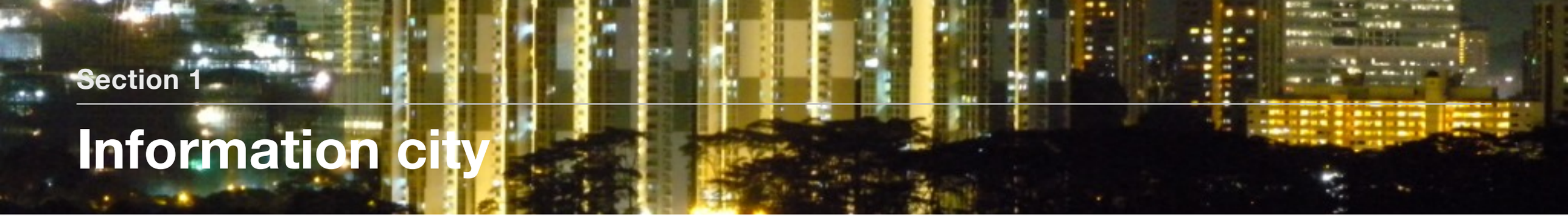


Section 1

Information city

DEFINITION

Information city describes the extension of information architecture to the urban scale. In analogy to information architecture, information city has two main meanings: (1) making the invisible visible on the scale of a city and thus helping to understand the functioning of an interaction between components of the city, and to design new cities; (2) information city might become a metaphor for the structuring and ordering of vast amounts of data, created increasingly by the city's inhabitants and its infrastructure.

With information city we do not mean the various InfoCities projects that focus on the seamless integration of information and communication technologies. We also do not mean completely virtual cities.

Increasingly, cities seem to take on personalities of their own. They are labelled as megacities, industrial cities, green cities, liveable cities, rich cities, smart cities, innovative cities, tele cities, info cities, or future cities. These properties of the city are sometimes related to the society they are positioned in. It is therefore surprising that the information society or the knowledge society has not produced an equivalent adjective with regard to the city.

We therefore put forward the suggestion that the information society is increasingly living in **information cities**. Cities and urban systems have for a long time been the place where societies accumulated and stored their information. More importantly, they made this information available to the general public in the form of libraries and exhibitions. Yet the information displayed in libraries had been mostly static and describing the past.

New today is the ability of any person using computational devices to generate large amounts of data, and in particular of real-time data. The storage and display of this information cannot occur in traditional libraries any more. Instead, the entire city becomes an information organism that at the same time generates data, turns it into information, and displays information in real-time. The visualisation of this information creates new knowledge about the city and is fundamentally different from previous knowledge, as it is able to make the invisible visible.

City information, visible

Like in buildings, a great amount of city information is visible, but not all. Coming to a city, we take photos of the obvious information: people, buildings, traffic, parks. At night, other information becomes visible: Lights in buildings, streets, and parks. It may give less 3D information, but more activity and occupancy information.

