Pedagogical Nurture through Other Means: A style of educating for architects by Gilles Deleuze

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ABSTRACT

The current landscape of architectural pedagogy is exposed to issues of standardisation that echo the ones that higher education faced in the second half of the twentieth century. The systems of pedagogic nurture in academia that were proposed during Modernism and rejected by some, including Giles Deleuze, who proposed a new, less structured way of teaching. Untethered by overly rigid definitions and expectations of good or bad scholarship, Deleuze encouraged his students to pursue their own path of reasoning. This paper explores how this approach was convened, looking in particular at Deleuze's relationship with architect Bernard Cache and the interconnection of their work. In examining this pedagogical relationship, the paper aims to underline a nurturing educational style relevant to contemporary architectural pedagogy.

KEYWORDS

Gilles Deleuze, Bernard Cache, philosophy, multiperspectival education, postmodern pedagogy

While thinking of nurture, we can easily lose ourselves in conjuring images of safety, tenderness, and mindfulness over the idle object of our knowing care. Eager to protect and nourish it, we may find ourselves at risk of overwhelming its potential by treating it according to ready-made answers to ethical or pragmatic questions that are by now old and irrelevant. And while in this delirious state, we can easily develop an expectation that the object of our attention will propagate and become an exemplar signifier of this safe, ethical approach rather than pursuing their own creative, even if erroneous, path. To these ends we may propose methods that are designed to achieve our goals, which may or may not be aligned with the desires, abilities or interests of the object of our care. Yet, if we find the courage to release our loving grip, we may see that the precariousness of liberty carries not only risks but also opportunities. This essay explores an idea of nurture that challenges forms of pedagogy that imply an over-nurtured and overbearing approach to the teacher-student relationship. As a counterpoint, it proposes an alternative, 'other' attitude that is not oppressive but, rather, is based on the trust in the opportunities that flow from the student's freedom to develop. The assertion here is that normative higher education teaching in architecture proposes a model of education that stands the risk of not only excluding methodologies that allow investigating spatial matters creatively but, more pressingly, of excluding individuals through a persistence on long-established fit-for-all (and therefore fit-for-none) approaches.

This paper explores how the pedagogic relationship between the teacher and the student can result in a context-specific, participatory and non-hierarchical style of teaching and, by extent, designing as opposed to the current-day dominant standardised model of education that in many ways restricts creativity and accessibility to the profession. To interrogate this, the paper will discuss the specific educational relationship developed between French philosopher Gilles Deleuze and his former student, architect, Bernard Cache as an exemplar of pedagogical nurture, as well as a conceptual framework for framing an approach to architectural education that has the potential to incite creative spatial thinking. The intellectual exchange between Cache and Deleuze was articulated in the work of both student and teacher, empowering the student while allowing the teacher to propose a more refined and precise articulation of his own ideas. Although not the only relationship of its kind in the long history of pedagogy relating to architecture, it is a useful one to observe, considering the ways that it reflects an inclusive, pluralist and open-ended approach to the teaching and learning of a creative discipline. On one hand, Deleuze's philosophy can be seen as one that was not oppressive, without specific expectations or a fixed reference point but, rather, one that can expand and adapt as needed to follow a number of perspectives. On the other hand, Bernard Cache is an architect who claims that his designs are following the route of 'philosophy through other means' drawing from Deleuze and proposing his own interpretation.[1] This idea of otherness similarly reflects a position of adaptability and openness that can enable creative productivity.

The paper will describe how this reciprocally nurturing relationship was achieved through a rejection of a strong identity of an academic teacher and by accepting that pedagogy can be understood differently. In convening the student-teacher relationship Deleuze allowed for his ideas to float freely and even, at times, be understood in ways that he perhaps did not intend. In doing so, he proposed an educational style that advocated for the rejection of repetitive, overtly rationalist pedagogic solutions, and tested ways of following social values. By doing this, he also demanded a level of responsibility from those who were under his educational care. In this way, the core of his philosophy was to de-centralise thought and allow it to become multi-perspectival so that the ontology described in his writing (as well as that of his students) could become relational and non-dictatorial. This was not a sign of neglect or mean-heartedness but a careful rearticulation of a nurturing relationship, whereby the stress of pedagogy was played out differently, if perhaps less explicitly defined: setting out a field of possibilities for ideas to form, by other means and with the anticipation of the other or the different to emerge. The route that this process took, accompanied by a pluralist pedagogic approach, allowed for the teacher's ideas to detach from conventional ways of seeing architecture. Deleuze's way of discussing philosophy with his students is a way of a continual becoming of both the teacher and the student, where no meaning is ever fixed or rigid but constantly challenged through the creativity of both sides. This paper assumes that architectural education or creative design demands a similar state of fluidity, in search for a comfortable freedom of expression and assuming an intensely idiosyncratic level of engagement with the demands of the discipline.

