid from a professional perspective to be close to everyone once in a while. So, you can notice things, as soon as someone says something. Theoretically it reduces barriers, compared to sitting somewhere hidden behind department X." (Mr. E)

It shows that his personal preferences, assumptions about and experiences with coworkers' opinions (and sensitivities towards them), as well as considerations about professional benefits (being close to everyone once in a while) flow into decisions about where to be at which point in time. His situatedness and individual perspective on the office shape his topography of access and circumstance his motility.

Motility and Rhythms

Throughout section 6.2.2.3, I have written about how devices are enrolled to stabilize arrangements, and how they contribute to a topography of access that contextualizes motility. Now, I will name a final example that deals with the maintenance of data security to explain how devices take part in engendering mobility and therefore contribute to individual work rhythms. As discussed in section 6.1, compliance and data security regulations aim at governing flows of information inside (and outside) the office. For instance, data security regulations prescribe that screens must be locked whenever a desk is left, however briefly, in order to minimize the risk of data leaks or deletion. Moving through the office and locking screens that have been left open therefore turns into a concern of risk management:

"We are one subsidiary, but the content of department X's screen is none of department Y's business. For example. Or it is not department Y's business what the people from accounting have on their screens. These are theoretically and practically completely separate departments. It's none of their business. Also, the possibility of mistakes happening, like if somebody accidentally touches someone else's keyboard and something important is deleted, is increased. Especially in Excel and other number programs it is very, very difficult to find mistakes or see if something has been altered." (Mr. E)

This particular interview partner portrays keeping a look out for unlocked screens at vacant desks and locking them as necessary risk management measure. To me, this example illustrates how not only the meaning of an occupation can be interwoven with the spatiality of the office (i.e. its visual porosity), but also how this impacts individual temporal experience and motility. In particular, spontaneous sensory triggering by the environment, and the required heightened *sensitivity*, contribute to the temporally diffused character of risk related maintenance practices. One might argue that risk management is a field that inherently requires being alert; the open office however seems to contribute new aspects that encourage management. This might increase the workload, by *disciplining* unruly colleagues (via email), and additionally lead to interruptions of the own workflow, curdling the personal rhythm, adapting it to others' rhythms, and remaining alert. Just as the practice of locking screens emerged as part of risk management, it recently seemed to subside according to the interview partner. More and more coworkers seemed to remember to lock their screens, and risk management seemed to grow weary of this task, making it less and less significant.

7. Conclusion: Towards a Cosmopolitics of Time

Writing this thesis has been a long and winding journey that showed me how the different practices and meanings in the open plan office contribute to employees' often unpredictable engagement in ordering rhythms. It has been my aspiration, to ignite you, the reader, with my enthusiasm to understand and further investigate how spaces mediate the way we make time within them. Of course, the open plan office is only a single site, and there lies a world of other places and temporal performances ahead of us to critically engage with. I imagine, for instance, that broader urban settings or places of scientific investigation might also be fruitful targets for cosmopolitics research into time, as it promises to shed light on the multitude of aspects that contribute to human and nonhuman coexistence and their bearings on the birth of new practices and spacetimes. Here, I have argued in depth that all workings within the microcosmos of the open plan office generate rhythms, which in turn amount to perceived harmony or disharmony. In my opinion, the teleological orientation of the office circumstances the necessity to govern such temporal harmonies and requires own strategic engagements with surroundings and peers. While atmosphering and niching, via the establishment of explicit and tacit regulations are complicit in governing this microcosmos, things might play out quite differently in other areas of the anthroposphere and are worth examining.

My literature review has shown that temporalities in the 21st century, "digital capitalism" are a highly controversial subject in the social sciences and humanities. It seems widely contested whether society is accelerating, and what technologies' role is in this process. Simultaneously, there seems to be little contemplation about how environments contribute to the ways we make and experience time. Moreover, the discourse seems to focus on the effects of overarching paradigms surrounding us, such as capitalism, globalization and "modernization" through technological innovation, instead of situated and spatialized analyses of temporality. Of course, these narratives cannot be ignored, as they do have bearings on the way we experience and construct our surroundings, however it will always be methodologically impossible to make a general argument (which does not seem to detract many authors from constructing grand theories). Moreover, I think they are embedded in the way we *make* space and time. I am convinced that such paradigms' specific bearings, their politics, can be better understood through paying attention to mundane "details", that bring to life their diverse readings (their multiplicity) even though this might be less glamorous. In this vein, my thesis has made a modest contribution to the study of temporalities, by arguing that making temporalities (like space, see Löw 2017) is a process that engages diverse actors, objects, matters of concern and narratives. Additionally, I have claimed that space, and the way time is made in it, can be understood in terms of a microcosmos that brings forth rhythms and temporalities in the dual process of its making, which in turn creates new ephemeral spacetimes and adjacent practices.

In order to follow the endeavor to fathom the contributions made by built environments, I have reviewed literature on workplaces, infrastructures, cities and buildings. These writings have supplied ample theoretical vocabulary, such as the notion of urban cosmopolitics, niching and atmosphering, to discuss how people relate to spaces and infused my empirical work with ideas that guided my research process. Additionally, STS conceptions of infrastructures have helped me frame regulatory practices in the open plan office and make sense of the ways they evolve in time. Here, I have contributed to the growing pool of literature interested in the temporal politics of spaces, and the ways temporalities become infrastructural to life in built environments (see Besedovsky, Grafe, Hilbrandt & Langguth 2019): I have examined how employees continuously order rhythms in order to construct atmospheres that are appropriate for doing their jobs, and which practices flow into their maintenance. I have made an effort to make the politics of atmospheres explicit by pointing out aspects that create inclusions and exclusions.

The final subject of my literature review has been sound studies, initiated by my hunch that acoustics would become a prominent concern in the open plan office. The writings I found turned out to provide fruitful inspiration, not only to investigate sound itself but also rhythm in more general terms. I became sensitive to the ways sonic rhythms in particular become areas of political contest and how their materiality engenders reactions and requires governance practices that may differ form governing visual and haptic cues, such as movements or placements. Most importantly this literature has contributed to a more in depth understanding of spatiality, by elaborating how sound and rhythms take part in the construction and disruption of space. To me, the principle of simultaneous mediation and mediatedness became unmistakably tangible due to LaBelle's (2010) exploration of acoustic territories, and I have found multiple applications for it in the office microcosmos.

