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Article

# Digital Dead Body Management (DDBM): Time to Think it Through

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## Abstract

Effective, safe and dignified dead body management (DBM) in the context of disasters, atrocities and wars has long been an important task—primarily for the humanitarian sector, but also for the human rights and international criminal justice community. How will the digitization of the human rights field and the adjacent spheres of humanitarian action and international criminal justice reshape ideas about death and the practices of care and control of the dead in the international space? To approach that question, the article coins the term ‘digital dead body management’ (DDBM) and offers an initial framing of this concept and some tentative pointers for a human rights research agenda. It focuses on the concept of ‘digital bodies’. Noting that the management of digital identities after death is becoming a significant governance challenge for the global technology sector, with thousands of ghost-accounts appearing every day, the article discusses the structural difference between how ‘digital deaths’ are dealt with in emergencies and in the marketplace, with a focus on DDBM as a problem of global equality. The article contributes to the critical conceptualization of DDBM by mapping a set of the tensions existing between the norms, objectives and operational approaches of humanitarian, human rights and international criminal justice practices and reflecting on where normative perils might arise in the context of digitization.

**Keywords:** data; death; digital bodies; digitization; humanitarianism

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## Introduction

Effective, safe and dignified dead body management (DBM) in the context of disasters, atrocities and wars has long been an important task—primarily for the humanitarian sector, but also for the human rights and international criminal justice community. DBM

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includes all the laws, rules and obligations, processes and activities related to dealing with (mass) death: for example, the search for, retrieval and burial of bodies, and their identification, exhumation and registration (IFRC 2016). The nature and aims of DBM continue to evolve because of changing political views on law and ‘humanness’, better forensic technology and improvements in practice resulting from experience of natural disasters, pandemics, wars, sudden population movements, and the investigations, procedural innovations and jurisprudence of war crimes tribunals. This exploratory article is addressed to a human rights audience and examines how the digitization of the human rights field and the adjacent spheres of humanitarian action and international criminal justice might reshape ideas about death and the practices of care and control of the dead in the international space. The article coins the term ‘digital dead body management’ (DDBM) and offers an initial framing of this concept and some tentative pointers for a research agenda.

In this article, DDBM is applied to an imagined future context—it is a theoretical exercise. It should be of interest to human rights practitioners because it will soon stop being theoretical and become entirely practical—a moral, legal and operational problem with which human rights practitioners will have to grapple, as the international community faces rising numbers of ghost beneficiaries.<sup>1</sup> Digitization—the collection, conversion, storage, and sharing of data and the use of digital technologies (mobiles, tablets, biometric devices, wearables, drones and the like) to collect information about beneficiaries—increasingly shapes our understanding of needs and our response to emergencies (Sandvik, Jacobsen, and McDonald 2017). Digitization is more than a technical measure: the discourses and practices of digitization create new challenges, dilemmas and opportunities that have political and legal dimensions needing to be considered (Jasanoff 1995, 2004). The use of digital technologies creates ‘digital bodies’ (Lupton 2015)—assemblages of images, information, biometrics (facial recognition, fingerprints and iris scans), and other data stored in digital space—that represent the physical bodies of individuals affected by conflict and disasters, but over which they have little control. This ‘co-production’ (Jasanoff 2004) of digital bodies, their life cycle and the stakeholders involved in the governance of this life cycle are the analytical points of departure for this article.

The ongoing digitization of beneficiary bodies in the context of aid confronts the human rights community with normative challenges that need to be articulated and engaged with. This includes the relationship between the deaths of aid beneficiaries and the fate of their digital bodies. Death is chaotic in emergencies. Mortality among those seeking aid and protection is high. Whereas fatalities in camp locations are registered, elsewhere deaths often go unrecorded. There is no corresponding disappearance of digital bodies, which do not die with their human hosts. While legal life ends with death and human rights belong to the living, the dead should be afforded residual rights of dignity and respect (Moon 2014). This implies that there is a duty of care for the various stakeholders involved in managing the digital bodies of the dead. From a human rights perspective, what does it mean to imagine the orderly and ethical termination, archiving or preservation of digital bodies? There are many ways of answering this question, and my approach is tentative and should be seen as a precursor to a human rights research agenda focusing on comprehensive scenario-building and

