Research Outputs as Testimony & the APC as Testimonial Injustice in the Global South

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Research outputs are a form of testimony with researchers serving as expert testifiers. Research outputs align with philosophical understandings of testimony, as research represents an everyday, informal communicative act. If research outputs are a form of testimony, they are open to ethical and epistemic critique. The open access (OA) article processing charge (APC) in the Global South serves as an apt topic for this critique. The APC is a financial barrier to publication for Southern researchers, and thus raises problems around epistemic and testimonial injustice. The second half of this paper examines a variety of equity issues in prestige scholarly publishing and OA APCs, which are then more fully illustrated by the development of a hypothetical testimonial injustice case study focused on a researcher working in Latin America. Ultimately, I propose the following argument: If people use journal rankings as a guide to which testimony they should take seriously and the OA APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds, then the OA APC publishing model contributes to testimonial injustice. This paper is a philosophical, theory-based discussion that contributes to research about equitable systems of scholarship.

Introduction

The open access (OA) article processing charge (APC) is a contentious issue within scholarly communication communities, but even more so in the Global South, where equity issues with the APC perpetuate the economic and cultural disparities between the Global North and South. To set the context for this article, I will provide a brief definition of both the Global South and of OA APCs.

The Global South refers to the regions of Latin America, Asia, Africa, and Oceania, which represent areas outside of Europe and North America. Other preferred terms for these regions include Developing Nations/World, Majority World, and Low- and Lower-Middle-Income Countries (or LMIC), or simply the name of the specific country. It is key to acknowledge that these areas have been shaped for centuries by external forces and are politically and culturally marginalized. Dados and Connell emphasize that the Global South "references an entire history of colonialism, neo-imperialism, and differential economic and social change through which large inequalities in living standards, life expectancy, and access to resources are main-

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tained."² In the interest of using consistent terminology in this paper, I will use Global North to reference regions primarily in North America and Europe, and use Global South to reference geographical regions outside of these areas.

Article processing charges are a direct fee charged to authors to subsidize the costs of OA publishing. APCs are among the most common type of business model used to make journals open access.³ Open access journals using the APC model flip more conventional pay-to-read subscriptions into pay-to-publish models making research free to access, but not free to publish. The OA community has defined various categories of openness, and the APC model is a key component of two categories: Gold OA and Hybrid OA. Gold OA makes all articles immediately open and free to access, usually under the auspices of the APC, while Hybrid OA opens a certain percentage of articles in traditional subscription journals by charging an APC.⁴ Siler and Frenken found the mean APC cost to be \$899 in 2020.⁵ Researchers fund APCs from a variety of sources including grants, national funding, institutional or discretionary funds, or pay for them personally.⁶ Many libraries and library consortia in the Global North have developed transformative agreements, which are OA APC contracts negotiated between institutions and publishers such as Elsevier, Springer Nature, Taylor & Francis, and Wiley to support institutional advancements in OA.⁷

Researchers in the Global South, who already encounter severe underfunding, also have to consider how they will fund APCs if they want to pursue Gold or Hybrid OA publishing. Given that some researchers in the Global North might also struggle with funding publishing fees, why do I exclusively focus on the South? Simply put, the predicament of a Southern researcher is distinctly different from underresourced scholars in the Global North. Southern scholars consistently face a variety of adverse systemic factors within the research ecosystem. A Southern researcher may face numerous barriers such as publishers who distrust the quality and credibility of scientific data coming from the Global South, fewer high-ranking local journals to submit work to, fewer Southern scholars on editorial boards who can advocate for Southern research, fewer international conferences taking place in the South, fewer high impact grant opportunities, language barriers, lack of research social support networks or research role models (since so few scholars can overcome barriers), and an overall lower number of resources to conduct research in the first place.8 APCs are now situated as one of the final hurdles that Southern scholars grapple with to disseminate their research openly. Researchers in the Global North may face the barrier of the APC, along with some of the other factors above, but their situation is more transient. For example, they may more easily find a coauthor at a well-funded institution who can pay the APC, or they may have connections to other types of funders. For Southern scholars, the APC represents yet another type of barrier that feeds into the general ideological oppression one experiences when recognizing that knowledge from the South is not as valued as it is in other parts of the world.9

The moral issues that the OA APC brings to the surface can be appropriately analyzed through a philosophical lens. Theories developed from the fields of social epistemology and ethics, such as the epistemology of testimony and epistemic injustice, are especially suitable to shed new light on these problems. ¹⁰ As libraries and scholarly communicators work to make research processes fairer and more equitable, concerns about epistemic injustice stemming from APCs in the Global South should give our community pause.