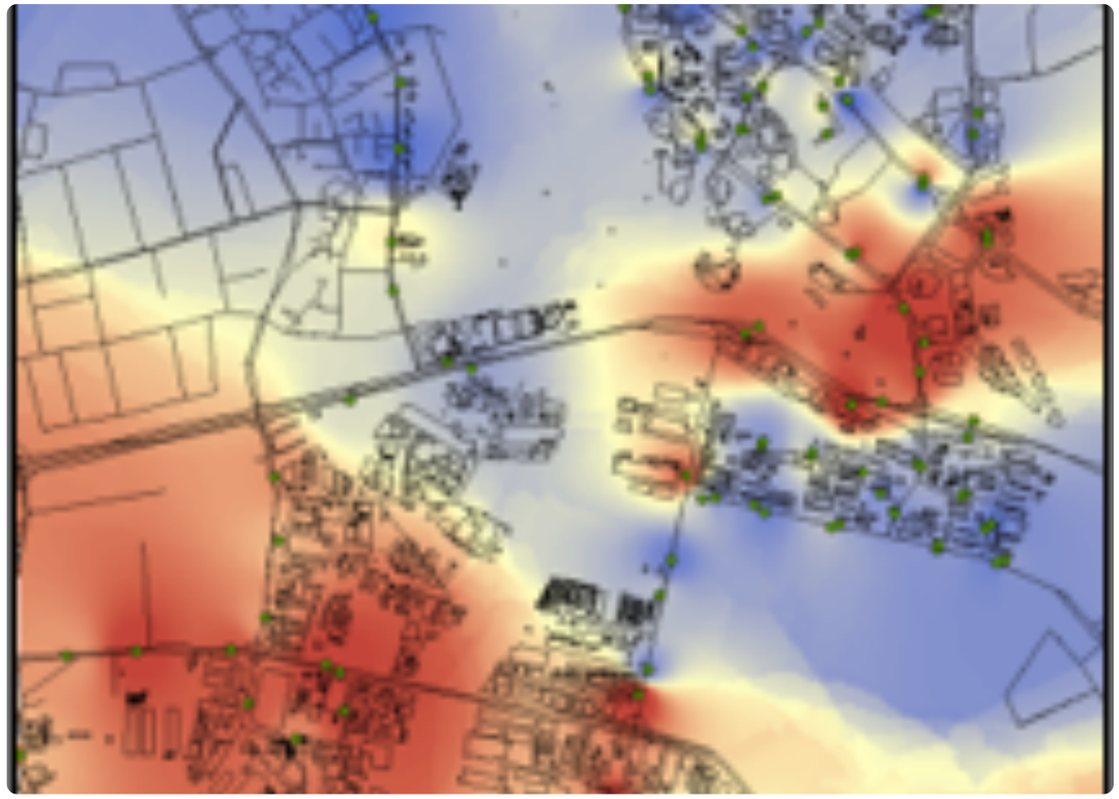
City information, invisible

The inhabitants of the city produce a constant flow of data. They can be visualised, admired, and taken as a basis for observation or future decisions. The first step is to derive a connection between data, activities, and locations in a meaningful sense by deducting relations between data. **Chen ZHONG** has performed pioneering work in this area, in that she is able to clearly relate the use of buildings and travel behaviour.

Gallery 3.1 City information

Bettschart, M. 2010. *Lights in buildings and cities as indicators for activities.* [Photograph]. Marina Bay Sands, Singapore.

Gallery 3.2 City information



Zhong, C. 2013. *Interpolated probability of working places - red: highly probable, blue: less likely.*

Coming to a city, we may sense the areas where poor, middle class or rich people live. This information is normally invisible, the building and streets are not labelled this way. This information is normally contained in the census data of a city. But how do we sense it? It is a combination of observations that leads to the categorization. **Comparative Urbanism** is developing tools to gather and visualize this information.

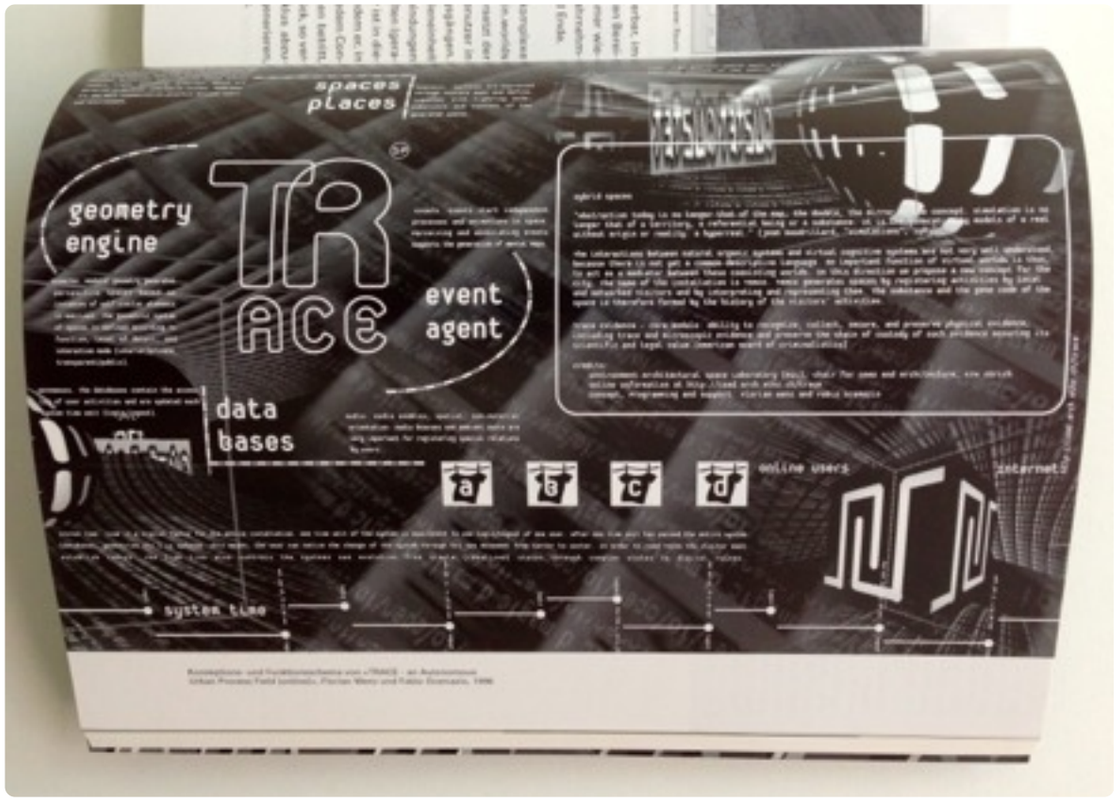
Gallery 3.3 Information city

Schmitt, G. 2013. *Making invisible information visible: comparing cities.* [Photograph]. Meeting of the comparative urbanisms group at the Future Cities Laboratory.