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1 ‘Beneficiaries’ is a humanitarian sector term, and controversial. In this article, it is used as an analytical trope. In the humanitarian sector, the old problem of ‘ghost beneficiaries’ who register fake or multiple identities to obtain legal protection or more aid is increasingly tackled by technology such as biometrics, blockchain or wearables. The focus of this article is different. I am not referring to the registration of ante-mortem data for forensic purposes.

empirical research. [Auchter \(2016\)](#) argues for ‘taking dead bodies seriously in security studies’, focusing on ‘the politics of how the dead are identified, classified, measured, represented, and managed, and how this is linked to questions of their agency’. She observes that the recent (technology-driven) preoccupation with tracing and counting dead bodies is not only part of the political assessment of a particular conflict, disaster or policy, but is also coupled with the moral notion that dead bodies should not only be counted but also accounted for (*ibid.*). This article represents an initial attempt to account for digital dead bodies.

To that end, I draw substantially on the literatures on DBM, digital afterlives and critical data studies. My argumentation also draws on experiential insights gained in the course of my years spent working with practitioners in the fields of human rights and humanitarian technology. I explore how rules, standards and norms on digitization and DBM interact, shape and are shaped by practices and interactions within and across global humanitarian domains (which provide services), human rights (which provide truth) and international criminal justice (which provides justice). The ‘M’ in DBM, as well as referring to management in the practical sense, also refers to the broader political economy of digitization and governance. My working assumption is that digital body data assemblages arise in the humanitarian field, where data is initially collected, registered and worked on, and are passed on to the human rights and international criminal justice fields. I do not suggest that data will flow freely between these sectors, but maintain that we need to think carefully about future cross-sectoral use of data and extensive third-party data use as a realistic—and ethically challenging—possibility. While the shared objective of these fields of practice is to end atrocity and protect civilians—dead or alive—they have different tasks, obligations, interests and values with respect to DBM, which sometimes overlap and sometimes conflict. I argue that, as an initial step, it is important to put these interfaces under analytical scrutiny, because of the widespread assumption that these three fields are united by their thematic overlaps and moral standing as supposed agents of ‘social good’. This means there is a lack of scholarly attention to fundamental differences in the objectives, practices, cultures and methods of the various communities of practice aiming to rescue, protect and care for civilians in crisis, and to how these differences translate into divergent uses of data and differing approaches to the management of digital bodies.

The article proceeds as follows: first, I provide a contextual understanding of the practice of DBM by bringing together insights from discussions of the norms of DBM in humanitarian action, human rights, and international criminal justice with policy and guidance tools in forensic anthropology and disaster management on DBM practices. Then I describe the rise of digital bodies in the humanitarian space and outline the structural differences in how ‘digital deaths’ are dealt with in the marketplace. Returning to the human rights perspective, I reflect on DDBM as a justice problem. Next, I develop the conceptualization of DDBM by mapping the overlaps and tensions existing between the norms, objectives and operational approaches of humanitarian practice, human rights, and international criminal justice. In the conclusion I suggest a DDBM research agenda for human rights practice.

### **Dead body management: norms, practices and political economy**

The practitioners and scholars dealing with DBM are engaged in a specialist field: a basic mapping of the concept will help to clarify the sensibilities and norms involved and to provide a contextualized conceptualization of DDBM. DBM, recently framed by the International Committee of the Red Cross (ICRC) as ‘humanitarian forensic action’

(Cordner and Tidball-Binz 2017; Rosenblatt 2019), is an important humanitarian activity that has received considerable legal and policy attention. Historically it has had three concerns: the integrity of the dead human body, identification and information sharing about identity, and respectful disposal. International humanitarian law (Additional Protocol I 1977) makes this care for the dead a humanitarian duty, and links it to the search for missing persons (Wels 2016). International humanitarian law requires that dead bodies should be searched for, collected, identified and returned to their families (Gaggioli 2018, quoting Henckaerts and Doswald-Beck 2005: Rules 112–16). The obligation to treat remains humanely and return them or dispose of them in a respectful manner is laid down, with individual burials being the norm, and collective graves avoided as far as possible. Armed forces and armed groups may authorize humanitarian organizations to search for and collect the dead (Gaggioli 2018).