In a nutshell, I have examined the temporal politics of the office microcosmos: How are temporalities brought forth by specific instances in space? How do they make new, ephemeral spacetimes? And in this context, how is this dealt with by employees? My thesis has made an effort to display how some matters of concern are generated or *mediated* by the office and the interactions within. On the other hand, I have meticulously described many examples where matters of concern common in most human environments, like movements, distributions and sound, take part in *mediating*, circumstancing how we make sense of and engage with specific office situations (spacetimes) such as peak times, atmospheric polities and niches in the office. In the open plan office, it is common sense that these matters bear the potential to disrupt situations or *spacetimes*. Therefore, it comes as no great surprise that governing such matters of concern is integral to the construction and maintenance of office atmospheres, or moreover its specific spatiality. The diversity of practices employees engage in, and the various rhythms they indulge, implies a fragmentation of spacetimes

into smaller inhabitable crevices that have the propensity to foster harmonious rhythms, which I have called atmospheric polities. This constant interplay creating ever new settings, arrangements and meanings would not have become visible to me without a cosmopolitics lens.

Next, I have shown how different theoretical frameworks can complement each other in pursuit of answers to my research endeavor: The Sociology of Space (Löw 2017) makes the duality of space as material semiotic discourse between humans and nonhumans explicit, while a (urban) cosmopolitics lens opened the productive and somewhat coincidental dimension of spaces, that goes beyond reproducing social hierarchies. Actor-Network Theory offered language to conceive of temporal agency as produced by networked relations and their morphology, without reducing it to social or technological determinism (as found in instructional design).

In regard to the application of methods, I have delivered convincing arguments why only an ethnographic approach has the capacity to extrapolate knowledge about the tacit and inexplicit dimensions of temporality in the open plan office. Participant observation not only enables engagement with the material and spatial aspects of temporality in the office, but also allows to build confidence and meaningful relationships with research partners who taught me a great deal about how things work in the open plan office. This section has also lent space for me to elaborate my methodological approach in detail, from its ethical dimension, my take on analysis, field documentation, interviewing, gaining field access and building and maintaining relationships with my coworkers.

7.1 Discussion of Findings

Now it is time to explain in more depth how the reviewed literature, the sensitizing concepts and my empirical work have helped me answer my research questions. My findings are detailed below, in the order of my research questions:

How is employees' temporal agency enrolled in the agencement of the open plan office?

In order to understand how employees' temporal agency is enrolled in the open plan office, it has been necessary to peel off the rhetorical layers that surround its various conflicting descriptions throughout media and scholarly publications. Contemplating real live implications of the term flexibility as it is enacted in the open plan office has helped me discover its rampant contingency, spontaneity and productive capacities (in the sense that interpretations of flexibility evolve and create new practices

and norms), which is often obscured by the vagueness of this buzzword. Its hardly tangible meaning inspired me to look more closely at practices that engage in doing time in the open plan office and has shown that it requires ongoing negotiation and labor. Moreover, specific modes of action are not simply infused into this architectural form, as supposed by various theorists like Foucault or Lefebvre. Instead, *performing flexibility and making time* requires constant engagement with space: Arranging rhythms, atmosphering, niching, synchronizations and maintenance.

1. How do employees co-construct their workplace's temporal fabric?

The first section of my empirical analysis has thoroughly argued that employees spend a considerable amount of time and effort negotiating how to inhabit the office without creating distractions. By becoming infrastructural to continuously devising methods and compromises for *doing time* in the office, these joint efforts aim at governing how time is spent *correctly* in the office. On an individual level, the morphing web of regulations enrolls employees in ongoing temporal maintenance in the form of constant vigilance to changes in regulatory practice and coworkers' sensitivities, and adhering to the narrative of equalizing the office topography. On the other hand, existing differences in habits, sensitivities and access (i.e. hierarchies or professional tasks) contradict the uniformity of the open plan office and necessitate the establishment of spacetimes with unique atmospheres, or as I have argued, atmospheric polities. The making of these polities requires synchronization of habits and rhythms, while adhering to broader regulatory frames. Synchronization of rhythms in sections of the office creates crevices of inclusion; a placative example is the scheduling of meetings on days where none of the participants is in remote work or having areas where employees can work with reduced distractions. Habitualizing certain seating arrangements through placement of (reservation) devices and agreements or agreeing not to take phone calls requires compromise and recalibrating individual work rhythms but enables stability over the period of time in which related regulatory practices are in effect.

Nonetheless, niching seems to enable activities beyond the relatively synchronous rhythms of the office; meetings, extended phone conversations or teamwork are often relegated to spatial niches. Temporal niching on the other hand takes place whenever employees decide to engage in work beyond peak times (typically between 9 am and 5 pm). While niching does play a significant part in maintaining office atmospheres and their derivative tempi, it takes place on an individual level and does not per se *construct* office temporalities. Rather, niches mark activities that are undesired within the office or asynchronous with office rhythms. Paying close attention to them stresses the necessity and ubiquity of ongoing temporal maintenance that flows into upholding and achieving office atmospheres. Even if

some niching practices are arguably employed to "shield oneself from the office", they emphasize that certain aspects of work *do not belong* in the respective space and require well-thought-out relocation (both in time and in space). Crafting these *exclaves* or niches enables curating cohesive atmospheres at a relatively low expense, instead of ridding the workplace of certain practices altogether, or not doing so at all at the cost of order. It is therefore unsurprising that limitations put on niching (lack of facilities, possibilities for spontaneous niching or acoustic boundaries) are a nuisance to employees who find it difficult to integrate all of their practices in prevalent office atmospheres. Another issue relates to blind spots in the web of regulations, which sometimes leads to inconclusiveness when niching becomes necessary.

