

Architecture as praxis: notes on the legacy of Arquitetura Nova

Arquitetura como praxis: Notas sobre o legado da Arquitetura Nova

Davide Sacconi*

*Architect and curator, director of Syracuse Architecture London Program, visiting lecturer at Royal College of Art (London) and founder of CAMPO, a space for architecture in Rome. Master from Berlage Institute (Rotterdam) and he is a PhD candidate at Architectural Association of London davide.sacconi@gmail.com.

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Abstract

The separation of *desenho* and *canteiro*, identified by *Arquitetura Nova* as the cleavage of the conflict between capital and labour, operates today in an augmented reality. The role of the architect is one of an illusionist who reduces the complexity of architectural labour to uniqueness, a process through which capital is reified and endlessly reproduced in the pervasive circulation of images. Against this condition *Arquitetura Nova*'s work offers a method. As a group they exercised a radically collective form of practice that opposed authorship placing the workers' knowledge at the centre of the design and building process. More importantly they turned the gap between the real subject and one imagined in their theory and practice into the substance of their political project. The archetype of the vault-house, in its very material form, reclaims and exposes architecture as a collectively produced form of common knowledge: architecture as praxis, rational critical action.

Resumo

A separação entre *desenho* e *canteiro*, identificada pela *Arquitetura Nova* como a clivagem do conflito entre capital e trabalho, opera hoje em uma realidade aumentada. O papel do arquiteto é o de um ilusionista que reduz a complexidade do trabalho arquitetônico à busca pela singularidade, um processo no qual o capital é reificado e reproduzido infinitamente através da circulação generalizada de imagens. Contra essa condição, o trabalho da *Arquitetura Nova* oferece um método. Como grupo eles exerceram uma forma radicalmente coletiva de projeto contra a autoria, e colocaram o saber dos trabalhadores no centro dos processos de projeção e construção. Além disso, eles transformaram a lacuna entre o sujeito real e aquele imaginado pela sua teoria e prática na substância do seu projeto político. O arquétipo da abóbada, em sua própria forma material, expõe e reivindica a arquitetura como conhecimento comum produzido coletivamente: arquitetura como práxis, ação racional crítica.

Building: a horizon of emancipation

Arquitetura Nova is a multitude of experiments in painting, scenography, pedagogy, building techniques and political theory that challenges the conventional understanding of architectural practice.¹ The intense collaboration between Flávio Império, Rodrigo Lefèvre and Sérgio Ferro during the 1960s – shared with a larger group of architects, artists and intellectuals – has been a permanent exercise in free and collective labour as a means of radical political change. Indeed, the adjective *Nova* had nothing to do with the search for novelty and originality that pervades contemporary architecture. *Nova* identified an ethos, an attitude towards work and life for which architectural practice was understood as technique of critical thinking and political action.²

Having experienced first hand the brutal working conditions demanded by Niemeyer's abstract white curves of Brasília,³ the group realised that the historical task of the architect within capitalist relations of production is to enforce the separation of the builder from his own knowledge. Through the *desenho* – both design and drawing – the architect reduces the act of building to a mere execution of orders and at the same time enforces a strict division of labour. Ultimately design weakens the workers' collective relationships with the aim of assuring efficiency and control of the production process. In short, the architect's "art" is to mediate between capital and labour, ensuring that construction remains the largest and most effective source of capital accumulation and labour exploitation.⁴

¹Sérgio Ferro first used the term "Arquitetura Nova" in a text of 1967 referring to the new generation of "rational architects" in Brazil and just twenty years later to identify his collaboration with Flávio Império and Rodrigo Lefèvre. FERRO, 1967, p.3-15; See also FERRO, 1988, p.272-273; KOURY, 2003, p.13.

²The adjective "Nova" was borrowed from the "Cinema Novo", a cinematographic movement lead by directors such as Nelson Pereira dos Santos, Ruy Guerra and Glauber Rocha, that questioned the very idea of development by assuming scarcity of resources as an opportunity to challenge the dominant aesthetic and model of production. See XAVIER, 1983.

