# La Défense: From Axial Hierarchy to Open System

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**Utopian Predecessors: Le Corbusier and the Rosenthal Competition**

The beginnings of development at La Défense are rooted in the utopian modernism of the 1920's. The developer Leonard Rosenthal included Le Corbusier in a 1929 competition he organized for the land near the Porte Maillot surrounding the Place de la Demi-Lune, which would later become La Défense. In Le Corbusier's sketches and notes for the competition we see him incorporating the ideas that he had developed in his *Ville Contemporaine* of 1922 and published in his book *Urbanisme*, of 1925: Two high-rise office towers frame the view of the Arc de Triomphe down the Le Nôtre axis; raised pedestrian plazas continue over the street; reticulated mid-rise slabs, that Le Corbusier called *lotissements à redents*, frame the base of the towers, housing residential apartments or *immeubles villas.*[1]

**Early Post-War Development**

After World War II, as pressure mounted for a co-ordinated development along the extension of the axis from Port Maillot, the French State created EPAD (Établissement Publique pour l'Aménagement de la Défense) to manage the development of La Défense, and retained Bernard Zehrfuss, Jean de Mailly and Robert Camelot, with urbanists Herbe and Auzelle, to prepare a series of master plans for the area. Showing the influence of the contemporary discourse, the separation of pedestrian and vehicle circulation rapidly gained significance in their master plans. The 1960 plan shows for the first time the breakthrough: a continuous pedestrian plaza runs almost the full 1.5 km distance from the Seine to the CNIT (Centre des Nouvelles Industries et Technologies), branching out across the peripheral roadway to connect the outlying towers.[2]

The final plan, approved March 7, 1963, and implemented in 1964, shows the office buildings as high-rise towers, and the residential blocks as reticulated slabs, similar to Le Corbusier's design for the Leonard Rosenthal competition, and for his City for 3 Million of 1922. Residents all have access to large expanses of landscaped open area, or *tapis vert,* and urban space sweeps freely and uncontained round the isolated slabs and towers.

The 1964 plan proposed a *tabula rasa* approach to urban development, EPAD would purchase 760 ha in the communities of Courbevoie, Puteaux, and Nanterre; the existing fabric of small factories, artists' studios, restaurants and bars would be completely demolished. The only buildings to remain would be the CNIT and the ESSO (Standard Oil) headquarters office building.

The massing plan shows consistent dimensions for all the buildings, each office building was required to have a footprint 24 x 42m and a height of 100m, except for the tower opposite CNIT, which was permitted to rise to 200m. Apartment sizes were fixed at 12.60m x 6.30m to create residential buildings of uniform width, with a height limit of 12 floors. The regularity of the tower bases and the uniform apartment size of gave the desired impression of classicism.[3]

The plan as finally approved proposed a complete functional separation of infrastructural systems:

pedestrian traffic on the plaza, buses and service vehicles on the level below; below that were parking, access driveways, and the *A14 Autoroute de Normandie.*
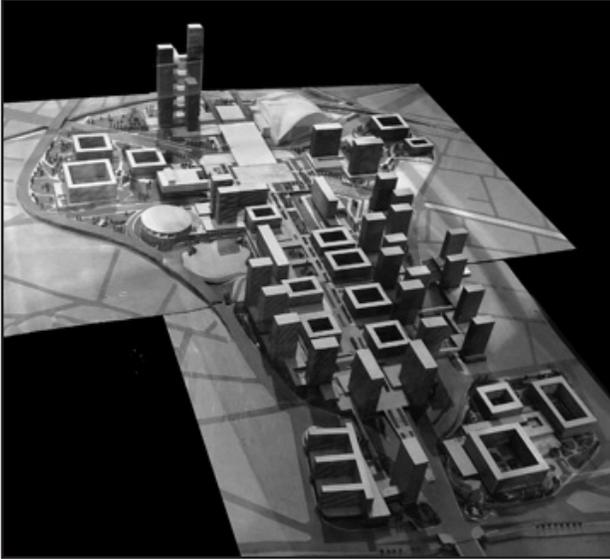


Fig. 1: The 1964 Master Plan model from the east, showing the theme tower and CNIT at the back. Note the uniform dimensions of the residential squares and the office towers, and their symmetrical arrangement along the *dalle*, or pedestrian mall.