Hence, agentic practices related to time can be understood as regulatory practices in a twofold way; 1) they aim at governing temporal order in the office and 2) they aim at maintaining it through individual adaptations or synchronizations. Additionally, they reflect the office's multiple ontologies that are temporally plural. Ontological multiplicity here implies the different perspectives that employees project onto the office and the situations that spontaneously unfold in it. These perspectives condition which activities are deemed possible in a space and how they, and the space as such ought to be properly enacted. Alas, the office does not constitute a uniform reality, form, way of doing work, or temporal regime. As I have argued previously, the category of agencement suits the open plan office quite well, as it is assembled with the purpose of being a productive workplace. In terms of politics, the agencement perspective implies governing ontological multiplicity; strategically reducing the spaces' meanings via atmosphering (via regulations and other arrangements) and maintaining it. Nevertheless, governing the office is complicated by ontological multiplicity, which is in my opinion expressed by the confusing and evolving web of regulations and the fragmentation of spacetimes into atmospheric polities and niches.

In section 6.2.2.2 I have argued that thinking spatially (as inspired by Löw, where space is an ongoing material semiotic discourse), allows to better comprehend the provisional, temporary nature of atmospheres and polities in the office. Hence, atmospheres and their derivative temporalities do not only exist in different areas of the office, but also in different segments of time. This temporal plurality of spacetimes further complicates temporal agency and the orchestration of atmospheric polities in the open plan office. The fragility of atmospheres, which is propelled by the porosity of the office's interior design allowing transgression of sounds and movements (see 6.2.2.3), makes it impossible to maintain stable atmospheric polities, but infers the constant construction, maintenance and reconstruction spacetimes. Hence, employees constantly co-construct their workplace temporality with their surroundings, by developing the web of regulations in an attempt to govern synchronicity in the office, *making* atmospheric polities through agreements with colleagues and enrolling devices, and

maintaining it by seeking niches to accommodate their needs without disrupting prevalent temporal regimes.

2. How does the open plan office's spatiality contribute to temporal agency?

In the light of my empirical findings, the answers to this question are somewhat less complicated than the previous one's. As I have argued throughout the sensitizing concepts and the empirical chapter, the office as a space is not only characterized by material arrangements and its architecture, but their interplay with human agency. Deducing from the idea that humans participate in making a space via spacing and operation of synthesis (as discussed in section 4.1), my analysis of interviews and observations has shown that these joint processes contribute to the making and maintenance of spatialized atmospheres or atmospheric polities. Hence, the office's spatiality is fragmented into ephemeral atmospheres that are orchestrated by their inhabitants. While there seems to be consciousness about the office as a unitary space, the labor invested in making it utile for a plethora of diversified needs, chores, processes and their respective often asynchronous rhythms requires synchronizations. As the office's porous interior design plays a significant role in mediating rhythms (especially visual and acoustic rhythms), inhabitants engage in fragmenting the space into relatively synchronized areas (atmospheric polities), which manifests in palpable atmospheres. Alas, atmospheric polities offer a format that allows employees to govern their surrounding conditions of possibility to a certain extent by governing rhythms in a space through engagement with their surroundings.

Nevertheless, it is important to acknowledge the fragility of atmospheres, which not only pertains to spontaneous, but also to curated atmospheres or atmospheric polities. The porosity of the open plan office allows objects, sounds and movements (as discussed in 6.2.2.2 and 6.2.2.3) to transgress enacted boundaries and often renders atmosphering endeavors futile. Even though many employees perform niching in various different ways (see 6.2.1.1 and 6.2.1.2), atmospheric polities remain ephemeral and subject to constant maintenance and renegotiation. Apart from the material aspects that I have addressed, the interpersonal struggle for achieving a regulatory infrastructure for synchronicity in the office is expressed by the evolving web of regulations that I have discussed in chapter 6.1. They are interesting not only because they make evident which aspects of the open plan office employees grappled with (in the past and present), but also because they display how coexisting and synchronicity in the open plan office is conceptualized by employees and other actors, as I will discuss later.

Especially in contrast to the past setting, where employees had single or shared offices, the

open plan office's spatiality seems to subvert synchronizations that used to be easier in small rooms. Nearly all interview partners have mentioned how useful sharing a room with a colleague from their department used to be; according to interview partners, listening in on important calls (which was apparently easier in a closed off environment) and being in touch used to facilitate cooperation and coordination between colleagues. Moreover, it seemed to save a lot of time which in the open plan office is used to keep coworkers up to date. Ironically, this specific quality of "potentially learning from others" has often been attributed to the open plan office in interviews (for example "especially for new colleagues who can easily learn from their seniors"). People who have made similar insinuations however have hardly ever spoken of their own experiences, but always about benefits for hypothetical coworkers.

The emphasis on reduced spontaneous communication which has been made in nearly all interviews (apart from the technician, Mr. A), the work invested in making atmospheric polities, enacting and negotiating regulations and niching specific topics (see 6.2.2.1) even hints at the opposite, which is why I do not conclude that the office's spatiality contributes to employees' temporal agency in a necessarily positive way by facilitating the synchronization of work rhythms and communication. On the contrary, it seems to complicate synchronization by pooling all sorts of rhythms which may easily be destructive to atmospheric polities. Hence, temporal agency seems to be enrolled in enacting and maintaining the workflow of the open plan office to a great degree; it is often subscribed to handling arising disruptions and is conditioned by the office's porous spatiality.

3. Which visions of work are performed through time governance practices in the office?

In chapter 6.1.1 I have argued that regulatory practices in the open office, if examined as a web or infrastructure of regulations, express certain values or narratives in their restrictions, through which they strive to unify their territory and its inhabitants. On the other hand, regulatory practices seem to constantly adapt to the aforementioned diversification of practices, needs and habits which requires the appropriation of spaces (like the acceptance of fixed seating arrangements which is also manifested via reservation devices). These practices are not accounted for by official regulations but are instead fixtures of tacit understandings and interpersonal agreements and are not second to explicit or official regulations, as discussed throughout chapter 6. Additionally, I have previously discussed regulatory practices that aim at governing temporalities in the office by *directly* engaging with the shared space (and less explicitly focusing on negotiations between coworkers), like atmosphering and niching.

