

# Dorotea Ottaviani and Cecilia De Marinis

## PRACTICE-BASED PHD AS AN EXPLORATIVE JOURNEY THROUGH TACIT KNOWLEDGE

### **AUTHORS**

Dorotea Ottaviani, postdoc  
'Università degli Studi Guglielmo Marconi'  
dorotea.ottaviani@gmail.com

Cecilia De Marinis, postdoc  
School of Architecture & Design, RMIT  
University  
<http://dap-r.info>  
cecilia.demarinis@rmit.edu.au

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### **ABSTRACT**

Can Tacit Knowledge be intended as both the aim and the tool for a creative practitioner/researcher's enquiry? The paper offers some insights as emerged from the experience of the recently concluded ADAPT-r ITN programme, focusing on the compelling facets of Tacit Knowledge that inform and sustain the research methods. Tacit Knowledge can be thought as the operational knowledge embedded in practice, built, developed, tested and shaped through the reiterative action of practising. The connection between tacit and explicit knowledge works as a circular feeding mechanism and the practice-based PhD plays a critical role in such a circular process, providing the creative practitioners with the ability to surface their tacit knowledge, articulate and express it through multiple media. In this paper, we will investigate Tacit Knowledge as both a trigger to move forward the research journey and the very field of exploration of the research itself.

## INTRODUCTION: THE ADAPT-R PROGRAMME

This paper will address the role of Tacit Knowledge in Creative Practice Research, within the framework of the practice-based PhD model, and will offer some insights as emerged from the experience of the recently concluded ADAPT-r ITN programme.

ADAPT-r ([www.adapt-r.eu](http://www.adapt-r.eu)) - acronym for Architecture, Design and Art Practice Training-research - is an Initial Training Network funded by the EU 7th Framework Program, that had the aim of linking the academic and professional realms. The purpose of the project has been to provide a practice-based doctoral training to creative practitioners, helping to educate new researchers, increasing supervisory capacity and creating new collaborations, as well as developing a European network of institutions devoted to develop and disseminate the PhD programme across Europe, through the investigation of the main features of Creative Practice Research and its specific doctoral training. The project - which involved seven partner institutions (KU Leuven, RMIT University, University of Westminster, Aarhus School of Architecture, University of Ljubljana, Estonian Academy of Arts, Glasgow School of Art), 33 Early Stage Research fellows and 7 Experienced Researchers - was structured across 3 years (2013-2016) and organised through 6 Practice Research Symposia, a series of events happening twice a year in which PhD Candidates found room to present their research work and receive feedback from supervisory panels.

Within the context of the ADAPT-r programme, we have undertaken our research as Experienced Researchers investigating from a meta level perspective the practice-based PhD model, its features, challenges, and possible interpretations. Each ADAPT-r Partner hosted one Experienced Researcher during the 3-year programme. We were based respectively at RMIT Europe, Barcelona, Dr Cecilia De Marinis, and at the Glasgow School of Art, Dr Dorotea Ottaviani, and we developed our research work in collaboration with Dr Alice Buoli, based at the Estonian Academy of Arts in Tallinn.

Our research work was focused on two main topics, on one side the concept of Tacit Knowledge and its influence on the PhD journey, on the other the methodology of the PhD itself and the Research Methods that practitioners apply to undertake their research path. The two topics were explored in a parallel way, observing intersections and connections. This brought to the fundamental insight and contribution of our research, which lies on the idea of a dual nature of Tacit Knowledge, being at the same time the topic to be explored in one's PhD journey and a method for the exploration itself, namely a lens through which looking at practices, actions, behaviours, fascinations, urges, intentionalities.

Hence, observing and 'interrogating' a series of practitioners undertaking their PhDs during the ADAPT-r programme, allowed us to come to the con-

clusion that research methods and practice methods are made of the same matter, and that Tacit Knowledge is simultaneously the object of the enquiry and a tool for the enquiry itself to happen.

