**I acknowledge the Gadigal of the Eora Nation, the traditional custodians of the land we are taught on and pay my respects to the Elders past, present and future.**

**Philosophy of Architecture - Worth it?**

MARC5110 Contemporary Architectural Theory
Terms of Engagement

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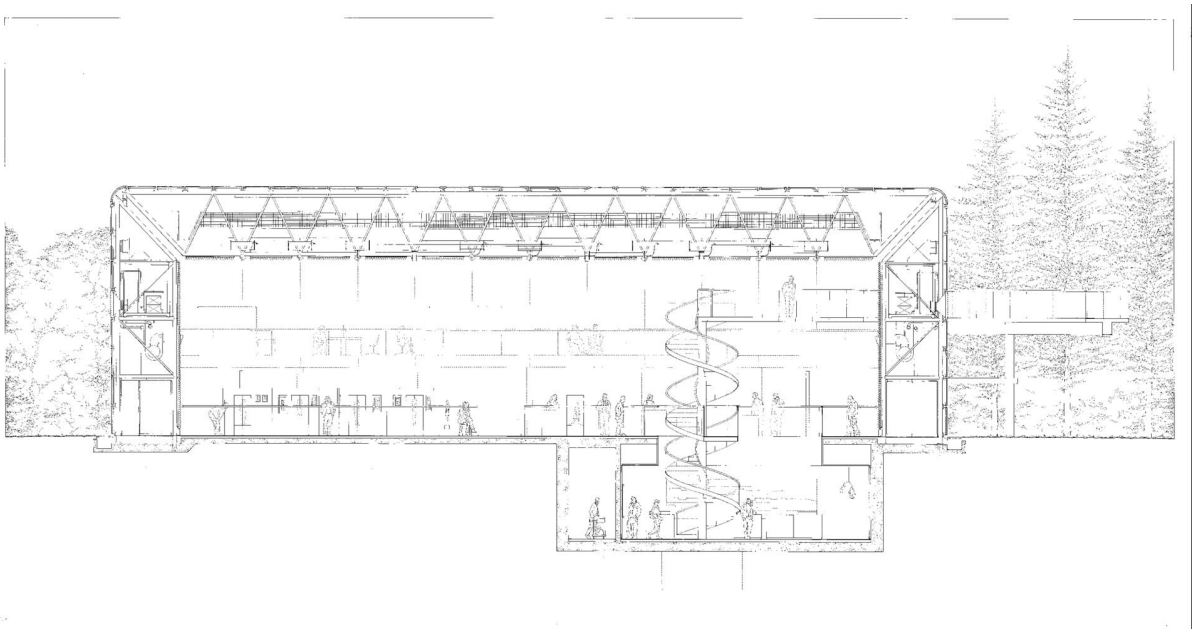
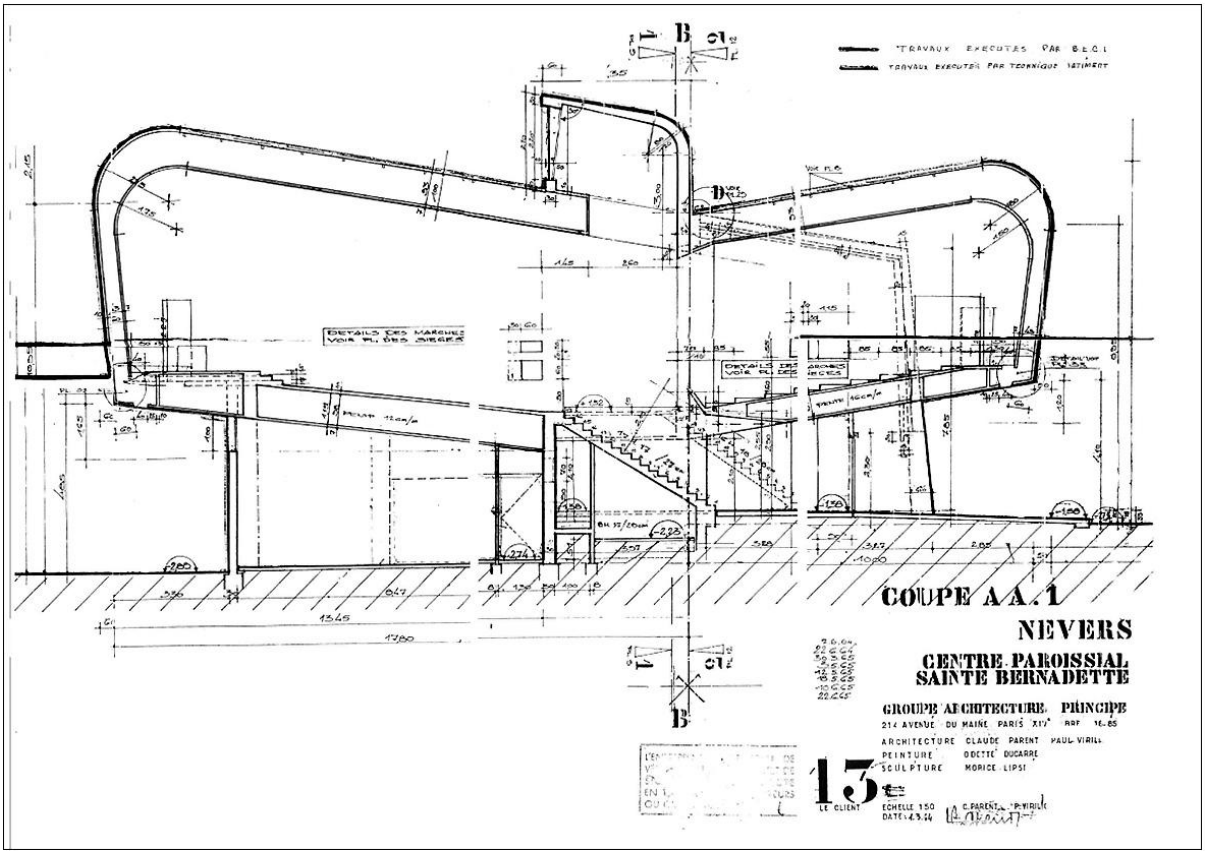