Overall, I think it is useful to contemplate what is implied in the buzzword *flexibility*, which so

conspicuously embellishes descriptions of the open office from all sorts of different sources; be it the owners of the office complex, adjacent urban planning policy and its political proponents, the company website or employees within. As argued in the introduction, its hardly defined meaning makes it possible for all "stakeholders" to seamlessly apply it to the open plan office. It allows them to describe the office uniformly, despite the multiplicity of its appearance. This capacity to offer a common ground for talking about different experiences is, according to Bensaude Vincent (2014), a core feature of buzzwords in general and makes them powerful narrative devices, because they tend to obscure difference. Therefore, the shallowness of buzzwords' meanings creates a so called "trading zone" that allows a great variety of people to communicate.

Epistemic values, societal values, national and political interests converge in the process of invention of buzzwords. At the same time the convergence of actors under the banner of buzzwords masks the diversity of stakes and concerns. Buzzwords are extremely good at concealing conflicts by pointing to attractive goals or desirable futures. They thus create peaceful collectives of people with competing agendas. (p. 250)

The superficial consistency across experiences with the office, that has been artificially created by subsuming them under the auspices of temporal flexibility, crumbled as soon as one inquired about more individual, less collective impressions. Interviews and conversations soon unraveled the intricacies and levels of difference between perspectives, conditions of access and moments in time, that could not possibly be captured by a single term. The lack of convergence between a uniformly obtainable sense of flexibility and the complex intertwinement of lived realities in the office, which are coproduced with its spatiality and temporality (the ontology of space is multiple and temporally plural in the office, as discussed in 6.2.1) has become conspicuously evident throughout my empirical work. According to Bensaude Vincent, buzzwords exude soft power that generates collectives of actors with competing interests and prevents conflict.

In regard to Bensaude Vincent's writings on buzzwords, it is noteworthy that collectives "generated by the buzz of clouds of buzzwords" are merely informal and ephemeral and "mirror and enhance at once the values of the society where they emerged" (p. 250). As such, buzzwords and their collectives mark and reflect epochs of societal attitudes. This property makes it difficult to precisely delineate the meaning of flexibility, demarcate its realm and define its agency to evoke human performances; as it is part of a larger canon of themes, buzzwords and narratives surrounding white collar workplaces, it remains in constant flux and impossible to pin down. Nevertheless, there are studies indicating its kinship to architecture. Carthy et al.'s (2011) literature review of how the term flexibility is used internationally across studies about health departments, shows that it is most commonly used in reference to architectures (p. 95), while its concrete implications remain obscure.

What struck me about these findings in relation to mine, has been that here too flexibility implicates the requirement of human intervention. Hence, flexibility in work contexts is not merely a descriptive term, but rather an imperative to act. Buzzwords, like flexibility, become performative, or enroll humans and other actors because "they generate matters of concern and play an important role in trying to build consensus; they mobilize people by setting attractive goals and agendas; they become mainstream by creating unstable collectives through noise" (Bensaude Vincent 2014, p. 239).

Flexibility as a term that guides cohabitation in the open plan office therefore creates the implicit requirement to adapt to office environments without committing to this implicit imperative. Instead of explicitly demanding labor that flows into temporal governance and maintenance, flexibility requires constant contemplation and reflection about how to preserve "productive" atmospheres on an individual and a collective level. While there are some explicit rules to inhabiting the open plan office, most regulatory practices seem to be based on individual interpretations and tacit knowledge. Alas, flexibility in this context not only implies the (somewhat limited) modularity of the office architecture, but also the expected devotion to negotiating regulatory practices and adapting to surroundings. It is therefore not only a positive flexibility, as in the freedom to do things, it is also negative in the sense that it requires adaptation, which I have labeled as "enacting the office" in 6.1.4. In the context of the open plan office, flexibility in no way guarantees the enhancement of temporal empowerment, which, as I have discussed earlier, is contextualized by the office's spatiality and specific rhythms within. It merely speaks to the spatial aspects, like the limited possibility to choose a desk. I would even insinuate that the spatial flexibility, or rather modularity, enables the temporal maintenance and governance which is required of coexisting and enacting flexibility in this particular architectural form.

It is somewhat tricky to conclude this sub question, due to the vagueness of the term flexibility. This opaqueness is at the same time what makes buzzwords relevant to my argument: In a way they black-box the complexity of interactions between actors, ideas and materialities. Still, the temporal implications of flexibility in terms of unstable temporal horizons, ongoing individual indulgence in its achievement or self-constitution of employees as "flexible persons" and fluidity match the performances I have taken part in, and that have been described to me during my field research. In addition to its requirements that I have discussed above, flexibility as temporal regime has a binding effect creating collectives of shared responsibility, kinship and accountability. In these terms, it creates superficial conformity and synchronicity, without accounting for the multitude of maintenance and governance practices that flow into making it, and the various exclusions they create. As the performance of flexibility in the office is diverse, the space itself becomes fragmented into somewhat

distinct governance entities, or atmospheric polities. Alas, practices, habits and their rhythms cannot be unified despite this collectivizing dynamic, which renders spacetimes in the office emergent, and the office's temporality an evolving cosmos.

To my delight, examining the open plan office with a focus on time has helped me develop my own approach for making sense of temporality. Far from reaching a universal conclusion about societal perceptions and experiences of time, as pursued by the reviewed literature, I have encountered it as surprisingly fragmented and emergent in this narrow context. Opening the black box of flexibility by examining mundane interactions in the office space, has revealed a fragmented topography of time, that is not guided by one general tempo that is inherent to the space itself, nor bears one universal experience of time among employees. Rather, experiences seem dependent on rhythms within the office and whether it is possible to align with them or whether they become disruptive to the individual pace of work. If time in such a minute fragment of the anthroposphere, an open plan office, is experienced and "made" in such diverse and seemingly incidental modes, I find it increasingly difficult to subscribe to broader generalizations of acceleration. Moreover, my findings here seem to align with Helga Nowotny's notion of *the great temporal contradiction,* which speaks to the simultaneous standardization and individualization of temporal experience, to some degree. Without being able to definitely subscribe to her socially stratified, hierarchical understanding of temporal experience (although there are some indications, but also contradictions for this as discussed on p. 66/67), the sharing of office space does, through its specific spatiality, bind all employees to shared obligations for enacting time. On the other hand, there is great diversity among these enactments which varies on par with the contingency of the open plan office's fragmented, temporalized topography, rather than mere hierarchy. While I do not suggest to turn a blind eye to popular and scientific narratives about temporal experience, I find it sensible to inspect scenarios where they might come to play, and critically inquire into their impacts in human environments, in order to understand the diverse forms in which they are perceived and performed. This way it might be possible to avoid the pitfalls of universal claims, such as simplifying complex and dynamic relations that make temporalities, or moreover depriving them of their dimensions and solidifying them, to detriment of understanding their evolving character.

