

Intervenções Urbanas Paramétricas

Urban Parametric Interventions

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Abstract: *Renowned Architecture schools are acting globally by means of international workshops. In these, new methodologies of digital parametric representations are applied in urban interventions. We bring forward an inflatable solution for sheltering a sports event, held under a viaduct. In this case, parametric technology was employed in the design, with the use of digital fabrication. Several other interventions were proposed for the same space chosen for the action of a multi-disciplinary group of professors. Differently from government actions that usually focus on the removal of social problems this workshop sought a solution through technology, new materials and parametric design.*

Palabras clave: parametric design, urban interventions, metaballs, augmented culture.

Introduction

In the last decades, societies have seen their markets, production and monetary systems interlinked. Some of what was confidential or secluded in some countries nowadays is being shared. The production and assembly of goods, including packaging, and their consumption has gone beyond the traditional exporter-importer associations. Flow line production systems have gone beyond the walls of a single factory, to become globally distributed. The search towards leaner production systems involve all phases of product lifecycle, through concurrent design and engineering.

The globalised World is irreversibly interlaced in practices designed for the competitiveness of projects that deal with complexities. The internationalization of manufacturing systems, with the exchange of information and ideas most likely influences local cultures, even when unintentional. Efforts of this sort, towards the solution of social issues, on the other hand, are rare.

This article explores the introduction of a World class design and production approach in solving social issues, involving local cultural aspects. The interlacing of cultural and technological significances in a complex context can be translated as “augmented culture”. Projects aimed to overcome time, space and linguistic barriers can sometimes achieve remarkable results, when searching to solve urgent demands of social groups that have been ex-

posed to catastrophes, threats or necessities that weaken local culture.

If the global World unified markets, on the other hand it separated even more those who detain knowledge of those who need it to solve their daily problems. Not only, but especially, in the case of developing countries, that have degraded urban areas in which local culture is weakened by violence and cultural deterritorialization¹. The AA School of Architecture has been promoting international workshops bringing new design methods with digital fabrication, with local and foreign teams of professors and students acting towards the solution of problems. Workshops conducted by professors Franklin Lee and Anne Save de Beaurecueil, in 2010 and 2011, focused on the urban context and local culture of São Paulo, Brazil.

The resulting interventions involve different points of view, developed through digital design interfaces, and also the use of algorithms and digital manufacturing equipment. Innovation, in this case, was the combination of parametric design with use of reusable materials. Professors, students and public intended by the project participate in unprecedented way, creating auto sufficiency, not a relation of dependence.

¹ French philosophers Deleuze and Guattari coined the term deterritorialization, a contemporary capitalism process, in which a territory is not merely geographic space but cartography of needs, re-territorialized through a sophisticated domination system.