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## COVID-19 from the Margins: Crafting a (Cosmopolitan) Theory

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**Abstract:** Voicing systematically marginalised communities is a problem historically posed in the media and communications field, in terms of de-Westernisation and, more radically, cosmopolitanism. Such a problem has been magnified in the COVID-19 pandemic, with narratives from systematically devoiced communities – ranging from migrants to informal workers, ethnic minorities, economically poor people, and survivors of domestic violence – remaining untold. Recognising the need for a conceptual apparatus to voice the silenced narratives of the pandemic, this paper conducts two tasks: first, it crafts a theoretical apparatus of three devices (data at the margins; data poverty; and the datafication of anti-poverty programmes) to conceptualise COVID-19 stories from the margins. Second, it applies such a theoretical apparatus to a map of five problems (counting in the pandemic; new inequalities and vulnerabilities; datafied social protection; data injustices; solidarity and resistance from below) opened by discussion on COVID-19 from the margins. By doing so it offers a conceptual lens responding to the call for cosmopolitanism in media and communications, applying it to the study of COVID-19 narrations from the globe.

**Keywords:** COVID-19, Margins, Cosmopolitanism, Datafication; Data Poverty

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## Introduction

Out of the 25 most cited social science books of all time, only four were originally written in a language other than English (Green, 2016). A similar fate awaits knowledge products of universities outside the Anglo-Saxon axis: the only non-Anglo-Saxon institutions to feature in the top thirty in the list of top universities for citations are based in Switzerland, Brazil and Sweden (*Transparent Ranking: Top Universities by Citations in Top Google Scholar Profiles*, 2021).

The problem of systematic marginalisation of voices from contexts of structural disadvantage is a long-standing issue in the media and communications field. This, of course, affects not only academic authors but even more so cultural production that hardly finds any circulation in mainstream circles. Voice, argues the sociologist of media Nick Couldry, speaks to the human capacity of narrating things “but having a voice is never enough. I need to know that my voice matters” (Couldry, 2010, p. 2). The (in)ability of reclaiming voice, however, maps onto a number of long-lasting dimensions of inequality (Tacchi, 2016), which impact brutally in particular on the so-called Global South.

Responses to the problem have been historically framed in terms of “de-Westernisation” (Waisbord & Mellado, 2014; Rao, 2019), a notion that invites a shift away from structurally privileged Western perspectives. Recognising the need to voice silenced communities, the concept of *cosmopolitanism* invites the researcher to confront a plurality of global voices (Waisbord, 2016), reaffirming de-Westernisation and applying it beyond the geographical dimension. A cosmopolitan perspective invites a plurality of voices to be raised, contemplating devoiced communities such as the economically poor, undocumented migrants, ethnic minorities, informal workers, survivors of domestic violence, and subjects of diverse forms of marginalisation.

The silencing of marginalised communities has dramatically come to the fore with the COVID-19 pandemic. Since the aftermath of the declaration of COVID-19 as a pandemic by the World Health Organisation in March 2020, media as well as popular narratives have centred numbers and statistics, which arose as the main tool to narrate the pandemic (Milan & Treré, 2020; Milan, 2020). While capable to leverage the evocative power of official statistics, this number-based narration has silenced communities at the margins, for they were “not seen” in the official figures. In the early days of the pandemic, for example, the African continent was largely invisible in the dashboard: only two out of the 54 countries in the region had the testing capabilities to identify COVID-19. But this invisibility problem also affected a number of social groups in developing countries and advanced economies alike. Think of workers in the informal economy, survivors of domestic violence, low-income families, undocumented migrants and refugees, which risked perpetuating their devoicing. In other words, the pandemic has exacerbated existing divides, worsening the

voice problem for marginalised groups and exposing the urgency of finding practicable routes for such voices to be heard (Milan & Treré, 2020; Shelton, 2020).

This paper contributes to the emerging literature aimed at amplifying such voicing. Our starting point is the discourse that brings to light marginalised voices in the pandemic, creating the essential premises to illuminate such narratives. To this end, we use a cosmopolitan lens that transcends de-Westernisation (Waisbord, 2016), recognising forms of silencing that reach beyond the geopolitical divide between Western and non-Western perspectives (Ganter & Ortega, 2019). What makes such an approach especially important is its ability to amplify the marginalised voices of the pandemic, creating a space that purposefully affords the surfacing of narratives beyond the mainstream (Ganter & Ortega, 2019).

This theoretical paper dialogues with critical data studies, information and communication technologies for development (ICT4D) and politics to pursue two concomitant tasks. First, it develops a theoretical apparatus to conceptualise COVID-19 from the margins, identifying three key concepts that might help towards this goal: *data at the margins*, *data poverty*, and the *datafication of anti-poverty programmes* as core devices in this epistemic project. Our theory-building technique consists of drawing on the three concepts, already existing in the literature (Rodríguez, 2017; Milan & Treré, 2020; Masiero & Das, 2019), combining them to understand and voice the diverse silenced narratives of the pandemic. In our theoretical project, each concept is complemented by the other two: the notion of the *margins* acts as “a shortcut to speak of complex dynamics of power inequality” (Rodríguez, 2017); the notion of *data poverty* captures the condition of people unseen or erased from the map of concerns, and the notion of *datafication of anti-poverty programmes* illuminates the conversion of social protection users into machine-readable data, resulting into multiple forms of injustice during the pandemic.

