

# Quantification and Humanitarianism

Brendan T. Lawson

University teacher in Media and Communication, University of Loughborough; [b.b.lawson@lboro.ac.uk](mailto:b.b.lawson@lboro.ac.uk)

## Abstract

Over the past 25 years, the humanitarian sector has become increasingly dominated by numbers. This has been reflected in the growth of academic work that explores this relationship between humanitarianism and quantification. The most recent contribution to this literature is Joël Glasman's *Humanitarianism and the Quantification of Humanitarian Needs*. Through his empirical and theoretical contributions, Glasman draws our attention to the different ways that academics approach this topic. These four strands structure the literature review: knowledge – the technical difficulties in quantifying phenomena; governance – how numbers help humanitarian organisations manage the sector; effects – the impact that quantification has had on the sector as a whole; meaning – the importance of rhetoric, discourse, representation and communication when it comes to understanding the quantitative. As part of the review, the essay also identifies how academics can better engage with each of the four strands.

**Keywords:** quantification, data, numbers, humanitarianism, governance

## Introduction

Quantification is an essential component of contemporary humanitarianism. It has manifested most clearly in the proliferation of indexes, metrics, indicators and rankings across the humanitarian sector: CATO's Human Freedom Index rates each country on a scale of 0–10 to judge the freedom they allow their citizens, the UN's Integrated Phase Classification categorises countries' food insecurity into five quantitatively-based tiers to determine the international response required, and the Humanitarian Data Exchange (HDX) amalgamates different datasets into one easy-to-access open platform, to name but three. These quantitative measures are the result of an ensemble of material, logistical, conceptual, sociological, institutional, ideological and historical processes. And, in turn, they wield a considerable amount of power: dictating flows of international aid, prioritising certain humanitarian problems over others, rendering specific actors legitimate and others illegitimate, structuring humanitarian institution and practices.

A small but relatively coherent body of literature has emerged that critically examines this phenomenon of quantitative humanitarianism. Within this nascent field, four books stand out. Peter Andreas and Kelly Greenhill (2010) provide an excellent edited volume *Sex, Drugs and Body Counts* that documents the politics and processes of

knowledge production of transnational crime and armed conflict. Andreas Morten Jerven's (2013) *Poor Numbers* lays bare the problems of African economic data and the ramifications that these uncertainties have for making conclusions about international development. Sally Merry (2016), in *The Seductions of Quantification*, diligently and carefully documents the difference between rights-based indicators and the localised experiences of those being quantified.

Joël Glasman's (2020) recent book *Humanitarianism and the Quantification of Humanitarian Needs* adopts a historical and ethnographic approach to the emergence of quantitative standards in humanitarian emergency settings. It was the publication of this book, and its emphasis on thinking through contemporary questions of quantification through a historical perspective, that spurred the literature review laid here. The work of Glasman, and the other three books, are accompanied by a set of recent journal articles that provide a lively and insightful set of discussions (Dijkzeul *et al.*, 2013; Fast and Waugaman, 2016; Beerli, 2017a; Dijkzeul and Sandvik, 2019; Jacobsen and Fast, 2019; Lokot, 2019). To provide an overview of this literature, this review outlines four broad strands of quantification and humanitarianism: knowledge production, humanitarian governance, effects on the humanitarian sector and meaning.

## Strand 1: Knowledge Production

Within the humanitarian sector, numbers are generally treated as scientific facts that tap into an objective ontological reality. While this has been documented across different fields of humanitarianism (Beerli, 2017a; Eramian, 2019; Fukuda-Parr and McNeill, 2019), it has been most comprehensively demonstrated by Sally Merry (2016: 3) in *The Seductions of Quantification*. She argues that global indicators, covering sexual violence to economic prosperity, are ‘presented as unambiguous and objective’ because they ‘are grounded in the certainty of numbers’. Such a conception of numbers is encapsulated by Desrosières (2001: 348) when he talks of ‘metrological realism’. This viewpoint holds that ‘computed moments (averages, variances, correlations) have a substance that reflects an underlying macrosocial reality, revealed by those computations’. In other words, numbers reveal something about the world around us that was previously hidden.