To begin to understand the moral implications of APC in the South, the first half of this paper argues that research outputs are a form of testimony and researchers are expert testi-

fiers. Research holds the potential to reshape both academic and non-academic communities, similar to how we think testimony given in a court might sway a jury to make a well-informed decision. Given the importance of research in our modern lives, it seems the ties between a researcher and their target audience for their outputs is much closer than we have imagined. This relationship brings a number of ethical questions to mind: What if the researcher cannot find a way to disseminate their findings to their intended audience? What is the intellectual injury to researchers who encounter unfair barriers to publication?

In the second half of the paper, I raise three premises: 1) Academics use journal rankings as a guide to which testimony they should assign the most credibility (where I explore issues within prestigious scholarly publishing); 2) The APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds (where I look more deeply at equity issues due to the APC in the South); and 3) If people use journal rankings as a guide to which testimony deserves the most credibility and the APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds, then the APC publishing model contributes to testimonial injustice (where I bring together premises 1 and 2 using Miranda Fricker's theory of testimonial injustice). To further illustrate premise 3, I introduce a hypothetical case study and raise some potential consequences of testimonial injustice for researchers. I wrap up the paper by briefly discussing some thoughts about testimonial justice related to the OA APC and scholarly communication between the Global North and South.

How Do We Categorize Research?

A researcher has a variety of methodological approaches at their disposal to pursue research questions. The ways that researchers discuss and classify their work help to clearly communicate the nature of their research to an audience. In its simplest form, research is the act of gathering information to solve a problem and engage in a conversation with people who have a stake in your solution. In the broadest of terms, we could categorize research as empirical, employing either quantitative or qualitative methods, or theoretical in nature. We gain more descriptive understandings of research categories when looking to different conventions within disciplines: the social sciences often employ a mixed-method approach, humanistic writing requires some type of well-formed argument, and scientific research depends on observation and experimentation. We could also think of the medium research is disseminated through to categorize outputs. These outputs can include books, articles, websites, conference publications, creative works, public exhibitions, and research reports. In the pursue of the publications of the publications are the publications of the publications and research reports.

Researchers might categorize their work by either the type of method or the type of research output. These are all adequate and appropriate ways to categorize research. However, to deepen our understanding of the epistemic and ethical dimensions of a research output, we need to identify another type of classification that spans across fields and provides a rich description of what the output represents, apart from the methodology or format. Philosophical inquiry can help us meet this need.

Testimony: A Philosophical Perspective

When thinking of testimony, our intuition probably brings to mind a dramatic exchange that happens in a courtroom, as a witness details a firsthand account of an event, with the testimony potentially playing a key role in the outcome of a case. We may also be familiar with the concept "bearing witness," such as martyrs in a religious context or the survivors of historical traumas giving accounts of their experiences.¹³

Within the academy, there are cases that draw on these traditional understandings of testimony. Anthropologists presented their research findings as testimony while being a witness for a lawsuit on behalf of homeless men in New York. 14 Social work faculty testified at state and federal legislative hearings on behalf of child and family welfare. 15 Scientists translated technical questions into everyday terms so that Congress understood the planet's climate vulnerability. 16 Public health researchers developed strategies to put their research into action by testifying in legislative hearings and meeting with elected officials. 17 All of these examples align with what we think of as testimony in the traditional sense. The primary source used as evidence in these types of communicative exchanges, the research study, is not considered a direct piece of testimony in these accounts. But recent developments in the epistemology of testimony can expand what we classify as testimony and help us consider the research study as a piece of testimony.

Understandings of testimony have evolved as the field of social epistemology became interested in investigating all forms of speech acts. Epistemology, the study of knowledge and justified belief, is a well-established area of philosophy that has traditionally focused on individual beliefs in abstraction from social lives. Social epistemology, however, seeks to rebalance this focus to account for the epistemic effects of our social systems.

Emerging from the field of social epistemology, more inclusive understandings of every-day testimony have recently emerged. Coady proposes two forms of testimony. ¹⁹ The type of testimony most familiar to us is *formal testimony*. This type of testimony would include being a witness in a courtroom or a war survivor bearing witness in an interview.

However, testimony is also an everyday phenomenon. A quick reflection of one's day will bring to mind how we experience testimony throughout the day: a coworker reports to your department with an update on a project, a neighbor tells you about a traffic jam she experienced that morning, your partner announces they are going to leave the house to run an errand, you read a breaking news report online, and so on. What we experience every day is the second form of testimony, *natural testimony*.²⁰ As with formal testimony, we do not treat just anybody as a testifier in our natural exchanges. For instance, we likely put more trust into what a family member tells us compared to that of a stranger. The key difference when compared with formal testimony is that we do not require it to be firsthand; we usually trust when we hear news about football scores or the weather from a journalist, reporter, or a friend.

