

## PAMPULHA ALTERNATIVE FUTURE Modernism, dynamism and conflicts of interests

### Geodesign Workshop Belo Horizonte, August 2015

#### *WHERE WHAT*

Last August, a Geodesign workshop was held within the post-graduate Course in Architecture and Urban Planning (NPGAU) at UFMG. The workshop focused on the conceptual design of alternative futures for the urban district of Pampulha in Belo Horizonte, Brazil. Pampulha, which was original design by Oscar Niemeyer and Roberto Burle Marx under the aegis of Juscelino Kubitschek, represents a very important example of the early modern architecture in Brazil.

As an urban area characterized by its modernism values and with landscape composed by a balanced mix of natural and urban land-uses, Pampulha is currently is a UNESCO World Heritage candidate. Thus, exploring possible alternative scenario for its transformation may help to gather precious insight for savy managing its future evolution.

To this end, the Steinitz' Framework for Geodesign (2012) was applied with the support of Geodesign Hub Planning Support System.

#### *WHOM*

The workshop was organized and conducted by Michele Campagna from the Università di Cagliari and Ana Clara Moura from the (hosting) Universidade Federal de Minas Gerais (UFMG), with the assistant of the students Júnia Borges and Chiara Cocco. Carl Steinitz and Hrish Ballal kindly advised in the data preparation and supported the organizers to set up the project in their platform Geodesign Hub (GDH) collaborative design support system (Geodesignhub.com).

The workshop was organized within the post-graduate Course in Architecture and Urban Planning (NPGAU) at UFMG. The group of 21 participants included 10 PhD students from UFMG (2 of them professors ant UFOP – Federal University of Ouro Preto) and 6 academics (3 from UFMG, 2 from UFOP and 1 from the Pontificia Universidade Catolica of Belo Horizonte), 4 technical staff members from the public sector [i.e. SEDRU-MG -State Secretary of Urban Planning; the Ministry of the Cities (Federal Government); PBH (Municipality)], and 1 from the private sector.

The participants, the majority of which had previous personal knowledge of the local context of Pampulha, have various background spanning from architecture and urban planning, to Geographic Information System/Science, to Information Technology.

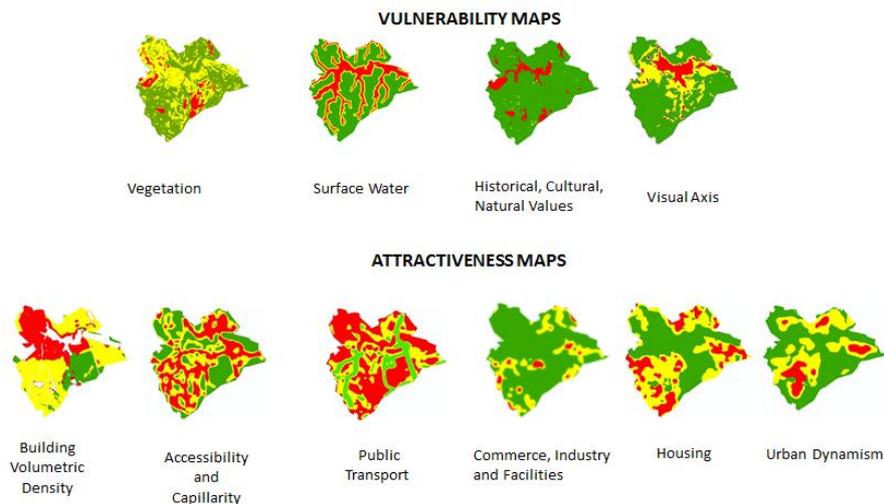
#### *HOW*

Preparations for the workshop were coordinated via Skype and took about four weeks. After initial Skype sessions, evaluation maps were prepared and project setup on geodesign hub.



Workshop preparation via Skype

Over the course of three days, the participants went through a collaborative design and change synthesis process aided by dynamic impact analysis and processing to build and negotiate alternate futures for the area.



**Evaluation models – Requirements maps**

The workshop was held along three days (i.e. 12-14 August 2015) from 2pm to 7 pm for a total of 15 hours. During the first day introductory seminars were given to the participants introducing the Steintiz' Framework, the case study and the Geodesign Hub PSS.