**The Build-Out of the 1964 Plan:**

Construction proceeded rapidly on a vast scale; aerial photos give some idea of the agony endured by the pioneering office workers in the new towers, who had to contend not only with the mud and noise of construction, but also with the unfamiliar environment of air-conditioned high-rise buildings. A survey taken as late as 1977 found that only 17% of office workers thought they were better off for having made the move to La Defense, 52% felt definitely worse off.[4]

The state approved construction of the suburban electric rail system, the RER, in 1961; La Défense station opened in 1970. By the early 1970's, the central plant was complete, 3,500 parking spaces had been built, and a station for the regional railroad system, SNCF, was complete.

**Flaws in the Master Plan Begin to Develop:**

By early 1969, despite the rapid progress on construction, the managing agency of La Défense,



Fig. 2: 1971 aerial photograph shows the agony of construction endured by the pioneering residents and office workers. Note the even height and floor plates of the towers. The *dalle* is taking shape in front of the CNIT building, the freeways and suburban railroad are already complete.  (EPAD photo courtesy De Facto)

EPAD, was seen as not sensitive to the needs of investors; it was also still in deficit due to the cost of the vast  infrastructure program. The 60-story mixed use tower opposite CNIT was considered over-ambitious and had been abandoned.

To cater to their needs, UAP (Union des Assurances Parisien) and GAN (Groupe des Assurances Nationale) were demanding real skyscrapers with much larger floor plates than previously provided. UAP wanted to consolidate its activities at La Défense, but because of the limits on footprint and building height, EPAD could only give them two towers of 27,000 sq. m..

In May, 1969, the State replaced André Prothin as head of EPAD with Jean Millier. In contrast to Prothin's diplomacy and negotiating skill, Millier was a man of action. At the minister's direction, Millier was charged with revising the massing plan for La Défense without delay.[5]

The 1964 massing plan was seen as not only inadequate in terms of the floor plates and heights of office buildings, it was also seen as problematic in its specificity concerning the sizes and locations of buildings. This inadequacy called into question the very concept of a master plan. As Shadrach Woods said in a 1964 essay, the master plan is a "plastic or aesthetic arrangement that does not work in our mobile civilization. These . . . images are built to

last 50 or 100 years, and in one tenth of that time the image is already out of date."[6]

## The Move Towards Open Systems: The Genealogy of the Field Condition

The roots of a move away from an experience of the city prescribed by design were already present in the 1950's and early 60's: in John Cage's 4'-33" of 1952, where ambient sounds swirled around the audience while the pianist sat at the piano without playing a note, in the dream–like urban experience that the Situationists enjoyed in their intoxicated derives, and in the continuous *ludique* surfaces that the architectural *avant-garde* proposed in their utopian projects.

In the sciences, a widespread fear of technology that followed the publication of Rachel Carson's 1962 book *Silent Spring,* and the terror of nuclear Armageddon that followed the Cuban Missile crisis of the same year, led to a disillusion with scientific determinism.

Jane Jacobs' book, *The Death and Life of Great American Cities*, first published in 1961, using the richness and vitality of Greenwich Village, New York as an example, argued that the complexity that had grown up in cities over time was indispensible for the vitality of the city, and the safety and comfort of its occupants. This vitality had been completely lost in newly-built redevelopment projects.

Two utopian projects by French and Dutch architects would certainly be known to French architects, Yona Friedman's 1958 Spatial City and Constant (Constant Nieuwenhuys)'s New Babylon. Friedman proposed a structure spanning over existing cities that allowed the occupants complete freedom of movement and action. In 1960, the Situationist, Constant, proposed a series of structures, giant space frames, which allowed free play for the new *homo ludens:* "a new skin that covers the earth and multiplies its living space. . . a quite chaotic arrangement of small and bigger spaces that are constantly mounted and dismounted by means of standardized mobile construction elements like walls, floors, and staircases.[7]

By 1969, however, this same *surface ludique*, as the zone of unlimited capitalist consumption, had become the object of ridicule in projects such as

Superstudio's 1969 Continuous Monument , and Archizoom's "No-Stop City" of the same year.

