

# Metapolis and Urban Life

**Eric Paulos**

Intel Research  
2150 Shattuck Ave #1300  
Berkeley, CA 94704

**Ken Anderson**

Intel Research  
Intel Corporation  
Hillsboro, OR 97124

**Michele Chang**

Intel Research  
Intel Corporation  
Hillsboro, OR 97124

**Anthony Burke**

Department of Architecture  
UC Berkeley  
Berkeley, CA 94720

*“Never confuse the map with the Territory”*

- *Empire of the Sun*, J.G. Ballard [1]

*“Only in Marco Polo’s accounts was Kublai Kahn able to discern, through the walls and towers destined to crumble, the tracery of a pattern so subtle it could escape the termites’ gnawing.”* [2]

## ABSTRACT

The city has always been a site of cultural, social and physical transformation, on scales from the most personal to the most collective. However, with the rise of the “metapolis” [3, 4] and the issues it brings with it, 24/7 rush hours, the conversion of public space to commercial space, the rise of surveillance, transnational neighborhoods, polyvocal politics and architecture etc. the contemporary city is weighted down. We can no longer technologically or socially be constrained by something planned and canned, like another confectionary spectacle. We dream of something more, something that can respond to our dreams. Something that will transform with us, not just perform change on us, like an operation. The metapolis requires individual, social and technological interaction.

As the field of wireless and locative technologies matures, this workshop is interested in exploring a more enduring relationship between the physical and cultural multicity and its digital topographies. This workshop asks the question what might an authentic or *native* digital/physical relationship be? Authentic to whom? How can these be considered within the hybrid space emerging from the interaction between digital and physical practices? This workshop seek to understand alternative trajectories for digital and wireless technologies while building definitions of place and practice in both physical and digital terms, as well investigating their interaction, influence, disruption, expansion and integration with the social and material practices of our public urban spaces.

## Author Keywords

Urban computing, Situationist, *dérive*, *détournement*, mobility, urbanism, locative, urban media,

## INTRODUCTION

The *Metapolis and Urban Life* workshop at UbiComp seeks to include a range of practitioners exploring urban projects for which the urban is not merely a palimpsest of our desires but an active participant in their formation. From dynamic architectural skins to composite sky portraits to walking in someone else's shoes to geocaches of urban lore to hybrid games with a global audience, position papers for the *Metapolis and Urban Life* workshop should transform the “new” technologies of mobile and pervasive computing, ubiquitous networks, smart materials and locative media into experiences that matter.

## BEYOND PRODUCTIVITY

*“Beyond the metropolis of the industrial era emerges the Metapolis of the digital era. The city is now a place of places, where numerous urban models coexist, each with its own qualities that make it different from the rest.”* [3]

The city has been described through many metaphorical lenses, mechanical, monstrous, biological, utopic etc. We are interested in uncovering further how we may characterize and importantly operationalize (act upon) the new metapolis when understood in terms that are not mappings of external metaphors onto the city, so much as uncovering existent conditions within the urban landscape. To this end we offer prompts for illuminating different types of cities within cities.

Beyond any single technology (such as GIS) there lie a range of strategies and practices for uncovering, understanding and exploring alternates that build on the interaction between technology and the urban landscape as a practiced place. The physical fabric in this instance is as constitutive of the project as the technology itself.

“Let us embrace the full scope of urban life with all of its emotions and experiences.”

Developing themes from the UbiComp 2004 workshop *UbiComp in the Urban Frontier*, this workshop seeks to both speculate and act upon the possibility of meaningful spatial and technological practices within the urban context.

## THEMES

We desire to explore the meaningful experience of urban life and landscape through a spectrum of sub-themes, and challenge urban practioners to bring ideas to the workshop that engage with this issue through a variety of positions.

The workshop is not intended to determine a definitive “position” rather to open new territories and contexts, and set about understanding and developing tools we may need to operate within them. Workshop attendees will be asked to speculate on the role of wireless and mobile computing technologies and the city in these terms through a brief position statement (10 minutes) at the beginning of the workshop. Over the course of the two day event, we will determine a range of methods and strategies for engagement of the metapolis in these terms by engaging with Tokyo itself.

The following sub-themes are not exhaustive but suggestive of views of the metapolis that may trajectories for further discussion.

### **Shadow City**

What types of lived and practiced neighborhoods exist within the urban landscape? How can they be realized, exposed, and experienced?

### **Collaborative Challenge**

Cities - a crowd of individuals? How can the crowd inspire the individual through collaboration, competition, confrontation? How can this massive audience become active co-conspirators in a collaborative challenge? What change, effect, or experience could only be achieved by a mass movement, a mob, a cooperative crowd? What spaces could be accessed, created or re-imagined by a massively-scaled intervention? How can we stage a series of “new happenings” that may be very brief or extend and develop for years?

### **Hybrid Histories**

Uncovering the past and looking toward future histories. Where has your urban environment been? Where might it go? These histories need not be accurate; we encourage participants to imagine alternate histories based on existing conditions.

### **Inbetween and nondisciplined spaces**

Urban environments are largely composed of the “spaces between”. Let us celebrate them. How can we engage with the overlooked, abandoned or disreputable urban spaces: alleys, underpasses, and empty lots? What nondisciplined spaces are specific to Tokyo or your own city? What role do daily rhythms play in the tensions between places, undisciplined spaces and “inbetween places”? How can we stage a series of “new happenings” in the city that may be very brief or extend and develop for years.

### **Alternate Playgrounds**

Rules, play, games, and toys. Let's create new sandboxes in the metapolis. What about games that span a single event or activity within the urban environment? How can we promote playful encounters in our metapolis? Can metapolis come out and play?