Second, the paper applies such a theoretical apparatus to a map of five problems that emerge as priorities in crafting a research agenda on COVID-19 from the margins. These themes – counting in the pandemic; new inequalities and vulnerabilities; datafied social policies; data injustices; solidarity and resistance from below – are recurrent in narrations of the pandemic from the margins, and constitute core themes in a project of multilingual, decolonial narration of the pandemic that the paper draws on (Milan, Treré, & Masiero, 2021). In doing so, the paper responds to the call for cosmopolitanism in media and communications, leveraging a cosmopolitan view to amplify stories of COVID-19 from the margins. The paper is illustrated with case studies that featured in the co-edited COVID-19 from the Margins project, aimed at narrating, through multilingual author voices, the untold stories of the pandemic.

Furthermore, the reflections around processes of datafication from the margins that are developed in this contribution are highly relevant for communication and media studies. This is because the communications field is currently undergoing a deep

transformation due to the convergence of media technologies and data systems. The increasing role that processes of data extraction and analysis are playing in almost every aspect of human activity makes it often impossible to distinguish between media dynamics and data flows. Therefore, this article can be also read as a contribution to a “radical revision of the boundaries of the communications field (...) required to adequately address the fundamentally altered social and economic order emerging from this ferment in the field of everyday life itself” (Turow & Couldry, 2018, p. 415).

The paper is structured as follows: we present our theoretical framework, then illustrate our research agenda for interpreting COVID-19 from the Margins and conclude by discussing the contribution of cosmopolitanism to our project.

### **Theory: Conceptualising COVID-19 from the Margins**

Milan & Treré (2017, 2019) propose the conceptual lens of “Big Data from the South” as a constructive challenge to the cognitive injustice that fails to recognise non-mainstream ways of knowing the world through data (Milan & Treré, 2017, 2019). Noting the predominance of Westernised views in approaches, even critical, to the datafication of the Global South (and beyond), they foregrounded an alternative centred on the recognition of perspectives from countries with “fragile democracies, flimsy economies, and impending poverty” (Milan & Treré, 2017, p. 1). While initially centred on de-Westernisation and in opposition to what the authors refer to as “data universalism”, the “Big Data from the South” approach is inspired by, among other, cosmopolitanism through its theorisation of the Souths, viewed in their pluralistic nature and beyond the geographical connotation (Milan & Treré, 2019). In a cosmopolitan fashion, the South is a plural entity that goes beyond the geographical marker (as in “Global South”) to constitute a metaphor and proxy for inequality, resistance, and subversive creativity. This approach offers a useful entry point to operationalise cosmopolitanism in the narratives of the COVID-19 pandemic.

The notion of cosmopolitanism has a long tradition in political theory. Beck links it to the “imagination of alternative ways of life and rationalities, which include the otherness of the other. It puts the negotiation of contradictory cultural experiences into the centre of activities: in the political, the economic, the scientific and the social” (Beck, 2002, p. 18). In practice, cosmopolitanism responds to the need of “enlarging” the polis to embrace a broader notion of membership in the global community of human beings. Attached to this notion is the ethical-normative idea of one’s responsibility towards other members of this global community (Held, 2004; Fraser, 2007). Explicitly shifting the sphere of interest from the national to the global, cosmopolitanism rides on the challenges and the opportunities of the new “organizing logic” of globalization and multilevel governance (Sassen, 2006, p. 148). In addition, it highlights the role of transnational political activism of the “global civil

society” as bearer of positive values for an ideal of cosmopolitan democracy (Kaldor, 2003).

From this tradition, we draw the emphasis on the moral imperative of justice and responsibility towards other human beings, as well as Beck’s idea of “the otherness of the other” (2002). We also take the invitation to “rethink established notions within disciplinary fields to expand the repertoire of conceptual tools” (Boczkowski & Siles, 2014, p. 565). However, contrary to “traditional” cosmopolitan thinkers who praise the internet as “the new cosmopolitanism” (Chouliaraki & Blaagaard, 2013) and “a vital dimension of the cosmopolitan experience” (Kendall, Woodward, & Skrbis, 2005), we foreground the notion, derived from critical data studies, that digital technology *also* contributes to (re-)produce injustice, instead of merely closing the gap between people in distinct geographies or contributing to their well-being. To say it with postcolonial scholar Sandra Ponzanesi (2020), “the ubiquity of digital connectivity does not mean an end to social inequalities; it can lead to new forms of isolation and radicalization for subaltern subjects” (p. 1). Broadly defined to include data, data flows and data infrastructure, digital technology here is an actor in itself, rather than merely a means to advance the cosmopolitan project.

