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Sounds of silence

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Sounds of silence: Rhythmanalysis of noise in flexible workspaces

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ABSTRACT

Silence and noise have become an important theme that emerges in studies of collective workspaces. Drawing on an ethnographic field study of a major bank in Paris, this study offers a rhythmanalysis of noise in the context of flexible offices. Findings center noise rhythms as an unfolding in time-space that involves an interlaced relationship between order, and alternations of harmony and conflict. These findings reflect the relational ontological nature of noise and add to a multiplicity perspective on space in organization studies.

Keywords

noise, rhythm, organizational space, silence, sound

1 INTRODUCTION

Silence and noise have become an important theme that emerges in studies of collective workspaces (de Vaujany & Aroles, 2019; van Marrewijk, 2011; van Marrewijk & van den Ende, 2018; Wijngaarden, 2023). Here, collaborative workspaces refer to collective forms of offices such as coworking spaces, maker spaces, and other forms of creative spaces, corporate open-plan offices and open non-assigned offices that are often called hot-desking (Hirst, 2011), activity-based offices (Sivunen & Putnam, 2020), flexible offices, etc. Flexible offices refer to working from activity-based offices and partly teleworking (Taskin et al., 2023). Workers are expected to remain silent in collaborative workspaces (Appel-Meulenbroek et al., 2021), and paradoxically to be ‘alone together’ (Spinuzzi, 2012). To manage this paradox, workers in coworking spaces developed temporal and spatial patterns for noisy practices, such as socializing (Wijngaarden, 2023). Furthermore, McCormack (2008) suggested undertaking a rhythmanalysis (Lefebvre, 2003) to understand the affective relations and patterns of order that might emerge between the multiple bodies that produce and hear the sound in a particular space.

Hainge (2013) considered noise from a relational standpoint to have an immersive quality, despite being often regarded ‘a by-product of an event or process, which is to say that it is produced by certain actions that are affected to achieve an outcome unrelated to the production of noise from the point of view of intentionality’ (p. 9), therefore connoted as disagreeable in contrast to silence as the ‘perfect state of rest’ (p. 15). This connotation was stressed in research on open-plan offices (e.g. Appel-Meulenbroek et al., 2021; Ayoko et al., 2023; Danielsson et al., 2015) as they have been shown noise perceptions to be associated with impaired concentration, loss of control over the workspace and negative effects on job satisfaction. This relational view was highlighted only in a few studies such as in Sivunen and Putnam (2020) study of an activity-based office as perceptions regarding noise and silence were related to expectations regarding movement and to fluctuations between those who regard interruptions as normal and those who do not.

Based upon the discussion above and to disentangle the complex noise process inherent to collaborative workspaces, we turn to Lefebvre’s (2003) rhythmanalysis, as he foregrounded rhythm in close association to noise: ‘For there to be rhythm, there must be repetition in a movement, but not just any repetition. The monotonous return of the same self-identical, noise no more forms a rhythm than does some moving object in its trajectory’ (p. 86). This study examines the following question: *What rhythm emerge from noise in flexible office?* To answer this question, we conducted an ethnographic field study between 2016 and 2019 of Digibank, a major banking organization in Paris, that had introduced a flexible office concept, with quiet areas and regulated and normed noise in collaborative and individual areas.

2 key aspects of lefebvre’s rhythmanalysis

“Everywhere there is interaction between a place, a time and an expenditure of energy, there is **rhythm**” (Lefebvre, 2003, p. 25). This definition implies that rhythm is linked to a place or, more precisely, to a “temporalized space” (Lefebvre & Regulier, 2003a, p. 96). Moreover, rhythm refers to a differentiated repetition in time and space, as Lefebvre explains: “rhythms imply repetitions and can be defined as movements and differences within repetition (Lefebvre & Regulier, 2003a, p. 96). Therefore, Lefebvre’s rhythmanalysis provides a framework for the analysis of sequences of actions and processes of “real and concrete cases that feature the lives of individuals and groups” (Lefebvre, 2003, p. 25). This framework is constituted by complementary rhythmic registers, including polyrhythmia, eurythmia, arrhythmia.

Polyrhythmia is understood as the interweaving of multiple rhythms that produce a time-space (Beyes & Steyaert, 2012; Edensor, 2010). When diverse rhythms coordinate, they produce a state of eurythmia, which, in terms of the body, designates a ‘healthy’ living body. On the contrary, when there is discordance between rhythms, a state of arrhythmia emerges. This discordance of rhythms brings the eurythmic body towards a pathological state: a state of illness.