During the second day the participants, divided by group with different roles (i.e. developers, chamber of commerce, natural and cultural heritage conservationists, public administration, and local residents) started the core design part of the workshop drafting project and policy options in the diagram matrix.

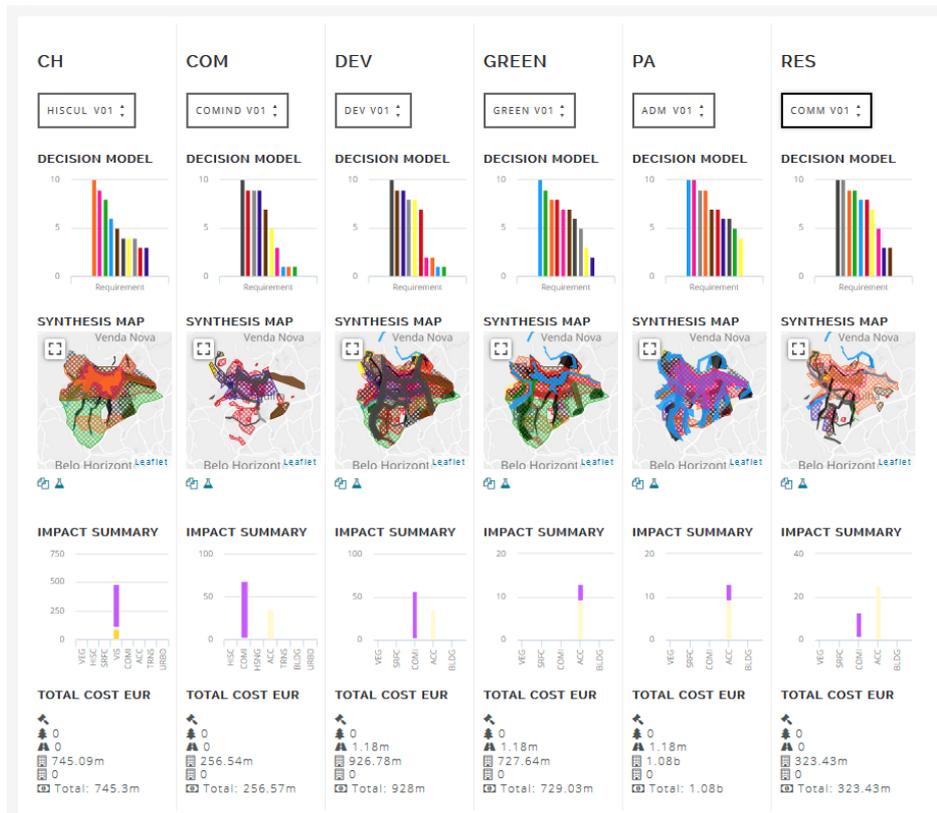
## ALL DIAGRAMS

+ ADD A DIAGRAM



Change model – diagram matrix of the Pampulha project

The groups started to assemble their future development scenario proposal in the design synthesis.



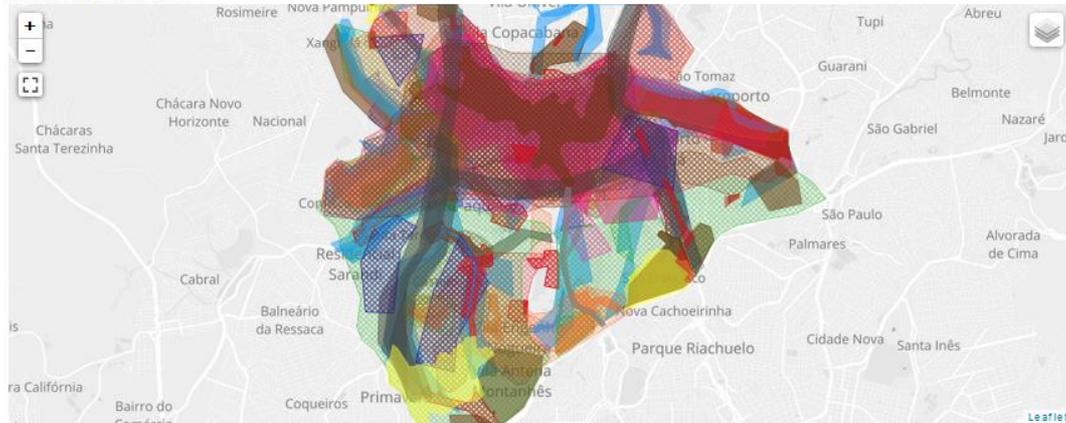
Change model – comparison of first synthesis