8. Bibliography

Akrich, M. (1992). The De-Scription of Technical Objects. In W. E. Bijker & J. Law (Eds.): *Shaping Technology/Building Society. Studies in Sociotechnical Change* (pp. 205-224) Cambridge/London: MIT Press

Atkinson, P.A., Delamont, S., Coffey, A., Lofland, J. and Lofland, L. (Eds) (2001). *The Handbook of Ethnography*. London: Sage.

Bensaude Vincent, B. (2014). The Politics of Buzzwords at the Interface of Technoscience, Market and Society: The Case of "Public Engagement of Science". *Public understanding of Science* 23(3), pp. 238-253. Sage.

Bergold, J. & Thomas, S. (2012). Participatory Research Methods: A Methodological Approach in Motion. *Forum: Qualitative Social Research* 13 (1), Art. 30.

Bernstein, E. S. & Turban, S. (2018). The Impact of the 'Open' Workspace on Human Collaboration. *Philosophical Transactions*. B 373: 20170239. London: Royal Society Publishing

Besedovsky, N. Grafe, F. J., Hilbrandt, H. & Langguth, H. (2019). Time as Infrastructure for an Analysis of Contemporary Urbanization. *City: analysis of urban trends, culture, theory, policy, action.* 23 (4-5), pp. 580-588. Routlegde.

Bister, M. D., Klausner, M. & Niewöhner, J. (2016). 10 The Cosmopolitics of 'Niching'. Rendering the City Habitable Along Infrastructures of Mental Health Care. In: *Urban Cosmopolitics: Agencements, Assemblies, Atmospheres*. pp. 187- 205. London: Routledge.

Blount, S. & Leroy, S. (2007) Individual Temporality in the Workplace: How Individuals Perceive and Value Time at Work. B. A. Rubin (Ed.) Workplace Temporalities, 17(1), 147-178. Amsterdam: Boston: Elsevier JAI.

Bluedorn, A. C. (2007). Polychronicity, Individuals, and Organizations. B. A. Rubin (Ed.) *Workplace Temporalities*, 17(1), 179-222. Amsterdam: Boston: Elsevier JAI.

Born G. (2013). Introduction. In: Born G (ed.) *Music, Sound and Space: Transformations of Public and Private Experience*. Cambridge: Cambridge University Press.

Bruyninckx, J. (2017). Synchronicity: Time, Technicians, Instruments, and Invisible Repair. *Science, Technology, & Human Values*, 42(5), 822-847. London: Sage

Callon, M. (1986). Some elements of a sociology of translation: domestication of the scallops and the

fishermen of St Brieuc Bay. In J. Law (Ed*). Power, Action and Belief. A New Sociology of Knowledge?* pp. 196-233 London: Routledge & Kegan Paul.

Callon, M. (2006). *What Does it Mean to Say that Economics is Performative?* CSI Working Papers Series No. 005. Paris: Centre de Sociologies de l'Innovation. École de Mines de Paris

Carthey, J., Chow, V., Jung, Y.-M. & Mills, S. (2011). Flexibility: Beyond the Buzzword- Practical Findings from a Systematic Literature Review. *Health Environments Research & Design Journal* 4(4) pp. 89-108. Sydney: Sage.

Chamberlain, J. A. (2018). Flexibility. In: *Undoing Work, Rethinking Community: A Critique of the Social Function of Work*. pp. 43-72. Ithaca: Cornell University Press.

Clarke, A. (2005). *Situational analysis: Grounded theory after the postmodern turn*. Thousand Oaks, California: Sage.

Clements-Croome, D. (Ed.). (2006). *Creating the Productive Workplace*. London: Taylor & Francis

Davies, S. (2017). *Hackerspaces: Making the Maker Movement*. London: Wiley.

Deckner, K. (2019). Exploring "Heterochronias". In: Hartmann, M., Prommer, E., Deckner, K. & Görland, S. O. (Eds.) *Mediated Time. Perspectives on Time in the Digital Age*. Berlin: Palgrave Macmillan.

Deleuze, G. & Guattari, F (1998). *A Thousand Plateaus: Capitalism and Schizophrenia.* London: Athlone.

Falconer, E. (2012). Rock Star Productivity: *Time Management Tips, Leadership Skills, and Other Keys to Self Improvement.* Hyperink.

Farías, I. & Bender T. H. (Eds.) (2011). *Urban assemblages: How actor-network theory changes urban studies*. London: Routledge.

Farías, I. & Blok, A. (Eds.) (2016a). *Urban Cosmopolitics: Agencements, Assemblies, Atmospheres*. London: Routledge

Farias, I. & Blok, A. (2016b). STS in the City. In C. Miller, et al. (Eds.), *Handbook of Science and Technology Studies* (4th Edition, pp. 555-582). Cambridge MA: MIT Press.

Farías, I. & Wilkie, A. (2016). *Studio studies: Operations, topologies and displacements.* London New York: Routledge, Taylor & Francis Group.

Ferguson, Y. H., Mansbach, R. W. (1996). *Polities: Authority, Identities, and Change.* Columbia, South Carolina: University of South Carolina Press

Fetterman, D. M. (2009). Ethnography. In D. J. Rog & L. Bickman (Eds.): *The SAGE Handbook of Applied Social Research Methods* (pp. 543-588) Los Angeles: SAGE Publications, Inc.

Flaherty, M. G. (2002). Making Time: Agency and the Construction of Temporal Experience. *Symbolic Interaction*, 25(3), 379-388. Hoboken: Social Science Premium Collection.

