

# Abstract labor and the ideological character of modern functionalist architecture

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Something would be functional here and now only if it were so in terms of the present society. Yet, certain irrationalities are essential to society.

Theodor Adorno (1965), *Functionalism today*. (Translation amended)

It is well known that modern architecture sought to distinguish itself early on from the pre-modern past by reclaiming the title of “functionalist”, but it remains paradoxical that this process of historical statement has been accompanied by a huge ambiguity as to the real status of the category of “function”. At first glance, functional is the building that fulfills with the minimum of friction the finality that was previously and specifically assigned to it. Thus, “function” in modern architecture would be something similar to what appeared in Vitruvius as *utilitas*; a merely mental abstraction of the countless specific purposes of many other possible buildings. A functionalist architecture would simply be one that gives priority or exacerbates the instrumental aspects of a building rather than its aesthetic appearance or even considering this efficiency its actual beauty. This is how is generally understood Louis Sullivan’s formula, set in the late 19th century, that “form follows function”. But in reality, functionalism in modern architecture is far from being just a technical exaggeration expressed in isolated buildings.

The question is immediately evident in the essay “*The tall office building artistically considered*”, where Sullivan set his ambiguous formula. It is not at all clear whether the verb “follow” means that form appears *after* function or if it is *determined* by function. The first case favors a reading of “function” as purpose or subjective intention, where the shape of a created object is the necessarily subsequent result,

among many possible others, of a preselected finality; if so, Sullivan's formula is a real truism. If, on the other hand, the relationship is interpreted as one of determination, if function determines form, then what determines function? Obviously, the answer to this question cannot be found in the internal field of architecture, and Sullivan's position on this matter is absolutely paradigmatic: "The architects of this land and generation are now brought face to face with something new under the sun,-namely, that evolution and integration of social conditions, that special grouping of them, that results in a demand for the erection of tall office buildings. It is not my purpose to discuss the social conditions; I accept them as the fact, and say at once that the design of the tall office building must be recognized and confronted at the outset as a problem to be solved,- a vital problem pressing for a true solution (...) [the modern office building] has come in answer to a call, for in it a new grouping of social conditions has found a habitation and a name. It is my belief that it is of the very essence of every problem that it contains and suggests its own solution. This I believe to be natural law". In this passage, we can see that Sullivan recognizes, at first, that the need for tall buildings is a problem triggered by specific social and historical conditions, "requirements" of a "new grouping of social conditions"; afterwards, he is quick to exclude any discussion about these social conditions, presenting them as "facts" and mere data of a problem of architecture. Sullivan thus takes refuge in the division of labor and in the specialization of architectural knowledge as not to have to account for the social consequences and assumptions of that knowledge. In that process, the essence of a problem known to be truly social is progressively reduced to a technical problem, until the moment where the relationship with the solution presents itself as the "natural law" that "form always follows function". *The capitalist social conditions are seen as generators of formal problems, but they themselves are assumed to be functionally non-problematic.* But, in this approach, architecture is far from alone.

First of all, we must not forget that functionalism was not an "invention" of architecture, but rather a paradigm that from the mid-nineteenth century began to cross multiple domains of knowledge, and that, despite the different paces of this development, tended toward a common ideological direction of *naturalization* of capitalist society. With roots in biology, functionalism was imported by the positivist sociological thinking of Auguste Comte and Herbert Spencer, who, through biological analogies, sought to observe all societies as one observes nature or the human body; in

this clearly ideological way, capitalist competition appears as natural selection, social classes as organs, individuals as cells, etc... And we know today that it was precisely through the diligent reading of Spencer that Sullivan arrived at his functionalist formula. This naturalization of social life was also the theoretical basis of the subsequent structuralist functionalism and it is at the genesis of urban sociology, ambiguously in Simmel and explicitly in the Chicago School, the latter contemporary of the first International Congress of Modern Architecture (CIAM), which, in turn, sought to biologically justify urban functions.

