

Exploring the Role of Experimental Research Photography in Architectural Design Research.

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Abstract

This paper delves into an experimental methodology designed to explore a research question examining the entry of change into social and political discourse. It explores how these experimental methods can be used to excavate and visualise non verbal processes in research particularly architectural design research, which are typically attributed to intuition. Furthermore, the study looks at how these mechanisms can be translated and communicated to a peer group in order to encourage and document alternative meanings made from the experimental project. This approach attempts to demonstrate how this methodology can be applied to architectural design research procedures to understand and enhance how architects come into new knowledge. My primary interest is the application of this method in architectural design research and its usefulness in the intersection between architecture, creativity and practice. The group discussion is centred on a workshop conducted at the Bauhaus Foundation Co-op Master's Thesis Program in collaboration with fellow workshop participants.

Key words: Photography, Experimental Research Photography (ERP), collaboration.



Figure one: Experimental Research Series

1. Take One: Situating the Research Approach

From the outset of the project change to me was an interesting concept to tackle because its existence can only be validated through the production of an outcome. I believe what comes after change occurs is actually what we perceive to be change. Change is constant, consistent, happening, active and alive as soon as it is located as a moment in space-time and history it is cemented in the past. In this way, change alternatively occurs in every moment, all the time and indefinitely rather than a linear set of events or actions which produce an event, and if this was to be acknowledged in my own research process how then can I justify my desire to photograph it?

Even if I were to describe this approach as a pursuit to photograph the *process* of change there are still many contradictions which present themselves. In the first instance, the desire to “capture” it at all as a singular event or moment was misguided and in retrospect I now realise that as Donald Schon mentioned, reflection-in-action may be a key reaction in redefining my approach to the task at hand.¹ Here, it is important to make note that I only find myself making sense of the methodology explored after the task has been completed, further giving evidence to the difficulty of architects to verbalise the intuitive methods which guide us.² Part of the defining character of my approach is a present mindset and research approach that is required to witness, rather than capture, an active meeting of matter, energy and catalytic forces. In venturing further down this path I am cognisant of the intuitive process which is guiding me to my solution, but it would be remiss of me to not speak about where I had first gone astray. Like any responsible researcher and architect I first set out to define what I was looking at exactly which entailed proposing and defining what change is exactly. If we follow the train of thought that there is in fact a tried and true method to approaching a scientific problem we can identify where I first encountered a bump in my research journey.

By applying the typical method I have learnt in my formal education - the logical and reliable approach to problem resolution, I began by defining the word change in relation to the task at hand as, “an act or process through which something becomes different”.³ Admittedly, change is a complex notion explored in many disciplines and in this instance my interpretation may most compellingly draw from theories established by Everett M Rogers who is notable for discussing how innovations propagate and spread through social and economic systems. In Rogers’ classic or descriptive model people are viewed as innovators who adopt change at varying rates and yet his theories are criticised for not detailing how such change may be perpetuated and sustained.⁴ In broader terms Rogers’ theories find

¹ Donald A. Schön, "The Reflective Practitioner: How Professionals Think in Action" Accessed December 9, 2023. <https://rauterberg.employee.id.tue.nl/lecturenotes/DDM110%20CAS/Schoen-1983%20Reflective%20Practitioner.pdf>

² Robert J, Sternberg, “Tacit Knowledge in the Workplace”. Accessed December 9, 2023. <https://apps.dtic.mil/sti/tr/pdf/ADA362656.pdf>.

³ Change | English Meaning - Cambridge Dictionary.” change. Accessed December 10, 2023. <https://dictionary.cambridge.org/dictionary/english/change>.

⁴ Everett M. Rogers, "Diffusion of Innovations" Accessed December 10 <https://teddykw2.files.wordpress.com/2012/07/everett-m-rogers-diffusion-of-innovations.pdf>

purpose in addressing organisational behaviour and management within a functioning ecosystem where variables may easily be managed. It is not to say these theories are not applicable to the creative spaces of architects or designers, but I wonder how these classical models can be translated to suit the creative and collaborative structure of research in the design space, if at all? Perhaps my process can better be explained through references to the literature presented to us during the workshop? During the design research workshop we were tasked to generate a photo series to explore a research topic of our choice. After having read the documents supplied to us which discuss the New European Bauhaus and the Green Deal, my interest in questioning the condition of change was ignited. So, from the outset of the creative task it was paramount to focus on what change is, what it means and how it exists in relation to us. I wanted to understand how change enters social and political disclosure, what it looks like, what it feels like and if this was at all possible.

But now, in retrospect it hits me.