Natural testimony is not limited to oral communication between two people where one is the speaker and the other the hearer.²¹ All that is needed is a sender who can relay a message to a recipient. A medium of some sort is required, whether that be "written material, recordings, electronic records, sign language, and (some) gestures and facial expressions."²²

So how exactly do social epistemologists define natural testimony? A variety of theories exist, ranging from the *broad view* to the *narrow view*.²³ Lackey's conception of testimony is considered to be in the broad view. We can propose the following definition using the example of Researcher X:

Broad View: Researcher X testifies that the Earth is round if and only if Researcher X's statement that the Earth is round is an expression of Researcher X's thought that the Earth is round.²⁴

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We can easily see that a research output can fit on the broad view of testimony since all that is required is that the research is an expression of the researcher's thoughts. In fact, this view is criticized for being too accepting of all forms of testimony, as countless expressions of thought can be testimony, such as false or misleading testimony. The broad view does not require belief or intention on the part of the speaker.²⁵

To correct for the problems with the broad view, we can consider the narrow view of testimony. Coady proposes this definition, which I reframe with the Researcher X example:

Narrow View: *Researcher X* testifies the earth is round if and only if

- (1) Researcher X states that the Earth is round is evidence that the Earth is round and is offered as evidence that the Earth is round.
- (2) *Researcher X* has the relevant competence, authority, or credentials to state truly that *the Earth is round*.
- (3) Researcher X's statement that the Earth is round is relevant to some disputed or unresolved question (which may, or may not be, Is the Earth round?) and is directed to those who are in need of evidence on the matter.²⁶

In contrast to the broad view, the narrow view requires a form of evidence. Researchers offer that evidence, such as outcomes of scientific experiments or theoretical conclusions, as part of a research output. The second meaning requires that the researchers have the competence, authority, or credentials to state p. We usually assume that scholars are highly credentialed with terminal degrees reflecting their specialization, while researchers in the process of becoming credentialed are guided by more experienced peers who help them develop a competent and authoritative voice in their own research. Furthermore, a reader or listener of a researcher's output could investigate other work by the author to gain a sense of their authority or competence in their field. Concerning the third meaning, researchers attempt to answer a question to bring about some resolution to their proposed theory or hypothesis, and direct it to an audience that needs the evidence to develop their own work.

Some epistemologists think that the narrow view of testimony excludes too many kinds of communicative acts. Such an example might be a posthumous diary, which one could argue has not been offered as evidence to anyone but should be acceptable testimony.²⁷ In our case, we will not worry too much about these marginal concerns with the broad and narrow views, since both accounts easily classify Researcher X's output as testimony.

Research outputs fit the requirements for broad and narrow views of natural testimony, but we can also extend our conception to a third category of testimony: *expert testimony*. Epistemologists are increasingly interested in applying theories of knowledge to social forms of reliance on the epistemic authority of experts in fields like law, policy, and medicine. Our reliance on the expertise of others is highlighted by our "increasing differentiation and division of labor in contemporary technologically advanced societies."²⁸

Hardwig coined the term epistemic dependence, where he analyzed the burgeoning role of trust in science.²⁹ He argues that modern society has reached a level of complexity that demands more than epistemic individualism, adding that "appeals to epistemic authority are essentially ingredient in much of our knowledge."³⁰ Claims that we consider scientific

knowledge, such as the premise that nothing can travel faster than the speed of light or the assertion that DNA encodes genetic information, "are only the end product of a socially distributed process of inquiry and information-sharing: the 'tip of the iceberg,' as it were."³¹

One of the main differences between natural testimony and expert testimony is the role of the speaker. With natural testimony, we find that the speaker happens to be in the right place at the right time to deliver a message to a listener. However, expert testifiers develop a depth of knowledge in concert with the ability to apply methodologies to that expertise. This combination of both knowledge and application is appealing to those seeking expert information. Goldman defines a testimonial expert as "someone who possesses an extensive fund of knowledge (true belief) and a set of skills or methods for apt and successful deployment of this knowledge to new questions in the domain."³²

Researchers provide expert testimony, according to Goldman's conception. They possess an extensive pool of knowledge as evidenced by various credentials, such as terminal degrees, which signify that they possess a sophisticated knowledge base around a specific body of research. Researchers then employ a set of skills to help answer emerging questions in their field and develop new research questions or hypotheses. Both the scientific community and greater public, outside the walls of academia, depend on researcher's testimonial expertise to broaden perspectives on a subject or learn about scientific developments to improve quality of life.

Research outputs are a form of testimony, fitting all the conceptions of natural and expert testimony. From this point on, a research output will be considered a form of testimony in this paper, with the researcher serving as an expert testifier. Now, imagine if a researcher encountered an issue with publishing their research. They could say, "I am having a hard time publishing my data analysis project" or "I can't seem to find a good outlet for my article." But if they are having challenges publishing their *testimony*, it takes on a moral significance that *project* or *article* does not.