In order to collect data for our research work, we have interviewed a number of creative practitioners undertaking their PhD in different institutions in Europe. We arranged a series of individual interviews in order to surface the specificity and singularity of each practitioner/researcher and alongside we run a series of workshops with the aim to involve creative practitioners in a collective debate, developing new knowledge from the collective discussion. This research comes under the sphere of the Qualitative Research methodological approach, drawing on the field of social disciplines. Qualitative methods examine motivations and modes besides the quantitative and dimensional analysis.

## **THE REALM OF TACIT KNOWLEDGE**

Tacit Knowledge can be thought as the knowledge embedded in practice, being the practice itself the place where hidden know-how resides. Such a practical or operational knowledge is built, developed, tested and shaped through the reiterative action of practising. The connection between tacit and explicit works as a circular feeding mechanism: the tacit informs the explicit knowledge and vice versa, in a never-ending process.

The term Tacit Knowledge was coined by Michael Polanyi who summarise the idea with the statement “We know more than we can tell”. Tacit Knowledge is a flexible and dynamic realm of knowledge which is hidden, invisible to the eye of the practitioner but constitutional of and for their practice. It is an unspoken, silent and subjective form of knowledge, embedded in the practice.

Tacit Knowledge could be then described as an intuitive and heuristic thinking related to the operational and experiential aspects of the practice. Intuitive thinking works through an associative connection process, namely a process of resonance in our memory (Kahneman, 2011). It seems to work in terms of resemblance: in that sense “intuition is nothing more and nothing less than recognition” (Simon, quoted by Kahneman, 2011, 11).

Tacit Knowledge could therefore be defined as the mental space of perception and memory, built through our spatial intelligence. Everyone builds up a spatial history for themselves and through that establishes their mental space made of assumptions about space (van Schaik, 2008). This mental space is something existing in the subconscious and which one becomes aware only through singular moments of eidetic recall in their memory. It is then possible to recognize a spatial history of a practice, revealing a kind of

tacit knowledge, built in and through the construction of the practice itself.

This research work doesn't aim to define what Tacit Knowledge actually 'is', but rather what it 'can be' for each creative practitioner, where it 'resides' and 'how' it can be surfaced by practitioners across their PhD process intended thus as a journey of awareness through their Tacit Knowledge.

Such a process opens up new directions for the practitioner's exploration, triggering a circular feed from implicit to explicit knowledge and allowing them to reach a more conscious understanding of their 'modes of practice' (van Schaik, 2013, 11-15) and their specificity, role and agency within their professional and disciplinary arena, within society at large. The research focuses on the ways in which Tacit Knowledge is embedded in practitioners' actions and artefacts as well as in their relationships with their Communities of Practice including mentors, peers and 'challengers' (van Schaik, 2011, 16) and then how it is brought to the surface, unfolded and deployed by the practitioners.

Trying to figure a 'physical location' for Tacit Knowledge one could say that it resides in the mind and the body. Both are sites for knowledge generation, coordinating different ways of learning. Both can at the same time learn and produce new knowledge. This insight allows to identify where directing the observation while looking for evidences of Tacit Knowledge in practitioners' words and work, as van Schaik (2008) suggested: "When we talk about human (...) intelligence, we now have to consider that intelligence is a distributed system: not something held like a command centre in the brain and distributed, but something that is present throughout the organism".

### **The binomial Explicit and Tacit**

An interesting perspective on Tacit Knowledge is given by the relation to its opposite: the explicit Knowledge. This binomial suggests the existence of different realms of knowledge and different ways of acquiring it. Tacit Knowledge is gained through experience and repetition, following intuitions and referring to irrational aspects, whereas the explicit one refers to the rational and conscious acquisition of notions, through education and study. The two realms of knowledge are deeply connected; they cannot be considered as separate or polarised realms but rather as useful categories to make sense of and clarify how the process of knowing is conceived at large. They are different facets of knowledge expressing different aspects and completing each other. A series of pairs of meanings allows to grasp the sense of such a binomial: theoretical/operational, slow thinking/fast thinking (Kahnemann, 2011), formal/informal, systematic-hierarchic/rhizomatic (Deleuze&Guattari, 1980), theoretical/practical, academic, reflective observation/active experimentation, comprehension/apprehension, abstract experience/concrete experience, slow/fast, codified/embedded, notion/skill, a priori/a posteriori. Tacit and explicit thus