This identity between positivistic sociology and architecture reflects, however, certain social conditions, which also means that, as an ideology, functionalism cannot but contain a "moment of truth" (Adorno). If the sociological functionalism sought to show the existence of a standardized general system of social interdependence, it did so, though, by leaving out of consideration the historical and social character of the constitution of these same functional relationships, and rather presenting them as eternal and natural facts. In reality, *only* modern society constituted itself as a form of "functional socialization" (Alfred Sohn-Rethel) tendentiously universal, essentially based on what Marx called "abstract labor" and in its ghostly representation in the commodity-form and money-form, and only those specific historical and social conditions made conceivable something such as functionalist rationality. The ideological character of functionalism reveals itself in the equivalence between the "first nature" of biological systems and the "second nature" of the specifically modern system of social interdependence, which despite its regularity and apparent neutrality has to be a socially constituted objectivity that needs to cross the consciences of human beings but which is, however, also more than the sum of their subjective intentions. It was precisely this unconscious character of the modern form of social consciousness that Marx had in mind when he said "they do not know it, but they do it", and that is the basis of what he critically called "commodity fetishism". What immediately distinguishes Marx's critical theory of positivist sociology is that it does not fall in the comparison between "first" and "second nature" and maintains as principle the possibility of *conscious abolition* of the pseudo-natural laws of capitalist society (see Kurz, 1993 and 1993a).

With their biological grounding of functions, the first CIAM leaned precisely in the opposite direction. Starting explicitly from the abstract principle that all human beings

in all ages have the same needs, it escapes the CIAM that "necessity is a social category" (Adorno, 1997: 392) and that any physiological human function is always socially mediated and cannot be isolated from social relationships (on architecture see Kapp 2005). By concealing it, functionalist architecture immediately dilutes the "second nature" into the "first" and, just as in positivist sociology, the specific social needs of capitalist society are thus considered natural and eternal. But unlike positivist sociology, which supposedly intends to only interpret social structure, functionalist architecture has the paradoxical claim to be a kind of *consciously applied structuralism*, in which supposedly objective, abstract and eternal functional laws, that were previously interpreted, ultimately need to be subjectively expressed in new, concrete architectural forms. The functionalist architectural challenge reveals itself to be a progressive research of the material forms suited to the functional requirements of capitalist social reproduction aprioristically assumed. Thus, *a truly "functional" building is not one that meets the specific needs of its users (as in the concept of Vitruvius's utilitas), but one that above all ensures the functionality of the modern social totality.*

Now, as Hannah Arendt (1998) argued in the 1950s and as it has been theoretically developed in recent years by the so-called "critique of value" (see, for example, the "Manifest against Labour", by the Krisis Group, 1999), modern society is a labor society. This determination can be applied to capitalist society, as well as to Soviet society. In both, labor is a condition for social integration. But the specific activity that one does is irrelevant; what is necessary is to receive money for it. In this sense, Marx's "abstract labor", i.e., the "undifferentiated human labor", "labour power expended without regard to the mode of its expenditure", just simply the "expenditure of human brains, nerves, and muscles" (Marx, 1976), is actually the fundamental core of modern society. There is no equivalent term in pre-modern societies for what we today thoughtlessly refer to as "labor"; Marx also states that "'labour' is as modern a category as are the relations which create this simple abstraction" (Marx, 1973: 103). Capitalism is distinguished by a new *form of social interdependence*, unconscious, in which labor in its abstract generality plays *the unique social function of constituting a form of abstract social wealth temporally measured* — value.

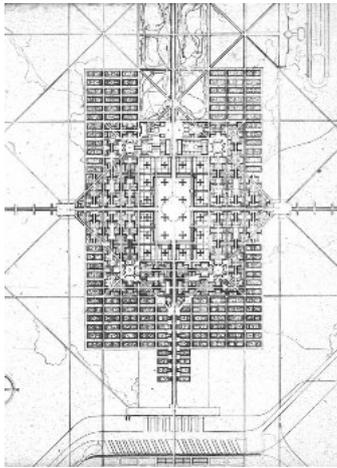


Fig. 1  
Le Corbusier's «Contemporary city» for 3 million of dwellers (1922-24).

