The city as an open interface

Madrid, 5-6 July 2012
Medialab-Prado / Intermediae, Paseo de la Chopera 14 Madrid
#cityopfa

Thursday, 5 July

10:00. Welcome.

10:15-13:00. SESSION 1. SOCIAL/DATA

> **10:15-10:50** **Citizenship and Crowdsourcing in Dataville,** James Holston, University of California, Berkeley.

> **10:50-11:25** **The Art of Software Cities,** Christian Ulrik Andersen.

> **11:25-11:50 Coffee break.**

> **11:50-12:25** **Nature and Implications of Changing Epistemic Infrastructure in Cities,** John L. King, University of Michigan.

> **12:25-13:00** **Living Cities, Living Data: the foreclosure of digital cities,** Mike Crang, Durham University.

13:00-15:30 Lunch

15:30-17:30. SESSION 2. CARTOGRAPHIES

> **15:30-16:10** **Countergeographies, Open interfaces and the New Military Urbanism,** Stephen Graham, University of Newcastle.

> **16:10-16:50** **The Politics of Counter-Mapping or Hacking Spaces and Opening Codes: Stories of Cartographic Productions by Urban Social Movements**, Maribel Casas and Sebastian Cobarrubias, University of North Carolina, Chapel Hill.

> **16:50-17:30** **Enacting Streets,** Evelyn Ruppert, Open University.

Friday, 6 July

10:00-13:00. SESSION 3. OPEN ASSEMBLAGES

10:00-10.45   Staging controversy: open urban forums in post-earthquake Chile, Ignacio Farías, Social Science Research Center Berlin.

10:45-11:30   The interior design of the right to the city: the atmosphere, rhythm and circuitry of #Occupation, Alberto Corsín Jiménez & Adolfo Estalella, Spanish National Research Council.

11:30-12:00 Coffee Break

12:00- 12.45   The Occupation of Squares and the Squatting of Buildings: Lessons From the Convergence of Two Social Movements, Miguel A. Martínez López and Ángela García Bernardos, Universidad Complutense de Madrid.

13:00-14:30 Lunch

14:30-16:30. SESSION 4. URBAN SMART

14:30-15:10   From the Needle to the Urban Factory: Analysing the Limits to Capital and Revolt in the Smart City, Ramon Ribera-Fumaz, Universitat Oberta de Catalunya.

15:10-15:50   Cloning the Cooperative: Genetics and the Global Circulation of Californian Oranges
Tiago Saraiva, Institute of Social Sciences, University of Lisbon & University of California, Berkeley.

15:50-16.30   Climate Change, Smart Cities and the Promise of 'Open' Energy, Hannah Knox, CRESC, University of Manchester.

16:30-17:30 Closing remarks and future plans

Venue: Medialab-Prado / Intermediae, Paseo de la Chopera 14, Madrid.
Attendance to the conference is free, without need of registration.

SESSION 1. SOCIAL/DATA

Citizenship and Crowdsourcing in Dataville
James Holston, University of California, Berkeley

This presentation considers the power of social media to generate associational forms that support what may be called a new digital (or net) urban citizenship. Certainly, enormous amounts of data about urban life are being produced both by residents and by remote sensors, stored and organized by digital services, and made available on demand as "open data" to the public by various government and municipal agencies. Certainly, many kinds of social media provide users with new capacities and conveniences to "crowdsource" their interests: to network, perform, comment, and collaborate on user-defined issues. My discussion raises three considerations about these conditions. I examine the extent to which this new sociality of peer-to-peer urbanism (Web 2.0) engages the stored streams of open city data (Web 1.0) to produce a new rhetoric of political life – rhetoric in the classic Athenian sense of the means to turn ordinary citizens (idiotai) into public and political ones. I also consider the extent to which this crowdsourcing may generate not only temporary, amorphous, festive, and/or mutinous crowds but also the sort of corporate, collective, public bodies that sustain membership and therefore define a citizenship – that is, may create a digital demos (as in demokratia) rather than merely a new kind of digital hoi polloi (the many). I continue the Athenian mode here to consider whether the direct democracy that Web 2.0 seems to promise and that vast numbers of people worldwide seem to desire requires an urban citizenship (not national, in fact antagonistic to national) that is both open to all regardless of national belonging, ethnic identity, and property qualification and also closed to non-members. This consideration raises the difficult problem of the meaning of urban citizenship and the nature of its political powers. Do the new information and communication technologies give "the many" capacities to constitute public realms through their actions (a kratos that empowers a demos) that is fundamentally more than "voting on line," more than an update, in other words, of majority rule and electoral control over offices. Moreover, do they sustain such collective capacities to effect change over time rather than just in fleeting, mutinous moments (in effect, becoming institionalized)? Do these digitally-driven capacities capture political power independent of established institutional forms; what relation between the two? Finally, time permitting, a fourth section of my discussion considers this relation to power in terms of both urban forecasting and planning.