Despite being presented as objective facts, these humanitarian numbers are far from certain. Merry (2016) highlights this tension in their analysis of the annual Traffic in Persons (TIP) Report. Produced by the U.S. State Department, the TIP Reports are principally concerned with quantifying the number of people trafficked across the world. This data is converted into a classification system that categorises nation-states into tiers of compliance. The index ranges from governments who full comply with the minimum standards of the Trafficking Victims Protection Act (TVPA) of 2000 (tier 1) through to countries who do not full comply and are not making any significant efforts to do so (tier 3). In this way, ‘the TIP Reports examine numbers of victims, numbers of prosecutions, and numbers of convictions as a way to gain certainty about a problem’ (Merry, 2016: 138). But Merry argues that such an act of quantification is far from certain. In fact, ‘trafficked people’ is an incredibly difficult phenomena to measure given the size and nature of population flows and the contestation over the definition of trafficking itself (Merry, 2016: 138). The lack of consensus over the definition of humanitarian phenomena is a central theme to research that outlines the technical problems of quantification (see Randall *et al.* (2011) for the case of ‘households’).

But problems in collecting quantitative data are not just definitional. Crisp (1999: 4) highlighted the logistical problems of collecting refugee statistics in the 1990s. Crisp (1999: 6–8) explains that low resources and insufficient labour meant that counting large populations was operationally extremely challenging. Even in spaces that seem to be prime for bureaucratic processes, such as refugee camps, issues of counting populations are rife. Harrell-Bond (1992: 211–12) provides a two-point explanation as to why this is the case. First, she explains

that ‘refugee survival usually depends on mobility, either for employment, households’ dependent on remittances, and for more basic forms of self-sufficiency which involve living off the land – all of which resist census taking’. Second, refugees will manipulate assistance systems. For example, ‘false registration of family members who are temporarily or permanently missing is common’.

We can observe these practical and logistical problems of counting refugees in the work of Glasman (2020). Glasman narrates a single day of UNHCR’s documentation of refugees in the town of Kenzou in Cameroon. He points to the performative, cognitive, technical and intensely local issues facing those quantifying refugee populations (Glasman, 2020: 182–95). In doing so, he provides a nuanced account of refugee registration that involves structures of bureaucracy but also the agency of refugees to function within, and potentially manipulate, this system. In doing so, it brings the critical literature on counting refugees (Harrell-Bond *et al.*, 1992; Malkki, 1996; Crisp, 1999; Harrell-Bond, 2002) into the twenty-first century.

Such a piece of research emphasises the importance of adopting an ethnographical or observational approach to processes of quantification. It places the discussions about concepts and logistics within specific settings and helps draw attention to the performative, agentive and relational dynamic between the person quantifying and the person being quantified (see the work of Ballestro (2015) for another excellent example).

In Glasman’s work we can also see the importance of the material. This is perhaps best demonstrated in Glasman’s case study approach to the Mid-upper Arm Circumference (MUAC) band for the measurement of malnutrition. Taking inspiration from Science and Technology Studies (STS), he traces the history of this ‘mundane artefact’ from its first use in Haiti in 1958 through to its contemporary position as the tool to measure malnutrition. The MUAC band is positioned as the result of a series of practical needs by those measuring malnutrition within tropical medicine, not a kind of ‘pure science’ that is often associated with quantitative tools. The legacy of this pragmatism is then identified in the way that the MUAC band can provide false positives for certain genetic groups (Glasman, 2020: 103). In addition, and somewhat ironically, this pragmatic tool also involved a series of practical steps that made its application inconsistent in the field.

In order to measure arm circumference properly, the child’s arm had to be hanging loosely, the exact mid-point between elbow and shoulder had to be found, and firm and constant pressure had to be applied with the measuring tape, which proved to be more complicated than it seemed. (Glasman, 2020: 102)

Such a critique provides a much needed technomaterialist perspective to a field often more concerned with problematic concepts and logistical problems. It also answers the broader call from critical quantification literature that emphasises the need to pay close attention to the tools that allow for measurement to occur (Holzhauser and Eggert, 2019).

Discussing the material also draws our attention to technology and its relationship to quantification. Dijkzeul and Sandvik (2019: S100) explain that digitisation – through technology – is dramatically changing the landscape of humanitarianism. It has enabled improved surveillance, most notably the use of biometrics with iris scans and fingerprinting to register and track beneficiaries and assistance (Jacobsen, 2017). It is not just what technology can capture, but it also makes information exchange on the ground much faster and transparent (Dijkzeul and Sandvik, 2019).

Despite these technological advances, quantitative practices during emergencies – such as counting populations – remains a non-exact science. As Read *et al.* (2016: 1326) argue, the ‘ideal of giving a full and accurate picture’ of a particular humanitarian setting offers the illusion of total depiction rather than a project that can be fully realised. Furthermore, much of the data that is collected remains unanalysed. As one interviewee explained in the paper by Read *et al.* (2016: 1315), this ‘data for data’s sake’ approach is like ‘buying a state of the art car, driving it in to the desert and leaving it there’. It seems that technology has allowed for more data to be collected but, through a lack of capacity and infrastructure, this information fails to become meaningful.