Central to rhythmanalysis is a concern with the body. Lefebvre stresses that “the theory of rhythms is founded on the experience and knowledge of the body” (Lefebvre, 2003, p. 77). To Lefebvre, a body in a “normal state” is “polyrhythmic and eurythmic” (p. 77). This normal body serves as a research tool for the rhythmanalyst, much the same as a metronome (Elden, 2013). The rhythmanalyst “listens – and first to his body; he learns rhythm from it, in order consequently to appreciate external

rhythms”(Lefebvre, 2003, p. 29). They draw on their whole bodies and all their senses to perceive surrounding rhythms.

3 methodological approach

Insights emerged from an open-ended and inductive research design (Schwartz-Shea & Yanow, 2012), wherein the initial focus was the everyday working life in Digibank following its spatial-temporal transformation at the beginning of 2016. This transformation included introducing working from home one to two days a week and implementing new flexible offices. In these offices, individual desks were no longer allocated to specific employees. Instead, workers moved around the workspace to find the required facilities for three needs: individual work, support activities, and collaboration. Support activities referred to areas housing lockers and printing areas. Spaces for collaboration included meeting rooms, creative and project areas, and conviviality spaces. Spaces for individual work included: workstations in open-plan layouts with 80 unassigned desks for 100 employees, closed phone pods, and one silent closed space per floor than can house up to 10 workstations. Employees were required to clear individual desks from personal belongings if they expect to be absent for more than two hours.

During the fieldwork (2016–2018), the first author role as a researcher was that of participant-as-observer—that is, she was immersed in the community but was known to be conducting research after having sought explicit permission (Ybema et al., 2009). The empirical investigation adopted various qualitative tools with ethnography being the main method (Ybema et al., 2009). We utilized thick descriptions (Geertz, 1973) based on participant observations, interviews, visuals, and autoethnographic accounts using the first author body as a metronome. The data collection comprised three phases. The first phase started in June 2016, just before the implementation of the change at Digibank, and lasted about four months. We collected architectural plans, spatial and temporal guidelines, design notes, and change planning to obtain a clear picture of the institutional rhythms. We also conducted 11 semi-structured interviews with organizational planners, including three facility managers, two architects, and four top managers.

The second phase, from October 2016 to July 2017, corresponded with the initial period after the transformation in which the research perspective shifted towards observing emerging practices, social interactions, and noise routines. Moreover, 27 unstructured interviews were conducted with employees, including facility managers, to glean their initial interpretations of the noise ordering. The last period was one year after the change implementation, from September 2017 to December 2018. Observations were made through habitual interaction with regular silence and noise spaces, nodes, and paths (Edensor, 2010). These were interlaced with the first author personal accounts of silence experience at Digibank, while listening first to her body and mobilizing all her senses (Lefebvre, 2003). We then listened to Digibank’s employees’ rhythms. Participants from the three research sites, reflecting the polyrhythmic nature of the organization, were given a digital camera and asked to photograph meaningful spaces and objects representing their daily silence experience. The photographs were subsequently discussed in the interviews, which ‘offered closer look at what participants consider important [...] open space for the emergence of unexpected topics and themes’ (Slutskaya et al., 2012, p. 29).

4 Findings

4.1 Rhythmically ordering noise

The introduction of the flexible office at Digibank gave rise to a particular regime ordering individual and collaborative work and regulating the use of different spaces. Specifically, noise turned out to be one relevant element in organizing everyday life in the flexible office: ‘After few weeks post-move to the flex office, we realized that in order to allow our employees to work efficiently, we should deal with the issue of noise’ (Jack #C2, September 2016). To do so, the steering committee responsible for the implementation of the flexible office, issued guidelines for the use of spaces. In these guidelines, spaces were designated following the intensity of noise into noisy, silent, and moderately silent areas. Noisy areas were centrally located and comprised closed meeting rooms, open conviviality space, and closed phone pods. Silent spaces were designed as transparent closed spaces and located at the back-front of each floor. The strategic intent of this design was to ‘signal that these spaces are only for concentration and confidentiality far from nodes of circulation. They are transparent because we aim with the new office to ensure openness and visibility so that employees dare to enter into this space even though it is close’ (Victoire #W1, September 2016). However, employees were not supposed to stay in a silent space for more than one hour as ‘silent spaces are pre-programmed to not be used more than one hour as afterward they get heated, after all, concentrated work is not supposed to last forever. Besides this permits a good number of employees to benefit from these spaces’, added Victoire. In the same vein, phone pods were designed to be used for no more than one hour. Moderately noisy areas primarily referred to open-plan layouts where employees were supposed to conduct individual work and interact with each other briefly while keeping a moderate voice as: ‘we aim that employee from different departments, teams know and be open to each other in the open space, but in a moderate way, as we implemented collaborative pods nearby so if they want to work together, they have to leave the open space and move into collaborative pods. The same rule should apply to phone calls. If employees get a call, they should not answer it from their desks but instead from the phone pod nearby’ (Jack #C2, September 2016).