In this sense, labor is far from being a self-evident physiological function, like the CIAM always assumes. Nor is it by chance that the precedents of functionalist architecture are found in the factories and industrial complexes of the 19th century, and that since the beginning the functional abstraction “labor” has played an absolutely crucial role in the ideology of the modern movement, especially in the metaphysics of labor of Le Corbusier. Even before the CIAM, Le Corbusier had begun his book *Urbanisme* with the following statement: "The city is a working tool. Cities no longer fulfill this function normally" (Corbusier, 1992: vii). Assuming labor as a biological function, the urban challenge becomes the mismatch between the negative historical form of the industrial city and the supposedly trans-historical and positive function of labor. Therefore, Le Corbusier also established that the purpose of urban planning should be "helping the birth of the joy of work" (Corbusier, 1995: 68). In his utopian proposal called "The Contemporary City", Le Corbusier proposes that the city should be structured around three major groups, as follows: “Citizens are of the city: those who work and live in it. Suburban dwellers are those who work in the outer industrial zone and who do not come into the city: they live in garden cities. The mixed sort are those who work in the business parts of the city but bring their families in garden cities” (Corbusier, 1992: 157). It is clear that what is proposed here is a spatial segregation based on social classes, but this obviousness cannot overshadow the fact that Le Corbusier does so from the *sole criterion* of abstract labor. In truth, Le Corbusier’s utopia is just an urbanistic example of what the German philosopher Jurgen Habermas (1986), in another context, called "utopia of labor society”. We cannot therefore think that Le Corbusier's metaphysics of labor is just a Protestant rhetorical exercise unrelated to the proposed urban forms; in fact, in Le Corbusier, the metaphysics of labor arise as a justification for many of the proposals that made him famous. He argues that it is necessary "to create types of streets that are fitted as a factory is fitted" (Corbusier, 1992: 124), streets that need to be straight, because only "a straight street is a work street" (Corbusier, 1992: 196). If the city is a working tool, then the concentration of the labor force is the city center; so, Le Corbusier defines it simply as “Twenty-four skyscrapers capable each of housing 10.000 to 50.000 employees” (Corbusier, 1992: 161); and the famous central square is, according to Le Corbusier himself, "so vast that each person goes to work without any hindrance” (Corbusier, 1992: 170). Le Corbusier expresses perhaps more explicitly than others what, from the beginning, is subjacent in most of the proposals of modern urbanism in

both the capitalist West and the Soviet state capitalism: abstract labor as a structural principle of production and organization of the modern city. It is no accident that the Situationist International, still in the 1950s, was one of the first critical voices of both the urbanism of the modern movement and abstract labor.

But to say that abstract labor is a structural principle of organization of modern urban space does not mean, obviously, that all one does is work in the modern urban space, but that abstract labor is the *social a priori* of perception, reflection and intervention in urban space. It is known that on their first congress (in 1928), the CIAM established three key functions of modern urbanism: dwelling, labor and leisure (to which circulation was later added). That the functional separation of these three functions has been historically constituted by the development of capitalist society and that it is far from being a trans-historical phenomenon is something that is simply being ignored.

In fact, this formulation of CIAM is nothing but the mere functional and spatial translation of the labor movement's classical claim to "eight hours of work, eight hours of sleep, and eight hours of leisure". Meanwhile, in this list of functions of the CIAM, so often recalled, there is an appearance of equivalence that insists on not being unmasked. In fact, in the CIAM's ideological reflections, "labor" is always the determinant function and a presumption of the remaining. In a capitalist society, it cannot be otherwise; CIAM's ideological character is precisely striving to naturalize these specific social conditions.

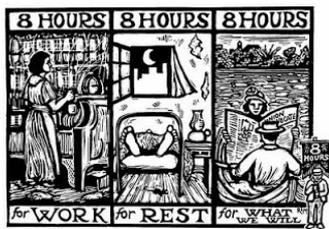


Fig. 2. Poster of the classic demand of the labor movement: "8 hours for work, 8 hours for rest and eight hours for leisure."



Fig. 3. Poster of the Second CIAM (1929) dedicated to the theme of "minimal existence dwelling."

The texts presented in the second CIAM congress, held in 1929, and dedicated to the theme of "minimal existence dwelling", sought to determine new standards of habitability from the biological determination of human needs in terms of area, light and air. Le Corbusier (1929), for example, opens his text with the statement that "The dwelling place is a distinctly biological phenomenon."; to Walter Gropius (1929), in turn, although starting from a discussion of the historical and social relativity of the minimum standards of housing, his ultimate goal is precisely to eliminate this relativity with a biological foundation, considered finally objective. But despite all the considerations about the biological needs that supposedly apply to all human beings, Gropius ends his essay uncritically restricting the right to "rationed dwelling" as "the minimum requirement of every gainfully employed person". Gropius thus considers perfectly natural that the right to housing has the assumption that one is employed. But, in fact, being a worker is not enough: one needs *to be profitable*.