**Section Drawing, Sainsbury Centre for Visual Arts, 1978**
*https://www.fosterandpartners.com/projects/sainsbury-centre-for-visual-arts/*




**Section Drawing, Eglise Sainte-Bernadette de Banlay, Nevers, 1966**
*https://www.frac-centre.fr/_en/art-and-architecture-collection/architecture-principe/eglise-sainte-bernadette-banlay-nevers-317.html?authID=10&ensembleID=26*

**Abstract**

*This essay aims to present a comparison of architectural design processes of collaborations between philosophers and architects. Even if philosophy somehow always is included in architecture and design, sometimes it is not actively thought of and it becomes more of a retrospective analysis of the built architecture. The partnership of philosopher Paul Virilio and architect Claude Parent in the 1970s as well as works of groups and people like Derrida and Tschumi, Archigram, Constant and Yona Friedman are proof that philosophical thinking can be an elementary component of a design process resulting in built architecture. The representative architecture of Virilio and Parent is the Church Sainte-Bernadette du Banlay in Nevers (1966), which will be compared to the architecture of one of the world's most renowned offices, Foster and Partner (Steve Jobs Theater, 2017).[1][2] While we could call Virilio and Parent's Church "built philosophy", the high tech architecture of the Steve Jobs Theater stands for innovation and progress in architecture without much theoretical thought.[3] Built philosophy implies that philosophical thinking comes before architecture. Of course in every project there is thought before a design is happening, but special here is the collaboration between philosophers and architects. This gets the project away from pure architectural thinking of the design process towards a symbiosis of philosophy and architecture. Outcomes might have a similar visual appearance, but I will argue that because of the process of how architecture is made, buildings will have very different implications and influences for architecture as well as society.*