Deleuze's and Cache's academic lives were tightly intertwined; both referred to one another in their publications on several occasions. Deleuze openly complimented Cache's works by saying that it is 'inspired by Geography, architecture, and decorative arts'. He then follows by saying that 'in [his] view [it] seems essential for any theory of the fold';[2] a concept representing Deleuze's ideas of spatial and metaphysical relations in architecture. This paper will draw from a series of key texts, in which the relationship between Deleuze and Cache is made explicit, to analyse the ways through which each referred to one another's ideas. Central to this collection of texts are Cache's *Terre Meuble* (*Earth Moves*), which engages implicitly with Deleuze's rhetoric,[3] and Deleuze's *Le Pli: Leibniz et le Baroque* (*The Fold: Leibniz and the Baroque*).[4] The paper will trace the intellectual exchange between the two, by analysing the spatial objects presented in their texts through the definition of the point of inflection. This will be analysed through the perspective of a need for freedom for creativity to take ownership of ideas and transmutate them into new, more bespoke versions of knowledge.

Deleuze's pedagogic approach can be seen as essentially antithetical to the context of contemporary higher education pedagogy, which is leaning towards a model that positions the student as the client in a pre-defined one-way transaction (money for knowledge). This pluralistic multi-perspectival

approach may stand the risk of the knowledge and experience of the teacher being mis-communicated or not internalised; or the student's feeling anxious due to lack of guidance, clarity and inability to quantify the learning outcomes. However, what this essay proposes is that Deleuze's approach to teaching, as reflected in his relationship with Cache, can open the architectural discipline to innovation and more individuals to accessing the profession. In doing so, the issue of contemporary approaches to higher education as an overly nurtured learning environments that are safe and mindful, yet overwhelming and outdated, can be liberated by embracing the potential for a creative and more fluid growth. In addition, the relationship between Deleuze and Cache can be seen as indicative and symptomatic of a wider rupture within architectural discourse, which expressed the inadequacy of established dialogues to account for new sentiments and rejected both the nurturing of Modernist ways of understanding design through an architectural stylism and the deterministic expectations of architectural outputs. Within architectural pedagogy, this rupture similarly rejected the methods of the old Modernist teachers so that the student-teacher relationship could result in a different architectural ethos, other than the replication of the master's style.

Post-modern higher education architectural pedagogy

After The Second World War the shortage of housing and necessity to rebuild the desolated European cityscapes mobilised the architectural profession. Faced with a multiplicity of challenges, architects started re-evaluating the core of their profession. Robert Oxman stipulates that the debates around design took what he calls 'a more open form' that contributed to a sense of renewal.[5] These, as he argues, lead to the development of a new dimension in the architectural ethos and education by proposing new objectives and methods that could encapsulate the sombre and complex role of reconstruction and regeneration that the architectural profession had to meet; one that the previous (Modernist) trust in the regenerative quality of the repetition of technology for moral issues did not take into account.[6]

Similar sentiments were expressed in The United States of America, where the struggle to find an expression of identity instigated questions about the validity of the modern movement. In *Complexity and Contradiction in Architecture*, a piece that is an elaboration of his earlier intellectual work, Robert Venturi calls for an architecture that is 'impure' and 'distorted', one that does not follow the order dictated by standardisation and the repetition of old solutions.[7] He prefers to see 'inconsistent', 'rich', 'perverse' and 'messy vitality' in architecture as opposed to the 'obvious unity' that modernist architects who came before him seemed to prefer.[8] Venturi attacks the 'Corbusean Purism' of 'primary forms' that were so deeply rooted in Modernist design traditions. In his own words he 'welcome[s] the problems and exploit[s] the uncertainties. By embracing contradiction as well as complexity, [he aims] for vitality as well as validity'.[9] His intellectual journey was accompanied by Denise Scott Brown who, similarly, analyses the problematics of colonial architecture

in America by discussing the paradoxes of authenticity.[10] Her rhetoric, touches upon a re-evaluation of assumptions about architecture typical of European nation-states, which, as she claims, were being used to establish similar passions across the Atlantic.[11] When discussing Las Vegas, Scott Brown develops a whole narrative unpicking the assumptions that create a uniform understanding of architecture carrying tired notions of attachment and nostalgia through the fixation on the architectural language.