The Art of Software Cities
Christian Ulrik Andersen

Urban screens, laptops, tablets, mobile phones, surveillance systems, wireless networks and other phenomena are intrinsic parts of contemporary urbanity. With this development, not only media but also software is introduced into the city. Thinking in terms of software, and the relation between media and computation, allows us to speculate about the mechanisms behind the spectacle.

The presentation will discuss how the development of the software city can be seen in the light of a tradition of making software, and further discuss the role of software art and culture in the software city.

Nature and Implications of Changing Epistemic Infrastructure in Cities
John L. King, University of Michigan

Epistemic infrastructure in a society conveys two kinds of information: what is known and how it came to be known. For a very long time epistemic infrastructure was run by elites, and largely for the benefit of elites. Contemporary information and communication technologies are altering the mechanisms and functions of epistemic infrastructure dramatically. Changing access to traditional forms of learning -- the mechanism by which people engage and become part of epistemic infrastructure -- is altering human agency with respect to knowledge. The traditional heart of epistemic infrastructure of systematic collecting seen in libraries, archives, museums, galleries, zoos, planetaria, and aquaria (all traditionally located mainly in cities) is being transformed as patrons are able reach more immediately and deeply into epistemic bases. And the advent of "crowsourced" knowledge, ranging from wiki-based anthologies (e.g., Wikipedia) to real-time commentary through social media to emerging "information markets" is changing not only epistemic infrastructure but epistemology itself. While these changes can be seen throughout society and the landscape, they are usually seen first and most powerfully in cities. This paper will explore the nature and implications of these changes.

Living Cities, Living Data: the foreclosure of digital cities
Mike Crang, Durham University
This paper counterposes two strands of thought around smart urbanism and suggests both share some epistemic and ontological positions. The first, strand we may see as a continuation of planning dreams of technocratic management. Here new digital information enables the seamless and smooth integration of data in real time systems. Here we can see a fantasy of (one way) transparency behind the open city providing an omniscient control system. There is both a corporate version of this (where the irrationalities of the populace and frictions of the city can be obviated) and an academic version that speaks to a citizen science where the citizen becomes the data priovider (providing ever more comprehensive information). The alternate strand sees a thousand algorithms blooming all enabled by feeding off the open data commons. In the second strand, then the transparency is more multidimensional and there are appeals to a democratisation not only of information access but processing. Both of these strands collapse normal temporal regimes of planning and management (data-analysis-plan-act) into real time automated processes and also the second opens out 'spatial' notions of data operation (capture -store-centres of calculation-deploy). The latter challenges the well-ordered and manicured datascape for sure, leading us to think of data as unruly, having agency and vitality. When data goes travelling it can outrun and exceed the planned uses and users. Moreover, it seems pretty clear that within a few years there will be more devices than people connected (to each other) in the networked city. Although heuristically these strands can be counterposed there are of course attempts to both destabilise central control by

pluralising forces and attempts to recuperate local action by major actors. Does a move to think of improvisational and transient connections detotalise the vision of the city? Or do both share a notion of efficiency or transparency. Both lionise the top end of data processing ('big data') and the top end of digital devices connecting to the city. What if we were to look at the 'kludge' (the sub-optimal make-do software patch) as normal not a failure? What if instead of a digital agora we thought of this constructing an architecture of the scab? If we were to look at the good enough city, that is about retrofitting on existing infrastructures, that is about making do and getting by?