An important practical objective of DBM is to avoid contamination and epidemics after disaster (IRIN News 2012). The field manual of the International Federation of Red Cross and Red Crescent Societies (IFRC) on the ‘Management of Dead Bodies after Disasters’ includes detailed practical guidance on planning and coordination, the allocation of unique code numbers to bodies, taking photographs and recording data from them, the recovery of bodies, temporary storage of bodies, traceable long-term storage and disposal of bodies, support for families and relatives, the collection and management of information on the missing (including those presumed dead), and communication with families and the media. The manual lists items such as protective gear, dead body information forms, labels for bodies with unique codes and a chain of custody record, as well as mass fatality plan checklists (IFRC 2016). Following recent mass fatalities, the technical aspects of DBM regimes have developed significantly: The practice of the International Criminal Tribunals for the former Yugoslavia and for Rwanda led to advances in forensic research on bodies and techniques for locating hidden graves. The tsunami in South-East Asia in 2004, the 2014 outbreak of Ebola in West Africa and the 2015–16 Mediterranean refugee crisis forced the international community to deal with unprecedented numbers of bodies. Their work was aided by rapid progress in DNA testing and analysis (Black 2009; Scully 2014; Morgan et al. 2006; Sadiq and McEntire 2012).

DBM is a contentious concept characterized by conflict about whether someone who is dead is a person or not, and the ethical value of the dead (Wels 2016). The body that is the object of DBM is very often a broken, non-intact body. The term ‘body part’ refers to tissue that is recognizably human but less than a whole body; body parts are treated in the same manner as a whole body (IFRC 2016). Related to this, microfragments of the body in the form of DNA are treated as personal data that is subject to data protection regulation. This represents a conceptual bridge between traditional understandings of DBM as a concern with physical bodies and the articulation of the concept of digital dead body management.

Breaches of DBM obligations under international humanitarian law include the mistreatment of bodies, unlawful or unsanctioned exhumation, the destruction or concealment of graves, sabotage of identification efforts, and general failure to provide the appropriate level of care, so that bodies are left to be desecrated, or proper information collection procedures are not organized and information is not shared (Wels 2016). However, while the general duty of care for the dead is carefully regulated, some tensions are discernible. On a normative level, in tandem with the general ‘humanization’ of international law (Meron 2000), there has been a ‘humanization’ of DBM, whereby DBM rules go beyond international humanitarian law to encompass international criminal law (focusing on investigating

the dead) and international human rights (focusing on identifying the missing). This entails a greater focus on the needs of individuals and communities for meaningful DBM, not only as a technical concept but as a vehicle for justice. The existence of multiple normative frameworks governing DBM also produces tensions, for example, when exhumation or forensic examination of remains collide with the cultural sensibilities, norms, needs and traditions of local communities or of families (Stover and Shigekane 2002). For DBM, the humanitarian objective is to recover, identify and repatriate bodies. For human rights or criminal justice, the objective is to determine the cause of death, assign criminal responsibility through prosecution, and allocate reparations.

However, neither scientific progress nor clear legal obligations will automatically ensure that DBM is carried out properly. DBM is situated in a specific political economy and is constituted through legal obligation, scientific knowledge, and shifting cultural and social practices and political paradigms (Turney 2010; Scully 2014; Toom 2016; Haines and Toom 2014). In recent years, thousands of undocumented migrants have drowned in the Mediterranean, died in the Sahel, or died along the US–Mexican border. Academics and practitioners have identified significant gaps in the policies adopted by local, national, European Union (EU) and international authorities to deal with the dead and missing. These gaps are caused by limited interest in and resources for retrieving bodies, an absence of provision for the identification of victims or for informing families of deaths, and little commitment to honouring bodies with a decent burial (Kovras and Robins 2016; Soto and Martínez 2018; Grant 2011). Similarly, efforts to ensure the centralized collection of data on migrant deaths have been faltering (IOM 2018). It is useful to emphasize the deliberate quality of these omissions, to indicate that the standards for duty of care around digital dead body management will be co-produced equally through technical means, rules, political will and everyday bureaucratic practice.

