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Epistemic injustice in academic global health

Himani Bhakuni, Seye Abimbola**

This Viewpoint calls attention to the pervasive wrongs related to knowledge production, use, and circulation in global health, many of which are taken for granted. We argue that common practices in academic global health (eg, authorship practices, research partnerships, academic writing, editorial practices, sensemaking practices, and the choice of audience or research framing, questions, and methods) are peppered with epistemic wrongs that lead to or exacerbate epistemic injustice. We describe two forms of epistemic wrongs, credibility deficit and interpretive marginalisation, which stem from structural exclusion of marginalised producers and recipients of knowledge. We then illustrate these forms of epistemic wrongs using examples of common practices in academic global health, and show how these wrongs are linked to the pose (or positionality) and the gaze (or audience) of producers of knowledge. The epistemic injustice framework shown in this Viewpoint can help to surface, detect, communicate, make sense of, avoid, and potentially undo unfair knowledge practices in global health that are inflicted upon people in their capacity as knowers, and as producers and recipients of knowledge, owing to structural prejudices in the processes involved in knowledge production, use, and circulation in global health.

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Introduction

Some social groups find that academic global health is geared towards their interests, whereas others find less priority is placed on what they know, how they see the world, or what is of pronounced consequence to them. Some people are recognised as credible knowers within global health, and the knowledge held by some others is afforded lower credibility. In light of this imbalance, there have been increasing calls to democratise and decentralise academic global health.[1] There have also been increasing calls for greater, deeper, and ethical community engagement,[2] for disseminating locally relevant research and knowledge to their appropriate end users,[3] for moving away from top–down approaches to research and interventions,[4] and for doing research that equitably meets the needs of people in low-income and middle-income countries (LMICs)[5] and, more broadly, the needs of marginalised people everywhere, including in high-income countries (HICs).

In our view, the epistemic injustice framework can help in efforts to surface, make sense of, and potentially undo unfair knowledge practices in global health.[1,6,7] Epistemic wrongs are moral wrongs that occur in processes involved in knowledge production, use, or circulation.[8] Epistemic wrongs can lead to epistemic injustices if the knowledge held by people who belong to marginalised groups (and if their status as knowers) is systematically afforded less credibility and if their interpretive (or sensemaking) resources are not recognised.[8] Such wrongs also lead to injustice if structurally marginalised groups are prejudicially denied interpretive resources to make sense of the world or their perception of the world,[8] or if they are unable to use the knowledge they receive because it was produced in isolation from them.[9] It is now well known that structural and persistent epistemic exclusion exists in academic global health, and that knowers, and producers and recipients of knowledge, from marginalised groups in HICs and LMICs suffer distinct epistemic wrongs.

The first systematic theory of epistemic injustice was proposed by Miranda Fricker,[8] who described some distinct wrongs done to a person in their capacity as a knower. Fricker identified two forms of epistemic injustice: testimonial injustice and hermeneutical injustice (in the following text we will use the term interpretive, it being synonymous with, and more accessible than, hermeneutical). Testimonial injustice occurs if a hearer prejudicially ascribes lower credibility to a speaker's word, for example, through acts that silence, undervalue, or distort the speaker's contributions (ie, through being given a credibility deficit). Interpretive injustice occurs if individuals or groups struggle to make sense of and share their experience of the world, owing to a gap in available legitimised collective interpretive (or sensemaking) resources. Interpretive injustice stems from interpretive marginalisation, which occurs if the experiences of such marginalised individuals or groups are not understood by themselves or by others because those experiences do not fit any concepts known to them (or to others).

Many knowledge practices in global health, which are often taken for granted, fit either of these two forms of epistemic injustice (ie, testimonial injustice and interpretive injustice) or even exacerbate them. In this Viewpoint, we draw attention to these practices and show the importance of framing them as moral wrongs related to epistemic injustice.

Knowledge practices in global health as epistemic injustice

Fricker approaches epistemic injustice at an individual or interpersonal level. However, the concept is also applicable at a systemic or institutional level.[10] Knowledge systems are social systems, with their share of social prejudices and implicit biases that result in credibility deficits or interpretive marginalisation for members of marginalised groups. These prejudices and biases interfere with people's ability to participate fully and equally in knowledge production, use, and circulation.