³Sérgio Ferro and Rodrigo Lefèvre, still students, had the chance to realise some large commercial and residential buildings in Brasília and thus to experience the construction of the new capital. "I closely followed the horror of Brasília's construction sites. Out of an ethical obligation, I was forced to review the airy certainties of the profession - and so I continue today". FERRO, 2002, p. 1-5. Translation of the author.

⁴The group elaborated the critique of the role of the architect in a number of polemic articles in the 1960s and early 1970s. Sérgio Ferro further elaborated and systematised the theoretical approach in FERRO, 1979. For Ferro building is not an industry but a manufacture, a labour intensive activity

Against the false hope of development and the deception of a free, open and democratic aesthetic promised by national Modernism, the group proposed the rationalisation of popular construction techniques as a means to liberate the workers from alienation and exploitation. Arquitetura Nova pursued a "poetic of economy," an architecture of reduced means where scarcity is not accepted as limitation nor aestheticized as a moral value, but rather assumed as the rationale that informs the structure, the production and the aesthetic of the work.⁵ From this perspective the role of the architect becomes one of organising the collective labour of building, of designing new relationships of production that minimise labour intensity and reclaim the value of the workers' knowledge: from *desenho* for the construction site to the *desenho* of the construction site (ARANTES, 2002, p.119).

Articulating the building activities in separate phases and parts, the design recognises the autonomy of each team of workers – masons, carpenters, plumbers, electricians, etc. – fostering their thinking and making according to each technical sensibility. Following an "aesthetic of separation" (FERRO, 1979), every phase and component of the construction process is left exposed in the building, allowing the marks of free labour on matter to act as the index of the workers presence (FERRO, 1972; KOURY, 2003, p.100). Rather than representing the power imposed on the workers through the drawing, the building becomes a didactic device that exposes the potential of cooperation and collective will. Thus the construction site is reimagined, from a space of oppression and exploitation to an arena of political experience, a stage where differences and conflicts between workers are negotiated through the self-determination of production rather than repressed through the hierarchies of labour division.⁶ Assuming the building process as the preminent theatre of the conflict between capital and labour, Arquitetura Nova shifts the core

with little mechanization that maximises the extraction of surplus from labour. It is precisely in virtue of its quantity, diffusion and backwardness, that the building activity plays a crucial role in the global capitalistic organisation, extracting from labour the capital to be invested in more advanced sectors.

⁵The definition of "poetic of economy" is published in an article by Sérgio Ferro and Rodrigo Lefèvre ([1963] 2006, p. 33-36): "It's from the useful, constructive and didactic minimum need that we take [...] the basis of a new aesthetic which we could call 'poetic of economy', of the absolutely indispensable, of the elimination of all that is superfluous, of the 'economy' of means for the formulation of a new language entirely established in the base of our historical reality." Translation of the author.

⁶To describe this form of productive cooperation Sérgio Ferro used the metaphor of the jazz orchestra, where free improvisation of the performer is allowed and encouraged within a common theme. FERRO, 1997, p.100.

of architectural labour from design to production. The construction site, often seen as an obstacle between the perfection of the idea and its realisation, is embraced as the locus where the working class could build its emancipation. Architecture should not only stop enforcing alienation and exploitation of labour through drawing, but must also refuse to provide for the working class according to the paternalistic logic of developmentalism imposed by the State. On the contrary, building itself is the horizon where the workers could come together and realise William Morris' motto: "art is man's expression of joy in labour" (MORRIS, [1883] 2012, p.164-191).⁷

Subject: from rural migrant to urban dweller

Arquitetura Nova proposed a practice of architecture rooted in the existing relationships of production, directly engaged with the oppressed subjects and their demands through collective action. Such a radical approach was developed within the hopeful spirit of the early 1960s, when the basic reforms proposed by President João Goulart and the rise of popular organisations, such as the Ligas Camponesas and the Comunidades Eclesiais de Base, promised a profound transformation of the Brazilian social and political landscape: before the military coup of 1964 revolution seemed possible, if not imminent. (HOLLANDA; GONÇALVES, 1982; ARANTES, 2002, p.49). More importantly, the 1960s also mark the acceleration of the dramatic rural exodus that turned Brazilian cities into largely self-built megalopolis in only a few decades: millions of people migrated from the country's impoverished interior to the margins of the major urban areas where they were forced to sell their labour power and build their own shelter. While industrial capitalism professed the rhetoric of development as a remedy to this permanent crisis – a solution embraced by both the Brazilian State and the Brazilian Communist Party⁸ – Arquitetura Nova claimed the possibility and the need to organise a cooperative practice exceeding capitalist modes of production. If mass migration and self-construction provided a reservoir of labour force and a mechanism to reduce the

⁷Significantly William Morris' sentence will later appear in paintings by Sérgio Ferro, who will discuss the legacy of the British architect in various texts.