The idea of the city as a infrastructural system, allowing for unlimited change and reorganization, as opposed to a designed experience, achieved its most explicit architectural representation in Archigram's Plug-in City of 1964, in which moving cranes assemble modular units on a vast space frame infrastructure.

By 1956, some members of the International Conference of Modern Architecture (CIAM), had already become disenchanted with the technocratic functionalism of its 1933 Athens Charter; Georges Candilis, Shadrach Woods and Aldo Van Eyck, influenced by the North African cities of Casablanca, Marrakesh and Algiers, and Alison and Peter Smithson, looking at the lively working-class streets of East London, sought out an architecture of *human association*, and a renewed emphasis on *habitat*, which led to their break with CIAM and the establishment of Team X, with Bakema and Giancarlo di Carlo in 1959.

Many of the goals of Team X coalesced in the concept of the "mat-building," which particularly interested Shadrach Woods and his Paris firm Candilis-Josic-Woods. Two key ideas drove them in their investigation: the inability of most master plans to evolve and accommodate growth at a time of rapid social and economic change, and a desire to emulate the diversity, density, and richness that they found in the traditional urban forms of Mediterranean and Arab towns.

Candilis-Josic-Woods' work evolved through the concept of the *stem*, which provided a framework for pedestrian circulation and building location in their Caen-Herouville housing, to the *web* in their competition entry for Frankfurt-Römerberg**,** their first real mat building, and finally to their winning competition entry for the Berlin Free University of 1963. The architects offered the BFU as a fragment of future urbanism; avoiding the specificity of functions and departments, it created instead a series of main and secondary streets along which program spaces could be arrayed at will, using a structure and skin that accommodated growth and change.

Woods' goal was the creation of an overall organizing system that accommodated not only the infra-

structure required for growth and change, but also a framework for human association:

> "Whether they are stems or webs, their purpose is to organize a field . . . The chief characteristic of such devices is their intent of total organization, this meaning that they are not exclusively concerned with certain aspects of the problem, in contrast to circulation systems, for example, or hyper-sensitive space making."[8]

> "This model describes the building not as a thing, but as a set of simultaneous abstracted systems layered to occupy and change a field."[9]

In the field of housing design, N. J., Habraken and the Stichting Architecten Research (SAR) investigated systems of supports that could allow residents to play a role in the evolution of their homes, while still being part of a larger infrastructure that answered to municipal requirements. Beginning in 1964, a team of nine architects developed and tested support systems and their ability to accommodate infill with detachable units.[10]

The tectonic shifts in philosophy and politics of the late 60's reached a climax in the events of May 1968, which began in Paris and ignited student communities across the world. The experience of these events had a lasting effect on the young generation of architects and planners.[11]

In architecture and urbanism, the uprising revealed new agencies of power in the users of buildings and the everyday inhabitants of the city. It also challenged conventional assumptions about the relation of program and building form, leading architects such as Bernard Tschumi to propose "disprogramming" and for Rem Koolhaas to state in his competition entry for Parc la Villette:

> "Finally, we insist that at no time have we presumed to have produced a *designed* landscape. We have confined ourselves to devising a framework capable of absorbing an endless series of further meanings, extensions, or intentions, without entailing compromises, redundancies or contradictions. "[12]

The new design philosophy embodied in the 1972 plan for La Défense, and in iconic work by Bernard Tschumi and Rem Koolhaas such as Parc la Villette, has found its theoretical manifestation in two texts by Stan Allen: Allen discussed the quality of the field condition, and analyzed its formal structure in "From Object to Field" of 1996. The field, he said, is "a formal or spatial matrix capable of unifying diverse elements while respecting the identity of each."[13] It plays "close attention to the production of difference at local scale, even while maintaining a relative indifference to the form of the whole."[14]

> "The field opposes conventional modernist rules of composition as much as it opposes classical rules of composition. The overall form emerges out of conditions established locally."

