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Edison Musa office: the creative process and the project production in Rio de Janeiro after Brasília¹

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Abstract

In the post Brasília period, how did the native Rio de Janeiro architects worked and get organized in their places of project? Since the 1930s, modern Brazilian architecture had, in Rio de Janeiro, fertile land for its realizations, what highlighted even more the figure of an architect, so called modern, and of specific professional practice. There were, however, the company-offices, places of design of vital importance for the city's architecture. Through them, there was the exercise of vigorous team work, where private initiative and the present reality began to gain evidence. They were also places that performed competently the path between the clipboard and the working site, and where it was heavily invested in the productive relation among architects, engineers and the civil construction industry. Having Brasília as a landmark for the constitution of a period in Rio de Janeiro's architecture, this article presents how the process of creation and the production of architecture in Rio de Janeiro began to happen, taking as study case the Edson Musa's office, between 1963 and 1983, years whose because of its physical structure and total area of its realizations, would achieve a leading position as one of the greatest project offices in the country.

¹ This paper represents a small part of the ongoing research of the author, referring to his doctoral thesis in progress with the PROARQ-FAU-UFRJ, presented in expanded form as the final work of the discipline of Project Process Management in Construction Buildings, under the responsibility of Prof. Dr. Monica Santos Salgado.

Key words: Edison Musa (1934-); Architecture Offices; Project Production; Post Brasília Rio de Janeiro.

1. Narrative presentation and theme

1.1. Justifying the narrative

'As announced by Paul Veyne in his polemic 1971 book (Veyne, 2008), history is written through operations which depend on our own intention, from the intrigue which guides our research. According to intrigues, [...] our instruments will organize themselves, the hierarchy of the documents we will decide to use and the narrative we will end up writing' (Solà-Morales, 2008, p.263, our translation).

Choosing as study case for an article about the creation process and production of the project and the trajectory of the *Edison Musa Arquitetura e Construção Ltda.* - EMAC - which, in the year of 2011, sums to forty-eight years of project architecture in Rio de Janeiro, seems opportune to us. Since its foundation, in 1963, there has always been there the quest for a working method which would make work more efficient and productive for the performance of his team work. On one hand, the production of the executive project was vital for the definition of an architecture which intended to be feasible, the same time it worked as an enhancer agent of the objective and pragmatic actuation that EMAC could achieve when facing a more and more diversified clientele.

This way, we face the little objectivity that a continuous text could represent for this article, what led us to redefine its format. Coming from some moments of EMAC characterized as important by us, here presented as specific organograms, our intention is to x-ray their time, take their pulse, that is, through them and the structures they represent, bring it to the surface, in interlinked fashion, as Foucault (n.d., p.18) tells us, the people, the facts, the relations, the processes and the documents hidden there.

1.2. Introducing an architect and his office

Graduated in December, 1957, by the former *Faculdade Nacional de Arquitetura da Universidade do Brasil*, in Rio de Janeiro, the Rio Grande do Sul native Edison Musa (1934-) would set to Paris, in 1958, having been an intern there for eight months with the architect Georges Candilis - Le Corbusier disciple and member of the Team 10 - whose office Candilis-Josic-Woods would see, in action, the character of the architect as project coordinator, as he would have contact with the several internal working teams - the one the Brazilians would call by "small teams" - which handled enormous production.

Back to Rio, he would be employed, in 1959, at the Costa Pereira Bokel construction company, also developing sporadic jobs which, at some moment, he believed would pave his own path. Thus, his first clients started to appear, among them the construction company Gomes de Almeida Fernandes – today GAFISA, a public company whose founding partners do not belong to it anymore – here called GAF, responsible for involving Edison Musa in random facts, which, more and more become new work possibilities. Stated by the architect himself ~~that~~, in that beginning of the 1960s, from a common origin - GAF, in this case - several and distinctive ways for opening up fronts for his professional practice and one of them would bring him the opportunity of opening and legally registering his own office.

2. Changing Years for the Architecture Way of Production

The same way the Second World War would be the watershed that nothing would ever be the same in the production way of architecture, in Brazil, more specifically in Rio de Janeiro, this would be noticeable in the following years after Brasília, when the architect would be excused from the obligatoriness of his detachment from the idea of “social reformer” whose Modern Movement theoreticians had engendered in them. According to what Piñon (2006, p.178) states, leaving such attitude behind would oblige him to take, as a primordial attribute of his activity, the constructive technical competencies, in order to avoid an identity crisis, so far, what status would surround him, if it he had been denied “the prophetic action upon the others’ life styles”?

During the “economic miracle” – period between the years of 1960 and 1970, in which the military governments encouraged the construction business, architecture would extend and multiply in a estate *boom* transforming Rio de Janeiro’s face, causing the architect to direct his activity not anymore for an architecture of “cultural relevance”, but for “that one realized according to the common techniques and economic conditions” (Diez, 2007, p.157), where, either in architecture or in the construction, the imposed challenge was about “reaching the industrial levels achieved by other market sectors” (Gregotti, 1975, p.174).

In such context – between crisis and opportunities, as quoted by Zein (2003, p.66) – surfaced the companies-office, places of significant production for the city architecture, where there was the exercise of a vigorous team work, for whom the private initiative and the present reality start to occupy a prime position. There were also places that performed competently the path between the clipboard and the working site, and where it was heavily invested in the productive relation among architects, engineers and the building construction. Until recently, however, they were not sought as study objects because the interest for the discipline field was covered, in Brazil, by what had become the general rule of the “do well” architectonic. Benefiting from the undisputable image and reinforced by the image here constructed by the modern architecture, there was the belief that the good architecture, the one which deserved

to be studied, was produced by the architect's exceptionality, whose *modus faciendi* met in the office their maximum productive expression. Nonetheless, favoring us nowadays, we have the postmodern world perception and an approach of history as a network of interlinked occurrences, where, according to Derrida (Meyer apud NESBITT, 2006, p.170), we should use our intention to make emerge what had been hidden under the *status quo*.

Thus, that is how the current article takes as study the EMAC object, founded in 1963 and currently working, would grow uninterruptedly during its twenty initial years, starting from a minimum staff in 1963 and achieving impressive numbers of employees, hired technicians and total licensed built area circa 1983. Such mass of expert staff and realizations, directly resulted, at a first moment, from the EMAC's will to efficiently fulfill an amplified and diversified clientele throughout that period; in a second instance, its interest in becoming lucrative, as any company inserted in the capitalist system. Before such objectives, compatible with the industry ones, would build up, in the Rio de Janeiro soil, "a project factory" which would face the unavoidable urge of organization and always seeking a method that would manage its development of projects and enhanced its capacity of producing them. Uncover its structure through the organograms of its various phases, as well as understanding its method through the documents created by the office itself for the optimization of the project practice, together with this article, were the tasks we set for ourselves. This served to confirm to us that the concept of the project as process had been present and active in Rio de Janeiro since the 1980s, as well as the idea of its management gained pertinence and concrete application.

3. Edison Musa Office, 1963-1983: Scenes of a Journey

3.1. EMAC, FIRST PHASE: 1963-1970

Scene 1: 1963, EMAC opens its doors

In the 1963 organogram (Figure 1) we can understand how the reduced dimensions of the Avenida Almirante Barroso room, where it all started, served perfectly for Edison Musa, in the beginning of EMAC, in which the young architect would be a "jack-of-all-trades", answering the phone, going to the client, typing proposals and elaborating projects. As initial collaborators, there were three professional drawers, two of them were external ones, that is, they would show up once a week to pick their tasks or bring them ready. Trivia: The "ghost" partner, Júlio Mendes, whose only role in the partnership was the telephone line owner, as indispensable as rare at those times. Then, we would find him in a pink, "non-influential" zone.