By recasting the research output as testimony, it relays that there is something vitally important about the work for both the researcher and the audience. It conveys that the researcher, as an expert testifier, is invested in a rigorous and intensive intellectual project that has taken months or years to prepare for and produce. It is therefore justifiable to demand that the project is communicated to an appropriate audience through a channel of their choosing. The audience of the testimony may engage with the project to provide helpful feedback to the author, advance their own similar projects, or use the research findings to improve their own communities. Next, we can start to investigate the epistemic and ethical implication of what happens when barriers prevent a researcher from communicating their testimony.

Testimonial Injustice Due to APC

Another line of inquiry from social epistemology, the study of *epistemic injustice*, has also produced a plethora of research among philosophers in recent years.³³ Miranda Fricker coined the phrase epistemic injustice in her 2007 book on the subject, wherein she presents two accounts of epistemic injustice, including *testimonial injustice*. Testimonial injustice "occurs when prejudice causes a hearer to give a deflated level of credibility to a speaker's word."³⁴ A paradigmatic case of testimonial injustice is when police do not believe a person because of their race. In this sense, the injustice that the speaker suffers is because the prejudice of the hearer deflates the speaker's credibility. In this paper, prejudice will be investigated in the context

of scholarly publishing, and is further explored later in this section. The identity prejudicial credibility deficit, as Fricker calls it, is the central case of testimonial injustice. The concept of testimonial injustice is highly relevant for discussions about APCs in the Global South.

Admittedly, the concept of testimonial injustice is highly applicable to many scholarly communication barriers (outside of APCs) experienced by Southern scholars. But for the purposes of scoping the argument in this paper and discussing a topic of timely importance, I will focus on how APCs, from publishers who utilize a Hybrid OA or Gold OA model, can lead to testimonial injustice. To be clear, APCs are not always a sign of prestigious, high impact publishing, but in this case I will direct our attention to APCs that are usually associated with OA journal publishing in the Global North that are generally cost prohibitive for those working in the South.

I propose the following argument:

(**Premise 1**) Academics use journal rankings as a guide to which testimony they should assign the most credibility.

(**Premise 2**) The APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds.

(**Premise 3**) If people use journal rankings as a guide to which testimony deserves the most credibility and the APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds, then the APC publishing model contributes to testimonial injustice.

Support for Premise 1: Academics use journal rankings as a guide to which testimony they should assign the most credibility

The sheer multitude of metrics, commonly referred to as bibliometrics, associated with journal publishing — rankings, impact factor, and the h-index — are meant to signal the degree to which a piece of testimony, in the form of a research output, is meant to be given a high degree of credibility. The current ecosystem of academic publishing is designed specifically with testimonial privilege in mind. The journal in which a researcher publishes can automatically signify the degree of integrity and credibility their work holds. It is hard to overstate how monumental it is for researchers to publish in high impact journals to benefit their own career trajectory. Just the acceptance of a paper to a high impact journal is an early indicator of prestige.³⁵ Researchers who want to have global impact in their field will seek to publish in a journal that can deliver that kind of exposure to their international peers. Some scholars are privileged enough to have the resources to navigate this ecosystem, while others do not.

For researchers in the Global South, the significance of publishing outlets can vary widely depending on the region, country, or discipline, but the concern about prestige remains no matter the circumstances. Publishing requirements, specifically regarding indicators of prestige, can vary. Depending on a variety of local conditions, Southern researchers may have to adhere to the quality standards of tenure committees and norms within their specific department or broader discipline. For example, some researchers are required to only target journals with an impact factor if they are interested in career growth; others are skeptical that OA journals are not prestigious enough, and for some regional publishing outlets might be sufficient.³⁶ Regional platforms developed and published in the South like Redalyc, SciELO, Latindex, CLACSO, La Referencia, and African Journals Online are influential in South-South regional scholarly communities, and are experiencing increasing visibility in the West as they develop successful South-North collaborations.³⁷ Since these regional journals are not well

known globally, the prestige of Western journals can dominate certain disciples and lead to the assumption that Southern journals are less credible than their Northern counterparts.³⁸ Although improvements are being made to increase the visibility of these publications, they still lack the prestige of what a Western-based journal can bestow. Discovery of scholarship still favors Northern publications, since Southern research is considered second-class by indexing tools, primarily due to language bias in the North.³⁹

Support for Premise 2: The APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds

The second premise holds that the APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds. If barriers to publish are purely financial, then they are not meritocratic.

