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EARLY STAGE

DESIGN STRATEGIES RELATING TO THE PERCEPTION OF OWNERSHIP, POROSITY AND PROPERTY BOUNDARY

EXTENDED ABSTRACT

BOUNDARY, AFFORDANCE, TRANSITION SPACE, POROSITY

DDR STATEMENT

Being at the early stages of the design-driven research process, the preliminary research question's formulation was a critical moment in the reflection on the design methods I have used in my practice so far. Over the years, I have been working on projects with a similar brief (small-scale domestic buildings) yet, set in an entirely different context - England, India and Poland. The scientific rigour of doctoral research enabled a systematic appraisal of the outcomes analysed using the same criteria. Such reflection on my past working methods in these varied conditions, coupled with a growing interest in the locally-specific, spontaneous place-making processes and the attitude towards owned terrain, led me to an array of possible investigation directions. Is there a common factor regarding the perception of ownership in a dynamically changing social context? Can a specific architectural intervention have an analogous impact on the place forming process in those settings? These deliberations led me to specific alterations in my approach to the design strategy - the decisions related to the boundary aspect and become more deliberate rather than intuitive. As a result, I am testing and altering the sequence of the particular design decisions and experimenting with visual representation methods related to different work stages and the needed communication with the clients. Each project forming a part of an ongoing sequence of such testing allows for a constant reassessment of the possible design solutions. Those project-specific discoveries and reflections tested at a non-theoretical level will hopefully allow to build up knowledge positioned in the broader context of the enquiry into the tension between private and public.

ABSTRACT

Antagonistic relations between the domesticity and the public realm deliberated in conjunction with the boundary's capacity to form a space rather than a separation sets the base to this research proposal. The study looks at the design responses addressing such tension between the public and private, the periphery and the inner space — in the context of small-scale, predominantly residential projects. The documented projects are used to analyse the ambivalent qualities of the particular elements responsible for the manifestation of ownership and those controlling the perceived privacy levels and visual connectivity. The proposal aims to analyse how the used design tools and the concept development techniques affect the final design and the subsequent use. The study examines the design process where such a transition is represented as a narrative compelled of a sequence of specific moments — a tool used to define the build fabric's porosity and generate particular spaces' capacity to provide affordance for specific activities.

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The manifestation of land ownership and the property line has its symbolic meanings and an array of physical solutions depending on the regional, urban or rural settings. The notion of tackling the urban fabric fragmentation, the solutions for *border vacuum* within the urban tissue, but also the land-sharing schemes have been a topic of debate over the last decades. Whilst the concept of blurring the boundary between the public and private domain for the multi-occupancy domestic schemes is widely explored, I would like to take a closer look at the potential of testing these strategies from a perspective of a single, small-scale private project. Can a micro-scale intervention connected to the decisions regarding the fence, front yard, the porosity of the building and the particular elements' transparency and the visual accessibility augment the functionality of the immediate surrounding? How does a non-abrupt, gradual transition from the private to the public domain manifest itself in the nuances of design solutions?

The research proposal is set in the context of my past work relating to the residential development guidelines for an experimental township in south India where the assets, including the land, are shared by the residents. In this scenario of no legal ownership and only virtual property boundaries, I researched how the shared social infrastructure components can be incorporated in the built fabric whilst ensuring the varied levels of required privacy and security. Currently, in my architectural practice, I am investigating to what extent the design practices derived from a collective ownership environment can be successfully transferred into a regular setting whilst being limited to interventions connected to a one-off private project. I am testing how the quality of such transitional spaces can aid the experience of domesticity and the connectivity to the immediate community while inciting spontaneous place forming processes.

A particular dimension to my investigation is granted by the locations of my projects in the past years. India and Poland, seemingly distant, share a quality of being subject to relatively recent and profound political, social and economic changes happening in a considerably short time. The post-communist and post-colonial both give a context of rapid development and abandonment of certain building traditions, which in turn determine the perception of the needed security, privacy and the attitude towards land ownership. Whilst private-public boundary space can have different connotations in the tropics and different in the northern hemisphere, the exploration possible solutions in both scenarios of challenging, often dysfunctional and fragmented realm can give ground to design language for the revival of the lost, spontaneous community place-making practices.(1)

(1) Le Roux, Hannah (2004): Building on the boundary — modern architecture in the tropics, Social Identities, 10:4, 439-453, DOI: 10.1080/1350463042000258889 from February 20, 2021

fig.1. Bedroom. Layers controlling the visual connectivity to the street. Single family home, Bangalore, completed in 2020.

fig.2. Bench at the site's boundary. Completed in 2018.
Own drawing and photograph.