### Digital bodies in humanitarian space

There is an established scholarly consensus that our ‘data doubles’ should be understood as ‘real’ (Haggerty and Ericson 2000; Aas 2006; Lyon 2007; Ruckenstein 2014). Ethicists argue for the recognition of ‘the inorganic body as an informational body’. We should regard private data as ours in the sense that it is ‘our body’: we are our own information and our personal data are our informational bodies (Öhman and Floridi 2017: 649, citing Floridi 2014: 121). In the humanitarian sector, the proliferation of powerful information and communications technologies (ICTs) dramatically changes how aid agencies identify beneficiaries and provide assistance: for example, they experiment with blockchain technology to provide cash transfers, and use biometrics to register and track beneficiary assistance through iris scans and fingerprinting and remotely controlled wearable drug delivery systems (Sandvik, Jacobsen, and McDonald 2017). As explained above, the use of digital technologies creates ‘digital bodies’. These data assemblages represent, track, monitor and quantify the physical bodies of individuals who are the object of humanitarian aid interventions. I want here to highlight two current trends underpinning the emergence of digital bodies in the context of aid.

The first is the rise and rise of legibility. The ‘seeing’ of citizens and communities, held by Scott to be central to the making of the modern state (Scott 1998), takes on particular importance in humanitarian contexts, both with respect to the humanitarian imperative to address ‘needs’ and in relation to political concerns about corruption, beneficiary ‘fraud’,

and violent extremism (Jacobsen and Sandvik 2018). Making communities and individuals in crisis legible is thus of central importance: it functions as a precondition for delivering ‘accountable’ protection of civilians, and is necessary to produce customers (Sandvik, Jumbert et al. 2014). Legibility is produced through the intertwining of technological, managerial and normative (legal) approaches. Employing a rhetoric that has changed significantly in the last few years, big international humanitarian non-government agencies and NGO actors seek to engage closely with the private sector to increase the digitization of humanitarian space (Mednick 2018; Burns 2019), thus pushing for the incorporation of the humanitarian field into the global data market (see Taylor and Broeders 2015). This shift is clearly illustrated by the framing of the ID2020 initiative, whose objective is to provide IDs for the population of the whole world, and especially for refugees, developing countries and conflict zones. It involves an alliance between UN agencies, NGOs, governments, and private sector actors, and requires the socio-technical construction of digital identity ‘to meet the needs of governments, international organizations, businesses and individuals alike’ (Sánchez-Monedero 2018). ID2020 aims to realize the Sustainable Development Goals (SDGs), which call for universal access to legal identity (SDG 16) (Bergling and Jin 2015; Oppenheim and Powell 2015). The problems of previous (failed) attempts are identified as being to do with ‘market failure’, which ID2020 will avoid by adding value by ‘creating a market for such digital identity systems, ultimately resulting in increased private-sector attention, support, and contributions’ (Sánchez-Monedero 2018).

The second trend relates to the pervasive technology optimism in the humanitarian field (Sandvik, Jumbert et al. 2014; Sandvik 2017) and how international humanitarian organizations are building large databases in which they hold enormous amounts of beneficiary data, and where dead people are the object of archiving and storage practices that, in my view, are little understood, even by the agencies themselves. So far, these platforms—which in effect constitute the infrastructure for the production of digital bodies—have had little academic scrutiny. One example of them is RAIS (the Refugee Assistance Information System), an inter-agency tool for tracking assistance, referrals, and assessment information. It enables the UN High Commissioner for Refugees (UNHCR) and partners to share assistance records, cross-check beneficiary lists, and hold various types of data. RAIS is used by 59 agencies in 42 countries (Inter-Agency Coordination Lebanon 2017). According to UNHCR, RAIS is a monitoring system that keeps refugee information up to date, prevents duplication of effort and helps provide targeted assistance to vulnerable people and ‘persons of concern’ (UNICEF and UNHCR 2016). SCOPE is the World Food Programme’s (WFP) beneficiary and cash transfer management platform that provides support for the WFP intervention cycle. The SCOPE platform is a web-based application used for beneficiary registrations, intervention setups, distribution planning, transfers and distribution reporting (WFP 2014). Another example is PRIMERO, described by UNICEF as an app that ‘facilitates the secure collection, storage and sharing of data to improve child protection, incident monitoring and family reunification services’. The app is geared towards the needs of social workers and will help caseload management by making it easier to ‘identify vulnerable children, provide them with life-saving services and protect them from exploitation and violence’ (UNICEF 2017). New platforms that combine and integrate data previously held in ‘data silos’ are rapidly evolving: In 2018, UNHCR launched the ‘Population Registration and Identity Management EcoSystem’ (PRIMES), which encompasses all inter-operable UNHCR registration, identity management and caseload management tools and applications (UNHCR 2018). The scope of PRIMES is enormous: it includes existing