Over the past three decades, much has been written about numerous inequitable barriers encountered by researchers in the Global South seeking to publish with commercial publishers in the Global North. Issues with biased editorial practices and peer review stemming from colonized ways of knowing⁴⁰ and publication in a non-native language⁴¹ are two of the more prominent challenges.

In addition to these two challenges, one problem has emerged that represents an equally restrictive barrier for researchers in the Global South: the OA APC. Internationally, reception to the OA APC has been varied. Major initiatives from both cOAlition S and the University of California system embraced the move to transformative agreements and have helped elevate the status of commercial OA globally.⁴² From this perspective, research organizations and academic institutions are increasingly serving as an intermediary between researchers and pay-to-publish options. But while APCs solve the access issue and make research free to read, it has flipped the equity issues onto the plate of researchers (and perhaps the institution serving as intermediary). Compounding the issues, the costs of going open are rising and the terms of these agreements are becoming more complex.⁴³ Many scholars question whether the APC model can truly create a more equitable publishing landscape for all stakeholders.⁴⁴

In the Global South, concerns about equity and the APC loom even larger.⁴⁵ With APCs in the range of several hundred to several thousand dollars, high costs systematically exclude researchers from the South in a new, more pernicious way. Becerril García voices concerns about commercial APCs coexisting with the long-established open access platforms, which do not charge researchers publishing fees in Latin America. Inflationary practices are already evident, with *Nature* charging up to \$11,000 per article.⁴⁶ Scholarship may be free to access and read, but Southern researchers are largely unable to publish in many of those same journals. Given this environment, it comes with little surprise that a study published in 2020 showed that the "likelihood for a scholar to author an APC OA article increases with male gender, employment at a prestigious institution, association with a STEM discipline, greater federal research funding, and more advanced career stage."⁴⁷

Efforts underway to curb APC equity issues in the South are viewed with skepticism. Many publishers and non-profit organizations offer APC discount and waiver systems. Those working in and writing about the South question how these systems work and the degree to which researchers are actually aware of them. Some data suggests that researchers are still frequently paying for APCs or just do not use waiver systems at all; it is unclear whether this is because researchers are ineligible for waivers or unaware of their existence.⁴⁸ Even if researchers are eligible for a discounted rate, affordability is still a problem. Dr. Farooq Rathore, Department of

Rehabilitation Medicine, PNS Shifa Hospital, Pakistan explains why: "some journals do offer a discount, but honestly, the discounted amount of \$300 to \$800 USD is still not affordable since very few authors based in LMICs (low and middle income countries) have institutional support and funding to cover the cost of publishing in OA journals."49 Many waiver systems do not automatically apply to those in the South, and some researchers have paid for APCs because they did not know they had to opt-in to receive a waiver. 50 Additionally, the terms of these systems frequently change, and it is difficult to know over time whether a publisher offers a full waiver or just a discount. Rouhi, Beard, and Brundy propose that waiver systems are a salient example of the "equality vs. equity" debate. On face value, APCs appear to afford Southern researchers equal opportunity to participate in OA publishing. However, in reality, they have to consistently navigate ever-changing, complex waiver systems that their peers in the North do not, so true equity regarding this kind of OA publishing remains elusive. 51 Even if researchers were well aware of the availability of waivers, the fact that they have to be utilized is patronizing and perpetuates the idea of science as a commodity rather than a public good. ⁵² Northern scholars have even suggested that commercial publishers can waive APCs in low- and middle-income countries without much loss in revenue, considering the gains that would be made with published research in the areas of life expectancy, health, and education.⁵³ The complicated structures around waiver systems—from knowing about their existence to the actual discount being offered—continues to favor commercial interests instead of the interests of Southern researchers.

How did researchers in the Global South become even more marginalized through the emergence of the APC, even with much progress on the open access front? A broad answer to this question might center on who drives the scholarly communication narrative on a global scale: research entities in the Global North. The primary emphasis in the North is driven by the desire to use publication to build the prestige of institutions and researchers, not toward more altruistic ends like the dissemination of knowledge to the global community. There is also much enthusiasm for using the term "excellence" to describe various aspects of the academy, including research outputs, even though "the hyper-competition that arises from the performance of "excellence" is completely at odds with the qualities of good research." I will further explore issues around prestige publishing and prejudice later in this section.

A narrower answer to the question might be found in Chan's 2019 reflections on the OA movement. He states that "while it appears that the moral battle for Open Access for the public good had largely been won, the battle over how best to provide and sustain OA continues to be hotly contested."⁵⁶ He observes that while interest in OA has persisted, the communities engaged in the movement fractured into a set of loosely OA-related coalitions (such as open data) and lost the power a large collective might have brought to bear on a singular issue. Differing interests and motivations within the movement allowed commercial publishing to successfully swoop in, co-op the OA agenda, and develop models that worked in their favor, like OA APCs.⁵⁷ Knöchelmann has also written about how commercial OA specially sets out to solidify epistemic injustices in the South instead of ameliorating them.⁵⁸

The inability to afford APCs is in no way related to the merit of an author's work. The next section evaluates the precise kind of epistemic injustice researcher's encounter with the barrier of the APC: testimonial injustice.