To tend towards the rhythmic order of noise, Digibank’s management also introduced the rhythmic convention that shapes the intensity of sound in the flexible office: ‘Be thoughtful to others and respect their need for silence’, ‘Be at the appropriate space to your activity at hand’, ‘At the open space, reduce the sound volume of your mobile, don’t speak too loudly or call a colleague sitting far from you’, and ‘Don’t sit more than one hour in silence spaces and calling pods.’

4.3 Eurhythmia and Arrhythmia

Our observations show that approximately and during each first hour and last half-hour of the working day, arrhythmic disturbances to the rhythmic order happen at the Digibank flexible office. In this specific period of time, most silent spaces, calling pods, and non-programable collaborative spaces are empty. In the morning, a high volume of noise takes the entire open-plan space as sedentary workers (Hasbi & van Marrewijk, 2024) move around to select a preferred desk for the day, salute each other, and shout a loud ‘bonjour’ to colleagues on the other side of the open-plan office. Similarly at the last half-hour in the afternoon, in noise, employees disconnect their laptops pack their belongings, and walk to their lockers; while there is always a loud voice shouting ‘*bonne soiree, a demain*’ to the whole

open-plan office. These disturbances were considered by some employees as time-consuming and hindering to their productivity: ‘I easily lose two hours to noise in the flex office, from 9 to 10 it is very loud in the open space, it’s unbearable even though I put on my headphone. Still, I cannot concentrate as there is a lot of movement at this hour, it’s like working in a corridor’ (Adele, #M30, February 2018). Arrhythmia reaches a peak of intensity on Tuesday, the day when employees are not allowed to telework and should be present onsite. In this day and particularly when buildings approached maximum capacity, silent spaces transformed into open-plan noisy spaces as employees kept the door open to trick the heating sensor. Moreover, non-programmable collaborative spaces were used to perform individual work and thus in some corners of the flexible office and far from passageways, these collaborative spaces were experienced as silent spaces especially when employees put on their headphones. Conversely, open-plan offices were used to perform collaborative work and become spaces of continual loud noise as ‘when an employee has a question for a colleague, they ask the question from their desk, other colleagues joined the conversation’ (first author field notes, March 2018). Although the rhythmic order of noise was conceived by Digibank planners and management, employees managed to establish rhythms for noise, that is for instance transforming their domestic workspace into a silent space to perform concentration work. This was emphasized by most of our respondents in different nuances: ‘My two days of telework are quiet days allowing me to escape the noises here. It is very calm at my home, and it allows me to concentrate. So, I keep all work that needs concentration for these days’ (Nathalie #P24, June 2018). Moreover, to some employees’ silence didn’t mean complete quietness but listening to chosen sound while working. This was emphasized in varied nuances: ‘I only concentrate on telework as I put loud music being alone. What irritates me here is the sound of walking’ (Pierre #M20, December 2018).

5 Conclusion

Through a rhythmanalysis (Lefebvre, 2003) of noise in the French Digibank, we found that the introduction of flexible offices in everyday organizational life shapes a multiplicity of noise rhythms into three states: polyrhythmia, eurhythmia, and arrhythmia. The interplay of these states indicates that noise rhythms are an unfolding in time-space that involves an interlaced relationship between order, and alternations of harmony and conflict. This reflects the relational ontological nature of noise (Hainge, 2013; Sivunen & Putnam, 2020) and adds to a multiplicity perspective on space in organization studies (Beyes & Holt, 2020; Beyes & Steyaert, 2012)

REFERENCES

- Appel-Meulenbroek, R., Steps, S., Wenmaekers, R., & Arentze, T. (2021). Coping strategies and perceived productivity in open-plan offices with noise problems. *Journal of Managerial Psychology*, 36(4), 400-414. <https://doi.org/10.1108/JMP-09-2019-0526>
- Ayoko, O. B., Ashkanasy, N. M., Li, Y., Dorris, A., & Jehn, K. A. (2023). An experience sampling study of employees’ reactions to noise in the open-plan office. *Journal of Business Research*, 155, 113445. <https://doi.org/https://doi.org/10.1016/j.jbusres.2022.113445>
- Beyes, T., & Holt, R. (2020). The topographical imagination: Space and organization theory. *Organization Theory*, 1. <https://journals.sagepub.com/doi/abs/10.1177/2631787720913880>

Beyes, T., & Steyaert, C. (2012). Spacing organization: non-representational theory and performing organizational space. *Organization*, 19(1), 45-61.