As the section above has highlighted, there are a range of conceptual, logistical, practical, performative and material problems in quantifying humanitarian phenomena. At best, quantitative information should be treated as complex and uncertain quantitative descriptions of the phenomena they enumerate. At worst, the humanitarian data produced should be considered guesstimates (Jerven, 2013).

Given the problems with reliable and accurate humanitarian data, why is quantitative information still so popular within the humanitarian field? One answer can be found through an engagement with quantitative governance. Numbers legitimise intervention and to confer trust to the organisations producing and communicating them. Put another way, quantification aids ‘humanitarian governance’ (Barnett, 2013) in determining who is trusted to act, in what context they can act and how they can act.

## Strand 2: Humanitarian Governance

Quantification has been shown to facilitate a specific form of humanitarian governance that centres on

legitimising intervention (Dijkzeul and Sandvik, 2019: 85). This type of intervention has ‘become increasingly polysemic and vague’ and it now refers to

[d]ifferent types of endeavours (coercive, non-coercive, ‘interventions on invitation’); involving a wide array of policy sectors (cultural, economic, military, legal etc.); seeing the engagement of a diverse set of ‘interveners’ (states, international organizations, NGOs etc.) as well as ‘targets’ (states, ‘crises’, civil wars, populations etc.). In sum, the concept is used to describe an extremely heterogeneous set of practices ranging from all-out war, in which case it serves as a euphemism, to the provision of humanitarian aid. (Olsson, 2015: 429)

Common to all the different types of intervention is the need for a legitimate rationale. Most often, this involves the construction of the ‘humanitarian problem’ that necessitates humanitarian intervention. In almost every case, the humanitarian problem is quantitatively constructed. Therefore, we can see quantification as the ‘foundation upon which the edifice of humanitarian intervention rests’ (Allison, 2014). But quantification does not allow for any type of intervention. In general, those producing and communicating the numbers during humanitarian crises hold an immense amount of power to govern crises by legitimising interventions (Porter, 1995; Parker, 1999; Barnett, 2013; Jacobsen and Fast, 2019).

We can observe this relationship between quantification, intervention and humanitarian organisations most clearly when we consider food insecurity and famine. Contemporary food insecurities are classified by the Integrated Phase Classification (IPC) system – a classification system developed by United Nations’ agencies, INGOs and intergovernmental organisations. For a famine to be declared, a region needs to surpass three thresholds: 2 deaths per 10,000 people per day (crude death rate), 30 per cent of children are acutely malnourished and 20 per cent of households with extreme food gaps (IPC Global Partners, 2019: 9). If the region falls into the category of ‘famine’, the IPC system stresses the need for ‘immediate action’ from the international community (IPC Global Partners, 2019: 88). This collective effort is then centrally managed by the United Nations’ Office for the Coordination of Humanitarian Affairs (UNOCHA). Here we can see how the production of knowledge, the intervention it necessitates and the organisation of the intervention are tightly bound within a small number of large organisations that dominate the humanitarian sector.

In theory, the IPC harbours the power of quantification to ‘de-politicise’ the declarations of famines. However, the suitability of these quantitative thresholds have been challenged – especially the mortality rate

integrated into the IPC system (Weissman, 2018). Many argue that having such a hard definition means that certain food insecurities are not classified as famines when they should be. Maxwell and Hailey (2020) point to the case study of Yemen. They explain how the IPC could not declare a famine in the region because the mortality and malnutrition rates were not high enough. But, many argue, these low levels of mortality and malnutrition are not reflective of the actual situation – instead, they result from issues with the quality, availability and transparency of the data (Maxwell and Hailey, 2020: 27).

Despite these problems, numbers continue to occupy a privileged position in the humanitarian sector. While this is partly due to their ability to legitimise intervention, it also rests on the way numbers confer trust to those who adopt quantitative practices. Dijkzeul and Sandvik (2019: S101) refer to these practice as ‘rationalisation processes’ that include auditing, accountancy and evidence-based action. These rationalisation processes are considered strategic exercises by humanitarian organisations to convey neutrality, accountability and efficiency.

Many academics argue that this link between numbers and trust can explain why the humanitarian sector became increasingly quantified during the 1990s. They argue that rationalisation processes were adopted to claw back the neutrality they had lost during the military humanitarianism of the late twentieth century (Chouliaraki, 2013: 13–15) and to regain the trust of the international community after their failings during the Rwandan genocide (1994) (Verpoorten, 2005: 357). In relation to the emergence of quantification in society in general, the twenty-first century has witnessed the establishment and entrenchment of numbers within the humanitarian sector – aided by the use of digital technology and big data (Leeuw, 2012; Dijkzeul *et al.*, 2013; Jacobsen and Fast, 2019).