**Fig. 4.**  
Aerial view of Siedlung Westhausen  
(circa 1929), one of the urban  
expansions of Frankfurt coordinated by  
Ernst May.



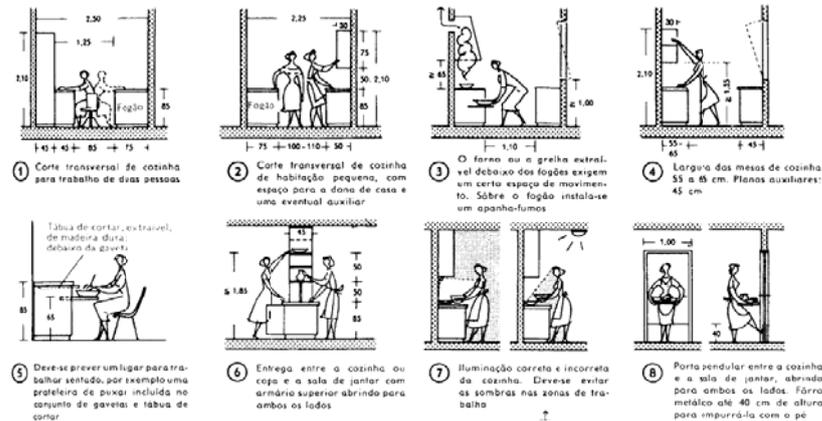
Unlike Le Corbusier and Gropius's declarative texts, the architect Ernst May, who had long coordinated dozens of social housing projects for the city of Frankfurt, sets out from the possibilities of denial of the social misery that really existed in Germany between wars, looking to establish, regarding the project and standardization of building techniques and materials, minimum standards of habitability that *answer to both the "biological needs" and the existing social conditions*, namely that the house rent did not exceed a quarter of the worker's salary, a condition that May thought to be increasingly difficult to secure and that was on the verge of getting worse: the second CIAM congress opened on the exact same day of the New York stock market crash, which also marks the beginning of the Great Depression. In the following years, while the exposition of the housing projects of minimal existence toured around Europe, enticing architects and students, the minimum social conditions presupposed by the projects were dissolving. In Frankfurt, the rapid rises in interest rates suspended several projects of urban expansion, restricted the construction and purchase of housing, rents went from a quarter to more than half the wages, while unemployment grew exponentially and evictions became unavoidable (see Eric Mumford, 2002). What finally becomes clear here is this: it is not enough that the minimal existence housing residents are employed, as Gropius argued, it is also necessary that they be

profitably employed. *In a context of capitalist social reproduction, any proposals for minimum existence housing cannot fail to assume the minimum profitability of the very existence of its inhabitants*; that profitability is not decided within housing space but is determined by the *total social context* of capitalist reproduction. This is something that in times of economic prosperity does not seem to be problematic for most individuals, until the moment when a valorization crisis exposes the monstrosity of the assumption with the general suffering that is well known, and today no less than yesterday.

