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DESIGN CULTURE(S) | CUMULUS ROMA 2021  
JUNE 08.09.10.11, SAPIENZA UNIVERSITY OF ROME

# Theory under suspicion: criticality and material meaning in practice based research.

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**Abstract** | Practice based research projects in design constitute a relatively young practice and despite the recent growth of books and articles dealing with the subject (Camps & Rowan, 2019; Vaughan ed. 2017; Redström, 2017; Muratovski, 2015), the articulation of practice and theory in these kinds of projects still remains problematic. The following paper explores alternative forms of practice-based research in design capable of engaging with criticality whilst avoiding its tendency towards signalling shortcomings and contradictions without providing ways for reparation. It also deals with how to avoid the shortfalls of objectivity or demonstration but nonetheless not falling into subjectivist practices (Verwoert, 2007). We will be looking into ways to embed design practices in a complex and heterogeneous present, working with pluriverses (Escobar, 2018) and situating practices in more than discursive material worlds.

**KEYWORDS** | PRACTICE BASED RESEARCH, CRITICAL THEORY, MATERIALIST AESTHETICS, ENTANGLEMENT

## 1. Introduction

Theory and practice have not always found it easy to fit in together in academic curricula and in studio or practice based education. Even if we acknowledge that the notion of theory itself is problematic and doesn't constitute a neatly defined practice or stem from a single continuous history (Rodowick, 2015), in some contexts theory and practice can be perceived as competing or even antagonistic practices. The cultural theorist Raymond Williams in his work *Keywords*, "identifies four primary senses of the word "theory" emerging by the seventeenth century: spectacle; a contemplated sight; a scheme of ideas; and an explanatory scheme" (Rodowick, 2015: 18). In this sense theory has come to be a set of conceptual operations that "seek to explain, usually by proposing concepts, but in this they are often distinguished from doing or practice. In this manner, Williams synthesizes 'a scheme of ideas which explains practice'" (Rodowick, 2015: 18). But as we will see, theory seeks to do more than mainly explaining practice.

In one of the fundamental texts that came out of the Frankfurt School, Max Horkheimer sets out to establish a more active role for theory. In his work *Traditional and Critical Theory*, he challenges the notions of objectivity and impartial universal knowledge that characterises modern science. He argues that the dualist Cartesian split that separates mind from body, subject from object has contributed to create a form of instrumental rationality that runs through modern epistemologies. He argues that "traditional theory" is a result of this paradigm in which the rational subject thinks he can understand external reality. Traditional theory is a detached cognitive operation that explains how things are. He opposes this traditional theory to what he brands as critical theory. For this new way of doing theory, reality is not waiting to be understood, but it is actively enacted through social practices. Subject and object are both social formations. This is why critical theory does not only contemplate reality from a distance and unpacks its mysteries, it needs to give a robust account of the social, economic and material conditions that shape reality. Critical theory does not only aspire to describe how things are, its main aim is to contribute to social change social, deal with inequalities and make power relations evident. If traditional theory is happy to describe how things are, critical theory aims at contributing to change reality in order to create a more equal and just society.

Critical theory has found an interesting space to inhabit design research projects, in the form of discussions and works on design and feminism (Rothschild, 2011), decolonizing design<sup>1</sup>, design gender and discrimination (Costanza-Chock, 2018), design and diversity, design and surveillance (Weizman, 2017) or the politics of material objects (Winner, 1986). But despite the growth of interesting projects and critical practice, we have experienced how in many cases critical theory reproduces some of the epistemic mistakes and errors it seeks to

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<sup>1</sup> See <https://www.decolonisingdesign.com/>

eradicate: it privileges words over things, theory over practice, discourse over material meanings (Boscagli, 2014), suspicion over affect (Kosofsky, 2003), concepts over actions.