**Philosophy of architecture?**

What do I even mean by philosophy as groundwork for architecture? When is it a philosophy that lays the groundwork? And when is it just a concept? What makes architecture? There are points that every architect thinks about when designing a building. One needs to study the program of the future design, study the site where it is supposed to be built, listen to all the needs of the client and include a financial concept. One also needs to know the building code, know the building materials and think about the aesthetics of the project.
To define my idea of a concept, and the differences to philosophy, I want to show three versions of what some might call the philosophy of architecture: (1) the concept: While crushing the brain about the above-mentioned influencing points on architecture in a bar, the architect may come up with a concept. The concept is an overarching idea specific to one project, to which the architect refers if any question during the design process comes up. For example, we can take the project *CopenHill Energy Plant* of the danish architecture firm Bjarke Ingels Group, where the concept can be defined as follows: *Building a waste-to-energy plant accessible to the public.*[4] Once they had an open question while designing, they could always refer back to their idea and base the decision on it. As an outcome, you have a ski slope on top of an energy plant in an otherwise flat country, bars and other facilities as well as a facade which is trying to fit in the city. (2) Between architectural concept and philosophy, or *design philosophy*: A bigger idea, which still solely relates to architecture, but can and mostly is applied to all projects of whoever believes in the idea. In history it ranges from *Firmitas, Utilitas, Venustas* (Vitruvius, ca. 84-27 BC) over *Less is More* (Mies von der Rohe, ca. 1929) to *Less is a bore* (Venturi, 1966). These well-known ideas work as a guideline for an architect and are broader than a concept. On the other side, those do not quite yet fit into the realm of

philosophy, because they are meant for architectural practice only. (3) Philosophy. Projects can also be built upon philosophical ideas, not talking about architecture in the first place. On this level, the architectural design process requires a certain amount of abstraction and conversion of a philosophical idea to built architecture, which makes it interesting and different, but also hard to apply. In this category, I want to put one of the projects discussed later - Church Sainte-Bernadette du Banlay (1966) - and argue why this approach can lead to a very different built architecture compared to whatever style is prevailing at the time. This of course is also true for multiple other approaches to making architecture, but here we can see the sense, the value and the origin, without having to bang our heads against the wall when hearing the approach to a piece of architecture we five minutes earlier thought was quite lovely.

**Church Sainte-Bernadette du Banlay in Nevers, 1966**

In 1966, Paul Virilio and Claude Parent, together with painter Michel Carrade and sculptor Morice Lipsi, started the magazine "architecture principe".[5] In three years, nine magazines were published talking about a different approach to architecture. A tenth edition was published together with a book containing all other editions as well 30 years later, in 1996. Interestingly, it is Bernard Tschumi who was invited to write in the tenth edition of the magazine, which he used to republish his essay "a manifesto of a different type", which connects slightly his ideas of the event, space and movement with the idea of oblique architecture by architecture principe. Tschumi worked together with Jacques Derrida on the design of the Parc de la Villette (1987), which as Virilio and Parent's church also follows the broad and social philosophical concepts.[6] Parent and Virilio used their magazine as a platform to publish *permanent manifestos*.[7]

*"The state of crisis which is manifestly affecting all human activities, the return to a principle of unity which undermines all classifications, all limits, the enormous contradiction of values and disciplines, point up to the proximity of an event, perhaps an unprecedented one.*

*[...]*

*In effect, the vertical-horizontal stationary position no longer corresponding to mankind's own dynamic, architecture will henceforth have to express itself in the inclined plane, in order to situate itself on the new plane of human consciousness. Failing that, all architecture projects will rapidly become unusable"* [8]