But these two notions – legitimising intervention and building trust – are not specific to the humanitarian sector. Both are forms of quantitative governance that have been identified in other contexts. This leads us to ask: what is specific about the process of quantification within humanitarian governance? For Glasman, it is the heterogeneity of the humanitarian sector (especially in emergency settings) that can include a wide range of actors and institutions from the UN system, INGOs, NGOs, nation-states, civil societies and private organisations.

Glasman (2020: 249) begins from this space of heterogeneity and examines how quantification is used as a tool to turn this fragile disharmony into a stable consensus. In the words of Glasman (2020: 2), ‘their [humanitarian numbers] *raison d’être* might well be to stabilise the relation between different humanitarian organisations competing for resources, public attention and access to target populations’.

Focusing specifically on the Cameroon, Glasman (2020: 231–4) documents the way OCHA created a ‘general score’ of humanitarian need to bring a diffracted humanitarian field together during the Central African refugee crisis in the country. Glasman (2020: 232–3) explains that there were a series of fracture lines across humanitarian actors and institutions: between the Cameroonian state and NGOs and the UN system, between UN organisations and INGOs, between urgentists and developmentalists and between those with a refugee focus and those concerned with the wider population. To pacify these tensions, UNOCHA followed three steps: they gathered the humanitarian organisations into ten sectors and asked them to choose a set of indicators from a pre-selected list; they weighted each indicator so each sector had an internal indicator calculated by an average; and then, through another process of averaging, they created a general score for each district that included all sectors. In doing so, UNOCHA used ‘the power of the algorithm’ to create consensus by ‘way of mathematical averages’ (Glasman, 2020: 233–4).

This process of consensus building was also central to the way humanitarian organisations used quantification as a tool to render themselves more trustworthy and accountable. Glasman demonstrates this when he focuses on the crisis of legitimacy within the humanitarian sector in the post-Rwandan genocide period (mid 1990s to early 2000s). To regain legitimacy, the Sphere Project (a group of humanitarian professionals set up in 1997) developed a set of humanitarian standards for aid and humanitarian practice.

Glasman argues that the success of the Sphere Project was not in creating foolproof standards. Its greatest achievement was the way it created a consensus across UN agencies, INGOs and donor governments through four strategies: framing the debate, domesticating the critique, integrating the critiques and crafting the language of consent (Glasman, 2020: 145–51). Only after this consensus had been established, could the Sphere project create their standards for aid and practice and use these standards to emphasise the accountability and transparency of the humanitarian sector.

This emphasis on consensus provides a more nuanced approach to the narratives of quantification-equals-trust or quantification-legitimises-intervention mapped out at the beginning of this section. It emphasises the need to start from the humanitarian sector and look at how quantification functions in this space, rather than overlaying quantitative governance onto the humanitarian sector.

### Strand 3: Effects on Humanitarian Sector

As the previous section highlighted, quantification has been increasingly adopted by humanitarian

organisations. While these do serve strategic purposes – legitimising intervention and conferring trust – they also structure the way humanitarian practice and institutions are configured. Many of these discussions are rooted in the way ‘evidence-based action’ – the use of mainly quantitative information to make decisions in the humanitarian sector – has come to dominate humanitarian institutions and practices (Bradt, 2009; Knox Clarke and Darcy, 2014; Campbell and Knox Clarke, 2019).

As Dijkzeul (2013: S2) explains, ‘in humanitarian studies, evidence-based approaches are most common in the fields of engineering, evaluation studies, logistics, medicine, and public health’. For example, we can turn to the literature on Humanitarian Operations and Supply Chain Management (HOSCM). This body of work, generally geared towards the development of practical solutions to humanitarian logistical problems, has increasingly adopted mathematical models over the past two decades. These have been used to understand the uncertainty surrounding several key areas in supply and operations:

communication systems, infrastructure requirements, resource management, severity and time of the disaster, geographical conditions, and reaction time, availability of technology and nature of resources of human resources. (Behl and Dutta, 2019: 1020)

These mathematical models are used to improve the efficiency, suitability and flexibility of logistics across different phases of humanitarian projects. Beyond these specific sectors, it seems that certain types of decisions in the humanitarian sector rely on quantitative information more too. In their interviews with humanitarian practitioners, Campbell and Knox-Clarke (2019: 46) found that decisions about responses – both the correct option and the scale – were heavily reliant on the analysis of data. The success of these types of approaches to humanitarianism have knock-on effects for the humanitarian sector itself. Most obviously, this emphasis on ‘evidence-based action’ involves the increased emphasis on collecting information.

