



#03 FALL 2018  
*Guest-curated by Jeremy Till*

Rosenberg & Sellier



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#03 MONEY. The Economies of Architecture

The discussion of architecture, with all the visibility of its objects, tends to downplay the invisible flows of money that sustain its production. It is as if the dependency on economic forces is too much to face up to; better then to celebrate the catalytic genius of the architectural hero and then the glorious outputs, and try to ignore everything else that goes on in between. This issue intends to probe the in-between space of the operations of architecture, examining the intersection of the projects of architecture with economies, and with it their associated social and political contexts and implications. It is only through a better understanding of the way that contemporary economics cut across architectural operations that one can learn to deal with these dominant forces in a resistive and transformational manner.

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Jeremy Till  
Sandra Kaji-O'Grady  
Lina Malfona  
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Tim Gough  
Megan Groth  
Adam Wood  
Andrea Gritti, Ezio Micelli  
and Alessandra Oppio  
Angela Condello  
Who Builds Your Architecture?  
Petar Bojanić  
Sheng Zhao  
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Andrea Alberto Dutto

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Andrés Jaque

# The Apple Case.

## Architecture, Global Market, and Information Technology in the Digital Age

Lina Malfona

### *Abstract*

Focusing on the relationship among architectural form, global market, and digital technologies, this essay investigates the controversial nature of the corporation, between real and virtual, local and global space. The writing contains two intersecting paths of reading. On the one hand, it focuses on the latest building of the Apple enterprise, which is analyzed through a formal as well as metaphorical comparison with some previous architectural experiences, including both the Stanford academic campus and the Royal Saltworks of Chaux. On the other hand, the paper focuses on the strategies used by Apple Computers in the construction of its competitive image, and passing through a reading of primary data, such as early experiences, products, commercials, and buildings, it analyzes the proper company's style, that we can define as "Apple Architecture".

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Apple is the pivotal example of a corporation serving a global marketplace, while challenging, in the form of its headquarters, notions of virtual and physical space, connection and separation, centralization and colonization.

What is the physical organization of a type of campus that arises as a new monument for a highly technological and competitive society?

### *The Digital Corporation*

«In a society of control», Deleuze wrote, «the corporation has replaced the factory, and the corporation is a spirit, a gas» (Deleuze, 1992a: 4). This statement describes the immaterial nature of the notion of corporation, by depicting it as an entity in perpetual “metastability”, whereas in electronics, the condition of “metastability” identifies the skills of a digital electronics system to persist for an unlimited time in a state of precarious equilibrium. Of course, in the Deleuze’s statement we can find the echoes of the Fredric Jameson’s belief that the physical entity of the marketplace is going to disappear and to be replaced by its imagine, its brand (see Jameson, 1991). However, if a corporation is defined by its immaterial flows, it is also described by the territorial basis of its nodes, legible in the headquarters of the corporation itself (see Harwood, 2016: 218-243). Today, more than in the past, the network of intense online connection seems to have its fortified zones: IT campuses, research laboratories, and headquarters of the Internet giants appear as physical nodes for producing digital technologies and fostering global connectivity, but they also materialize as new strongholds of control and power. A new type of militarization makes these centers inaccessible and fortified garrisons, which paradoxically produces a spatial model that separates instead of connecting. Among the multinational technology companies, Apple is the pivotal example of a corporation serving a global marketplace, while challenging, in the form of its headquarters, notions of virtual and physical space, connection and separation, centralization and colonization.

The point is: what is the physical organization of a type of campus that arises as a new monument for a highly technological and competitive society? Is it a power station from which free thought could arise, or is it a control center where a new type of surveillance is developing?

### *Design and Commercial Strategy. Jobs Leadership*

Apple is one of the few IT companies in the world that seems to trust in its own autonomy, instead of its place within a network, as a philosophy of labor, management and marketing, and it is also the only IT company that has been rewarded by this philosophy. In this

regard, it is relevant to consider the epic history of Apple Computers, started in 1976 when the inventors Steve Jobs and Steve Wozniak produced some circuit boards in a garage in the Silicon Valley, by analyzing primary data, such as early experiences, products, commercials, and buildings. Jobs was able to manipulate his venture, by fostering a myth around it, a myth that has to be examined in order to stress some key points. Jobs gave the first demonstration of the “Apple I” in a Homebrew Computer Club meeting at the Stanford Linear Accelerator Center Auditorium, where a number of engineers enjoyed sharing and showing off ideas. The earliest purchaser, a representative of the Byte Shop, the first retail computer store chain in the US, agreed to buy the product only as a fully assembled computer (see Lynzmayer, 1999: 1-5). From the early stage of Apple’s history, indeed, the idea of an autonomous, fully assembled, and complete machine was a key point for the company, which is still broadly recognized today for its very secure devices: fortified boxes, protected from viral attack.

Watching Jobs’s presentations of Apple products in the early 2000s, it is interesting to observe how frequently he used the word “architecture” when referring to the internal structure of his revolutionary products, located at the intersection of technology and design. While Apple has created an empire of autonomous and well-designed products, it has even extended its signature and its brand to its corporate buildings, which follow the corporate guidelines; in this way, the spaces, too, become Apple products. They seem to delineate a peculiar style – which we can name Apple Architecture – based on a self-conscious sense of design, minimalist geometric figures, and an apparent celebration of transparency, employed as an advertisement or a form of propaganda.

