

AR3A160 Lecture Series on Research Methods

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TOWARDS ARCHITECTURAL ACUPUNCTURE OF EVENTS

A Phenomenological and Praxeological Reading of the City as a Collage of Situations through the Use of
Big Geo-Data

INTRODUCTION

In the architectural profession we often encounter the notions of the unjustified distinction between research and design, putting them in the antipodal categories of science and art. During a lecture in 2017 on Methodologies of Architectural Reuse, Martin de Jong brought up the highly discussed issue of the relationship between the two aspects and if they affect each other within the architectural process - does being a good analyst make you a better designer and vice versa. ^[1] Buildings, as part of our living environment, are always situated within a certain context, be it man-made or natural. Through their superimposition they react to the present surroundings, affect and change them, therefore become active components of the setting. In order for the architect to design an edifice that responds to its locale and creates a pleasant user experience, one must learn how to extract knowledge not only from the present context, but from as many practices as possible. Design and research are interdependent practices that cannot be separated by hard borderlines within the field of architecture. They complement and inform each other on the way towards a humanitarian built environment that successfully responds to the needs of its users. Just as the traditional notions of science and art do not exist in detachment, since even in the scientific context every new, not yet proven theory or paradigm is a product of a creative process ^[2], in architecture design is the tool which asks the right questions while research provides with the right answers.

The field of architectural design has an established high complexity due to its major role in all aspects of human life by providing shelter, utilities, entertainment, economic reformations and stage for political action, therefore the aspect of multidisciplinary in both design and research is crucial:

*"The architect should be equipped with **knowledge** of many branches of study and varied kinds of learning, for it is by his judgement that all work done by the other arts is put to test. This knowledge is the child of **practice** and **theory**."*

Vitruvius, A.D. 15 ^[3]

Within the series of Lectures on Research Methods I see the complex nature of the built environment reflected through the plurality of various methods and approaches in terms of architectural knowledge accumulation. The presentation of different prisms, through which analysis can be bent, as well as the catalogue of aspects, fluctuating from user experience, through typologies to materials, which can be used to inform architectural design was a great representation of the richness of the field and the extensity of the epistemological spectrum in architectural research.

The ground of the ongoing research is situated in the city of Prague, Czech Republic – a place of layers, cavities and mystery. My graduation project, entitled "Through, Above and Under", explores urban strategies within the city, combining the notions of the Situationist thought in an interdisciplinary amalgam

with the twisted world of Surrealism in search for a possible solution to the issue of overtourism. The Czech capital was the only place outside of France to have an official Surrealist group. Even today the traces of the movement are still not only present in the city, but also actively enriched by the work of contemporary artists (such as the well-known David Černý), hiding in the network of streets, passages and squares. Looking critically through the lens of phenomenology and praxeology, the thesis explores typical tourist behavior in Prague and the possibilities to navigate it through the creation of focal points of experience that all together will form an acupuncture web of balancing and activation not of a single plot, but a larger area.

RESEARCH-METHODOLOGICAL DISCUSSION

As formerly discussed, the artistic science of architecture is of highly complex nature, therefore it requires the implementation of a multidisciplinary research method. The growing issue of overtourism in Prague is imposing serious threat on its cultural heritage sites and calls for urgent measures. Such notion, of course, is dependent on the movement and behavior of people in a certain location and consequently the location providing the stage for their action. As Christian Norberg-Schultz suggests, every place is a totality composed of certain elements – concrete “phenomena” – both tangible (people, vegetation, rock, wood, etc.) and intangible (feelings).^[4] Such phenomena construct the two basic ingredients of the world as we know it – space and character. Together they form the concept of “lived space” – the one where all human actions take place – and since the act of “taking place” is usually related to the solid features such as spatial distribution and dimensioning, therefore being quantitative; and place itself is defined by its properties, thus understood as qualitative^[5], both types of research are implemented in the discussed thesis. The quantitative methods of data collection and statistical information will set the question “what?”, whereas the qualitative phenomenological and ethnographic studies, combining eyetracking, personal experience and cultural research, will ask “why?”, which combined with the former will give an answer to “how?”

The city of Prague in itself provides a stage for two main groups of users – locals and visitors. However, since the built environment is defined by the everyday life, its events, people’s movement and actions, the latter should not be examined as an alien element. All tourists are part of the everyday life of Prague and therefore contribute to its phenomenological and praxeological perception. The understanding of the praxis of both locals and visitors on the stage of Prague will shift the ongoing thesis from the “imaginary space” closer to the “real space”^[6] and will provide me with a base for developing a solution tackling the overly high concentration of tourists in certain areas of the city through the methods of designed attractors, path-making and architectural events. Moreover it will provide for the design of a proposal where the two contrasting worlds of local and foreign exist in unison.