Lokot (2019) outlines this ‘bias towards counting’ through her interviews with humanitarian practitioners who had worked, or were currently working, on gender equality issues in Jordan. She quotes one interviewee who explains that ‘instead of quality work, you are trying to get the numbers’ and Lokot goes on to argue that such an emphasis on counting means that they stop being part of a wider process and become ‘the outcome itself’ (Lokot, 2019: 472)

Quantification does not only mean counting practices form an increasingly larger part of everyone’s workload, it also privileges certain types of expertise over others. Since the 1990s, there has been a shift from experience-based opinion within the humanitarian sector towards

quantitative experts who practice auditing, deploy accountancy and conduct numerical-based research (Barnett, 2013; Beerli and Weissman, 2016).

The dominance of these quantitative experts has been demonstrated in the work that can be grouped together as ‘neo-Bourdiesian’ (Beerli, 2017a: 785). Most notably, Bigo (2014) shows how security practices are increasingly dominated by data analysts with knowledge of computer systems who have the potential to create and manage population statistically. Since the publication of Bigo’s work, we can see how the practices of data science, artificial intelligence and machine learning have rooted themselves in sectors such as agriculture, health and education (Bertermann *et al.*, 2020).

But evidence-based work goes beyond the data scientist or the statistician. It also includes the number-based work of bureaucrats. Beerli (2017b) argues that quantification empowers senior managers and security managers to legitimise organisational change. Drawing on the work of Theodore Porter (1995: 8), Beerli (2017b: 66) argues that these bureaucratic officials do not have the mandate of an elected official, so draw on numbers to rationalise managerial functions. The argument goes beyond the expertise traditionally associated with numbers, and places emphasis on the way some people are more capable ‘of wielding power through quantitative instruments’ than others.

This change in humanitarian practice – one that emphasises the collection of data (by specialist and non-specialist experts) over implementation – has profound effects on the nature of humanitarianism. Lokot (2019: 468) argues that solidarity and proximity to communities – some of the original motivations of humanitarianism – ‘have become less of a priority than the drive towards generating evidence and data’. In relation to refugees, Lokot (2019: 475) argues that an emphasis on quantification marginalises the ‘day-to-day experiences of refugees based on actual research, old knowledge from other contexts and anecdotal facts’ that can create proximity, so the ‘relational, participatory approaches to understanding people’s lives are not seen as necessary’. Beerli (2017a) argues that this shift from proximity to distance is part of a wider trend within the humanitarian sector.

Such a process cannot be considered just a quantitative one, but also one that goes hand in hand with the adoption of technology. As Jacobsen and Fast (2019: S162) explain, the proliferation of mobile devices to collect data has shifted the emphasis from richer contextual data to quantitative data that can be captured by these devices. In doing so, there is a movement away from the contextual expertise of national staff – the insiders – to the technical expertise of outsiders (Autesserre, 2014). Or, as Dijkzeul and

Sandvik (2019: S100) put it, this technology ‘has enabled an increasing degree of remote management’.

This discussion of proximity and distance, and how it relates to the fundamental principles of humanitarianism itself, can also be observed in the work of Glasman. He argues that the contemporary focus on meeting humanitarian needs – the provision of X calories of food, Y litres of water and Z square metres of sheltered space – changes the very notion of humanitarianism (Glasman, 2020: 7). For Glasman (2020: 249), such a focus on minimum needs ‘supports only a very thin, minimalist version of humanity’. This version of humanity is not just minimalist but overly individualised. It conceives of a set of individuals – each having the same minimum needs – existing as atomised individuals within the larger mass. For Glasman, this erases how individuals exist within families, communities, regions and nations.

Glasman’s work on minimal versions of humanity and the wider literature on proximity and distance emphasises the need for the ‘ethics of quantification’ to be taken seriously (Espeland and Yung, 2019). To do so, we can turn to the literature on mediated suffering to further explore this relationship between philosophy and the quantitative (Arendt, 1990; Boltanski, 1999; Chouliaraki, 2006).

## Strand 4: Meaning

A paper by Paul Frosh (2011) examines the constant flow of images representing suffering across television screens, calling this form of representation the ‘aggregated image’. He argues that these images are ‘impersonal, non-intimate, inattentive’ forms of communication that mediate the sufferer and the audience (Frosh, 2011: 384). This creates a set of loose connections between the sufferer and the audience, what Frosh calls ‘the connective mortality of the media’. This can then be linked to a ‘complementary system of aggregated moral agency by organizations and institutions’ (Frosh, 2011: 394).

