

## **THE MOTION OF THE HAND CHOREOGRAPHING THE UNEXPECTED**

### **INTRODUCTION**

The awareness of research methodologies has become profoundly evident in heuristic techniques, design practices and within the architectural profession. Regarding heuristic techniques, one should be able to critically reflect on their actions and thinking, and substantiate a particular methodology. In design practices, the architect has to *'be able to demonstrate capabilities in specific research-based practices, for example, "evidence-based design" (EBD)'*<sup>1</sup> as there is an increasing inquiry from the clients side. Meaning that from an early stage in the architects profession, one should *'develop the ability to critically review and understand the basic research foundation of all manner of architectural products and processes.'*<sup>2</sup> It is on this course that we as students become familiarised with methodologies which have given me the opportunity to be acquainted with research methodologies of which I had no previous knowledge. As a result, a more in depth and open minded vision to others which could potentially be used alongside the studio's approach. However, as a student participating in Methods and Analysis (M&A) graduation studio, I have become aware of the fact that consciously and unconsciously I have stayed in line with their heuristic and research methodological approach. Through this approach the chair emphasizes the consistent use of praxeological<sup>3</sup>, epistemological<sup>4</sup> and phenomenological<sup>5</sup> research methodologies. Within each of these lies the importance of investigating the human actions in relation to the built environment in terms of meaningfulness<sup>6</sup>, appropriation<sup>7</sup> and integration<sup>8</sup>.

This approach, has resulted in the following thesis topic; *'Choreographing the unexpected'* which can be explained as; the panoptic eye of the planner looks down upon the territory, within which the situated choreographers compose a manifold story out of invisible trajectories that leave traces on the landscape. They weave their way through an existing, larger choreography of the city. When confronted with ambivalent spatial elements, the choreographers ponder and think of ways of interacting with them. Poets of their own affairs blazes trails and disobey the suggested use of things to subvert rules imposed on them and to actualize the latent potential afforded by things in the environment. They see the city as an open score, on which every spatial element provokes different interpretations and tells their own material stories. I imagine a landscape of non-determination that is not conceived for a norm that each body should reach in order to function smoothly in its environment. This landscape is populated with elements of a shifting nature, for instance a fence that evades its original purpose to divide whereby it becomes a choreographic device. Thus, the relation between elements are more important than what the single element is. In these relations lie the cues that mobilize our memory in the immediacy of a situation. I imagine a landscape of intensities and oddities that allows the emergence of something that is too vast or too volatile to be perceived, yet something that perhaps resides in the imaginary. From this the following research question can be defined; *'How can "the unrevealed" be revealed, forming a landscape of elements with a shifting nature and creating an open choreographic score?'*

### **RESEARCH-METHODOLOGICAL DISCUSSION**

In order to answer the research question a praxeological methodology has been applied. In this, lies embedded the heuristic approach. Praxeology can be defined as; *'The branch of knowledge that deals*

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<sup>1</sup> Linda Groat & David Wang, *Architectural Research Methods* (New Jersey, John Wiley & Sons, 2013), 5.

<sup>2</sup> Linda Groat & David Wang, *Architectural Research Methods* (New Jersey, John Wiley & Sons, 2013), 5.

<sup>3</sup> *'The branch of knowledge that deals with the nature of human action, (...).'* Retrieved from: <https://en.oxforddictionaries.com/definition/praxeology> December 3<sup>rd</sup> 2018

<sup>4</sup> *'The theory of knowledge, especially with regard to its methods, validity, and scope, and the distinction between justified belief and opinion.'* Retrieved from: <https://en.oxforddictionaries.com/definition/epistemology> December 3<sup>rd</sup> 2018

<sup>5</sup> *'An approach that concentrates on the study of consciousness and the objects of direct experience.'* Retrieved from: <https://en.oxforddictionaries.com/definition/phenomenology> December 3<sup>rd</sup> 2018

<sup>6</sup> Offering communities methods and instruments to improve their understanding of built environment in which they exist by. And by doing so, helping them understand what their role and possibilities are.

<sup>7</sup> Taking into account the feelings and hopes of different local communities when developing urban planning and built environment strategies.