UNHCR tools such as proGres (a case management software application), the Biometric Identity Management System (BIMS), the Global Distribution Tool (GDT), the Rapid Application (RApp), IrisGuard and RAIS and *tools to be developed in the future* [my italics]. It is designed to work in offline, online and GSM (global system for mobile communication) environments and will be interoperable with IT systems used by governments and partner organizations such as WFP's SCOPE and UNICEF's PRIMERO (UNHCR 2018). PRIMES will also move data from local databases worldwide and consolidate all UNHCR data in a single database that can be accessed via the web.

A particularly interesting issue is the fact that the humanitarian agencies are embracing various private sector partners and changing their attitudes to aid data as 'business' and the permissibility of treating beneficiary data as a commercial resource. When they become the backbone of domestic health or welfare infrastructure, such platforms are constrained by domestic legislation and (usually) some form of democratic accountability. The proliferation of locally held databases is itself a security problem, but a globally managed platform brings further challenges. Organizations like UNHCR or WFP are not in any meaningful way accountable to the 'populations of concern' covered by their mandates. Much remains unclear about how these platforms will work, how data will travel, who will be able to access it, how it will be stored and protected, how individuals will be able to access their own data and what purposes these systems will ultimately serve (Parker 2018).

### **A different digital death: commodification and the marketplace**

To contextualize the accumulation of digital bodies in humanitarian space, it is useful to look at how and by what logic the marketplace deals with dead bodies in cyberspace. Dead users constitute both an existential threat to social media business models and a business opportunity (Öhman and Watson 2019). For a start, death is a problem for social media business models to which users sign up voluntarily. The dead are becoming increasingly present in cyberspace: 'dead profiles', or digital remains, increase by the thousands every day. The orphaning of platforms leads to loss of revenue, which decreases the financial ability and willingness to protect customer data, and results in cyber insecurity and less care for digital bodies. As demonstrated by the plight of former hubs such as Myspace, a potential future for Facebook and other large social media platforms is to become a 'digital graveyard', where the number of dead profiles exceeds the number of living users (Öhman and Floridi 2017). Nevertheless, over the last decade, digital death has become a site of intense commercial activity. To avoid the development of digital graveyards, the market co-creates new economic, social and cultural practices. Efforts to commercialize deaths in cyberspace, that is, putting people's digital affairs in order as physical owners die—by dealing with issues such as digital asset management and the burden of proof on next of kin (Gibson 2014)—include offers of 'pre-death audits' to see 'where you need to provide additional guidance to ensure your wishes are carried out' (Digital Death, no date). Facilitating continued generation of traffic around digital avatars and capitalizing on registered data through data-mining (Leaver 2013) and rebundling have become boom industries. A 'digital afterlife industry' has developed out of responding to user needs created by social media. This industry offers information management services, online memorial services, posthumous messaging services and re-creation services (emailing, continuous social media presence and posthumous video communication) (Öhman and Floridi 2017). A growing body of scholarship is also addressing the ethical, social and cultural aspects of post-mortem digital

identities and questions surrounding their status and future (Wright 2014). Scholars are exploring, for example, the saving and archiving of data concerning one's own life (Bourdelloie 2015), emergent dilemmas surrounding the juxtaposition of biological death with possibilities for digital immortality (Leaver and Highfield 2018; Lingel 2013), and looking at how social media reshapes grief processes, and at the cultural significance of disconnecting from deceased users or erasing their presence (Stokes 2015). 'Digital death' here involves a host of things: bringing emotional and technical closure to social media networks; discussions about legacy and sites of memorialization; asset planning; and the distribution and maximization of value. This scholarship also explores new legal concepts, such as that of post-mortem data privacy (Harbinja 2017). Few, if any, contributions are concerned with digital afterlives in the global South (Hussain et al. 2017).