For example, with interpretive marginalisation, members of a marginalised group are unable to participate fully and equally in the social practices through which collective interpretive (or sensemaking) resources are generated and publicised. Such interpretive marginalisation can lead to credibility deficit. Interpretive marginalisation can also stem from credibility deficit. Furthermore, the dominance of frameworks favoured by privileged groups can limit the use of interpretive or sensemaking resources owned or generated by members of marginalised groups.[8,11]

With interpretive marginalisation, dominant social and epistemic groups, who do not give sufficient attention to the possibility that their interpretive tools or conceptual and knowledge frames are imperfect (especially regarding the experiences of marginalised groups),[12] negatively affect the knowledge-related freedoms of such marginalised groups. Also, members of dominant groups might harbour prejudices and biases that lead them to discount the knowledge held by members of marginalised groups and their credibility as knowers, which also leads to credibility deficit. Credibility deficits in academic global health arguably can be linked to undeserved epistemic privileges afforded to dominant groups, that is, credibility excess. Such credibility excess can be rooted in historical patterns of social relations (eg, racism, sexism, and colonisation) in which one social or epistemic group's credibility excess comes at the expense of a marginalised group's credibility deficit.[13]

Epistemic injustice is relevant from the perspective of knowledge decolonisation. Concerns about epistemic injustices, without the explicit use of the term, have been key to decolonial and post-colonial scholarship; for example, the question posed by Gayatri Chakravorty Spivak,[14] "Can the subaltern speak?", was about the credibility deficits and interpretive marginalisation of the subaltern (ie, the colonised, marginalised, or non-elite). To decolonise knowledge is therefore to even out credibility deficits and reverse interpretive marginalisation in society.[15] Knowledge decolonisation is long overdue in global health,[1,16–18] a field that was birthed in colonialism, and which continues to display implicit hierarchical assumptions, disregards local and Indigenous knowledge, and refuses to learn from people often deemed to be lesser on many grounds.

The social systems (eg, governance) and the social realities (eg, inequities) that global health seeks to alter are complex,[19,20] that is, they consist of multiple moving components with distributed interactions that are emergent, dynamic, adaptive, history dependent, contingent on context,[21,22] and "shot through with power relationships".[23]

Knowledge about such complex systems and realities is always partial and provisional, and requires idealisations, frameworks, and interpretive tools.[24,25] Complete descriptions, simple generalisations and universal explanations are impossible.[21,24] Emic (ie, local or internal) knowledge, perspectives, and sensemaking are of primary importance,[26] and efforts to describe, study, or evaluate them inevitably involve reducing their complexity and then making choices[21,24] about which aspects to highlight and which interpretive (or sensemaking) tools to use. These choices are influenced by the power, position, or perspectives of the people making them, and by the intended or assumed primary audience of the description, analysis, or evaluation.[6]

Understanding a complex social system or reality therefore requires a plurality of ways of thinking about or making sense of it.[24,25] For example, on its own, even a local perspective, insider account, or emic approach might be inadequate. In being particular to a place or location, it might sometimes struggle to grasp aspects of a system or reality in a way that incorporates knowledge beyond its immediate borders or experience, something that an etic (ie, foreigner or outsider) approach sometimes allows.[27] Having a plurality of perspectives, accounts, approaches, and sensemaking devices (of which some might be local and some non-local) that complement one another is essential in global health. The successful implementation of even universally proven biomedical interventions requires such plurality,[28] to understand the complex systems within which such interventions will be implemented and the complex realities that they will alter or create.

Knowledge practices in academic global health typically privilege dominant groups, thus diverging from plurality and the need to defer to the local, internal, or emic knowledge and sensemaking of the individuals and groups whose systems and realities the field seeks to alter. We describe these knowledge practices in two categories: first, wrongs associated with the speaker, that is, the apparent pose or positionality[6] of groups and individuals involved in knowledge production; and second, wrongs associated with the hearer, that is, the assumed gaze or audience[6] of groups and individuals involved in knowledge production. We show how these knowledge practices fit into, and are made concrete by, framing them in terms of credibility deficits and interpretive marginalisation that lead to epistemic injustices, that is, testimonial and interpretive injustice.