Support for Premise 3: If scholars use journal rankings as a guide to which testimony is the most credible, and the APC publishing model systematically excludes researchers from the Global South on non-meritocratic grounds, then the APC publishing model contributes to testimonial injustice.

Earlier in this article, I introduced Fricker's account of testimonial injustice. In this section I will relate Fricker's work to discussions about journal prestige. Fricker states that testimonial injustice "occurs when prejudice causes a hearer to give a deflated level of credibility to a speaker's word." To better understand this type of injustice, Fricker also defines a prejudice as "judgements, which may have a positive or a negative valence, and which display some (typically, epistemically culpable) resistance to counter-evidence owing to some affective investment on the part of the subject." ⁶⁰

Fricker's definition of a prejudice requires two components: 1) judgments that are resistant to viable counterevidence, and 2) those judgments are due to affective investment on the subject's part. The conception of prejudice of interest for this paper is an indirect kind that is structural instead of directed at an individual. Traditionally, people think of prejudice toward people, but we need to think about prejudice aimed toward testimony. The testimonial injustice lies in an unjustifiable attachment to a system of journal rankings. The following three paragraphs will demonstrate support for these two requirements.

First, assigning a high degree of credibility to prestigious journal publishing (including pay-to-publish models) goes against much of the evidence about these types of publications. Much research has been published about the deficits of relying on bibliometrics to understand journal quality. Some of these deficits include citation manipulation or gaming by editorial practices, 61 small percentages of articles inflating the journal impact factor, 62 citation calculations that are not transparent to the public,63 and problems with normalizing metrics between two different fields, such as molecular biology and physics.⁶⁴ Predatory journals have also taken advantage of the fixation on metrics in the publish-or-perish environment, and have been shown to promote fake impact factors.65 In short, reliance on citation data alone provides only a narrow understanding of research and does not replace sound judgment about a work.66 Additionally, rigorous peer review practices, which are thought to allow only the most credible research into prestige journals, can be biased in favor of researchers in the US and other regions in the Global North primarily because of cultural bias, such as preference for the English language.⁶⁷ Peer review can also suffer from the Mathew effect. Under this effect, researchers with certain privileges (such as prestigious institutional affiliation) who have a track record of publishing success will continue to have advantage and multiply their gains, while others without certain privileges will struggle to get ahead.⁶⁸ Thus, the widespread view that publications in high prestige journals are more credible than their counterparts published in low prestige journals appears to be resistant to viable counterevidence. I will not dig too deep into what the markers of quality research are if bibliometrics are not an effective sign of this quality. However, it is reasonable to think quality research is related to the characteristics of expert testimony discussed earlier in this paper, particularly the ability to synthesize disparate information for an audience in need of it.

Even though problems with prestigious journal publishing are well documented, academic institutions in the Global North still heavily depend on journal metrics for evaluation and assessment, particularly for promotion and tenure.⁶⁹ It then comes as no surprise that researchers are still affectively invested in attempting to publish in high impact journals, even though there is evidence that works against this investment.

A 2015 post on the philosophy blog *Daily Nous* further demonstrates how pervasive publishing metrics have become in the daily lives of researchers. This post garnered a spirited debate on journal ranking and metrics.⁷⁰ A few of the commenters wondered why some journals

received a "C" rating (the post's author organized a system of philosophical journal ratings) but in their mind, should clearly be an "A" rating. Based on these comments, we imagine how a conversation might unfold between one researcher (researcher X) who just published an article in what she considers an "A" journal, and another researcher (researcher Y) to whom she is recounting the story: researcher X is very proud of her publication, but researcher Y has a different conception of the quality of the journal researcher X has just published. Researcher Y tells researcher X that the article was published in a "decent" journal due to their own personal beliefs about the prestige of this journal. This comment dampens researcher X's celebratory mood, since she knows that some of her colleagues, such as researcher Y, may not view the article with the importance that she will. There is reason to think that a scholar's affective investment related to prestigious journal publishing is at least partly responsible for the fact that prestige continues to be used as an indicator of article quality, despite countervailing evidence.

If we assume that people base judgments about an article on journal prestige, and that research from the Global South is systematically excluded from prestigious journals for non-meritocratic reasons, like exorbitant APC fees, there is a prejudice in favor of work in prestigious journals (that underrepresents Southern scholars) and against work that is not published in prestigious journals. The prejudice is the difference in epistemic status assigned to research from the high prestige journal and the low prestige journal.