If change is the nucleus of paradigmatic shifts then I wonder if it is in fact a condition which can be materialised? My hypothesis was that just like a nucleus surrounded by a membrane consisting of a complex arrangement of energetic forces, so too can change exist as a similar phenomenon. It is by way of this thought process that I realise now the photos produced are not in fact photos at all, and by extension I am not a photographer. What they do instead demonstrate and present is how my understanding of complex phenomena such as change can be examined through abstract representation and methods, and more deeply, how complex phenomena in architectural design research may be examined, interpreted and generated. In this process, I then become a witness to the meeting point of a complex relational dynamic in which traditional hierarchies between the observer and subject are disturbed. To me this demonstrates that experimental approaches can be utilised in architectural design research methods to explain how architects come into new knowledge.

1.1 Observing Relationships: Not a Photographer, Not Photographs.

One interesting aspect of this research exercise to me was that the idea of change that I had arrived to the point of creating the pictures was not yet fixed. Like all creative processes that feature iterative methods, the photo experiments also required time, development and introspection. By being open to what could be instead of engineering an outcome the photos begin to develop a language and relationship of their own, or even more so the ability to regenerate and recreate alternative scenarios. Each photograph presents a moment of alignment of forces that exists in reality for just a brief moment. The transcendental and transient nature of these moments speaks to the dialogue the photographs begin to establish with themselves, the lens and myself. In this instance I am not the photographer, but instead my sole duty is to witness the meeting of forces. Karen Barad speaks of scientific apparatus like the microscope, or in this case the lens, as a form of relationship that allows us to see opportunities rather than define problems.⁵ In my own experiment, equal significance is given

⁵ Ino Mamic, "Karen Barad's Onto-Ethico-Epistemology as an Apparatus of Empowerment in Contextual Theologies," *Hyperrhiz: New Media Cultures* (2016): 1-1, Accessed December 12, 2023 <https://doi.org/10.20415/rhiz/030.e14>.

to the matter, energy and lens which work together to generate a relationship or engagement which is then observed and documented. There is no hierarchy between what is in front of the lens and what is behind it, and in equal measures I am also a part of the experiment as a witness to the moment. What is most significant to me here is the opportunity that is created to bear witness to a moment of dynamism which gives way to instances that can be documented, recorded, interpreted and re-interpreted through reflection, composition and interaction. By disturbing traditional hierarchies in this context the approach identifies how architects can enhance their understanding of new knowledge whilst also presenting novel ways in which scientific inquiry may be conducted in the field of architectural design research and practice. Furthermore, this unconventional relational dynamic between the observer and observed, in this case the photographer and the lens, which later extends to the architect and their tools illustrates how we can more deeply understand and define processes which are often attributed to intuition in the design research process of architectural practice. In addition to the mechanism of scientific enquiry investigated here, material connections to the built environment were an important aspect in the genesis and conceptualisation of the series.

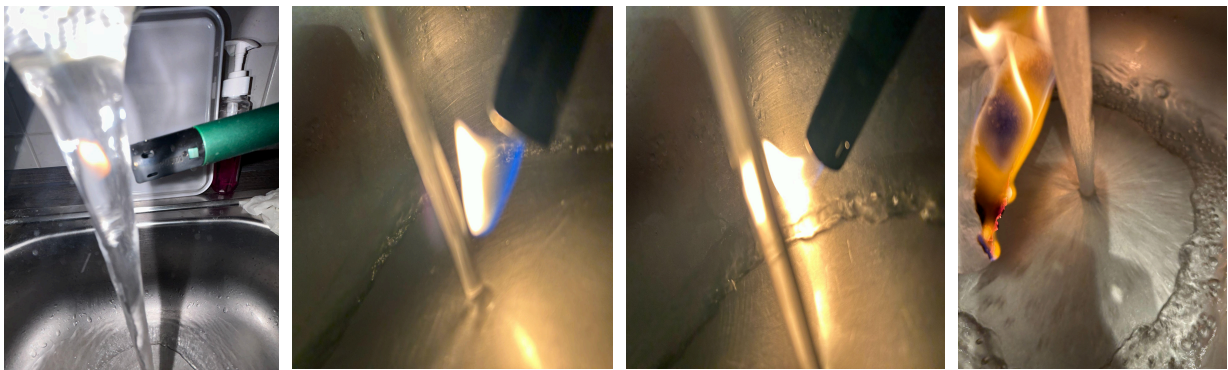


Figure Two: Material Exploration

2. Take Two: The Significance of Abstract Experimentation in Material Explorations.

Conceptualising the research project through abstract experimentation was important to me as it provided a clean creative slate in which I could explore how new knowledge is formed and understood. What I sought to understand and study was how change not only enters social and political discourse, but what type of condition it exists in. This required a difficult process in which abstract relationships can represent real world conditions, and to me this abstract conceptualisation was a prominent mode of exploration when conjuring my research question. I felt that in order to study complex phenomena such as change, or the condition of change I needed new and creative formats which would represent the energetic and catalytic forces which encourage change and to me this was perceived as a methodological approach to material experimentation and chemistry. I can now describe this train of thought as a reliance