This ‘phatic politics’ is not the radical, activist-based politics presented by many within the field yet offers a take on the representation of suffering through accumulation and amalgamation that recognises the ‘everydayness’ of quantification, mediation and suffering (Frosh, 2011: 386). This account provides a counterpoint to some of the previous arguments concerning quantification by exploring the potentials of calculation to open up distinct, and morally desirable, spaces within humanitarianism. In doing so, we can see the potential of using the literature on ‘meaning’ (incorporating communication, representation, discourse and rhetoric) to explore quantification and humanitarianism.

A useful place to start is with the work of Alleyne (2003) on the discursive strategies and regimes of the United Nations. This account shines a light on the

importance of communication in the mid to late twentieth century to the establishment and spread of global and humanitarian governance. Taking this book as our foundation, we can begin to ask wider questions about quantification and humanitarianism. Why is the quantitative so seductive, given its technical deficiencies? How are quantitative practices associated with notions of trust, transparency and accountability? Why do certain standardised measures become accepted and celebrated and other fail?

Some of these questions have been addressed by those examining the intersection between journalism and public relations in a broadly ‘humanitarian’ setting. In particular, literature has identified how misleading numbers are communicated to the news media to emphasise the need for moral and financial support (de Waal, 1997; Lawrence and Brun, 2011; Franks, 2013; Dijkzeul and Sandvik, 2019). Such a relationship is then set within the broader relationship between humanitarian organisations seeking discursive exposure and news media organisations desiring more content with less resources (Cottle, 2009; Chouliaraki, 2013).

But to think through the unanswered questions around meaning, quantification and humanitarianism, I would recommend using David Beer’s (2016) book *Metric Power*. He outlines three distinct dimensions of the quantitative – measurement, circulation and possibility. Measurement and possibility have been explored in the current literature (addressed in strand 1 and strand 3 respectively) but the notion of circulation centres on meaning. He provides a comprehensive overview of different approaches to circulation that can help us think through the way the quantitative becomes meaningful in a humanitarian context. Done well, answers to these types of questions will provide a humanitarian-specific account of the meeting of quantification and communication that has proved so successful in other fields (Carruthers and Espeland, 1991; Porter, 1995; Espeland, 2015).

## Conclusion

This literature review has centred on four strands of work: knowledge, governance, effect and meaning. Each offers its own distinct potential but also sits in relation to the other. Knowledge production, however flawed, is essential to humanitarian governance. The increasing reliance on the quantitative in governance has knock-on effects for the humanitarian sector itself, while the broad concept of ‘meaning’ underpins much of the hopes, desires, imaginaries and dreams of quantification that underpin strands one, two and three.

Within each strand, I have also put forward some suggestions for future work. Within knowledge

production, the work of Glasman and Ballestero emphasise the need to root research in observational studies of how quantification occurs within specific contexts. To understand quantitative-humanitarian governance, it is important that the catch-all frameworks of quantitative governance are not automatically and directly mapped onto governance techniques within humanitarianism. Instead, there is a need to begin with humanitarianism and explore how the quantitative facilitates or restricts certain types of governance. As the initial discussions of ‘distance’ and ‘minimalism’ have outlined, there is also a need to engage with the ethical dimensions of quantification and relate these to the ethical underpinnings of humanitarianism itself. The final strand – meaning – is where my suggestions are perhaps more wide ranging. It calls for a reappraisal of knowledge production, governance and the effects of quantification within the broad banner of communication. To do so, will help unpack how and why quantification becomes so meaningful within the humanitarian sector.