To develop a theoretical apparatus to make space for “the otherness of the other”, the Big Data from the South perspective is here developed through three interdisciplinary conceptual devices. The notion of *data at the margins*, based on the description of the *margin* as coined by Rodríguez (2017), captures the multiplicity and diversity of the communities whose narrations we seek to voice. Specifically, it responds to the cosmopolitan invitation to make room for an “otherness of the other” which is not geographically bounded. The notion of *data poverty*, as theorised in Milan and Treré (2020), allows capturing a form of poverty that is caused by lack of data and, in turn, produces invisibility of individuals due to lack of representation in mainstream statistics. A third notion, implicitly predicated on the former two, is the *datafication of anti-poverty programmes*, theorised by Masiero and Das (2019) to capture the conversion of anti-poverty programme recipients into machine-readable data, affecting their entitlements and the assignation of these. Below we illustrate such theoretical devices, illuminating how they are blended to theorise COVID-19 from the margins.

### ***Data at the Margins***

Rodríguez (2017) introduces the notion of the *margin* as “a shortcut to speak of complex dynamics of power inequality. Processes of asymmetrical access to material and symbolic resources shape differentiated and unequal access to the public sphere” (p. 56). Her citizen media research theorisation stems from problematising theoretical perspectives that, even when bringing to light power inequality, adopt a monodimensional view of it as centred on geographic or geopolitical lines. In constructive opposition to such a view, Rodríguez (2017) positions the notion of the margin as a route to understand dynamics of inequality that may stem from diverse

sources, and result in silencing of the interested individuals and communities (p. 56).

With its pluriversal nature (cf. Escobar, 2018), the notion of the margins allows an operationalisation of the cosmopolitan perspective adopted in this paper, responding to the cosmopolitan proposition to break with methodological nationalism (Beck, 2006) as well as Harvey's invitation to question the geographical reasoning underpinning our understanding of cosmopolitanism (Harvey, 2009). The margins inspire the vision of a plurality of South(s) (Milan & Treré, 2019), which engage different forms of datafication and suffer different forms of exclusion in the datafied society. For example, the silencing of survivors of domestic violence (Anonymous, 2021) differs, in quality and performance, from the silencing suffered by undocumented migrants (Pelizza, Milan, & Lausberg, 2021) or users excluded from social protection schemes (Cerna Aragon, 2021). With social protection we mean

all public and private initiatives that provide income or consumption transfers to the poor, protect the vulnerable against livelihood risks, and enhance the social status and rights of the marginalised; with the overall objective of reducing the economic and social vulnerability of poor, vulnerable and marginalised groups (Devereux & Sabates-Wheeler, 2004, p. 1).

Only some of such forms of exclusion are specific to the so-called Global South, with inequality intercepting not only colonial relations but also other "global" dynamics, such as "surveillance capitalism" (Zuboff, 2019), that hit human beings regardless of their geography. Finding a common matrix in the power inequality experienced by such communities, the notion of the margins still allows to conceptualise diversity, and take into account to avoid the homogenising view of a "Global South" in which all forms of marginalisation are taken as equal.

### ***Data Poverty***

Early works on statistics in marginalised contexts, such as the seminal work on African development statistics by Jerven (2013), detail how weak statistics affect the ability of states to provide public services. The notion of *data poverty*, theorised in Milan and Treré (2020), flows from the same problem, illuminating the role of quantification to "determine the existence of the problem and affect our ability to care and contribute to relief efforts" (p. 1). Stemming from the inability of mainstream statistics to capture contexts of structural marginalisation, data poverty explains the absence of many communities from the number-based narration of the pandemic (Milan & Treré, 2020). Data poverty emerges from the exclusion of structurally marginalised people from the map of concerns (Milan et al., 2021) and, at the same time, reproduces such a problem, perpetuating the absence of non-counted communities from relief efforts and social protection systems (Masiero, 2020). In other words, data poverty is an attempt to centre inequality in a cosmopolitan theory book that "[i]n trying to give more of a role to inputs from beyond the West (...) runs the risk of playing down the Western power that such inputs are subjected to" (Martell, 2009, p. 259).

The pandemic is a case in point. With its global extension, it has illustrated the extent to which human existences are yoked to data in the four corners of the globe—and crucially, to mainstream representations of these (Milan et al., 2021). Presupposing a pluriversality that puts it in continuity with the concept of the margins by Rodríguez (2017), data poverty illuminates the roots and consequences of being “un-counted” (thus, invisible to, e.g., income subsidies or health care) in the context of a global emergency. In the light of this concept, diverse forms of marginalisation lived by the economically poor, undocumented migrants, indigenous communities or domestic violence survivors find a common matrix in the performative consequences of inability to be seen and cared for. At the same time the concept allows for showing such differences, rather than homogenising them in a unifying lens that blurs the diverse forms in which data poverty comes.

