Study Level Documentation

Smart Cities in the Making: Learning from Milton Keynes

Research Design and Context of Data Collection

The data in this archive is derived from a research project called *Smart Cities in the Making: Learning from Milton Keynes* (hereafter SCIM). It was a project funded by the UK Economic and Social Research Council which ran from January 2017 to April 2019. At this time, there was a move in urban governance and technology sector circles towards the 'smart city' – a broad piece of terminology which is taken to mean the integration of digital technology, very often data driven in its functioning, into the urban fabric. Considerable research was undertaken that looked at the technical aspects of such developments. However, the project was rooted in an urgent need at the time of its conception to understand moves towards smart city discourses and practices in terms of their effects on the social life of the city. The particular focus of SCIM was to understand the difference smart city interventions might make to social difference within the city, by giving weight to existing lines of social difference (race, class, gender, sexuality and so on) or by create new ones. As such, the project's central research question was 'how is smart assembling and engaging different forms of social difference in Milton Keynes?'.

It aimed to investigate this across five 'slices' of the smart city's landing in our case study city of Milton Keynes (MK). The five slices became the five work packages of the project, and were smart citizens, smart businesses, smart governance, smart data and smart visuals. They were selected because they each spoke to significant attributes in the constitution of the smart city:

- The material and practical engagements of citizens in smart city approaches,
- The businesses whose products are often at the core of smart city technologies,
- The local and national governance practices which make the smart city possible,
- The collection and curation of data upon which many smart city platforms operate,
- The visual material by which people interact with smart city technology or through which it is marketed or explained to them.

MK was chosen as the case study for two principal reasons. First, it is one of the UK's leading smart cities with a number of significant public and privately funded smart city interventions underway or recently completed at the time of the project. These included the Transport Systems Catapult which was involved in testing autonomous vehicles in the city amongst other projects; the university and private sector collaboration MK:Smart which examined data, energy, water, transport, innovation and citizen engagement largely from a technical and commercial perspective; as well as other small projects. MK was known as a place in which the local government was open to experimentation and novelty in the smart city field. Second, in a field where the vast majority of research was based on urban areas which were in some ways exceptional – the greenfield developments of Songdo or Masdar City in which new technology was integrated from the outset, or international cities like London, New York or Tokyo – this project looked at an ordinary city. Its aim was to be attentive to the way that smart city interventions come about in an average sized urban area, resembling the kinds of towns and cities and most people live in. Its aim also was to see how smart city technologies fitted into an urban space which was not a blank canvas and in which instead the vast majority of the urban fabric had already been constructed.

The project team was composed of:

Principal Investigator:	Prof Gillian Rose (The Open University, and then, The University of Oxford)
Co-Investigator:	Dr Nick Bingham (The Open University)
Co-Investigator:	Prof Matthew Cook (The Open University)
Co-Investigator:	Prof Parvati Raghuram (The Open University)
Co-Investigator:	Prof Sophie Watson (The Open University)
Research Associate:	Dr Alan-Miguel Valdez (The Open University)
Research Associate:	Dr Edward Wigley (The Open University).
Research Associate:	Dr Oliver Zanetti (The Open University, and then, The University of Oxford)

It was funded by the Economic and Social Research Council which awarded £595,649 from its open competition under grant number ES/N014421/1.

Data Collection Methods, Secondary Data and Data Validation

The data was collected in SCIM was almost entirely qualitative. For each work package, interviews were undertaken with relevant players and stakeholders in their field. These were identified by desk research undertaken by research associates followed by a snowballing method to identify and be introduced to other participants. Because of the nature of the project, there was not an aim of sampling a representative community. Rather, each of the interviews took the form of elite or expert interviews with actors engaged in some significant way in the smart city debate in MK. For the same reason, there was no interview protocol which was transferable across each work package, let alone across the project as a whole. Interview topic areas were decided based on the specific expertise of each interviewee, drawn from desk research and from knowledge that had emerged from the existing fieldwork corpus. In all cases where the interviewee gave permission to do so, the interviews were recorded using an industry standard digital data recorder and transcribed verbatim by an outside agency. Metadata was added to the interview when the transcription was returned, and the relevant Research Associate would check the interview quality, filling in missing words and checking queried works and replacing them where possible.

Other data was gathered to accompany that gained from interviews. Most work packages made some use of documentary data and other desk research to underpin their findings. The smart governance work package collected and analysed a number of policy documents produced by MK, national and international governmental organisations. The smart visuals work package accumulated images from social media such as Twitter and YouTube, as well as printed publicity materials, in order to understand how smart city technologies were being pictured and therefore imagined and presented to audiences. We have been unable to archive either the documentary sources nor the images for copyright reasons, though those analysed were all found in the public domain and therefore continue to be available from their publishers or found in their archives.

Structure of Data Files

This section concerns only the data files of interviews, as other data files have not been submitted to ReShare.

Interviews were saved as rich text format files with basic metadata added as a table at the top of the transcript. During the project, a file name structure which took the form of:

INT_[date YYYYMMDD]_[interviewee name]_[interviewee organisation].rtf

was employed. At the end of the project, those file names were changed to protect the anonymity of those participants who wished to remain anonymous. The file name structure for interviews submitted to ReShare is:

INT_[interview date YYYYMMDD]_[interview ID].rft

All data submitted is in rich text format in order to preserve the longevity of the data.

