

MODERNITY AND TECHNOLOGY

Paternity Rights: the brise-soleil and the sources of modernity in the Ministry of Education and Health in Rio de Janeiro, Brazil

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Absurdo, sólo tú eres puro.

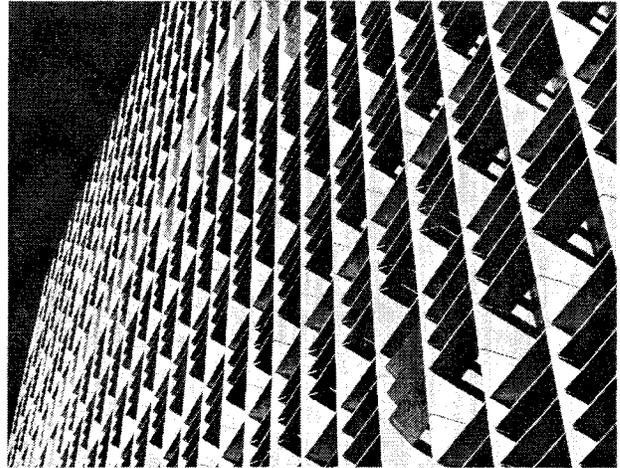
Absurdo, este exceso sólo ante ti se

suda de dorado placer.

Cesar Vallejo, Trilce LXXIII

The study of Latin American modern architecture has traditionally used comparative models that link original examples of modernity—mainly derived from Europe—to their expressions in Latin America. This comparative or linking method is perhaps most evident in the copious studies on the Ministry of Education and Public Health in Rio de Janeiro, Brazil (1935/6-1945)¹. The clarification, assignation, justification, appropriation and manifestation of the influences that “describe” this building, expose the under-lying forces that govern the study of modern architecture in Latin America. This building serves as a model of the way the region has been understood and analyzed. These undercurrents present in the examination of Latin American architecture reveal a moralizing search for paternity. This particular understanding, with its over reliance on architectural models and insistence on genealogy, makes no concessions to the study of other sources of modernity; nor does it allow us to understand these “original examples” as creative endeavors in themselves; that is, as sources that embedded in a matrix of migrating frameworks, escape the condition of models/objects and become forces/artifacts to contend with.²

Paralleling the politics of debt, this comparative view, with its insistence on origin, ignores specific influences³ by voiding cultural and pragmatic forces;⁴ forces which influenced (and still influence) the production of architecture in any region. This brings about an erasure of the territory for it creates an abstract region, giving primacy to static outlines that advance a pragmatic and contained definition of architecture. We are left with a technocratic apparatus



North-west facade of the Ministry of Education

Fachada noroeste do Ministério de Educação

Fig. 1 Ministry of Education and Public Health, Costa et al (1935/6-45) North Façade -Brazil Builds

(both in practice and in discipline) that negates the understanding of architecture as praxis. This apparatus replaces the art of being modern—the process of production, with the discourse on being modern—a scientific organization of production.

The Ministry of Education and Public Health in Rio de Janeiro, has always been framed through the question of authorship. It is the presence and influence of one of the giants of modern architecture: Le Corbusier that brings forward this question. This certainly has to do with the Franco-Swiss architect's influence on the modern scene and on Brazilian modern architecture. But it is also due to Le Corbusier's at times inflammatory antics and publicity seeking distortions—his deep need for recognition. Yet, he unquestionably casts a long shadow over most of modern architecture in Latin America. It is perhaps the signature brise-soleil device used in the Ministry that captures the essence and reality of the authorship debate. This paper uses *Brazil Builds*, the companion publication to New York's Museum of Modern Art (MoMA) 1943 groundbreaking exhibition on Brazilian modern architecture as the international benchmark of this debate.

I

In *Brazil Builds*, the origin of the brise-soleil is recognized and assigned to Le Corbusier. But after this acknowledgment of source, origin is allocated because of quality of execution, to the Brazilians: "As early as 1933, Le Corbusier had used movable outside sunshades in his unexecuted project for Barcelona, but it was the Brazilians who first put the theory into practice."⁵ Philip Goodwin, author of the text, sees no need to rest on the issue of authorship; paternity (origin) is clear. Nevertheless, for him practice and execution supercedes theory,⁶ and thus entitles builders to claim ideas and concepts as their own. But to stop here and accept such simple hierarchy between theory and practice would force us to accept also a paternalistic stance that diminishes the singularity of the Ministry as a whole.

