TEATRO DO MUNDO | 11

O Estranho e o Estrangeiro no Teatro

Strangeness and the Stranger in Drama

FCT Fundação para a Ciência e a Tecnologia
U.PORTO
CETUP

Ficha Técnica

Título: O Estranho e o Estrangeiro no Teatro
Strangeness and the Stranger in Drama

Coleção: Teatro do Mundo

Volume: 11

ISBN: 978-989-95312-8-4
Depósito Legal: 412190/16
Edição organizada por Carla Carrondo, Cristina Marinho e Nuno Pinto Ribeiro
Comissão científica: Armando Nascimento Rosa (ESTC/IPL/CETUP), Cristina Marinho (FLUP/CETUP), Gonçalo Canto Moniz (dDARQ/CES/UC), João Mendes Ribeiro (dARQ, UC/CETUP), Jorge Croce Rivera (UÉvora), Nuno Pinto Ribeiro (FLUP7CETUP)

Capa I Foto: ©Hugo Marty, Bartabas et Sa Troupe Zingaro
On achève bien les anges - 2016
Projeto gráfico: Suellen Costa

1ª edição: julho de 2016
Tiragem: 100 exemplares

http://www.cetup2016.wix.com/cetup-pt

A CULTURE OF MATERIALS AND ART OF PRODUCTION.

THE AUDITOR COURTS OF JOAO FILGUEIRAS LIMA (1932-2014)

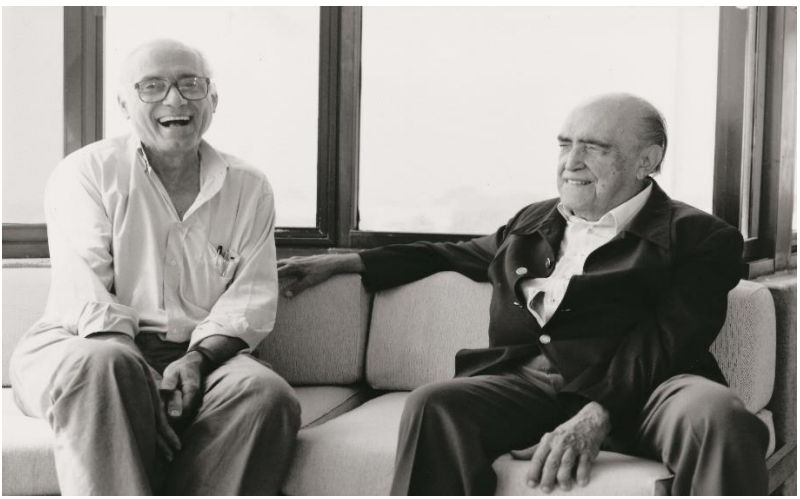
Max Risselada
T.U. Delft, Holanda

When asked to talk about the work of the Brazilian architect Joao Filgueiras Lima **(note1)** at this seminar, which tries to bring together such seemingly different subjects as architecture, justice and the stage.

I felt that lecturing about the projects for auditor courts built for the governments of the Northeastern States of Brazil might be an issue because these court buildings show such different forms of monumentality as we are accustomed too.

Court of Auditors State of Bahia, Salvador 1996

The career of the architect Joao Filgueiras Lima - we like to call him Lelé - began in the end of the fifties of last century during the realization of the new capital of Brazil where he worked as a young architect in close contact with the Lucio Costa and Oscar Niemeyer. Lelé's contribution focused mainly on the development of experimental building systems in reinforced concrete to fulfill the needs of this rapid growing city in the middle of nowhere.



Lelé and Oscar Niemeyer

Brasilia – Overview of the strip of 'quadras' as realized.

Even during the period of dictatorship (1964 -1984) he continued to experiment in spite of the contra productive forces of the military bureaucracy, trying to achieve an architectural language for reinforced concrete both poured in situ as with industrially produced building components and later also in ferro-cement and steel.

Portobras Building, Brasilia 1974

Residence for thye Minister of Stae, Brasilia 1965

Lelé became instrumental when democracy was slowly being re-established in the late seventies, when progressive central governments asked for his cooperation in realizing public provisions such as school in the favelas, infrastructural projects like sewage systems, retaining walls, but also footbridges, police stations, bus stations and bus stops, furniture to embellish the public space and in the end even health care centers and hospitals.