### ***The Datafication of Anti-Poverty Programmes***

The concepts of the margins and data poverty offer the conceptual tools to illuminate new vulnerabilities emerged during the COVID-19 pandemic. But as the pandemic has diffused globally, the social protection schemes that care for vulnerable groups have been datafied as well. Masiero and Das (2019) refer to the *datafication of anti-poverty programmes* as the conversion of users of social protection schemes into data, which makes them amenable to computer-based recognition and assignation of their entitlements. As the socio-economic consequences of the pandemic unfolded, the need to care for large numbers of new poor (Drèze, 2020) has emerged worldwide, leading to a new need to recognise needful people and cater to them with social protection schemes.

The rationale for datafying anti-poverty schemes lies in the potential of datafication to accurately determine beneficiaries, combating exclusion and inclusion errors alike (Gelb & Metz, 2018). But Masiero and Das (2019) illuminate three forms of injustice stemming from this process: a *legal* injustice lies in how essential rights, such as the right to receive social protection, are made conditional to registration in datafication schemes (e.g. biometric registration), hence losing their universality. An *informational* injustice pertains to the treatment of data of social protection beneficiaries, on which respondents in research by Masiero and Das (2019) are found not to be fully informed. A final type of injustice is *design-related*, with datafied schemes being centred on combating unlawful inclusions rather than exclusions, hence failing to meet the needs of many unjustly excluded users.



**Table 1: COVID-19 from the Margins - Theoretical Devices**

<b>Concept</b>	<b>Theoretical role</b>	<b>Relation to COVID-19</b>	<b>Relation to other theoretical devices</b>
Data at the Margins (“margins” from Rodríguez, 2017)	Positions understandings of data within the margins defined as “a shortcut to speak of complex dynamics of power inequality” (Rodríguez, 2017)	Affords theorising data from the perspective of communities left at the margins of narrations of the pandemic, foregrounding inequality	Provides a background for the understanding of data poverty and injustices stemming from datafied social protection
Data Poverty (from Milan & Treré, 2020)	Conceptualises the condition of people unseen or erased by the “map of concerns” of states and societies (Milan & Treré, 2020)	Explains the absence of many communities from the number-based narration of the pandemic, due to invisibility or effective erasure from concern	Presupposes the pluriversal notion of the margins as a route to conceptualise exclusions from the number-based map of concerns
Datafication of Anti-Poverty Programmes (from Masiero & Das, 2019)	Studies the processes and consequences of the conversion of social protection users into machine-readable data (Masiero & Das, 2019)	Affords the study of legal, informational, and design-related injustices on datafied social protection in the pandemic	Situates injustices in datafied social protection in contexts captured by the notions of margins and data poverty

Against this backdrop, Masiero (2020) argues that datafied social protection in the pandemic poses concerns pertaining to all three dimensions of injustice. From a legal perspective, the sudden need to cater for many new poor implies a magnified need to avoid exclusion errors, which the state of global emergency makes even more problematic. From an informational perspective, cases including subsidy schemes in Colombia (López, 2021) and Peru (Cerna Aragon, 2021) have seen entitlements being determined by the cross-checking of existing databases, with limited transparency of how information was handled. Finally, from a design-related perspective, the importance of designing schemes is magnified by the need to cater to the new poor produced by the pandemic, as well as those whose vulnerability has increased during COVID-19. For example, in India biometric identification, operated to access the Public Distribution System (PDS) that is the main national food security scheme, has been suspended by several states during the COVID-19 pandemic. This was done to adapt the system to a reality where touchscreens should be avoided, but also mitigated the perils of exclusion that come with biometric identification. To the three types of injustice identified here, Masiero and Buddha (2021) add a *structural* type, finding, with a study of a digital social protection scheme in south India, that the

design of the system reproduces existing patterns of oppressive class and caste relations.

Table 1 offers a synopsis of the theoretical devices offered here, illuminating how each of them participates in the construction of a lens to understand COVID-19 from the margins. Such a lens offers a guiding light in this endeavour, enabling the researcher to engage diverse themes that recur in marginalised narratives of the pandemic.

### **COVID-19 from the Margins: A Research Agenda**

In this section, we apply the theoretical apparatus proposed above to a map of five problems that emerged as recurring in discussions on COVID-19 from the margins, forming the five core themes of the COVID-19 from the Margins project. While interlinked, such themes present diverse foci that conceptualise complementary aspects of the pandemic, aspects that affect communities at the margins in distinct ways. The themes of counting in the pandemic, new inequalities and vulnerabilities, datafied social policies, data injustices, and resistance from below are presented here as foci of COVID-19 from the margins, and illuminated, in the COVID-19 from the Margins project, through narratives collected in the first ten months from the World Health Organisation (WHO) declaration of COVID-19 as a pandemic.

#### ***Counting in the Pandemic***

Numbers, produced through statistics collected at the national and regional levels, have characterised the narration of COVID-19 since the early days. Milan and Treré (2020) note how numbers are the condition of existence and care in the pandemic, and the main instrument to tell the story, mourn the dead, and make sense of the global emergency. The concept of data poverty explains the absence of uncounted individuals, groups and populations from the map of caring, making the politics of counting a first key theme in the narrations of the pandemic from the margins. Historically uncounted groups including undocumented migrants, informal labourers, sex workers, displaced people and survivors of domestic violence remain largely uncounted in the pandemic, with performative consequences leading to the inability to access caring structures (cf. Lam, 2020; Odendaal, 2021; Pelizza et al., 2021).