Under Steve Jobs’s leadership, a belief in the universal appeal of bare geometric forms and faith in software revolution, along with a strong entrepreneurial spirit, made the success of Apple Inc. The Jobs’s strategy was to design innovative and attractive products by simplifying and stripping down the Mac models. Every part of the process had to be carefully choreographed and designed, including the box, packaging, cables, and other accessories. In a conversation that took place in 1981, Jobs said that the Macintosh should be “like

They seem to delineate a peculiar style – which we can name Apple Architecture – based on a self-conscious sense of design, minimalist geometric figures, and an apparent celebration of transparency, employed as an advertisement or a form of propaganda.

The revolution in which Steve Jobs believed, should have been started on college campuses, involving higher education processes in order to create a foundation for a new corporate culture.

a Porsche,” evoking a futurist hymn on the machine’s power (Price, 2008: 83-85).

On January 30<sup>th</sup> 1984, Steve Jobs attended the General Meeting of the Boston Computer Society to introduce the Macintosh computer. His bold and visionary speech started with a comparison between the achievements of Apple and of IBM, self-confidently focusing on Apple’s big accomplishments to date. He continued by presenting the company’s “1984” commercial, which introduced the Macintosh. Recalling the Orwellian scenario, a 1984-like super bureaucratic world, the commercial showed a multitude of slack-jawed drones, watching Big Brother on a huge video display, until a woman came from the back of the room and tossed a sledgehammer into the screen. The closing frames promised that the Macintosh would be the reason “why 1984 won’t be like 1984” (Price, 2008: 83-85). The famous commercial was one of the best expressions of Apple’s philosophy, fostering an idea of the company as a place for people with an anti-establishment cast of mind and a desire to change the world. A world which would be modified by the introduction of personal computer, created as a mean for personal liberation, the word “personal” meaning also individual. Another interesting slice of the Apple strategy, dealing with autonomy and individuality, can indeed be observed in the Apple spot “Think Different” (1997), directed by Ridley Scott for the Los Angeles office of advertising agency TBWA\Chiat\Day. The spot showed an overview of talented men who changed the history of humanity, like Picasso, Frank Lloyd Wright, Martin Luther King Jr., and Paul Rand. Following a now-familiar pattern of overturning, or revolutionizing previous concepts, Apple paid homage to IBM, by modifying the slogan and trademark “THINK,” first used by Thomas J. Watson in 1911 (online source).

The revolution in which Steve Jobs believed, should have been started on college campuses, involving higher education processes in order to create a foundation for a new corporate culture. Even when Jobs left Apple and founded the company NeXT, his particular interest in creating, if not a school, but a techno-entrepreneurial community was evident. Heading NeXT, and through his ritual retreats with employees on Pebble Beach in California, Jobs tried to



create a para-academic institution, where one could elaborate marketing, entrepreneurial and technological strategies. And even when in NeXT, Jobs' personal vision remained prominent: by meticulously perfecting products, he defended design as an integral part of the business plan, and not as a mere addition. For this reason, he called Paul Rand, designer of the IBM logo, in order to give the company graphic appeal. In fact, an interesting slice of the Apple strategy can be observed in Apple graphics and advertisements, like Apple's first logo, designed by Ron Wayne, one of the three founders of Apple. While it was later substituted by the final logo, it shows the earliest sources of inspiration. It was an ink drawing, depicting Isaac Newton leaning against an apple tree and reading a William Wordsworth poem. Running around the border, the quotation "Newton... a mind forever voyaging through strange seas of thought... Alone". The words "mind", "strange" and "alone" anticipate the company line of thinking: its desire to foster talented minds who think unconventionally and walk alone, "because the people who are crazy enough to think they can change the world, are the ones who do" (Jobs, 1997). We can find the term "alone" in one of the most elegant Apple spot, "Alone Again" (1983), a video directed by Ridley Scott for TBWA\Chiat\Day, presenting the computer "Lisa" as incompatible with all established standards.

#### *Figures of Apple Architecture*

It seems to be contrarian that in the era of global connection, the image of a company leader in the production of Information Technology, as in the case of Apple, is that of a self-contained figure, the circle. However, the circle, which alludes to security, protection, and eventually, autonomy, is operative across all the Apple products, processor or buildings. When the spinning wheel is closed, the download is complete and the software is ready to be applied; the logo of the Apple device's settings is a toothed gear wheel, and in order to gain access to the screen one must press the central button, a circle. The circle, which alludes to security, protection, and eventually, autonomy is operative across Apple products, processor or buildings. When the spinning wheel is closed, the download is complete and the software is ready to be applied. The