### **Digital dead body management as a global equality problem**

Why then, should we care about the management of digital afterlife in emergencies? Those who die in conflict, fragile settings or disasters are the invisible dead, those officially registered as dead in camp settings, or whose bodies are located or exhumed, and those who end up registered as disappeared or missing. However, they will increasingly be individuals with digital bodies that have been stored by international actors in super platforms or elsewhere. The international community aims to take care of the physical bodies of the dead because human beings have a right not to lose their identity after death, and to be treated with respect and as if they have inherent dignity. I argue that, at present, there is a lack of understanding of what digital bodies are, and a failure to think about dignity and respect as being integral to digital bodies, and fundamental to the management of digital dead bodies. Moreover, there is a lack of clear rules about digital bodies and digital dead bodies, and insufficient attention to the cybersecurity precautions needed to protect the integrity of digital bodies (Sandvik 2016). For the purposes of DDBM, an important general feature of these aid data infrastructural systems appears to be that, while beneficiary data may be archived, it is not deleted. There are two reasons for this: the systems are bad at ascertaining who is no longer in need of services; and by their very nature, they belong to an ecosystem with a high death rate and poor government ability to register deaths. Also, the ecosystem is deliberately constructed this way, possibly due to a combination of scant policy attention to digital dead bodies and a corresponding lack of political interest in investing in managing the digital dead bodies of marginalized people.

I suggest that what should be noted for the purposes of conceptualizing DDBM is that the evolving status of the dead in global data capitalism, and the way this type of digital death management is wholly geared towards individual paying customers with digital assets, will also shape DDBM in the global emergency field. However, while they are (somewhat) attractive from a data capitalism point of view, humanitarian data reservoirs do not hold customers or clients, but 'beneficiaries', who did not necessarily consent to their inclusion and who have very limited agency in managing their own data. While humanitarian organizations such as the ICRC have historically been the custodians of data on dead people, the use digital bodies can be put to across the sub-fields of global governance, and their potential commercial value, are something radically new. It is in this context of lax governance and disempowered data producers that humanitarian data reservoirs—and the unspecified shelf-life of individual digital bodies—also offer potentially important possibilities for human rights and international criminal justice actors to accomplish their

mission to investigate crimes and produce accountability and justice. Understanding where dilemmas arise is important for developing a critical understanding of the digitization of the human rights field.

### **Understanding digital dead body management through sectoral priorities: services, truth or justice?**

In this section, I will continue to develop the concept of DDBM by discussing some of the overlaps and tensions involved in how service providers (humanitarians), truth providers (the human rights community), and justice providers (international criminal justice) approach data collected by humanitarian actors in emergencies. The assumption is that a critical consideration of these tensions will yield interesting analytical insights about future approaches to DDBM and illuminate some of the normative perils that might arise. Humanitarianism, human rights and international justice differ sharply in their conceptualization of the interrelationship between themselves. While international criminal justice processes may use reports from human rights organizations and humanitarian actors in court as evidence (La Rosa 2006), humanitarian actors emphasize the difference between public condemnation and giving evidence. The difference in perception is not academic—it has significant practical ramifications: organizations such as the ICRC and Médecins sans Frontières (MSF) pursue policies of non-cooperation with the International Criminal Court (ICC) (Weissman 2009). This also means that the sectors have very different perceptions of whom they can legitimately extract, borrow or receive data from, and the type of institutional resistance they should put up against other actors' approaches. The trade-offs and costs involved in this type of engagement will often be difficult to assess properly: for humanitarian actors, the idea of human rights actors appropriating beneficiary data is unattractive, as it threatens neutrality and impartiality and may cause harm to beneficiaries by limiting humanitarian access. For human rights actors, such access to data appears attractive and useful, at least in the short term. However, I suggest that, although the dead 'do not have human rights', we should pay attention to the conditions under which the data are extracted and (re)appropriated and the type of ethical problems this might engender for human rights practice.

To gauge the data interests of humanitarian, human rights and international criminal justice communities, I suggest that it is necessary to take a step back and identify key structural differences between the three groups in the objectives of their missions, their time frames, their means, methods and values, and their perceptions of the agency of the individuals and communities in crisis that are the targets of interventions. The underlying differences between these groups mean that actors will have different uses for data and different ethics. My aims here are to do some initial thinking about how background factors shape each group's perspective on 'repurposing' data and ethical considerations around reuse, and to get a better understanding of how data collected by one actor for a specific purpose within a specific time frame can be passed on, borrowed or appropriated, and what the implications of this are.

What are the aims and objectives of data collection? Humanitarianism aims to address needs and save lives, to protect civilians from suffering, but has no theoretical interest in the relationship between justice and peace. International criminal justice aims to establish criminal responsibility and protect civilians by means of penal sanctions and the detention of perpetrators, seeing justice as a precondition for peace (Kendall and Nouwen 2018).

