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Research Plan Urban Architecture Graduation Studio 2024/2025 Low Town Down Town 

Research Focus

This research proposal investigates the evolving relationship between living and working spaces, investigating the tension between comfort and discomfort in the built environment. I aim to understand how concentrating on comfort and its spectrum within architecture can enable a more symbiotic relationship between domestic and productive environments.





02 J. Voženílek (1946) Baťovany - Urban Regulation Plan 03 Repro-Horalík (1945) Baťovany - Residential District 04 J. Vaňhara (~1939) Baťa Factory in Zlín (Colorised)

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05 J. Vaňhara (~1935) *Baťa Factory in Zlín (Colorised)*



Throughout history, the connection between production and domestic spaces has changed significantly, reflecting societal and technological shifts. From integrated environments in the Neolithic period, where living and agricultural activities coexisted within the same rooms, to industrial urban settings characterized by strong separations (Dogma, 2022). In the Neolithic era, rectangular floor plans emerged, allowing homes to serve dual functions of living and labor. During the Gothic period, a clearer division appeared: workspaces typically occupied the ground floor, while living areas were positioned above or behind. However, the noise and dirt from productive spaces highlighted the limitations of these arrangements (Dogma, 2022).

The birth of Fordism marked a profound shift, emphasizing industrial production within dedicated factories and reinforcing the separation of home and workplace. This separation solidified during the post-World War II suburban boom, transforming the concept of home into a sanctuary away from work.

In spite of this separation, hybrid work-home arrangements persisted after the Industrial Revolution (Goheen, 2007). A notable example is the Coventry terrace, where shared steam engines powered multiple workshops in attics across households, allowing families to balance paid work, domestic duties, and childcare while nurturing community ties (Holliss, 2015). Nevertheless, zoning laws and mass production practices gradually restricted home-based work, confining it to skilled craftspeople and family-run businesses.

In the era of post-Fordism, the boundaries between living and working began to blur once more. The shift from material to immaterial production has transformed cities into intricate environments where living and working increasingly coexist (Lecture Series: Martino Tattara, Dogma, 2023). This trend accelerated dramatically during the recent COVID-19 pandemic, as homes transformed into extensions of workplaces, with dining tables becoming office desks. Although this blending can challenge worklife balance, it also opens pathways for innovative solutions that embrace interconnectedness. The dynamics of these evolving spaces reveal both oppressive conditions and liberating potential, prompting us to rethink and design environments that respond to contemporary life.



















In architectural discourse, comfort remains an open concept without a fixed definition; however, it is frequently conceptualized as the alignment of spatial qualities with the physical and psychological needs of occupants (Human Comfort in Buildings, 2022). This encompasses thermal comfort, indoor air quality, acoustic comfort, visual comfort (lighting), and spatial comfort (layout and ergonomics). Comfort transcends mere physical conditions; it is an experiential state intimately tied to our senses. Juhani Pallasmaa articulates how architecture engages multiple senses - sight, sound, smell, taste, touch, and movement - contributing to our embodied experience of space (Pallasmaa, 1994). A well-designed environment might offer not only visual appeal but also acoustics that foster tranquility, the tactile warmth of natural materials, and even pleasant scents. This multisensory engagement is crucial for nurturing belonging and well-being.

Pallasmaa (1994) emphasizes the significance of materials and details in architecture, showing how they evoke sensory experiences that define a space's uniqueness. By exploring "the materials, details, and events that have occurred inside these structures" (p. 40), we uncover the qualities that enrich our lives. He argues that architecture's "timeless task is to create embodied existential metaphors" (p. 49) that help us structure our understanding of the world, grounding us in "the continuum of culture" (p. 49). Thus, the experience of comfort transcends physical attributes, fostering deep engagement with our environment, stimulating our senses, and shaping our identities.

Ultimately, I assert that Pallasmaa's insights can inform the discourse on comfort in architecture, suggesting that the richness of comfort lies in diverse sensory encounters that enhance a space's overall quality.





"Comfort [...] is in short supply. Not because the world is running out of it but because, in the face of the climate crisis, we have to collectively adjust to its going away" (Barber, 2019, p. 44). Over the last century, the Western world has become accustomed to high standards of comfort enabled by the built environment. Within thermal comfort, fossil-fueled HVAC systems are expected to mitigate heat in warmer seasons and provide warmth in winter. However, these concepts are constructs of modern societies, coming at a significant energy cost - cooling and heating account for approximately 20% and 50% of building energy use, respectively (Wang et al., 2023). In light of climate change, my research aligns with Professor Barber's assertion that the status quo regarding comfort must be reevaluated. Architects, as "on the front lines," are responsible for "exploring life after" and for developing non-carbon solutions for "a world at the edge of discomfort" (Barber, 2019, p. 50).

