

URBAN AUTOMATION
An International Workshop
University of Sheffield and University of Amsterdam
Sheffield, United Kingdom,
4-6th September 2017

Rationale

There is now considerable research and development on new possibilities for radically extended urban automation via robotic, sensors and smart control systems, reflected in the development of commercial products and technical demonstrations and development. But as yet there has not been significant interest from the urban studies community despite the way in which the city is being positioned and used as a test bed for new automated logics of control.

The international workshop gathers together leading interdisciplinary critical social scientists and reflexive practitioners in the field to map and examine the emergence, applications, and socio-political implications of automation technologies and processes, as applied to a widening range of urban sectors.

There are currently four significant gaps in our conceptual and empirical understanding of Urban Automation (UA), which the workshop will examine:

1. How might the development and application of UA be conceptualised as a distinctive socio- technical field and range of cultural practices? What actors and dynamics are involved?
2. How is UA emerging in different areas of urban life and is it (re)producing forms of inequality, intolerance and insecurity?
3. To what extent is it part of logic of centralised hub control or the neo-liberal governance of the self? What effects on urban citizenship can we see now and anticipate in the future and how significant are they?
4. What, if any, are the potentials of urban settings of experimental Smart City creation, such as "living labs", to democratize processes of UA innovation?

As such, the core aim for the workshop is to develop new perspectives on contemporary experiments in UA that go beyond the familiar critique of corporate smart cities and infrastructures, to understand how digital technologies and infrastructures, software code, robotics, sensors, and wireless hubs work within different sectors, shaping city processes with distinct socio-political implications.

Evening Lecture 4th September
ICOSS 219 Portobello, Sheffield S1 4DP
5.30pm – 7pm

Matthew Gandy

Negative Luminescence

The increasingly pervasive phenomenon of light pollution spans several different fields of concern including the loss of the night sky, energy wastage, and the effects of artificial light on circadian rhythms and nocturnal ecology. Although the scale of the problem has grown significantly in recent decades, the underlying dynamics remain only partially understood beyond the identification of specific technological pathways such as the rise of LEDs (light emitting diodes) or the capitalist transformation of the nocturnal realm. It is suggested that current approaches to the study of light, including the identification of “urban atmospheres”, the elaboration of existing approaches to urban ecology, or the extension of “smart city” type discourses, do not capture the full complexity of the politics of light under late modernity.

Robyn Dowling, Pauline McGuirk

Emergent Geographies of Smart/Automated Cities

In Australia, a national vision for making cities smart – which includes the automation of governance processes, services and urban activities – has only recently emerged. Nonetheless urban governments across Australia have been experimenting with shaping ‘the smart city’ through diverse governance visions. Alongside these visions, a host of smart initiatives are emerging—including around smart buildings and autonomous vehicles—with the potential to transform cities and urban life from the ground up. Drawing on examples in which automation is paramount, we explore the emergent processes and practices involved in making cities smart/automated in Australia. Remaining attentive to the importance of place in how smart cities are realized, we conclude with broader reflections on how smart/automation might change both cities and their governance.

The lectures will be followed by a drinks reception and buffet in the foyer of the Interdisciplinary Centre of the Social Sciences.

Day 1: Tuesday 5th September 2017

9.00 Coffee

9.15 – 9.30 Welcome and introduction

Part 1: New logics of urban automation and robotics?

9.30 – 11.00

- ‘The emerging ecosystem of urban automation: a research agenda’, Simon Marvin, Rachel Macrorie and Aidan While
- ‘The new politics of the robot city: The state of affairs in big cities in the Netherlands’ Rinnie van Est, Damion Bunders and Iris Korthagen
- ‘Predictive analytics in city hall: New forms of biopolitical security’ Andres Luque-Ayala and Simon Marvin
- ‘Automated Landlord: Disrupting a financial backwater and securing market order’ Desiree Fields

11.00 – 11.30 Coffee

Part 2: Automation, work and urban economies

11.30 – 13.00

- ‘Restricted Areas: Emerging Architectures and Territories of Non-human Labor’ Víctor Muñoz Sanz and Marten Kuijpers
- ‘Exploring Robot and Autonomous Vehicle Transformation of Urban Logistics and Warehousing’ Nancey Leigh
- ‘Conductors and Computers: A comparative Study of Human-Technology Interaction on Public Transport’ Diana Kurkovsky West and Olga Sezneva

13.00 – 14.00 Lunch

Part 3 Citizenship and participation in the automated city

14.00 – 15.30

- ‘Urban automation experiments and the user: Creating invasive technologies or new possibilities for inclusion?’ Marianne Ryghaug, Tomas Moe Skjølvold and Gitte Koksvik
- ‘The relevance of urban experiments and interventions to the everyday life of citizens and professionals’ Ida Nilstad Pettersen

- 'How to be smart in the city? An ethnographic inquiry into the variegated politics of citizen sensing' Dorien Zandbergen
- 'Living with the datafication (and visualisation) of everything', Helen Kennedy

15.30 - 16.00 Coffee

16.00 – 17.00 Drinks at the Fat Cat pub

18.30 – Dinner Akbhars

Day 2: Wednesday 6th September 2017

8.30 – 9.00 Coffee

Part 4: Automated infrastructural transformations?

9.00- 10.30

- 'Accomplishing autonomous driving in urban traffic: Observations from the back-seat' Goede Both
- 'Autonomy and entanglement in self-driving cars' Jack Stigloe
- 'Test Beds, Trials and Transport: Autonomous Vehicles Shaping and being Shaped by the City' Robyn Dowling, Pauline McGuirk and Donald McNeill
- 'Thinking about the (un)imaginable urban mobility futures: The case of self-driving vehicle technology' Milos Mladenovic and Dimitris Milakis

10.30 - 11.00 Coffee

Part 5: Automation and the new urban human?

11.00 – 12.30

- 'Urban Humans' Aidan While and Andy Lockhart
- 'Urban Contexts Shaping Social Robotics and Social Robots Shaping Future Cities: Robot Police in Dubai, Robot Hotel in Tokyo and Robot Restaurant in China' Mateja Kovacic
- 'Robotic Freight: Examining Mobile Subjects in an Automated Future' Debbie Hopkins and Tim Schwanen

12.30 -13.30 Lunch

13.30 - 14.30 Discussion: current status and gaps of the research agenda

14.30 – 15.00 Next steps: individual and collective projects?

END