⁸The official line of the Brazilian Communist Party maintained that the path to the revolution required the development the industrial means of production and therefore supported the "developmentalist" project of the national bourgeoisie. This was one of the most relevant points of friction between Imperio, Lefèvre and Ferro and their master João Batista Vilanova Artigas, prominent member of the PCB. KOURY, 2003, p.26-27; ARANTES, 2002, p.39-48.

workers' salary,⁹ they also constituted the material condition and the base of production for a large part of the Brazilian people. Therefore, the subject of a truly popular architectural and political project was to be found less in the organised industrial proletariat, than in the rural migrant now turned into worker, builder and dweller of the Brazilian city. In the construction site, the encounter of the rural and the urban, of the migrant with the technician, of the popular with the erudite culture could generate an emancipatory synthesis based on the available means of production rather than on the false promise of a future development.¹⁰

The work of Flávio Imperio for the 1960 play, *Morte e Vida Severina*, is the first powerful manifestation of this emancipatory potential. Based on a poem by João Cabral de Mello Neto, the piece celebrates the rural popular culture following the journey of a peasant walking from the inland to the big city. The abstraction of the costumes, realised with poor and bare materials such as jute fabric and cardboard, contrasted with the realism of the migrants arriving in the station of São Paulo, brought on the scene by projecting photographs – a device borrowed by Berthold Brecht. As Sérgio Ferro recalls, "simple materials [...] transfigured through the lucid invention were definitely more suitable to our time than the falsification of metropolitan models." (FERRO, 1997, p.98-101).¹¹ Producing sets and costumes offered a more direct path to action than architecture and to a certain extent the backstage represented a simplified version of the construction site the group was imagining: a space organised collectively, where teams with different craftsmanship worked together to realise the various elements of the scenographic project.

However, if in theory Arquitetura Nova clearly defined the subject of their architectural and political project, in practice a self-managed construction site where work-

⁹Allowing the migrants to self-build illegal houses meant keeping the workers in a precarious condition, sparing investments in the provision of housing and discounting the value of rent from the salary. The seminal book on the issue remains ENGELS, 1872. The argument is rehearsed also in Rodrigo Lefèvre master thesis (1981, p.20-31). For the relationship between State, capital and social housing in Brazil see BONDUKI, 1998.

¹⁰In his master thesis Rodrigo Lefèvre discusses in depth the potential of the encounter between the migrant and the technician forming a new subjectivity. The thesis is a systematisation of the experiments produced in the previous decade, conflating in the project of a "school-construction site", a place where an architectural and political paradigm based on cooperation could be built. LEFÈVRE, 1981; the term "school-construction site" will be used later by Erminia Maricato in an article dedicated to Lefèvre. MARICATO, 1987.

¹¹Translation of the author.

ers could freely build their home was less a reality than a metaphor of a possible free and democratic Brazil (ARANTES, 2002, p. 84-85). As Sérgio Ferro will recall years later, empowering the workers' creative freedom was a dream relentlessly chased and almost realised in many experiments. (FERRO, 1997, p.100). Yet such ambition turned absolutely impossible in 1964 with the seizure of power by the army, which made of large-scale development, urban growth and violent repression the cornerstones of the Brazilian State.¹²