on prior knowledge of materiality perhaps related to my education and experiences in architecture, whereas at the time of experimentation I would have described it as an “intuitive direction” I felt compelled to travel in. Therefore, in order to produce new scenarios that could demonstrate how the condition of change occurs I set out to find material interactions that would successfully support my hypothesis. As a result, I once again returned to my prior scientific knowledge in chemistry to source material agents that would support catalysis, and more importantly materials which were readily available and at hand. This on-hand approach was a crucial aspect to me because it symbolised how ideas can often sit in our subconscious until the realisation that they exist is either instigated or ignited through a conscious agent. The materials I employed included oxygen, fire, water and time, all elements that would support catalysis and in their own right I hoped would interact with one another in an interesting way. The idea of change, or the systems which constitute change are represented to me here in abstract forms. As previously noted, my understanding of change is more rooted in its processuality instead of the outcome and what I was more interested in observing was the interactions that lead up to a moment that would typically be defined as ‘change’, that is a series of interactions between catalytic elements that produce an event which can be documented and interpreted.

More importantly, these elements are found all around us and are readily available. They successfully resemble materials we find in our built environment and the energetic forces needed to create and erect the world around us. By pondering these decisions now, I can begin to draw parallels between the materials I “intuitively” thought would work well together to instigate an event, and my material understanding of the world around me as an architect. Once again, through retrospection and introspection I can outline the process which led up to this decision and begin to bridge the conceptual approach of the experiment with a tangible relational dynamic that exists in the world around me. These material connections also make evident how architects can lean on existing knowledge and traditions to form the basis of scientific inquiry in the production of new knowledge in the field. The process of this experimental approach along with actions which are influenced by existing knowledge has been useful in guiding my exploration of my research question, and now in reflection allow me to unravel the procedures which are often touted as intuitive in creative practice.⁶ These procedures are not just limited to the aforementioned practices, and one important element of the research experiment was the treatment of what was witnessed. These instances, happenings or previously misdefined as photographs at this point, began to establish a language of their own that I believe can be most visibly, amongst other systems of relationship, be rooted in aesthetic familiarity. This is one aspect which I believe can be enhanced through a conscious effort of curatorship, omission and artistic compatibility.

⁶ Tyson C. Fiscus, “Intuition in the Design Process” Accessed December 30, 2024. <https://core.ac.uk/download/pdf/188077976.pdf>

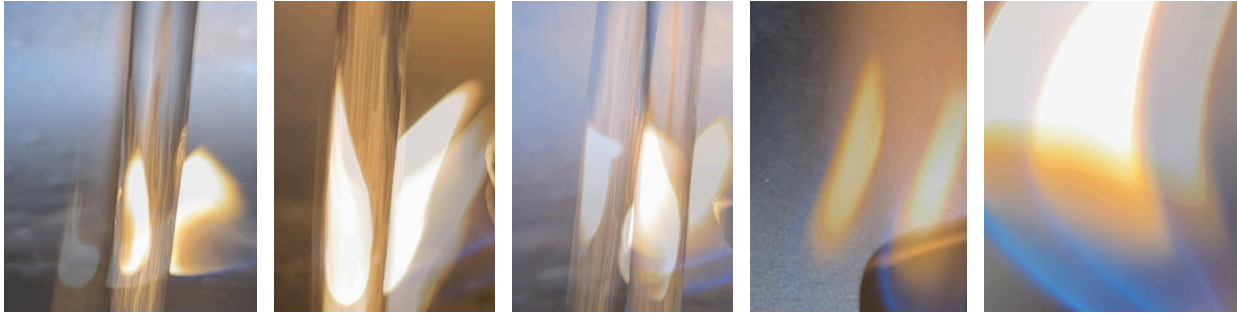


Figure Three: Raw Format and Curation Process

2.2 Curating a Series: Exercising Composition and Omission.

At this stage the series began to take on its own character in that each instance gives way to another similar yet different scenario. Figure Three demonstrates what I mean when the “photographs” began to develop a dialogue of their own, and I would further describe this as the ability for one photograph to give birth to another. Many scenarios later, a collection of these instances becomes a series and by observing the group as a collective we are able to draw meaning from the whole. However, there is one caveat I must acknowledge in this process, that is the act of omission and curatorship. Here is where the intuitive path takes a more formal route as the selection of moments to form a series becomes informed and referential. To me formal principles of aesthetics, artistic relationship and composition become most prominent in their ability to elicit meaning from the group. Colour relationships and spatial dynamics lead the process of omission and in doing so I felt compelled to pull out images which seemed to hold some sort of unison that is difficult to define by words. The similarities in warmth, tonality and texture of a few instances spoke to me and the final group formed make these connections evident.