Practices associated with pose or positionality

Pose or positionality refers to the standpoint from which knowledge is produced. There is potential for epistemic injustice if dominant knowledge practices limit the extent to which members of marginalised social or epistemic groups have ownership of knowledge production and sensemaking. Epistemic injustice can be seen in who is recognised as a credible knowledge producer and in whose interpretive tools are used to make sense of existing or new knowledge. Academic researchers can enjoy credibility excess compared with non-academic actors who can have credibility deficit or

interpretive marginalisation. Distant or foreign actors can enjoy credibility excess compared with local or proximate actors, who can have credibility deficit or interpretive marginalisation.

Parker and Kingori[29] note that frequently in international research collaborations, the role of local LMIC scientists is limited to providing samples or doing fieldwork, while being excluded from the scientific features of collaborations through which they can analyse and theorise about data. HIC or foreign experts who are assigned the role of theory makers enjoy credibility excess, whereas local LMIC experts who are assigned the role of data collectors suffer a credibility deficit.[30] If academic researchers decide that what determines whether a policy or intervention is effective (or not) is evidence from elsewhere, even if effectiveness depends on the local context and cannot be defined along the binary of works versus does not work, they do so by sidelining local knowledge. Academics add to the interpretive marginalisation of local experts when they judge interventions by using interpretive devices from elsewhere, without acknowledging the interpretations of people with day-to-day experience of implementing those interventions.[26]

Credibility deficits can also occur if local experts or marginalised people in an epistemic community are not recognised as authors in positions that indicate ownership (first and last author positions in public health or global health papers). Authorship practices uncover underserved credibility excess of foreign or HIC experts. Analyses of authorship in international collaborations identify a so-called stuck-in-the-middle pattern[31] in which, even if recognised as authors, local LMIC partners are often neither first nor last author of studies done in their own country.[31,32] Indeed, such exertions of power and position are so common that the phenomena have been given labels such as the Matthew effect[33] and the White Bull effect.[34] The Matthew effect refers to established and recognised coauthors receiving disproportionate credit over the less established or more junior researchers. The White Bull effect is when senior researchers coercively or manipulatively assert a first authorship credit. Both these practices often result in researchers who are junior, less experienced, or from marginalised groups being either wholly excluded from the list of authors or receiving an authorship credit that ignores their intellectual contribution and only reflects their organisational role and status.

Credibility deficit can also be seen in the manner by which the work of LMIC experts or marginalised people is judged and perceived on the basis of their local positionality by peers, editors, and peer reviewers of academic journals. This form of prejudice has been termed editorial racism,[9] and it reflects bias and prejudice of editors and peer reviewers against knowledge that is produced by researchers based in LMICs versus HICs, or in non-prestigious versus prestigious (typically western) institutions and journals.[35] Credibility deficit results in unfair denial of knowledge-production capacity of local experts or members of marginalised groups. In global health, such credibility deficit perpetuates what Lauer describes as "falsehoods about what is wrong and how to fix it", thus creating situations in which "resources are diverted from productive policies".[36]

In an example of credibility deficit that stems from interpretive marginalisation, local experts or marginalised people are not recognised as people who can determine the frame of analysis or approach to sensemaking, or as people whose frame or approach is valid. The result is that foreign or dominant interpretive frames are imposed on local realities, which could lead to inappropriate analyses, and ultimately to falsehoods. For example, Richardson[18] examines epidemiological analyses that ascribed the spread of Ebola virus in DR Congo to mistrust, because even though interventions (eg, medical care and vaccination) were available, people would not use them. Richardson argued that an explanation that stops at mistrust omits underlying "global power relations, colonial history and contemporary extractive political economies" that led to mistrust in the first place.[18] When asked, people in DR Congo gave historically informed explanations and interpretations of the structural drivers of the origins and transmission of disease, and of mistrust in available interventions.[18] By privileging such one-sided and downstream explanations of disease causation, academic global health commits interpretive injustices that "recycle cultural claims of causality that mystify more than one hundred years of coloniality and predatory accumulations as explications".[18]

Practices associated with gaze or audience

Gaze or audience refers to the intended receiver of the knowledge that is produced. There is potential for epistemic injustice if knowledge practices do not prioritise local audiences or the local gaze for the purpose of local learning, or if knowledge production serves the needs of foreign and distant actors or elite epistemic communities—eg, by defaulting to global standards or searching for universally applicable knowledge rather than what a system needs to learn from and about itself. Epistemic injustice related to gaze or audience can exist in relation to who is recognised as a credible recipient of knowledge, and in how the choice of audience influences whose interpretive tools are used to make sense of social systems, realities, and experience, to determine what constitutes knowledge and to convey or circulate new and existing knowledge.