The emancipatory potential of the construction site was concretely tested in Brazil from the 1980s through the experiences of the *mutirões*, a series of collectively self-managed and self-built housing projects developed by groups of militant architects together with the housing movements. The growth of popular political forces demanding the basic rights of housing, education, healthcare and land reform in the face of staggering inequality, called for a radical questioning of the "myth of development"¹³ and therefore of the architect as a gifted individual envisioning social transformations from the heights of his atelier.¹⁴ Admittedly, the projects of the *mutirões* were less concerned with theoretical issues than with technical solutions. As such they adopted a diverse set of references spanning from the Egyptian architect Hassan Fathy to the British John Turner, from the Uruguayan cooperatives to internationally known references such as Bernard Rudofsky, Felix Candela, Frei Otto and Richard Buckminster Fuller. Yet, the affinity with *Arquitetura Nova*'s project is evident inasmuch as they pragmatically addressed the housing needs of the lower classes by experimenting with building techniques, participatory design and collective self-management of construction sites (ARANTES, 2002, p.163-

¹²Between 1964 and 1968, year of the infamous AI-5 (Institutional Act n. 5) that suspended the constitutional guarantees, the situation deteriorated until the point of pushing Flávio Imperio to retreat into "individual metaphysics", and Sérgio Ferro and Rodrigo Lefèvre to abandon architecture as a mean of political struggle and join the armed resistance, substituting the pencil with the rifle. Since December 1970, Sérgio Ferro and Rodrigo Lefèvre were imprisoned and tortured for one year in the Presídio Tiradentes of São Paulo where they organised a painting atelier as a form of resistance. ARANTES, 2002, p.91-98.

¹³As the economist Celso Furtado thoroughly demonstrated underdevelopment is not a temporary stage of an evolutionary process, but rather a structural condition in the global dynamic of capitalism that allows the centre to perpetuate its domination on the periphery both at a global and local scale. FURTADO, 1974.

¹⁴Not by chance the major studies on *Arquitetura Nova* were published in the 2000s, concurrently with the peak of the social movements popularity and strength. Together with the pioneering works by Koury (1999; 2003), Arantes (2002) and the collection of texts by Sérgio Ferro (2006), in the same period are published: BUZZAR, 2002; 2019; FERRO, 2004; 2010; CONTIER, 2009.

224). During the city government of Luiza Erundina in São Paulo (1989-1993), the municipality implemented over 100 *mutirões* for a total of 11.000 housing units, opening an extraordinary season of participation in the construction of the city that unfortunately was quickly dismissed by the following administrations (ARANTES, 2004, p.172-201).

The setbacks suffered by these experiences raise the question of the relationship between alternative forms of production and their institutionalization, and more generally of the role of architecture within this framework. On the one hand these experiments, backed by a strong political and economic support from the State, productively influenced the policies and the practices of the administration. In the following decade, under the pressure of the social movements, Brazil elaborated some of the most progressive urban legislation in the world, instituting the Ministry of Cities (2003) and adopting the Statute of the City (2001), which established the social function of property and the principles of participatory planning. On the other hand the dependency from State institutions and the shift of focus from architecture to legal and technical procedures tended to normalise the subversive potential of these practices and turning political participation into an instrument to gain consensus, reducing the housing question to a mere economic issue. In this respect the Federal program *Minha Casa Minha Vida* (2009), implemented under the "leftist" presidency of Dilma Rousseff, is exemplary. While including policies specifically catered to collective subjects like the *mutirões*, the housing scheme essentially entrusted private construction companies to deliver millions of housing units subsidised by the federal government: left in the hands of private initiative the program encouraged large complexes and low construction quality in the cheapest available land (FIX; ARANTES, 2009). The program not only reduced the housing question to a financial instrument, further deepening the social and physical segregation of the lower classes, but more importantly, contributed in a decisive way to shape a subjectivity where money and property mediate every relationship.

Under the pressure of capital, the legislative achievements were easily manipulated or disregarded while the *mutirões*, facing political resistance and economic restraints, struggled to reach a significant scale. The experimentation with housing types, settlement models and forms of property, necessary for the elaboration of an alternative to the hegemonic model of development, has been very limited.