Afterwards, the groups compared first design synthesis and their impacts, before starting a revision of their design. After the second round of synthesis, in the negotiation process they

started to find consensus on preferable alternatives. Like-minded groups made coalitions to find consensus to work together towards few final syntheses.

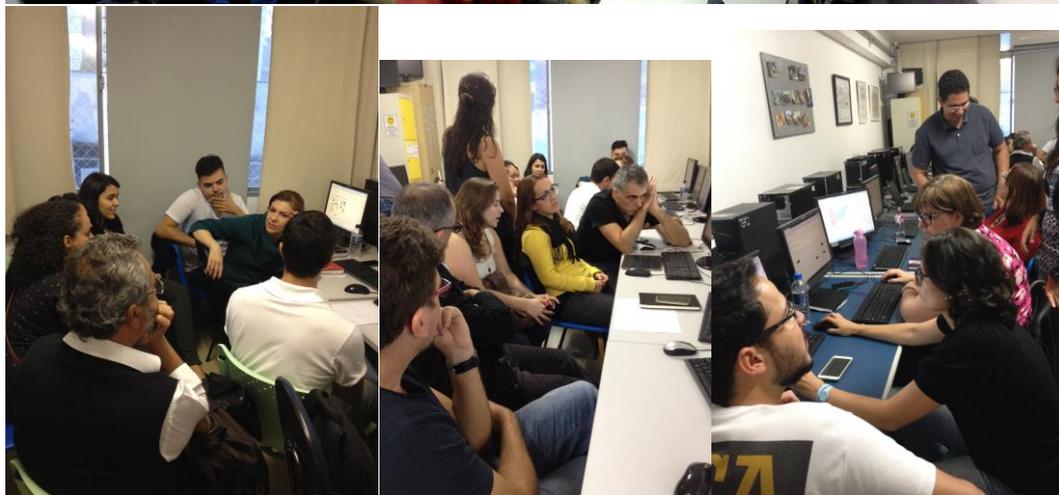
### SYNTHESIS COMPARISONS

#### OVERLAP ANALYSIS



Combined synthesis of all the change teams above.

### Change model – comparison of the final syntheses



Workshop activities – arriving to alternative consensus

### **POST WORKSHOP**

Part of the group went to Rio de Janeiro to take part in the ICC – International Cartographic Conference, in the Special Session: GEODESIGN. The first discussions and initial case studies and tests produced by the group were presented to Brazilian and foreign participants.

### **QUOTES**

*As a senior planner used to traditional planning methods based on physical tools but also aided by GIS systems I was very pleased to have the opportunity to know more and experience the geo design method. I could foresee a huge potential to improve participatory planning and decision-making processes with small data, little resources and short time. The method also proved to be a very useful and effective as a teaching resource for planning studios.*

*I like the workshop and the experience was amazing.*

*It was nice knowing how geodesign can be used in urban planning, and how the platform widens open a new level of group work with the participatory approach.*

### **SPECIAL THANKS:**

CNPq – National Council for the Scientific and Technological Development - MCTI/CNPq/MEC/CAPES Nº 43/2013, Process: 405664/2013-3.

### **Contact**

For further information about this workshop please contact the organizers:

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### **PREPARATORY LINKS**

- Book: STEINITZ, Carl. 2012. A framework for Geodesign; Changing Geography by Design. ESRI Press, Redlands.
- Youtube Video: talk of Prof. Steinitz about geodesign synthesis given at U Rapperswil in Switzerland in 2014: <http://www.youtube.com/watch?v=rwZjeUCSqc0>
- A tutorial on Geodesign Hub Software including project setup : <https://www.youtube.com/watch?v=O188WggmjX8>