In this atmosphere of reflection, engagement with disciplines outside of architecture offered a respite and an avenue to propose alternative solutions that are not dictated by aesthetic style. Several architects including Peter Eisenman, Gregg Lynn and Philippe Rahm, to name a few,[12] indulged in the literature and ideas put forward by Deleuze and started using his writings to inspire their design practice. In this sense, a departure from established conversations on architectural design was permissible and even encouraged. This approach to the architectural ethos opened the profession to be reinvented and stale ways of seeing architectural elements that were assumed as essential were to be re-articulated. Voices of people such as Robert Segrest, criticised Boyer Report in which the image of architectural education can be seen as overly nurtured and based on a narrow definition of social progress and a singular image of consensus suggesting a series of action points that should be taken.[13] Newton D'souza notices that in more recent times the architectural discipline has followed suit, privileging a very narrow set of skills and ways to investigate space, thus depriving the profession of creative avenues in which spatial design can be accessed.[14] The unification of architectural pedagogy was also challenged by Linda N. Groat and Sherry Ahrentzen who suggested that pedagogic discourse is being convened in a way that is abrasive not only to ideas but also to students who do not have the same aims after graduation as what was assumed by educators, thus alienating a huge portion of talented individuals.[15]

In the current landscape of architectural pedagogy in the UK, the discipline faces more and more regulations, which standardise the architectural design industry and discount the post-war debates that were contemporary to Deleuze. The overseeing body that has regulated the architectural discipline since 1837 is the Royal Institute of British architects. Its role is to ensure that graduates are able to operate in industry in a safe and knowing way. This regulation is specific to the discipline itself and aims at curating an environment for good and progressive practitioners to emerge. A much more generic form of regulation came in the form of the *Dearing Report* in 1997,[16] which was a consensus of academic disciplines and pushed for a reform in the way universities functioned to adapt to the challenging environment of the international landscape of higher education. It asked that all lecturers receive a higher education teaching qualification in the initial years of their teaching career. As such lecturers, who specialised in their own consecutive disciplines, were asked to undergo training that advertised approaches to teaching based on a unified Higher Education Academy's Professional Standards Framework.

What is more, on 16 July 1998 the teaching and higher education bill, which was passed into law, asked that students be charged with fees for their student experience. Subsequently, the amount of money that students were charged since increased dramatically as has the financial support in the form of loans they are offered.[17] In 2010 the fees increased substantially without a comprehensive debate in parliament about how this change will influence the role of the student body in the context of higher education.[18] With the graduate contribution system in place, the students are now only asked to pay their loans back when they can afford to do so. This may be seen as allowing for wider inclusion; however, the prospect of being in debt for a long period leaves a bitter aftertaste to students.

At the same time, the new-found commodification of knowledge that this monetisation imposed has led universities to intensify the debate of the students' role in funding and, following from there, shaping the higher education environment. If the students are a much greater force in the funding of universities, then in a Capitalist society it should stand that their voice should be heard more clearly in how they wish to be educated. This has diminished the stance of the lecturers and proposed a more student-body-led curriculum – one that evades stress and seeks safety, tenderness and mindfulness as means of security for the students' investment. The student-teacher relationship that emerged from this shift has disciplined universities to present the curriculum and, importantly, expectations of the course to the students before they enrol so that they know what to expect. But it is also demanding that teaching teams specify the methods involved and output required before meeting the student, promoting the standardisation of the bespoke and individual relation between student and tutor that is typical for the professionally accredited architecture schools. Even though more daring architectural programmes ask for a creative reflection on idiosyncratic design briefs, there is always a set of rigid expectations and outputs that the students are meant to satisfy. This places pressure on the tutor to pre-envision the teaching strategy and disengage with the post-modern debates on architecture and its education as one that allows for 'inconsistent', 'rich', 'perverse' and 'messy vitality' as well as one which is specific to the context and student's ideas – allowing them to grow in their own, idiosynchratic way.

Deleuze and students

Deleuze's approach to narrating his understanding of philosophy is difficult to engage with. However, he often uses architecture as a subject of his debates, as well as a tool to explain his ideas. This is the reason why architects have been drawn to his rhetoric. Architecture, as an art of orchestrating relations in space and without a fixed meaning, served well to dissolve the oppression of dictatorial enunciations inherent in Deleuze's relational ontology and fitted well with the post-modern debates on architecture and the production of meaning. This meant that the nurturing of academic ideas in conversations with him was intentionally difficult to pinpoint and was not conforming with

traditional pedagogy. At times, his focus was drifting into very personal and emotional territories. This attitude was meant to challenge and propose an alternative to Modern discourses that present a very rigid set of dualisms and deterministic answers.[19] This allowed his students to engage with his ideas on their level and develop their own approaches, as opposed to repeating fixed notions.