### **Urban Archeology**

What can we uncover within the layers of strata of the urbanscape? How will we “dig” within our newly emerging technological metapolis and how will we exhibit its “discoveries”?

### **Open Traversal**

Ebb and flow. Waxing and waning. What's all this hustle bustle about anyway? Where are all these people, goods, and information going and why? What are the rhythms of this metapolis?

### **Exposed Urban Environments**

What are we not seeing, feeling, smelling? What do we not understand about our Urban Environment? More importantly, how does this reconfigure our future?

### **Operational Metapolis**

How is our metapolis at work? At play? How does it function? Is it healthy? Sickly? Tired? Happy? How can we measure its production, health, and mood?

### **Hacked Metapolis**

What are you rebelling against? ... What've you got? Learn the rules of the metapolis then let's break them together and create something deliciously new.

### **Parasitic Metapolis**

Parasite - an organism that grows, feeds, and is sheltered on or in a different organism while contributing nothing to the survival of its host. Is the urban environment our parasite or our host?

### **Open Source**

Open source or open-source software (OSS) is any computer software distributed under a license which allows users to change and/or share the software freely. How can this be transposed onto the infrastructure of the urban environment? What are the source codes of the metapolis and how can they be re-coded?

### **Alternate Economies**

An economic system is a mechanism which deals with the production, distribution and consumption of goods and services in a particular society. The economic system is composed of people, institutions and their relationships as well as the allocation and scarcity of resources. Why not impose a new system of exchange across the urban scape? Complete with new forms of trade, transfers, currency, concepts, modes, utopias, co-ops, gifts, barter, punishments, and rewards.

### **Town Hall**

Take your issue to the people. Isn't it time we held a real town hall meeting? Then call the meeting to order. One of the roles of a town hall is to create a common meeting space for citizens. What is the vision for the new peoples' “town hall”? How can *all* citizens be full participants in the

new metapolis? What are the barriers to full participation? How can they be overcome? How can all citizens be invited into the town hall?

### **Community Mapping**

An aid which highlights relations between objects, people, situations within that space. How can urban inhabitants map their environment? What will they look like? How will they be shared? What will they provide? Ignore? Remove? Celebrate?

### **Parallel Metapolis**

What are the new sister metapoli? Where are they connected? disconnected? How to they share time and space with each other? Where do they disconnect?

### **LET'S GET DIRTY**

The workshop is planned to run over two days, with a significant amount of time involving actively engaging the urban environment through "deep exploration" and urban actions. Attendees will give a brief 10 minute presentation on the morning of the first day, stating their interest and trajectory within this topic area, followed by a discussion and strategy session on the issue of digital urbanism as a practice and place in the context of the Metapolis. On the afternoon of the first day and morning of the second day, we will adventure into Tokyo to collect, discover, uncover, map, spy, follow, trace, shadow, etc in an effort to construct a discourse through doing. Participants will get dirty and hands on with the urban environment. On the afternoon of the second day participants will discuss their findings through a series of "visual speculations" assembled from the work in Tokyo, closing with a discussion of projections and speculations.

### **GOALS OF THE WORKSHOP**

Taking the above perspectives as a spring board for discussion and action, this workshop has the following aims:

- To bring together a multi-disciplinary group of practitioners to discuss how our future fabric of digital and wireless computing will influence, disrupt, expand, and be integrated into the social patterns existent within our public urban landscapes.
- To elaborate new methods and models in design practice that can accommodate designing technology for urban environments and lifestyles.
- To extend the discourse of locative media and technologies and their relationship to urban space and practices as a maturing dialogue, raising issues that are reflective of this.

- To develop an agenda for future collaborations, research and design in the area of urban computing and identify critical opportunities in this space.

### **CONCLUSION**

Urban environments continue to transform under pressures from wireless digital tools and mobile devices, and the reconnection of information to place. Within this dialogue a new set of spaces and practices are constantly being evolved, not just remappings of technologies to the hardscape, but hybrid practices and methods that are more intensively oriented and built on the hybridity of the urban landscape. We are looking to be able to nuance both our understanding of our urban digital practices as well as the multiple layers of context that go with the modern "metapolis". The need to develop a continuing investigation of the implications of emerging technologies on our urban landscape is unabated, and we recognize that we are moving into a more mature phase of understanding, searching for and exploring deeper connections to place, technology, material and practice. The Ubicomp *Metapolis and Urban Life* workshop aims to provide a trajectory and hands on exploration of what digital practice and urban computing might mean in the metapolis, and how we may begin to empower urban dwellers in the construction of a meaningful and continuously emergent digital landscape.

Let us experience your vision of the Metapolis!

### **PARTICIPATION**

Selection of Workshop participants and presentations will be based on refereed submissions. Authors are invited to submit a two page position statement in the ACM SIGCHI conference publications format. Position statements are encouraged to be provocative and will be used during the workshop to guide and disrupt our views of urban computing. They may include personal experiences, performances, studies, or individual urban projects. Position statements should have only one author, and should include a brief biography. Selected participants will be invited to present a short position statement, and should come prepared for a physically active two day workshop in, around, under and through Tokyo.

### **REFERENCES**

- [1] J. G. Ballard, *Empire of the Sun: a novel*. New York: Simon and Schuster, 1984.
- [2] I. Calvino, *Invisible cities*, 1st Harvest/HBJ ed. New York: Harcourt Brace Jovanovich, 1978.
- [3] M. Gausa and Instituto Metápolis de Arquitectura Avanzado., *Diccionario Metápolis arquitectura avanzada*. Barcelona: Actar, 2001.
- [4] G. Simmel, "The Metropolis and Mental Life," *On Individuality and Social Forms*, 1971.