Throughout the magazine, Virilio and Parent argue for oblique architecture. Based on Virilio's extended studies of second-world-war bunkers, the inclined plane is supposed to be the new status quo. This is where Virilio's philosophy differs from most other design philosophies. While most ideas focus on architecture itself, even the origin, Virilio finds common ground between architecture and war, war and cinema and architecture and politics. In his book *Bunker Archeology* from 1975, which is one of his earliest publications, Virilio studies the

connection between war strategy, the architecture of second world war bunkers and society's perception of it. It also contains a detailed observation of the found bunkers, which at the time were and still are leftovers of Germany's *Atlantic Wall*.[9] Virilio is fascinated by the fact that most of the bunkers survived - obviously being built for that - and are now architectural aliens from which he argues we can learn. The three key elements he finds in bunker architecture, which differ from most other archetypes, are foundations, form and materiality. While normal buildings are rooted inside the earth to withstand wind and weather, bunkers purposely are just resting on sand being very heavy yet movable in case of a bombing. They are round to reduce the impact of projectiles, and they are monoliths consisting of reinforced concrete and reinforced concrete only. Additionally, Virilio outlines the paradox that while normal architecture is built to withstand any kind of destruction, and, in a perfect scenario, lasts forever, with war architecture, *"destroying is part of the construction".*[10] The paradox here can be found in the fact that for example, residential and commercial buildings have a maximum lifespan of around a hundred years, while war architecture, due to their design, lasts forever, at least if not centrally hit by a missile. Even if a bunker is bombed, it will just move, but it will not collapse. Based on this research, together with Parent, he then defines a new style of architecture, oblique architecture. In that style, Parent and Virilio effectively forbid any completely horizontal or vertical object. About the vertical wall as a space separator together with a horizontal plane to live on they say it is a waste of space and material. Rather, they propose one oblique element, that does both jobs. We can stand on an angled plane as long as it is not too angled, while this plane also vertically divides the space successfully. At this point, even if the theory sounds very exciting, and the drawings supporting it might seem very comfortable, we must outline that even Claude Parent, whose oeuvre is much bigger than Virilio's, introduced a horizontal plane in all of his buildings, probably due to the request of all his clients. But there was still a lot of experimentation with the inclined plane, ranging from a huge amount of drawings over installations to a sadly not built prototype, the *IP 1* (Instabilisateur pendulaire, 1968)[11]. The IP 1, designed by Virilio and Parent, was supposed to be built and lived in as an experiment on how the inclined plane affects the human body. Sadly, due to the political events in 1968, which is also the reason for the ending of Parent and Virilio's professional relationship, hence the end of architecture principe, the prototype could not be built.

*"The architectural schema of the church is represented by two inverse inclined planes. At the lowest point, where they meet in a dihedral angle, is the entrance to the nave, a large central staircase in a single piece.*
*Translating this schema, two interconnecting concrete shell halves, set slightly off from the longitudinal axis which is the line of the greatest incline of the planes.*
*An imaginary symmetry is obtained resulting in an intense convergence on the alter situated at the top of the main ramp. The additional access points to the church are found in the lateral spaces of the interconnecting shell halves.*
*At the summit of the nave, in the dihedron of the roof beams which follow the ground movements, opens a lantern of transversal lighting, a shell facing the exterior along the whole width.*
*Additional light comes from the opening of continuous lits which set off all along the nave the interconnected lateral volumes.*

*Bays situated on the ground all along the walls behind the altar and opposite the nave between the confessionals, receive exterior solar reflection and give off light in contrejour, all the way up to the vaults."* [12]

Claude Parent has a clear idea of the design for the Church in Nevers. Here he lays out openly the decision taken during the design and construction process. We can witness the conversion of a philosophical approach to built architecture. At this point, Virilio and probably above all the architect of the duo, Parent, have to take plain architectural decisions to make sure they have a defined form as well as a buildable one. While solving technical questions, they want to make sure to stick to their philosophy as closely as possible. For example, Parent is talking about multiple engineers wanting to alter the form for better performance, which does not comply with the idea of the original form (same quote).
While a church is a good building to express the thought of oblique architecture, one can also clearly see the analogy to bunker architecture. In fact, many critiques about the building talk about the visual similarity to bunkers, in a time just about 20 years after the end of the war.[13] In *Bunker Archeology*, Virilio describes the bunkers laying in the sand as *"concrete alters built facing the void of the ocean"*[14], and now he designs a sacred space in the style of war architecture. The bunker, opposing the nature of his existence, becomes a space of refuge and safety.