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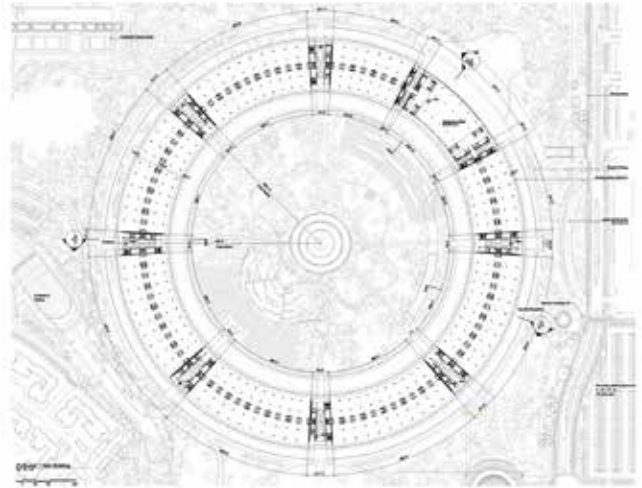


Fig. 1 - Simon Martin-Vegue Winkelstein Moris, Apple San José Headquarters, 1990 (published in Edie Lee Cohen, *Apple Computer*, "Interior Design", vol. 63, no. 4, February 1990); Foster & Partners, Apple Campus 2, Cupertino, 2013- (online source).

The Apple Company embodies the idea of a new pragmatism, based on organizational efficiency in the struggle against competitors, control of information circulating on the net, and trading of this data through communication infrastructures.

logo of the Apple device's settings is a toothed gear wheel, and in order to gain access to the screen one must press the central button, a circle. The circle is also the image of the plan for the Apple campus in Cupertino, California, the old one, known as "Infinite Loop," designed by Hellmuth, Obata & Kassabaum in 1993, as well as the new one, Apple Park, designed by Foster + Partners. If the metaphor of the arena recalls the unrestricted global arena which represents the exchange of information through digital infrastructures, this figure also has certain political and economic implications, which we are going to highlight through a formal analysis. If the geometry of the circle represents a universalistic idea of global connection, it also represents enclosure and self-sufficient centralization. In fact, it is possible to discuss widely the rapport between the myth of power and architecture, and why circle and enclosed forms has been used in most of institutional architecture, as the Pentagon and the GCHQ. However, the Apple Company embodies the idea of a new pragmatism, based on organizational efficiency in the struggle against competitors, control of information circulating on the net, and trading of this data through communication infrastructures.

On June 7<sup>th</sup>, 2011, during a City Council Meeting, Apple founder Steve Jobs personally showed the municipality of Cupertino the design for the Apple Park, intended to host 20,000 people and designed as a sort of starship, landed in Silicon Valley. The build-

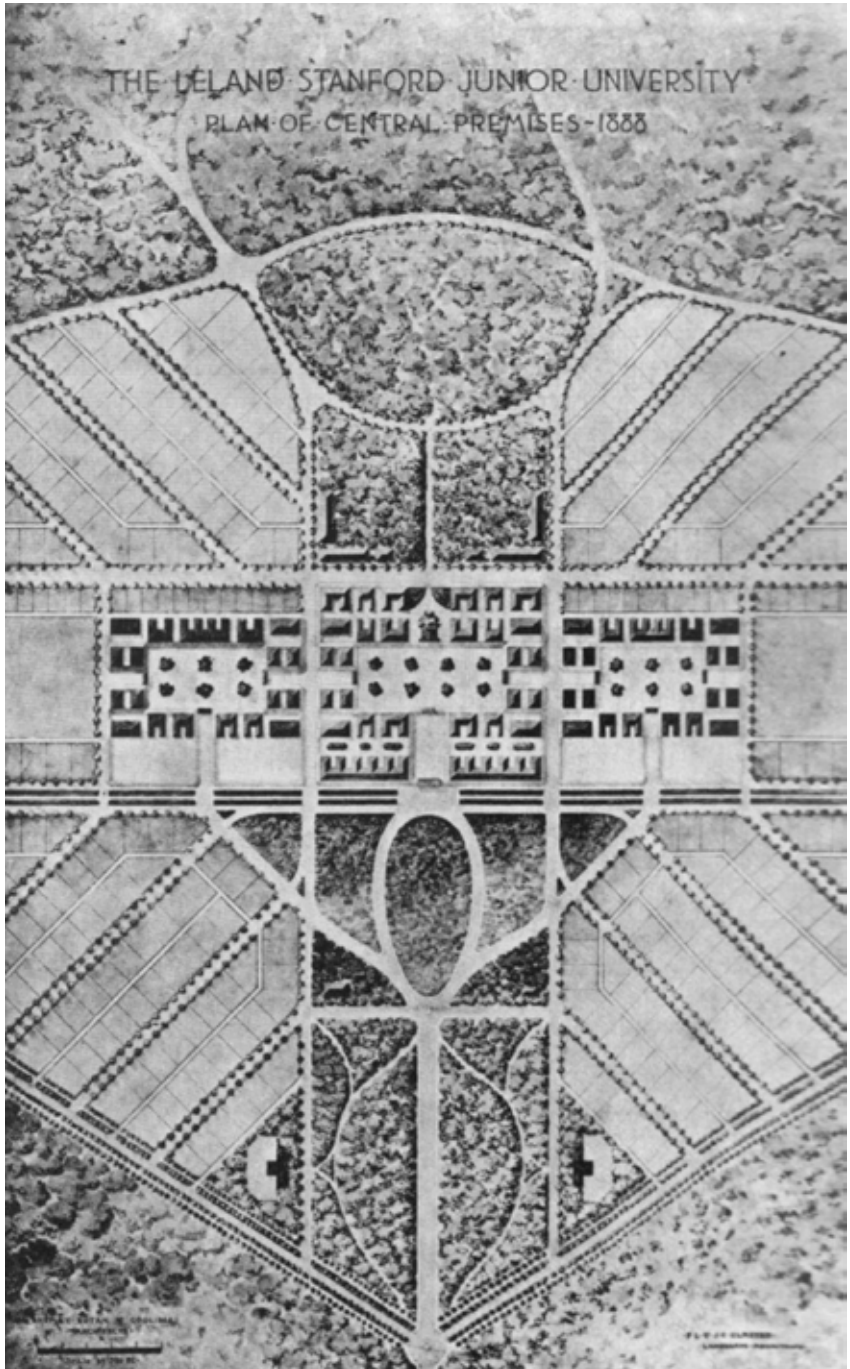
ing looks like a futurist spaceship, a hyper-innovative machine meant to provoke destabilizing effects on its surroundings, according to Jobs' words. This last aspect of Apple Architecture is intriguing in its manifestation of the building as a kind of heterotopic space. Michel Foucault indeed defines heterotopia as a necessary, perhaps even conceptual space, full of creative energy, used to enhance reality (see Foucault, 1984: 49).