Interpretive marginalisation relating to gaze or audience, particularly in research claiming knowledge of local lived experiences, manifests if members of marginalised groups do not see their own interpretive devices reflected in knowledge that is produced because the concepts used to interpret data or make sense of findings do not reflect how they make sense of their own

experience. Knowledge practices that cause interpretive marginalisation can result from aligning research with the priorities of funders or audience from dominant groups, and could give marginalised groups reason to distrust the scientific community. Interpretive marginalisation can lead to wrong assumptions that go unchecked as marginalised groups are not deemed legitimate audience, thus leading to flawed understandings or ignorance which can harm marginalised groups. Such mistaken assumptions in research, particularly prejudicial ones, have contributed to ignorance and led to flawed understandings that have disproportionately harmed marginalised communities. Examples include research done on all-male participants rather than looking into sex-specific indicators,[37] sexist suppositions that underpinned research on women's sexuality,[38] and racist studies that claimed to explain differences between people with European versus African roots.[39]

It is an example of interpretive marginalisation if, owing to socially rooted prejudice or bias, producers of knowledge implicitly default or defer to a western audience, and in so doing, conflate what is universal with what is western; or even ascribe the origin of universal concepts to the first western person to mention or describe it; or consider universal statements to be more credible than locally relevant statements. Such instances of bias implicitly deny marginalised people and groups the space to interpret their own reality. This form of interpretive marginalisation can be found in interventions and recommendations in the literature that prioritise the universal conceptions of, for example, "respectful maternal care principles" over "local notions of good care",[40] or if actors default to or prioritise globally defined measures of health-system performance (eg, maternal mortality) over locally defined framing of performance.[41] This form of interpretive marginalisation could further lead to credibility deficit if western (located or oriented) voices are allowed to speak for the universal, but others can only speak of local (thereby being undervalued). In a circular way, such instances of credibility deficit can lead to interpretive marginalisation if it limits the availability of interpretive tools that belong to non-western located or oriented users and producers of knowledge.