## Works Cited

- Alleyne, M. D. (2003), *Global Lies? Propaganda, the UN and World Order* (Houndsmill: Palgrave Macmillan).
- Allison, S. (2014), ‘Putting a Number on Suffering’, [www.politicsweb.co.za/archive/putting-a-number-on-suffering](http://www.politicsweb.co.za/archive/putting-a-number-on-suffering) (accessed 13 May 2021).
- Andreas, P. and Greenhill, K. M. (eds) (2010), *Sex, Drugs, and Body Counts: The Politics of Numbers in Global Crime and Conflict* (Ithaca, NY: Cornell University Press).
- Arendt, H. (1990), *On Revolution* (London: Penguin).
- Autesserre, S. (2014), *Peaceland: Conflict Resolution and the Everyday Politics of International Intervention* (Cambridge: Cambridge University Press).
- Ballestero, A. (2015), ‘The Ethics of a Formula: Calculating a Financial–Humanitarian Price for Water’, *American Ethnologist*, 42:2, 262–78.
- Barnett, M. (2013), ‘Humanitarian Governance’, *Annual Review of Political Science*, 16, 379–98.
- Beer, D. (2016), *Metric Power* (London: Palgrave Macmillan).
- Beerli, M. J. (2017a), ‘Legitimizing Organizational Change through the Power of Quantification: Intra-Organizational Struggles and Data Deviations’, *International Peacekeeping*, 24:5, 780–802.
- Beerli, M. J. (2017b), ‘The Power to Count and the Stakes of Counting: An Inquiry into the Quantified Production of Humanitarian Insecurity’, *Global Governance*, 23:1, 57–70.
- Beerli, M. J. and Weissman, F. (2016), ‘Humanitarian security manuals: Neutralising the human factor in humanitarian action’, in M. Neuman and F. Weissman (eds), *Saving Lives and Staying Alive: The Professionalization of Humanitarian Security* (London: C. Hurst & Co. Publishers Ltd).
- Behl, A. and Dutta, P. (2019), ‘Humanitarian Supply Chain Management: A Thematic Literature Review and Future Directions of Research’, *Annals of Operations Research*, 283:1, 1001–44.
- Bertermann, K., Robinson, A., Bamberger, M., Higdon, G. L. and Raftree, L. (2020), *Big Data to Data Science: Moving from ‘What’ to ‘How’ in the MERL Tech Space*, [www.alnap.org/help-library/big-data-to-data-science-moving-from-%E2%80%9Cwhat%E2%80%9D-to-%E2%80%9Chow%E2%80%9D-in-the-merl-tech-space](http://www.alnap.org/help-library/big-data-to-data-science-moving-from-%E2%80%9Cwhat%E2%80%9D-to-%E2%80%9Chow%E2%80%9D-in-the-merl-tech-space) (accessed 13 May 2021).
- Bigo, D. (2014), ‘The (in)Securitization Practices of the Three Universes of EU Border Control: Military/Navy–border guards/police–database analysts’, *Security Dialogue*, 45:3, 209–25.
- Boltanski, L. (1999), *Distant Suffering: Morality, Media and Politics* (Cambridge: Cambridge University Press).
- Bradt, D. (2009), *Evidence-Based Decision-Making in Humanitarian Assistance* (London: Humanitarian Practice Network).
- Campbell, L. and Knox Clarke, P. (2019), *Beyond Assumptions: How Humanitarians Make Operational Decisions*, ALNAP Study (London: ODI/ALNAP).
- Carruthers, B. G. and Espeland, W. (1991), ‘Accounting for Rationality: Double-Entry Bookkeeping and the Rhetoric of Economic Rationality’, *American Journal of Sociology*, 97:1, 31–69.
- Chouliaraki, L. (2006), *Spectatorship of Suffering* (London and Thousand Oaks, CA: Sage).
- Chouliaraki, L. (2013), *The Ironic Spectator* (Cambridge: Polity Press).
- Cottle, S. (2009), *Global Crisis Reporting* (Maidenhead: Open University Press).
- Crisp, J. (1999), ‘Who has counted the refugees? UNHCR and the politics of numbers’, in *New Issues in Refugee Research Working Paper No. 12*. UNHCR.
- de Waal, A. (1997), *Famine Crimes: Politics and the Disaster Relief Industry in Africa* (Bloomington: Indiana University Press).
- Desrosières, A. (2001), ‘How Real are Statistics? Four Possible Attitudes’, *Social Research*, 68:2, 339–55.
- Dijkzeul, D. and Sandvik, K. B. (2019), ‘A World in Turmoil: Governing Risk, Establishing Order in Humanitarian Crises’, *Disasters*, 43:S2, S85–S108.
- Dijkzeul, D., Hilhorst, D. and Walker, P. (2013), ‘Introduction: Evidence-Based Action in Humanitarian Crises’, *Disasters*, 37:1, 1–19.
- Eramian, L. (2019), ‘Neutral Evaluators or Testimonial Connoisseurs? Valuing and Evaluating Reconciliation in Post-Genocide Rwanda’, *Social Anthropology*, 27:3, 531–46.
- Espeland, W. (2015), ‘Narrating numbers’, in R. Rottenburg, S. E. Merry, S. J. Park and J. Mugler (eds), *The World of Indicators: The Making of Governmental Knowledge through Quantification* (Cambridge: Cambridge University Press), pp. 56–75.
- Espeland, W. and Yung, V. (2019), ‘Ethical Dimensions of Quantification’, *Social Science Information*, 58:2, 238–60.
- Fast, L. and Waugaman, A. (2016), *Fighting Ebola with Information: Learning from the Use of Data, Information, and Digital Technologies in the West African Ebola Outbreak Response*, USAID.
- Franks, S. (2013), *Reporting Disasters: Famine, Aid, Politics and the Media* (London: Hurst).
- Frosh, P. (2011), ‘Phatic Morality: Television and Proper Distance’, *International Journal of Cultural Studies*, 14:4, 383–400.
- Fukuda-Parr, S. and McNeill, D. (2019), ‘Knowledge and Politics in Setting and Measuring the SDGs: Introduction to Special Issue’, *Global Policy*, 10:1, 5–15.
- Glasman, J. (2020), *Humanitarianism and the Quantification of Human Needs* (London and New York: Routledge).
- Harrell-Bond, B. (2002), ‘Can Humanitarian Work with Refugees be Humane?’, *Human Rights Quarterly*, 24:1, 51–85.
- Harrell-Bond, B., Voutira, E. and Leopold, M. (1992), ‘Counting the Refugees: Gifts, Givers, Patrons and Clients’, *Journal of Refugee Studies*, 5:(3–4), 205–25.
- Holzhauser, N. and Eggert, F. (2019), ‘The Role of Measurement in Theorising about the World’, *Social Science Information*, 58:2, 301–26.
- IPC Global Partners (2019), *Integrated Food Security Phase Classification Technical Manual Version 3.0. Evidence and Standards for Better Food Security and Nutrition Decisions*, FAO.
- Jacobsen, K. L. (2017), ‘On Humanitarian Refugee Biometric and New Forms of Intervention’, *Journal of Intervention and Statebuilding*, 11:4, 529–51.