The importance of the brise-soleil cannot be underestimated. Goodwin spends six pages and numerous illustrations on the development of this device in Brazilian modern architecture. The graphic prominence that is given to it in this book (as well as in most other books), testifies not only to its plastic virtuosity but also to its condition as signature of modernity. For Goodwin much hinges on this device, for it anchors all his arguments about modern architecture: 1. the need for contextualization, 2. development of a language⁷, and 3. technological resolution. Yet, although Goodwin moves over the issue of authorship by stressing the importance of the development and resolution of the brise-soleil, he, like all others, never forgets. The inability to fully emancipate the device from its origin has colored in Freudian tones, most if not all of the writings on the Ministry.

The question of *origin* has been the foundation or contract under which to study and understand this building, as well as most architecture in Latin America. For Goodwin, Brazilian modern architecture presents mastery both in execution and context⁸ through its use and development of the brise-soleil. This gives it along with the Ministry, a relative independence or distance from the question of origin. For Goodwin, mastery serves as a form of authorship. Yet, this outline is incomplete, for it is unable to dispel the query of source. Goodwin never directly expands on the issue (most likely

due to the demands of the text itself). He never elaborates on the nature of the "Brazilian mastery." The answer to this question is left for the reader to draw for him or herself from the projects presented. In this, Goodwin's statement has a silencing effect. Instead of attending to the issue, he hides it, veiling the question: "Whose modernism does this device manifest?"

Goodwin states that the Ministry presents the best example of the integration of the brise-soleil in architecture⁹, yet he states several times that he sees it as "external blinds." He sees it as a form easily borrowed and applied to architecture. This condition of appliqué might be one of the reasons why he sees no need to push the issue of authorship further, and why, after a detailed explanation of its functional aspect, he follows with examples of its use (integration) by Niemeyer, the Roberto brothers, and other "(s)impler types of outside sun break."¹⁰ Here, Goodwin presents a catalogue of solutions. This is done with the purpose of forwarding with select Brazilian examples, the development and integration of the brise-soleil in modern architecture as a whole. Goodwin forwards a catalogue, one that serves as a source for future implementations.

The catalogue is Goodwin's answer to the question of authorship. But in this, he follows late 18th Century discursive practices that as de Certeau points out, separated and still separates the arts from the sciences. Trapped between these two forces he is left with a clear and pre-assigned hierarchy. The separation between art and science forwarded by the late 18th century theorists, assigns an intensive value to science, but this is so only because it recognizes, much to the encyclopedists' regret, the clear hierarchy of art being above science. This was the inevitable structure of the separation, a trace of its former unity. It was in a way the punishment of science, its original sin. In this structure, Goodwin is left with only one possible argument for the brise-soleil: Le Corbusier, as recognized author/origin, is the source of its art. The Brazilians, as masters, are the source of its science.

Technical optimization of the brise-soleil is the only value and expression left if we accept the discursive practice of the catalogue; for the catalogue comes with assigned origins. We might praise

Goodwin for finding the Brazilians more “scientific” than Le Corbusier—we certainly expect them to be more scientific than their colonial counterparts. Nevertheless, technical proficiency is placed in the hands of the Brazilians because this is the only value left to be assigned; artistic merit (i.e. origin) is left securely in the hands of its creator. If the “arts are techniques that await an enlightened knowledge they currently lack (...)”¹¹ they are also visionary processes that stir the world in new directions. That virtuosity or “savoir faire” that needs no training because it is what does the training is placed beyond the reach of “the other.” This is the essence of author; an essence that firmly secured by Goodwin’s contract with modernity, accepts the pre-established order of relationships. This is what Goodwin hides when he glances over the issue of authorship.