In my research approach I cannot stay fully on the side of the etic, due to my personal experience living in the city of Prague for 6 months, as well as being a critical participant-observer of the local and touristic praxeological patterns in multiple occasions. However, enriching my own knowledge, the two main literature sources which inform the analytical methods within this thesis are the aforementioned work of Christian Norberg-Schultz – “Genius Loci: Towards a Phenomenology of Architecture” – which presents a new perspective on phenomenological reading of the city as positioned in between contrasting realities such as “earth” and “sky”^[7]; and Bernard Tschumi’s “Architecture in/of Motion”, in combination with other works on the Situationist approach, focusing on the human factor in architecture and the creation of events instead of objects^[8].

III RESEARCH-METHODOLOGICAL REFLECTION

The episteme of phenomenology has a long standing history within the field of architectural research. It is a philosophical tradition which immersed in Germany, and particularly in the works of Martin Heidegger and Edmund Husserl. In the architectural practice it was most often present as a notion in the writings of the aforementioned Christian Norberg-Schultz^[9]. The phenomenological system of inquiry is concerned with the relationship between being and dwelling and the human experience of the built environment. As Schultz suggests: *“to gain an existential foothold man has to be able to orientate himself; he has to know **where** he is. But he also has to identify himself with the environment, that is, he has to know **how** he is a certain place”* (Schultz, 1979).^[10] In the past such knowledge must have been limited to the hermeneutics of historic and architectural writings on a certain place; or simple participatory research^[11], however nowadays with the rapid development of technology and visual culture, the architect is equipped with a richer variety of research tools including photography, film and digital media.

In combination with the understanding of the phenomena that constructs the realm of Prague, it is crucial to analyse the way people use and move within the space. The study of praxeology – the analysis of human action and conduct^[12] – initially a term in social philosophy, was developed by Alfred Espinas (in its modern meaning) and implemented independently by two principal groups: the Austrian of Ludwig von Mises and the Polish school of Tadeusz Kotarbiński^[13]. We can see examples of praxis-led architecture dating from the first half of the 20th century in the works of Margarete Schütte-Lihotzky and her famous Frankfurt Kitchen, as well as Bruno Taut, in both cases emphasizing on efficiency informed by user action and movement. In the modern day praxiological practice interdisciplinarity is celebrated by the incorporation of research methods from the field of anthropology such as unstructured participatory observation – a method also used in my own analytical process - as an expansion of the established structured methods of user interviews.^[14]

The relation of the built environment with its users and their ever-changing needs contributes to the active nature of the architectural practice. Just as all living species are in constant process of evolution and transformation, the methods of design and research cannot maintain an isotropic nature and are exposed to the constant process of metamorphosis. The synthesis of phenomenology and praxeology in my personal research methodology is further enriched by the situationist perspective of reading the city as a stage of social reality and its architecture as “designed conditions instead of conditioning designs.” (Tschumi, 1997) ^[15] When tackling the issues of overtourism such architectural “events” can be read as attractors within the urban tissue. The traditional methods of literature reviews (including historical and theoretical readings, as well as popular tourist guides), data collection, photographic recording and objective assessment of physical components are of course an integral part of the overall process – they set the basic understanding of the present conditions and the way they have evolved through time. However, tourism is a human act, therefore its process has to be analyzed through the praxis of the human factor. In the present day one of the most powerful sources of information is the concept of big geo-data. During a trip the tourist no longer looks only for stimulating experiences, environments and encounters, but he/she is also involved in a continuous process of documenting, sharing and geolocating. Through the means of the internet and social media, such actions allow the monitoring of all traces left by human actions at a specific location. Moreover, big geo-data is a provider of constantly updated information, which can be used as a basis for the definition of existing hot-spots and development of marketing strategies. ^[16]

The most commonly used online platforms for photo-sharing are Instagram ^[17], Flickr ^[18] and Facebook ^[19], offering the users to upload unlimited geo-located data and thus creating an open database that can be used for both information and research purposes. Within my research process a quantitative study was conducted using the 200 most recent photographs from each platform which allowed me to engage into an explorative quantitative and qualitative analysis on the most popular attractors in the city of Prague (Fig.1). The findings provided a great overview of the flow of visitors and drew the traces of the invisible thresholds between the touristic hot spots and the local areas. Such information is crucial for the situationist city of events and my future design proposal, focusing on the directed movement of people through the city by the introduction of urban attractors, which, with the assistance of the highly present surrealist trace in Prague and its web of internal passages cutting through the city blocks, will contribute to the journey of mystery and discovery while dispersing the people flow.