In all these cases he was not only responsible for the design but also for the production of the building components, as for the realization and maintenance of the buildings. For this purpose, building companies – which from now on I will call fabrica's - were established and in which the different components were produced. His search for the maximum of quality to be realized with a minimum of effort resulted in an architecture of what I like to call a 'relaxed intensity'.

Lelé's most important achievement – both architecturally and as a production system - was the realization of a chain of hospitals and revalidation centers for the motorial handicapped in the North East of Brazil – the Sarah Kubitchek Chain for which a 'fabrica' was stablished in Salvador.

It was also in Salvador in the state of Bahia that most of Lelé's projects were realized and the related building companies were established in the years before. To mention RENURB (Fabrica da Companhia de Renovacao Urbana) in from 1978-1982, FAEC (Fabrica de Equipementos Comunitarios) 1985-1989. And at last but not least CTRS (Centre de Technologia da Rede Sarah) once again in Salvador from 1992 on, where Lelé could realize in a way his dream of integrating research and production as a continuous process till left this great place in 1909.

Factory of the Salvador Urban Renovation Company (RENURB), 1978-1982

Technological Centre of the Sarah Kubitchek Chain (CTRS), Salvador

It is noteworthy that both at RENURB and FAEC the production period spans a period of only four years, being also the period that new elections are being held in Brazil. For the fabrica's mentioned above, change of government resulted in closing and dismantling both of them.

This illustrates the fact that establishing a state owned factory was of course a much criticised issue in a country where in spite of many systems of patronage, the free market and competition was all around!

The criticism did not come from contractors and developers alone; also the local architects joined the crowd, which made Lele in the end a marginal figure in both the building industry and in the local architectural circles. He also never made it to become a teacher or researcher at the Faculty of Architecture or the Civil Engineering Faculty of the State University in Salvador, a position he hoped for a long time.

Discovering the work and idea's of Lelé

Before continuing it is important to know why and how I became interested in the work of Joao Filgueiras Lima, being an architect from the Netherlands who most of his time has been a teacher at Faculty of Architecture in Delft and who does not speak Portuguese!

I got to know the work of Lele for the first time when we were in Sao Paulo in 2000 to work on the installation of the Dutch presentation at the Centenary Architectural Biennale. Tucked away in a small corner of the immense Biennale building in the Ibirapuera Park I discovered a small exhibition about Lelé's work, which then already attracted my attention.

But more important – we then also could buy a lavishly illustrated book in which Lelé's work produced up till 2000 was presented within this series of monographs. The monograph was part of a series of monographs prepared by the Lina Bo Bardi Institute under its then director Marcello Ferraz, showing that there was more 'under the sun' in Brazil than the 'mythical' modern Brazilian Architecture that dominated our perception already since the publication of *Brazil Builds* by the Museum of Modern Art in New York in 1942.

I also do remember visiting the Sarah hospital in Belo Horizonte in that period – yes, we also had to see the 'mythical' buildings in Pampulha. This was a touching experience also because of the way we were showed around by one of Lelé's collaborators and the

architect on the job who took care of the maintenance the building. Apart from admiring the relaxed intensity of this industrially produced complex around an existing building by Niemeyer, with its changing shades of light and the visible caring for its patients, I was mostly stricken and moved by the devotion of our guide to the work of Lelé.

In the years after I became more and more intrigued while studying and visiting architecture in Brazil also because of the fact that it seems to fit in the frame of my specific view on architecture.

The observations I like to make here also comes from a foreigner, an 'other' who had the possibility to visit and appropriate to a certain degree this country with its complex social and political structure and the many differences in its architectonic culture.

Speaking both as an architect and a teacher I consider this process of 'appropriation' – in some cases even of identification – important for a position of critical balance. Being conscious of the mental distance towards the complex of Modern Brazilian Architecture it was necessary to have a framework to enable this process of appropriation to happen.

Such a frame has the double purpose of tracing the work under study and displaying the intentions and the values of the viewer – being me.

For me this frame is best expressed by a short citation – here taken out of its context – of the 19th century German architect Karl Friedrich Schinkel which states in German 'Architektur sei mit dem Gefühl erhobene Konstruktion' or in English 'Architecture might be construction elevated by the senses' or in Portuguese perhaps '.