Theory has grown in design studies programs and arts and designs universities and its is now central to design research schemes, but we will argue that new ways of engaging with theory/practice must be explored. Ways in which material meanings are taken into account (Barad 2007). In which the knowledge/action split is undone. This implies the pursuit of ways in which to enrol and work with non-discursive meanings and addressing semio-technic entanglements (Puig de la Bellacasa, 2017) and the need to investigate and integrate non-western epistemologies (Sousa Santos, 2017; Viveiros de Castro, 2009), giving space to explore materialist aesthetics (Gregg & Seigworth, 2010) and playful ways of performing knowledge.

## 2. Theory Under Suspicion

Our aim is to explore and showcase some of the strategies/devices/prototypes we have devised in order to bridge the theory/practice gap. In order to promote “knowledge in action” (Camps, 2019), and more experiential forms of learning. Forms of learning that matter. Meaningful engagements with art and design research projects. These are pedagogical experiments aimed at finding new ways to integrate theoretical concerns and practice based forms of researching. We are aware that practice based research projects in design constitute a relatively young practice, despite the recent growth of books and articles dealing with the subject (Camps & Rowan, 2019; Vaughan ed. 2017; Redström, 2017; Muratovski, 2015). Still, most of these proposals and discussions end up producing more theory. Separating matter from meaning, as if theory provides meaning for a matter that waits to be understood. This is why we aim to work through pedagogical practices that can promote and help to establish these forms of “knowledge in action”, in which concepts, examples, experiences, and intuitions can be invoked. In this sense, this does not constitute a research method per se, these are not closed ways of doing research, but open strategies/devices/prototypes that can be redone, contested and continually reworked. The following pedagogical experiments consciously aim at going beyond the modern epistemic framework we have inherited in which science and art occupy different academic spaces. Going beyond binarisms, bridging the knowledge practice divide, reworking through modern taxonomic categories, and challenging hetero-patriarchal and colonial epistemic regimes, our aim is not to put theory aside, but to allow it to inhabit and become entangled with material practices avoiding epistemic privileges. The following pedagogical experiments try to circumvent the knowledge-truth paradigm, to link learning with affect, theory with joyfulness, material with meaning, ideas with care.

These proposals stem from the certainty that sustaining uncertainties is one of the hardest problems for design students and researchers. Our previous research has proved agents that engage in design research projects usually feel more comfortable with closed assignments,

conceptual certainties and methodological boundaries (Camps, 2019). Tinkering with learning processes, experimenting with inventive methods (Lury & Wakeford, 2012), or deploying theory strategically, enables messiness and confusion to become part of a creative research process. In this sense we consider that it is important to design strategies to sustain “knowledge in action”, a practice inspired by the political and aesthetic work carried out by the artist and philosopher Erin Manning and the philosopher Brian Massumi (2014). In an attempt to see how affective theory could be put into practice they devise forms of engaging with theory that transcend the mind/body, thinking/doing categories. In that sense we aim for research practices that give place to forms of knowledge woven into the body, through practice and repetition. Involving the senses and going beyond ocular-centric ways of producing theory, by touching (Puig de la Bellacasa, 2017), licking (Morton, 2013), sweating (Pérez Galí, 2013) or sensing rhythms (Ikoniadou, 2014) as forms of learning and understanding the world.

The following strategies/devices/prototypes, or as Isabelle Stengers smartly has put it, the creation, invention and use of artifacts (facts or art) (Stengers, 2000:50), allow our students to become engaged in the research process and forget the inherited frameworks of research from natural sciences or social sciences, which aim to obtain objective outputs or get closer to some kind of truth. For these artifacts to work, we must rework traditional ways of assessing research outputs and deploy new indicators under which these projects are going to be measured. Research in design should not aim at establishing universal truths, neither should they be a material representation of how theoretical discourses operate. The experiments that follow aim at engaging in a sensorial dialogue, in which different knowledge genealogies, theories, materialities and located forms of knowledge can take place.