Archaeology of the future city

The plans of today, using information Architecture to depict a possible future, are the historic documents of tomorrow. Seen from the future, they are archaeological items. This view produced the title of an exhibition in Tokyo in 1996, the «Archaeology of the Future City» by **Takashi Uzawa**. It demonstrated the power of combining Architecture and information in the sense of information as the new building material.

Gallery 3.4 Archaeology of the Future City

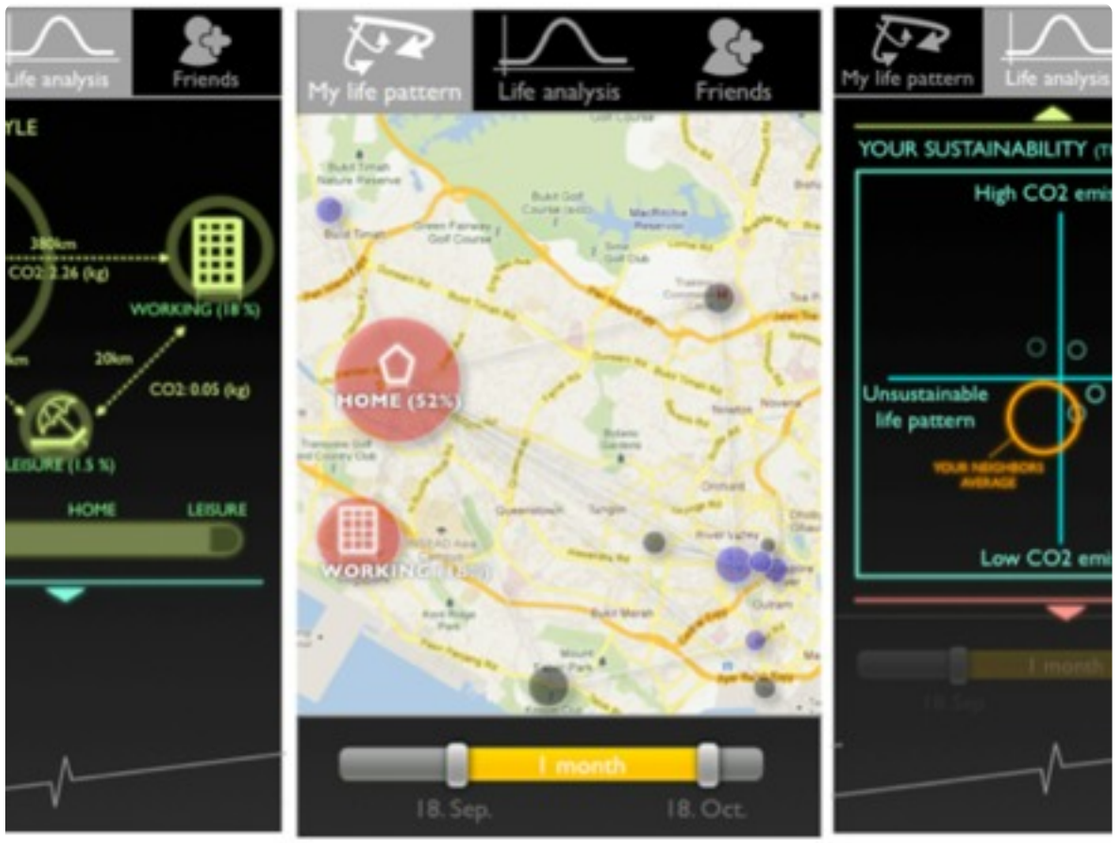


Wenz, F. 1996. *«TRACE» installation by Florian Wenz in the exhibition «Archaeology of the Future City» by Takashi Uzawa.*

Crowdsourcing

The name **Crowdsourcing** appears around the middle of the first decade of the 21st century, with **Second Life** as a precursor. Many platforms now support the input of volunteers that contribute information to open calls. Particularly interesting are participatory planning exercises, that are made possible by the extensive use of crowdsourcing This way, a growing number of persons can direct the development of the planning or the transformation of communities

Gallery 3.5 Crowdsourcing in the City



Shin, D. 2010. *CITYing, a crowdsourcing application that records movement types of people based on smartphone acceleration data.*

The Urban Observatory

The **Urban Observatory** was created by the combined effort of researchers who came to the conclusion that understanding precedes action. It encourages cities to contribute their own data and maps, to make them comparable with other cities of the world. The result is an unprecedented view on cities and their properties at the same scale over time. The Urban Observatory was created by Richard Saul Wurman, Jon Kamen and Jack Dangermond.

Gallery 3.6 The Urban Observatory

Schmitt, G. 2013. *Mansour Raad (ESRI) explains the Urban Observatory at the Santa Fe Institute.* [Photograph].

Senseable city lab

The research group focuses on the visualisation of real time data. The **Senseable City Lab** of MIT observes, gathers and visualises the multitude of data and data streams available in various cities of the world. The themes of its exhibitions range from “Data Drives” (2014), “Road Frustration Index” (2013), “Local Warming” (2013), “Senseable Rio” (2012), “Live Singapore” (2011), “Trash Track” (2009), to “Real Time Rome” (2006).