<sup>8</sup> Offering methods and tools for constructing common grounds among different communities which are based on the relation(s) between meaningfulness and appropriation.

with the nature of human action, (...)’<sup>9</sup> and can also be understood as ‘action learning’. *‘There is no learning without action and no (sober and deliberate) action without learning.’*<sup>10</sup>

Regarding the studio’s approach, an open ended exploration through Teusaquillo, an area in Bogota, Colombia was emphasized at the beginning of our research. Therefore, the studio started with the exercise “Thinking through Things,” where a domestic object of objectiveness was to be brought with us. *‘(...) it is proposed that the “things” that present themselves will be allowed to serve as a heuristic with which a particular field of phenomena can be identified, (...)’*<sup>11</sup> The underlying heuristic approach of this exercise was that *‘... with its imperative to go out and “see for oneself” and to participate in, as well as observe, other peoples’ lives. Ethnographic fieldwork compels its practitioners to engage with people and their things in a variety of ways, not simply by talking to them or reading about them in their own or others’ texts.’*<sup>12</sup> From this idea, a certain fascination would evolve which in my case was Contemporary dance. This articulated itself into choreography and its notation within dance and architecture with the following underlying story; the urban planner, the choreographer of the city, laid down a set of rules and regulations for the ordinary pedestrian to follow. However we, the situated practitioners, the dancers, experience the city from within and perceive the environment through the passage from one place to another where we continuously weave our knowledge and movements through the urban layer, therefore creating our own choreography.

When recollecting my choreography, the technique of weaving was used, as for an unknown reason I was not able to deliberate on this. The motion of my hand tried to revive these memories, feelings and movements which were embodied in my muscles and joints; *‘Every motion of the hand in every one of its work carries itself through the element of thinking, (...). All the work of the hand is rooted in thinking.’*<sup>13</sup> Weaving as a tool for bringing “something” back relates to kinesthetic learning, a hands-on approach where the kinesthetic memory refers to how the muscles remember certain movements. *‘(...), when we attend to the qualitative dynamics of movement – (...) – we realize that the complexities and subtleties of our movement are grounded in kinetic qualities that structure our movement and constitute its particular dynamics.’*<sup>14</sup> It was a way to understand what my thoughts and feelings were and why my body was moving in a particular way. However, I did not understand ‘what’ moved my body and why it had made those particular movements. *‘A movement is learned when the body has understood it.’*<sup>15</sup> Through the motion of the hand my diary of the revisit was written, which again is a form of kinesthetic learning, and I was able to reflect on the spatial and architectural elements which I was confronted- and interacted with. These elements embodied the cues, which were interpreted and triggered my bodily movements. *‘My body is the fabric into which all objects are woven, and it is, at least in relation to the perceived world, the general instrument of my comprehension.’*<sup>16</sup> However the cues can be interpreted in different ways, not only by me but also by others, resulting in an element with a shifting nature and therefore creating an open choreographic score. This can be understood as; *‘A choreographic object, or score, is by nature open to a full palette of phenomenological instigations because it acknowledges the body as wholly designed to persistently read every signal from its environment.’*<sup>17</sup>

It is here that I would like to point out the relevance of this research methodology in the current discourse of architecture. Working from a praxeological point of view not only happens within research, but also applies to design processes. *‘Due to this fact, the scientific design process can be treated as a*

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<sup>9</sup> Retrieved from: <https://en.oxforddictionaries.com/definition/praxeology> December 3<sup>rd</sup> 2018

<sup>10</sup> Reg Revans, “Action learning: its origins and principles.” McGraw Hill Education, Retrieved from: <http://www.mheducation.co.uk/openup/chapters/9780335245970.pdf> December 2<sup>nd</sup> 2018

<sup>11</sup> Amiria Henare, Martin Holbraad & Sari Wastell, *Thinking Through Things: Theorising Artefacts Ethnographically* (New York: Routledge, 2006) 1-9

<sup>12</sup> Amiria Henare, Martin Holbraad & Sari Wastell, *Thinking Through Things: Theorising Artefacts Ethnographically* (New York: Routledge, 2006) 1-9

<sup>13</sup> Juhani Pallasmaa, *The Thinking hand. Existential and Embodied Wisdom in Architecture* (Sussex: John Wiley & Sons Ltd, 2009) 17.

<sup>14</sup> Maxine Sheets-Johnstone, *Kinesthetic memory* (USA: John Benjamins Publishing Company, 2003) 44.

<sup>15</sup> Merleau-Ponty, “Merleau-Ponty, Perception, and Environmental Embodiment Implications for Architectural and Environmental Studies,” *Merleau-Ponty and Perception*, retrieved from: [https://transitionconsciousness.files.wordpress.com/2012/10/seamon\\_merleau-ponty\\_carnal\\_echoes\\_chapter\\_9\\_9\\_10.pdf](https://transitionconsciousness.files.wordpress.com/2012/10/seamon_merleau-ponty_carnal_echoes_chapter_9_9_10.pdf) December 4<sup>th</sup> 2018

