### **MENARCH,** ONTOLOGIES IN ARCHITECTURE A study on architecture social function

Frederico da Silveira, Architect

### Welcome

*Architecture* is the technical art that connects and studies the *merge between men and its environment*.

"Form ever follows Function"

### The Urban Plan Key Factors

As technology evolves, so does the responsibility of architecture to deepen its concern about social functionality.



### **Urban Planning Premises**

### **GENIUS LOCI**

- Different places have different identities, this is what gives us the sense of the place and it is the premise for architecture planning;
- Communication between place, identity and architecture. Both constructed and natural characteristics define the spirit of the place, features like light, materials, morphology, social customs, interaction, architecture and the phenomenology of the environment.

#### PHENOMENOLOGY

- The shape of this urban boundaries, varied in dimension, relate to the phenomenology of human life and they change translating the human condition at the time;
- The creation of different boundaries and the intervention on urban morphology are a phenomenological manifestation that intents to communicate either an individual or a social consciousness.

#### ACCIDENT

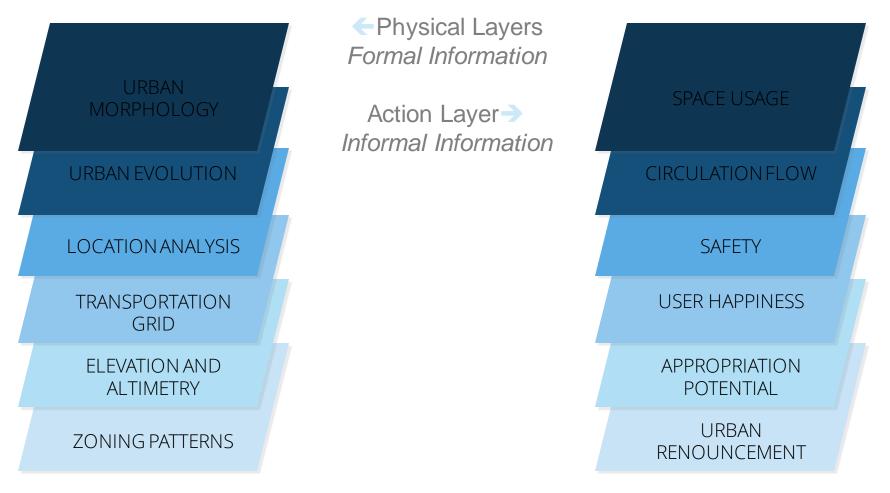
- Space is now more accidental than objective as it is constantly rescued, rehabilitated and appropriated by different users and uses;
- Perhaps the heritage factor left for us to recognize was accidental, but we can't assure that it is not the case today when art can influence the way we live in the urban space and leave a urban heritage.

### COMMUNICATION

- Communication, this is the link, the new object, defining the field of architecture and the social study;
- We now have the ability to use architecture with the purpose of studying and envisioning the energetic patterns and variables within the function of spaces and social communication.

## **Urban Layers**

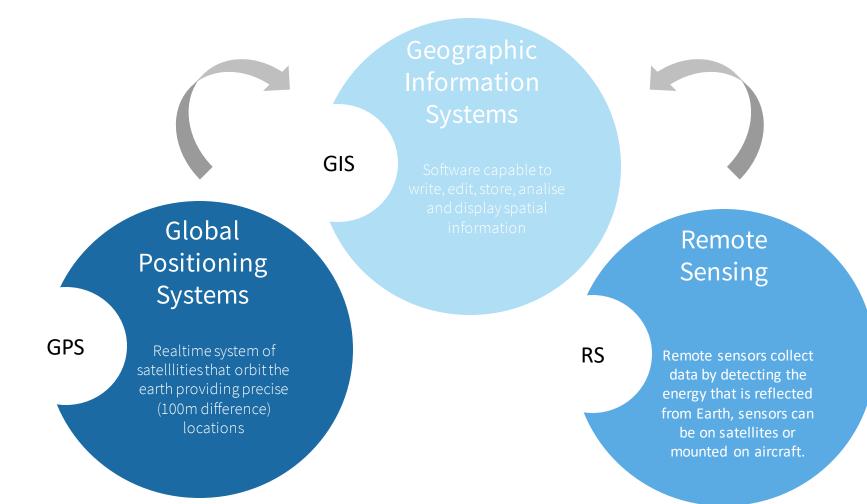
"From spoon to the city"



Spatial organization is imperative to maintain and grow a stable society.