work in a circular never-ending process of mutual feeding. Such a process can be read through the metaphor of the subterrain, highlighting the circular and dynamic process of mutual nourishment from the subterrain to the terrain and vice versa. These two kinds of knowledge are interdependent, as new knowledge is produced in the space in-between the tacit and the explicit dimension. What the practitioner does in the ‘terrain’ enhances and enriches what resides in the subterrain. That said, what happens once one becomes aware of something emerging from the subterrain? How does this affect the terrain? And subsequently, how does this affect back the subterrain? The metaphor of the subterrain evokes the idea of something latent, whose edges are defined with difficulty, and also something without which the ‘terrain’ can’t exist. Tacit Knowledge could be then seen in terms of retroactive forces that drive practitioners across their practice. Such retroactive forces, residing in the subterrain, can be defined as tacit drivers, and they shape and build the personal eidetic archive. Such tacit drivers are operative and they lead practitioners in their behaviours, productions, and actions within their practices. As practitioners become able to see what is motivating them they discover their own eidetic archive, their subterrain, their Tacit Knowledge. Tacit drivers are connected with urges and fascinations that move and orient the practice. Those are elements that constitute the eidetic archive, a collection of images residing in the mental space involving memory and imagination. As such, this archive defines the intentionality of the practice. This interpretation of Tacit Knowledge as a tacit driver of the practice, creates a connection in time between past, present and future, defining the history of the practice itself, since tacit knowledge comes from the past and, quoting Kahneman (2011), it “(...) determines your interpretation of the present as well as your expectations of the future”.

### **Overlapping between Tacit Knowledge and Research Methods: why is it relevant to this research?**

During the research undertaken for the ADAPT-r Project, we tested and verified what was an initial intuition and would have become a major topic of our research. The intuition that talking about and exploring Tacit Knowledge wasn’t anything far from talking about and analysing the Methods of the Practice, firstly emerged as a suspicious and fascinating idea. Nevertheless, it soon became obvious how all the practitioners, interviewed for our research, tended to talk about their Methods of research while explaining the relevance, role and functioning of the Tacit Knowledge embedded in their research and practice trajectories and vice-versa. The answers to our questions, designed separately for the topics of the Tacit Knowledge and the Methods, inevitably pointed to an intertwined account where one was the trigger and the aim of

the other.

Although in this paper we will focus on the role of Tacit Knowledge as the field of the exploration for the PhD candidate, it is worth saying that Research Methods are a tool-kit that the explorer brings in their journey and, the nature and role of the Methods of Research is paramount for the PhD journey.

### **The PhD Journey described through ‘time’ and ‘reiteration’**

In this paper, we will try to show how the practice-based PhD may be described as an explorative journey in the field of the Tacit Knowledge, through some example extrapolated from the research in ADAPT-r. We will specifically do so, spotlighting the role of Time and Reiteration in this process. As a starting point for these reflections, we will use Glanville’s (1999) description of the process of designing. He claimed that it might be intended as a “circular-conversational [process] (in Pask’s sense): we act iteratively, until reaching self-reinforcing stability or misfit. We test, until we arrive at something satisfying our desires-for stability/recognizability/repeatability/etc. Thus, we arrive at our understandings. We test and test again, repeat with refinement and extend; and, when driving to extremes, we find our patterns no longer hold, we rejig them or start again from scratch.” This process is not automatic, in the meaning of passive or impersonal but rather hinges on the unique knowledge, experience and sensibility of the practitioner. That said, although the PhD is a linear trajectory towards the completion and the dissertation, it is driven and defined, by an iterative process of the circular reflection on and about the work of the practitioner. The two fields we have identified (Time and Reiteration) are naturally linked and co-dependant but it is worth giving some definitions of how we crafted those lenses for the sake of this research.