Reuse of Data: Confidentiality and Conditions of Use

The data collected in this project may be reused by future researchers. It has been submitted to ReShare as Safeguarded Data and requires permission from SCIM's Principal Investigator to be reused. The decision was made to archive in this way in order to protect the personal or commercial interests of interview participants. The original consent form (included in the submission) given to interviewees offered the possibility for data to be archived in a way which preserved the anonymity of participants. However, because of the nature of the project, in particular its specificity to MK and the fact that almost all interviews were expert interviews where participants spoke about discrete projects, anonymity could not be guaranteed to those participants. The decision was made to re-contact participants who had requested anonymity and explain that, though personally identifying information could be removed from the interview transcript, it might still be possible to deduce who the speaker is based on their comments and the projects with which they were involved. A second consent form (also included in the submission) was sent to relevant participants. Very few responded, but for those who did, depending on their wish, either had their transcript removed from the archive or had personal information removed from their transcript which was then submitted to the archive.

Research Outputs

Gillian Rose

talk at Urban Transformations meeting and workshop, Brussels, March 2017

talk at smart city local government workshop, London, Dec 2017

talk at Urban Transformations conference, Oxford, June 2018.

talk at public meeting about smart developments in Vancouver, Simon Fraser University, Oct 2018

seminar at University of British Columbia, Oct 2018

inaugural lecture at University of Karlstad, November 2018

seminar at Oxford Internet Institute, Nov 2018

seminar at the University of Karlstad, Nov 2018

keynote address, Spatial Refigurations conference, Technische University Berlin, Feb 2019

seminar at Kings College London Urban Futures, Feb 2019

talk at FutureBuild expo, London, March 2019

seminar at University of Calgary, March 2019

lecture at University of Calgary, March 2019

lecture at University of Maryland, March 2019

seminar at Leeds Uni Geog Dept, June 2019

Matthew Cook

June 16-19 2019 - Nordic Geographers Bi-annual Meeting, Trondheim, Norway - Smart Milton Keynes and the taking of Frankenstein urbanism - Valdez, A., Cook, M. and Bingham, N. (2019)

July 25-28 2018 - EASST2018 conference, Lancaster, UK - Smart cities in the Making: Learning from Milton Keynes - Bingham, N, Rose, G, Valdez, AM and Cook, M. (2018)

June 3-6. 2018 - Regional Studies Association Annual conference, Lugano, Switzerland, - Exploring smart mobilities, assemblages and alignments - Cook, M., Valdez, AM. (2018)

June 18-21 2017 - Nordic Geographers Meeting in Stockholm - Doing smart governance: an assemblage approach - Cook, M., and Joss, S., (2017)

May 19 2017 - 'Shaping Data Standards for future Cities' event at the Urban Big Data Centre, Glasgow, UK - Standardising the Smart City: Toward a new Citizenship Regime? - Cook, M., Joss, S., and Dayot, Y.,(2017)

Alan Valdez

June 16-19 2019 - Nordic Geographers Bi-annual Meeting, Trondheim, Norway - Smart Milton Keynes and the taking of Frankenstein urbanism - Valdez, A., Cook, M. and Bingham, N. (2019)

Nov 30 2018 - Breakfast Briefing at the Future Cities Catapult, London, UK - Smart cities and inadvertent exclusion: a toolkit for better and more inclusive smart cities - Zanetti, O., Valdez, AM. (2018)

July 25-28 2018 - EASST2018 conference, Lancaster, UK - Smart cities in the Making: Learning from Milton Keynes - Bingham, N, Rose, G, Valdez, AM and Cook, M. (2018)

June 3-6. 2018 - Regional Studies Association Annual conference, Lugano, Switzerland, - Exploring smart mobilities, assemblages and alignments - Cook, M., Valdez, AM. (2018)

May 21-22 2018 - Data Justice Conference, Cardiff, UK - Smart cities, data infrastructures and social difference in a new town - Valdez AM., Bingham, N. (2018).

Aug 30-Sept 1 2017 - 'Contesting the Smart City' session, RGS-IBG conference, London, UK - Following Smart Cities in the Making: stories from the Milton Keynes Data Hub - Bingham, N. and Valdez, AM. (2017)

Edward Wigley

30th August 2018, Empowering Mobilities, 'Who's Behind the Wheel', Wigley and Rose

Oliver Zanetti

November 2018 'Social difference in smart cities: how it works and what to do about it,' at the Future Cities Catapult breakfast talks series.

August 2018 'Smart city technologies as generators of new kinds of social difference?' at ESRC Newton Fund and British Academy project workshop 'Learning from Small Cities: Governing Imagined Futures and the Dynamics of Change in India's Smart Urban Age'.

August 2018 'Assemblage practices in emerging smart technologies: what holds, what doesn't, and why,' Royal Geographical Society: Institute of British Geographers, Cardiff.

July 2018 ‘Enacting social difference through smart city tech: the gathering of groupings through a platform,’ European Association for the Study of Science and Technology, Lancaster.

April 2018 ‘Digital Citizenship in a Smart City: The Making of Citizenship by a Smart Which Doesn’t Quite “Hold,”’ British Sociological Association, Newcastle.