Norman Foster, who designed the Apple Park with early input from Steve Jobs, describes it as a kind of hi-tech ring-shaped greenhouse, encompassing an *hortus conclusus* (see McGuigan, 2014: 72-74; Foster + Partners, 2014: 28-31). According to Foster, Jobs' first point of reference was Stanford University, designed by Frederick Law Olmsted around 1888. Stanford was both an architectural and urban model: it was conceived according to the tradition of the American campus as a utopian community and it was inspired by the monastic precinct's integration of labor and life. The first design sketch showed a modest circular arrangement of buildings set in the hills to the south of the present Quad (1886), but the last proposal was a more formal composition, offering an ambitious design, organized around two orthogonal axes (1888) (see Joncas, Neuman, Turner, 1999: 2-12). What is really remarkable in the plan design is the link between the Inner Quad and the Outer Quad: a double ring of discrete buildings, connected by a complex system of arcades. From above, this interconnection of spaces makes the central Quad akin to a castle, with its bulky stone walls (the campus' pavilions) and its routes (the courtyards framed by pavilions). In some ways, the project became urban architecture, and this could be considered both the most important feature of the original Stanford architecture and the one most akin to Jobs' vision: a circle as an experience of totality, like the interlinked quadrangles of the Stanford campus.

After a first idea to forest only the foothills south of the university, Leland Stanford expressed a more ambitious concept of a university and universal forest, an *arboretum* organized around different specimens of plants, encompassing the campus. As we will see, this proposal was overturned in the Foster-Jobs' idea of an inward-looking garden, at the center of

In some ways, the project became urban architecture, and this could be considered both the most important feature of the original Stanford architecture and the one most akin to Jobs' vision.

Fig. 2 - Frederick Law Olmsted, Stanford University, 1888 (published in Charles E. Beveridge, Lauren Meier (eds.), *Frederick Law Olmsted: plans and views of public parks*, Baltimore, John Hopkins, 2015).



the project for the Apple Park in Cupertino. Here, the forest that encircles architecture has been replaced by an *hortus conclusus*, in which a number of local plant species could be transplanted and protected in an *asylum*: a kind of new *abbey* of the digital age. Jobs imagined the campus as a Garden of Eden and, at the same time, as a theatre: a pure form, separated from its surrounding urban context, to which access is restricted. This aspect could allow us to include the building among the Foucauldian heterotopias: it is a profane version of a holy space, continuous as a ring but disconnected from context, in a spiritual detachment, as a condition for intellectual, scientific and artistic autonomy. In the Third Principle of his essay “Des Espaces Autres”, Foucault described the garden as “the smallest parcel of the world and then the totality of the world”, (a place where) “all the vegetation was supposed to come together, in a sort of microcosm” (Foucault, 1984: 48).

The figure of the circle, as an architectural typology of control, fits particular places of worship and labor because it expresses the necessity of protecting the specific activity carried out inside from the outside. However, the circle contains as successfully as it incisively excludes. In this regard, the reference to Stanford University is not merely instrumental, in that it mirrors the tradition of the American campus as a city within (or outside) the city, like the University of Virginia in Charlottesville, designed by Thomas Jefferson in 1817. But if the campus is a kind of miniaturized city, it is also in large part autonomous from the city itself, analogously to the new campus, the Apple Park. Evidently, the campus model cannot be perceived as a city’s fragment, inasmuch as it constitutes an alternative city: something introverted, exclusive and recognizable. Upon closer inspection, Silicon Valley can be considered a peculiar collage city, developed by following the Stanford University model. Along with other corporate campuses in the Valley, Apple Park does nothing but duplicate Olmstead’s model, and, in a way, reinterpret the internal logic of the Quad city. If the “Stanford effect” multiplied the urban model of the city within (or outside) the city in various topologies of corporate clusters and specialized urban sectors, Apple Park can show the common features of corporate architecture in the Silicon Valley.