SESSION 2. CARTOGRAPHIES

Countergeographies, Open interfaces and the New Military Urbanism,
Stephen Graham, University of Newcastle

In my recent book *Cities Under Siege* I identify a 'new military urbanism' – a complex constellation of antiurban imaginaries, practices and technologies amongst security and military forces, right-wing thinkers and political lobbyists -- which work problematise and demonise the open, mixed-up and cosmopolitan life of cities in many parts of the world. In the ascendent globally, although with uneven power, the rise of new military urbanism is manifest in a wide range of related phenomena: paramilitarised policing; miltarised paradigms for addressing urban social problems; a blurring of policing, intelligence and military deployment; shifts toward invasive, preemptive, military-style tracking and surveillance; and the wholesale privatisation or legal reengineering of city spaces and streets within capsular enclaves, either permanently or for temporary events. This is evident in through a boom in both 'homeland security' industries which profit from these developments.

In this intervention I seek to explore how the open interfaces of urban spaces fused with digital media can be mobilised to contest and undermine the various dimensions of the new military urbanism. Within the complex elements that contribute towards the emergence of a global civil society, centred on multiple media circuits circling the globe, there has been much experimentation to address here recently. Whilst far-from coherent, and often extremely ephemeral, these experiments offer some useful lessons in countering strategies of urban militarisation. They offer an important complement to the more traditional methods of resistance and political mobilization against colonialism, imperialism and militarization based on street protest, social movements, grassroots organization, and formal political organizing to re-regulate economies or re-direct or revolutionise state power. The starting point for such interventions is that the architectures and discourses sustaining the new military urbanism need to be countered in the crucial realms of public discourse ands spectacle where the flows and visualities of the media interact with urban places within a context of transnational media complexes.

The paper first looks at the key role of digital experimentation within contemporary urban public domains. It then traces a series of strategies to contest

the new military urbanism by building urban open interfaces have different relations to state and corporate power. These I label: exposure; juxtaposition; appropriation; jamming; satire; and collaboration.

**The Politics of Counter-Mapping or Hacking Spaces and Opening Codes :
Stories of Cartographic Productions by Urban Social Movements**
Maribel Casas and Sebastian Cobarrubias, University of North Carolina, Chapel Hill

Do-It-Yourself mapping have become a tool among contemporary struggles. The Counter-Cartographies Collective (3Cs) have released a series of critical dis-orientation guides to the University of North Carolina at Chapel Hill.

These counter-maps of 3cs were explicitly aimed at acting as an interface of a particular space, that of the university. The goal was to open it up, getting into the program (in this case, an engrained spatial understanding and reified uses of the campus), in order to decode and recode that space; the map becoming a malicious add-on.

The aim was decoding the spatial understanding of the university, in particular the generalized notion in the US of the university as an ivory-tower, isolated from other social realities and constructed as an unreal space separated from surrounding material networks at the local-urban, regional, and transnational scales.

Mapping the university to disrupt the standard spacious programming becomes a prototype that is reproducing both in other urban campuses -CUNY in NYC and QueenMary in London. Also, the cultural practice of counter-mapping is traveling as a tool in other related struggles, particularly around the effects of gentrification and restrictive migration/border policies.

These counter-maps are product of assembly-based processes, caring for the processual details involved in collective and decentralized knowledge production. The open-code politics of the mapping practices are also challenged by the timing requisites and the technological learning curve that a cartographic project involves.

Our participation in the workshop of "The City as Open Interface" would engage the Intersections of mapping and resistance practices in the production of counter urban territories.

Enacting Streets
Evelyn Ruppert, Open University

City streets are multiple and complex realities that are enacted by myriad relations between people, animals and things. Such a conceptual framing makes present or foregroundsrelations of openness– of collaboration, multiplicity, innovation, invention, creativity, experiments, and novelty.My question then concerns how streets are being (re)enacted in relation to digital participatory devices mobilised by local authorities and civic organisations in the name of openness and

transparency (e.g., data.gov.uk and openlylocal.com).These devices appeal to relations of openness by crowdsourcing the digital surveilling, classifying, mapping and tracking of the material conditions of streets (potholes, faulty lights, graffiti, rubbish, dog foul, flyposting, etc.).Through mobile apps and online platforms citizens are invited to engage in 'collaborative governing' and 'distributed democracy'. The politics of streets is thus enacted as sets of dispersed relations between governing authorities, citizens, digital technologies, sites and material infrastructures. By following howFixMyStreet has been mobilised in the city of London, the research note focuses on the 'political capacities' of the interface betweenmaterial and technological infrastructures instead of the 'deliberative, discursive and linguistic communicative processes' that occupy contemporary analyses of politics (Marres and Lezaun 2011). Through such a focus Iwill think about the socio‑technical‑material relations that configure and simultaneously open up and close down forms of everyday