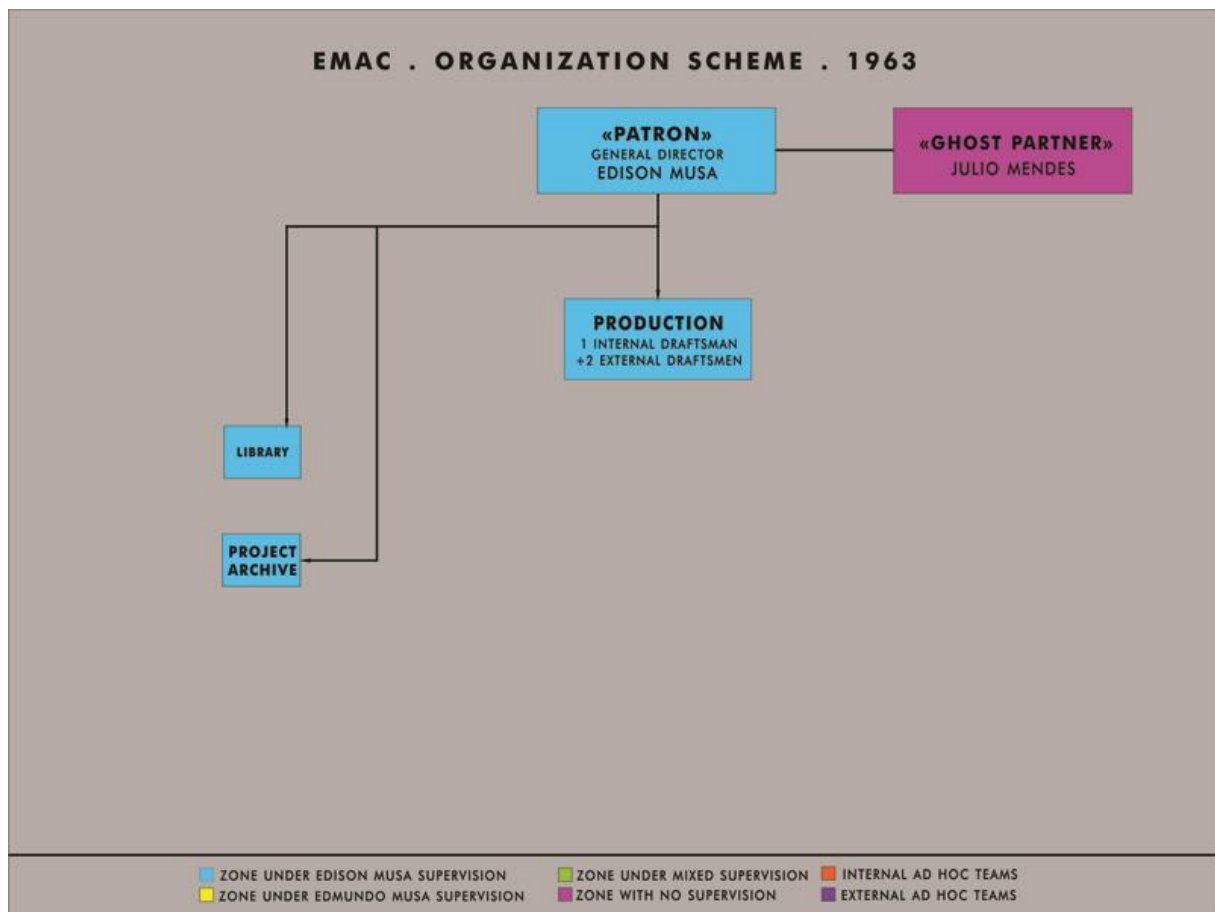


Figure 1. EMAC - Organogram, 1963.
Elaborated and Designed by Marise F. Machado

Note that the library and project state, still in the beginning of their collections, were isolated from the other ones, and directly linked to Edison Musa, whom up to this point was still able to informally manage it. Furthermore it should be registered here that EMAC's first steps, in its first phase, characterized a time in which the office kept some similarities with the modern-inspired offices, given to the architect working there, in a way a *patron*, would centralize the project's decision-making, keeping to himself the direct contacts, both the clients as well as the industry and external collaborators. Perhaps this explains the hierarchical composition that would mark the company physical structure, despite the architect, after 1968 and as the company grew, distribute responsibilities to members of his staff, believing that the only way for them to acquire comprehension before the tasks and achieve autonomy would arrive from him.

Several clients circulated around Edison Musa at that time, but *Gomes de Almeida Fernandes* - here called GAF - can be considered fundamental for the EMAC journey. It has to be highlighted here the relation established between them, revealing data to help us to understand how, in the beginning of the 1960s, some construction companies of the city dealt with the architect and the project production: this was systematically broken, and for the

architect one or more fractions were assigned. With GAF, through its Technical Department where there was only place for the drawer work, was the responsibility for the legal project (approval with the competent municipal bodies) and for the development of the executive project of the building nucleus. Access pathways and façade, separated from the whole like some kind of “packaging”, were systematically handed to an external architect, who could perhaps contribute to the entrepreneurship with a small differential.

Scene 2: 1965, EMAC grows

In the 1965 organogram (Figure 2) we can see the arrival of a secretary to EMAC and with her, the birth of what would be the future administrative-financial department, with the library still bound to Edison Musa, and beginning to be managed from there.

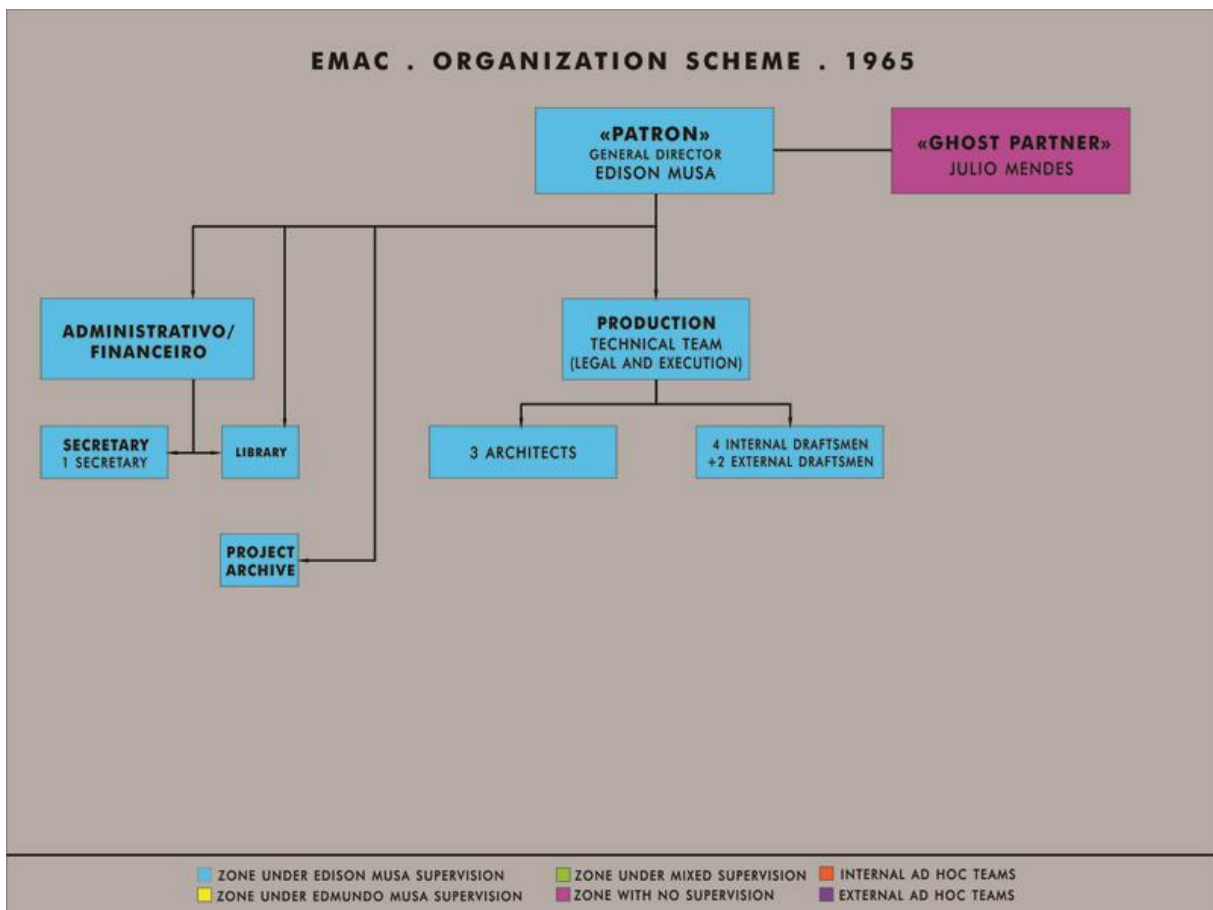


Figure 2. EMAC - Organogram, 1965.
Elaborated and Designed by Marise F. Machado

The technical collaborators grew in number and diversified: they were now six drawers and three architects, working together in a so-called production department, which denotes, in