One of the fundamental assumptions of Deleuzean dialogues is the elimination in his rhetoric of any centre-point that might have dictated questions, solutions, and answers, which may suggest a tactical strategy of nurturing specific directed ideas. Instead of doing so, Deleuze proposes a framework that allows opening up and accepting different forms of dialogue. This manifests in the style of articulation that he operates with, such as the assumption of the roles between teacher and student in the propagation of ideas. In *What is Philosophy?* Deleuze and Guattari write:

> [T]he teacher refers constantly to taught concepts (man-rational animal), whereas the private thinker forms a concept with innate forces that everyone possesses on their own account by right ('I think'). Here is a very strange type of persona who wants to think, and who thinks for himself, by the 'natural light'.[20]

Deleuze and Guattari follow this with a narrative on the importance and prevalence of the persona of the 'private thinker' within philosophy and their role in developing ground-breaking ideas that may not fit in with old, often outdated assumptions. In fact, the role of conducting philosophy is precisely to encapsulate a friction in the relation between the state of knowing and state of naive doubting, continually becoming the private thinker over and over. The notion of nurture here, as a concept that necessitates a leading and knowing hand, is challenged along with the hierarchies of the teacher-student relation.

Joe Hughes argues that Deleuze's reading is intently non-linear and consciously challenging the reader's habits, prompting them to forget conventions so that they can adapt to a new, more open, and humbler way of thinking.[21] Hughes argues that this aesthetic is deliberate and is an educational tool that helps to convey Deleuze's philosophical position.[22] He suggests that Deleuze's texts present a plethora of ways to dissolve a signifying reference point for his philosophy, implying a multiplicity of ways in which his ideas can be understood. An example would be the explanation of the same concept several times in the same text that changes certain details but maintains a single conceptual character. In this way, the concept that is put forward can be seen as almost vibrating around a defined mean position but is never truly static. Deleuze applied this method to the definition of a 'refrain' in *A Thousand Plateaus*.[23] The refrain appears several times in the text, much like a repetitive chorus, each time adding to or moulding the previous definition. In doing so Deleuze is true to his own multifaceted and plural

rhetoric and would not place himself in the centre of the debate but instead dissolves it and asks the reader to compose their own (at times fragmented) understanding. In *What Is Philosophy?* Deleuze outwardly writes that a concept is 'a heterogenesis – that is to say, an ordering of its components by zones of neighborhood [*sic*]'.[24] Through this way of articulating ideas, Deleuze proposes a new type of conducting philosophy – one that is non-oppressive and non-critical of other lines of thought. He rather allows thoughts to come together without being forced to fit in and comply with a forceful, transcendental ideology.

Following from there and in terms of pedagogy, Deleuze's approach is similar to the post-colonial attitudes put forward by people such as Paulo Freire or Gert Biesta,[25] who advocate dissent from politicised positions in the teacher-student relation and strive away from the normative ways in which education is convened. In fact, in *What Is Philosophy?* Deleuze suggests that for him pedagogy is a tool to keep his philosophy in check and not deviate into incomprehensibility.[26] In this way, he subjugates himself and his philosophy to the discussions he had with his students. This approach, without a strong and simple message, might seem disorientating, however, Deleuze's students could not help but attend his sessions. Hugh Tomlinson and Barbra Habberiam write on Deleuze's seminars at the University of Vincennes:

> [The seminars] took place every Tuesday morning, in a tiny seminar room, choked with smoke, where only those who arrived an hour early would find a seat. Deleuze's 'explorations' would be informal and far-reaching with frequent questions and interruptions.[27]

The informality may here mean a less regimented or pre-planned format of a strictly policed central point in the discourse, where Deleuze would be the leader nurturing ideas.

Cache and Deleuze

Among the many architects that have referred to Deleuze, his student Bernard Cache stands out as a creative designer and an exceptional scholar of architectural history and theory. Cache studied mathematics, engineering, architecture, philosophy, and business.[28] He claims that his understanding of architecture was always from the position of an outsider and his journey to use Deleuze so prominently, amongst many other historical figures started when Cache attended Deleuze's seminars.[29] Cache considers his designs to be, in his words, a '*philosophie poursuiviepard' autres moyens*' ('a philosophy attained through other means'),[30] which is a play on Carl von Clausewitz's, 'a continuation of politics by other means'.[31] In 'A Plea for Euclid', he writes that designing architecture is a practice that deals with a translation of a multidimensional space into a three-dimensional Euclidian figure.[32] In 'Objectile: Poursuite de la philosophie d'autres moyens', similarly to Deleuze, Cache refers specifically to Henry Bergson to hint on the importance of the qualitative aspect of spatial perception.[33]