Repetition, circularity, and iteration are processes, either to generate an unbounded sequence of outcomes or with the aim of approaching a desired goal, target or result. Through a process of ‘Reiteration’ we develop and explain further the hypothesis of the circularity among doing and thinking (and back) and we can foresee its role in the development of a practice-based research. Reiteration here can describe the idea of the practice of the practice. On the one hand, the role of Time becomes pivotal for the deployment of the reiteration and, on the other, it is the key variable in relation to the self-reflective journey that the practitioner undertakes to break down and rebuild the knowledge and research methods embedded in their practice. Van Schaik (2014) addresses this process as an expanding and ongoing path where practitioners delve into their mental space: “from the subconscious (Cave/sleeping) to the conscious (Home/walking) onto the nearby (...), then to the middle ground (the expansive plain), the unfamiliar distance and finally to the ever receding horizon”. It is in its trajectory and multi-dimensional path

(as past, present and future) that the PhD can be experienced, as Blythe suggests when talking about the body of work of a practitioner across time “represented as objects collected within the boundary of a practice which leads to the current point in time, represented by the arrow that points to dotted objects which are the future projects of that practice” (Blythe, forthcoming). In these two fields or dimensions practitioners work in a process of ‘metacognition’ (Flavell, 1985) together with the reflections about/on/in the practice and, as they claim, when having conversations about their research, the two dimensions of time and reiteration are pivotal in this process of recognition of what you do while you are doing it.

## **CASE STUDIES**

The following case studies are drawn from the research project we led last year within the ADAPT-r programme. We chose to focus on three creative practitioners, involved in different kind of practices, this allowed to show how similarities and differences in their research approaches can be traced through their reflections on the fields of Time and Reiteration. Two of the practitioners are artists, Koen Broucke is mainly a painter whereas Alicia Velázquez is a performer, and Martí Franch Batllori is a landscape architect.

### **Martí Franch Batllori**

Martí Franch Batllori ([www.emf.cat](http://www.emf.cat)) is a Landscape Architect based in Girona (Spain) and a Horticulturalist at ETSAB in Barcelona, where he teaches since 2001. He is founder & principal of EMF landscape architecture, an interdisciplinary practice of independent experts in the field of urban and environmental design. He is currently doing his PhD at RMIT Europe, and took part in the ADAPT-r programme as an Early Stage Researcher at the Glasgow School of Art.

In Franch’s work Time is simultaneously a key fascination, a driver, a design method, and a research strategy. The landscape architect is interested in Time as a tool for the design process by letting time for things to mature. Over time things can develop and be observed in their development, and the practitioner can learn from this process. Duration is a key concept for Franch’s work who mainly deals with open-endedness evolution and instability. In his research, he makes reference to Richard Sennett (2009) who claims that “(...) by an open system I mean a system in unstable evolution. My argument is that the closed system has paralysed urbanism, while the open system might free it. (...) Bridging all these aspects of openness is the dimension of time, evolutionary time which challenges the closed, over-determination of and its correlates of equilibrium and integration.”

Reiteration is strictly connected with Time and it is developed as a reiterative exploration and observation over time. The explorative method at play in his design process is the action and repetition of walking through the landscape, considered as a design strategy allowing him to get to know the place and to surface ideas. The process of walking through a place at different moments of the day and the year is a reiterative action which allows Tacit Knowledge to come to the surface and be transformed in thoughts and actions.

The action of walking contains in itself the power of physical reiteration to make the mind work through reacting to the environment and being immersed in the place. Walking is for Franch an urge and a tool for knowing and discovering. Physical experience is thus at the core of his design thinking. Experience appears then to be in his work as both a research method and an objective for the design process: his aim is then to activate the landscape, creating new experiences, allowing appropriation by the inhabitants.

## **Koen Broucke**

Koen Broucke ([www.koenbroucke.com](http://www.koenbroucke.com)) is a Belgian artist, researcher, historian, and performer. Broucke's research is linked and imbued with his own past as a historian and during his fellowship in the ADAPT-r project at the Glasgow School of Art, he focused his research especially on battlefields of the First and Second World War.