But To complicate the issue, in a world where technical mastery assumes a confrontational stance with art (optimization with origin), technical achievement becomes a manifestation of originality. It

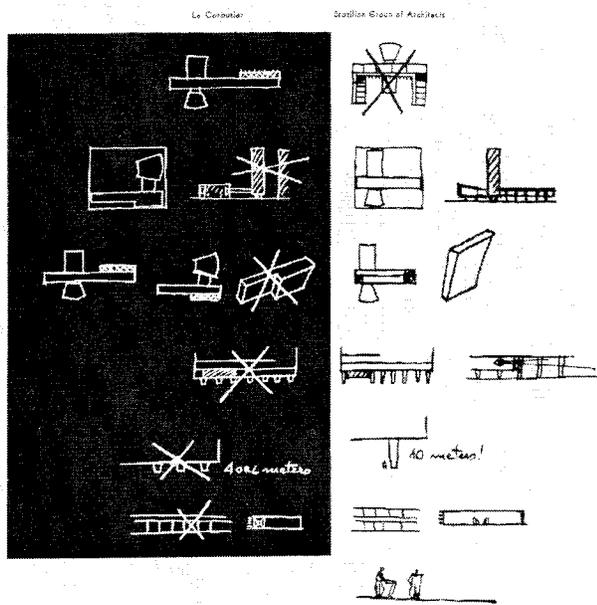
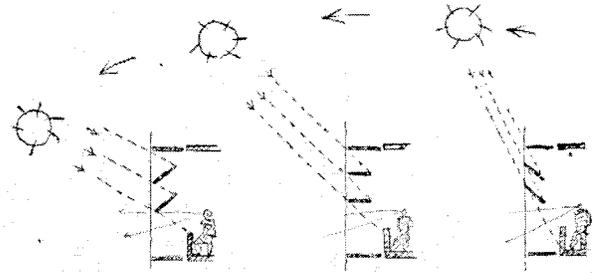


Fig. 2. Ministry of Education and Public Health (1935/6-45) Development of concepts –The Work of Oscar Niemeyer



How the Ministry of Education’s sunblind system works
Como funciona o sistema de quebra-luzes do Ministério de Educação

Fig. 3. Ministry of Education and Public Health, Costa et al (1935/6-45).

becomes in a way an Oedipal construct. On many occasions, Le Corbusier attempted to claim the Ministry as his own. The level and degree to which he included, excluded, erased, misconstrued, and simply lied about his involvement, relationship and participation in the design process of the Ministry is the subject of a book itself. This force is real and has specific repercussions. One of the many manipulations of information that he elaborated aims precisely at this relationship between author and master, the same one Goodwin forwarded on the international scene.

In *Le Corbusier, My Work*¹² (almost 25 years after his involvement in Rio) he claims authorship of the brise-soleil as a general concept: “In this studio the brise-soleil was invented... and with good reason.”¹³ But he is not satisfied with authorship, for in following pages he consciously and directly attacks the Brazilians’ mastery of the brise-soleil, solely on scientific grounds: “ (...) a mistake was made. The horizontal panels of the brise-soleil are movable.”¹⁴ Brise-soleil –Brazil Builds Our first reaction must be that of incredulity. It is precisely the movable condition of the horizontal panels of the brise-soleil at the Ministry in Rio what gives it its most powerful effect, even Le Corbusier is forced to recognize this valuable connection with “human predilection” and “freedom of choice.”¹⁵ But for Le Corbusier this “human predilection” is counterpoised to the absolutes of science. The Brazilians have not mastered the

brise-soleil because they were not able to present this absolute, what he calls the “real principle” behind the device: “It is the sun which does the moving, never once occupying the same place in the sky for 365 days.”¹⁶ But is this not the reason for the movable condition of the horizontal slabs? Obviously not for Le Corbusier. For him in an irrational tour de force, the movement of the sun enables the architects to develop a scheme “based on precise data,”¹⁷ data that allows them to calculate the necessary angle(s) and thus fix the movable fins. Thus it is the failure of the Brazilians to produce a solution on precise scientific ground that makes them implicitly students not masters.

For Le Corbusier, Goodwin is giving the keys to the kingdom of modernity to the Brazilians by granting them technical mastery over him, master of the machine. There can be no doubt that mastery of this technical device is no small feat. One is seduced by the simplicity and directness of the argumentation. Technical clarity presents the lure of definition that dissolves in the completeness of a discursive practice. But here, the other vanishes. The brise-soleil is not only the summation of a technical discourse on climatic control. It is a synthetic image that reveals the forces of modernity at work. As such it is an exhausting device, a consuming image, an object that says everything about modern architecture. This is at the core of Le Corbusier’s complaint.

