SURREPTITIOUS EXPERIMENTATION: DIGITAL INFRASTRUCTURES AND STRUCTURAL VIOLENCE IN THE HUMANITARIAN INDUSTRY

Mirca Madianou
Goldsmiths, University of London

The humanitarian sector is known for its reliance on technological pilots as part of the digitisation and datafication of aid operations. This paper outlines a new type of technological experimentation which I term 'surreptitious experimentation'. This type of experimentation is possible as digital technologies and practices become enmeshed with the infrastructures of aid. This process of infrastructuring allows for a continuous flow of experimentation, which is not named as such, and which operates in the infrastructural background, and therefore remains hidden – yet in plain sight. Surreptitious experiments take place outside the laboratory, without clear boundaries, without meaningful consent, or processes of accountability. In so doing, surreptitious experiments compound the power asymmetries of humanitarianism with significant risks and harms for some of the world's most vulnerable people. In order to illustrate my argument, the paper will first observe the infrastructuring of humanitarian aid before outlining the contours of this new type of experimentation and its associated harms.

The paper draws on 10 years of research in the humanitarian sector. In particular, it draws on interviews with donors, humanitarian organisations, government representatives, private entrepreneurs and business representatives, digital developers, volunteers, and affected people themselves; participant observation in spaces of innovation (such as hackathons), and finally, digital ethnography.

Infrastructuring

Infrastructures are 'built networks that facilitate the flow of goods, people or ideas and allow for their exchange over space' (Larkin, 2013: 328). In this sense, infrastructures encompass, but extend beyond the notion of 'substrate', the idea of a system such as a railroad on which rail cars run (Star and Ruhleder, 1996: 116). Humanitarian infrastructures include the substrates as well as the data, technologies, ideas about technology and affects which flow through them. Humanitarian infrastructures

encompass humanitarian workers, host governments, donors (which largely includes western governments), private companies, volunteers, digital developers and crisis-affected communities and the relations between them. An infrastructural approach allows us to observe how biometric data travel within, but also beyond the humanitarian space – and the vulnerabilities this creates for data subjects.

By infrastructuring I refer to the technological networks that underpin the humanitarian space as a whole. Humanitarian systems are built on privatised or government networks and systems; in turn humanitarian systems become the infrastructure for the provision of basic services. Crucially, infrastructuring means that humanitarian systems become interoperable with other systems owned by governments or private companies.

A typical example of infrastructuring is biometrics. Biometric technologies have become normalised in the humanitarian sector. The first thing that happens when a refugee comes into contact with the United Nations High Commissioner for Refugees (UNHCR) is to be asked to give their biometric data. Biometric data are stored in vast databases held by humanitarian agencies such as UNHCR and the UN's World Food Programme (WFP). Biometrics increasingly underpin a multitude of humanitarian operations and processes, such as cash assistance.

Building Blocks, the biometrics and blockchain-based cash assistance programme launched by the WFP exemplifies the infrastructural character of biometric systems. *Building Blocks*, *which* started in 2017, combines with blockchain technology and commercial infrastructures to disburse payments following the successful authentication of users. *Building Blocks* draws on the vast biometric databases of UNHCR and the WFP, which in turn provide the infrastructure for all sorts of humanitarian operations. *Building Blocks* was one of the largest technological pilots in the humanitarian sector. It started as a pilot of 10,000 people before expanding to 106,000 refugees in Jordan. In 2021 it scaled up to over one million users in Bangladesh and Jordan and, more recently, in Ukraine.

Biometric technologies are far from the perfect identification technologies. They are based on classifications which are racialized and which marginalize some communities more than others (Browne, 2015; Magnet, 2011). Apart from concerns regarding privacy, safeguarding and function creep, the high margin of error when measuring 'othered' bodies that deviate from prototypical whiteness, is a form of structural violence. This is the violence of being defined as someone who is not you (Glissant, 1990). Structural violence is here understood as a violation of human dignity which is indirect yet systematic (Farmer, 2004).

Surreptitious experimentation

Because infrastructures operate in the background, they are invisible and taken for granted. When experiments take advantage of digital infrastructures, they, too, become invisible. In these circumstances, experiments become diffused. When a pilot occurs in what is an everyday, vital infrastructure, then participants are not aware that they are taking part in an experiment. For example, when *Building Blocks* operated as a pilot it

was the only method of aid distribution. In other words, it was not a pilot that refugees could choose to 'opt out' of.

This is related to the lack meaningful consent in refugee biometric registrations and digital identity systems where to refuse to submit one's biometric data amounts to a refusal to receive aid when there are no alternatives for survival. In the case of experimentation, the problem of consent also extends to not making people aware of the nature of a programme and its potential limitations (McStay, 2013). As one interlocutor from the aid sector put it: 'the problem begins when not all people understand that they participate in an experiment'. If people are presented with a technological system that appears to be complete, and therefore safe to use, that has significant implications for their awareness of possible dangers. Even in the rare occasions, when people are presented with a consent form, if there are no alternative ways to access aid and if the nature of the pilot and its data management are not made abundantly clear, then consent resembles coercion. This bureaucratic application of consent ultimately helps legitimate problematic experimentation practices.

When experiments take place at an infrastructural level, experimentation becomes diffuse and continuous. Operating in the infrastructural background, experimentation remains hidden. Infrastructural experimentation exemplifies Marres and Stark's (2020: 428) observation that the social environments are modified so as to enable experimental operations. Infrastructures allow for more experimentation to take place. In surreptitious experimentation the aim is no longer to learn and observe, but to intervene into the environment and control the experiment subjects (Marres and Stark, 2020).

Experiments have always reconfigured the relationships between those tested and those testing. Because of their lack of meaningful consent and accountability surreptitious experiments accentuate the inequities between humanitarian workers and affected communities and further compound existing asymmetries between the global north and global south. The risks associated with biometric technologies turn the *Building Blocks* surreptitious experiment into a diffused form of structural violence.

References

Browne, S. (2015) *Dark Matters: On the Surveillance of Blackness*. Durham: Duke University Press.

Farmer, P. (2004) 'An Anthropology of Structural Violence', *Current Anthropology*, 45(3), pp. 305–325. doi:10.1086/382250.

Glissant, É. (1997) *Poetics of Relation*. University of Michigan Press.

Larkin, B. (2013) 'The Politics and Poetics of Infrastructure', *Annual Review of Anthropology* 42(1), pp. 327–43. doi:10.1146/annurev-anthro-092412- 155522.

Magnet, S. A. (2011) *When biometrics fail: Gender race and the technology of identity*. Durham: Duke University Press.

Marres, N. and Stark, D. (2020) 'Put to the test: For a new sociology of testing', *British Journal of Sociology,* 71, pp. 423–443. https://doi.org/10.1111/1468-4446.12746

McStay, A. (2013) 'I consent: An analysis of the Cookie Directive and its implications for UK behavioral advertising'. *New Media & Society, 15*(4): 596-611. https://doi.org/10.1177/1461444812458434

Star, S. L. and Ruhleder, K. (1996) 'Steps Toward an Ecology of Infrastructure: Design and Access for Large Information Spaces', *Information Systems Research*, 7(1), pp. 111–134