Fleck, L. (1979 [1935]). Introduction to Thought Collectives. In: *Genesis and Development of a Scientific Fact*. (pp. 38-51; pp. 154-165) Chicago/London: University of Chicago Press.

Foucault, M. (1984). Des Espace Autres. In: *Architecture, Mouvement, Continuité*. pp. 46-49

Foucault, M., translated from French by Alan Sheridan (1995). *Discipline and Punish. The Birth of the Prison.* New York: Random House Inc.

Fourcade, M. (2011). Cents and Sensibility: Economic Valuation and the Nature of "Nature". *American Journal of Sociology*, 116(6), 1721-1777.

Fraser, N. (2003). From Discipline to Flexibilization? Rereading Foucault in the Shadow of Globalization. *Constellations*, 10(2), 160-171.

Fraser, N. (1985). What's Critical about Critical Theory? The Case of Habermas and Gender. *New German Critique*, (35), 97-131. doi:10.2307/488202

Freeman, E. (2010). *Time Binds. Queer Temporalities, Queer Histories.* Durham and London: Duke University Press.

Göbel, H. K. (2016). 9 The Aesthetic Composition of a Common Memory. Atmospheres of Revalued Urban Ruins. In: *Urban Cosmopolitics: Agencements, Assemblies, Atmospheres*. pp. 167-186. London: Routledge.

Guggenheim, M. (2009). Building Memory: Architecture, Networks and Users. *Memory Studies*, 2(1). 39-53. London: Sage.

Guggenheim, M. (2016) Im/mutable im/mobiles: From the socio-materiality of cities towards a differential cosmopolitics. In: Farías, I. & Blok, A. (Eds.). *Urban Cosmopolitics: Agencements, Assemblies, Atmospheres*. London: Routledge: 63-81.

Haraway, D. (1988). The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), 575-599. Feminist Studies, Inc.

Hartmann, M. (2019). The Normative Framework of (Mobile) Time: Chrononormativity, Power-Chronography, and Mobilities. In: Hartmann, M., Prommer, E., Deckner, K. & Görland, S. O. (Eds.). *Mediated Time. Perspectives on Time in the Digital Age*. Pp. 45-66 Berlin: Palgrave Macmillan.

Hartmann, M., Prommer, E., Deckner, K. & Görland, S. O. (Eds.) (2019). *Mediated Time. Perspectives on Time in the Digital Age*. Berlin: Palgrave Macmillan.

Hindsmarsh, J. & Heath, C. (2000). Sharing the Tools of the Trade. The Interactional Constitution of Workplace Objects. *Journal of Contemporary Ethnography*, 29 (5) pp. 523-562. London: Sage

Jasanoff, S. (2004). Ordering Knowledge, Ordering Society. In S. Jasanoff (Ed.), *States of Knowledge. The Co- Production of Science and Social Order*. pp. 13-45 London: Routledge.

Jensen, C.B. & Morita A. (2015). Infrastructures as Ontological Experiments. *Engaging Science, Technology And Society*, 1, 81-87.

Johnson, J. (Latour, B.) (1988). Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer. In: *Social Problems*. (pp. 298-310) UK: Oxford University Press.

Kunda, G. (2006) Engineering culture: control and commitment in a high-tech corporation. Philadelphia, PA: Temple University Press

Knorr Cetina, K. (1983). The Ethnographic Study of Scientific Work: Towards a Constructivist Interpretation. In: K. Knorr-Cetina & M. Mulkay (Eds.): *Science Observed: Perspectives on the Social Study of Science*. pp. 115-140 London: Sage.

LaBelle, B. (2010). *Acoustic Territories*. New York: Continuum.

Lancione, M. & McFarlane, C. (2016). Infrastructural becoming: sanitation, cosmopolitics and the (un)making of urban life at the margins. In A. Blok & I. Farias (Eds.) *Urban Cosmopolitics* pp. 45-62. London: Routledge

Latour, B. (2005). *Reassembling the Social. An Introduction to Actor-Network Theory*. New York: Oxford University Press

Latour, B., & Porter, C. (1993). *We have never been modern*. Cambridge, Massachusetts: Harvard University Press.

Latour, B. & Woolgar, S. (Eds.) (1986). An Anthropologist Visits the Laboratory. In: *Laboratory Life. The Construction of Scientific Facts*. (pp. 43-90) Princeton: Princeton University Press.

Law, J. (2009). Actor Network Theory and Material Semiotics. In: B. S. Turner (Ed.): *Social Theory*. pp. 141-158 UK: Blackwell publishing

Law, J. (2011). *Heterogenous Engineering and Tinkering*. Retrieved from: http://www.heterogeneities.net/publications/Law2011HeterogeneousEngineeringAndTinkering.pdf

Lefebvre, H. (1996). *Writings on Cities*. Oxford: Blackwell. Translated and edited by Eleonore Kofman and Elizabeth Lebas.

Lévy, P. (1997). *Collective Intelligence*. NY: Plenum/Harper Collins.

Lewis, J. D. & Weigert, A. J. (1981). The Structures and Meanings of Social Time. *Social Forces*. 60(2), Special Issue, pp. 432-462. Oxford University Press.

Löw, M. (2017). *Raumsoziologie* (9th edition). Frankfurt: Suhrkamp Taschenbuch Wissenschaft.

MacKenzie, D. (2003). An equation and its worlds: Bricolage, exemplars, disunity and performativity in financial economics. *Social studies of science*, 33(6)

Massey, D. (1999). *Power-geometries and the Politics of Space-Time*. Heidelberg: Department of Geography, University of Heidelberg

Moore-Cherry, N. & Bonnin, C. (2018). Playing with time in Moore Street, Dublin: Urban redevelopment, temporal politics and the governance of spacetime. *Urban Geography*, pp. 1-20

Nowotny, H. (1989). *Eigenzeit. Entstehung und Strukturierung eines Zeitgefühls* (2nd ed.). Frankfurt a.M.: Suhrkamp.

Nowotny, H. (2019). Eigenzeit Revisited. In: Hartmann, M., Prommer, E., Deckner, K. & Görland, S. O. (Eds.). *Mediated Time. Perspectives on Time in the Digital Age.* Berlin: Palgrave Macmillan.