In his 1999 essay, he describes "Infrastructural Urbanism" as "the production of directed fields in which program, event and activity can play themselves out." It is part of material practice, which is "concerned with the large-scale behavior of large-scale assemblages over time, less concerned with what things look like and more concerned with what they can do."[15]

**The Impact of New Design Thinking at La Défense:**

The changes in philosophy and design thinking of the late 1960's had a dramatic effect on the planning of La Défense. Millier's 1970 plan showed the complex as no longer a three-dimensional sculpture, a static object designed with a totalizing ocular vision. Instead, it appeared as an open system, an infrastructural framework, ready to receive modules containing the highly-serviced workplaces of the future, plugged into its global networks of transportation, power and communication.



Fig. 3: In this 1973 aerial photo the core of the GAN tower already dwarfs the surrounding towers, the AXA tower rises in front of it. (EPAD photo courtesy De Facto)

The first move was to abandon the limits on building footprints. The new plan that EPAD proposed April 14, 1970 and the State approved November 8, 1972, called for increasing the buildable area for La Defense from 800,000 sq. m. to 1,550,000. The plan revised the maximum allowable size for an office building to 160,000 sq. m., permitting buildings of unlimited height. On February 26, 1970, the UAP building broke through 39 stories to exceed 159m in height; on August 25, the GAN building by architects Harrison & Abramovitz reached 187m. The Fiat (now AREVA) building by Skidmore Owings and Merrill, completed in 1974, leapt up to 200m.[16]

Although temporarily delayed by the *querelle des tours,* the opposition to high-rise building triggered by the emergence of the GAN tower over the Arc de Triomphe, and by the economic downturn following the oil crisis of 1973, La Defense resumed its growth on the new model in 1978, with Citibank demanding an office building with large, flexible, highly serviced floor plates suitable for the new computerized office. Named Les Elysées La Défense, the seven-story building opened in 1982 on top of the Quatre Temps shopping center.

**La Defense Today:**

With its completion in 1980, the *dalle*, or continuous pedestrian plaza, linked all the networks of rail and road communication, flowed through porous building skins into building lobbies, and into the *Quatre Temps* shopping center, the largest in Europe when it opened in 1981.

From this highly serviced urban surface rose a series of towers, the residential tower Défense 2000 in 1974, Manhattan in 1975, followed by a number of new towers in the 1980's.  With the completion of the metro line 1 in 1992, and the tramway T2 in 1997, La Défense achieved its planned level of connectivity.

 The qualities of the new La Défense are significant:

Openness: Development at La Défense is not hampered by architectural design constraints or by limits on height or floor area; the 1972 removal of height restrictions and the increase in permissible gross floor area to 160,000 sq. m.

Continuously Renewable: The absence of architectural restrictions enables La Défense to renew itself continuously; buildings can be renovated, or demolished and replaced, as required by the market.

Hyperconnectivity: Four rail lines, 17 bus lines, a freeway, a tramline, and four *routes nationales* converge on the transportation hub beneath the plaza. 100,000 people travel to work there every day; nine out of every ten arrive by public transit.  Parking for 10,000 cars is hidden under the deck. The Arc de Tromphe is only four minutes away by RER. La Défense is not just connected to the historic city of Paris, however, it also possesses a larger employee catchment area than any other business district in Paris.

Global City: Intimately connected to global networks of finance and information, La Défense has become a node in what Manuel Castells describes as the *Space of Flows.*[17] It is also a global city in the sense described by Saskia Sassen, in which, thanks to information systems, connections to other global cities have in many cases become stronger than links to adjacent communities.[18]

Mixed use: The retail center created by Quatre Temps and the renovated CNIT has become the largest in the region, drawing from the surrounding communities in addition to the resident population of La Défense.

*Surface Ludique:* Thanks to generous public space, the *parvis*, the Grande Arche, and CNIT, La Défense is able to offer public concerts, exhibitions, and other events. The *parvis* formed the stage for a concert by Jean-Michel Jarre attended by two million people on Bastille Day, 1990.