**It is a profane version of a holy space, continuous as a ring but disconnected from context, in a spiritual detachment, as a condition for intellectual, scientific and artistic autonomy.**

**The figure of the circle, as an architectural typology of control, fits particular places of worship and labor because it expresses the necessity of protecting the specific activity carried out inside from the outside.**

In terms of urban design, Apple Park does not contain any principle of reproducibility, nor does it adhere to an urban strategy: it refuses to foster connection with its neighbors, but it does not create separation in an urban sense. In the end, the project is made of a series of buildings among which no links could be perceived. Since the design is not repeatable, it marks the city as an anonymous piece of it, albeit a beautiful one.

We can trace some features of the Apple Campus to some projects designed by Eero Saarinen, as the Bell Telephone Laboratories at Holmdel (New Jersey, 1962). The project was derived by a kind of turning-in-side-out of the Bell Laboratories in Murray Hill, and it focused on the concept of inward-looking space. The workspace in the Bell Laboratories was entirely artificially conditioned and the corridors, lining the external curtain-wall, encompassed laboratories and offices, as in the case of the Apple Park. The most engaging point of comparison is found in the earliest sketches made by Saarinen, which can be viewed as a set of topological studies intended to investigate the relationship between inside and outside, contiguity and separation, along with providing a range of possible models for the Bell facilities. Like the final solution, these preliminary studies were highly formalistic and symmetrical, but whereas the final solution was arranged around a cruciform atrium, these early models were distributed around an open central space (see Martin, 2003: 193-97). Although, ultimately, the actual construction of Bell Labs deviated from these initial sketches, the early proposal for a green atrium, equipped with tropical plants, is mirrored years later in the plan for Apple's *hortus conclusus*.

Another model, or, more precisely, a form of urban architecture, wraps its corporate architecture around a courtyard and stirred the office floor typology by creating an unprecedented indoor garden. Namely, Kevin Roche, John Dinkeloo and Associates' Ford Foundation Headquarters in New York (1963-68) was shaped around an artificial and automatically controlled greenhouse. One of the aspects of this building is the business deal that was struck among the different actors involved in the process of creating the foundation. The goal, as Roche put it, was to articulate "a sense of the individual identifying with the aims and intentions of the group". [...] Others, too,



Fig. 3 - Eero Saarinen, Bell Telephone Laboratories at Holmdel, New Jersey, 1962 (online source).

noted that this suspension of the city of the seasons, of office workers within a controlled, internalized environment translated into a sense of control at the global scale. [...] Just as the environmental control mechanisms produced at ones a sense of security and simultaneously a certain unease, the building's spatial topology, switching back and forth between continuity and disjunction, here and there, resonated uncannily with the foundation's postwar mandate of expanding US interests within a global arena (Scott, 2016: 52). What emerges from this analysis is the scaleless control of the Ford Foundation Building, which could be seen as a media vehicle showing the image of a global capitalist system, as a trade-off between workers' identities and the corporation's cooptation. This last

Fig. 4 - Kevin Roche,  
John Dinkeloo  
and Associates,  
Ford Foundation  
Headquarters, New  
York, 1963-68 (online  
surce).