O'Leary, M. B. & Cummings, J. N. (2007). The Spatial, Temporal, and Configurational Characteristics of Geographic Dispersion in Teams. *MIS Quarterly*, 31 (3), 433-452 MN: University of Minnesota.

O'Toole, p. & Were, P. (2008). Observing Places: Using Space and Material Culture in Qualitative Research. *Qualitative Research*, 8(5), 616-634. London: Sage.

Pichère, P., & Probert, C. (2015). *Parkinson's law: Master time management and increase productivity* (Management & Marketing). Belgium, Namur: Lemaitre Publishing.

Revill, G. (2016). How is Space made in Sound? Spatial mediation, critical phenomenology and the political agency of sound. *Progress in Human Geography*, 40(2), 240-256: Sage.

Robbert, A. & Mickey, S. (2013). Cosmopolitics: An Ongoing Question. *Political Theory and Entanglement: Politics at the Overlap of Race, Class, and Gender*. Center for Process Studies: Claremont, CA.

Rosa, H., (2013). *Social Acceleration. A New Theory of Modernity*. New York: Columbia University Press.

Rubin, B. A. (2007). Time Work Discipline in the 21st Century. *Workplace Temporalities*, 17(1), pp. 1-26. Amsterdam; Boston: Elsevier JAI.

Ryen, A. (2007). Ethical Issues. In Seale, C. (Ed), *Qualitative Research Practice* (Paperback ed., 1. publ. ed.) pp. 218-236. London: Sage

Sánchez-Criado, T. & Rodríguez-Giralt, I. (2016). Caring through design? *En torno a la silla* and the "joint

problem-making" of technical aids. In: C. Bates; R. Imrie & K. Kullman (Eds); *Care and Design: Bodies, Buildings, Cities* pp. 198-218. London: Wiley/Blackwell.

Sharma, S. (2014). *In the Meantime. Temporality and Cultural Politics*. Durham and London: Duke University Press.

Sloterdijk, P. (2008). Foam City. *Distinktio*n, 9(1), pp. 47–59.

Stack, L. (2011). *The Productivity TIP System: Organizing Your Time, Information, and People*.

Star, S. L. (1999). The Ethnography of Infrastructure. *American Behavioral Scientist*, 43(3), pp. 377–391.

Stengers, I. (2010). *Cosmopolitics : 1 : I. The Science Wars, II. The Invention of Mechanics, III. Thermodynamics*. Minneapolis: University of Minnesota Press.

Steve Jobs: https://www.inc.com/partners-in-leadership/31-quotes-from-great-leaders-to-improve-workplace-satisfaction-for-employees.html

Tilley, C. (2007). Ethnography and Material Culture. In: P. Atkinson et al.(Eds.) *Handbook of Ethnography*. pp. 258-272 London: Sage.

Vinck, D. & Blanco, E. (2003) *Everyday engineering: an ethnography of design and innovation.* Cambridge, Mass.: MIT Press

Wajcman, J. (2015). *Pressed for Time: The Acceleration of Life in Digital Capitalism*. The University of Chicago Press: Chicago and London

Woolgar, S. & Neyland, D. (2013). *Mundane Governance: Ontology and Accountability*. Oxford University Press.

Zerubavel, E. (1980). The Benedictine Ethic and the Modern Spirit of Scheduling: On Schedules and Social Organization. *Sociological Inquiry*, 50(2), pp. 157–169.

Zerubavel, E. (1985) *Hidden Rhythms. Schedules and Calendars in Social Life*. Berkley, LA, London: University of California Press.

9. Appendix

9.1 Informed Consent Agreement

<div align="center">

Teilnehmerinformation und Einwilligungserklärung

</div>

Sehr geehrte InterviewteilnehmerIn!

Herzlichen Dank für die Bereitschaft für ein Einzelinterview zum Thema Großraum und SmartWorking!

Im Zuge meines Masterstudiums Science-Technology-Society an der Universität Wien, führe ich eine Teilnehmende Beobachtung die mit Interviews angereichert wird durch.
Der Zweck der Studie ist ein Verständnis über die Benutzung, Wahrnehmung, und Bedeutung von technologischen Infrastrukturen im Großraum-Kontext aus der Perspektive der darin Arbeitenden, zu entwickeln.

Die Datenerhebung und Verarbeitung erfolgt alleine für Recherchezwecke, um den Einblick in den Untersuchungsgegenstand zu vertiefen, und wird nicht an Dritte weitergegeben.

Welche Daten werden gespeichert?

Audiodateien, ohne Nennung des Namens und des Ortes der Interviewten Person, die eine spätere Auswertung ermöglichen. Im Laufe der Untersuchung werden die Dateien transkribiert, um eine Verarbeitung zu erleichtern. Dies ermöglicht eine detaillierte Auswertung und reduziert das Risiko von Missverständnissen und Erinnerungslücken erheblich. Audiodateien, Transkripte und die Einwilligungserklärung werden mit FileVault vollverschlüsselt auf dem MacBook der Forscherin gespeichert.

Wer hat Zugriff auf die Daten?

• Anonymisierte Audiofiles: Nur die Forschende
• Ausschnitte aus anonymisierten Transkripten: Leser*Innen der Studienarbeit

Widerruflichkeit erteilter Einwilligungserklärungen

Wenn Sie eine Einwilligung erteilt haben, Ihre personenbezogenen Daten zu verarbeiten, haben Sie das Recht, die erteilte Einwilligung jederzeit mit Wirkung für die Zukunft zu widerrufen.

Diese Rechte können Sie bei der verantwortlichen Forscherin Esther Dessewffy geltend machen (esther.dessewfffy@hotmail.com).

Außerdem besteht das Recht auf Beschwerde bei der österreichischen Datenschutzbehörde, Wickenburggasse 8, 1080 Wien, Telefon: +43 1 52 152 0, E-Mail: dsb@dsb.gv.at.

<div align="center">

1

</div>

Name der TeilnehmerIn in Druckbuchstaben:

....