Human rights are about providing accountability, transparency and justice. The human rights crisis response community is heavily regulated by international human rights law and the core principle of non-discrimination. Human rights are also shaped by frequent states of exception and suspension of rights in times of crisis. While humanitarianism has a problem with the ‘politicization’ of emergencies and mass atrocities, which gets in the way of responding to human need, the human rights outlook can see all sorts of possible trade-offs in the interests of securing formal rights protection. The work of the human rights community produces accurate and credible information about human suffering and rights violations, providing ‘truth’ in response to mass atrocities. International criminal justice provides ‘justice’ through formal legal processes such as trials. These differences are immensely significant as regards the ultimate ends for which digital bodies can be used, and the justification for using data for secondary objectives—or for objectives that were not thought about at the time of collection.

What does implementation look like and what is the importance of differences in time horizons? Humanitarianism builds infrastructure to offer material aid, services and legal protection (refugee status, for example) in the most appropriate, expedient and effective way. Humanitarianism produces policies, handbooks and standards of procedure, but very little by way of compliance procedures, due diligence practice and organizational legal capacity. For international justice, procedurally correct processes, truth-telling and the establishment of accurate historical records is the way to produce justice. For human rights, public advocacy and taking sides, giving testimony about violations and helping to give victims a voice—mostly through legal discourse and procedures—are central. Given these differences, each of the three spheres has its own timeline and time horizon. Humanitarianism addresses needs and suffering in the present and immediate future. International justice aims to provide redress for past wrongs and thus help to prevent future crimes. Human rights seeks to address individual and systemic injustice in the past and to provide accountability and redress, through empowerment and participation in truth-telling. For humanitarians, the time horizon is short: it is now and tomorrow. For international criminal justice, the long-term goal is to create a universal moral and judicial community. Human rights falls somewhere in the middle. For humanitarians, therefore, data management is part and parcel of the day-to-day governance of vulnerable populations. It is feasible to trace and establish responsibility for harm, and public knowledge of such harm will have an immediate impact on public trust and humanitarian access.

What are the values involved, and how do they shape practice? At least on an ideological level, humanitarianism operates according to the basic imperatives to do no harm to individuals or communities, and to provide aid and assistance impartially to all, according to need. The human rights approach is founded on notions of inalienable universal (legal) rights that states have a duty to respect, protect and fulfil. International criminal justice is geared towards assigning responsibility through punitive approaches to individual accountability. These differences in values also shape trade-offs: from an international criminal justice perspective, accountability to a community, whether in the abstract or concretely, may look very different from accountability seen from a humanitarian perspective, and lead to very different decisions about data use. Humanitarian actors providing food aid, legal protection and health care base their day-to-day operational decisions on engagement with digital bodies intimately linked to physical bodies, living or dead. Human rights and international criminal justice actors will take a completely different view of the same cluster

of digital bodies, being unconstrained by day-to-day responsibilities to provide sustenance, care and protection in an insecure setting where resources are limited.

Who is involved and why does it matter? Actors include service providers from local and international groups, NGOs and UN agencies; truth providers such as local and international NGOs, human rights defenders and the UN; and justice providers such as NGOs, victim associations, northern donors, international and domestic courts, and the UN machinery. When these practice communities use and manage data, they are also involved in competition over resources, moral economies and publicity. They are made up of experts, bureaucrats and grassroots actors with different skill sets and motivations for utilizing data. One can imagine the different ways an international criminal justice lawyer from an international tribunal and a UNHCR community service officer might think about the management of digital bodies speaking about lethal trauma in a context of sexual and gender-based violence and mass rape. For the UNHCR staffer working with the community, the obligation is to the community and the dead. From the perspective of the legal professional, these digital bodies represent ‘facts’ or ‘evidence’.