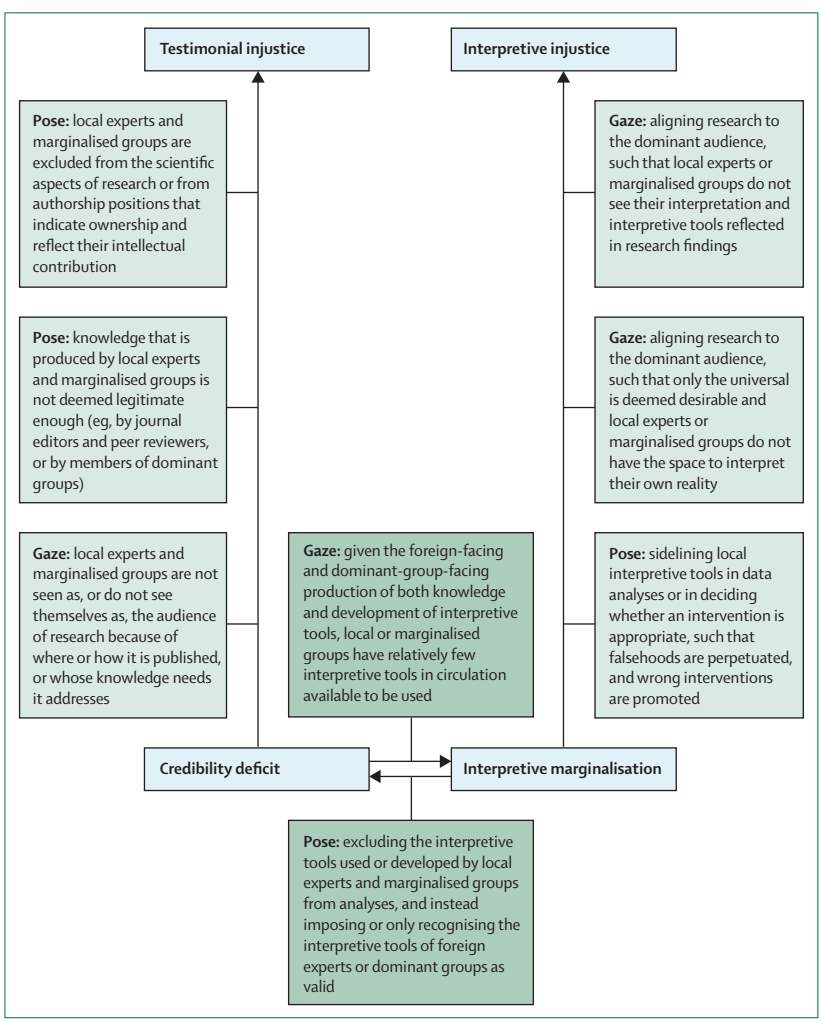

Figure: **Examples of credibility deficit and interpretive marginalisation in academic global health**

Credibility deficit manifests in preferences signalled by editors of elite academic journals—eg, for multiple-country studies (over single-country studies), or standardised knowledge (over locally useful knowledge), because of privileging a foreign, so-called global, or dominant (which often translates to western) audience. The credibility deficit so imposed on local or marginalised audiences manifests if locations are not studied on their own merit but instead to provide a case study that illustrates a broader theme, or if authors fail to mention the location of a study in the title, abstract, or conclusion of a paper (such that people from whom the knowledge is extracted do not see it as intended primarily for them). This deficit occurs because of credibility excess enjoyed by elite or western journals. Local experts can even, because of it, impose deficit on themselves to appeal to the foreign gaze, by adopting methods and sensemaking devices that appeal to a western or globalised audience.[6,42]

In another example of credibility deficit related to gaze or audience, researchers can justify a study or publication on the basis of a gap in the literature, as if the literature could be considered the sum of all available knowledge. This practice discounts the credibility of non-academic actors as holders and producers of knowledge. Such knowledge practices can reflect or imply a presumption that knowledge on issues about which people have day-to-day experience does not exist because it is not in the literature. Credibility deficit is imposed on local experts or marginalised knowers if the need to produce knowledge is based on what is globally known or not known, rather than on what is locally known or not known. For example, systematic reviews often call for further research if they fail to identify study in the title, abstractly applicable evidence (eg, owing to gaps in

measurement, or the absence of validated instruments, about consensus on what to measure, or on methods), as if local unvalidated instruments or an absence of global or universal consensus are inherently problematic.

Credibility deficit involving gaze or audience (figure) manifests when researchers who study marginalised groups or LMIC populations get published in only elite journals, with little or no readership either in LMICs or among marginalised groups from whom the knowledge has been collected. Such circumstances, combined with the absence of recognition of local experts among marginalised groups as knowers or as recipients or sense makers of knowledge, can erode the trustworthiness of the academic community or of international collaborations. Such an absence of trust can lead to the rejection of (sometimes helpful) knowledge, or make it harder for marginalised groups to acquire and use knowledge that is otherwise in circulation. The harm could also be circular. By being distrustful of a research community or epistemic group, members of marginalised groups can become less likely to participate fully in activities of inquiry,[43] and by not participating fully in such activities, can lose the opportunity to redress the conditions that led to epistemic injustice in the first place.[44]

Conclusion

The epistemic injustice framework can help to surface, detect, communicate, and potentially avoid specific wrongs that knowers and recipients of knowledge suffer owing to structural prejudices in the processes involved in knowledge production, use, and circulation in global health. However, further philosophical and empirical work is required to delineate the boundaries of epistemic injustice in global health research and to develop precise strategies to address these highly contextual injustices. People, and even groups and communities, are usually unaware of their biases and prejudices. Substantial public work (including among academics) to raise awareness could lead some people to practise giving higher degrees of credibility to credible marginalised groups, and could also lead some people to avoid practices that erode the interpretive or sensemaking role of marginalised groups.

Furthermore, members of the global heath community often witness a cycle in which researchers assume that locals in marginalised areas and members of marginalised groups do not have the capacity to contribute to research, and thereby bypass such people's participation. In doing so, the more the local knowers and members of marginalised groups are bypassed, the further they are marginalised. We acknowledge that overcoming epistemic wrongs might require further resources or place an increased burden on researchers. For instance, community members and fieldworkers might need to be trained, or to be listened to, and prejudices might need to be discarded to include their voices in the final academic outputs. But by being aware of epistemic wrongs and in trying to overcome them, researchers could break an unjust research cycle and could produce knowledge that is increasingly authentic, complete, and valuable especially to local users.