Edison Musa, the intention of an industrial characterized professional practice already present. Yet embryonic, we can affirm here that this was the foundation of the EMAC technical team.

It is to mention that 1964 had served as experiment field of various kinds; some of them were used, others were discarded, as the experiments used to happen, nonetheless, always generating future contributions for the architect practice. This is what happened to COOPHAB-GB, in the professional journey of Edson Musa, position which would place him before concepts – macro project planning standardizing that he would only applied in the office of the Candilis-Josic-Woods office. The year of 1964 also resulted in a personal landmark for the architect, at least when it comes to real estate market. That is because two GAF buildings in *Ipanema* would be the first preliminary studies developed by him for that construction company, even though they didn't allow him to sign them, yet. Other "little studies" came, but nothing would surpass the importance, although the *Colégio Santo Inácio* enlargement, in 1965, which would make Edison Musa produce, from approval to execution, a complete architecture project, absolutely of his authorship. There would be the structure increase of the EMAC staff, and for that reason, forcing a correspondence in its physical space, which made it relocate. In 1965, EMAC would arrive – to stay until nowadays in the *Pancreto* building, in Copacabana at 323, Princesa Isabel Avenue, first occupying three rooms in the 10th floor (Figure 3).



Figure 3. EMAC - *Pancreto* building. 323, Princesa Isabel Avenue -10th floor. Physical Growth, 1969. Elaborated and Designed by Marise F. Machado

The 1967 organogram (Figure 4) presents the leave of the uncommon "ghost partner", Julio Mendes, then replaced by Edison Musa's brother, who joined in an identical condition as his

predecessor. What we highlight there is the beginning, at EMAC, the idea of a familiar association between two brothers.

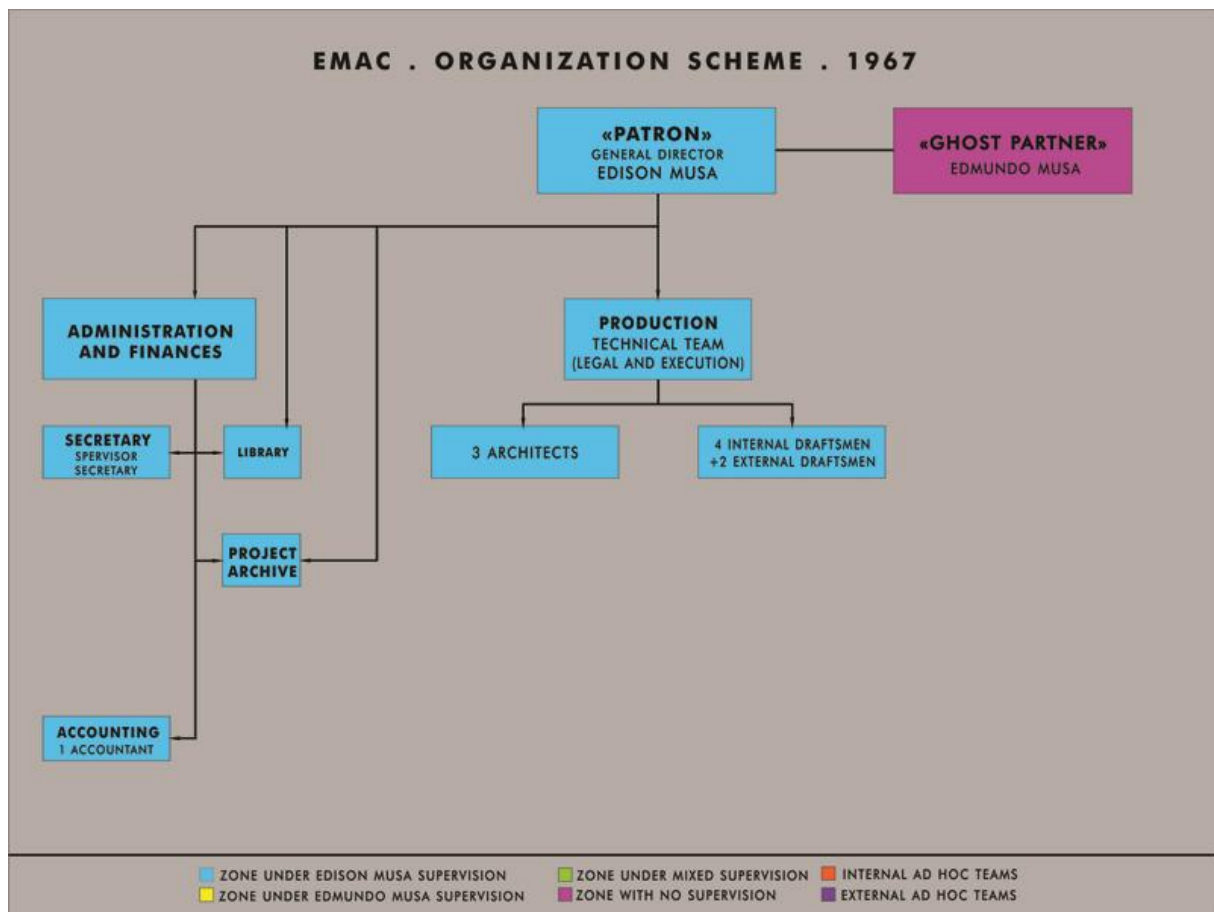


Figure 4. EMAC - Organogram, 1967.
Elaborated and Designed by Marise F. Machado

It is then formed, the financial sector, and the secretary accumulates functions, also supervising the growth of the administrative-financial sector. The project production department was kept intact, counting on the same technical staff that was already there in 1965.

It is important to highlight, that thinking about a controlling position (which would give him greater range of freedom), Edison Musa would try to devise an execution project as detailed as possible, and giving the clientele the reassurance that everything had been considered beforehand. With such preoccupation with detail, and the resulting mastery in the project production, he would earn a differentiated place in the work market. It has to be cited that this place was assured, not only by private clients and companies who crossed paths with the architect at that time, but also heavily by the real state sector, through the construction companies: Lisboaeta, since 1963; *João Fortes Engenharia*, since 1968; Celso Bulhões Carvalho da Fonseca, since 1971; Santa Isabel, since 1974; and Brascan, since 1975 – which would join

EMAC on the elaboration of complete architecture projects, from preliminary studies to the executive blueprint legalization, making full use of the office's means of production.

Scene 4: 1970 End of a phase, beginning of another

The year of 1970 is considered as a landmark, due to having represented the EMAC opening in São Paulo – what would made Edison Musa travel more regularly from then on, dividing his time – and because it also marked the return of his younger brother Edmundo, now an architect, to Rio de Janeiro and the local EMAC team, after a year of internship in New York.

