

RESPONSE

Urban indicators and dashboards: epistemology, contradictions and power/knowledge

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The three commentaries to our paper provide some interesting complementarities to our arguments and we would like to thank the authors for taking the time to read and comment on our work. Although coming from quite different perspectives, Mike Batty as an urban modeller and planner and Matt Wilson as a critical geographical information system (GIS) theorist, largely support our concerns around urban indicator and dashboard projects: that they have certain technical and epistemological shortcomings and are often used to support particular interests. Whilst Batty cautions as to how indicators and dashboard might be used, reframed technically and supplemented by more sophisticated modelling, Wilson is more concerned with how such projects are framed socially and economically as tools of capital accumulation. Neither provide analysis with which we particularly disagree. In contrast, Meg Holden and Sara Moreno Pires, while they recognize many of the issues we discuss, provide a critique of our analysis and a defence of indicator and dashboards as presently conceived and practised. Their commentary demonstrates to us how those who have vested a lot of time and effort into indicator and dashboard projects might misread and react to our argument, defending such projects without fully grasping our critique and the alternative epistemology we forwarded, or our own position within the indicator and dashboard landscape. The rest of this response, therefore, concentrates on their commentary.

We think it is important to start by restating that we are not against indicator or dashboard projects. As stated in the paper, for the past 15 years we have built and deployed them, working with communities, local and regional authorities, government departments, state agencies, and companies in both Ireland and Canada. Any time spent exploring our on-going projects – the Dublin Dashboard (www.dublindashboard.ie) or All-Island Research Observatory (www.airo.ie), or The Atlas of the Risk of Homelessness (<http://atlas.gcrc.carleton.ca/homelessness/intro/intro.xml.html>), or projects we contribute to such as MunicipalData.ca (<http://www.municipaldata-donneesmunicipales.ca/>) – would make it clear that we not only advocate such projects, but also successfully produce them. We also run ‘data days’ training people in how to take the data used in our sites and create their own visualizations and maps. We are highly active in local and national open data communities and in policy circles around open data. It seems perverse in this context to suggest that we feel that opening data is a ‘small matter’ or that we do not understand the politics and opportunities of opening data (especially since the entire paper is about the politics of data). At no point in our paper do we

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advocate for less data, or to close or not use indicator and dashboard projects, or offer a rationale for non-action, or dismiss the notion that the power, control and learning in indicator and dashboard projects can cut both ways (for administrations and citizens). Our argument is not about the potential value of such projects to different constituencies, or whether projects should be created and employed, but rather the nature of the data used, sites built, and how they are deployed and for what ends by city administrations. It is a paper about rethinking the epistemology, methodology and ideology of indicator and dashboard projects.

Our central argument can be illustrated with respect to answering a set of questions concerning urban indicators and city dashboards.

- Are cities highly complex, multi-scalar, contingent, relational, open entities?
- Are there issues of bias, error, fidelity, certainty, reliability, validity with indicator data?
- Does how we present data affect how they are interpreted?
- Are indicator projects concerning urban governance about more than accountability and transparency?
- Do people and institutions that are monitored by key performance indicators ‘juke the stats’ (as the cast of *The Wire* would say); that is, try to game indicators thus producing Campbell’s law?
- Do policy and actions based on indicator data have unexpected outcomes?
- Do modifiable areal unit problem (MAUP) and other ecological fallacies exist in indicator projects?
- Are urban indicator projects framed by political ideology and used politically?
- Are urban indicators and dashboards useful and informative?

For us, the answer to all of these questions is ‘yes’. When we talk to other people developing or using indicator/dashboard projects they also concede, if somewhat reluctantly, that the answer is ‘yes’. So the question therefore is why do the teams that build indicator and dashboard projects pretend that the answer to some/all of these questions is ‘no’? Why do they discount the concerns and carry on as if the issues referred to in the questions have no consequences vis-à-vis analysis, choices and decisions drawn from the projects? Or in the terms of our initial paper, why do indicator/dashboard projects adopt a realist epistemology that tries to assert that it ‘reveals the city as it really is’ when their creators know that they only present one understanding of the city; an understanding that has all kinds of limitations?

The answer is because it enables them to assert various kinds of power/knowledge: to claim to know the city and what is best for the city; to assert how the city is and should be governed and regulated; to justify particular policy and legal responses to city issues; to claim to be objective, neutral and impartial and therefore deflect critique from technocratic solutions based on them; and so on. In other words, the ends justify the means regardless of flaws, contradictions, ideological inflections, etc. This is as true for community groups using indicators as municipal authorities. This is why Holden and Moreno Pires make the appeal that the opportunities of such projects for local democracy and social learning outweigh any epistemological, ideological and technical concerns, despite the fact that such opportunities and the epistemology we offer are not mutually exclusive (which is our central point).

In counterpoint, we argue that indicators and dashboards have great utility, indeed offer many opportunities as demonstrated by how we ourselves have repeatedly used

such data in policy and media debates, but that the value of such initiatives should not be oversold and their shortcomings openly recognized and acknowledged. Yes, such projects have many uses and much value, but they are not the panacea for urban governance. They are one useful form of knowledge amongst many others for understanding and managing the complex realities of cities. What our paper advocates is to expose their strategic essentialism and to rethink their epistemology; to recognize openly that the answers to the questions above are 'yes'.

Given how important city planning and governance is to communities and companies residing in cities we still believe that this is a sensible move. Especially since indicator and dashboard projects are often used to promote neoliberal and new managerialist approaches to governance that serve particular interests and perpetuate and widen, rather than ameliorate, inequalities and injustices. This is certainly the case with respect to Baltimore and New York, where successive rounds of neoliberal reform have served particular class interests and have not simply produced transparency and accountability in neutral ways. If others want to persist with a tunnel and selective vision to indicators and dashboard projects they should not be surprised if we continue to critique their myopia and instead advocate and practise a different view that has a different set of values and epistemology; one which does not rely on strategic essentialism, contradictions and hypocritical positions, and which is open about the power/knowledge it seeks to assert. It is also one that seeks critically and reflexively to consider indicator or dashboard and open data projects so that these are created in the public interest, where evidence-informed policy is an open discussion between politicians, city administrators and citizens, and where the producers of these numbers do so in an open and transparent fashion.