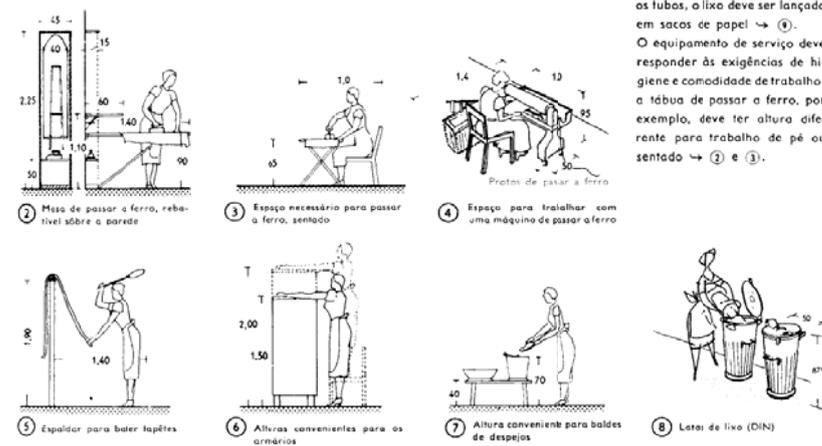
Apparently, the principle of abstract labor and the assumption of valorization of the labor force apply to all individuals. However, this principle has from the beginning a sexual connotation. As demonstrated by Roswitha Scholz (1992), despite the patriarchal domination and the sexual division of labor being prior to capitalist society, only here can be found a "patriarchal determination of social relationships by means of abstract labor and value", and in the corresponding historical process of the socialization of capitalism "any sensitive content that is not absorbed in the abstract value, in spite of remaining an assumption of social reproduction, is delegated to the woman." Thus, all daily activities that are not likely to be integrated in the process of capital valorization (child rearing, household management, meal preparation, etc...) find themselves sent to the feminine sphere, and are themselves feminized. Nevertheless, these activities are also structurally performed in the residential space, which in the modern movement acquired a symbolic status of "stronghold" run by women against the "dark side" of the imperatives of abstract labor expressed in most of the urban space. This issue has been highlighted a few times by feminist critiques of the modern movement, without being taken seriously. However, it is easily verified that in functionalist architecture and urbanism the *feminization of the private residential space appears as an assumption of the masculinization of the work space and of public life, and the same inversely*. It is no coincidence that the architecture book that has sold more copies around the world, Neufert, after hundreds of editions still illustrates the supposedly universal measures of public and labor spaces with male figures and reserves female figures for residential spaces and the kitchen section; and it is also no coincidence that the famous Frankfurt kitchens were assigned to one of the rare female architects of the early modern movement, Margarete Lihotzky. But this assumption is also in Le Corbusier, not only in his famous archetype *Modulor*, which is explicitly masculine, but when he says candidly that in a mechanized civilization "women seem perfectly able to rediscover their essential role, which is to be the

household hostesses. Therefore, they will cease to work in factories, and in the fields, by the ordering of the equipment of rural exploration, their role will also be closely linked to the household" (Corbusier, 1995, p. 191).

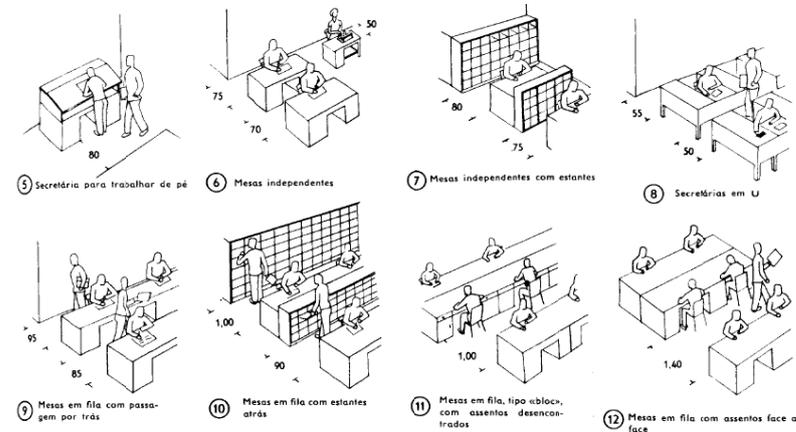
**Fig. 5**  
The "kitchen" section from Ernst Neufert's book *The art of design in architecture*



**Fig. 6.**  
The "service hall" section of Neufert's book.



**Fig. 7.**  
The "office" section from Neufert's book.



As for Brasilia, some of these aspects are not that hard to find. The Constitution of the Brazilian Republic, in the late 19th century, inscribed on its flag the motto "Order and Progress", not coincidentally inspired by an explicit statement of the positivist

sociologist August Comte, while also establishing the intention of founding a new capital city in the interior, which would only happen over half a century later and in light of the principles of functionalist architecture and urbanism.



Fig. 8.  
Brasília official map (1950-1959)

In this context, it is already clear that functionalist architecture itself began to play the role of national representation of social modernization, in which architectural forms themselves assume a symbolic function, one aspect that is always present in research of the modern movement but never consciously reflected on. On the other hand, it was sought, in a way, to test the postulate of modern architecture of social stabilization through architectural forms (something that is explicitly stated in the report of the plan). Functions are assumed a priori, as it should be, and, in accordance with the principles of zoning of the 4º CIAM, entirely separate by sectors, mainly organized in two axis: an axis of housing and an axis of work, which is also called the Monumental Axis, i.e., of state representation with its various ministries. The anthropological investigations of James Holston (1989) showed however some aspects that deserved further clarification in the light of the issues raised here, namely: that the initial organization led by the federal government distributed accommodation on the basis of labor criteria; that the collective identities of the residents are still today deeply marked by labor identity, and that Brasília has been for decades the Brazilian city with the highest ratio of active population.