This, the end of the office phase and the prognostic of another, still being generated, of a company which aimed to produce in industrial rhythm. Edison Musa had set up a small team of internal and external collaborators, which grew to the strength of the clients who had diversified. From this growth, EMAC would earn wider and more challenging horizons, because there was the need of improving the working method, which the only reference had been the French experience of Candilis-Josic-Woods. Now, the entrepreneur vision won body and substance and reasoning was needed for profiting, holding tight to its position in the market which had laboriously been conquered. Therefore, the two brothers' attention pointed to the North American organizational system, which both believed be adequate to manage the office's technical team in their specific project tasks, to make production fully meet what was expected from it by a bigger and more demanding market.

It becomes evident, in the 1970 organogram (Figure 5) a phased project repartition. Characterized with the blue color, Edison Musa appears as the EMAC's general director, completely influencing the two departments – DAF (Administrative-Financial Department) and DETEC (Technical Department) – which passes to be part of the company. Edmundo, in yellow, appears as a "participative partner", that is, he possesses a specific percentage of quotas in the company, yet his integration was to be built – observe the traced in the representation – at first, linked with the clients he would be able to co-opt.

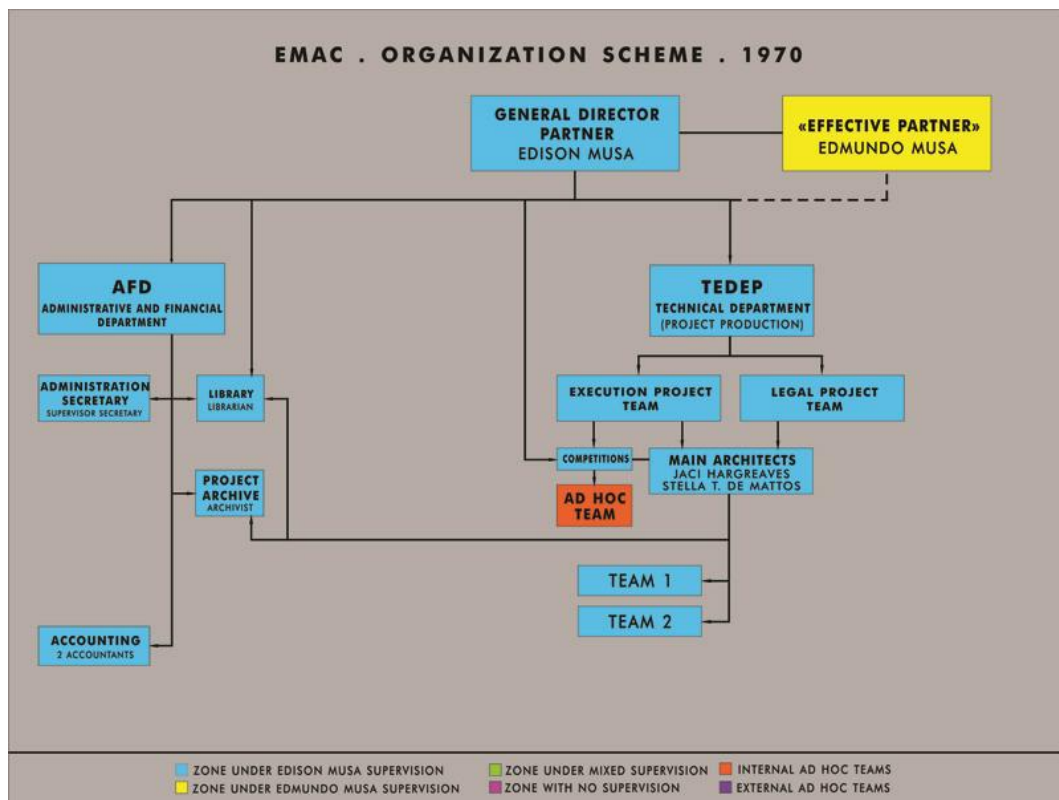


Figure 5. EMAC - Organogram, 1970.
Elaborated and Designed by Marise F. Machado

The office was structured according to the demand. As in the fashion of what happened in the Candilis office, were two then, the “team leaders” in the Rio de Janeiro based Edison Musa office: Jaci Hargreaves, who had entered in 1968, and Stella Teixeira de Mattos, hired since 1969, soon each one would receive their own team to lead.

Bear in mind that, with the opening of the São Paulo office, Edison Musa had invited his brother to take it over. After his refusal, Jaci Hargreaves, the group’s most experienced architect at the time, was probed. Having accepted the invitation, he soon would leave Rio de Janeiro towards São Paulo, where he would be Edison Musa’s partner for more than thirty years.

In the beginning of the 1970s, from what we could appraise, and according to Ferreira (apud Salgado, 2007, p.27) –, Edison Musa worked as the architecture project coordinator, performing managerial actions to assure the interfaces (between projects and between these ones and the construction execution project) were “worked on the proper way to generate the global solution of the predicted planning”. The coordinating task included, therefore, the compatibility between architecture with its complementary projects, besides with the industry, what left architects and engineers face to face around a shared goal: get to the working site with a minimum of predicament to guarantee maximum quality.

The technical team then formed a unique team which successively faced the tasks one after the other. With the increase of the clientele, several simultaneous orders forced EMAC to an posture that allowed the work to be done in a parallel fashion. This would be the time of the development nuclei, or the "little teams" to gain prominence, with their team leaders receiving more autonomy for conceiving and developing the architectonic project.

The sequence of the proceedings concerning the creation process and the project production at EMAC, at that time, consisted of:

- (1) an Edison Musa's initial risk, which took into consideration the current legislation and the necessity program defined together with the client;
- (2) a preliminary study phase, passed along to an architect and/or a drawer of the technical team, who put them on a legal project placement;
- (3) project approved, started the execution of the blueprint, when then the complimentary projects became compatible through meetings that integrated the architect with his engineer peers, external collaborators of the office.
- (4) blueprint decided, the executive project was developed, with technical detailing and specifications, which imposed the dialogue among several industries, and was kept, with independence by the office leaders.

It is also noted that, in the 1970 structure, the architecture contests were linked with the executive project team. They were performed, as soon as the calling, by a team, signed in red, referred *asad-hoc*, that is, especially assembled for that purpose, when this was the case, with some architects from the internal office team. These ones took over the contest, whose deadline was systematically short, and had their tasks, previously predicted by their work plan, redirected to other colleagues.

3.2. EMAC, second phase: 1971-1985

Scene 5: EMAC, big-sized architecture office

In the line which divides the two first EMAC phases, we consider as relevant, as previously mentioned, the opening of the São Paulo branch, as well as Edmundo's coming back to the Rio de Janeiro's team, as we understand: (1) São Paulo would cause the thickening of the projects, the duplication of the technical team and the time division for the architect Edison Musa, bringing the need of thinking about organization and method to manage the two cities; (2) the Edmundo Musa's methodic temper, associated with his administrative strictness had a lot to do with the Rio de Janeiro team to accelerate their production capacity and had worked rhythm to be considered as industrial. The office grew continuously and there was the need of

regulating the tasks in order to make them impersonal, which is, as the employees changed, routine remained unaltered.

The number of employees in the technical area (architects and drawers, added by engineers after 1976) grew vigorously in the period, jumping from 11 to 62 professionals. Evidently, this was corresponded by a physical space increase of the office, which, in 1972 started to occupy five rooms on the fifth floor of the Pancreto building (Figure 6), increased in 1983 to the total occupation of the same (Figure 7), to which were added three other rooms on the tenth floor.



Figure 6. EMAC - *Pancreto* Building. 323 Princesa Isabel Avenue – 5th floor. Physical Growth, 1971. Elaborated and Designed by Marise F. Machado



Figure 7. EMAC - *Pancreto* Building. 323 Princesa Isabel Avenue – 5th floor. Physical Growth, 1983. Elaborated and Designed by Marise F. Machado

The EMAC second phase beginning would represent reorganization in its general structure, regarding its repartition, both for functions as well as established clients. In the 1976 organogram (Figure 8), we noticed DAF and DEPEC as the two EMAC's backbones, with the first one performing the support actions, presenting itself as "robust" owing to the fact that it had the Rio de Janeiro office the one which managed the São Paulo branch.