**Conclusion: La Défense as an Open System and a Space For *Habitat***

The overall effect of La Défense today is of a pressing crowd of heterogeneous elements, a far cry from the serried rows of consistent towers in the 1964 plan.  The organizational structure of the project is very close to the idea of the *stem,* first proposed by Candilis Josic Woods for their Caen-Herouville

project in 1961, as shown in the diagram. The *dalle* connects the transit terminal at the west end to the Metro station at Esplanade de la Défense. Branches from this central spine lead to a network of secondary plazas and walkways, which provide access to the buildings. The *dalle* gives form and logic to the pattern, each of the branches is identified by a significant piece of public art, making it relatively easy to find one's way.
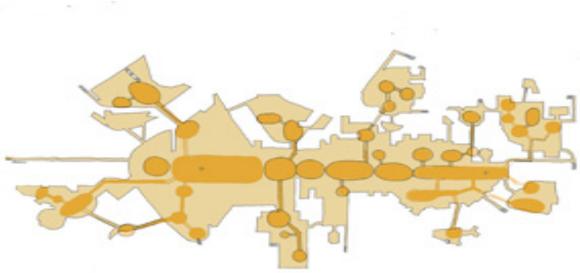


The "stem" organization of the *dalle,* which is similar to Candilis Josic Woods' Caen Herouville project.  The light shading shows all the raised deck, the darker areas are the major public spaces.

The goals established by Shadrach Woods and the Smithsons for their mat-building projects of the mid 1960's provide a good yardstick for evaluating the success of La Défense: Does it accommodate growth and change in considering time as the fourth dimension? Does it indeed provide a space for *human association*? Does it indeed encourage *habitat*?

A measure of the project's success in accommodating change is its ability to accept the large increase in population generated by the 2006 Master Plan. The 2006 expansion plan promoted by President Sarkozy envisaged the construction of 450,000 sq. m of new office space and 100,000 sq. m. of residential accommodation, all built to the French government's *Haute Qualite Environmentale*, the equivalent of the LEED standard in the US.  A new RER, line E, and tram line T1 were planned to meet the needs of the expanded population. A number of signature office buildings were projected as part of the plan: the Phare tower, designed by Morphosis, the Signal tower, designed by Jean Nouvel, the renovation of the AXA (Insurance) tower by Kohn Pederson Fox, (now under construction as the First Tower), the Air2 tower by Arquitectonica , the Carpe

Diem tower by Robert A. M. Stern, the twin Hermitage towers by Foster & Partners, and three others.
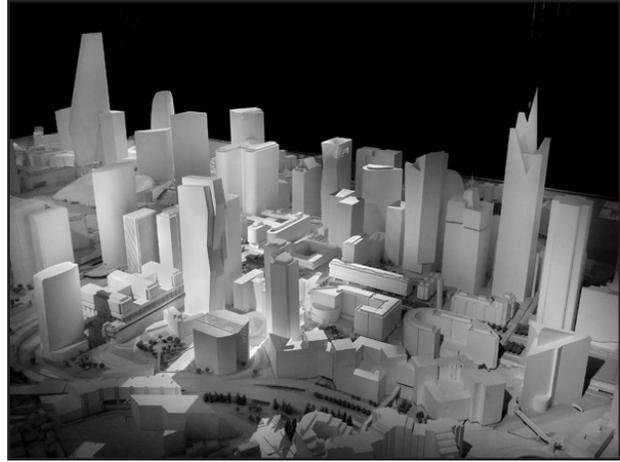


2006 Master Plan model, a pressing field of heterogeneous elements in which form is generated not by a preconceived geometrical layout, but instead by part-to-part relationships determined by daylight, views, and the individual relationships of one tower against another; "an architecture that leaves space for the uncertainty of the real."

Although the financial crisis of 2008 interrupted the development of many of these projects, the fact that they were considered possible can still be read as a testament to the flexibility of the 1972 plan. Significantly, the new towers were inserted into the matrix, within the already defined perimeter of the development, without expanding the area of La Défense. It is evidence of the suppleness and receptiveness of the 1972 plan that it could accept a 33% increase in floor area, thanks to the framework of public transit and pedestrian access.