Although the German word 'Gefühl' is nowadays mostly associated with a state of mind, the German verb 'fühlen' still means both a state of mind and the sense of touch that might be associated with it.

To say it in another words, the citation might inform us that the constructive both only acquires meaning by way of our sensory perceptions and the feelings that are evoked by it and otherwise, that the tactile experience of constructing and the pleasure of producing is transmitted in the product as experienced.

What is experienced and the experience of producing it, should not be considered as a dichotomy but as a distinction that should

be overcome during the process of realisation. This means that the architect should become conscious about and experience the handling of materials and how they are transformed, produced, assembled and ordered and that he has a hold on the processes involved.

For Lelé it was therefore necessary that the sequence of planning, designing, materialisation and execution as much as possible are brought under a common denominator; a chance that was given to him several times since the end of the seventies of last century by the more progressive central governments that were sometimes in power and who felt the need to build the necessary facilities and services for the people.

The consequence was a return to the shop floor and in terms of industrial production to the 'fabrica' which is not only a place of production but also a laboratory - a place of patient research, 'une recherche patiente' to speak with le Corbusier - in spite of the fact that he mostly was not given much time!

In spite of the tragic fact that he had to give up the fabric's several times - which then were dismantled - Lelé and a loyal group of collaborators continued their patient research.

With the title of this essay 'A Culture of Materials and the Art of Production' I tried to characterize this type of research, stressing the importance of understanding the inherent qualities of materials and the way to handle them in different stages of production – from handcraft to different forms of industrially produced – for developing an architectural language.

The Abadiana experiment

One of the main research projects in which the developing an architectural language can be followed was testing the possibilities of the use of ferro-cement – a combination of materials that was of little use in the building industry in Brazil before but already had been researched at the university of Sao Carlos in the seventies.

By using only cement, reinforced by a thin net of metal mesh a component of only 4 cm thick can be produced that nevertheless is waterproof. Its powder like structure makes complicated forms possible which is of special interest in the detailing of the edges of

the components to be produced. Furthermore, it is much lighter than reinforced concrete and when used in small elements these can be carried by two persons, of importance to diminish the use of auxiliary equipment like a crane etc.

Early experiments with this material were already done at RENURB, where mostly urban furniture and building components for infrastructural works like retaining walls, sewages etc. were produced.

It was at the short interval at the rural workshop in Abadania during the years 1982-1984, between the closing down of the RENURB in 1984 and the establishment of FAEC in 1985, that the potential of this material was fully exploited in producing and assembling components produced for transitional school buildings. In fact, this experimental project became the theoretical and practical basis for all the developments that came afterwards even up to the Sarah chain of hospitals and revalidation centres.

Apart from the technical aspects it was perhaps more important that the Abadiana experiment was also a moment of learning for the local inhabitants how to build their own school building assisted by Lele himself, discovering the pleasures of building with new and advanced building materials and components, in spite of the absence of an industrial infrastructure on the spot.

Abadiana experimental school system: Lelé teaching the workers how to prepare he ground for putting up a column

The metal molds in use at the workshop in Abadiana

Lele assisting the assembling of the gutter-beams to the columns

The placing of the modulor wall-elements

For this purpose, Lelé developed a building system consisting of a limited number of components to minimize the costs of the production of the expensive and precise steel molds which were produced in Salvador. These light components, to be carried by only two persons, should be combined with as little tools as possible and should not need any finishing off. The whole structure consists only of five components:

- a beam with a complex section that also functions as the gutter;
- a column which is hollow to drain the water which is collected in the gutters;
- a wall element;
- a roof element;
- a roof light;

The form and detailing of the edges of each element is such that the components interlock one another so that no extra joint elements are necessary to make a necessary stiff connection in these low rise buildings. In their repetition these joint details also

contribute to the architectonic experience of the buildings realized with this building system.

The main architectural feature of this building system is the overhanging roof as a consequence of the construction of the supporting structure, which is set back and between which the closing elements are positioned, in this case door-panels which span the total height. The overhanging roof at the same time also function as a projection against the sun.