In our experience as teachers and researchers, we have often found that the power of critical theory and its great capacity to debunk the material reality it confronts ends up blocking forms of creativity and material intuition. We must find meaningful ways of engaging with theory without aiming at becoming theorists, but design researchers with a deep understanding of the contemporary world in which we inhabit. The strategies/devices/prototypes we have developed stem from the awareness as teachers and researchers that in too many occasions the deployment of sophisticated theoretical apparatuses can overpower practice based design research projects. Despite theory's desire to change uneven power relations, to provide a coherent framework in which to understand contemporary issues, can become an obstacle for the development of projects by students and researchers.

During these last five years in our work we have experienced that, the more students/researchers advance in their engagement with theoretical issues, the more responsibility they feel regarding their role as designers. They become aware of the implications of trying to function as active agents of change in contemporary social issues. A much needed step if one confronts complex challenges and socio-technical controversies.

Nevertheless, this responsibility does not always transform into creativity, on the contrary, their practice often suffers either from a material paralysis, or they feel the need to translate and represent the concepts put forward by certain theoretical discourses. The concepts they work on are so powerful, the epistemic consciousness of their shortcomings can be so violent, that it is common to end in a creative impact that can turn the proposals for research action or projects more rigid and troubled, concerned exclusively with fulfilling the requirements of the premises of critical theory. This can lead to believing that for a project to have meaning, for it to be meaningful, it must be justified and accompanied by a dense theoretical analysis. We would like to argue that practice matters, and because of that, it can produce its own meanings.

Our aim with the following strategies is to move beyond this feeling that theory operates as a judge of material actions and rather establish a joyful conversation with verbal, material and sensitive discourses. We propose that design research projects should not be obsessed with debunking, seeking revenge, judging or saving the world, but, as Arturo Escobar reminds us, they should be concerned with the idea of opening up possible worlds. Or as he puts it, they should engage in designing for the pluriverse (Escobar, 2018).

### 3. Entanglements of material meaning: some attempts

Once we have identified the risk that theory tends to contribute to the production of more theory, and that in occasions it struggles when it has to relate, engage or become entangled with practice, we propose a repertoire of possibilities for handling this reality. We need to clarify that in the following paper we will not focus on the development of design research projects and their relationship with theory<sup>2</sup>, but on how can we start exploring meaningful material entanglements by encouraging the establishment of live relationships that place the practice in specific networks of practice, systems of ideas, aesthetic repertoires. To do so we have been inspired and we have worked with the idea of intra-action developed by the feminist physicist Karen Barad (2007). This notion helps us to explore and articulate encounters between critical theory, the politics of matter and the sensibility of aesthetics. It is in fact an invitation to take part and be able to contribute to the creation of a mutually constitutive entangled agencies, in which matter, discourse and bodies occupy unexpected positions. What we have called “entanglements of material meaning” are areas of potential engagements with theory/practice that can lead and end in

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<sup>2</sup> For deeper insight to this subject we recommend reading “Building Theory Through Design” (Markussen, 2017) in which the author shows how design projects can lead to new theory distinguishing between three basic forms of theory construction: *guiding philosophies*, *conceptual frameworks* and *ideas borrowed from other disciplines*, *manifestos*, *annotated portfolios* and *design implications*, all exemplified by PhD theses.

the shape of performances, drawings, paintings, constellations of objects, sound based projects, movement and body languages, interactive outputs, etc. In this sense they are not defined methods, recipes or closed procedures, they function as ways of generating engagement. Ways in which to explore more evocative ways of mattering meaning. Ways to envisage and define sensorially genealogies of thought and action. Following Donna Haraway's assertion that we are constituted by relational ontologies, that who or what we are is defined by a dense and complex set of relations with and into the world, our aim is to detect and shape these relations. Promoting ways in which to embed one's own practice into social, political, material and aesthetic concerns. Shaping the meaning of a specific practice by locating it alongside other meaningful practices.