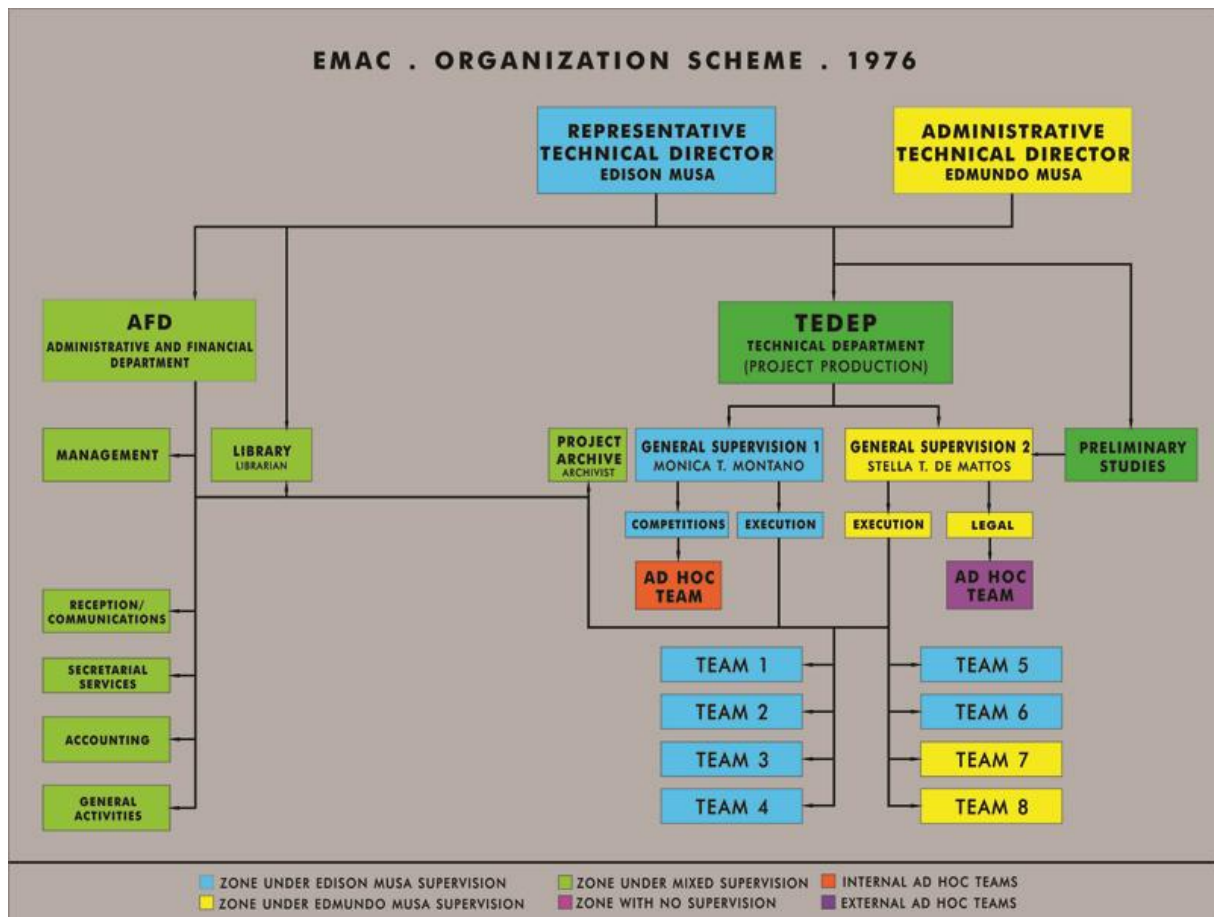


Figure 8. EMAC - Organogram, 1976.
Elaborated and Designed by Marise F. Machado

The branching and expanding hierarchical structure has to be noticed from its top where Edison Musa stands – regarding his mobility towards the clients, external collaborators, industry, entities and journals – occupying the position of EMAC's Representative Technical Director. Edmundo Musa appears as Administrative Technical Director, position earned because his permanence in the office, which allowed him to have full control over all the activities and projects developed there. Characterized by the blue and yellow colors, we could realize each one's influence zone at that moment, as well as the one that united them, in green.

In this condition, two ramifications, the first one which takes them to the initial studies, first project risks that the brothers start to develop, if not in partnership, from the preliminary discussions they had between themselves, backed by the drawers who assure them the

preliminary drawings at a 1:200 scale; the second one, which binds them to the Technical Department and, consequently to the office production project sector. In that same year, DETEC starts to be assigned two General Supervision functions, strategic positions of leadership and control and worked as bridges between the two brothers and all the EMAC's technical team. One of them fronted the legal projects, although also supervised some of the executive ones, the ones originated from Edmundo Musa. The other one took over most of the company's executive projects, as well as the occasional contests.

A curious point of the same organogram was showed at the *ad-hoc* team featured by the purple color, responsible for the boards for approval: these were produced on the weekends, in routine turnovers, functioning as ansporadic job, where everyone who wanted to participate earned by drawing, and prices varied by its complexity.

The collective working scheme was already showing of vital signs operation in 1976. We realized the division by teams had existed from the beginning, starting from the experience of Edison Musa in the Candilis-Josic-Woods office. It also has to be mentioned that the latter, having to cope with the situations as they came by, had done research on the theme, mainly in the *AIA – American Institute of Architects*, which, at the time had already have an extended list of works on architecture office administration, subject almost totally ignored in Brazil. But the new data in this second phase, to characterize a specific "Musa Method" in action in the company was the disciplinary role by Edmundo Musa, scheduling weekly meetings, each of whom registered in minutes, he believed the group would be able to adjust their rights and mistakes. After all, duties would be distributed, responsibilities taken and results would be presented in regular meetings, always written and signed by the attendants. This would generate greater commitment which would mobilize each one of the professionals to perform more and better. Key concepts of the American industrial vision would be applied in the office, identified by new organizational attitudes; control was needed to be exerted, evaluation be effected, gratifications offered and permeating everything, the time appropriation. These would be the four pillars EMAC would support its management system in the following years.

Beyond the teams, that in 1983 (Figure 9), at DETEC, would add up to twelve – here we have to emphasize the existence of two very distinctive nuclei in that department: (1) the corporative one with Edison Musa, his direct supervisor and several technical teams related to him; (2) the real state one, provider of the office's daily financial obligations coordinated by Edmundo Musa and also with supervision and its own teams.