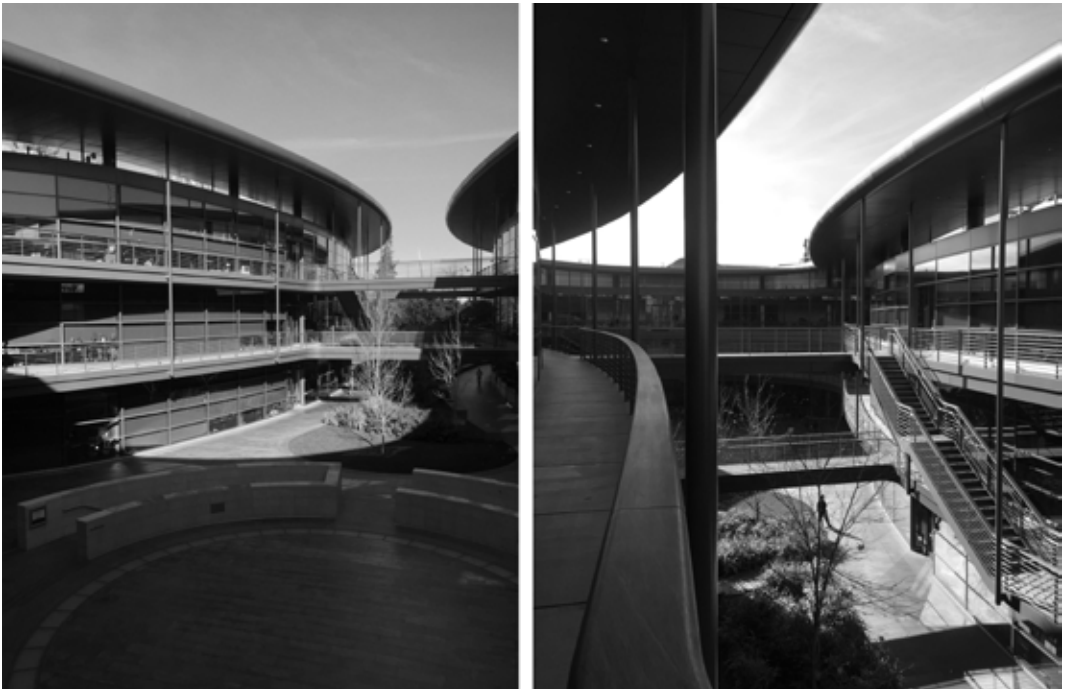


idea highlights an extraordinary similarity between this building and the Apple Park in Cupertino, between deterritorialization and reterritorialization. In order to explain these two concepts, we may refer to the position of Kenneth Frampton, who pointed out the “underlying sense of *insecurity*” released from the exclusive Ford Foundation Building, “a house of Ivy League values and good intentions, dedicated to the dispensation of private profit for the public good, hermetically scaled in an unreal world” (Frampton, 1968: 311). Tellingly, the Apple hyper-tech ring-shaped greenhouse shows the same characteristics: it appears to be hermetical, scaleless and utopian. “Like his mentor Buckminster Fuller, Norman Foster thinks of Earth as a spaceship that travels through space,” (Fernández-Galiano, 2013: 5) and perhaps this is why he conceived the Apple spaceship as a circular and iterative atopic building, with radial blocks for facilities, with the restaurant as the one place that does not fit into the scheme.

Apple Park is comparable with another building designed by Norman Foster as part of Stanford University: the James H. Clark Center for Biological Sciences. Embodying the collaborative spirit of interdisciplinary research, the Clark Center shows the same idea

**Tellingly, the Apple hyper-tech ring-shaped greenhouse shows the same characteristics: it appears to be hermetical, scaleless and utopian.**

Fig. 5 - Foster & Partners, James H. Clark Center for Biological Sciences, 2003 (photo by Lina Malfona).



We can observe the metaphorical as well as physical presence of the theater in the history of the Apple Inc., in relationship with Steve Jobs' communicative skills.

Commodity architecture prefers to borrow typologies, rather than erect new ones.

of a central void, onto which all of the building's windows overlook. Moreover, in the center of its open circular court, it houses two theaters where scientists can meet, share, and show their projects. The first of the two theaters is marked by a circle drawn on the ground while the second one, as in the Apple Park's theater, is a meeting room underneath it.

We can observe the metaphorical as well as physical presence of the theater in the history of the Apple Inc., in relationship with Steve Jobs' communicative skills. The IT company arose with the presentation of the "Apple I" model in one of the Homebrew Computer Club meetings (1975) and even today, each year the new products are announced during the meeting Macworld Expo, the pinnacle of a product development cycle. When Steve Jobs would take the stage, he would be enthusiastically greeted by an adoring crowd, and considering the climax of his product demonstrations, he became a showman over time: in his keynote presentations, he used a methodical approach, starting by summarizing the financial state of Apple, underlining some milestones, and then disclosing the news (see O'Grady, 2009: 143-145).

Beyond performance, Apple Park in Cupertino shows the centrality of theatrical space. The building hosting the Corporate Auditorium is designed as an anti-pole with respect to the architectural and urban configuration of the big circle: it is a cylinder, emerging from the ground floor as a glass showcase offering a miniaturized duplicate of the large central building. What is visible from the outside is only a small part of the whole theater, which is hidden underground: the glass showcase indeed is only a threshold. When observing its design, the viewer may experience some form of *déjà vu*. In fact, commodity architecture prefers to borrow typologies, rather than erect new ones. Consider the case of the Apple Store design, and, in particular, the Fifth Avenue Apple Store in New York, designed by Bohlin Cywinski Jackson in 2006, which is indebted to the building concept of the Neue Nationalgalerie, designed by Mies Van Der Rohe (see Bohlin Cywinski Jackson, 2010: 261-272). The concept is relaunched in an obviously simplified version that plays with both control and exhibition. Upon closer inspection, the Apple auditorium in the Apple Park is modeled on the Neue Nationalgalerie cross section as

well, with a basement where the spectacle happens and a preamble on the ground floor; it acts as a preparatory glass vestibule, where visitors can be purified before entering the Apple experience.

### *From Panopticism to Colonization*

The new Apple campus neglects the territory on which it seems to have temporarily landed, as a spaceship, despite its deep foundations. Analogously, the plans for the Royal Saltworks of Chaux by Claude Nicolas Ledoux (1773-75) was also depicted as a spaceship, fallen off the city. The provocative comparison with this project will highline some of the characters and the topics, which Apple Architecture is based on. Ledoux usually put his designs in abrupt contact with the landscape: the cubes and spheres which featured in his *Architecture* are indeed artificial objects, their artificiality referring to a purified expression of nature. However, in Ledoux's lexicon, architecture dominated and surveyed the countryside, in keeping with the model of the belvedere, whereas the Apple Park is a blind element of surveillance.

Urban design is not the unique point of contact between Ledoux's project and Apple's product. An abstract principle of autonomy could be seen as a *trait d'union* between the two, and this refers not only to the unity of design but also to the type of labor carried out in these spaces. In his essay on *Revolutionary Design*, Antoine Picon stated that Ledoux proposed the

The new Apple campus neglects the territory on which it seems to have temporarily landed, as a spaceship, despite its deep foundations.