Flickr

• Prague Castle	43
• Charles Bridge	42
• Old town square	22
• Mala Strana	20
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• Kampa park/island	8
• Bridges – aeral from Letna	6
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• Wenceslas Square	3
• Luziny	2
• Ujezd	2
• Alfa Arcade	1
• Astronomical Clock	1
• Dancing House	1
• Hlavni nadrazi	1
• Jerusalem Synagogue	1
• Jewish Cemetery	1
• Loreto	1
• Masarykovo nabrezi	1
• Metronome	1
• Municipal House	1
• Na prikope	1
• New Town	1
• Riegrový Sady	1
• Rudolfinum	1
• State House Opera	1
• Stvanice	1
• Zizkov Tower	1

Facebook

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• Astronomical Clock (currently under maintenance)	7
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• Dancing House	3
• Most Legii	3
• New Town	3
• Vysehrad	3
• Narodni Divadlo	2
• Prasna Brana	2
• Speculum Alchemiae Prague	2
• Strelecký Ostrov	2
• Bridges – aeral from Letna	1
• Fata Morgana	1
• Hlavni nadrazi	1
• Klementinum	1
• Letna	1
• O2 arena	1
• Stromovka	1

Instagram

• Charles Bridge	41
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• John Lennon wall	4
• Na prikope	4
• O2 arena	4
• Old Town	4
• Petrin hill	4
• Namesti Republiky	3
• Vinohrady	3
• Letna	2
• Lucerna	2
• Malostranske nabrezi	2
• Most Legii	2
• Museum of Communism	2
• Municipal House	2
• National Museum	2
• Prague Airport	2
• Quadrio	2
• St Nicholas church	2
• Vysehrad	2
• Ceske Muzeum Hudby	1
• Colloredo-Mansfeldsky palac	1
• Gallery of Steel Figures	1
• Hlavni nadrazi	1
• Il Commendatore statue	1
• Karlin	1
• Lobkovicz Palace	1
• Meet Factory	1
• Metronome	1
• Narodni Divadlo	1
• Nusle bridge	1
• Palac Akropolis	1
• Prague Gallery (I. P. Pavlova)	1
• Smichovska Naplavka	1
• Stromovka	1
• TJ Kobylisy	1
• Trhy na Jiraku	1
• Zizkov Tower	1

Fig. 1 Author's work. *Geo-located Photos*.

Moreover, the findings of the research draw the image of what is Prague made of from both local and foreign point of view. The language of surrealism is then translated into the building proposal by creating a collage of the components of Prague and their twisted representation. One of the main themes within the movement was the "demasking" of an object by its disposition in an unexpected context, which in this case is the composition of the typical elements of the city. The social media study was used as the main tool for defining those iconic elements to be used in the design process.

IV POSITIONING

In the lecture given by Marieke Berkers on *Investigating Spatial and Social Practices* the episteme of praxeology was related mostly to issues of efficiency and satisfaction of user's needs ^[20]. In the given example of the Home Economist including the work of Christine Frederick and her focus on the role of women as important agents in mass-consumption and the improvement of the efficiency of the household with an accent on the kitchen. Through the implementation of motion studies in the form of spatial diagrams the everyday praxis became the driving force of her revolutionary design.

The more contemporary example presented in Berkers' lecture – the case study of an affordable housing complex in Casablanca, Morocco by Bureau SLA and Idmaj Sakan - presents a new purpose given to praxeology. The study of human action is being used not only for tackling functional issues, but also as a source of information towards a bottom-up architectural approach, which gives voice to the real inhabitants and their needs. ^[21] Such strategies are commonly seen in the more recent practice with projects such as Quinta Monroy by ELEMENTAL, Sesc Pompéia by Lina Bo Bardi, Frizz23 building by Deadline Architekten and many more.

However, the architectural knowledge must always seek for expansion of its scope and active engagement with new disciplines, theories and methods. ^[22] The notion of praxeology in combination with phenomenology opens new perspectives not only regarding efficiency and user's satisfaction, but also on ways of reading the city. Through the incorporation of research methods as the analysis of geo-located big data, the urban planner or architect can gain an understanding of the ways, actions and experiences of the modern-day user whose life is heavily influenced by digitalization and social media. Emerging issues such as overtourism can be tackled only if their one active agent – the engaged individual – is seen as a guide towards a possible solution. Within my graduation thesis the knowledge obtained from social media studies is overlapped with statistical data on the number of visitors at Prague's landmarks ^[23], as well as a reflective review on the common aspects described in popular tourist guides. In addition, a phenomenological analysis on the atmosphere of the most popular sites was executed through investigation of historic literature and photographic documentation, as well as eyetracking and personal experience, on the present architectural styles and current happenings. Such combination of methods presented me with the possibility to establish what the "ingredients" of Prague are and what makes them attractive to the tourist masses and uninviting to the locals.