It would be absurd to see in this presentation the defense of a kind of conscious complicity of the modern movement with the historical trajectory of capitalism. This is about defining it as an ideology, understood as an affirmative processing of the social contradictions of capitalism, contradictions that it seeks to naturalize and resolve by naturalizing, which never works. If architecture must answer to requirements, and therefore also to functions, of the existing society, it cannot forget that society can essentially also be other way, and in this sense, with other consciously chosen functions, and not simply because of architecture.

### **Bibliography**

Adorno, Theodor W. (1965), «Functionalism today»;

<http://thecharnelhouse.org/2011/11/19/theodor-adornos-functionalism-today-1965/>.

Accessed 20 Feb. 2013

\_\_\_\_\_ ([1942] 1997), «Thesen über Bedürfnis», Gesammelte Schriften 8. Soziologische Schriften, vol. I, Frankfurt: Surkamp, pp. 392-6.

Arendt, Hanna ([1958] 1998), *The human condition*, Chicago: The University of Chicago Press.

Corbusier, Le (1929), «Analysis of the Fundamental Elements of the Problem of “The Minimum House”», <http://modernistarchitecture.wordpress.com/2011/09/14/le-corbusier%E2%80%99s-%E2%80%9Cciam-2-1929%E2%80%9D-1929>. Accessed 20 Feb. 2013.

\_\_\_\_\_ ([1924] 1992), *Urbanismo*. São Paulo: Livraria Martins Fontes Editora.

\_\_\_\_\_ (1995), *Maneira de Pensar o Urbanismo*. Mem-Martins: Publicações Europa-América.

Gropius, Walter (1929), «Sociological Premises for the Minimum Dwelling of Urban Industrial Populations», <http://modernistarchitecture.wordpress.com/2010/10/28/walter-gropius%E2%80%99-%E2%80%9Csociological-premises-for-the-minimum-dwelling-of-urban-industrial-populations%E2%80%9D-1929>. Accessed 20 Feb. 2013.

Habermas, Jurgen (1986), "The new obscurity: the crisis of the welfare state and the exhaustion of utopian energies:" *Philosophy & Social Criticism* 11:1-18.

Holston, James (1989), *The Modernist City: an anthropological critique of Brasília*, Chicago: The University of Chicago Press.

Kapp, Silke (2005), «Por que Teoria Crítica da Arquitetura? Uma explicação e uma aporia», em *Cinco Textos Sobre Arquitetura*, edit. M. L. Malard, Belo Horizonte: Editora UFMG, pp. 115-67.

Krisis Group (1999), *Manifest against labour*. <http://www.krisis.org/1999/manifesto-against-labour>. Accessed 20 Feb. 2013.

Kurz, Robert (1993), «Domination without a subject (part one)». <https://libcom.org/library/domination-without-subject-part-one-robert-kurz>. Accessed 20 Feb. 2013.

Kurz, Robert (1993a), «Domination without a subject (part two).

<https://libcom.org/library/domination-without-subject-part-two-robert-kurz>. Accessed 20 Feb. 2013.

Marx, Karl (1976). Capital, vol. 1. Translated by Ben Fowkes. London.

\_\_\_\_\_ (1973) Grundrisse: Foundations of the Critique of Political Economy. Translated by Martin Nicolaus. London.

Mumford, Eric (2002), The CIAM Discourse on Urbanism, 1928-1960.

Massachusetts: MIT Press.

Scholz, Roswitha (1992), «O valor é o Homem. Teses sobre a socialização pelo valor e a relação entre os sexos», disponível em <http://obeco.planetaclix.pt/rst1.htm> (consultado em 20 de Fevereiro de 2013).

Sullivan, Louis (1896), The tall office building artistically considered. Lippincott's Magazine. [http://ocw.mit.edu/courses/architecture/4-205-analysis-of-contemporary-architecture-fall-2009/readings/MIT4\\_205F09\\_Sullivan.pdf](http://ocw.mit.edu/courses/architecture/4-205-analysis-of-contemporary-architecture-fall-2009/readings/MIT4_205F09_Sullivan.pdf). Accessed 20 Feb. 2013.