### Geoinformatics

GPS and RS collect data to be stored and analised in GIS



# Participatory Geographic Information Systems

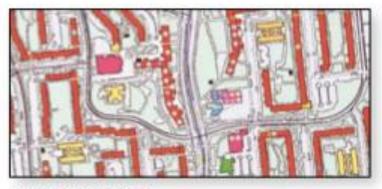
- The creation of a social identity;
- Inform the impacted and interested stakeholders, including the public, by disseminating information and maps through online GIS;
- Involve the public by getting its feedback on proposed projects and land-use changes. Citizens act as sensors and a source of geographic information;
- Empower the public to make informed decisions about existing and new development.



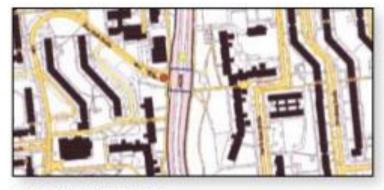


Lighting

Open Space Register



Supply With General Goods

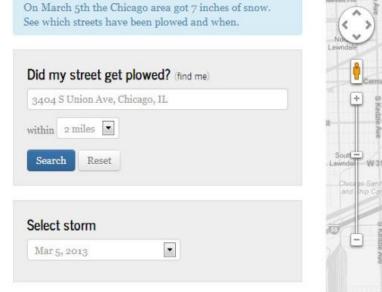


Transportation Development

### CLEAR STREETS

An Open City app

HOME ABOUT PLOW LEADERBOARD



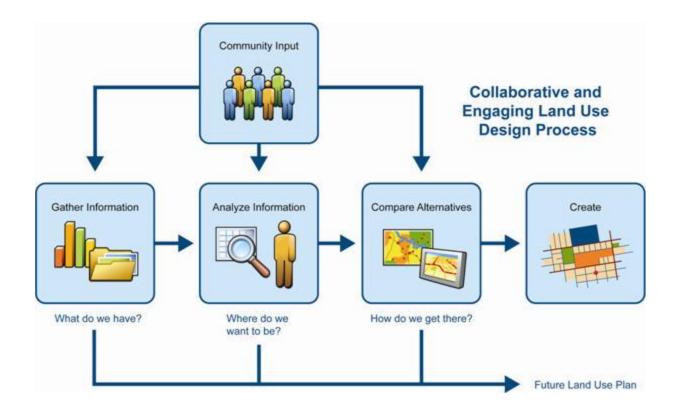
On January 3rd 2012, the City of Chicago launched <u>Plow</u> <u>Tracker</u>, an app that tracks the city's snow plows in real time. This app uses the same data. By knowing where the plows are, we've figured which streets have been plowed. <u>More</u> »



By Derek Eder, Forest Gregg, Juan-Pablo Velez, Ben Smithgall, and Samarth Bhaskar

The user interface in Chicago

## Strategy Towards a Democratic Urban Planning



### **Urban Plasticity**

Public Space as Our Space

#### Sónia Domingos - Yarn Bombing

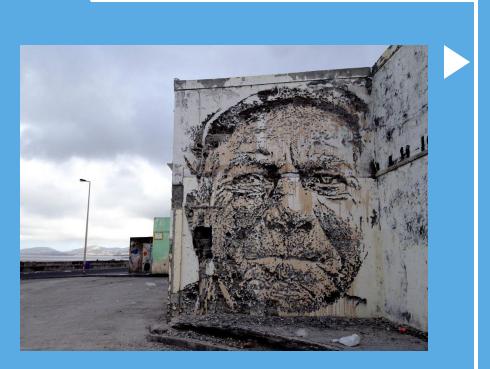
"Coloridos, ora são abraçados por flores, ora pelas mais diferentes formas geométricas ou riscas. As latas de spray dão, do Norte ou Sul, lugar ao crochet, originando uma nova forma de arte urbana."



#### Hass and Hahn - Rio de Janeiro



"A project that aims to transform communities into landmarks and inspirational monuments as a part of Rio's image, next to the statue of Christ the Redeemer and Sugar Loaf mountain."



#### Vhils, Açores - Portugal

"An avid experimentalist, he has been developing his notion of the aesthetics of vandalism in a plurality of media – from stencil painting to wall carving, from pyrotechnic explosions to 3D modelling – which have enabled him to expand the boundaries of visual expression."