Cache's fascination with Deleuze is complemented by an interest in historical examples of design, which may be seen as parametric. His practice works with landscapes of form to transform their conventional aesthetics and create new opportunities for functionality; some, more daring items push the boundaries of materiality. In 2019 Cache also published *Projectiles*; a compilation of essays that explicitly references Deleuze and how his philosophy has inspired the designer's work. In particular, *Projectiles*, Cache writes, 'is a commemorative essay that aims to evoke the extraordinary adventure of engaging with Gilles Deleuze's thoughts'.[34] The project does so through fixation on undulating forms and a fascination with Baroque as well as Gottfried Leibniz and other historical figures. In his writing, Cache challenges the problematics of sameness which come from the essentialist tie to established forms and ways of production; in doing so, he advocates for the virtues of total differentiation. His lecture *Towards Contemporary Ornamentation Manufacturing Process*, more specifically presents the virtues of parametricism and presents his work.[35] In it, he suggests that his aim is a search for the dissolution of the object and an experiment in searching for a new and creative way of seeing a plane in the context of not only aesthetics but also structure.

This strive to attain an undetermined meaning of an element through industrial production is similar to the Deleuzean idea of the fallacy of a fixed identity. In *Earth Moves*, Cache suggests that at the time of writing the book or weaving the narrative that came to compile its narrative it was 'no longer [...] possible to think in terms of identity'.[36] He goes further to suggest that it essentially leads to a 'dead end' by establishing a form that responds to an abstract situation in a given moment in time or an understanding thereof informed by the past. Rather, he suggests following contemporary philosophical strands to 'work beneath the surface of identity'.[37] To exemplify his point, Cache discusses the functions of transformation that compose any architectural form: 'inflection, vector and frame'.[38] He describes mathematical equations and presents his conceptualisation of the point of inflection.[39] The point of inflection describes a moment where the concavity of a mathematical function changes and where the graph folds back in on itself, a point which leaves no hints over which way the function may be inclined to turn next. In this way it can turn to another, or the other direction entirely; the point becomes a blank slate for the function – a starting point in the journey of the function to gain a defined graphical representation.[40] He writes that '[i]n this way, the inflection represents a totality of possibilities, as well as openness, a receptiveness, or an anticipation'.[41]

He then suggests that this state of inflection is not a stable one and that rather than exploring this state of anticipation, architecture seems to more likely seek more established ideas that signify a specific meaning, to inform design. In this vein, Cache also mentions the Kantian idea of 'interiority' which is an aesthetic manifestation of common interest – a concept that comes into Kant's philosophy at the same time as intersubjectivity and without which the aesthetic judgment of an object or even a piece of architecture would be

difficult.[42] Cache comments that the art of architecture is to recognise the variations in probabilities on site. He notes the difficulty of designing in this way by writing:

> The rigid form of the [architectural] frame cannot coincide with that of an effect that is always subject to variations and is only probable. That is why the frame belongs to a register of autonomous forms whose principle must still be defined.[43]

Cache's text in *Earth Moves* is complemented by images showing three-dimensional objects; several more abstract items are presented and juxtaposed against one another in a series of photographs.[44] The scale and material are difficult to discern; they undulate and change in shape almost like objects made of a fluid or viscous material and in the process of responding to a series of forces warping, twisting, and extending out. The elasticity of these bodies makes one wonder what shape the object takes when observed from a different perspective. The impression of their dynamic appearance is only anchored by the light reflected by the objects (that appears to indicate a glossy surface) and their texture (which is always parallel to its base and appears to be too regimented to represent a malleable piece). The objects do not have an easily identifiable purpose, they simply are, more-so they are in a state of joyful and stressless ambiguity – almost balancing on a cloud.

Much like the points of inflection, the objects seem to represent a type of suspension of production where their functionality is yet to be determined or is rather unspecified in the field of possibilities. To paraphrase Cache, the objects represent a 'totality of possibilities, as well as openness, a receptiveness, or an anticipation'.[45] The composition of the objects within their context can be misleadingly understood as apolitical as they do not explicitly serve any purpose in the production of a predictable affect. Without a clear and rational purpose, the aesthetics of the items may be said to emphasise the process that produced them. The lack of familiar associations to function allows the objects to operate on the periphery of politics as an opportunity to engage personal sensations, or the emotionality of wonder, uncertainty, and bafflement. In this way, it must also put the designer in a precarious state of not knowing how their design will be received without the safety of an established pattern that may sanction the form through a standardised schema or an affiliation with an institutionalised marketability of predictable aesthetics. Thus, thinking of the process as opposed to the end-result of the labour that constructed the items is not at all apolitical but engaging the designer in a complex set of very personal sensations. They also ordain an affect in which the possibilities of responses to the design become de-centralised from familiar concepts and liberated from a standardised approach. In this sense, it can be said that the idea of multi-perspectivity as 'other' means of engaging with the architectural objects is extended by being recognised as not only physically complex but also emotionally challenging.