II

Goodwin assigns the origin of the brise-soleil to Le Corbusier’s 1933 Barcelona Project. This is of particular interest, for there are other possible origins. Why this one? In *Solar Control & Shading Devices*,¹⁸ the Olgay brothers trace the origin of the brise-soleil back to the Geneva “Clarté” apartment house building (?).¹⁹ With this fixed point, they develop a linear progression through the house at Carthage (1928), the Barcelona project (1933), the apartment house in Algiers (1933), the Ministry in Rio (1936) and the master plan for Algeria (1938).²⁰ This 1957 book serves both to clarify and mystify the development of the device. We can hear its echoes in Le Corbusier, *My Work*. This text with its linear clarity was not available to Goodwin. Yet, all the projects mentioned were; so the question remains relevant: why the Barcelona project?

The Brazilians were bound to Corbusian ideas, as Le Corbusier was hemmed in by the Brazilian development of his concept. So great is the attraction that Le Corbusier claims the Ministry as his own. But the issue of authorship is more than a simple paternity test, or right of inheritance. At the core of the Ministry is the perfect graft of regional and universal argumentations. This graft could only happen in Brazil. The region was fertile ground for new ideas, but it was also a transformative soil for them. That Goodwin looks at Le Corbusier’s Barcelona project and not earlier ones, as the conceptual origin of the Ministry is not a small point, a fanciful interpretation. There are risks. Lucio Costa had already stated in 1939 that Le Corbusier’s 1933 Algiers’s project (*Maison Locative à Alger*) had served as a solution to “thermal protection”²¹ for the Ministry. It may be that Goodwin is simply seduced by the mechanical aspects of Rio’s brise-soleil, and that he sees in the Barcelona project a simple and direct link between moving devices. Yet, my argument is that he is not interested in paternity. I believe that he fully understands the sinuosity of his argument, that he sees already in the Barcelona project the incipient marriage of traditional forces and modern conceptual ones.

Le Corbusier seems hesitant in the use of the brise-soleil in his Barcelona project. This project (*Barcelone, Lotissement Destine a la Main-D’Oeuvre Auxiliare, 1933—Cf. Oeuvre Complète 1929-34, p. 193-96*) presents two solutions to the inhabitation unit. In the first one, we see that the glass enclosure in the rez-de-chaussée (first floor) recedes into the interior of the overall volume of the building, creating a balcony (very much like the 1922 *Immuable Villas* project). Contrary to this receding plane, the facade of the 1^{er} étage (second floor) meets the outer plane of the volume. The window on this floor (it is unclear if it is a horizontal window) is protected or masked by movable horizontal louvers. The section reveals a very shallow facade thickness (made by the receding floor plates and forwarding roof plane). This accommodates a vertical structure that attached to the façade, supports the louvered windows of the second floor. These louvered windows appear at times as square panels, making them read either as compositional non-moving panes, or completely closed louvers. In the second version of the unit or the project définitif, we find movable horizontal fins spanning the full width of

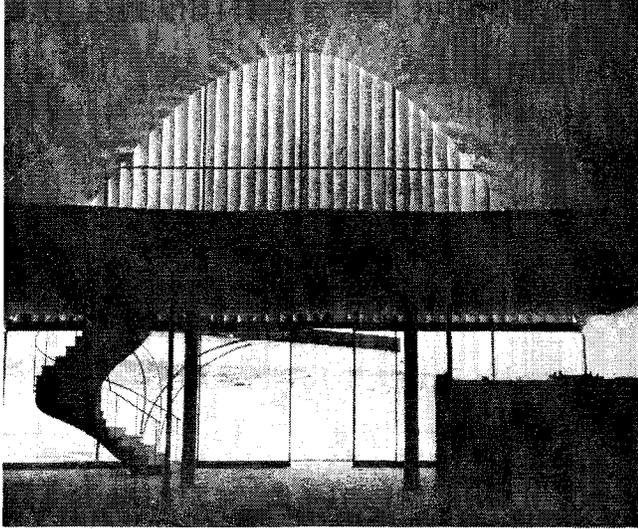


Fig. 4 Church at Pampulha, Oscar Niemeyer (1943) –*The Work of Oscar Niemeyer*

the facade in the first (rez-de-chausée) and second (1^{er} étage) floor of the unit. A fully developed facade thickness houses the brise-soleil. The movable fins are contained within the facade, not attached to it like in the first scheme. Although in the final project we see a clear compositional integration of the brise-soleil, its spatial relationship, its integration with respect to the interior spaces of the unit is like the first version, still unclear.