The lens of data poverty is articulated across two gaps concerning, respectively, developing countries and invisible populations across contexts (Milan & Treré, 2020). In terms of developing countries, one recurring problem is the lack of statistical power (Jerven, 2013) that in the pandemic has affected both the production of statistics and the ability to test for COVID-19 (Diallo, 2020, cited in Milan & Treré, 2020, p. 2). The incomplete production of statistics meets, across low-income country contexts, porous health infrastructures that the pandemic has put under excessive strain (WHO, 2020). The problem is perpetuated in contexts that, while located outside low-income nations, are still poorly captured by national statistics, such as

ethnic minorities in the UK (Ragnedda & Ruiiu, 2021) or the urban poor in the US (Qureshi, 2020; 2021).

In terms of invisible populations, the gap identified by Milan & Treré (2020) transcends national borders, capturing multiple forms of invisibility across contexts. In narrating the erasure of migrants from counting during COVID-19, Pelizza et al. (2021) observe continuity with pre-existing dynamics, such as reluctance of undocumented migrants to seek medical help due to fear of policing. In a similar vein, de Souza (2020) notes how, in the migrant crisis after India's first lockdown, the Indian government declared that no data had been maintained on migrant deaths, nor indeed on job losses. In her study of sex workers during COVID-19, Lam (2020) illuminates exclusion from government relief and social protection programmes, then highlighting the magnification of extant forms of invisibility. Studies of domestic violence during COVID-19, such as those by Ravindran and Shah (2020), illustrate a similar form of invisibility: underreporting of domestic violence is stated to be even more dangerous in the light of the heightened risk of abuse induced by lockdowns (Anonymous, 2021). Grouped together, these forms of invisibility transcend the national dimension, putting the politics of counting at the top of a research agenda on COVID-19 from the margins.

### ***New Inequalities and Vulnerabilities***

The notion of the margins, as theorised in Rodríguez (2017), transcends geographic and geopolitical dimensions to point at complex dynamics of power inequality. This perspective allows conceptualising diverse forms of vulnerability, embracing issues that reach beyond a de-Westernising perspective and complement it. Placed in the context of the pandemic, the notion of the margins illuminates multiple forms of inequality and vulnerability that have been produced or reinforced during COVID-19.

In many ways, such inequalities and vulnerabilities mirror the statistical invisibilities discussed above. Villasenor (2021) reports on the “other epidemic” constituted by the rise in femicides, denouncing the silencing of victims escaped by national and global statistics. A reflection by Rohm and Martins (2021) discusses the impact of the pandemic on LGBTQ+ communities, illuminating how containing measures such as lockdowns lead to trapping of individuals within abusive household situations. In the domain of socio-economic inequalities, contributions highlight the perpetuation of impoverishment as a result of the business paralysis induced by COVID-19. Within contexts of urban poverty, studies including Magalhães (2021), Ortiz (2021) and Qureshi (2020) illuminate the reproduction of economic inequalities in ways that result into effective inability of people at the margins to receive adequate assistance.

Within the new and reinforced inequalities of the pandemic, the condition of workers of the physical gig economy (Heeks, 2020) has been captured by multiple

accounts. Research on the gig economy has a history of capturing subalternity of workers, noting conditions of asymmetrical power perpetuated, among other factors, by the position of workers as freelancers rather than employees (Fairwork Foundation, 2020a, 2020b; Heeks, 2020). Translated in the context of the pandemic, ethnographic accounts of physical gig work (cf. Guerra, 2021; Krishna, 2021) report cases of continuous and enhanced risk, augmented by the need to continuously work while being exposed to transmission of COVID-19 (Bosma, Mos, & Van Doorn, 2021). Illuminating the subalternity opened up by power asymmetries in gig work, reports such as those by the Fairwork Foundation (2020a; 2020b) denounce the increased hardship of such work, augmented by the enhancing of risk and the lack of redressal mechanisms.

### ***Datafied Social Policies***

Masiero and Das (2019) use the notion of datafication of anti-poverty programmes to theorise how the global turn to data has reshaped social protection schemes. With the diffusion of COVID-19, turned into data are also the new poor of the pandemic, whose status is converted into machine-readable records for the assignation of entitlements. Along with the advantages of datafication, poignantly claimed in the latest World ID report (World Bank, 2021), come the legal, informational and design-related injustices that Masiero and Das (2019) caution against, which raise concerns around the social policy responses to the pandemic. Such responses varied across countries, but find a broad common denominator in the use of data to identify and serve the new poor (United Nations Development Programme, 2020).