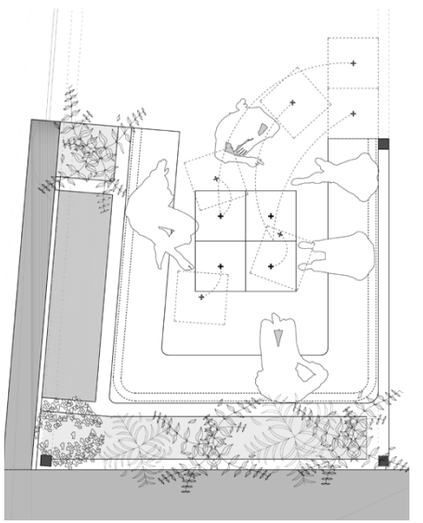

fig.3. Inner space narrative, produced to establish a concept for the visual connectivity of the specific spaces to the nearby surrounding. Single family home, design in progress. Own drawing.

The documented projects are used to catalogue the physical manifestations of the intimate domestic zone (fig.2), that at the site's periphery (fig.1), and further – at the adjacent, informally community-owned, shared space. I intend to question the need for a clear demarcation and separation of the Aristotle's *oikos* and the *polis* by offering a more intricate set of transitional spaces based on the exact privacy needs.(2) I look at how the characteristics of those zones, seen as a sequence of overlapping spaces, can be translated to the specific design tools augmenting the spaces transitions whilst meeting the particular project's functional requirements. I am studying how the positioning of such underlying sequence narrative as pivotal to the design strategy impacts the trajectory of the process, shapes the final porosity of the built fabric, as well as impacts the subsequent use. (fig.3)

Whilst investigating the aspects of the documented transition spaces, I am interested in testing the relevance of the Theory of Affordances by J. J. Gibson's and the associated nomenclature applied to describe the subtle moments of the documented design interventions.(3) Thus, I look at the given space as a medium where certain qualities of surfaces and their layout create affordance for specific activities – be it

(2) Aureli, Pier Vittorio (2008): Toward the Archipelago, Log, no. 11, 2008, pp. 91–120. JSTOR, www.jstor.org/stable/41765186 from February 25, 2021

(3) Gibson, J.James (1986): The ecological approach to visual perception, New York:Tylor&Francis Group.

a flat surface suitable for sitting, an alcove inviting to stop by or a sunny wall patch conducive for comfortable leaning and engaging in a conversation. Categorising the previously intuitively used design tools based on the psychology of ecological perception and appreciating the direct linkage between the design's nuances and the subsequent use, will hopefully pave the way to a more methodological approach in my future work. A systematised catalogue of the design tools relating to the structure of reflected light, relative point of view, textures or even the roundness or sharpness of edges grants a possibility of a more rigorous appraisal of the existing and future design outcomes.

Giving this added attention to the perception mechanisms which impact the design methods, particularly concerning the visual connectivity, I look at the new, apt ways of representation and appraisal of the designed fabric porosity. And so, I am delaminating all the build structures between the private domain and public realm into layers that act as visual connectivity filters – this helps to visualise and code the direct link between the gradation of privacy and porosity of the built fabric. (fig.3,5,6) The envelope of the building stripped down to information showing it solely as a filter for visual connectivity acting in a specific depending on the point of view, proves valid as means to a retrospective assessment of past projects and as a design tool for the current ones.