Reviewing the Case for Testimonial Injustice

The APC regularly excludes Southern researchers from publishing their testimony in prestigious journals, and this exclusion strikes at the heart of a researcher's core responsibilities. The hypothetical case below posits a Southern researcher in this problematic scenario. This case will help us more fully illustrate what testimonial injustice looks like with regard to the APC.

Gabriela's case

Gabriela, a biologist in Honduras, would like to publish her new study in a popular, prestigious OA journal in her field that requires an expensive APC. She is eager to publish in this journal because peers she admires around the world publish in this venue, and it would be a great way to communicate her research to those peers, develop her professional network, and demonstrate the impact of her work. She hopes that publication in the journal might catch the eye of one of these respected peers so that they might contact her to discuss their work and find mutual interests to write a grant application in the future. However, she currently does not have the funding for the APC to make this a reality. Instead of publishing in another journal, Gabriela decides to wait and see if funding comes through to publish in the journal that she thinks would be the best fit for her work. After a few months, Gabriela is still waiting for funding to pay the APC and decides to publish in a less prestigious journal in her field without an APC. This is sufficient for her career requirements but does not provide the opportunities for the career advancement that she envisions for her project. Had she published in the journal of her choice, she would have had the opportunity to connect and collaborate with colleagues who have a track record of securing large grants in the Global North. She believes the potential grant opportunities from the response to

her publication in the prestigious journal would have transformed her research agenda and advanced several projects. Unfortunately, she has missed out on all of these career opportunities because she published in a journal that will not receive broad readership from a global audience. The small percentage of non-Southern researchers who do read it might not regard it with a high degree of credibility when compared to a high prestige journal. She is disheartened about the missed publishing opportunity in the APC journal and begins to question if it is worth pursuing other publication ventures outside of her home country.

Gabriela experiences testimonial injustice not because she is prohibited from publishing in the OA APC journal, but because she has to publish in the low prestige journal that will not bring her testimony the kind of global exposure she thinks would be best for the future of her project. Her work will be taken less seriously by her Northern peers because of a prejudice that works in favor of prestigious journals. Most people in the international community will simply not read her article, or if they do read it, will not regard it as highly credible. It could be the case that if a reader did happen upon her work in the lower prestige journal, one would see that the work is good, and understand it to be highly credible research. But lower-ranking journals are not nearly as widely read, since many in the Global North are invested in following only high prestige publications. The degree to which discovery systems, like Google Scholar, feed into a researcher's deep investment in high prestige publications is an interesting question that I will only raise here but deserves more attention. Her work will likely have less of a global impact simply because of the lower prestige journal she had to publish in, not because her work was any less methodologically sound than that of her peers.

What are the consequences of testimonial injustice that Gabriela might experience? The primary wrong of testimonial injustice for Fricker is that the subject is wronged in her capacity as a giver of knowledge.⁷¹ To be wronged in one's capacity as a knower is to be wronged in a capacity essential to human value. Being rebuffed as a knower in any context — with family, friends, coworkers, or acquaintances—is detrimental to leading a life where one is listened to and appropriately heard.

Fricker's secondary harms of testimonial injustice are split into two categories: practical and epistemic dimensions. Practical elements may affect one's career, while the epistemic represents a deeper dimension that involves loss of confidence in one's intellectual abilities to such an extent that this hinders intellectual development.⁷² Loss of intellectual confidence is worrisome because many epistemologists think that epistemic confidence is a condition for knowledge acquisition.

The practical harms of testimonial injustice can clearly impact a researcher's career. If a researcher is barred from making a contribution in the way they best see fit, this will have negative consequences for their career growth. In the case of Gabriela, she is wronged in her capacity as an expert testifier who is the best person to make decisions about her own scholarly communication practices. She has the capacity to envision how a potential research publication can apply to other researchers' work and answer emerging questions in her field, but is not granted that opportunity. Being a knower and expert testifier is essential to her identity as a researcher. After publication in the less prestigious journal, her hopes for how she wants to craft her identity and disseminate her testimony as a researcher do not come to fruition. Northern scholars will view the publication as less credible since it will be read less, cited less,

and fewer people will connect with her about her work. We know Gabriela is less likely to form connections with peers who might be interested in writing a grant application because she did not secure the article in a high profile publication. As an expert testifier, she is denied the privilege to communicate her testimony in a way of her choosing.