<sup>16</sup> Merleau-Ponty, “Merleau-Ponty, Perception, and Environmental Embodiment Implications for Architectural and Environmental Studies,” *Merleau-Ponty and Perception*, retrieved from: [https://transitionconsciousness.files.wordpress.com/2012/10/seamon\\_merleau-ponty\\_carnal\\_echoes\\_chapter\\_9\\_9\\_10.pdf](https://transitionconsciousness.files.wordpress.com/2012/10/seamon_merleau-ponty_carnal_echoes_chapter_9_9_10.pdf) December 4<sup>th</sup> 2018

<sup>17</sup> Retrieved from: <https://synchronousobjects.osu.edu/media/inside.php?p=essay> December 6<sup>th</sup> 2018

*systematic rational reconstruction of the designer's behaviour. Such a reconstruction requires previous reflection on designer's work, as well as some consideration and design experience, thus know-how knowledge based on methodological knowledge.*' However, with hindsight on this I would like to emphasize the praxeological methodology which up until this stage has been clearly apparent. The challenge here is that it could not only strictly be praxeological but that depends on the way the research and design process proceeds, which is why I feel that I should not completely eliminate other methodologies. Particularly the phenomenological research methodology. Having said that, it might become of potential added value.

## RESEARCH-METHODOLOGICAL REFLECTION

Since the 1960's, the emergence of praxeology, in other words action learning, has become increasingly important. Reflecting on the human action is *'one of the most powerful mechanisms for developing a students' thinking'*<sup>18</sup> even though there has been controversy in promoting why we should promote learning over teaching and why the situated practitioners knowledge exceeds that of experts. According to American academic Reg Revans it was and still is a methodology *'for tackling the 'wicked problems' (...).'*<sup>19</sup> Wicked problems are characterized by "things" that have no clearly stated formulation, nor a true or false solution. It suggests that we address these problems by studying and reflecting upon our own experience and actions and that we as humans have the potential to deal with these issues. In the 21<sup>st</sup> century the growth of use, and interest for action learning has become very mainstream for one reason in particular. The interest of academics and universities has led to an increased corporate use which has created opportunities for research- and practice-orientated programs. As a result, action learning itself has changed as well, where it is more a specific method than an idea. This transition is shown in American philosopher and pedagogue John Dewey's model of learning through reflective inquiry where he develops the concepts of inquiry-based learning<sup>20</sup>, problem-based learning<sup>21</sup> and experimental learning<sup>22</sup>.<sup>23</sup> It is therefore not a uniform idea but a family of methods.<sup>24</sup> However, it can be argued by Revans that action learning has become a 'generic title' and that due to too many bogus programs it lacks resemblance to his theory, which therefore leads to the *'questionable usefulness when redefined according to some current theory.'* But according to the current literature, *'(...) Revans started something and we modern practitioners know how to make a good thing better. We are the practitioners right?'*<sup>25</sup>

Reflecting on how the understanding of action learning has developed over the past decades and which methods have evolved in relation to my research, there are a few issues I would like to touch upon. From my perspective I agree on the fact that it is a powerful mechanism for the development of a students' thinking. It is therefore not surprising that this research methodology is being taught to us as students with, in this case, a heuristic approach through the exercise of Thinking Through Things where we discover through our actions and experience and critically reflect on this. However, regarding the traditional vision of action learning with its underlying idea of 'tackling a problem' is something I cannot relate to nor is this the approach of the M&A studio. We should not be solving a problem by reflecting on our experience and actions, rather we should be asking ourselves a question. Since reviewing both the "Thinking Through Things" exercise and the research method of kinesthetic learning, it is now

<sup>18</sup> Yordanka Dimova & Kalina Kamarska, "Rediscovering John Dewey's model of learning through reflective inquiry," *Problems of Education in the 21<sup>st</sup> Century*, retrieved from: <http://www.scientiasocialis.it/pec/node/948> December 4<sup>th</sup> 2018

<sup>19</sup> Reg Revans, "Action learning: its origins and principles." *McGraw Hill Education*, Retrieved from: <http://www.mheducation.co.uk/openup/chapters/9780335245970.pdf> December 2<sup>nd</sup> 2018

<sup>20</sup> 'Inquiry-based learning is a form of active learning that starts by posing questions, problems or scenarios—rather than simply presenting established facts or portraying a smooth path to knowledge.' Retrieved from: [https://en.wikipedia.org/wiki/Inquiry-based\\_learning](https://en.wikipedia.org/wiki/Inquiry-based_learning) December 5<sup>th</sup> 2018

<sup>21</sup> 'Problem-based learning is a student-centred pedagogy in which students learn about a subject through the experience of solving an open-ended problem found in trigger material.' Retrieved from: [https://en.wikipedia.org/wiki/Problem-based\\_learning](https://en.wikipedia.org/wiki/Problem-based_learning) December 5<sup>th</sup> 2018