The pandemic has arguably magnified the trade-off, associated to datafied social protection, between accurate identification and exclusion of users (Masiero, 2020). It has been noted that the introduction of biometric authentication in anti-poverty programmes leads to reduce wrongful inclusions of the non-entitled, but also results in wrongful exclusion of the entitled (Drèze, Khalid, & Somanchi, 2017; Muralidharan, Niehaus, & Sukhtankar, 2020). The point sits within the tension between surveillance and recognition where biometric technologies are conceptualised (Weitzberg, Cheesman, Martin, & Schoemaker, 2021), locating such technologies in between the affordance of more accurate identification and realities of unjust exclusion. Problematised is also the extent that biometric authentication results in right entitlements, with studies noting that wrong disbursement is not ruled out by correct authentication (Hundal, Janani, & Chaudhuri, 2020). In the context of the new urge for digital identification in the pandemic (Martin, 2021) a need to prioritise inclusions led to suspending biometric authentication in schemes such as India's Public Distribution System (PDS), the country's largest food security scheme (Shrinivasa, 2020). However, as Hriscu (2021) notes, to access social protection beneficiaries are still requested to link their unique identity (Aadhaar) number with their mobile phone numbers or authenticate through iris recognition.

In this context, the taxonomy of injustices proposed by Masiero and Das (2019) offers a route to map global concerns in social protection under COVID-19. From an informational perspective, opaque data handling was reported for subsidy schemes in Colombia (López, 2021) and Peru (Cerna Aragon, 2021), resulting in households being unclear on how their subsidy status decisions were made. From legal and design-related perspectives, the emergency leads to the need to design for inclusion, learning from schemes that used coverage expansion to improve national access to subsidies. A case in point, India's National Food Security Act (NFSA) passed in 2013 induced wider coverage of India's PDS, now enabling the accumulation of excess stocks that were used to provide double rations to below-poverty-line people during COVID-19 (Khera, 2020).

### ***Data Injustices***

Concepts of data at the margins, data poverty, and the datafication of anti-poverty programmes all point, in different ways, to forms of injustice brought by marginalisation. Among these, data injustices – where *data justice* is taken, with Taylor (2017), as “fairness in the way people are made visible, represented and treated as a result of their production of data” (p. 2), have appeared in new forms during the pandemic. As noted by Taylor, Sharma, Martin, & Jameson (2020), states of emergency declared worldwide as a result of COVID-19 have opened up a new type of data injustice, generated by the public-private architectures built across countries for disease surveillance. Unprecedented in reach and scope, these architectures have largely neglected data protection systems, with particularly hard consequences for people at the margins with limited powers to negotiate their rights (Das, 2021; Mwezigwa, 2020).

Taylor et al.'s (2020) book on data justice and COVID-19 collects 33 country experiences of pandemic surveillance, raising at least two themes that overlap with COVID-19 from the margins. First, constant across country cases is the fact that marginalised people have comparatively higher and more pressing exposure to COVID-19 tracking. This is true for gig workers, surveilled as they carry out frontline work such as food delivery (Krishna, 2021), for migrants on the move to seek shelter and safety (Suri & Mishra, 2020), and for urban poor communities accused to spread the virus due to overcrowding and poor hygiene. Surveillance of vulnerable groups, in some cases taking the form of “authoritarian surveillance” (Akbari, 2021), is more concerning when placed in countries without a framework for data protection, such as India where a surveillance app, Aarogya Setu, was launched in the absence of data protection laws or rights conventions (Das, 2021).

Secondly, data justice consequences of tracking are augmented in contexts where surveillance apps intersect with forms of outright power abuse. For example in Hungary, COVID-19 tracking has become part of legitimation of a “state of danger” in which essential rights are suspended (Böröcz, 2020), while in the Philippines, concerns over post-pandemic data custody have been silenced by the ruling powers

(Lucero, 2020). In such cases, data injustice has soon translated into expressions of outright social injustice, with denial of fundamental rights to data protection and dissent. When it comes to people at the margins, denial of fundamental rights is magnified by low bargaining power, which constrains voice and ultimately perpetuates power abuse (Lucero, 2020; Mwesigwa, 2020).

### ***Resistance from Below in the Pandemic***

Our theoretical devices have afforded conceptualising exclusions from counting and social protection, new inequalities and vulnerabilities, and also data injustices in the pandemic. But a countertrend has been observed across countries: at the margins, technologies have been used to create new forms of active solidarity and resistance to repressive powers. The coincidence with the new wave of the Black Lives Matter movement, which saw new forms of tech-based solidarity across the Americas, provides context for a reinvention of technology for the oppressed (Gomes, 2020). This situates the margins as a locus of resistance, which appropriates available technologies to enact new forms of subversion (Milan & Treré, 2019).

In terms of solidarity, the gap in social protection illustrated above has been, in many country cases, filled by digitally-organised activist groups. In Argentina, WhatsApp groups have mobilised to assist people excluded from the country's Emergency Solidarity Income, a social protection scheme that left many unassisted (Tarullo, 2021). Spain has seen the emergence of "redes de cuidados" (networks of care) to assist families in poverty (Ortiz, 2021), while gig workers in India and South Africa have formed solidarity networks to support each other (Fairwork Foundation, 2020a). Different in contexts and conditions, the solidarity networks of the pandemic are grouped by their use of digital technologies, monopolised to chart and enact assistance to communities left vulnerable by COVID-19.