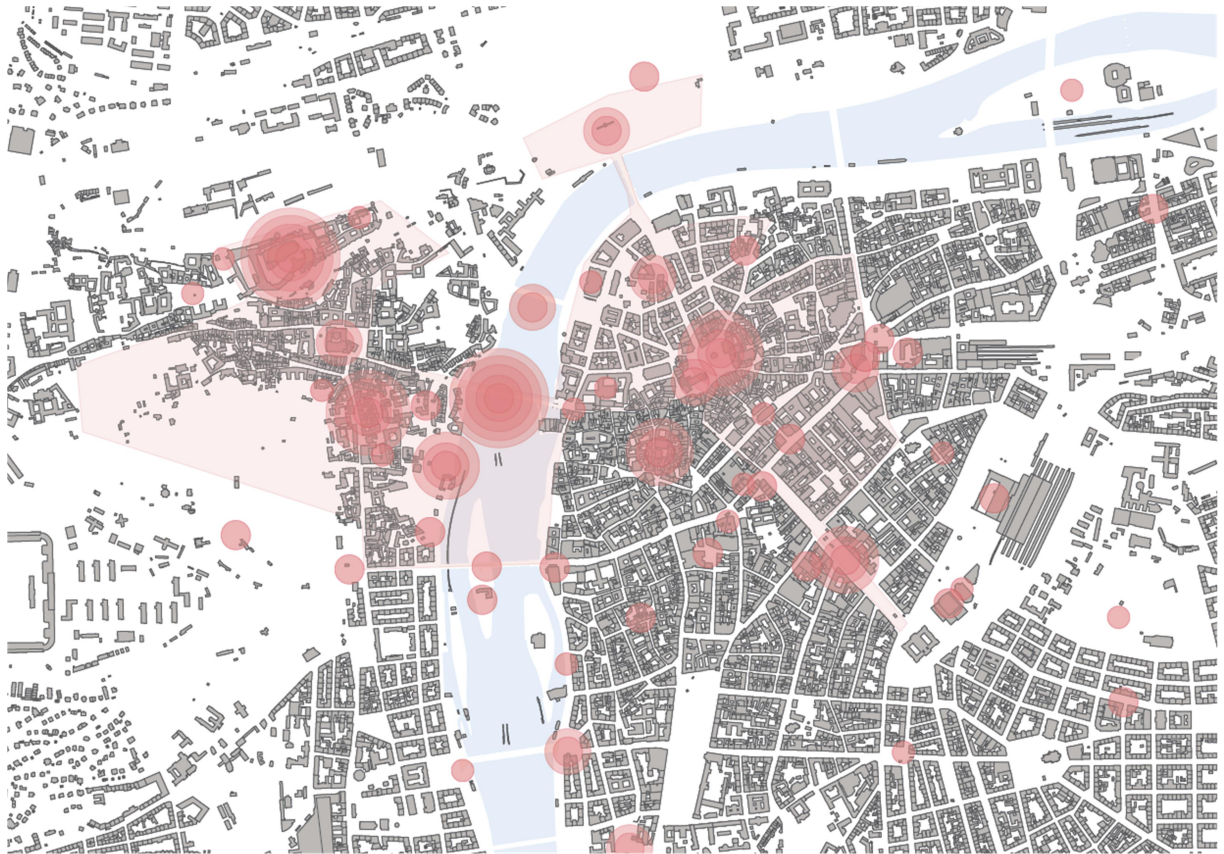


Fig. 2 Author's work. *Geo-located Photos and Tourist Guides Area*

In modern day architecture there is a strong duality in design approaches which on one hand is represented by the consumer buildings – driven by the purely competitive mechanisms of capitalism and the representation of the financial superiority of a single individual over the mass – and on the other hand social architecture – the one incorporating participatory design methods and focusing on the well-being of the community. The former aims at the construction of edifices-icons which act as design statements, disconnected from their context, simply carrying the signatures of the investor and the architect. However, such manifestations of individualism do not play the leading role in conditioning the city. ^[24] Instead, that part is given to the latter, the architecture that shapes the everyday life of the inhabitants, the one creating phenomenological happenings and housing the common praxis.