As an environment for *habitation* and *human association*, however, La Défense still betrays its origins in the high modernist tradition of functionality, efficiency and speed of movement. It has not made the transition to the post-industrial consumer world of irresistible atmosphere, vibrant stimulation and seductive surface. It is not the *surface ludique* that encourages the *derive*; La Défense is still stuck in the austerity and bleak functionality of early modernism.

La Defense is also hampered by the tradition of functionalist zoning, which specifies that functions are restricted to certain areas, in contrast to the mixed-use spaces typical of traditional Parisian

neighborhoods. Restaurants and stores are only found in the Quatre Temps, the Cupole and the CNIT, although offices and residences are spread all along the 1.5 km length of the *dalle*. The result is a long walk for a lunchtime sandwich, frequently in the rain or cold.

The *parvis*, or central square, with its calendar of regular public events, is certainly a surface of spectacle; it is so, however, only in the sense that Guy Debord describes a space created by capital and designed for its accumulation by multinational corporations.[19] It should not be confused with the Situationist concept of the space of free play and creativity dedicated to *homo ludens,* illustrated in Constant's New Babylon. Architecturally, the space displays exactly the sterility and monotony that the Situationists criticized in the new architecture of the 1960's, finding it lacking the 'subtle relationship of the discipline of form and the possibility of variety' that they loved in old Paris.[20]

Looking at other qualities of the *mat-building* defined by Alison Smithson in her essay "How to Recognize and Read Mat-Building," published in 1974, La Defense has difficulty in reaching out to the surrounding city; it does not immediately show what Smithson calls "the mat-building urge towards collective grouping, and firm but recessive compatibility."[21] The project connects to the surrounding city at a number of points, but because of the difference in elevation between the *dalle* and the neighborhoods, the transition involves many flights of steps, escalators, or even elevators, which are frequently out of service. This condition is doubly paradoxical considering the growing economic importance of the Quatre Temps and CNIT as a retail centers for the surrounding communities, and the potential markets that exist all around.

Comparing La Défense with Haussmanian Paris, the difference of *grain* at pedestrian level is striking. Building surfaces lack the porosity and fine-grained texture that makes them attractive at human scale. 100m high metal and glass curtain walls plunging relentlessly into the surface of the *dalle* border the most popular pedestrian routes.

Most of the public spaces have serious environmental challenges. The *Parvis* is as big as the Cour Napoleon at the Louvre, and four times the size of Place Beaubourg, but it provides little shelter from

sun, wind or rain. As a result of the tight clustering of tall towers and the vast scale of the open spaces, the up-drafts accelerate between the buildings, creating knives of cold winter air that slice and stab at pedestrians struggling to cross the *dalle*.

Considering the project as a field condition, there is no question that the primary public spaces are still axial and hierarchical; they follow what George Wagner calls the "fixed representation of the monument – its 'political functionalism' and . . .  the hierarchy which a monument imposes on the space of the city . . . "  Looking at the areas away from the main axis, however, what we see is literally a field of towers, in which form is generated not by a preconceived geometrical layout, but instead by part-to-part relationships determined by daylight, views, and the individual relationships of one individual tower against another. The result is what Stan Allen calls "a formal or spatial matrix capable of unifying diverse elements while respecting the identity of each."[22] It is a field, a flexible matrix capable of accommodating growth and change, "an architecture that leaves space for the uncertainty of the real."

Paradoxically, La Défense is fulfilling Woods's dream of the city as a four-dimensional infrastructure in a state of continuous change, while the Berlin Free University, hailed in its time as a groundbreaking example of an open system, has remained a static object, unchanged since its early days and recently restored as a historic monument. Propelled by the shifting demands of the business market and the political ambitions of the head of state, La Défense has seen new towers spring up, and older towers remodeled or demolished to make way for larger buildings, all the while resting on the substructure of services, transportation and utilities designed in 1960.