Danielsson, C. B., Bodin, L., Wulff, C., & Theorell, T. (2015). The relation between office type and workplace conflict: A gender and noise perspective. *Journal of Environmental Psychology*, 42, 161-171. <https://doi.org/https://doi.org/10.1016/j.jenvp.2015.04.004>

de Vaujany, F.-X., & Aroles, J. (2019). Nothing happened, something happened: Silence in a makerspace. *Management Learning*, 50(2), 208-225. <https://doi.org/10.1177/1350507618811478>

Edensor, T. (2010). Introduction. In T. Edensor (Ed.), *Geographies of Rhythm: Nature, Place, Mobilities and Bodies* (pp. 1-18). Routledge.

Elden, S. (2013). *Rhythmanalysis: An Introduction* (S. E. G. Moore, Trans.). In *Rhythmanalysis. Space, time and everyday life*. Bloomsbury Academic.

Geertz, C. (1973). *The interpretation of cultures : Selected essays*. Basic Books.

Hainge, G. (2013). *Noise matters: Towards an ontology of noise*. Bloomsbury Publishing USA.

Hasbi, M. M., & van Marrewijk, A. (2024). Navigating tensions in the organizational change process towards hybrid workspace. *Journal of Change Management*, 1-26.

Hirst, A. (2011). Settlers, vagrants and mutual indifference: Unintended consequences of hot-desking. *Journal of organizational change management*, 24(6), 767-788. <https://doi.org/10.1108/09534811111175742>

Lefebvre, H. (2003). *Rhythmanalysis. Space, time and everyday life* (Stuart Elden & Gerald Moore, Trans.). Bloomsbury Academic.

Lefebvre, H., & Regulier, C. (2003a). Attempt at the Rhythmanalysis of Mediterranean Cities (S. E. G. Moore, Trans.). In *Rhythmanalysis. Space, time, and everyday life*. Bloomsbury Academic.

Lefebvre, H., & Regulier, C. (2003b). The Rhythmanalytical Project (S. E. G. Moore, Trans.). In *Rhythmanalysis. Space, time and everyday life*. Bloomsbury Academic.

McCormack, D. (2008). Geographies for moving bodies: Thinking, dancing, spaces. *Geography Compass*, 2, 1822-1836. <https://doi.org/10.1111/j.1749-8198.2008.00159.x>

Schwartz-Shea, P., & Yanow, D. (2012). *Interpretive research design: Concepts and processes*. Routledge.

Sivunen, A., & Putnam, L. L. (2020). The dialectics of spatial performances: The interplay of tensions in activity-based organizing. *Human Relations*, 73(8), 1129-1156.

Slutskaya, N., Simpson, A., & Hughes, J. (2012). Lessons from photoelicitation: Encouraging working men to speak. *Qualitative Research in Organizations and Management: An International Journal*, 7, 16-33. <https://doi.org/10.1108/17465641211223447>

Spinuzzi, C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of Business and Technical Communication*, 26(4), 399-441. <https://doi.org/10.1177/1050651912444070>

Taskin, L., Courpasson, D., & Donis, C. (2023). Objectal resistance: The political role of personal objects in workers' resistance to spatial change. *Human Relations*, 76(5), 715-745. <https://doi.org/10.1177/00187267211067142>

van Marrewijk, A. (2011). Aesthetic experiences of designed organisational space. *International Journal of Work Organisation and Emotion*, 4(1), 61-77. <https://doi.org/10.1504/ijwoe.2011.041531>

van Marrewijk, A. H., & van den Ende, L. (2018). Changing academic work places: The introduction of open-plan offices in universities. *Journal of organizational change management*, 31(5), 1119-1137. <https://doi.org/10.1108/JOCM-02-2017-0039>

Wijngaarden, Y. (2023). 'I like the "buzz", but I also suffer from it': Mitigating interaction and distraction in collective workplaces. *Human Relations*, 76(12), 1881-1903. <https://doi.org/10.1177/00187267221121277>

Ybema, S., Yanow, D., Wels, H., & Kamsteeg, F. (2009). *Organizational ethnography. Studying the complexities of everyday life*. Sage.