These meaningful matter entanglements also draw inspiration from the idea of "community of practice" developed by Richard Blythe and Marcelo Stamm in the context of Practice-based Design Research in doctoral studies (Blythe and Stamm, 2017). As they put it, "a community of practice can be understood as the choir of voices that operate as self-talk during the creative process. This self-talk, although an individual phenomenon, is an internal conversation with peers and collaborators (and sometimes challengers) extending the social aspects of community also to individual thinking" (Blythe and Stamm, 2017:59). This leads us to open our field of action and focus on contextualizing the proposals in a more effective and conscious way. This idea of "communities of practice" was initially developed as a way to identify those forms of knowledge production that take place beyond academic or institutional learning environments (Lave & Wenger 1989). In any given formal or informal context, people devise ways of sharing ideas, producing specific arrangements and forms of knowledge that help these communities to deal with practical issues that affect their life. Following this idea, rooted in the pragmatism of Pierce or Dewey, defining a community of practice helps the researcher to become aware of the subjects, spaces and practices that inform and contribute to expand their own practice. Drawing a community of practice implies becoming aware of who else is working on the same issues you are dealing with, who is sustaining similar concerns. Who is affected by your practice and what practices affect your own work.

The challenge we face is to articulate forms of theory and practice that belong to different fields, disciplines and genealogies. To open conversations and links with other researchers/practitioners whose work resonates with our own. Establishing non-hierarchical topologies of instruments, technologies, debates, concerns and matters. Becoming open to being affected by other projects, seeking to affect the work of others. In this sense, these entanglements can be more poetic than logical, more evocative than descriptive. Learning to identify other instances of meaning, other ways of mattering theory, contributes to defining our own practices. Research is about establishing non-linear and extraordinary links, coherence is what provides a framework for this exercise of material entanglements and actualization. By identifying and establishing entanglements we can intra-act in a new system of meaning, the aim should escape from casual linking in order to seek deep and strong intra-actions, to intertwine a particular practice with other practices and theories. Locating our practice in one or other community of practice, linking it to a specific set of theories, a defined set of aesthetic inclinations or other, makes our practice perform in completely different ways. Making oneself accountable for these entanglements,

acknowledging how you affect a certain context or affects your practice implies a deep understanding on how your practice operates.

The following examples come from the PhD. thesis “Knowledge in action: undisciplined teaching practices” (Camps, 2019), and they explore some of the issues developed above.

Pencil quotes: Pencil quotes constitute a specific way to do a literary review, in this case, working on visual summaries and handmade drawings and diagrams. Instead of engaging linguistically with concepts, these pencil quotes acknowledge other ways in which meaning can be attained and knowledge created. Diagrams, colours and visualizations can be created allowing non-linear ways of ideas to emerge. These images open-up new meanings and relate in weird and open ways to the ideas and discourses which have previously been developed semantically. This contributes to the creation of new relationships and hierarchies of information and other ways of presenting concepts. Pencil quotes are spaces of assimilation of the theory that help to deepen its meaning. Still these pencil quotes are still too flat to allow intra-actions, to give place to entanglements with other ideas or practices. Their limitations become apparent when our aim is to define a new system of relationships. However, this is a first step towards mattering theory, towards working in a more visual and personal way. This contributes to attain a better understanding and developing new meanings of theoretical and discursive practices.

We have selected three pencil quotes that unpack and work through some key concepts and ideas put forward by different authors, in this case Damasio (1994, 2018), Federici (2010) and Braidotti (2013) that serve specifically to the research and practice of the thesis:





Figure 1. Pencil Quote: Damasio (1994, 2018). Camps (2019).



Figure 2. Pencil Quote: Federici (2010). Camps (2019).



Figure 3. Pencil Quote: Bridotti (2013). Camps (2019).

Interactive genealogy

Bruno Latour, inspired by a concept put forward by John Tresch (2005) develops the notion of the *cosmogram* in order to provide ways in which to display and allow for the interaction of human and non-human agents in the design and transformation of natural and social reality. A cosmogram is a device with which we learn to describe the associations of convenience, coexistence, opposition and exclusion between human and non-human beings. As Latour himself points out: «Mapping cosmograms means becoming sensitive to these lists of associations and logical duels without resorting to the distinction between the rational and the irrational, the modern and the archaic, the systematic and the asystematic» (Latour, 2000:115). We have explored ways in which to develop these entanglements of humans and non-humans, tools and ideas, techniques and practices.