In cultural terms, however, the real revolution that the building accommodated was not the liberating utopia, the "pure untrammeled expression of the creative imagination available to all"[23] that Constant and the Situationists hoped for; it was rather the ability of capital to reinvent itself, shedding its emphasis on industrial mass production, developing new forms of flexible organization and appropriating the spaces of media, popular culture, fashion, and tourism as grist for its expanding universe of commodification.[24] The revolution that found its home at La Défense turned out to be a revolution in capitalism itself.[25]

## ENDNOTES

1        See the documents in the Porte Maillot file at the Fondation Le Corbusier, in particular Le Corbusier letter to Leohard (sic) Rosenthal, April 1930, , document R3-1-315 p.2
2        See the historic documents in the library of De Facto, the information arm of EPAD, in particular: Lauras, Denedicte, « Genese et Étapes de l'Operation Urbaine de la Defense, » unpublished thesis, University of Paris X, Nanterre, 1973
3        COFER, Compagnie Française d'Etudes et de Réalisations, *Paris La Défense, Métropole Urbaine des Affaires*, Moniteur, 1989, p.52
4        Ibid p.75
5        Ibid
6        Woods, Shadrach, "Stem" in *AD*  No. 5, 1960, p.181, Quoted in Alexander Tzonis and Lianne Lefebvre, "Betond Monuments, Beyond Zip-a-Tone, Into Space/Time: Contextualizing Shadrach Woods's Berlin Free University, A Humanist Architecture, in Gabriel Feld et. al. eds., *Berlin Free University,* AA Exemplary Projects 3, London, 1999. (BFU) For an excellent discussion of the work of Candilis-Josic-Woods see also Tom Avermaete, *Another Modern, The Postwar Architecture and Urbanism of Candilis-Josic-Woods*, Rotterdam 2005, NAi Publishers
7        Wigley, Mark, *New Babylon,* Rotterdam, 010 Uitgeverij, 1999
8        Woods Shadrach, "Waiting for Printout" previously published as "Techno-Sociological Hangup", *Perspecta 12*, 1969, p.10, quoted in George Wagner, "Looking Back Towards the Free University, Berlin, BFU, p.19.
9        Woods, Shadrach, ibid. p.20
10       see N. J. Habraken, *Supports: An Alternative to Mass* Housing, NY, Praeger, 1972, and N. J. Habraken et.al., *Variations: The Systematic Design of Supports*, trans W. Wiewel, MIT Press, 1976
11       "France, and especially young French people, were being influenced by outside forces too. The Cultural Revolution in China, which was disastrously misinterpreted as a spontaneous revolt, rather than a murderous series of maneuvers designed to eradicate Mao's opponents physically, and many of those close to Foucault believed themselves to be France's Red Guards. An Anglo-American counter-culture of drugs and rock and roll was also having a huge impact upon a country that had yet to generate a rock culture of its own. The convergence of the counter culture and ultra-left politics gave birth to some very exotic groups, and few were more exotic than Vive la Révolution, whose main slogan was an eloquent expression of the feelings of many young people:"What do we want? . . .  Everything."" Macey, David, *Michel Foucault,* p.85.
12       Koolhaas, Rem, et. al., *SMLXL,* New York, Monacelli, 1998, p._,(Koolhaas italics)
13       Allen, Stan, "From Object to Field: Field Conditions in Architecture and Urbanism," in Stan Allen, Practice: *Architecture Technique and Representation*, 2nd ed., Routledge, 2009, p.218
14       Ibid, p.231
15       Allen, Stan, *Points and Lines: Diagrams and Projects for the City,* Princeton, 1999
16       COFER, op. cit. p.73
17       Castells, Manuel, " The Space of Flows" in *The Rise of the Network Society*, Blackwell, 1996, pp.376-428
18       Sassen, Saskia, *The Global City – New York, London, Tokyo*, Princeton, 1991
19       Debord, Guy, *The Society of the Spectacle*, translated 1977, http://www.marxists.org/reference/archive/debord/society.htm
20       Sadler, Simon, *The Situationist City,* MIT Press, 1970, p.70
21       Smithson, Alison, in Sarkis, op. cit., p.92
22       Allen, Stan, "Object to Field," p.220
23       Sadler, op. cit.,
24       See for example, Jameson, Frederic, *Postmodernism, the Cultural Logic of Late Capitalism*, Verso, 1991
25       See, for example, Luc Bolanski and Eve Chiapello, *The New Spirit of Capitalism*, Verso, 2005