In fact, as the terrain of demands shifted from architecture to urban processes, the antagonistic potential of built form has been largely disregarded and the political action diffused on the more slippery terrain of legal procedures and economic mechanisms. While inequality as much as social and spatial segregation kept increasing, the rise of globalisation and expansion of communication networks significantly changed the way in which lower classes relate to urban. If a migrant, arriving to the city in the 1960s, brought a rural culture capable of providing a form of resistance to the totalising power of the urban, today, after decades of exposure to information technology and commodity flows, such a distinction has been largely dissolved. The post-Fordist capitalism has dramatically increased the capacity of capital to penetrate all strata of the population and capture labour power through all sorts of informal and flexible means. Within this framework, can architecture still produce an emancipated subjectivity that is not pliant to the needs of capital reproduction? Can architecture carve a hole through the smooth and continuous surface of capital and put forward an alternative form of life?

Praxis: architecture as common knowledge

The dramatic political U-turn of 1964 impeded further radical developments and the brave experiences of the *mutirões* exposed institutionalisation as a problematic limit of radical practices. Yet, the legacy of Arquitetura Nova's built work offers a counterplan for the contemporary practice, a design method that focuses on the relationship between architectural form and the production of subjectivity.

Although rooted in the rigorous analysis of the material relations of production, the emphasis on the centrality of the building process in the construction of subjectivity easily slips into a utopian horizon, as Rodrigo Lefèvre himself has pointedly highlighted: "Only there, in the epoch of transition, where some of the political and economic relationship will be modified, I can accept to participate to a self-building process of large scale" (LEFÈVRE, 1981, p.31).¹⁵ Such a position resonates with the one put forward by Constant Nieuwenhuys in his visionary project of New Babylon, a city built by a radically nomadic subjectivity. (CARERI, 2001). Based on the notion of Homo Ludens (HUIZINGA, 1938), Constant envisioned building as the

sole playful artistic activity performed by the New Babylonians on a planetary scale, a form of life that could only take place after a revolution of the modes of production. In this respect New Babylon's condition is not far from the emancipated future imagined for the rural migrants by the Brazilian collective, or from the creative co-operation practiced in Flávio Imperio's theatre productions. Despite the differences, the comparison is relevant as much as it highlights how the position of Arquitetura Nova flattens the relationship between architecture and the construction of subjectivity into a single plane where designing, building and dwelling coincide. Ultimately the power of the construction site rests on the idea that the technician and the migrant would design, build and inhabit together. Yet, as Roberto Schwarz has noticed, tackling the housing question through the practice of self-building runs the risk of translating the conflict between labour and capital in the distance between the housing movement and the contemporary means of production (SCHWARZ, 2002). However, if Arquitetura Nova's theory gives to the building process the role of shaping the subject, on the contrary in their built work it is the architectural form the primary means used to construct a new subjectivity, to bridge the gap between the existing and the imagined forms of production and life.

Between 1961 and 1977 Flávio Imperio, Rodrigo Lefèvre and Sérgio Ferro produced a wide range of over 60 architectural projects including houses, schools, multi-storey buildings, competitions and renovations.¹⁶ Within this body of work, the experimentations on the single family house, and in particular the elaboration of the archetype of the vault-house, undoubtedly constitute the most consistent manifestation of their *ethos*. The clients for these residential projects were friends and relatives, a group of bourgeois intellectuals keen on experimenting with a different way of living in their own house.¹⁷ Yet, working with the single-family house meant to go to the political economic root of the production of space, as the home is locus of the institution and naturalisation of property and family as the productive core of capitalist society. The interior is the place of reproduction and comfort associated with women, which provides a relief from the busy and dirty space of production of the

¹⁶A complete list of works is in KOURY, 2003, p.133-135.

¹⁷It is worth to mention that Arquitetura Nova built a series of public schools in 1966-1967 and designed an unbuilt proposal for social housing in 1968, both using the system of the vault. However these projects are exceptional episodes within the trajectory of their work. KOURY, 2002, p.70.

¹⁵Translation of the author. See also the interview of Rodrigo Lefèvre by Renato de Andrade Maia, in KOURY, 1999, 111, available online on *Vitruvius*, last modified January 2000, <https://www.vitruvius.com.br/revistas/read/entrevista/01.001/3352?page=4>

city, associated with men. Such opposition enforced gender hierarchies and the myth of ownership of both the house and the commodities needed to make the interior a personal and protective space opposed to the repetitive character of the urban.¹⁸ This aspect is particularly emphasised in the Americas' suburban single-family house, where the house as the negative of the city acquires the territorial dimension of the plot. Furthermore, in Brazil the home is the place where extreme inequality rooted in racial and class segregation – a legacy of slavery from which the country was never truly liberated – is managed through the ambivalence of personal relationships between master and domestic labourers.