Le Corbusier presents two spatial variations for his second and final solution. In one version we see the brise-soleil clearly establishing a separation between interior and exterior, the device serving as a barrier, itself being severed from the interior by a glass wall/door. In this case, in both first and second floors, the brise-soleil is a contained object, sandwiched between glass wall/door and a railing. In the second version, the same condition as before applies only to the second floor. In the first floor, we see the brise-soleil serving as a mediator/connector between exterior and interior, between the outside and a terrace—probably a residue from the earlier version of the unit project. Here the brise-soleil achieves full integration with the interior. It ceases to be a mere morphological thickness, a device, and has the possibility of becoming the source of spatial

definition, giving spatial character to the interior. It becomes a shadow. But this transformation from device to shadow is only understood after we examine Brazilian examples, especially Niemeyer. Goodwin is right when he states that the Brazilians put Le Corbusier's theory into practice, and that in doing so they went farther than Le Corbusier himself, for they actualized the experience of the shadow. There is no indication in the Barcelona project (nor in any other of Le Corbusier's projects) of the full spatial power that the brise-soleil is able to manifest. The Brazilians develop a shadow machine. What is astonishing about the brise-soleil is not so much its condition of device (again a functional reading) but its condition as spatial modulator. This is what the Brazilians are able to develop through their 'practice.'

III

Le Corbusier appears to be more interested in the conceptual origin of his idea than in its implementation. After announcing that future users of these residences or lotissement are unqualified to live in 'governable rented apartments'—"Ces Populations sont encore inaptes à habiter dans des immeubles locatifs disciplinés,"²² or more precisely, since these people cannot be renters because of their condition as "auxiliary workers," Le Corbusier's proceeds to enumerate four directives for his loting project. On the third directive he states that the principle²³ of his loting is based on: a window, a tree (the relationship is left ambiguous). He states that the window of each unit will face a tree planted by the ever elusive grammatical pronoun one-on (possibly the inhabitant of the residence him/herself): "On a donc admis un principe tout à fait neuf de lotissement, basé sur ceci: une fenêtre, un arbre – c'est-à-dire que chaque fenêtre de maison est en face d'un arbre que l'on plantera. C'est dire que le lotissement ne sera pas aride."²⁴ The tree is the generator of the brise-soleil. We see this relationship between window and tree present in the first and the final version of the project. It might be poetic to establish this connection (tree + window = brise-soleil), yet this hides functional problems. To put a tree in front of a brise-soleil makes little functional sense, for the tree cancels the function of the brise-soleil by doubling its activity and reducing its meaning as shadow device. It appears that the Barcelona project is more interested in tracing the origins of an argument than in forwarding a functional or spatial proposition. Taking no notice of these

considerations the project définitif forwards this marriage. Why?

Although the tree may serve as an added protection against the sun, diminishing the brise-soleil's ability to modulate interior spaces, it also serves as a rhetorical device that signals the origin of both device and project. Le Corbusier's concern about a barren landscape: *le lotissement ne sera pas aride*, reveals a conflicting attitude. He seems torn between his desire to give the inhabitants a traditional agrarian lifestyle²⁵ and a machine like condition for living. This attempt at a hybrid form where tradition and modernity co-inhabit is never fully explored nor elaborated. He uses rhetorical devices (in language and form) only to forward his conceptual ideas, never truly bringing the "theory into practice." It appears that these concerns are used only to humanize or "sell" his project. These remain abstract formulations that work only the edges of the argumentation and its forms, rather than engaging and interlocking them in an architectural resolution that mediates and integrates both. In his Barcelona project, like in many of his early works, there is no overlap. Thus, it is puzzling when he sees tradition as the unquestionable source of a modern condition: "Une ventilation automatique se fait par courant d'air, comme les constructions de l'andalousie ont su le réaliser si bien."²⁶ If Le Corbusier truly examined the traditional Andalusian house is unimportant (he does not show clear signs of this). What is important is his purely rhetorical claim of recycling local and traditional cultural elements. This is significant because this argumentation is at the core of Latin American modernism. Goodwin does not fully play on this utilization of tradition. Although he intuitively sees the connections, he still favors a functionalist understanding. The Brazilians on the other hand living the argument follow and further this line of thought incipient in Le Corbusier's Barcelona project.