Fricker notes that "being understood, expressing oneself, being able to contribute to meaning-making are basic human capabilities and constitutive of a dignified life".[45] The literature on justice in global health has been sympathetic to the capabilities approach,[46–48] which claims that the freedom to achieve wellbeing is of crucial moral importance, and that wellbeing should be understood in terms of people's functionings and capabilities. This approach is consistent with the epistemic injustice framework. After all, being able to access knowledge produced by others and to put it to use and being treated equally as a knower and sense maker of knowledge, are all capabilities necessary for human flourishing. As we in the global health community seek to promote equity in health, we must not forget that the assumptions upon which our field produces, uses, and circulates knowledge are peppered with epistemic wrongs, and give rise to practices that either cause or exacerbate epistemic injustices.

Contributors
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We declare no competing interests.

References

1 Abimbola S, Pai M. Will global health survive its decolonisation? *Lancet* 2020; **396:** 1627–28.
2 Adhikari B, Pell C, Cheah PY. Community engagement and ethical global health research. *Glob Bioet* 2019; **31:** 1–12.
3 Kim C, Wilcher R, Petruney T, Krueger K, Wynne L, Zan T. A research utilisation framework for informing global health and development policies and programmes. *Health Res Policy Syst* 2018; **16:** 9.
4 Bardosh KL. Towards a science of global health delivery: a socio-anthropological framework to improve the effectiveness of neglected tropical disease interventions. *PLoS Negl Trop Dis* 2018; **12:** e0006537.
5 Yegros-Yegros A, van de Klippe W, Abad-Garcia MF, Rafols I. Exploring why global health needs are unmet by research efforts: the potential influences of geography, industry and publication incentives. *Health Res Policy Syst* 2020; **18:** 47.
6 Abimbola S. The foreign gaze: authorship in academic global health. *BMJ Glob Health* 2019; **4:** e002068.
7 Jumbam DT. How (not) to write about global health. *BMJ Glob Health* 2020; **5:** e003164.
8 Fricker M. Epistemic injustice: power and the ethics of knowing. Oxford: Oxford University Press, 2007.
9 Victora CG, Moreira CB. North–south relations in scientific publications: editorial racism? *Rev Saude Publica* 2006; **40:** 36–42 (in Portuguese).
10 Anderson E. Epistemic justice as a virtue of social institutions. *Soc Epistemol* 2012; **26:** 163–73.
11 Gilmore B. Realist evaluations in low- and middle-income countries: reflections and recommendations from the experiences of a foreign researcher. *BMJ Glob Health* 2019; **4:** e001638.
12 Goetze TS. Hermeneutical dissent and the species of hermeneutical injustice. *Hypatia* 2018; **33:** 73–90.
13 Medina J. The relevance of credibility excess in a proportional view of epistemic injustice: differential epistemic authority and the social imaginary. *Soc Epistemol* 2011; **25:** 15–35.
14 Spivak GC. Can the subaltern speak? *Die Philos* 1988; **14:** 42–58.

15 Tobi AT, Towards a plausible account of epistemic decolonisation. *Philos Pap* 2020; **49:** 253–78.

16 Affun-Adegbulu C, Adegbulu O. Decolonising global (public) health: from western universalism to global pluriversalities. *BMJ Glob Health* 2020; **5:** e002947.

17 Büyüm AM, Kenney C, Koris A, Mkumba L, Raveendran Y. Decolonising global health: if not now, when? *BMJ Glob Health* 2020; **5:** e003394.

18 Richardson ET. On the coloniality of global public health. *Med Anthropol Theory* 2019; **6:** 761.

19 Hill PS. Understanding global health governance as a complex adaptive system. *Glob Public Health* 2011; **6:** 593–605.

20 Rutter H, Savona N, Glonti K, et al. The need for a complex systems model of evidence for public health. *Lancet* 2017; **390:** 2602–04.

21 Cilliers P. What can we learn from a theory of complexity? *Emergence* 2000; **2:** 23–33.

22 de Savigny D, Adam T, Alliance for Health Policy and Systems Research, WHO. Systems thinking for health systems strengthening. 2009. https://www.who.int/alliance-hpsr/resources/9789241563895/en/ (accessed July 16, 2021).