Living Cities, Living Data: the foreclosure of digital cities
Mike Crang, Durham University

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Friday, 6 July

SESSION 3. OPEN ASSEMBLAGES

Staging controversy: open urban forums in post-earthquake Chile
Ignacio Farías, Social Science Research Center Berlin

In this paper, I focus on 'open forums' organised in Chile with the aim of bringing together experts and citizens and collectively shaping a reconstruction master plan for the city of Constitución after the earthquake and tsunami of 2010. This is a fascinating case for at least three reasons. Firstly, it is a story about actor-network theory in the wild and, more specifically, about how Michel Callon's description of hybrid forums and technical democracy has been translated into a management instrument for dealing with controversies available to corporations, both governmental and private. Secondly, this is a case that shows some of the paradoxes and problems associated with the attempt of organising controversies, that is, framing a space, such as the 'open forum', for overflows to occur. Looking in some detail at two open forums on an industrial plant and a fluvial park, I show the persistence of asymmetries between corporations and citizens and between experts and citizens with regard to their capacities to produce undisputable economic and technoscientific facts, thus framing the worlds achievable in these open forums. Finally, it makes evident citizen's modes of participation in these forums, which I suggest are based on a tactical use of these power/knowledge asymmetries, not on overcoming them. Thus, this case suggests that the open forums, and the literature inspiring them, while praising a form of citizen participation based on speech, individual responsibility and a collective exploration of the common good, overshadow other forms of legitimate democratic engagement, such as protest or even silence, especially legitimate among a population that just suffered the third largest earthquake ever registered and a devastating tsunami.

The interior design of the right to the city: the atmosphere, rhythm and circuitry of #Occupation
Alberto Corsín Jiménez & Adolfo Estalella, Spanish National Research Council

There is a city 'within' the right to the city: an assamblage of practices, meetings, infrastructures and spatio-temporal urban rhythms through which 'rights' are mobilized as material and political artefacts. There is therefore an interior design to the right to the city. In this brief research note we want to present ethnographic material of our work with some of the 'popular assemblies' that have incarnated the Spanish version of the global #Ocuppy movement. These assemblies sprung up in the wake of the 'Indignados' movement in May 2011. In an innovative political gesture, the movement decentralized out to Madrid's neighbourhoods, with over one hundred assemblies being called in hoods all over the city. The assemblies met weekly or fortnightly in local plazas or streets. Their permanence as durable sociological objects over the past year has required the development of novel

methodologies, the deployment of a variety of do-it-yourself infrastructures and social media, and the careful manufacturing of local political atmospheres. We thus describe the sociological materiality of the assembly-form as an object of interior design: a complex negotiation over the wiring of atmosphere, rhythm and infrastructure into the urban landscape.

The Occupation of Squares and the Squatting of Buildings: Lessons From the Convergence of Two Social Movements
Miguel A. MartínezLópez and ÁngelaGarcíaBernardos, Universidad Complutense de Madrid

The M15 movement in Spain responded to the financial crisis and neoliberal policies with a sudden and profound social mobilisation. The first prominent action of this movement consisted in the occupation of the main squares in different cities and neighbourhoods. These occupations and the regular assemblies that took place in the squares provided a salient feature of the initial political identity of the movement. This chapter seeks to explain why this specific aspect of both the movement's identity and repertoire of action, shifted from taking the squares to squatting buildings. Due to specific mechanisms such as similar ways of self-organisation, mutual aid and joint campaigns, we argue that a convergence between two different movements occurred: the M15 and the squatters' movement. This phenomenon has not received sufficient attention by social movements studies. Our explanation of this process of convergence rests mainly on what we call the 'cumulative chains of activist exchanges'. We contend that key events, such as the Stop Foreclosures campaign and the occupation of landmark buildings, and particular features of the process reinforced each other: the structural equivalence of the occupied camps and the squatted social centres, the turn of occupations into strategic ends, and the emergence of new sources of legitimation for squatting as a repertoire of action. Our study shows, in addition, the conflicts and persistent differences between both movements, both of which deserve consideration in order to understand the consequences of such a convergence. Our empirical evidence comes from a comparative analysis of the most salient cases of the M15-squats in Madrid, based on semi-structured interviews, secondary sources and participant observation.