The epistemic harms of testimonial injustice can have a wide-ranging impact on a researcher's life. If the researcher is repeatedly subjected to the epistemic insult associated with testimonial injustice, this persistent undermining can cause her to lose confidence that the scholarly communication system can successfully be navigated, or worse, start to question her beliefs as a scholar.⁷³ Systematic exclusion can cause one to suffer an erosion of confidence such that she is severely disadvantaged in her pursuit of knowledge and lacks the ability to develop certain intellectual virtues. For example, loss of epistemic confidence prohibits development of intellectual courage, "the virtue of not backing down in one's convictions too quickly in response to a challenge."⁷⁴ Gabriela is already less likely to commit to future international projects if she believes no outlet exists to amplify her projects most effectively.

The harms of testimonial injustice related to OA APCs can run deep and should be a significant concern to all involved in scholarly communications, especially those in the Global North. A final thought from Fricker conveys why this injustice is so worrisome: "Testimonial injustice, and the attack it makes on intellectual confidence, can change an intellectual trajectory in one fell blow, whether as a single event or, more likely, as the final straw in an ongoing experience of persistent petty intellectual undermining."⁷⁵

Testimonial Justice in the Context of APCs

Fricker describes the virtue of testimonial justice such that "the influence of identity prejudice on the hearer's credibility judgment is detected and corrected for." In our context, we might say that testimonial justice occurs when the influence of prejudice toward a researcher's testimony is detected and corrected for. The question of what it means to detect and correct prejudice with regard to prestigious publications in scholarly communication requires an expansive answer that I will only briefly touch on here. Specifically, in our case of Gabriela, this might require that researchers acknowledge that publications unknown to them are not necessarily less credible than their better-known counterparts. Or, it could mean that those who read her publication in the non-APC journal resist prejudiced assumptions about the quality of her research. At minimum, any account of testimonial justice in this context requires that one have the ability to possess a self-regulating sensitivity to the identity and intellectual resources of the Southern researcher.

Scholars in the Global North might be tempted to rectify the possible harm done to a Southern researcher's epistemic confidence by helping to rebuild said confidence. But this would be misguided. Bali reminds us that the confidence of women, people of color, and other minorities will inevitably be in flux because they operate in patriarchal societies and deal with frequent microaggressions.⁷⁷ Trying to help increase a researcher's confidence would be futile given these circumstances. What *would* be helpful is to focus on the source of the problem and make space for them to forge a path through their own efforts to better shift the power dynamics of scholarly communication. This also aligns with Hathcock's appeal for a real dialogue within scholarly communication that decenters Northern values and knowledge creation.⁷⁸

Taking this a step further, Baildon suggests that one way to directly support researchers in the Global South would be to financially support open platforms like SciELO or Redalyc from Latin America, similar to how some already fund institutional repositories and publi-

cation funds at institutions in the Global North.⁷⁹ This support would have to be managed with a true partnership in mind that centers the needs of Southern scholars. Finding in-roads with South-North partnerships is as critical as ever since the COVID-19 pandemic taught us that grappling with global problems means that it is important to read science coming from global communities.

Conclusion

Reimagining what a research output represents to a researcher helps us more fully describe the ethical mechanisms at play when someone can, or cannot, disseminate their research. Classifying a research output by methodology or medium only goes so far, as these terms do not carry the moral weight needed for an ethical investigation. The philosophical study of testimony is uniquely suited to this inquiry, since contemporary developments in the field have provided much scholarship regarding all forms of testimony. A research output can be considered a piece of testimony. Identifying a research output as testimony conveys how morally vital it is that the researcher, as an expert testifier, communicate findings that have taken significant amounts of time and intellectual effort to produce through a channel they deem appropriate for their work and career goals.

Fricker emphasizes that the best way to work toward epistemic justice is to first create an account of what epistemic injustice looks like. The exercise of sketching out testimonial injustice was discussed in the second half of this paper. Researchers encounter testimonial injustice when a prejudice causes a reader to give a deflated level of credibility to a researcher's work published in a less prestigious journal due to the fact that the author did not have funds to pay for an APC in a more prestigious journal. The case of Gabriela illustrates this definition and shows the potential epistemic harms she might suffer.

The main aim of this paper was to give an account of testimonial injustice related to APCs. There is ample opportunity to continue exploring topics raised here, including the degree discoverability plays in shaping a researcher's investment in prestigious publishing and further sketching out conceptions of testimonial justice between scholars in the North and South. Other types of epistemic injustice also hold significant potential for exploration in scholarly communication. Fricker's second type of epistemic injustice, hermeneutical injustice, could have broad implications for the scholarly community as well. Hermeneutical injustice is defined as "the injustice of having some significant area of one's social experience obscured from collective understandings owing to hermeneutical marginalization." This concept is highly applicable in scholarly publishing between the North and South when it comes to shared social understandings in peer review and editorial practice. Further, hermeneutical injustice could be used to explore the inequities found at the intersection of social and intellectual practice in scholarly communication, such as conferences and other types of professional gatherings.

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