Deleuze and Cache

Cache's writing was explicitly influenced by Deleuzean rhetoric and was consequently picked up by Deleuze himself while discussing Baroque. The objects of the writing are the same and the foundation stone for the philosophical framework in both Deleuze and Cache is relational ontology. However, the nuance in the specificity of concepts varies, exposing Deleuze's permission for creativity. This suggests that a lineage can be traced between the two, even though its core assumptions are signified by an area of semantics rather than an intentionally nurtured argument. In one instance, a key concept from *Earth Moves*, 'the point of inflection',[46] was incorporated in Deleuze's writing on the architectural fold and published a few years later under the same title. That is the way in which *The Fold* touches upon Baroque, which, as Deleuze suggests, has deep foundations in mathematical physics and curvilinearity.[47] Deleuze proposes that Baroque is not a prescribed aesthetics with an ideal set of rules and ratios as well as a serene and calm composition but a particular attitude to design. Helen Hills suggests that for Deleuze, Baroque offered a theoretical decomposition of a sense of subordination leaving the composition open to infinity.[48] Hills posits that Baroque destabilises and redacts points of reference from relations and assumptions of the role of the detail in the whole composition. In describing this, Deleuze refers to the Baroque thinkers, Dutch physicist Christiaan Huygens and Swiss historian Heinrich Wölfflin. He also introduces German Philosopher Gottfried Wilhelm Leibniz, who is also an important figure in Cache's publication. It might be said that the way that Leibniz is presented outlines the extent of Deleuze's fixation with the idea of infinity, humility, and plurality in accepting and propagating ideas. Leibniz writes:

> Now, as in the ideas of God there is an infinite number of possible universes, and as only one of them can be actual, there must be a sufficient reason for the choice of God, which leads Him to decide upon one rather than another [...].[49]

Gregory Flaxman suggests that Deleuze proposes a more sophisticated idea than just the design style in *The Fold* and by referring to Leibniz and Baroque he outlines a way of understanding spatial relations in their totality.[50] In this light, Deleuze is detaching Baroque from expectations of a classically single-perspectival and limited view and identifies a wider range of possibilities.

In this context, Deleuze reaches out to contemporary architects and makes a specific reference to Cache's description of the point of inflection from *Earth Moves*. Deleuze writes:

> Bernard Cache defines inflection – or 'extrema' (extrinsic singularities, maximum and minimum), it does not refer to coordinate: it is neither high or low, neither right nor left, neither regression nor progression. It corresponds to what Leibniz calls an 'ambiguous sign'.[51]

He follows on to add that the event of inflection can also be referred to as a point of view, from a virtual point and ideal state that only exists in the soul of the perceiver to its real manifestation that has a physical place, position, and site.

> To the degree it represents variation or inflection, it can be called point of view. Such is the basis of perspectivism, which does not mean dependence in respect to pregiven or defined subject: to the contrary, a subject will be what comes to the point of view, or rather what remains in the point of view. That is why the transformation of the object refers to a correlative transformation of the subject [...].[52]

Here, Deleuze unfolds the complexities of relational ontology and the idea that objects and subjects change one another through their assumed positions in space.

A sentiment that Deleuze repeats almost word for word throughout the book is the notion that inflection is associated with the subsequent development of a sense of inclusion. If the inflection is an ideal beginning that introduces the subject into a relation with an object and allows for a mutual transformation without pre-given concepts, then it might be assumed that this point is a blank slate – a pre-inclusive state of openness, from which an inclusion into a relation can begin. In the point of inflection and at the outset of a relation any object will come across as, (following Deleuze:) 'manneristic, not essentializing'.[53] Saying this, the ideal state of the beginning is precarious; any deviation left or right on the function from this point may spoil its character and give it an essentialising and non-manneristic quality by drifting to the maxima or minima on the function that may indicate a strong identity. If then change leads to a sense of inclusion, then it would stand to scrutiny that inclusion, demands a signifier of identity. Deleuze also writes on organisms in a pond:

> In fact, it is the inorganic that repeats itself, with a difference of proximate dimension, since it is always an exterior site which enters the body; the organism, in contrast, envelops an interior site that contains necessarily other species of organisms, those that envelop in their turn the interior sites containing yet other organisms.[54]