In its really first meaning of historic, Time is the main characteristic of Broucke's research. He is particularly interested in evoking what he describes through the words of the Dutch philosopher Huizinga's as 'historical sensation', namely the immediate connection with a historical event through the contact and exposition to an object. In order to reach this state of connection with the historical facts within the realm of the art, Broucke deploys several conjunct strategies and tools. Some of the actions he sets up are dealing with a methodology that involves a circular process between explicit and tacit bids of his perception and knowledge. He explains these processes as a pursue of the freedom of the body and its perceptions from the leash of mind and rationality. He compares two aspects of his practice under these lenses of Reiteration and Time, which are walking in the battlefields and drawing. He says that those deeds are related to his methodology of practice which starts from a rational will of accomplishing a drawing or a walk, where the idea is broken down and the practical preparation is needed. After this phase, when the action starts, whether walking or drawing, the mind and the ego gradually disappear in the background, and the body takes over. In that moment the hand gets in relation to the eye or the foot, which is leading the process whereas the mind stops thinking until the moment in which the mind itself recognises that the drawing is finished. This seems to be a recognition of

the tacit knowledge embedded in the body by the explicit part staying in the mind. The mind, both for drawing and walking, recognises and becomes aware only of the final destination, but in the process, which is the real core of his practice, it is mostly oblivious. In this circular process the rational mind works as a trigger for the action of drawing or walking and it is stimulated by the Tacit Knowledge.

### **Alicia Velazquez**

Alicia Velazquez ([www.aliciavelazquez.com](http://www.aliciavelazquez.com)) was trained as an architect at ETSA in Madrid and her practice developed and blossomed in a hybrid space between art and design where she explores the performing interaction between body and matter. She has been a PhD Candidate and a fellow within the ADAPT-r programme at the KU Leuven.

Most of the time Velazquez's work springs from the reflection and reaction to a brief or a project, which she takes as a challenge. The path of every project is an exploration where Velazquez follows her instincts and reaction prompt by the 'rational' brief, which might engage with the explicit knowledge of the artist, and then she releases the handbrake and discovers where the project will lead to. This approach of discovering of the artist's fascination in a process of conversation with the self triggered by an external event such as a 'challenge' or a brief aims improving the "projective improvisation skills" (Rattenbury, 2015), i.e. observing, assessing, describing, reworking, rejecting, making, connecting, assembling, changing, testing, selecting, improving, in a circular way that allows to "look at our drawings and see in the things that we have not thought of before. We are surprised. We re-iterate the process. It is about marking and viewing, marking and viewing" (Glanville, 2014). This conversation with the self, arisen by an external trigger, is one facet of the idea of Time and Reiteration in Velazquez's practice. She is really interested in exploring and developing the concept of ritual, where rules, repetitions and discipline shape the perception and the intuition. Her work is indeed largely informed by the repetition of gestures which crafts the matter, the space and the body of the performer. She mostly records her performances on video, therefore, leading to a Reiteration of the repetitions. The meaning of setting and accepting rules can be found in the creation of an environment where she is able to listen to the reactions of the body and its very own intuitions. The performer learns about her own Tacit Knowledge through the experience of the body in the space and through the relationship with the matter. Through the exploration of daily rituals, she understands how she acts and reacts within those rules and why. In this circularity, she grasps information about how the ritual shapes us and how we shape the rituals in response to our needs.

## CONCLUSION

The understanding of the PhD as a Journey through and towards Tacit Knowledge opens up possible interpretations of the PhD as a trigger for shifts, back and forth moments, accelerations and points of break. Such interpretations can be thought in terms of linear trajectories, divergences, derives, loops, repetitions. During this journey, different discoveries and epiphanies about the practice occur. Through such a journey, Tacit Knowledge becomes then a powerful tool for practitioners to better understand their own urges, fascinations, methods, and mechanisms. The PhD is then a journey that leads the practitioner to a process of awareness of their own practice, their own specificity and 'voice'. Such awareness allows the practitioner to master their specificities and roles becoming more effective, compelling and forceful within both the professional and academic realm and society at large.

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