Facing these contradictions *Arquitetura Nova* elaborated the archetype of the vault-house as a mean to seize the gap between the existing and the imagined subject and turn it into the substance of the project. As such *Arquitetura Nova*'s ruthless critique of the architect's role exceeds both the recognition of the construction site as the battleground for the liberation of the working class and the call for collective self-building actions, to propose a critical horizon for architectural practice.

As Sérgio Ferro boldly puts it: "architecture is *praxis*, communion of theory and practice, rational critical action." (FERRO, 2008, p.20).¹⁹ In Marxian terms, *praxis* is the self-conscious, collective and free activity that distinguishes humans from the other beings, as opposed to the alienated labour imposed by capital.²⁰ As Marx himself noticed in describing the labour process, "what distinguishes the worst architect from the best of bees is that the architect raises his structure in imagination before he erects it in reality" (MARX, [1867] 1976, p.284). Hence architecture as *praxis* is not immediate action or the realisation of a theory, but a form of knowledge that is collectively produced throughout history. As such architecture can't be reduced to a set of universal principles nor to the mere sum of the individual buildings or practices, but has to be understood as the totality of design and construction techniques that allow understanding, producing and inhabiting space.

¹⁸For a concise history and thorough critique of the notion of the domestic see AURELI; GIUDICI, 2016, p.105-129.

¹⁹Translation of the author.

²⁰The concept of *praxis* was originally developed by Aristotle as the political and ethical activity of man in opposition to *theoria* and *poiesis*. Here Sérgio Ferro refers to the Marxian notion of *praxis*, discussed by Marx (1845; 1845). For a succinct reconstruction of the Marxian notion of *praxis* see PETROVIĆ, 1994.

In other words each individual building can be conceived, produced and inhabited because architecture exists as common knowledge, as a pre-individual condition collectively produced. Designs and buildings are the actuality of architecture as potentiality, individuation of architectural knowledge and at the same time a manifestation of the common undifferentiated horizon that allows the production of space.²¹ Yet, the common nature of architectural production is precisely what capital appropriates when the individuality of each work and the originality of each practice is obsessively emphasised. The reality of contemporary architectural production is constituted by two apparently divergent but in fact complementary movements: on the one hand the pulverisation of labour in a cloud of interns, consultants, subcontractors, visualizers, curators and social media managers while on the other hand the strive for the uniqueness of the product through which the abstraction of financial capitalism is reified and endlessly reproduced in the pervasive circulation of images.²² The conflict between drawing and construction site identified by *Arquitetura Nova* operates today in an augmented reality where the distinction between the building and its image is increasingly blurred to accommodate the light speed of capital and exploit the productivity of precarious and ubiquitous labour. For that, not only the marks of labour are to be erased from the building appearance, but also the traces of architecture as a form of knowledge collectively produced through history have to disappear underneath the artificially pumped uniqueness of the immediate present. The architect's role today is less about coordinating the building process than reducing the complexity of architectural labour to a unitary image and narrative, encapsulated in tautological diagrams and painted with a thin coat of social and ecological purpose. The master builder is dead; long live the illusionist.

Against this contemporary condition of architectural practice the work of *Arquitetura Nova* is exemplary: not only did they exercise a radically collective form of design opposing individual authorship while placing the workers' knowledge at the centre of both the design and building processes, but they also worked relentlessly on

²¹Here I refer to the idea of the common as pre-individual reality as theorised by Paolo Virno (2002; 2010). On the notion of architecture as common knowledge see AURELI 2012, p.147-156.

²²For an articulated critique of the relationship between architecture, financial capital, digital image and construction site see ARANTES 2012.

designing a form that would expose and reclaim architecture as common knowledge: the vault.