The following example was an attempt at making pencil quotes to intra-act with other quotes and materials. To generate a more complex set of relations and genealogies that would help to shape a specific cosmogram. Once some of these links were drawn on paper, there was a need to look for another tool that would allow these relationships to move, grow or change.



Figure 4. Drawn on paper genealogy. Camps (2019).

This cosmogram was digitized and uploaded on an online server<sup>3</sup>, that allow interactions between discrete objects and movement among them. Each element, mostly pencil quotes, specific theorists or projects, was tagged with information such country of origin, date of birth or when it was published, keywords, etc. The tool allows these elements to be recombined, generating different relations among them. Their sizes can be altered, which also allows to give more or less importance to specific elements in a genealogy or another. These temporal arrangements help to envisage how cosmograms can change, can grow or give place to new genealogies. The combination of elements, the possible links and entanglements among them, define specific cosmograms that later can be redone. In this sense, heterogeneous elements can come into conversation, can be linked giving place to new meanings and cosmologies.

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<sup>3</sup> In this case the free-software activist server <https://hotglue.me/>

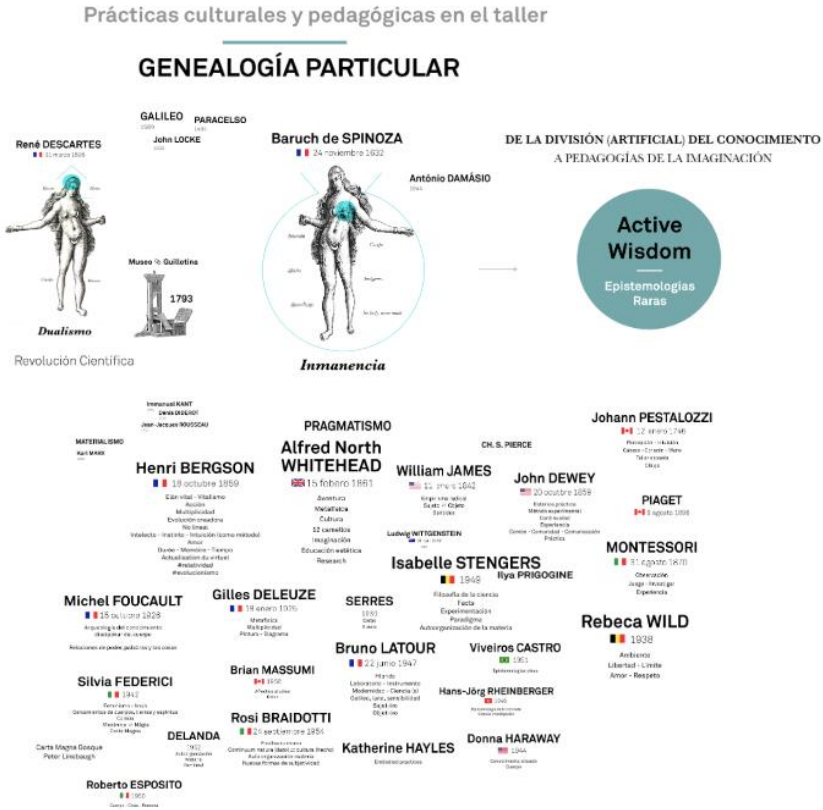


Figure 5. Interactive genealogy<sup>4</sup>. Camps (2019).