- Jacobsen, K. L. and Fast, L. (2019), 'Rethinking Access: How Humanitarian Technology Governance Blurs Control and Care', *Disasters*, 43:S2, S151–S168.
- Jerven, A. M. (2013), *Poor Numbers: How We Are Misled by African Development Statistics and What To Do about It* (Ithaca, NY: Cornell University Press).
- Knox Clarke, P. and Darcy, J. (2014), *Insufficient Evidence? The Quality and Use of Evidence in Humanitarian Action*, ALNAP/ODI.
- Lawrence, P. G. and Brun, M. C. (2011), 'NGOs and HIV/AIDS Advocacy in India: Identifying Challenges', *South Asia: Journal of South Asian Studies*, 34:1, 65–88.
- Leeuw, F. L. (2012), 'On the contemporary history of experimental evaluations and its relevance for policy making', in O. Rieper, F. L. Leeuw and T. Ling (eds), *The Evidence Book: Concepts, Generation, and Use of Evidence* (Vol. 15) (New Brunswick, NJ: Transaction Publishers).
- Lokot, M. (2019), 'The Space between Us: Feminist Values and Humanitarian Power Dynamics in Research with Refugees', *Gender & Development*, 27:3, 467–84.
- Malkki, L. H. (1996), 'Speechless Emissaries: Refugees, Humanitarianism, and Dehistoricization', *Cultural Anthropology*, 11:3, 377–404.
- Maxwell, D. and Hailey, P. (2020), *The Politics of Information and Analysis: Humanitarian Information Systems and Analysis in Famines and Extreme Emergencies* (Medford, MA: Feinstein International Center, and Nairobi: Centre for Humanitarian Change).
- Merry, S. (2016), *The Seductions of Quantification: Measuring Human Rights, Gender Violence, and Sex Trafficking* (Chicago: The University of Chicago Press).
- Olsson, C. (2015), 'Interventionism as Practice: On "Ordinary Transgressions" and Their Routinization', *Journal of Intervention and Statebuilding*, 9:4, 425–41.
- Parker, I. (1999), 'Qualitative data and subjectivity of "objective" facts', in S. Simpson and D. Dorling (eds), *Statistics in Society* (London: Arnold), pp. 83–8.
- Porter, T. (1995), *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton, NJ: Princeton University Press).
- Randall, S., Coast, E. and Leone, T. (2011), 'Cultural Constructions of the Concept of Household in Sample Surveys', *Population Studies*, 65:2, 217–29.
- Read, R., Taithe, B. and Mac Ginty, R. (2016), 'Data Hubris? Humanitarian Information Systems and the Mirage of Technology', *Third World Quarterly*, 37:8, 1314–31.
- Verpoorten, M. (2005), 'The Death Toll of the Rwandan Genocide: A Detailed Analysis for Gikongoro Province', *Population*, 60:4, 331–67.
- Weissman, F. (2018), *Mortality Emergency Threshold: A Case for Revision*. ALNAP, [www.alnap.org/blogs/mortality-emergency-threshold-a-case-for-revision](http://www.alnap.org/blogs/mortality-emergency-threshold-a-case-for-revision) (accessed 13 May 2021).