In terms of resistance, diverse initiatives have emerged to counteract abuses legitimised in and beyond states of emergency. In China, the Internet has emerged as a space to overcome the censorship of contents related to COVID-19, using digital activism for freedom of information (Merini, 2021). Data journalism has been used across countries to problematise officially produced statistics (Odendaal, 2021) and in Brazil, where a negationist stance has been adopted by the ruling powers, data volunteers have mobilised to visualise and communicate COVID-19 statistics (Füssy, 2021). Solidarity and resistance are interconnected, and grouped by the ability to turn potentially oppressive technologies upside down: faced with social injustice, activist networks have turned technologies in their favour, circumventing power abuse and enacting grassroots forms of information.

Table 2 summarises our research themes, illuminating how the theoretical devices proposed in this paper help conceptualise them. While potentially unexhaustive in narrating the many forms of impact yielded by the pandemic on different

communities, the agenda operates as a means to identify core themes of concern on COVID-19 from the Margins, along with routes for their theorisation.

**Table 2: Summary of Research Themes**

<b>Theme</b>	<b>Core concerns</b>	<b>Practical Instances</b>	<b>Ins- vices</b>	<b>Theoretical de-</b>
Counting in the Pandemic	<p>-Narratives of the pandemic are produced by mainstream statistics</p> <p>-They leave out countries with low statistical power and populations made invisible across different contexts</p>	<p>-Sub-Saharan Africa: low statistical power limiting ability to test for COVID-19 and produce statistics</p> <p>-BAME in the UK, urban poor in the Americas, not accurately reflected by COVID-19 statistics</p> <p>-Migrants, sex workers, survivors of violence, invisible to mainstream COVID-19 data production</p>		<p>Data poverty: makes sense of exclusions of the marginalised from statistics produced in the pandemic</p> <p>Explanatory value (making sense of invisibilisation), but also normative value (suggests inclusive data production practices)</p>
New Inequalities and Vulnerabilities	<p>COVID-19 has seen the production of new forms of inequality (e.g. the new poor of the pandemic), and the reinforcement of existing ones (subordination of migrants, gig workers, socio-economically vulnerable people)</p>	<p>-Domestic violence, marginalisation of LGBTQ+ communities, exclusion of entitled users from assistance, all exacerbated during the pandemic</p> <p>-Gig workers operating on the frontline, but systematically left without assistance or compensation mechanisms for risk</p>		<p>Data at the margins: conceptualises the margins as a locus of power subalternity that transcends geographic borders</p> <p>Serves to illuminate forms of inequality and vulnerability that have been produced or reinforced during the pandemic</p>

Datafied Social Policies	<p>Countries are responding to COVID-19 with datafied social protection schemes, aimed at recognising entitled users and assigning subsidies</p> <p>This leaves room for legal, informational and design-related injustices, which need to be watched for in the pandemic</p>	<p>-Legal injustice: denial of assistance to users who cannot perform digital authentication</p> <p>-Informational injustice: opaque handling of data in the determination of subsidies</p> <p>-Design-related injustice: schemes designed to counter inclusion, not exclusion errors</p>	<p>Datafication of anti-poverty programmes: illuminates the conversion of social protection users into data and the injustices stemming from it</p> <p>Affords understanding injustices unfolding in datafied social policies during COVID-19, and possible routes to react to them</p>
Data Injustices	<p>New forms of data injustice produced during the pandemic, as a result of public-private surveillance</p> <p>Existing forms of data injustice on vulnerable people further consolidated through states of emergency across countries</p>	<p>-Marginalised people (migrants, gig workers, the poor) have more pressing exposure to COVID-19 tracking</p> <p>-Tracking apps used in contexts without data protection laws or regulation (e.g. India)</p> <p>-Surveillance apps intersecting with forms of power abuse (e.g. Hungary, the Philippines)</p>	<p>Data at the margins and data poverty conceptualise the background within which data injustice on the marginalised unfolds</p> <p>The datafication of anti-poverty programmes illuminates three forms of injustice (legal, informational, design-related) in datafied schemes</p>
Resistance from Below in the Pandemic	<p>Technology being used in the pandemic to enact new forms of solidarity and resistance from the margins</p>	<p>-Solidarity: activist groups fill the voids left by inadequate social protection</p> <p>-Resistance: digital activism in oppressive contexts (e.g. Brazil, China) circumvents repression and censorship of COVID-19 data</p>	<p>Data at the margins illuminate the constraints, but also the affordances, of being marginalised in the pandemic</p>



## Discussion: A Cosmopolitan Perspective on COVID-19 from the Margins

A cosmopolitan perspective makes space, on the one hand, for a normative perspective on global justice, and on the other, for the plurality of perspectives and ways of understanding and experiencing social reality. It affords recognition of silenced communities in distinct geographical and socio-economic margins, inviting to de-Westernise our interpretations of these realities and to incorporate multiple forms of voice (Ganter & Ortega, 2019). Cosmopolitanism helped us to engage the margins as complex sites of “otherness”, as well as inequality and power struggles. In this paper, a cosmopolitan perspective has supported the creation of a theoretical apparatus consisting of data at the margins, data poverty and the datafication of anti-poverty programmes. We then applied our theoretical construct to the study of the COVID-19 pandemic from the margins, identifying five main research themes, each illuminating a different aspect of the pandemic narrated from marginalised voices.