This sense of interior sites can be seen as a way of inclusion into a larger universal whole and plays on sentiments for Kantian interiority. This concept of interiority was also discussed in *Dialogues II* (first published in 1977) with Clare Parnet,[55] yet another of Deleuze's students. It might be said that the event of establishing a signifier that can be shared, such as the definition of a pond or species, an inclusion into the event of *being in* or *being part of* can take place. Deleuze explores this conceptualisation of how these spatial narratives come to being that defines not only intellectual movements but also interior sites.[56] Here, interiority can be understood as at the same time real and a misleading account of the state of unified composition. Any change

in the perspective of the elements involved in their envelopment can put in question their role in the production of unity that can be shared and re-assemble the parts forming a new interiority. It could be assumed that the traditionally assumed agenda of pedagogy is to include into an interiority of thought, or the event of including into knowledge circulation. At the same time, however, this interiority should not be thought of as a rigid state but rather as fluid and precarious – one that needs to be free and open for creative acts or events (such as design) to take place.

To illustrate Deleuze's point, the narrative of *The Fold* is inexplicably intertwined with architecture as well as the art that was produced in the Baroque spirit. He suggests that 'painting needs to leave the frame and become sculpture'.[57] This preference for a three-dimensional form in his understanding of Baroque, is facilitated by the reminiscence for several craftsmen that defined the intellectual development of Baroque. While mentioning exceptional artists, Deleuze lingers on Gian Lorenzo Bernini and lists several of his art pieces but signifies one sculpture especially, that of The Ecstasy of Saint Teresa.[58] The composition of this piece consists of St. Teresa on a cloud and an angel standing over her, holding her tunic, and aiming an arrow at her heart. Her persona is warped, twisted, and extended in a dynamic way almost as though it was elastic and weightless; her tunic becomes the most suggestive element of the composition, loosely covering her figure without redacting the expressiveness of her posture. Her eyes, half-open and her lips uncontrollably gasping for air make her experience both intimate and intense; one cannot help but share St. Teresa's passions in this fleeting, suspended moment in which Bernini managed to capture her story. Deleuze's eye is caught by the extraordinary folds of the tunic that clothe her body; those, as he suggests, play a more significant function than just decoration.[59] Although we will probably never be sure what exactly Bernini was thinking of when crafting the sculpture, Susane Warma offers a compelling interpretation. She writes that St. Teresa was here presented in a state of ecstasy that she, herself describes as experiencing a 'true revelation' at the moment of her death, when the angel violently yet gently pierces her heart with an arrow that represents the love of God.[60]

There is no clear front nor a distance from which St. Teresa's experience should be admired, the space around her is defined by the statue and indirectly attempts to include its perceivers into the story of the Saint. Even though the sculpture is framed by columns and access to it is restricted, each step closer and to the side of the sculpture adds to the experience of being with or even being St. Teresa and sharing the passions that misshape her body. Each change in perspective does not just add to the aesthetic qualities of the sculpture but can change the meaning of the depicted event. Each viewpoint in itself, may be seen as a point of inflection and a re-introduction into her story. If one views St. Teresa from the side, one could miss her face entirely. This would make the angel the focal point of the composition. However, if one were to see the sculpture from the other side, one could

miss the angel's hand holding Teresa's tunic redacting the violent aspect of the event. The totality of the composition in this way needs to be seen from many angles, each revealing a new aspect of St. Teresa's story that Bernini generously presents us with. To see them all is not only to know the full story but to become included in Teresa's ecstasy. Moving around the sculpture is to become part of it again and again. Like the images on a film reel each emerging from the last and becoming a new one in the future, the moments of perceiving the sculpture offer a new sensation through movement adding to the story shared by so many scholars and theologians. In this way, the piece should be perceived in movement in the space around it as one walks slowly taking in all the complexities of the multifaceted and multi-cavernous or multi-folded geometry. But the sequence in which the elements of the sculpture are seen can also distort the story, as any new noticed element will be infected with the memory of the last. The folds that Deleuze is so interested in, exemplify this logic. Even though made of marble these folds seem soft and delicate, falling slowly and gracefully – almost in motion. Each one is carved into the stone from a different angle so that the crevices that they enclose cannot be peered into at one glance. Of course, it can be understood that the folds which Deleuze discusses in his book are much more than a physical manifestation of stone and can be thought of as a link between what is imminently here and that which is metaphysical or present only in memory. If we understand a change of perspectival position as a new situation where we discover a new image of the folds in St. Teresa's appearance, then each perspective will offer a new point of view, a chance to reorganise the role of the self in the composition of the interiority. It will then become a point that denotes a noticeable change in the understanding and appreciation of the form.

