T10P06 / Digital Methods for Public Policy

Topic : T10 / Methodologies
Chair : Gray Jonathan (King's College London)
Second Chair : Nicholas Pearce (University of Bath)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

The past few decades have seen an explosion in "born digital" data – including from social media services and online platforms, smart phones, digital devices and the web. These sources of data open up new avenues for the study for social and political phenomena (Savage & Burrows, 2007; Lazer et al., 2009). This panel will examine the potential implications of a shift from "digitized" to "born digital" data and methods (Rogers, 2014). This methodological shift from a focus on polls, surveys and interviews to repurposing digital traces and big data is accompanied by a corresponding shift in ways of studying and thinking about of social life.
Drawing on research in digital sociology, media studies, communication studies and Science and Technology Studies, this panel will look at how "born digital" data has and can be used in the context of public policy. In particular, it will address questions such as: How might emerging sources of digital data be repurposed to inform policy research and practice? What kinds of capacities are required for researchers, policymakers and public institutions to take advantage of these developments? What are the consequences of the growing use of born digital data for public policy-making?

The digital methods agenda has been developed in order to repurpose "born digital" data for the purpose of social, cultural and political research. The past decade has seen the development of tools and methods for using digital data from a wide variety of media – including search engines, social media and sharing platforms. These have been applied to study societal issues from migration and food safety to urban planning, illness and ageing (Rogers, 2013; Rogers, Sánchez-Querubín, & Kil, 2015). The panel aims to open up space for engagements between digital methods and public policy research - including showcasing and discussing the contribution of new digital tools, methods and born digital data in public policy research, as well as advancing methodological and theoretical reflection on their growing availability and use.

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CALL FOR PAPERS

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Drawing on research in digital sociology, media studies, communication studies and Science and Technology Studies, this panel will look at how "born digital" data is and can be used in the context of public policy.
This panel aims to open up space for engagements between digital methods and public policy research - including showcasing and discussing the contribution of new digital tools, methods and born digital data in public policy research, as well as advancing methodological and theoretical reflection on their growing availability and use. We welcome contributions on topics such as:
- Examples of the use of digital tools, methods and data in public policy research

- Opportunities and challenges around the use of "born digital" data in policy research
- Reflection on the use and availability of digital methods, tools and data in policy
- Shifts from digitised data (e.g. statistics) to born digital data (e.g. web and social media data)
- The politics of digital tools, data and methods and their role in policy research and practice

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Session 1Digital Methods for Public Policy

Thursday, June 29th 08:15 to 10:15 (Block B 2 - 2)

Discussants

Gray Jonathan (King's College London)

Moving beyond the digitalised and natively digital divide. The case of the mapping of climate policy debates in multiple spaces

Nicolas Baya Laffite (STSLab, Université de Lausanne)

How can digital data of different origins be articulated to produce mappings of specific spaces, both online and offline where the debate on the policy deploys? Addressing this question implies engaging head on with the origin of the digital character of data as understood by scholars in the Digital Methods. Digital methods have built upon the divide between digitalised and natively digital. In such division, natively digital data and methods are what distinguishes the Digital Methods approach – as a linked to a specific group of scholars developing it – from other approaches and scholars that operate in the realm of digitalised sources and methods, often associated with "digital humanities" and other scholarly labels that have emerged with the computational turn in the social sciences and the humanities. While this foundational distinction is important not only in terms of method and also as marker of epistemic identity for those engaging with the digital in research, this paper proposes to move on toward an integrative approach of "digitalised" and "natively digital" within a spatial approach to the web and the Internet. Such move is an answer to the challenges raised by the use of digital data and computer assisted methods to provide specific insight to the study of the conversations, debates, and struggles that animate technically complex policy processes. To address these questions and illustrate, the paper proposes a comparison of two investigations aimed at mapping the topical trajectories of conversations about climate politics at the occasion of the Conferences of the Parties to the United Nations Convention on Climate Change. The first investigation focuses on the "inside" of the negotiation. Using a collection of digitalised summaries, it achieves to map the evolution of topics over twenty-two annual conferences. The second one, draws instead on Twitter data, not for mapping negotiation topics or public debate on climate change, but just Twitter interactions around the 21st and 22nd COPs in Paris and Marrakech. In the proposed approach, Twitter is understood as a specific place which is not a world apart, outside the real world, but precisely one place in the world with its own specific grammar. Thereby, this paper contributes the panel's call for engagements between digital research and policy research by problematizing "digitalised" and "born digital data" as distinct proxies that can be combined to produce distant readings of online and offline conversations taking place in specific places in the same world.

Understanding the policy process over time: Linking debates to decisions through digital sources

Jenny Lewis (University of Melbourne)

Andrew Turpin (University of Melbourne)

What is the relationship between policy debates and government policy decisions? There is much that we still do not understand about how discussion ultimately leads to policy change (or does not). In order to understand how policy decisions unfold we need a much stronger grasp of what happens over multiple points in time, rather than at a single decision point, and how they are driven by varying debates and potentially changing groups of supporters. How can large digital sources of pertinent data be used to understand the link between debates and policy decisions over time?