#### Parking Day

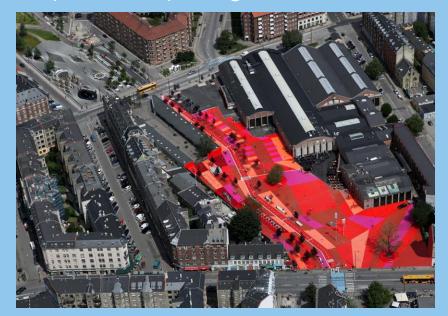
"PARK(ing) Day is an annual worldwide event where artists, designers and citizens transform metered parking spots into temporary public parks."

#### Feira da Vandoma – Porto, Portugal



Lorem ipsum dolor sit amet, consectetur Praesent sodales odio sit amet odio tristique quis tempus odio

#### Superflex, Bjarke Ingels Group and Topotek1 - Copenhagen, Denmark

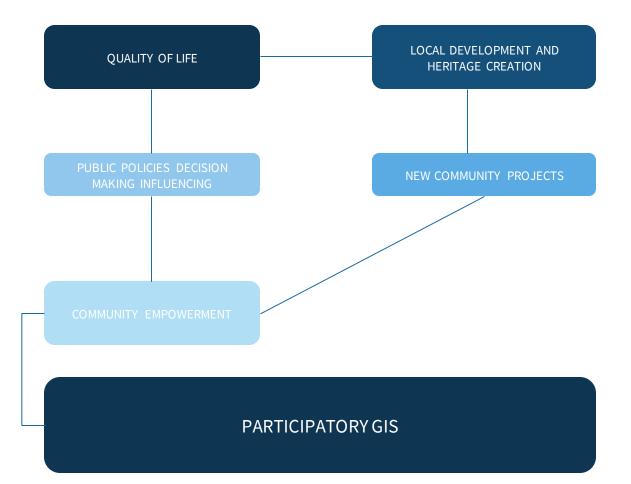


"The park is intended to celebrate diversity. Filled with objects from around the globe, it is designed as a kind of world exposition for the local inhabitants, covering over 50 nationalities, who have been able to contribute their own ideas and artefacts to the project."

### **Urban Strategy Plan**



### **Urban Strategy Plan**



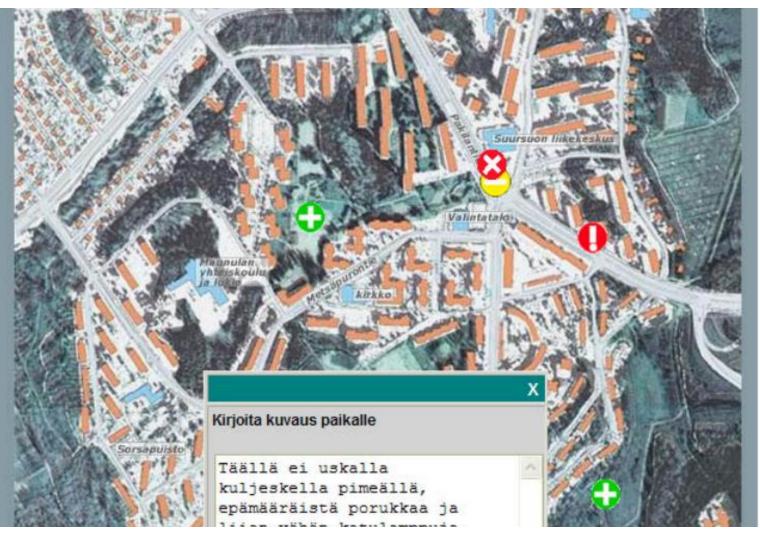
Urbanism and architecture driven ontologies are created in order to assimilate and dissect different data features in order to find common information links that create groups of agents in the urban environment. Through the study of a gathered information we can observe how the urban places evolve on a daily basis and we can make up nodes on urban space based on different chosen filters. Ontologies play an important part in development, analysis and understanding of the urban space as they can provide knowledge that was never before accessible.

