Densification and upgrade of university buildings, Rio de Janeiro, Brazil

Project data

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Main author

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- **Study direction**: Architecture and Urbanism
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Comment of the Holcim Awards jury Latin America

The jury found the general approach of the project convincing, denoting the campus on the one hand and creating new public spaces on the other. The necessity of handling existing structures is a theme of high value, particularly because the project dares to deal with well-designed buildings. The claim of promoting simplicity is well presented in the strategy, yet certain appropriate technical proposals are made. The design also responds successfully in terms of the site's context with a strong architectural language.

Project description by author

The Pontificia Universidade Catolica do Rio de Janeiro (PUC-Rio), is one of the most important national institutions, holding the first positions of teaching quality in Brazil. With a campus of over 100,000m2 and 20 buildings, it is located in the oldest neighborhood of Rio and is inserted inside dense and native vegetation. Today the university suffers from a serious problem of lack of space and the existing spaces organization. The lack of a strategy of growth and investment on the requalification of this existing space is very harmful to PUC and has deployed in a politics of temporary solutions. PUC-Rio needs to invest intelligently on its other hand on logistics: on its organization, on program and programs. It enlarges the time of uses of the university and differently from their original intention 30 years ago. The insertion of this new building is a turning point for all the spatial organization that was there before, now there is no separated parts, the new reactivates the old and depends upon it at the same time. Their structure, for instance, is together, there is no need to build all over from zero when it is possible to use what exists on the site.

Relevance to target issues by author

**Innovation and transferability – Progress**

This is a project to be seen alone, it was born from the idea of renewing all the existing infrastructure of the site. By a form and a programmatic logic that connects the surrounding buildings, it creates a new kind of built cluster where the whole is more than the sum of the parts. This new configuration enables the old buildings to work better and differently from their original intention 30 years ago. The insertion of this new building is a turning point for all the spatial organization that was there before, now there is no separated parts, the new reacts to the old and depends upon it at the same time. Their structure, for instance, is together, there is no need to build all over from zero when it is possible to use what exists on the site.

**Environmental quality and resource efficiency – Planet**

Extremely efficient in its functioning, the project deals with a wide range of sustainable solutions for the building's maintenance. It creates a "field" of energy generation through solar panels, recycles water, brings biodiversity through green roof, almost doesn't touch the land, appropriates the existing structures of the surrounding buildings for its use, and renews those old building by inserting new methods of use and programs. It enlarges the time of uses of the university by bringing new functions to the campus, like residences and a conference auditorium. It is inserted in the nature in a way to minimize the damage to it while embraces the green to put its users in contact with it.

**Ethical standards and social equity – People**

This is a building inside a university what is from its first beginning an inclusive place, where the search for knowledge and mental evolution are defining principles. Moreover this is a site close to the favella of Rocinha and PUC-Rio has always been involved with social programs of interaction in this community therefore this should be a building built by a cooperation of different social level workers, a kind of laboratory and teaching school of construction.

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Economic performance and compatibility – Prosperity

The idea is to maximize uses in order to exploit everything each building has to offer, it proposes new ways of using the existing space, bringing to the surrounding buildings the program necessary for them to work fully extending their performance. The complex will be energy-efficient and in a long-term the initial building cost will be funded by the rental of houses proposed with the annexed building (Minhocão) and the rental of the conference center.

Contextual and aesthetic impact – Proficiency

The project is dedicated to renew the image of the PUC therefore all its steps are of building a better environment. It unites the existing buildings in one complex and builds a solid and coherent image for the university. By joining the buildings, a new sense of direction is created and the hill that before was considered behind the building is now part of it and integrates the university campus with the existing forest.