By understanding the human actions and experiences the architect is given the tools to create structures of acupuncture in the city – focal points in the urban tissue that not only relate and compliment their context, but also act as a web of engines for the activation of a larger area by interventions on single plots.

REFERENCES

1. Martin De Jong, *Design and Analysis* (lecture, TU Delft, 2017)
2. Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 24th ed (University of Chicago Press, 1957).
3. Marcus Vitruvius Pollio, *The Ten Books on Architecture*, trans Morris, 1st, 1960 ed (Dover: Dover Publications, A.D. 15, published: 1960) p. 5.
4. Christian Norberg-Schultz, *Genius Loci: Towards a Phenomenology of Architecture* (New York: Rizzoli, 1979) pp. 3-4
5. Ibid.
6. Bernard Tschumi, *Architecture in/of Motion*. (Rotterdam: NAI Publishers, 1997) p. 7.
7. Schultz. p. 8
8. Tschumi. p. 26
9. Linda Groat and David Wang, *Architectural Research Methods*, 2nd ed. (Hoboken, New Jersey: Wiley, 2013) p. 76
10. Schultz. p. 16
11. Groat and Wang. p. 228
12. Marieke Berkers, *Investigating Spatial and Social Practices* (lecture, TU Delft, September 20, 2018)
13. Leo V. Ryan, F. Byron Nahser and Wojciech Gasparski, *Praxiology and pragmatism. Praxiology: the international annual of practical philosophy and methodology* (New Brunswick, New Jersey: Transaction Publishers, 2002) pp. 7–9
14. Berkers
15. Tschumi. p. 21
16. Juan Carlos García-Palomares, Javier Gutierrez, Carmen Mínguez, *Identification of tourist hot spots based on social networks: A comparative analysis of European metropolises using photo-sharing services and GIS*. *Applied Geography*. Volume 63 (Amsterdam: Elsevier, 2015), pp. 408 – 417.
17. <https://www.instagram.com/>
18. <https://www.flickr.com/>
19. <https://www.facebook.com/>
20. Berkers
21. Ibid.
22. Peter Andreas Sattrup, *Architectural Research Paradigms: an Overview and Research Example* (Kongens Lyngby: Technical University of Denmark, 2012)
23. Prague City Tourism, *Statistics and Analysis* (*Prague.eu*, 2017)
Available: www.praguecitytourism.cz/en/our-services/statistics. [Accessed 25 Nov 2018]
24. Gianfranco Cannigia and Gian Luigi Maffei, *Interpreting Basic Buildings* (Florence: Altralinea, 2017) pp. 31-32

FIGURES

Fig. 1 Author's work. (2018) Geo-located photos.

Fig. 2 Author's work. (2018) Geo-located photos and Tourist Guides Area

BIBLIOGRAPHY

Bernard Tschumi, *Architecture in/of Motion*. (Rotterdam: NAI Publishers, 1997) p. 7

Christian Norberg-Schultz, *Genius Loci: Towards a Phenomenology of Architecture* (New York: Rizzoli, 1979) pp. 3-4

Gianfranco Cannigia and Gian Luigi Maffei, *Interpreting Basic Buildings* (Florence: Altralinea, 2017) pp. 31-32

Juan Carlos García-Palomares, Javier Gutierrez, Carmen Mínguez, *Identification of tourist hot spots based on social networks: A comparative analysis of European metropolises using photo-sharing services and GIS*. *Applied Geography*. Volume 63 (Amsterdam: Elsevier, 2015), pp. 408 – 417

Leo V. Ryan, F. Byron Nahser and Wojciech Gasparski, *Praxiology and pragmatism. Praxiology: the international annual of practical philosophy and methodology* (New Brunswick, New Jersey: Transaction Publishers, 2002) pp. 7–9

Linda Groat and David Wang, *Architectural Research Methods*, 2nd ed. (Hoboken, New Jersey: Wiley, 2013) p. 76

Marcus Vitruvius Pollio, *The Ten Books on Architecture*, trans Morris, 1st, 1960 ed (Dover: Dover Publications, A.D. 15, published: 1960) p. 5.

Marieke Berkers, *Investigating Spatial and Social Practices* (lecture, TU Delft, September 20, 2018)

Martin De Jong, *Design and Analysis* (lecture, TU Delft, 2017)

Peter Andreas Sattrup, *Architectural Research Paradigms: an Overview and Research Example* (Kongens Lyngby: Technical University of Denmark, 2012)

Prague City Tourism, *Statistics and Analysis* (*Prague.eu*, 2017)

Available: www.praguecitytourism.cz/en/our-services/statistics. [Accessed 25 Nov 2018]

Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 24th ed (University of Chicago Press, 1957)