Form: the archetype of the vault-house

The *ethos* of Arquitetura Nova primarily takes the form of the vault-house, a gesture of powerful aesthetic intensity that manifests the theoretical and technical issues posed by the political position of the group into an precise architectural form: a single large vault defines the space of the house; two glass and wood walls on the short sides regulate the threshold between interior and exterior; the ground is manipulated to accommodate the topography and define different spatial qualities through fixed furniture; a number of secondary elements are overlaid to the vault and articulate the organisation of the space. These four simple operations constitute the archetype that Arquitetura Nova has produced and refined in a dozen variations, from the Casa Bernardo Issler in 1961 to the Casa Paulo Vampré in 1977.²³

The single vault is chosen for its structural efficiency and simplicity of construction: its geometry, based on the catenary curve, allows the structure to work almost exclusively in compression, therefore minimising the need of steel and concrete, and drastically reducing the amount of labour and the cost of materials.²⁴ Furthermore the project aims for each phase of the work to remain separate, legible and didactically exposed in the materiality of the building, so that the workers' labour can be celebrated in its technical and aesthetic autonomy. This tactic is particularly visible in the exposed electrical and plumbing installations and in the intentional separation of the vault from the elements that organise its inhabitation, such as the mezzanines, the "wet rooms," the openings of windows and skylights, and the fixed

furniture. While the geometry of the cover allows the use of the most common and familiar materials of the Brazilian city, their arrangement in an unusual form and the overlaying of autonomous elements against the absolute clarity of the vault, produce an effect of estrangement that echoes the montage technique devised by Berthold Brecht in his "epic theatre". According to Walter Benjamin, in the montage "the superimposed element disrupts the context in which it is inserted. [...] The interruption of action, on account of which Brecht described his theatre as 'epic', constantly counteracts the illusion on the part of the audience [...] Epic theatre therefore does not reproduce situations; rather it discovers them" (BENJAMIN, 1999, p.778). In the same way Arquitetura Nova's "epic details" counter the naturalisation of hierarchies and relationships of production – that is the core of the bourgeois ideological project of the interior.²⁵ By disrupting the conventional understanding of domesticity the vault allows a new form of life to be invented through inhabitation. The mezzanine floors hosting the resting areas, for example, are bare concrete structures built inside the house that suggest a penetration of the very generic fabric of the city within the intimacy of the interior. Suspended at the very centre of the vault they at once materialise and dissolve the idea of privacy through the continuity of the three-dimensional space. The openings in the vault defamiliarise the notion of window by piercing the surface with concrete boxes or slices of fibrocement pipes, or by subtraction generating unusual arched porticoes that reveal the pace of the structure. The "wet rooms" are autonomous concrete and brick structures containing kitchens, toilets or the maid's rooms: topped with water tanks and decorated with the geometrical arrangement of exposed coloured pipes these volumes stand like iconic and enigmatic totems. If the presence of domestic labourers in the Brazilian house couldn't be eradicated, at least it was not half-sunken or hidden in the backyard but bluntly placed at the entrance of the house, in a volume that could be eventually demolished when "abolition" would be finally achieved (KOURY, 2003, p.89). The concrete fixed furniture dissimulate the problematic moment when the vault touches the ground and reduces the inhabitable height (KOURY, 2003, p.85), and at the same time they are permanent objects removed from the endless cycle of commodification and open to appropriation through use. Finally every element, seen as produced, analogously represents the entire manufacturing cycle and thus counters the ideological separation between

²³Single-family houses constitute the most conspicuous and relevant part of Arquitetura Nova's architectural production. Among the 18 houses they designed between 1960 and 1977, 12 assumed the form of the vault. There is no unanimous consensus among the scholars on what should be included in the production of the group: after Sérgio Ferro was exiled to France in 1971, Rodrigo Lefèvre continued to experiment with the vault-house while working on large scale projects for Hidroservice and Flávio Imperio dedicate himself to art and set design. However the houses of the 1970s are clearly a development of the common trajectory.

²⁴The structure of the vault was initially made of straight standard hollow bricks and prefabricated beams. Disposed longitudinally on wooden moulds to form the curved surface the array of beams was then finished with a layer of lightly reinforced concrete. In the latest projects Rodrigo Lefèvre further refined the construction technique by turning the original catenary into a second-degree parabolic curve and using transversal curved beams, a system that made the construction easier and more efficient. KOURY, 2003, 74.