The current focus on standardized comfort levels presents significant limitations. The pursuit of thermal comfort through mechanical systems often overlooks the rich sensory experiences architecture can provide. Contemporary architects, like Studio Muoto, argue that the modern tendency to create "thick thermoses" prioritizes uniformity over engagement, sacrificing sustainability and resulting in architecture that, while functional, lacks resonance with human experience (Studio Muoto, 2023).

Moreover, this prevailing notion of comfort can obscure the potential found in discomfort. Engaging with environments that challenge our senses can lead to richer experiences. For instance, Lisa Heschong (1979) emphasizes how microclimates can evoke delight, reminding us that discomfort can foster resilience and adaptability. The varied thermal sensations in places like Italian piazzas or Japanese thermal baths illustrate how integrating diverse thermal elements into architectural design can elevate human experience, akin to savoring a rich, varied cuisine.

Research by Richard de Dear (2011) supports the idea that asymmetrical thermal environments - rather than uniform conditions - may enhance pleasure. His findings indicate that individuals experience greater comfort when exposed to varied thermal sensations, paralleling the appreciation of a well-prepared meal. This suggests the potential for designing spaces that intentionally incorporate asymmetries and transient conditions to enrich overall experience.

Discomfort, often seen negatively, holds a paradoxical significance in our lives and environments. As Jacques Pezeu-Massabuau (2012) notes, discomfort emerges in relation to comfort; this interplay defines our experiences. The ephemeral nature of discomfort prompts a reevaluation of our surroundings, fostering potential growth and transformation. Discomfort can serve as a catalyst for understanding, whether through ascetic practices, social interactions, or creative endeavors. This idea resonates in architecture, where the tension between comfort and discomfort reveals deeper cultural codes and personal values. Pezeu-Massabuau highlights how different cultures embody discomfort in rituals and spaces, suggesting societal norms mediate our reactions to these feelings. Thus, discomfort becomes a lens for exploring identities and the essence of built environments, challenging us to confront limitations and enriching our understanding of space. The juxtaposition of comfort and discomfort ultimately illuminates the complexities of our existence and reveals joy in navigating discomfort.







16 6a architects (2016) Photography Studio for Juergen Teller



As we reconsider the integration of living and working spaces, we uncover profound opportunities to explore the gradients of comfort and discomfort that individuals experience. These gradients vary widely based on personal preferences, cultural backgrounds, and situational contexts. This proposal aims to delve into the meaning of comfort in architecture - what it signifies for occupants and how much they seek it based on their activities.



18 F. Wachter (2024) Gathering at Blikfabriek









The Urban Architecture graduation studio centers on a district in Hoboken, Antwerp, where the remnants of a once-thriving industrial era now pose open questions about the area's future development. At the heart of this district lies the Blikfabriek - a former can factory transformed into a dynamic hub for small businesses, artisans, artists, and community events. The unique architecture and spatial character of Blikfabriek sparked my curiosity about the relationship between perceived comfort and space. It inspires me to investigate spaces beyond Antwerp where the boundaries between private life and work environments blur or merge entirely, challenging traditional distinctions between domesticity and work.

Focusing on small businesses and creators in such spaces is not simply a nostalgic and romantic endeavor. Andreas Reckwitz, a German sociologist and cultural theorist, argues that we have entered a postmodern era where the dominant social logic centers on the pursuit of singularities, exposing the limitations and negative externalities that modernity has imposed on our cities. As Reckwitz writes, "The social logic of the general expressed by standardization, generalization and formalization which is forced by the industrial modernity has a flip side - the societal elimination and pushing away of genuine specialty (...) the fight against the seemingly non rational and the "different", forces a neglect and the destruction of local and historic spaces and their everyday culture for the sake of the functional city" (Reckwitz, 2020, p. 45).

In this context, creating architecture to host small businesses and creators allows us to resist this drive toward uniformity and react to the increasing demand. These actors reintroduce individuality, adaptability, and cultural vibrancy into the urban environment. Their presence not only enriches economic diversity but also preserves unique social spaces, facilitate connections that capture the singularity and depth of lived experience.











21 R. Boer et al. (2018) Architecture of Appropriation

22 B. Stumpf (1977) Julia's Kitchen – A Design Anatomy



In moving forward with the research, I intend to employ both qualitative and quantitative research methods:

- Ethnographic research through on-site semi-structured interviews with occupants of locations that combine living and working, supplemented by sketches, photographs, and field notes.
- Creating a personal journal to map and narrate my observations of comfort and discomfort in the built environment.
- Environmental monitoring using thermal cameras to map the existing microclimatic conditions of the spaces I visit.

Potential research question(s)

Apart from the main research question outlined in the research focus, I am curious to explore additional questions that revolve around the central theme. For example: How do we define comfort in architecture? When do we need to feel comfortable? To what extent can we sustain discomfort without it being harmful? Is there a benefit to certain types of discomfort in a work environment when juxtaposed with a comfortable place of retreat?



24 S. van Rij & D. van der Leeuw (2024) Sketches

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