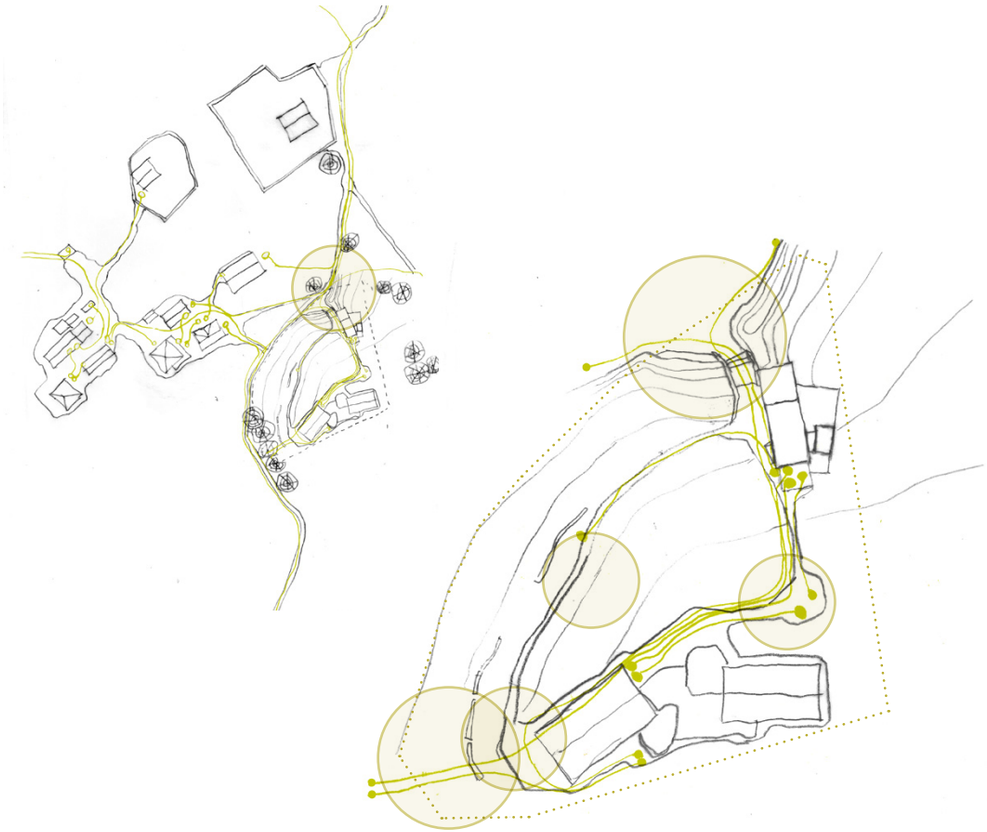

fig.4. Mapping of the existing and proposed movement routes and the periphery transitional spaces. Single family home and an ancillary summer house, Sablowka, Poland, design in progress. Own drawings.

The direction for further research and the coherent methodology's formulation is given by assessing certain failures and setbacks in my past projects' outcomes. This assessment motivated an alteration to the representation techniques I use — now they aim to represent, in a more direct manner, the underlying strategy regarding the transition spaces. I am currently observing how using such altered techniques impact concept development and how it affects client-architect communication. Consequently, I prioritise the subjective environment analysis sketches rather than formal architectural drawings representing barely the functionality requirement. As a design strategy, I aim to contrast and rationalise such subjective narrative design tool with a logical appraisal of the designed spatial elements following the previously mentioned Theory of Affordances and a mathematical approach offered by Nikos A Salingaros.(4) This strategy aims to directly reflect the particular privacy needs with the building's porosity and extend the reference ground of the future building inhabitants to the nearby neighbourhood, helping to appreciate the potential for an active usage beyond the building's envelope and even their site boundary.

(4) Salingaros, Nikos A. (2016): Borders in Architecture and Urban Design: Science Explains How Life is Influenced by Physical Boundaries. Lecture presented at the Seminar "Architecture and Cities in Transition" https://zeta.math.utsa.edu/~yxk833/Borders%20in%20Architecture%20and%20Urban%20Design.pdf from February 20, 2021

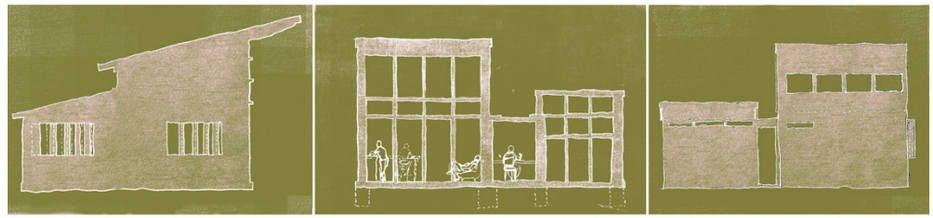

fig.5. Internal elevations study - building's envelope perceived from the inside as a visual connection filter. Summer house, Sablowka, Poland, design in progress. Own drawings.