**No philosophy in architecture?**

In comparison to what we talked about so far, I now like to introduce the architecture of Sir Norman Foster, more specifically the architecture of Faster and Partners together with the smartphone company Apple. When we put Virilio and Parent in the corner of architects with highly interesting, social and philosophical thoughts, we could argue to put Foster in the opposite corner. That does not mean his architecture is flat, not well thought through or even bad. On the contrary, most of his works, I argue more the old ones than the new ones, can be seen as architecture *as good as it gets*. Everything, every screw, every nut is designed to be in the exact position it is in. On every scale. You might like it, or you do not, but it is hard to argue against a project that is worked through so intensively than some of Foster's works.
In comparison to Virilio and Parent, Foster does not base his designs on philosophy itself but follows strictly his defined idea of design (also: *design philosophy*), which fits in the idea of *high tech architecture.* Oriented along industries like aeroplane design, high-tech architecture aims to be efficient, replaceable, quick and open. To bring the idea closer, I would like to offer a very low-level description: Imagine the connection of two pieces of wood at a random place in a house. One might think, the easiest solution is to just connect those to plates by screwing in a couple of wood screws. It is quick and cheap, and easy to do. Rather than doing this, Sir Norman Foster prefers getting holes milled in the plates, and then screwing them together with a bolt and nut system, preferably done in such a way that in the end, nothing sticks out, and you can only see the bolt, but when you touch it with your hand there is no hard edge or such thing that you can identify to be annoying. This way, the pieces of wood are very easy to replace, and through the predrilling of the whole in the planks, everything becomes very accurate, and no mistakes are made. This adds not only to the financial value of the project

one might argue but also to the aesthetic one. Of course, the holes are milled in the best possible grid layout, which is preferred by the human eye over a random layout that some construction worker might invent during the process of connecting the plates. One can probably find as less random choices in the design of Foster than one finds in the design of the Church Sainte-Bernadette du Banlay, but the outcomes are very different.
Maybe not the best, but the cleanest built architecture by Fosternad Partners in regards to their design philosophy are the buildings in their ongoing cooperation with Apple. Next to all the different Apple stores as well as the circular Apple campus building, one sticks out in particular: The *Steve Jobs Theater*. As much as the Church Sainte-Bernadette du Banlay is an embodiment of the oblique function, the upper part of the Steve Jobs Theatre is an embodiment of high tech architecture. A complete circle when seen from the top, the roof floats on 44 curved glass panels consisting of each four individual pieces of glass, which can withstand earthquakes with a magnitude of 8-plus.[15] Thinking back on how Virilio found the origin of oblique architecture in bunkers which would withstand bombs by not being fixed in the ground, we again find similarities in two completely different approaches.
In addition to the fancy glass, Foster and Partners manage to bring everything, water, sound, light, etc. into the roof without ever showing it. The pipes are engineered into the joint between two glass elements and are so thin that one must know about them to find them. The roof then hosts everything invisibly, the construction is made of carbon fibre. Everything is at the right place, everything serves a purpose. Also, everything is expensive, but also everything is seen as *as good as it gets*.
Does this then make philosophy in architecture irrelevant? Or is it just another approach?
One might want to mention here that even Foster and Partners probably would not have been able to produce the architecture they did if it was not for the thinkers at their time, like Archigram and Archizoom as well as developments in other industries.
It comes back to the thought were architecture only develops because multiple people are practising it at the same time.
This starts in architecture school and goes through all the way to international design competitions. Since there are no rules about copyright in architecture, architects copy architects. And mostly it is for the better. When you have a good idea, and I copy it, it is better than not copying it and sticking to my idea, which I own, but which is also not as good as yours. And that obviously is not limited to designs. Everything is copied. Ideas, thoughts, philosophies.