Fig. 6 - Claude Nicolas Ledoux, Royal Saltworks of Chaux, 1773-75; Foster & Partners, Apple Park, Cupertino, 2013.



If the ellipse (or rather the circle) is a form of surveillance, it could also be considered the form of the social contract.

The prototypes of residences and workshops located in the forest, at the intersection of some pedestrian paths, designed by Ledoux appear to share similarities with the idea of colonization that Apple carries out through its stores.

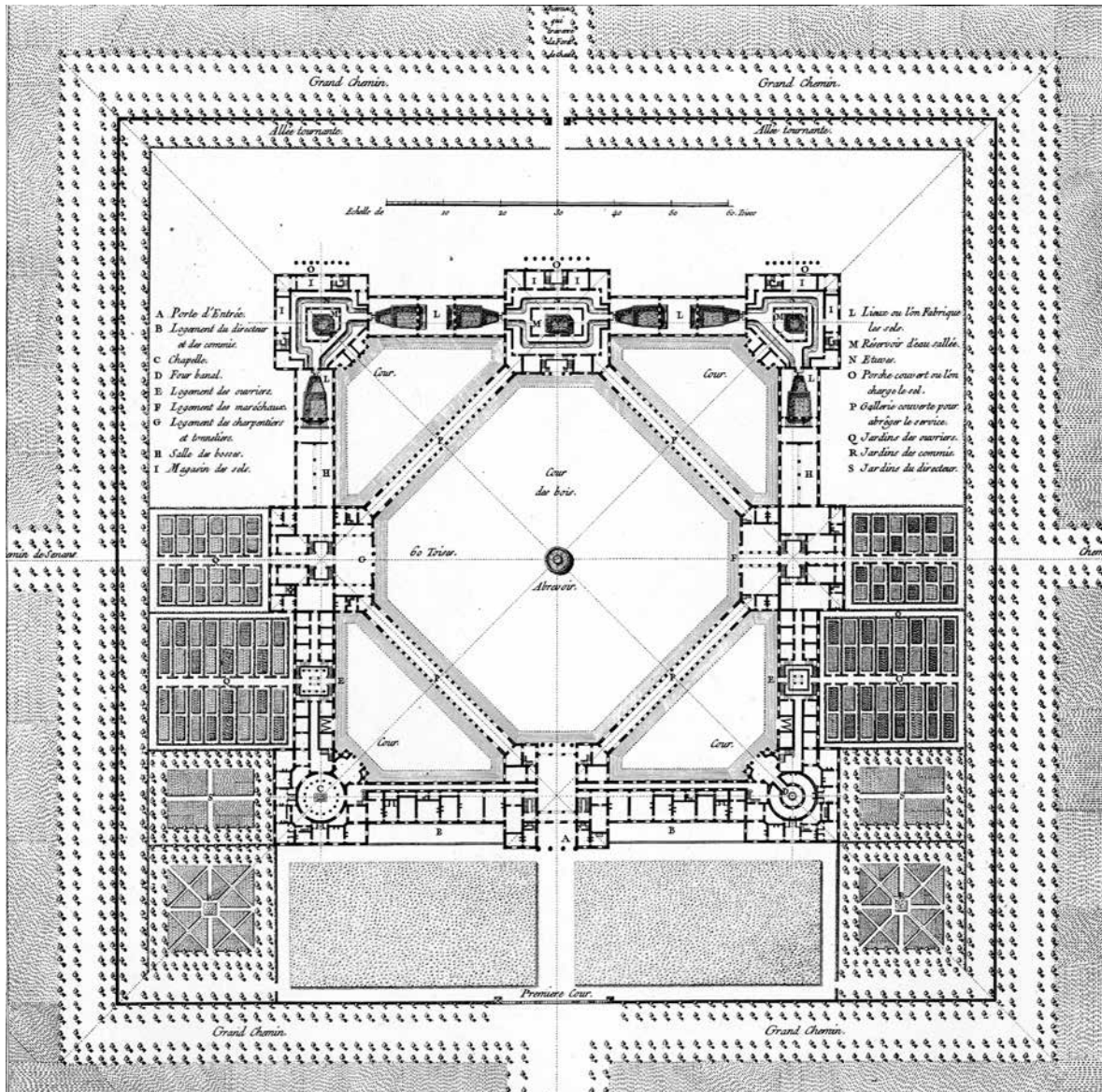
rationalization of production by means of a rigorous spatialization, and that “the idea of surveillance, which was facilitated by the elliptical emphasis, played a crucial role, the gaze of the director being directed in turn at the various stages of the production” (Picon, 1992: 280-81). But this surveillance – wrote Picon – would have proved wholly ineffectual if there had been no consensus between workers and director. Thus, if the ellipse (or rather the circle) is a form of surveillance, it could also be considered the form of the social contract: “the factory and its environs were the framework for a perfectly adjusted social representation; though symbols of the universe, the ellipse and the circle also referred to the notion of a community that was transparent” (Picon, 1992: 281). The same transparency was invoked by Jobs, who designed the campus as an amphitheatre, which should be a symbol for sociability.