Liikenteellisesti vaarallinen

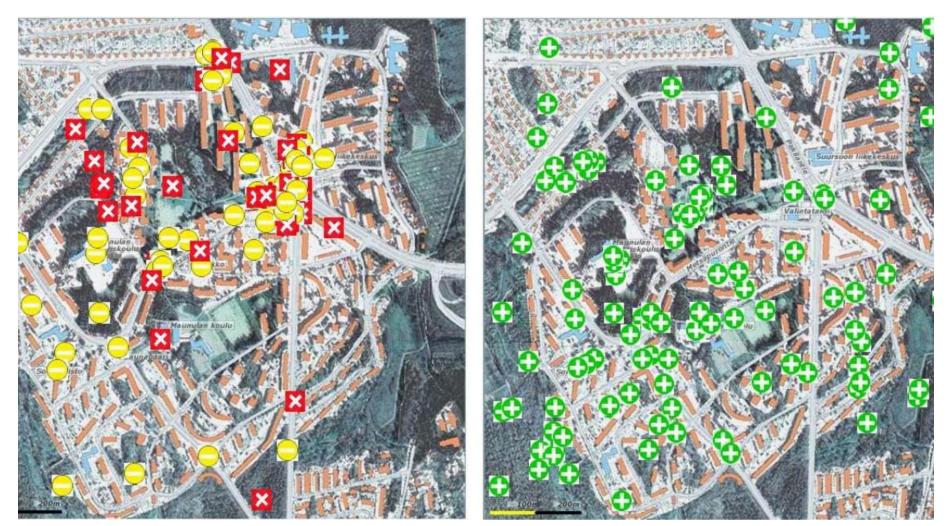
Millainen on sinun Maunulasi?

Voit merkitä karttaan turvattomiksi kokemasi alueet, liikenneturvallisesti vaaralliset paikat, epämiellyttävät ja tietenkin myös miellyttävät alueet.

Liikuta värillisiä ikoneita kartalle. Voit kommentoida valintaasi ikonin yhteyteen avautuvaan kommenttiikkunaan.Talleta kartta painamalla TALLENNA-

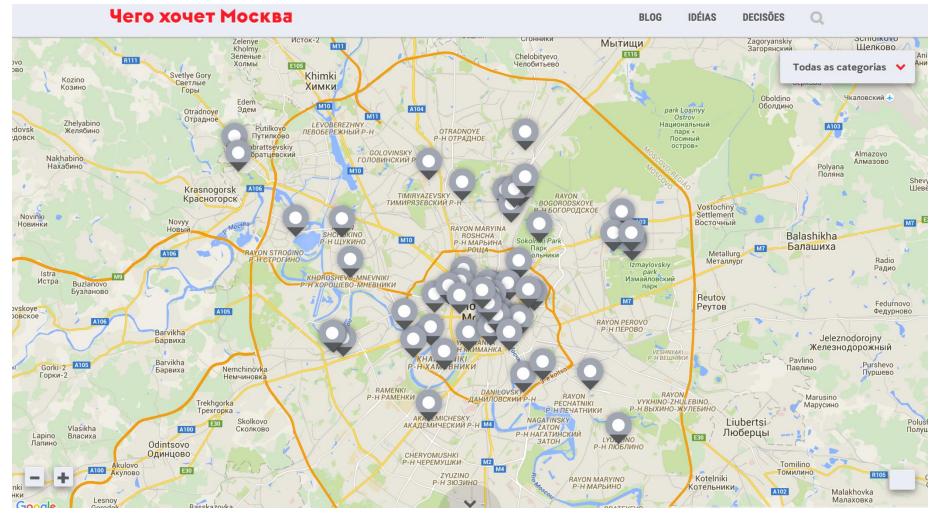


Heli Rantanen From Local Knowledge Mapping to a Learning Planning Process The user interface in My Maunula Map



Heli Rantanen From Local Knowledge Mapping to a Learning Planning Process

The user interface in My Maunula Map



moscowidea.ru What Moscow Wants The user interface in Moscow City Map



#### Чего хочет Москва

Escreva-nos: hello@moscowidea.ru



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Moscowidea.ru - um recurso para a recolha de ideias dos cidadãos e dos profissionais para melhorar os projetos de Moscou. O uso de materiais, "que Moscou quer" só é permitida com o link ativo para o site. Usando materiais visuais somente com o consentimento dos fundadores do projeto. Moscou de 2013

Criado <u>Whitescape</u>

moscowidea.ru What Moscow Wants Process of PGIS in Moscow

### **Active Participatory Urban Politics**

Empowering the User

Local digital maps and georeferenced data needs to be associated with the community not just by studying it, but providing the tools for men to write is own history, participate in the making of his habitat and facilitate the building process of urban spaces of every scale.

# Thank for you attention!

Frederico da Silveira Architect