23 Lee K. Revealing power in truth: comment on "Knowledge, moral claims and the exercise of power in global health." *Int J Health Policy Manag* 2015; **4:** 257–59.

24 Cilliers P. Complexity, ethics and justice. *J Humanist* (*Tijdschrift voor Humanistiek*) 2004; **5:** 19–26.

25 Appiah KA. As if: idealization and ideals. Cambridge, MA: Harvard University Press, 2017.

26 Abimbola S. The uses of knowledge in global health. *BMJ Glob Health* 2021; **6:** e005802.

27 Morris MW, Leung K, Ames D, Lickel B. Views from inside and outside: integrating emic and etic insights about culture and justice judgment. *Acad Manage Rev* 1999; **24:** 781–96.

28 Naaldenberg J, Aarts N. The compatibility of reductionistic and complexity approaches in a sociomedical innovation perspective. *BMJ Glob Health* 2020; **5:** e003858.

29 Parker M, Kingori P. Good and bad research collaborations: researchers' views on science and ethics in global health research. *PLoS One* 2016; **11:** e0163579.

30 Walker M, Martinez-Vargas C. Epistemic governance and the colonial epistemic structure: towards epistemic humility and transformed south–north relations. *Crit Stud Educ* 2020; published online June 16. https://doi.org/10.1080/17508487.2020.1778052.

31 Hedt-Gauthier BL, Jeufack HM, Neufeld NH, et al. Stuck in the middle: a systematic review of authorship in collaborative health research in Africa, 2014–2016. *BMJ Glob Health* 2019; **4:** e001853.

32 Schneider H, Maleka N. Patterns of authorship on community health workers in low-and-middle-income countries: an analysis of publications (2012–2016). *BMJ Glob Health* 2018; **3:** e000797.

33 Merton RK. The Matthew effect in science—the reward and communication systems of science are considered. *Science* 1968; **159:** 56–63.

34 Kwok LS. The White Bull effect: abusive coauthorship and publication parasitism. *J Med Ethics* 2005; **31:** 554–56.

35 Skopec M, Issa H, Reed J, Harris M. The role of geographic bias in knowledge diffusion: a systematic review and narrative synthesis. *Res Integr Peer Rev* 2020; **5:** 2.

36 Lauer H. How epistemic injustice in the global health arena undermines public health care delivery in Africa. 25th International Congress of History of Science and Technology; Rio de Janeiro, Brazil; July 23–29, 2017. https://www.immunity.org.uk/wp-content/uploads/2017/09/Rio-handout-_-Laurer-with-Shentons-commentary-16.6.17.pdf (accessed June 25, 2021).

37 Criado-Perez C. Invisible women: data bias in a world designed for men. New York, NY: Harry N Abrams, 2019.

38 Tuana N. The Speculum of ignorance: the women's health movement and epistemologies of ignorance. *Hypatia* 2006; **21:** 1–19.

39 Harding SG, ed. The "racial" economy of science: toward a democratic future. Bloomington, IN: Indiana University Press, 1993.

40 de Kok BC, Uny I, Immamura M, Bell J, Geddes J, Phoya A. From global rights to local relationships: exploring disconnects in respectful maternity care in Malawi. *Qual Health Res* 2020; **30:** 341–55.

41 Alba S, Sondorp E, Kleipool E, et al. Estimating maternal mortality: what have we learned from 16 years of surveys in Afghanistan? *BMJ Glob Health* 2020; **5:** e002126.

42 Chelwa G. Does economics have an 'Africa problem'? *Econ Soc* 2021; **50:** 78–99.

43 Kalinga C. Caught between a rock and a hard place: navigating global research partnerships in the global south as an indigenous researcher. *J Afr Cult Stud* 2019; **31:** 270–72.

44 Grasswick H. Understanding epistemic trust injustices and their harms. *R Inst Philos Suppl* 2018; **84:** 69–91.

45 Fricker M. Epistemic contribution as a central human capability. In Hull G, ed. The equal society: essays on equality in theory and practice. Lanham, MD: Lexington Books, 2015: 73–90.

46 Venkatapuram S. Health justice: an argument from the capabilities approach. Malden, MA: Polity, 2011.

47 Pratt B, Loff B. A framework to link international clinical research to the promotion of justice in global health. *Bioethics* 2014; **28:** 387–96.

48 Ruger JP. Health and social justice. Oxford: Oxford University Press, 2009.