Conclusion

Why do I state that the argumentation that surrounds the Ministry and its signature piece, the brise-soleil, reveals a "moralizing search for paternity." The question of the brise-soleil goes beyond the scientific and technical demand of the catalogue, the bourgeois need for a sanction genealogy, or capitalistic claim of property. The importance of the brise-soleil is that it is the embodiment of the

abstract idea of modernity. Thus, far from being just a mechanical device that firmly secures a techno-industrial idea of the world, the brise-soleil reveals in material reality the quest for an absolute, giving form to its spirit. . The brise-soleil is the manifestation of the spirit of modernity; it is the seal of its spirit.²⁷ We are in the realm of the soul. As such, the brise-soleil manifests the truth of modernity. Since the debate about the brise-soleil concerns the soul, all actions and discourse on it have—hidden within them—a moral claim. The author of the brise-soleil has a say on the Truth of modernity, and in this he/she has a claim on Eternity. This is what hides behind all the arguments.

But is this an important debate? Is this not simply an archaic religious residue of artistic/creative process? For capitalist industrial society this question is a mere theoretical annoyance. For it, secured in its own conquest of the world, this issue is already resolved in favor of the author. Authorship presupposes the very important foundation of property. Yet, for non-industrial societies, for those still on the road to capitalist development, the issue is far from being just mythological background. For these a-synchronic societies, the soul is still the embodiment of collective identity. With the brise-soleil we encounter the a clash between the individualistic idealization of the world—the paternal image, Le Corbusier as father/author/owner of the brise-soleil, and the collective image of a modern Brazilian nation—a social value built through its claim on the abstract expression of modernity embodied in its signature modern building.

Carlos Eduardo Dias Comas, one of the foremost scholars on the Ministry, has pointed out that the Education Minister Gustavo Capanema "asked for an efficient office building, which would at the same time be the monumental representation of a nation that was rediscovering its roots and reconstructing itself (...)."²⁷ This was the task at hand, the one to be performed as Dias Comas points out, through the work of the Ministry itself. No simple task. This directive given by an extraordinary man to Lucio Costa became the eloquent search, intense process and synthetic production that gave the world one of the most astonishing buildings of the modern period. Its synthetic quality surfaces in every argumentation, in every study. Although Goodwin never fully embraces this synthesis,

he is undoubtedly aware of it. His functional reading of the building, its eloquent technical resolution, its well-designed and efficient climatic solution to the problem posed by large glass curtain-wall buildings does not obscure its synthetic quality; on the contrary, it is one of the main forces behind it. Yet neither Goodwin nor Le Corbusier, are able to abandon their pre-established understanding of modern architecture (their contract): functional supremacy, as a pure and abstract principle. Goodwin's fixation with the brise-soleil as the sign of a universal language is clear sign of his contract. Yet, he is never free from the specificity of his model, from the synthetic power of the Ministry. Le Corbusier's attack on the supposed un-scientific nature of Rio's brise-soleil, signals his ever wavering attitude towards 'the other.' Nonetheless, the Ministry stands as a new contract on modernity. Its synthesis of the local and the universal makes this building an articulation of the forces of modernity at work. It is this condition that grants its position of hinge within the discourse of modern architecture in the world.

Notes

- 1 These dates embrace the competition call, April 1935, to its inauguration, on October 1945.
- 2 I am following here Lezama-Lima's concept of "el copista."
- 3 The influence that colonial baroque architecture had on the design of the building is hardly mentioned in non-Brazilian discussions of the Ministry. This omission wavers according to the assigned "author," whether Niemeyer, Costa or Le Corbusier, and the position they had—at least to international eyes—in respect to colonial architecture. If brought in at all, its influence is catalogued or assigned to the "decorations" of the building, its cultural herbaria.
- 4 A pragmatic force guiding the Ministry was the Vargas' regime need for a representative language and image, one that would identify its public works.
- 5 Philip Goodwin, *Brazil Builds* (New York: Museum of Modern Art, 1943), p.84 (From here on, BB).
- 6 It must be noted that he was a practicing architect. Zilah Quezado Deckker, *Brazil Built* (London: SPON, 2001), p.115.
- 7 A flexible language, one that is responsive to context understood as climate, geography, technology and local production.
- 8 By context we must also understand the international scene, dominated by industrialized countries. We must not forget that with the Ministry, Brazil breaks into the scene and joins this "elite."
- 9 "In no case has the sunshade more successfully been integrated

with the architecture than in the Ministry of Education and Health." BB, p. 85.