One important aspect in proposing the relationship between the group is the exercise of composition. In addition to demonstrating the connectedness and familiarity of individual elements as part of the group this act of refinement was important in presenting the instances as a body of work that was open to interpretation. Here, the dialogue between the group, lens and myself extends to welcome interaction and reflection from the workshop participants. One significant characteristic of how the work presents itself is in its abstracted form both visually and metaphorically where greater significance is made from the photo series through interaction, particularly the observation and meaning made by others who were not directly involved in the experiment. The social engagement with the documented instances is key in excavating “covert” and “subjective” forms of interpretation as John Law puts it.⁷ The notion that ideas are shaped and in turn shape our understandings, contribute to the continuously reforming meanings drawn from the series. The most significant parallel I can draw from

⁷ John Law, "The Double Social Life of Method," ESRC Centre for Research on Socio-Cultural Change (CRESC) 5th September 2010.

Law's discussion to my own methodology is the usefulness of discussion and debate in a social setting. Partially for me, this was an integral aspect of my post reflection of the series because the discussion which formed out of this series developed the relational dynamics I had previously mentioned. Not only did this result in an aggregate of alternative meanings made from the group, but also as an extension of the relationship between the observer and the observed. In this setting, the observer becomes the observed and the observed instances extend themselves to become a medium by which my intuitive and novel insights can be communicated to peers. To me this is an important feature of scientific inquiry in architectural design research because it encourages a greater awareness of "blind spots" which may be present in my methodology and findings. This social peer review I can agree may not be necessary in detailing the findings from the experiment however, are important in aggregating data and mitigating bias when considering the experimental nature of the methodology presented.

2.3 Peer Discussion and how the Experiment is Enhanced by Subjective Readings.

Notably, this elaborates on Barad's earlier comments about apparatus allowing us to identify opportunities as here, discussion in the social-scientific sense amongst peers identifies potential oversights in my methodology. The remarks of the group suggested to me that it is not so much that the methodology itself is rooted in subjective creative practice, but that the multiple meanings derived from abstract experimental research activity allow for subjective reasoning to feature in conclusions drawn from the experiment. Although this may appear counterintuitive to scientific procedure, I believe this is not the case for methodologies which feature in architectural design research and adjacent creative sciences. This is important for me to acknowledge because in this case instead of derailing the scientific integrity of the study it proposes a flexible methodology that can suit how architects research. In this experiment we can see an alternative where experimental methodology works to enhance the research process particularly for architects, because the methodology allows for subjectivity outcomes which enhance the overall findings from the experiment. To me, these experimental methods demonstrate the "alternative worlds" Frederik Nilsson speaks of that architects are distinctly capable of creating in the process of knowledge making.⁸ Furthermore, they hold the ability to make the unseen in our process of research enquiry visible to ourselves and accessible to others whilst encouraging a methodology that suits the observer, rather than the alternative of a rigid methodology that they must instead suit in order to receive an outcome.

3. Findings and Applicability

The feedback from the group discussion and a retrospection on the methodology outlined here presented me with many useful considerations in reflection. Firstly, the significance of an alternative approach to the relational dynamic between researcher and apparatus evidently becomes significant as I see it as a way to redefine how we witness opportunities and

⁸ Nilsson, Fredrik. (2013). Knowledge in the Making. On Production and Communication of Knowledge in the Material Practices of Architecture. FORMakademisk. 6. 10.7577/formakademisk.569.

acknowledge oversights in our research process. The witnessing of events in a scientific sense has become most apparent to me in this process as it not only honours the non-hierarchical approach described but also allows for an openness that can be explored through experimentation. Rather than document the final outcome of the test, or experiment, the present mindset required to undertake the experiment is what gives weight to the series. The process of iteration and informed curatorship to refine the process was also important in situating the series as a meaningful research approach to the question at hand. Additionally, given the abstract nature of the series it can easily be misread as an artistic representation of change, rather than a scientific and methodological approach to the research question. The ability for the series to hold many meanings is perhaps its greatest strength as it simultaneously allows for an excavation of intuitive practices, communicates the implicit as explicit and spurs discussion and debate about how the findings can be perceived in a creative group setting.

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Images

All images © Tsyon Feleke

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