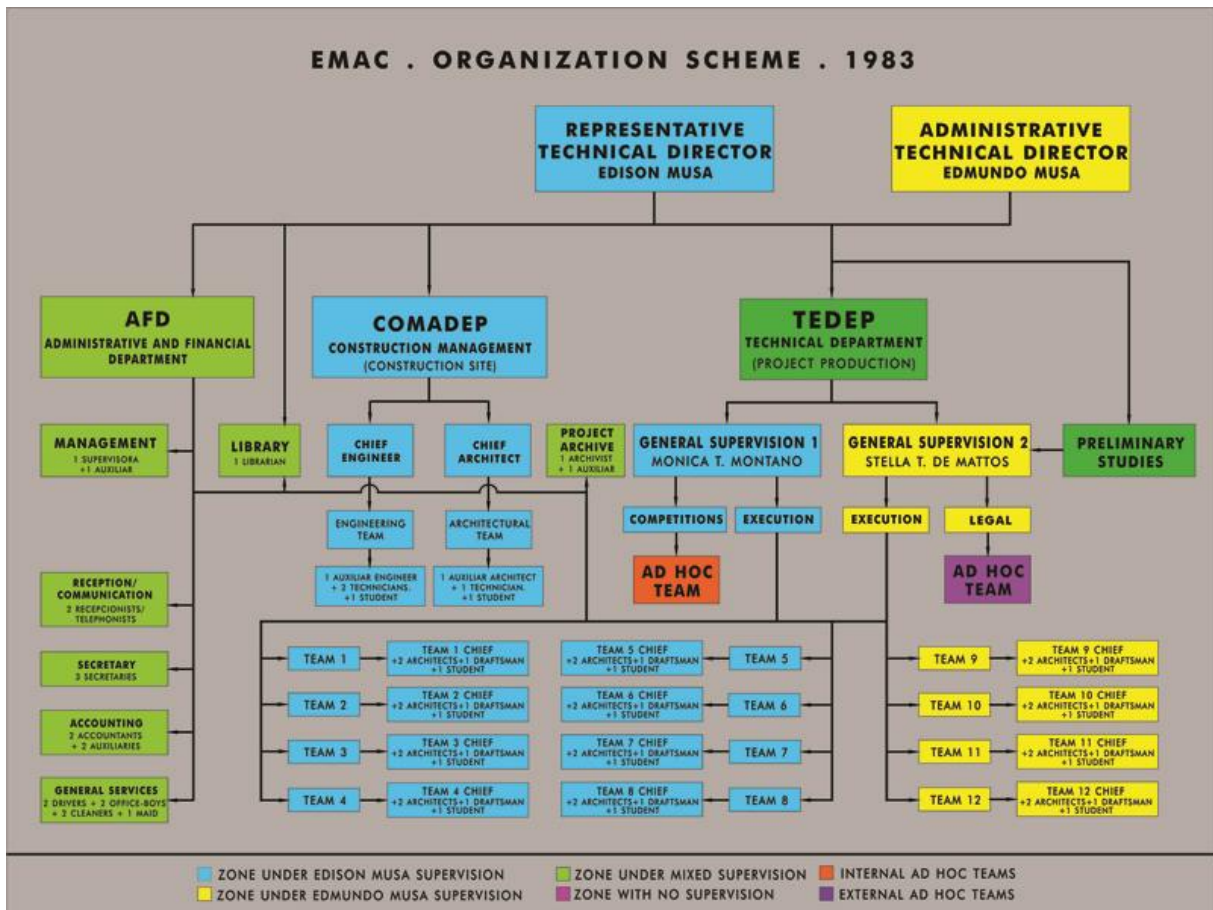


Figure 9. EMAC - Organogram, 1983.
Elaborated and Designed by Marise F. Machado

The aforementioned DEtec was formed by architects and drawers, in different levels of function and salary. They were: (1) the project managers, that is, the architects who lead the team; (2) the technicians, architects and drawers who work under the manager's orders, normally in three to four professionals by team; (3) the architecture interns, who occupied a whole new big room in the office, which they named "Maracanã". In the summit of the DEtec's pyramid, as we had already seen, are the two general supervisions.

The weekly control each manager applied on their subordinates related to the production they were responsible for, as well as, the worked hours, in the end of the year this would become a document called "productivity accumulated summary" (Figure 10), with supporting data of this financial-administrative mathematics, presented the teams in a "ranking" of the ones which had the best productivity performance to the ones with the poorest results.

EMAP / EMAC

RESUMO DO ACUMULADO DA PRODUTIVIDADE 1987

(OTN=522.99)

EQUIPE / PROJETOS	TIPO	TOTAIS ACUMULADOS-Mes: 1 a 12/87			
		HORAS		OTN	
MARA		3,344.5	6.3%	808.37	4.8%
ESTUDOS (EQUIPE 1)	:Estudo	1,149.5	1=16	160.59	2=144
ALVARO RAMOS	:Legal	36.0		17.66	2
GASTAO BAHIANA	:Legal	38.0		17.63	2
PRUDENTE MORAES 1694	:Legal	131.0		49.41	2
PRUDENTE MORAES 1694	:Legal	22.0		6.68	2
RIO BRANCO 87	:Legal	37.5		11.75	2
CANAL MARAFENDI - L1	:Legal	274.0	1=11	19.27	2=8
U3	:Legal	24.0		0.00	2
FREI LEANDRO (CBCF)	:Legal	16.0		0.00	2
PARQUE DAS ROSAS - L4	:Mod.Leg.	129.5		60.52	2
RUA AMARAL	:Mod.Leg.	44.5		15.77	2
PRUDENTE DE MORAES	:Mod.Leg.	23.0		7.11	2
GASTAO SENGES	:Mod.Leg.	1,046.0		355.88	2
CANAL MARAFENDI - L2	:Mod.Leg.	14.0	1=4	6.89	2=2,8
PARQUE DAS ROSAS - L3	:Mod.Leg.	217.5		64.70	2
ITUVERAVA	:Mod.Leg.	8.0		1.00	2
ALFREDO AGACHE	:Mod.Leg.	28.0		0.00	2
URUGUAIANA	:Mod.Leg.	52.0		7.63	2
QUADRA U L3	:Mod.Leg.	54.0	1=31	5.89	2=179
MODESTO		4,122.0	7.8%	1,417.37	8.4%
ESTUDOS (EQUIPE 2)	:Estudo	210.0	1=81	121.59	2=41
CHP (COPACABANA PALACE)	:Legal	13.0		6.70	
BRASCAN - AV DAS AMERICAS	:Legal	67.0		29.33	2
QUVIDOR "C & A"	:Mod.Leg.	16.0		11.45	2
FABIO DA LUZ	:Execucao	241.5		113.12	2
RIO BRANCO 1	:Execucao	994.5		325.57	2
RES. ERICD BARROS	:Execucao	311.0		143.14	2
CENTRO CULTURAL	:Execucao	1,518.0		428.60	2
QUITANDA 60	:Rev.Exec	79.0		35.96	2
REVIL - RIACHUELO	:Rev.Exec	35.0	1=986	15.53	2
QUITANDO 60	:Acc.Exec	83.0		48.64	2=431
DULCE		5,110.0	9.7%	2,074.67	12.3%
ESTUDOS (EQUIPE 3)	:Estudo	122.0		64.08	2
NACIONAL - Etapa 3	:Legal	40.0		12.26	2
PARQUE DAS ROSAS - L4	:Legal	13.5		4.20	2
NACIONAL - Etapa 1	:Legal	17.0		3.80	2
Sto. AGOSTINHO	:Legal	19.0		4.11	2
PARQUE DAS ROSAS - L4	:Mod.Leg.	68.0		29.45	2

RELATORIO 1 VIA

Figure 10. Procedure: Control through Appropriation of time and Financial Productivity.
 Issued Document: Abstract of the Productivity Accumulation.

Source: EMAC's Archives

It is observed reinforcement in the collective aspect of the EMAC creation process, with the now effective presence of a Study Group, with the increase in demand, would become responsible for the project preliminary studies 'elaboration, developed according with the architectonic parties suggested and agreed on with Edison Musa and Edmundo Musa. This group, from the beginning of the 1980s, would become, at EMAC, the starting point of the architectonic project production, which gained life of its own, yet supervised. The result of the research they did on the then current legislation showed in data related always to the same analysis categories, what ended up leading to the making of a specific document, which they

called "Land Diagnosis Broadsheet" (Figure 11), whose basis is still being used by both brothers, working in distinct offices since 2000.