²⁵On the emergence of the interior as ideology see RICE, 2007.

the domestic interior and the city as space of production. Even enclosed within the individual plot and bound to private property, the vault-house strives to expose the conflict between capital and labour and to produce a political awareness beyond the collective moment of the construction site. In this respect the gap between the imagined and the real subjects inhabiting the house is not understood as a limit or a contradiction, but rather as an opportunity to imagine another way of dwelling and therefore new relationships of production against and within capital: the vault-house is striking inasmuch as its form is able to question the bourgeois canon of domesticity and put forward an alternative paradigm of living.

Although never explicitly claimed by the group, the refusal of a domesticity based on property and privacy finds a crucial precedent in the indigenous *oca*, the collective-domestic space of many Brazilian native peoples. The parallel goes far beyond a superficial formal resemblance or the fetishism of a national cultural identity, hinting instead to the idea that the formulation of an alternative form of life is inextricably linked with the valorisation of the native culture. Not only the *oca* is a vaulted space, but it is built collectively and lived as a space of the clan rather than as a stronghold of the nuclear family. In this respect the words of Sérgio Ferro, describing the unbuilt project of the Casa Império-Hamburger, seem to claim an idea of domesticity analogous to the indigenous one: “the gentle curve protecting first the construction site and then the family Império-Hamburger with its maternal, uterine connotation. Inside, total freedom, to escape the rigidity of the bourgeois house. On the mezzanine, completely open to the community of the numerous children, bed, wardrobes, benches and tables compose a festive *promenade architecturale*. Below, the *promenade* continues, fluid with few closed spaces (FERRO, 1997, p.100).²⁶ Going beyond the opposition between the opposition – still internal to the bourgeois tradition – between the subdivision of the apartment and the fluidity of the modernist open space, the metaphor of the uterus claims a much deeper sense of belonging to the land beyond the social construct of the family. Furthermore the *detournement* of the Corbusian *promenade architecturale* into a carnival of furniture suggests an idea of living based more on the communal use of space and objects

²⁶According to Sérgio Ferro the house Império-Hamburger, designed by Flávio Imperio for her sister in 1965, has been the most complete and original contribution of the group, a “legisign”, a term borrowed by Charles Sanders Peirce that can be understood as synonymous of archetype. Translation of the author.

than on privacy and property – a conception very close to the one of the native peoples. The form of the vault itself, blending the vertical and the horizontal plane into a continuous surface, challenges the conventional Cartesian dimension of the space, constituted at once of separation and repetition *ad infinitum*. On the contrary the space is fluid but constantly framed by the curvature of the ceiling-wall surface that, even when subdivided, always offers a way for the subject to analogously reconstruct the whole from the singular part. As such the form of the vault produces an understanding of space that is not of a mathematical kind but rather, as the indigenous one, symbolic and cosmological.

The power of the vault-house lies in its savage monumentality, in the autonomy of its form, chosen not in relationship to function or context but in spite of them. Lightly resting on the ground, the vault fulfils the problem of shelter and thus liberates the interior from functional preoccupations. As such the archetype is radically anti-typological: a mean of inhabitation without end (AGAMBEN, 1996). The vault house seems to anticipate the unfolding of post-Fordist production in the imagination of a self-managed construction site that opposes autonomy, cooperation and creativity to the hierarchical organisation of the factory (ARANTES, 2002, p.120-130). Furthermore it stages a living condition that blurs the boundaries between work and leisure, public and private, productive and reproductive labour. Rather than liberating the worker, the dissolution of the modern boundaries of human activities implies an increasingly pervasive control and exploitation of the very potential of human labour, of our common capability of thinking and relating:²⁷ the utopia of the plan overcome by the endless reproduction of urbanisation. However, the vault-house opposes to the ideology of monadic individuals and unique architectures the ability of architectural form to expose the irreducible presence of the common architectural knowledge. The vault house stands as an archetype, a paradigmatic form that produces a tension between the subject, the house and the city, and thus challenges prescribed norms and behaviours while opening to collective use and appropriation of space.

²⁷This is the central thesis of Paolo Virno's reflection on language based on the notion of “general intellect” proposed by MARX, 1993. Besides the already mentioned texts by Virno see also VIRNO [1985] 2010.

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