Using a cosmopolitan perspective to study COVID-19 from the margins has two main theoretical implications. First, cosmopolitan principles are not challenged in the media and communications field (Waisbord & Mellado, 2014), but reluctance to engage in cosmopolitan practices has tangible consequences on pluralism. An example is that of multilingualism, whose absence – leading to the use of English as *lingua franca* in academia – silences many voices from the field (Suzina, 2021). With its perspective of ubiquitous voicing, cosmopolitanism acts as an antidote to such forms of silencing, affording to translate in practice the principles of pluriversal amplification on which the theory relies.

Secondly, a cosmopolitan approach to COVID-19 from the margins has an explanatory value, but also a normative one. From an explanatory perspective, it is an approach that explains the exclusion of structurally marginalised groups from counting, and hence from the official statistics that narrate the stories of the pandemic (Milan & Tréré, 2020). It hence affords exploring the consequences of such exclusions identified as inequalities and vulnerabilities, denial of social assistance, and data injustice that hit the marginalised particularly hard. But from a normative perspective, the same approach allows to challenge exclusions, through the forms of solidarity and resistance from below that we have examined in our research agenda. A cosmopolitan perspective studies such practices from the voices of their makers, illuminating new routes for subversion and inclusive data production.

In addition, our work emphasizes the role of digital technology broadly defined not only in advancing a cosmopolitan project, but also in (re-)producing the very same inequalities cosmopolitanism purports to fight. In so doing, this article intends to contribute to a critical perspective on technology, advanced by critical data studies as well as in part by ICT4D, to current understandings of cosmopolitanism.

With the pandemic perduring across countries, having now entered second waves and yielding effects across all the five themes, several methodological considerations

are needed as research on COVID-19 from the margins continues. First, the pluriversity of the approach has implications both in terms of multilingualism (Suzina, 2021) and of interdisciplinarity, a feature of which the present Special Issue is a poignant instantiation. Our agenda of themes has illuminated research objects that are dealt with from many disciplines, such as media and communications but also information systems, human geography, development and critical data studies to name a few. Relying on the translatability of communication scholarship (Waisbord, 2016), an agenda on COVID-19 from the margins requires an interdisciplinary perspective to ensure a pluralistic approach to narration.

In addition, disciplinary silos tend to emerge with respect to thematic clusters, limiting the opportunity for researchers to learn from different perspectives. For example, a proliferating literature exists on the disempowering effects of gig work, with studies (cf. Wood, Graham, Lehdonvirta, & Hjorth, 2019; Anwar & Graham, 2020; Heeks, 2020) explicitly engaging the Global South. While rich and informative, such a literature has so far witnessed limited exchanges with the field of media and communications, where key concepts such as those of the margins and data poverty have first emerged. Against this backdrop, the interdisciplinary approach proposed here affords interaction among the fields, which complete each other in illuminating the effects of gig work specifically on marginalised groups.

Such an exchange is also needed between COVID-19 from the margins and the emerging agenda on data justice (Taylor, 2017; Dencik, Hintz, Redden, & Treré, 2019), now with its focus on COVID-19 (Taylor et al., 2020). As noted in this paper, strong synergies exist between the two perspectives, with data injustice yielding especially hard effects on marginalised groups with limited power to negotiate rights. The two perspectives complete each other along two dimensions: on geographical lines, data justice research only partially engages the world's Souths, which a cosmopolitan perspective embraces. On thematic lines, data justice engages specific forms of oppression that communities at the margins live, hence completing the lens proposed here with the study of the production of such injustices. In bringing forward a COVID-19 from the margins approach, constant engagement with a data justice agenda is therefore vital to comprehensiveness of the work.

Finally, the thematic agenda proposed here is not designed to be exhaustive. Implicit in a pluriversal approach is the continuous emergence of themes for analysis, which may fit in the taxonomy proposed here or generate new categories altogether. At the time of writing, with several COVID-19 vaccines approved by international health institutions, questions are emerging on their distribution across the world's Souths and to systematically vulnerable categories. Even in these early phases of a new era of vaccine distributions, problems of counting, equality and justice posed in this paper can be seen as relevant to the upcoming studies of how distributions will take place. As we move towards this new era, we hope to have offered, with this paper, a theoretical apparatus that affords the effective voicing of the margins, analysing extant inequalities but also creating routes of resistance and subversion.

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