**What about formalism - Weighing between methods - Retrospectively?**

So what about aesthetics? What about formal ideas of a design? The great thing about architecture in comparison to other industries where people design things is that buildings are complex. Even if architects follow their concepts or philosophies, there is still room to play. Even if the architect follows their concept completely, a lot of choices are made on a different basis. Let's go back to the Steve Jobs Theater. It is the perfect circle seen from top. This could have a thousand reasons. From the geometrical meaning of the circle over the site conditions to the personal preferences of Tim Cook. But at some point, the decision was taken to work as a basis for all other decisions. When we speculate a bit more about the process, probably transparency was an early and important design choice as well as lightness. Then one would end up with a somewhat formal idea of how the theater would look like, and from this point on

one goes back and forth between the image and the technical problems. One finds the problem of curvature in glass, a free-spanning roof on top of only glass and so on, one questions the design and weighs the options. All that is done under the core idea, the design philosophy the architects work with. Many architects would have different ideas of how to show transparency, and how to make something float, but with the design mantra that floats like a big cloud over the headquarters of Foster and Partners in London, this is the only real choice. Only glass and a roof on top. If it somehow is doable, it is going to be done. With Apple obviously, money is no question.
The second big point about formal decisions is *everything is relative.* Architecture itself is relative, there is no right and wrong. In that way, architecture feels similar to art. It is not quite as free as art, but to a certain degree comparable. To a certain degree, an architect can do whatever they want to do, and the only thing we have to do to verify our design is to find a reason for it. It can be good, it can be bad, but there must be an explanation. That is what separates architectural practice from the arts. This retrospective verification process can be seen a lot in architecture. A lot of times there is no way of knowing what was there first - the design or the reason for it. With more possibilities of how to build, this phenomenon becomes more and more present. Architectural offices like MVRDV sometimes find the most obscure reason for one of their great designs.[16] And here is the paradox. Bad reasoning does not mean a bad design. And some good reasons do not guarantee a good one.
Architecture is complex.

**Final thoughts**

If philosophy comes into play in the architectural design process, we can see a difference compared to architecture solely based on a normal concept. For example, Virilio answers a question asked by Enrique Limon about the connection to "Le Corbusier's Right Angle":

*"It is a critique of orthogonality. It is a critique of large blocks of flats that were built at the time like sugar lamps. The intention was to go beyond orthogonality, beyond Euclidean geometry, towards an architecture based on a non-Euclidean geometry, on topology."* [17]

Here we can see a clear difference in the thinking process and architecture of Foster and Partners. While Virilio has a very broad view of architecture - connecting it to the social and architectural remnants of the second world war, challenging and opposing the predominant style in architecture of the last fifty years - Foster and Partners *are just doing architecture*. Obviously, we are not talking about outcomes anymore, as said, there is no better or worse, but different. But what I mean by *just architecture* is simply that if you imagine the process of making architecture in the way that Forster and Partner are doing being a straight line, Virilio's process resembles more of a seemingly random curve, which has kinks, circles, goes back and forth and wriggles between different worlds. Even if the results of both their architectures look different, more importantly, the intent is different. Foster and Partner, like most architects out there, design a building to present the user with the best experience possible. The Sainsbury Centre[18] is designed that way because at the time, on this site, the architects

thought this is the best solution for the user, and that is the reason why it looks as it looks. Whereas Virilio and Parent's church in Nevers - obviously trying to be the right architecture for the time and place as well - is more of a built manifesto, a statement of their thought of what architecture should be. It can be seen more as an example, a pioneer project for more to come. Even if the Church Sainte-Bernadette du Banlay is one building in many thousands, in my opinion, it is greatly needed to influence other architects. As probably Foster was influenced by drawings and writings from Archigram, Virilio and Parent resemble an influence for a lot of more recent architects and architectural styles (thinking of visual similarities with parametric architecture and friends due to the nature of the geometry).

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