- 10 BB, p. 88
- 11 Michel de Certeau, *The Practice of Everyday Life* (Berkeley: UC Press, 1988), p. 66
- 12 Le Corbusier, *Le Corbusier, My Work* London: Architectural Press, 1960).
- 13 Le Corbusier, op. cit., p. 107
- 14 Ibid, p. 111
- 15 Ibid
- 16 Ibid
- 17 Ibid
- 18 Olgay & Olgay's *Solar Control & Shading Devices* (Princeton: PU Press, 1957).
- 19 The Olgays give us no date. They state: "In Geneva at the apartment house the sun-breaker is revealed. Here the broad elongation of the floors over the glass surface created the first solution which satisfactorily admitted the low winter sun and intercepted the high summer sun." (p. 10). What is also effective against the sun in this building is the diagonal rolling shades that Le Corbusier attaches to the building. It is striking that the Olgays have no comment on this device, something that adds to the confusion around this example. The Olgays use of the Clarté project as the apparent incipient origin of the brise-soleil has been misleading. In his article *Erasing the Face: Solar Control and Shading in Post Colonial Architecture* (Interstice 5, University of Auckland, 2000) William Braham dates the Clarté project to 1922, and classifies it as unbuilt, for he apparently confuses it with the Project Wanner for Geneva 1928-29 (*Oeuvre Complète* 1910-29), which is based on the Immeuble-Villas 1922 project depicted in the 1910-29 of the *Oeuvre Complète*. In this 1922 project with the famous *jardin-suspendu* (*Des solariums permettront de continuer les bienfaisants bains de soleil commencés à été.*) there is no mention of location, i.e. Geneva, or of a name, i.e. Clarté. The Clarté project was executed in Geneva in 1930-32. (*Oeuvre Complète* 1929-34), although Le Corbusier states that the Clarté project was the product of preparatory studies of *inneubles* *locatifs* that date back to 1928. Typical of Le Corbusier's manipulation of information, one can see that in *Le Corbusier, My work*, he presents the Immeuble Clarté 1930-32 (the one in *Oeuvre Complète* 1929-34) as being done in 1928.
- 20 Although Le Corbusier offers a *Suite de L'Urbanisation d'Alger* in 1938, this project with its star plan *Ville Radieuse* skyscraper, does not present the solar or climatic considerations of the later 1942 *Plan directeur d'Alger*. The sketches used by the Olgays refer to this later project, not to the original 1938 one, as they incorrectly follow. My argument is that the Algiers 1938 original project,

suffers a revision after Le Corbusier's involvement with the Ministry. If one examines the 1929-34 volume and the 1934-38 volume of the *Oeuvre Complète* (this one has the Ministry in it, but being published before the Brazil Build exhibition, it plays down the *brise-soleil*), we see a clear disregard for the *brise-soleil* in the Algiers master plan tower. But the 1938-46 volume published after the Brazil Build exhibition, sees a radical transformation of the Algiers project. Thus it appears that Le Corbusier manipulates the schemes to make it appear that the *brise-soleil* tower solution dates from 1938, when in fact a completely different scheme was proposed in that date as the 1934-38 volume shows.

- 21 Lucio Costa, Ministerio da Educaçao, in *Lúcio Costa: Sobre Arquitetura*, Porto Alegre, 1962, p. 57. This essay was first published in 1939.
- 22 *Oeuvre Complète* 1929-34, p. 194
- 23 This word comes back when he criticizes the Brazilians for their incorrect use of the *brise-soleil*.
- 24 *Oeuvre Complète* 1929-34, p. 196
- 25 *Ibid*
- 26 *Ibid*
- 27 Carlos Eduardo Dias Comas, *A Machine for Remembering*, in *Latin American Architecture* (Gustavo Gili: Barcelona, 1998), p.130.