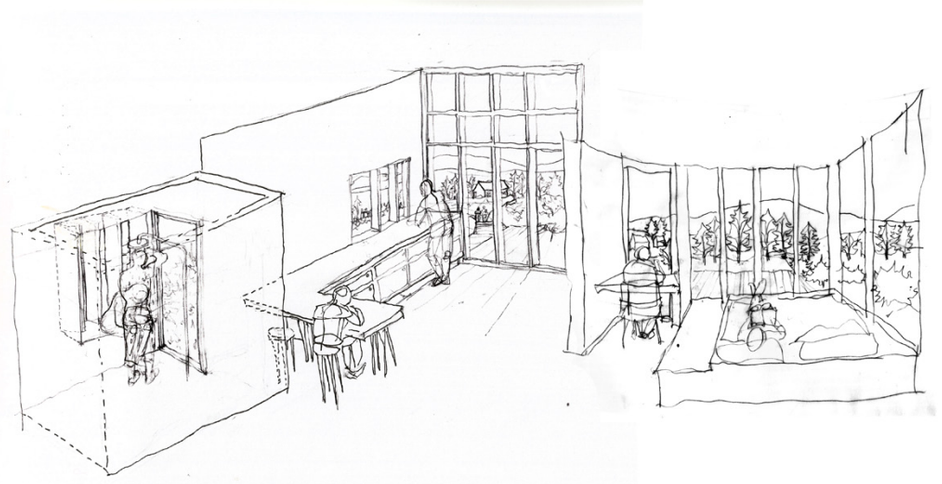

fig.6. Initial inner spaces narrative sequence study exploring porosity and the visual connectivity. Summer house, Sablowka, Poland, design in progress. Own drawings.

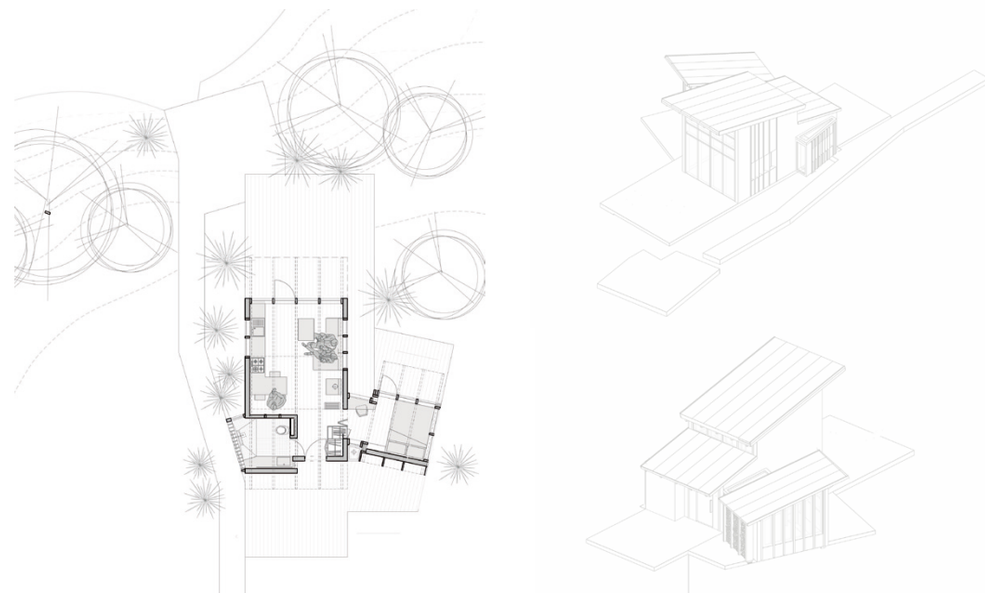

fig.7-9. Final conceptual design based on the narrative sequence concept study. Summer house, Sablowka, Poland, design in progress. Own drawings.