The sculpture as a piece of stone is a point of inflection but it is also by necessity polluted with the signifiers that ordain it: it is infused with the stories of the turbulent passions of the Saint. The sculpture is nothing more than a block of white marble but the ideas that it represents are designed to 'fold it in' or superimpose it with a much more elaborate meaning: the shared story of a Saint's violent death and the sensations she went through. The multi-perspectival character of the sculpture provides a space which varies the storyline of the Saint's passion with changes of the points of view that it can be admired from. The interiority around it then can be said to be including the perceivers into St. Teresa's story albeit always associated with a layer of relativity and frailty in its composition, it will always be fragmentary and incomplete but, as a signifier of place, it will always deviate to a 'maxima or minima of a function' of inclusion in space. The meaning of this peace as an element of spatial design becomes a vibration around a mean central position.

Concluding remarks

Higher Education institutions are currently facing the problematics of formalising the student-teacher relationship by asking for a wide-ranged standardisation. The issue is particularly pressing for creative design courses, including architecture – a discipline that by its creative attachment to design resents standardisation. A model of higher education which should be included in the debate about how to change the architectural pedagogy as one that empowers creativity is that reflected in the engagement between Gilles Deleuze and Bernard Cache. Even though Deleuze did not specifically aim at teaching architectural design, his rhetoric is deeply spatial and touches on an ontology that cannot exist without the concept of relationality. His way of thinking of pedagogy is one of a continual formation and reformation of ideas where there is no right or wrong answer. This was picked up by Cache whose architectural designs embody what he calls 'philosophy through other means' and a reflection on his engagement with Deleuze. There is a definite relation between Deleuze and Cache in their research, as stated in their publications and references in their work. Cache's projects play on relational ontology as do Deleuzean texts, while Deleuze referred to Cache's rhetoric in his development of the fold as a spatial concept. In explicitly referring to Cache's work, Deleuze exposed his sensibilities in nurturing ideas that followed his philosophy. Deleuze did not want to present the students with his ideas but create conditions for them to question the world. In a way, it could be said that he aimed at becoming a 'private thinker' and de-centralise the dialogues in his 'choked with smoke' office. This pedagogical approach was pluralistic and allowed for concepts to emerge without a strict discipline for what form they may have or a rigid expectation of what they should become. This is evident in the way Deleuze continued his dialogue with Cache in their professional life.

Both Cache and Deleuze discussed the idea of the 'point of inflection' and both used Kant and Leibniz to signify the quality of this concept. For both the point of inflection is relational as well as temporal and signifies a blank slate that is open to a range of possibilities to include into a multiplicity of events. Looking at the designs that emerged from Cache's office, it could be said that he tried to encapsulate the qualities of this conceptual device of the point of inflection in a physical object: a form that is suspended at the moment of becoming something concrete. Deleuze refers to Cache's text, which describes the point but refuses to engage with Cache's design-thinking, rather returning the discussion to Baroque art in order to tell another, very specific story. The reference is an acknowledgement of the relation between the two and a specific link of Deleuze's philosophy to architecture; however, the deflection of the key medium used by Cache may suggest that perhaps Deleuze's understanding of the point or philosophy in general is different. It might be the case that for Deleuze the point cannot be physical and for him it can only exist in a virtual state, while the physical world and architecture are already too inclusive in a Kantian interiority. It could also mean that for Deleuze the dissent from the point of inflection happens at the level of emotionality and

perhaps this is where the differences between the two arise.

Regardless of the differences, or perhaps as the differences underline, the discourses between Deleuze and Cache allowed the student to create their own approach to form-finding and the teacher to develop their research interest further, not assigned to the teacher but rather developed in a bespoke way, somewhat differently by the student. As a successful model of inspiring an architectural student the Deleuze/Cache concert should be present in the debate of the future of creative design pedagogy. One that follows the same logic as the becoming of a designer; one that is fluid, free and open, without being overwhelmed by an ethics that is over-reliant on irrelevant pragmatism. Deleuze aimed to de-centralise the dialogues between him and his students, nurturing the rise of concepts in a free way and enabling an affect that is multi-perspectival and freed from rigid expectations. This attitude gave rise to a new form of architecture that extends beyond Cache's own practice, inspired by new developments in technology and unbound by requirements of learning outputs, as currently demanded by construction industries and higher education institutions. It is this freedom that perhaps we should recognise as one that carries value for creative design courses, freed from the burdens of an overly nurtured and controlled design sensibility amongst students. A multi-perspectival approach to architectural education would be open to adopt, adapt to and respond to the otherness of students as the creative professionals it claims to nurture them to be.

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