By differentiating between a modular supporting structure of linear components and a filling structure of flat modular elements made of different materials to function appropriate to their function, the building system in fact has become an open system that can house other functions too, as was demonstrated in projects developed after 1985.

Apart from this flexibility in dimensioning the main focus was on better isolation, quality of the finishing and improvement of climate control by ventilation and the natural lighting by way of the roof surface, an aspect that was already a main preoccupation of Lelé during the years past.

The Abadiana experimental school system: the building as realized

Psychiatric clinic in Taguatinga (FAEC)

The Sarah Rede Hospital Chain for the motorial handicapped and the establishment t of CTRS (Centro de Tecnologia da Rede Sarah Kubitschek, 1992-1999)

One of the early experiments to implement the improved building system into another programme, was for a hospital complex in Taguantinga near Brasilia in 1988. It was in fact the incentive to use it also in the first proposal for the hospitals to be built for the Sarah Rede Chain in the same year.

In the end however steel was introduced for the main structure of the buildings while ferro-cement was still used for the partitions and other box like components. As all the components had to be transported over many miles to the main cities in the North East of Brasil, steel was easier to handle and lighter to be transported in big quantities. Steel also had the advantage that more complex components could be developed that were easier to connect to each other. For the research, planning, projecting, production of all these components and the final realisation Centro de Tecnologia da

Rede Sarah Kubitschek (CTRS) was established in Salvador, the city where Lelé already had worked before and also had 'failed'.

There is a logic that these hospitals for the motorial handicapped are preferably horizontal in plan. As a consequence, the roof is emphasized as functions like the entry of light, ventilation and sometimes even the view outward, functions that normally are related to the elevations, now for the most part are relegated to the roof surface to provide the desirable play of light and ventilation. Traditionally these functions led to an idea of Architecture both in the composition of windows and other elements in the elevations of buildings as to the idea of space as experienced within the buildings.

In the hospitals the light-shed is the element to provide the qualities mentioned above; with a minimum of means such environmental qualities as light, temperature and acoustics are regulated by a single building component – the shed - which at the same time defines the presence of the building – its Architecture.

Overview of the Sarah Kubitchek hospital and revalidation Centre in Salvador (1991-2001)

Overview of the Sarah Kubitchek rehabilitation center and educational facilities at Lago Norte in Brasilia (1997-2003)

Overview of the Sara Kubitchek hospital in Rio de Janeiro (1999-2010)

During the years three basic shed types were developed as an answer to the different climatic conditions to be considered. The form of the section of each of these types is identical but can vary in size depending on the span. In their repetition they define the overall appearance of the building complex, especially in the first projects to be realized. In successive projects other solutions were sought after to span bigger surfaces. While providing the same environmental qualities they have an identity of their own and are experienced as such both as space and appearance.

Together with the sheds they constitute an alphabet of roof shapes that is characteristic for and determine the Architecture of the hospitals of Sarah Rede and the Tribunals de Contas as built by CTRS during the years 1996-1998.

Court of Auditions of the state of Bahia, Salvador (1996)

Court of Auditions of the state Minas Gerais, Belo Horizonte (1997)

Court of Auditions of the state of Alagoas, Maceio (1998)

Notes

1. For a more complete overview of the work of Joao Filgueiras Lima see *'Joao Filgueiras Lima – Lele'* edited by Giancarlo Lattoracca, Editorial Blau, Lisbon/Instituto Lina Bo e P.M. Bardi, Sao Paulo.
See also '*A Arquitetura de Lele: fabrica e invencao'* edited by Max Risselada and Giancarlo Lattoraca, Imprensa Oficial do Estado de Sao Paulo, Sao Paulo 2010, One can consider the last mentioned publication as a sequel to the monograph that was published in 2000.

2. In German Schinkel's quotation reads 'Architektur sei mit dem Gefühl erhobene Konstruktion'. Although the word 'Gefuhl' is more associated with a state of mind nowadays, the verb 'fuhlen' still means both a state of mind and the touch that might be associated with it. In the Oxford dictionary also has two related meaning for the word 'sense':

- an awareness of feeling that one is in a specific state;
- a faculty by which the body perceives an external stimulus; one of the faculties of sight, smell, hearing, taste and touch.

All images are property of Léle Filgueiras archive.