ARCHITECTURE < CULTURE < DESIGN
December 2007

My Favorite ROOM

Eight interior designers pick the spaces that most inspire them.

Jamie DRAKE
George YABU
Glenn PUSHELBERG
Kitty HAWKS
LAUREN ROTTET
Shawn HAUSMAN
David ROCKWELL
Clive WILKINSON

WWW.METROPOLISMAG.COM
USA $6.95 | CANADA $6.95
"We expect to improve physical-development planning and deliver real-time information to citizens."

Images from the WikiCity project in Rome, which maps concentrations of urban activity as it happens. Above: An estimated 1 million people gathered at the Circus Maximus to celebrate Italy’s World Cup victory.

As part of an all-night festival of free events last September, a giant outdoor screen displayed a map of real-time data on the movements of the crowd and transportation systems that people could influence through their own activity. It was the debut of WikiCity, a tool developed by MIT’s Senseable City Lab that tracks pedestrians and traffic using portable wireless technology, converting the information into a visual format that depicts the pulse of the city. As the program evolves, the city of Rome plans to employ the data to better control traffic lights, street signs, and other systems.

"Italy makes an ideal subject for the system because of its particularly high density of cell-phone usage," says Paolo Cellini, head of the Internet division of Seat Pagine Gialle, a research partner in the project. Telecom Italia is furnishing the key information: anonymously aggregated mobile-phone transmission data that indicates concentrations of urban activity. Live information is also being continually dispatched from GPS devices mounted in buses and taxis.

Rome’s transportation agency, ATAC, already has a navigation system, in place since 2000, where users can find out how long it will take to get someplace by car and exactly when a bus will arrive. But the WikiCity program will greatly enhance the Internet tools provided to customers as well as transportation planners by separating out pedestrian activity, which is expected to be possible within six months. "The bus company could plan routes and schedules more efficiently, deploying vehicles only where and when necessary according to actual shifting daily demand," says Giuseppe Noia, ATAC’s director of strategic marketing.

As a planning instrument based on actual behavior, WikiCity promises groundbreaking potential for cities to optimize resources by providing solid statistical backing for new policies. “We saw the project last year, and we are signing on to fund the research,” says Claus Juhl, city manager of Copenhagen. "Through knowledge of how residents and tourists are using the city, we expect to improve physical-development planning and deliver real-time information to citizens."

Eventually the MIT lab hopes to develop WikiCity into an open platform for data exchange whereby people and organizations are able to contribute information about cultural events and political demonstrations, weather and environmental conditions, and even free parking spaces. "You could upload the combined data, for example, to find the best jogging path according to air quality, traffic density, and your personal fitness condition," WikiCity team leader Kristian Kloectl says. "The goal is to allow people to make better-informed decisions about how to move about the urban environment based on the actual state of city dynamics."

By giving the public a tool to figure out the best way to get around, WikiCity could make citizens the primary force behind improving urban efficiency. Combined with the ability of municipal agencies to shift services based on the real-time tracking of behavior, the technology may ultimately turn the city into an integrated self-calibrating system in which people and vehicles flow seamlessly in a kind of spontaneous ballet. — Cathryn Drake

Citizen Mapping

Rome tests a tracking system in which you and your cell phone are the key to better urban flow.