Ich habe dieses Informationsschreiben gelesen und verstanden. Alle meine Fragen wurden beantwortet und ich habe zurzeit keine weiteren Fragen mehr.

Mit meiner persönlich datierten Unterschrift gebe ich hiermit freiwillig mein Einverständnis zur Teilnahme an einem Interview.

Ich weiß, dass ich diese Einwilligung jederzeit und ohne Angabe von Gründen widerrufen kann.

Eine Kopie dieser Teilnehmerinformation und Einwilligungserklärung habe ich erhalten. Das Original verbleibt bei der Forscherin

....
(Datum und Unterschrift der/des Teilnehmerin/Teilnehmers)

....
(Datum und Unterschrift der/des Forscherin/Forschers))

2

9.2.1 English Abstract

As open plan offices gain popularity among employers, questions concerning their propensity to foster a productive work environment multiply. Next to reducing costs by replacing single offices with shared spaces, a popular argument that is deployed in favor of the open plan office is that they endow employees with *flexibility,* which is often associated with giving employees some empowerment over their work schedules*.* Considering the amorphous meaning of flexibility, this study pursues a more in depth understanding of employees' engagements with the shared, open and allegedly flexible spatial structures of their work environments, in endeavors of (self-) organizing temporal horizons and work rhythms.

Questioning the outcomes of flexibility in this specific work environment and developing an understanding of how employees' go about structuring their time at work in the open plan office, requires paying close attention not only to the ways they engage with colleagues, but also with the space and its material specificities. An ethnographic approach that focuses on material culture and is enriched by visual data and interviews will therefore serve to pursue the question of how employees' *temporal agency* is enrolled in the open plan office to achieve a situated understanding of flexibility as workplace regime.

The Sociology of Space, (Urban) Cosmopolitics and an actor-network approach inform the analysis and enable a systematic perspective on how space mediates relationships among actors like employees and devices and contributes to the production of new, temporalized arrangements. Combined, these approaches promise to reveal knowledge about how temporalities are brought forth by specific instances in space and how they contribute to the making of ephemeral space-times within the open plan office. Moreover, understanding the open plan office as dynamic arrangement of humans, artefacts, their acoustic emissions and visualities in a place, contributes to literature about how built environments take part in the mediation of humans' temporal agency.

The focus on the interrelations between temporal agency in its diverse performances and material environments that often appear as ephemeral space-times, may not only be interesting to Science and Technology Studies (STS) scholars or sociologists, but also to designers and anyone who wishes to develop a deeper understanding of material semiotics at the workspace. This case study contributes to Urban Cosmopolitics approaches in STS by drawing attention to the ongoing production of space-times in built environments and critically responds to Critical Urban Theorists' technological framing of spaces as complicit in governing "social order".

9.2.2 German Abstract

Während Großraumbüros bei Arbeitgeber*Innen an Beliebtheit gewinnen, treten immer häufiger Fragen bezüglich ihrer Kapazitäten ein produktives Arbeitsumfeld zu gewährleisten auf. Neben der Kosteneinsparung durch Flächenreduktion, scheint ihre vermeintliche Fähigkeit Arbeitnehmer*Innen Flexibilität und freiere Zeitgestaltung des Arbeitsalltages zu ermöglichen, ein beliebtes Argument für ihren Einsatz zu sein. In Anbetracht der vagen Bedeutung von „Flexibilität" versucht diese Studie ein tiefergehendes Verständnis über die Beziehung zwischen Handlungen von Arbeitnehmer*Innen und den gemeinschaftlich genutzten, mehr oder weniger modularen Büroräumlichkeiten herzustellen. So wird der Bezug zwischen Raum und jenen Praktiken, die auf zeitliche (selbst-) Organisation und Entwicklung von Arbeitsrhythmen abzielen, erstellt.

Die Untersuchung der praktischen Implikationen von Flexibilität in diesem spezifischen Arbeitskontext und ein Verständnis für die Praxen, die Arbeitnehmer*Innen einsetzen, um ihre Arbeitszeit zu gestalten, bedarf daher nicht nur einer Auseinandersetzung mit zwischenmenschlichen, sondern auch mit materiellen Komponenten dieses Büromodells. Eine durch Interviews und visuelle Daten angereicherte ethnographische Untersuchung mit Fokus auf Sachkultur soll daher die komplexen Beziehungen zwischen Zeitgestaltungspraxen und Büroräumlichkeiten beleuchten, um ein situiertes Verständnis von Flexibilität als Arbeitsplatzregime zu erzeugen.

Raumsoziologie, (Urbane) Kosmopolitik und Akteur-Netzwerk Theorie tragen hier maßgeblich zur Analyse bei und ermöglichen eine systematische Auseinandersetzung mit der Art und Weise wie Raum Verhältnisse zwischen Akteuren, zu welchen sowohl Menschen als auch Artefakte zählen, vermittelt. So trägt diese Art von Vermittlung beispielsweise zur Genese von neuen, zeitlich begrenzten Formationen oder Raum-Zeiten bei. Die Kombination der theoretischen Ansätze verspricht so neue Erkenntnisse über das Entstehen von Zeit und Rhythmen in Räumen zu Tage zu bringen. In diesem Sinne trägt das hier entstandene Wissen über Raum als dynamisches Gefüge aus Menschen, Artefakten und ihren akustischen und visuellen Emissionen zur Literatur, die sich mit den Verhältnissen zwischen Gebäuden und Zeitgestaltung auseinandersetzt, bei.

Der Blick auf Beziehungen zwischen Praktiken der Zeitgestaltung in ihren diversen Facetten und Spielräumen, mag nicht nur für die Wissenschafts- und Technikforschung oder die Soziologie, sondern auch für Raumplaner und all jene, die sich mit den materiellen und symbolischen Dimensionen des Arbeitsplatzes befassen wollen, von Interesse sein. Diese Fallstudie trägt auf theoretischer Ebene hauptsächlich zu (Urbanen) Kosmopolitik Ansätzen in der Wissenschafts- und Technikforschung bei, indem sie sich kritisch zu Positionen von Critical Urban Theory äußert, die Räume lediglich als technologisches Instrument zur Regulierung „Sozialer Ordnung" verstehen.