### Performative genealogy: a litany

This artifact is inspired by the interdisciplinary research project “Choreo-Graphic Figures. Deviations from the Line”, led by artist Nikolaus Gansterer in collaboration with choreographer-dancer Mariella Greil and artist-writer Emma Cocker, in dialogue with a team of international critical interlocutors<sup>5</sup>. The proposal stages an eccentric encounter between drawing, choreography and writing that aims to

<sup>4</sup> <https://practicasculturalesypedagogicas.hotglue.me/>

<sup>5</sup> <http://www.gansterer.org/choreo-graphic-figures/>

investigate those forms of 'thinking-feeling-knowing' produced through collaborative and interdisciplinary reciprocities. At the same time it explores the performativity of notation (figures of thought, speech and movement) in order to materialize research. What we find particularly useful and inspiring from this kind of proposals is that they explore the nature of thinking-in-action where different practices enter into dialogue. It allows different semiotic meanings, practices and bodies to become entangled and to collide. This opens-up the opportunity for new layers of knowledge and affection to become embodied, encouraging «the need to invent and define research methods that explore results and formats capable of challenging the hegemony of the written word» (Rowan y Camps, 2018, p. 55).

In the following strategy/device/prototype, we have worked through this sense diagram proposed by Gansterer and tried to transform it into another machine to allow this meaningful material entanglement. In this case, it is a sound base device that operates on a purely sensorial dimension: a litany. Originally litanies have their origins in Christian songs or prayers, from the 5th century, which constituted long and monotonous enumerations of frequently repeated prayers, with a standardized cadence. In this case we take up the litany as a possible practice to help to entangle matter and meaning. To do so the researcher needs to work on an open list of references, ideas, theories, practices, objects, materials, needs, aspirations or fears. Through an exercise of free association of concepts, ideas and experiences, the litany provides a context for them to be located in different proximities and rhythms. It creates a (dis)order, in which intuitive associations become weave through sound. This is an evocative way generating relations between elements that can seem apparently disconnected. It helps overcome the practice/theory divide, and works against the idea that knowledge operates following rigid disciplines. In this way, the voices of artists, thinkers, designers, sociologists and scientists as well as different materialities (colours, textures, sounds...) can be brought together through a sensorial entanglement of meanings and traditions.

Litanies contribute to synesthetic experiences. The performativity of sound here affects the bodies of those listening, where concepts, words and images become entangled in their minds. Sensorial entanglements take place. The litany presented in Marta Camps' thesis was entitled "The (Artificial) Division of Knowledge"<sup>6</sup> In this case, the litany, originally handwritten in a slow and monotonous rhythm, chains together ideas and images and builds up this prayer through a series of enumerations. It is both a written and an audio-performatic piece that provides an opening to an imaginary of arbitrary hierarchies.

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<sup>6</sup> <https://archive.org/details/letanialadivisionconocimiento>



*Figure 6. Performative genealogy. Camps (2019).*



## 4. Conclusions

In the following paper we have discussed some of the problems derived from trying to entangle two different material practices: producing theory and design research projects. We have looked into ways to embed design practices in a complex and heterogeneous present, situating practices in more than discursive material worlds, and trying to find new ways of producing material meaning. Along this paper have argued that practice based design projects need to work on the creation of strategies to situate these practices in the world, allowing material and political interdependencies, discursive continuities and material entanglements to become apparent.

We have shown evidence of research projects in which rich entanglements of semiotic and material elements are present, in which aesthetic, political and social considerations are taken into account, contributing to go beyond the epistemic affordances of criticality or discursive based practices. We have tapped into a history of practice-based forms of research in design, showing how notions such as “community of practice” can help us to define more complex ways of situating and materializing links between heterogeneous practices, complex discourses, theoretical approaches and socio-aesthetic concerns. We have explored ways of engaging with criticality whilst avoiding its tendency towards signalling shortcomes and contradictions without providing ways for reparation.

In this sense we have explored the consequences of embedding the notion of relational ontologies into design research, showing how semiotic/material entanglements, situated practices and aesthetic concerns matter. This paper is a small contribution to a long debate on how to make design research projects meaningful, in this case, by working and providing evidence of how practice not only is embedded in the world, but by establishing new links and robust entanglements, helps to produce new worlds. Design is an ontological practice, material/meaning entanglements contribute to the production of these new worlds, or pluriverses using Escobar’s terms (Escobar 2018). In this sense, helping to find, understand, establish and become accountable of these entanglements, is a way of making design matter in a world that needs healing and repairing. It's a meaningful way to make design matter.

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