Citizen Data and Trust in Official Statistics*

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Key Question

In a time of "alternative facts", what constitutes legitimate knowledge and expertise are major political sites of contention and struggle and require going beyond defending existing statistical practices towards inventing new ones. In this context, we argue that trust in official statistics depends not only on inventing new data sources and methods but also mobilising the possibilities of digital technologies to establish new relations with citizens.

Methodology

The article draws on several years of ethnographic fieldwork that followed statisticians' debates about and experiments with digital technologies and big data and their implications for official statistics as well as a series of workshops with an advisory group of statisticians. It is based on research conducted by an ERC funded project, ARITHMUS (Peopling Europe: How data make a people). Beginning in 2014, a team of 6 researchers followed working practices at five NSIs (UK Office for National Statistics, Statistics Netherlands, Statistics Estonia, Turkish Statistical Institute, and Statistics Finland) and two international organisations (Eurostat and UNECE). Rather than summarising empirical material from our fieldwork, we outline how this research led to a conception of "Citizen Data".

Main Results

• We reconceive statisticians' matters of concern about digital technologies and Big Data to define four principles of citizen data for the production of official statistics: experimentalism, citizen science, smart statistics and privacy-by-design.

• Experimentalism means being open to how relations between different participants in the making of data might be organised differently.

• Citizen science calls for models of coproduction that make ways of thinking and generating data open to citizens' influence.

• Smart statistics call for a care-full approach that enlarges ethics to include the interests and contributions of citizens in the development of new devices of data production.

• Privacy-by-design involves citizen privacy as a right built into not only the frontend of software design but through relations with citizens as co-producers at all stages of data production rather than at the backend as a correction.

Message

Proposals that NSIs need to defend the legitimacy of official statistics by demonstrating their trustworthiness or "calling out bad numbers" potentially play into the premise that what is at stake is winning a competition of "facts". Rather, NSIs have a role to play in fostering official statistics as collective accomplishments where legitimacy is derived from conditions of co-production and democratic deliberation where citizens are active in the making of knowledge about societies of which they are a part. While raising many practical and political questions such as the representativeness, inclusivity and quality of co-produced data, recent experiments that repurpose Big Data suggest that there is not one mode of production or set of standards through which statistics can become "official" and in turn trusted by citizens.