		
Cliente :	Data :	
Endereço :		
Bairro :		
Estudo No (Cliente) :	Estudo No (Arq&Urb) :	
Planta No :	R.A. :	
Aero Novo :	Aero Digital:	Aero Antigo :
I.A.A. :	I.A.T. :	
Área do terreno :	PAL/PAA :	
Decreto/Lei :		
A.T.E. :		
Zoneamento :	Taxa de Ocupação :	
RN (nível de referência) :		
Gabarito :		
Afastamentos :		
Área útil mínima da unidade residencial :		
Número máximo de unidades :		
Estacionamento :		
Observações :		
Anotações :		

Figure 11. Procedure: RATIONALIZATION of the Project 's.
Generated Document: Diagnostic Sheet of the Land.
Source: EMAC's Archives

We shall characterize EMAC's decision as a landmark when it took in, in its activity structure, the constructivist trend, which had always existed in intention, though it had been restricted to eventual opportunities. With this attitude, the office made its businesses more dynamic,

increased its revenue and survived the worsening of a crisis which had been anticipated in the real state sector. Imposing itself to follow a close path as the ones of the great entrepreneurs and banks, EMAC would dedicate itself to the corporative architecture that from then on would be Edison Musa's "apple of his eyes". In it, the architect would find two crucial points for the realization of an architecture he would see as "vigorous": in the first place, the client was the user; that is the architect talked directly with the owner of the business; secondly, the image of a company had to convey seriousness, functionality and quality, which assured a fruitful partnership between conscious client and the architect who praises his job.

The policy was directed, in the beginning, for the foreign companies, because those ones were used to have the management of the architecture offices in their country of origin. In England, for example, this was law: the architect made the project, charged 6% of fees; the same architect inspected the work, more 6% of pay. This would be the profile of the Musa's Office "Project Portfolio" that would change radically between the years of 1970 and 1980: if until 1976, more than 70% of the businesses were concentrated on projects for residential buildings, from this point the situation would revert and 60% of the projects would be destined to the corporative architecture. Owing to this, one of these projects, the CAEMI headquarters, which we will use as example to show how the process was fully performed, from the clipboard to the working site.

Thus, inside the office own structure, DEFIS would be born, after called DEGER, that in 1983, according to what the respective chronogram shows, was fully active, with two interdisciplinary teams: an engineering one and an architecture one, both with two professionals from each area, one in a leadership position besides a building technician, all of whom integrated to the financial-administrative staff as well as interns of three areas.

Because they were able to establish such department inside the office itself, and subordinated to themselves, the Musa brothers guaranteed fidelity to the developed projects, at the same time they could conquer a new working market for the architect, who in there did not replace the engineer, but instead, they worked together as partners in the working site, with the first one coordinating the latter.

Undoubtedly, when it comes to the architecture offices at the time, this fact would put EMAC in a totally differentiated position, which distinguished it among the clientele they wanted to work with.

They were several the procedures that, at that time, put into operation the project production inside EMAC, originating documents that on their turn would operate its management. Starting with Edison Musa and his brother, there were board cyclical meetings, where both established EMAC's goals and directives, besides deciding on any technical, administrative, financial subject which were pertinent at the occasion. The result of those meetings was always a

specific minute, document which acquired its significance according to the subject being discussed (Figure 12).

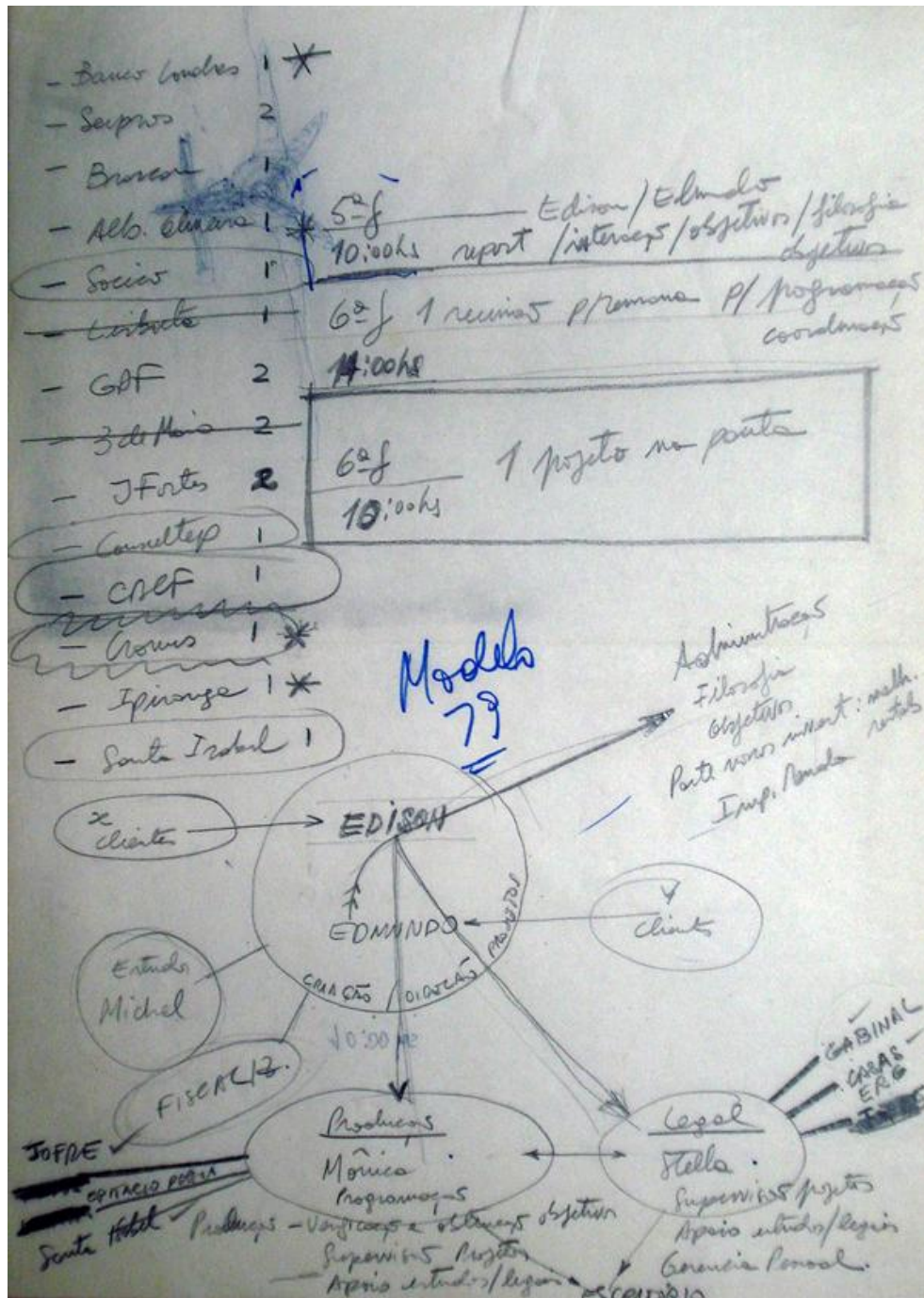


Figure 12. Procedure: FRAMING – Board Meeting, 1979.
Generated document: Organogram, with distribution of functions.
Source: EMAC's Archives

Through organizational permanent postures, the supervising was systematically discussed about the affairs of several teams, both of which, on their turn knew from weekly meetings kept with each team leader. It was when they decided on the "Weekly Programming". By using

it, the directories would be able to know what had been happening, predicted what would happen and already created parameters for future estimate on the amount of time they took to develop certain services. With total control over the so-called production, they consider important to stimulate productivity, having instituted, consequently, an award from a system of regular evaluations (Figure 13). On their turn, taking property of the experience with the finished projects, the group would be able to preview how many hours/men would be consumed on a project yet to start (Figure 14), rationalizing the production.