Although the second project for the Saltworks was an ellipse-shaped figure, morphologically akin to the Apple Park, the first one, a building shaped like a castle, reveals a deeper typological analogy to the Apple project. Here, all the factory’s facilities were arranged in a continuous quadrangular body, creating, according to Antony Vidler, a “type form”, which unified all the community’s needs within a unique diagram, just like Apple’s circle (see Vidler, 2011: 152-161).

Like Ledoux’s design, the Apple strategy is founded on centralization as corollary to colonization. In fact, while Ledoux designed a network of habitations and services that represented an intention to systematically exploit the surrounding territory, the Apple company uses Apple stores as sentinels of consumer taste, placed in the nodes of the global market. The prototypes of residences and workshops located in the forest, at the intersection of some pedestrian paths, designed by Ledoux appear to share similarities with the idea of colonization that Apple carries out through its stores. Indeed, the aim of Ledoux’s *fabriques* was not only to reaffirm the factory’s domain on the countryside but also to reform the habits of the “rude men”. In the same way, Apple tries to convert people to the Apple way of thinking through both its physical presence in the city and through virtual means of visual and psychological persuasion. It seems possible, albeit provocative, to make a formal comparison between the Le-

doux pavilions and the Apple stores. Ledoux designed each residence as a type of community place, around a main, two-storey-high space, with ovens for heating and cooking at its center. The Apple store prototype, whose center is occupied by particular furniture-like elements in order to exhibit computers, could be seen as a similar space. One of these elements of furniture, the Genius Bar, appears to be borrowed from the concierge desk of the Four Seasons Hotel, the best service experience for employees tasked with testing and reinventing

Fig. 7 . Claude Nicolas Ledoux, Royal Saltworks of Chaux, 1773-75, I project.



This visual permeability could be seen as closely tied to the total transparency of the Apple store. But in the latter, we can find a kind of inverse control: what counts here is the possibility of looking inside. The extreme transparency conceals the extreme control.

In any case, although a purely behavioral analogy between Ledoux's Saltworks and Foster's Apple could be plausible, a structural comparison is almost unsustainable.

the retail store concept in the twenty-first century (see O'Grady, 2009: 53-54).

In Ledoux's house of the forest watchman (an open cage where the walls are replaced by square pillars) nothing obstructs the view of this kind of rural panopticon. This visual permeability could be seen as closely tied to the total transparency of the Apple store. But in the latter, we can find a kind of inverse control: what counts here is the possibility of looking inside. The extreme transparency conceals the extreme control. This last point is demonstrated by the house of the barrel manufacturer, which is shaped like a barrel in order to express the scope of the building through its architectural form. In the case of Apple, the *architecture parlante* becomes media architecture, at the service of the network society, as well as the society of control. Indeed, Steve Jobs gave great importance to the concept of media: consider, for instance, the increasingly relevant role of the iPhone launch ceremonies, the new rituals of the network society. In any case, although a purely behavioral analogy between Ledoux's Saltworks and Foster's Apple could be plausible, a structural comparison is almost unsustainable. In the latter project, an abstract circle simplifies the typology of the amphitheatre, a reference that resembles more the arena in Oakland, where Steve Jobs enjoyed attending concerts, than the Roman archetype (see Isaacson, 2011). The entrance of the building has lost its architectural role, remaining only a transitional space, eventually determined by systems of surveillance. No architectural devices are deployed, nor is any contrast between light and shadow used, and, finally, a kind of coldness without tension runs through the corridors and into the workspaces. We are in a space where architecture accommodates the "nihilism of technology" (Hartoonian, 2006: 5-6), where buildings can be placed on the ground without any particular regard for architectural weight and measures, where buildings can be equally transparent on both sides, where architecture expresses the frictionless flow of money, and where geometry itself can be operationalized as a brand.

*Conclusions. Golden Prisons or Utopian City?*

With the new campus, Apple emphasizes the company's need to broadcast its presence in the worldwide

economy through the physical certainty of a monument to lasting architecture. If it is true that today mute monoliths have been replaced by the esthetics of continuous obsolescence, through methods like the creation of the surgically young city, or recycling existing buildings by means of surrogates or elegant superimpositions, Apple Architecture shows that the need for “supertechnological monuments”, as Manfredo Tafuri described this kind of building, is still alive in the American corporate culture (Tafuri, Dal Co, 1979: 103; see Tafuri, 1970: 241-281). Also, this position demonstrates that a company’s physical location still transmits the appearance of power. This is why Apple’s most enduring symbol is probably no longer the apple on its products but rather the iconic circle of its campus in Silicon Valley. To some extent, Apple Park in Cupertino will overturn what Reyner Banham called “Silicon Style” (Banham, 1981: 283-290), referring to the kind of informal, *Googie* architecture of the Silicon Valley. The 30-mile spin of the Santa Clara Valley from South San Francisco to San Jose is going to be interrupted by something different from the usual “serious play” (see Wright, 2000: 88-94; Lang Ho, 1995: 70-72). An *object* is arising, no longer arranged according to informal, temporary and flexible patterns, but rather according to specialized, secured and hierarchical spaces, clear and controlled flows. What will it be the result? An unsettling, highway-inspired and scaleless building (perhaps the spaceship anticipated by Jobs) or the nightmare of a technocratic and commodified society, imprisoning young brains in a golden jail?

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