SESSION 4. URBAN SMART

From the Needle to the Urban Factory: Analysing the Limits to Capital and Revolt in the Smart City
Ramon Ribera-Fumaz, UniversitatOberta de Catalunya

The way new technologies are transforming the urban space and social relations in the city and beyond are striking. On the one hand, the combination of hardware and software innovations in the management and production of the city through Smart City strategies is pushing even further the processes of privatization, commodification and surveillance of public space, and transforming the city itself into a factory for the extraction of surplus-value. Yet, these very same processes of converting the city into a factory are giving way to the emergence of new (potentially revolutionary) subjectivities such as the *Indignados* or new forms of

production and organization around the concepts of openness and peer production.

This paper explores the limits and potentialities of these double-sided processes of production of the urban factory through discussing different ways of approaching the understanding of the city as a Factory, which are centred on three key concepts: Lefebvre production of space and the politics of difference, cognitive capitalism and the concept of Social Factory and David Harvey's recent conceptualisation of the right to the city. In doing so, the paper focuses on the urban transformation of 22@, the digital district of Barcelona.

Cloning the Cooperative: Genetics and the Global Circulation of Californian Oranges
Tiago Saraiva, Institute of Social Sciences, University of Lisbon & University of California, Berkeley

When thinking about a Californian model globally exportable one tends to consider the many versions of Silicon Valley scattered around the world and the multiple examples of attempts to emulate the unique innovation environment of the Bay Area. This paper follows the oranges' trail in tracing an earlier version of global California based on converting traditional farmers into innovative horticulturalists organized in cooperatives producing commodities for world markets. It starts by exploring the role of oranges in selling Los Angeles internationally as a new Mediterranean Eden in the first decades of the twentieth century, making the case for considering the tight connections between urban sprawl and citrus cooperatives. As an alternative to car centered stories, it takes the orange orchard as central element in the narrative of the emergence of the paradigmatic American horizontal city. University of California (UC) scientists, both as genetics researchers and cooperative managers, took an important part as producers and keepers of this new standardized urban landscape.

The citrus cooperatives which constituted the economic backbone of Southern California till the 1930s were emulated not only in the new Mediterranean being cultivated in South Africa or Australia, but also in the old Mediterranean namely in Palestine, Algeria and Spain. In each case it is possible to track the decisive role of scientific standards in establishing the cooperatives. Based on the trajectories of UC geneticists and their scientific artifacts, the paper intends to highlight the transnational nature of the cooperative experience across a new global Mediterranean.

Climate Change, Smart Cities and the Promise of 'Open' Energy
Hannah Knox, CRESC, University of Manchester

Climate is an *entirely* mediated phenomenon, at least according to some (Edwards, 2011). In this tradition of thought weather *qua* climate is *only* knowable through distributed networks of expertise involving advanced information modelling technologies. If the object of climate change is informationally constituted, then so too is the response. In this paper I explore some of the implications of climate treated as a mediated object by turning my attention to the "data practices" of

people who are experimenting with ways of knowing and engaging the problem of climate change, specifically as this pertains to cities. Drawing on research that I am currently conducting in Manchester, UK, I look at the way in which techniques of monitoring, data collection, aggregation and data visualisation emerge and are presentable as a 'logical response' to the global climate problem. 'Opening up' data on energy use and CO2 emissions through techniques like smart meters, building monitors and smart grids is understood by participants to be a key means of 'changing behaviours' and altering relationships between people and their practices. At the same time I suggest that data gathering and analysis techniques which aim to track CO2 emissions have the unforeseen effect of making visible previously invisible infrastructures of energy use. These data practices are pursued under the promise that they make possible a reduction in CO2 emissions but they simultaneously have the effect of revealing the potential of a whole new set of relationships between the energy 'consumer', energy companies, cities and the state. In contrast to those who have tended to see environmental politics as a space for the recovery of an anti-capitalist logic, this paper explores how the distributed assemblages of contemporary climate politics might be usefully understood as a new kind of 'frontier' (Tsing, 2005). In contrast to a deterministic endpoint associated with the frontier that might see a history of exploitation fated to repeat itself, I suggest this new frontier is opening up a realm of unknowability in which we are provoked to engage with questions such as the the kind of *responsibility* entailed or made possible by the new (virtual) grounds it opens up.