<sup>22</sup> 'Experiential learning is the process of learning through experience, and is more specifically defined as "learning through reflection on doing". (...)' Retrieved from: [https://en.wikipedia.org/wiki/Experiential\\_learning](https://en.wikipedia.org/wiki/Experiential_learning) December 5<sup>th</sup> 2018

<sup>23</sup> Yordanka Dimova & Kalina Kamarska, "Rediscovering John Dewey's model of learning through reflective inquiry," *Problems of Education in the 21<sup>st</sup> Century*, retrieved from: <http://www.scientiasocialis.it/pec/node/948> December 4<sup>th</sup> 2018

<sup>24</sup> Reg Revans, "Action learning: its origins and principles." *McGraw Hill Education*, Retrieved from: <http://www.mheducation.co.uk/openup/chapters/9780335245970.pdf> December 2<sup>nd</sup> 2018

<sup>25</sup> P.A.C. Smith, "Action learning: praxeology of variants," *Esmerald Insight*, retrieved from: <https://www.emeraldinsight.com/doi/pdfplus/10.1108/00197859810791609> December 1<sup>st</sup> 2018

possible for me to relate to John Dewey's present-day concept of action learning of "Experimental learning." Bearing in mind the dependency on further future developments. Experimental learning can be defined as; '(...) *the process of learning through experience, and is more specifically defined as "learning through reflection on doing". (...)'*<sup>26</sup> By observing and reflecting on a concrete experience, we learn from what we have done.<sup>27</sup> And in my case, by reflecting through the motion of the hand in the form of weaving and writing, I have come to the understanding that it revealed what I was feeling and thinking, and why as a result of this I was moving my body in a particular way.

## POSITIONING

As mentioned previously, writing was used to understand and reveal which spatial and architectural elements, which embodied the cues, made my body move in a particular way, made me feel the way I felt and thought. The motion of the hand itself revealed this whilst writing my diary of the revisit. '*The purpose of words is to point out, illuminate and reveal. A poetic word can make us see, touch, feel and understand.*'<sup>28</sup> It is here that I would like to position this part of my research method in relation to Klaske Havik's lecture on "Investigating Spatial Narratives" where she presents literary methods as conceptual and practical approaches. Writing can be applied as a tool within design practices as well as in educational programs and research. Therefore we are able to '*reinforce our means of dealing with complex intellectual, experimental and emotive worlds in design.*'<sup>29</sup> She also states that through '*using literary description as a mode of architectural investigation*' it reveals aspects such as embodied perception, memory and use, which are sometimes difficult to describe.<sup>30</sup> The visual impact of experiencing the architectural and spatial elements in Teusaquillo were experienced and embodied unconsciously and through the act of writing my imagination was constructing the architectural existence.

However, even though I can empathize with Havik's vision, I would like to emphasize that the act of writing was made possible through the motion of the hand. The embodied thoughts, feelings and movements in my muscles and joints were revealed through the motion of the hand by writing. Consequently, the architectural and spatial elements were revealed as well as the embodied cues which had triggered those initial thoughts, feelings and movements. Therefore I would like to make clear that even though writing does not predominantly fit within the praxeological research methodology, I still position myself in this as the research methods which have been applied were driven by the action of the human body.

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<sup>26</sup> Retrieved from: [https://en.wikipedia.org/wiki/Experiential\\_learning](https://en.wikipedia.org/wiki/Experiential_learning) December 5<sup>th</sup> 2018

<sup>27</sup> John Ord, "John Dewey and Experiential Learning: Developing the theory of youth work," *Research Gate*, retrieved from: [https://www.researchgate.net/publication/270338098\\_John\\_Dewey\\_and\\_Experiential\\_Learning\\_Developing\\_the\\_theory\\_of\\_youth\\_work](https://www.researchgate.net/publication/270338098_John_Dewey_and_Experiential_Learning_Developing_the_theory_of_youth_work) December 4<sup>th</sup> 2018

<sup>28</sup> Juhani Pallasmaa & Klaske Havik, *Domicile in Words. The Scriptive Approach to Architecture* (Rotterdam: NAI Publishers, 2014) 6-15.

<sup>29</sup> Juhani Pallasmaa & Klaske Havik, *Domicile in Words. The Scriptive Approach to Architecture* (Rotterdam: NAI Publishers, 2014) 6-15.

<sup>30</sup> Klaske Havik, "Acts of Symbiosis: A Literary Analysis of the Work of Rogelio Salmons and Alvar Aalto," *Montreal Architectural Review* no. 4 (2017): 41-60, <https://repository.tudelft.nl/islandora/object/uuid:2b5e8810-d5ab-4e67-.../download>

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