Emerging developments such as natural language processing, topic modelling and sentiment analysis, allow

us to build large, inter-temporal data sets using numerous sources of information on policy debates, which can be analysed in relation to particular decision points. We can use these to track debates on a policy area over multiple decision (and non-decision) points, so that changes in how the problem is being framed, who is supporting particular solutions and what they are supporting, and the ultimate decisions taken (or suspended until later) can all be observed.

This paper will develop and empirically test a new framework for analysing the relationship between policy framing and debates and policy decisions over time, using digital sources. This approach has several major advances over previous work on the policy process. First, because we are able to harness data with computational approaches, the volume of data that can be analysed is increased enormously. Second, related to the use of data searching, extraction and collation by computer algorithms, we can also take an inter-temporal approach, tracking issues over time. Third, in addition to tracking what is reported in various publicly available datasets over time, we can map the changes we observe onto numerous critical policy decisions. Fourth, we can analyse how different policy decisions unfold in regard to the length of time taken to reach decisions and the sources and level of support required.

We will empirically test this framework with a case study of austerity (public expenditure restraint) in Australia, ending with the 2014 federal budget which was largely not enacted. Although the most recent global financial crisis has brought austerity to the fore, it has been sporadically discussed in many nations following the end of the steady public expenditure expansion that followed World War II and the oil crisis of the mid-1970s. Successive Australian governments have tried to curb spending, with varying levels of success. Using Hansard, the mass media, government media releases, policy statements, and Prime Ministers speeches over the last 50 years, we will extract and analyse references to austerity (and a range of related terms) using natural language processing, topic analysis and sentiment analysis. We will also search for the supporters and opponents of particular framing of the issue and proposals for change. Finally, we will link this with policy decisions (and non-decisions).

Mapping open data on digital media

Gray Jonathan (King's College London)

Over the past decade open data has dramatically ascended from a niche idea in open source software, scientific and civic hacking communities to playing a prominent role in public policy at local, regional, national and transnational levels, in relation to a wide variety of issues and areas - from facilitating transparency, accountability and open government to fuelling the digital economy and scientific and technological innovation.

This paper examines how digital methods for social and political research (Rogers, 2013) can be used to study and map the circulation, adaptation and reconfiguration of open data policy - including associated visions, practices, infrastructures and technologies. It will explore how "born digital" data from the web and a variety of different online platforms can be repurposed in the service of policy research. As well as showcasing a variety of different approaches, tools and methods - from web scraping to visual network analysis - the paper reflects on the affordances and limits of digital methods for policy research and practice, suggesting several avenues for experimentation.

Designing Digital Methods to monitor and inform Urban Policy. The case of Paris and its Urban Nature initiative.

donato ricci (médialab|SciencesPo)

Axel Meunier

Gabriele Colombo (Politecnico di Milano)

Agata Brilli (Politecnico di Milano)

Following United Nations projections by 2050 around 66% of the human population will live in urban area, triggering unprecedented and irreversible impacts on the biosphere. *Renaturation* of the city is considered worldwide among the *smart* solutions to a wide range of issues created by urban growth, from the improvement of the quality of life, the sustainable production and distribution of food, to the mitigation of the "heat island" effect. But there is no agreement as to which imaginaries and technical practices will lead to a better future. One could summarize the puzzle that Urban Nature poses as: should Nature be brought back or designed in the urban realm?

In this framework, the Paris municipality has recently started a big revegetation project. Through the local urban development plan 850 million euros have been allocated for greening the city through 2020. The

municipality wants to reconfigure the practices that produce Nature through financial incentives, identification of new sites of interest, calls for projects and a soon-to-be launched digital platform. It aims at enrolling residents in a narrative that brings together citizen participation, local entrepreneurship and innovation to enhance the greening potential of the city.

To address such a situation and to observe, monitor and, eventually, produce elements of reflections for future Urban Policy about Urban Nature, the NATURPRADI project has been financed by The French Environment and Energy Management Agency. It gathers researchers from several different disciplines and the Paris municipality itself, in order to understand this ongoing transformation. It features a specific Digital Methods research module aimed at producing symbolic and material mappings of the Parisian Urban Nature issue, and addresses specific research questions: Which images, discourses and practices narrate urban nature? by whom and what are they sustained? Who and what is speaking in the name of the nature?

For the project, we harvested one year of Twitter contents, to extensively document the social dynamics making the Urban Nature issue public. The collected dataset has been analysed and visualized under different dimensions:

-the entanglement of Urban Nature with other issues over time;

-the sharing patterns of pictures and documents relating to Nature in Paris;

-the mobilization of new objects and concepts specific to the urban environment

-the evolution of the network of actors;

-the change achieved by the city's policy makers.

In the paper, after having detailed the methodological aspect of the research, its technical and conceptual challenges, we will critically discuss how the result of the Digital Methods campaign could constitute a strategy to address simultaneously citizens and institutions alike, and provide them with tools to navigate through the issue and imagine future public policies.

A special attention will be paid to the mainstream *green and ecological* narratives about Urban Nature, used as a pacifying force to weaken opposition and disagreement. Digital Methods offer a chance to follow alternative muffled narratives, to re-politicize the Urban Nature issue and to make visible new emerging representations of the city, which is particularly relevant for an iconic city like Paris.