AVALIAÇÃO TÉCNICA

DATA: _____ PERÍODO: _____

NOME: LUIS CARLOS TÍT. DA EQUIPE: DEFIS CLASSIF.: [S]
[M]
[I]

TRABALHOS EM QUE COLABOROU NO PERÍODO:

RESIDENTE NO LLOYDS CUQUITIBA

	NOTA	PONDERAÇÃO	PONTOS
1 - CONHECIMENTO TRABALHO	8	35	280
2 - INICIATIVA	8	15	120
3 - ORGANIZAÇÃO TRABALHO	9	10	90
4 - RENDIMENTO	8	15	120
5 - CONFIABILIDADE, BOM SENSO, INTERESSE	9	25	225
TOTAL			835

RECOMENDAÇÕES PARA MELHORIA E DESENVOLVIMENTO

RECOMENDAÇÕES SOBRE A CLASSIFICAÇÃO PROFISSIONAL

OBSERVAÇÕES

SUGIRO QUE SEJA ASSINADA SUA CARTEIRA E UM AUMENTO NO SEU SALÁRIO POIS PRETENDO LEVÁ-LO PARA SÃO BERNARDO (OBRA LLOYDS). É EFICIENTE E CONHECE BEM AS OBRAS DO BANCO, TRABALHOU APROXIMADAMENTE 6 MESES NA OBRA DE BOM HORIZONTE.

PREPARADO POR [Assinatura]
VISTO POR _____
RIO DE JANEIRO, 21 DE 4 DE 84

Figure 13. Procedure: Control Through Evaluation. Technical Team Evaluation. Generated document: Specific sheets with notes and comments. Source: EMAC's Archives

PROJETO DE EXECUÇÃO			
DIMENSIONAMENTO DAS HORAS-HOMEM PREVISTAS			
PROJETO			
CLIENTE			
ÁREA			
COMPARADO COM	PROJETO		
	ÁREA		
	TOTAL DE HORAS TRABALHADAS		
TOTAL-HORAS PREVISTAS			
PRAZO PARA EXECUÇÃO			
HORAS PREVISTAS DISTRIBUIDAS POR SEMANAS			
SEMANA	HORAS / HOMEM	HORAS/HOMEM RESTANTES	Nº DE PESSOAS
1ª			
2ª			
3ª			
4ª			
5ª			
6ª			
7ª			
8ª			
9ª			
10ª			
11ª			
12ª			
13ª			
14ª			
15ª			
16ª			
17ª			
18ª			
19ª			
20ª			
21ª			
22ª			
23ª			
24ª			

Figure 14. Procedure: Control by Time Appropriation. Dimensioning: worked man-hours.
Generated document: agenda for the EMAC structuring with suggestion of new management documents.
Source: EMAC's Archives

Contracted directly with the user, as part of a complete architecture project of EMAC, the building of the CAEMI headquarters- at 300, Botafogo beach, currently *Botafogo Entrepreneurial Center* - would comprehend various services. Starting with the choices of the possible zones for receiving the proposal in gestation, followed by the search for an adequate place for this goal, the making of the legal project, the respective execution project development as well as its detailing, the building company hiring, the working site activity management, the daily executive functions and its physical-financial control follow-up. To complement all this activity, the office was also in charge of the interior project and all the

necessary measures for its fulfilling up to the time of moving. Edison Musa, the architect was the director of the project, and his supervisor, was the professional responsible, within the office. Mobilizing and coordinating the technical teams, in number of two. Totalling 10 professionals, these two teams and their respective project managers could manage their execution to be finished in exact 24 months, from the day of the choice of the land to the opening date for its inauguration. Observe below (Figure 15) the macro flux of the project, which, here, we only develop until the executive project.

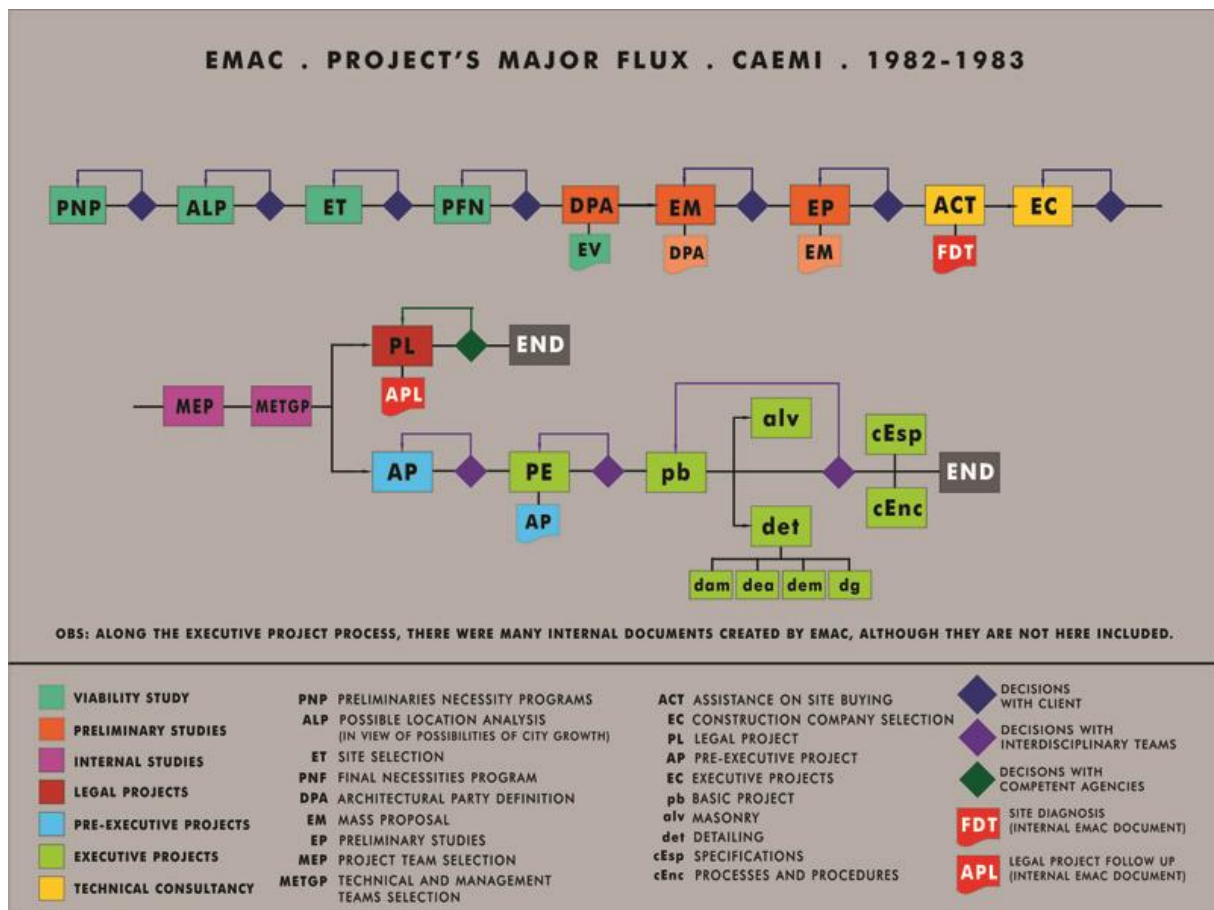


Figure 15. CAEMI – Macro Flux of Project.
Elaborated and Designed by Marise F. Machado

Final Scene: EMAC creation and process in an office to be discovered.

The architect Edison Musa, the architect gave EMAC, since its beginnings, a professional posture code and characteristic concepts of an architecture in times of transition, concepts the whole team would be supported along the years. Edmundo Musa contributed with his strict temper and administrative competence to the improvement of the existing method, boosting it as normalizer of the professional behaviors to make possible the maturing of the team and the formation of first rate professionals in the city. Thus, we can say that actually there, since the 1970s, specifically, the implementation of a very particular management system for the project

production outlined by the way the brothers thought architecture, the professional practice, the team work, the creative process.

The truth is that it is needed to see through the adjectives in which the Edison Musa office was submerged and now look for the noun word, for the architectonic objects in themselves. It is now time to prepare the land for the future critical and investigative view: the one which is freed from the weight of history tied with the myths and ideologies, will feel the thrill of unveiling a recent Rio de Janeiro, although unknown: that one, more impartially will question the EMAC production with curious eyes of whom will be seeing it, literally, in some cases, for the very first time.



Figure 16. Edson Musa Office Technical Team, 1983. Source: Revista Projeto 55.
Source: EMAC's Archives

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