How is agency imagined? Humanitarianism, international criminal justice and human rights also address different audiences. Humanitarianism is addressed to the vulnerable, whereas the law that international criminal justice enforces—international criminal law—is supposedly addressed to everyone, including those holding political power. Human rights are also addressed to everyone, but with a focus on slotting people into groups representing duty holders responsible for addressing root causes. Humanitarianism operates with the idea of passive victims (or ‘beneficiaries’ as they are called in this article), human rights has rights-holders, and international criminal law, focusing not on structural conditions but on individual accountability, has witnesses, perpetrators with strong agency—and sometimes also victims (Kendall and Nouwen 2018). This means that understandings of the legitimate interests of addressees will vary: the war crimes perpetrator registered as a refugee will be reckoned as less worthy of protection than the innocent peasant farmer. It also affects how we think about the freedom to engage. More and more scholars have begun to ask critical questions about how we think about the freedom to not engage with the data market or not to be represented on commercial databases. How much visibility do citizens owe the state? For the human rights community, one possible framing of the ethical problem is to explore the notion of ‘data justice’ as articulated by Taylor, who argues that such an idea—fairness in the way people are made visible, represented and treated as a result of their production of digital data—is necessary to mark ethical paths through a datafying world. Using the example of Global Pulse, Taylor is particularly critical of the notion of a ‘collective good’ duty of participation, that implies that development agencies have a claim to people’s data on utilitarian grounds, and that opting out should not be an option, because it will impact on the rights of the collective (Taylor 2017). Human rights scholarship should think about how this compares to ideas held by humanitarian organizations—or an international criminal court.

Finally, what harm can be caused and what are the sources of harm? Whereas humanitarianism sees misfortune and suffering, human rights sees injustice, discrimination and inequality—and international criminal justice sees atrocity, barbarism and impunity. Humanitarianism has traditionally identified the sources of harm as conflicts and disasters, broadly construed. Human rights sees them as human-made injustice. For international criminal justice, harm results from moral failings. However, in recent years, there has been considerable focus within the humanitarian sector on the dangers of humanitarian

experimentation (Sandvik, Jacobsen, and McDonald 2017) and data harm (where sensitive data is leaked, misused, or misunderstood in a way that leads to bureaucratic decisions with negative consequences for individuals). This concern, arising from the enormous amount of data collected in a service-delivery context, does not currently figure in the internal conversations of the human rights and international criminal justice communities.

## Conclusion

Auchter (2016) asks ‘what is the visibility of the global dead’? This exploratory article has suggested that ‘digital dead body management’ is becoming an issue that human rights practitioners need to think about, as the digitization of humanitarian space accelerates. As we have seen, the political economy of DDBM rests on the mechanisms through which certain ideas about technology lead to particular framings of problems and understandings of appropriate solutions. The conceptual point of departure is that the data originally used to verify and process humanitarian beneficiaries, assess needs and distribute aid could subsequently be used to document violations, locate and identify victims, perpetrators or webs of relationships, or to prosecute perpetrators. As an initial strategy, I have proposed that we should examine the differences between the ideal and the actual use of data by humanitarian, human rights and international criminal justice actors, and the impact this use has on the dignity and rights of the dead—and on crisis-affected individuals and communities. Also in need of scrutiny are what appear to be increasingly divergent perceptions of what responsible approaches to data collection, maintenance, storage and sharing should be.

Looking ahead from a human rights perspective, to begin a critical inquiry it is necessary to think through a range of scenarios to see what potentially difficult situations are likely to arise for human rights actors, and what knock-on problems human rights approaches to data may cause for other benevolent actors intervening in emergencies. To begin to flesh out some of the practical ramifications for human rights work, I will now mention three issues. The first concerns accessing evidence about atrocity events as part of an attempt to provide communities with closure and healing. The existence of digital bodies means that there may no longer be any need to speak with survivors to confirm details—digital bodies can make the dead speak. While the ability to confirm the location, biodata, health situation and interactions of an individual is attractive, the practice of human rights actors ‘giving voice’ versus the risk of ‘stealing stories’ remains contested (Pittaway et al. 2010). The implications of making the dead speak and give away ever more detailed personal data in the name of truth and justice need to be carefully thought through. The second issue concerns the handling of data as a commercial resource in the context of social and economic rights: SDG 3 emphasizes the need to ‘ensure healthy lives’. The SDGs themselves follow a datafying format and logic, emphasizing a vision of global public health as ‘counting’ and making ‘visible’ human suffering (Hoeyer et al. 2019), while the move to numbers and digital health platforms is at the same time profoundly commercial in nature. When health data is extracted from digital bodies this will raise questions about digital assets, consent and dignity—and inevitably involve the digital bodies of dead people. Again, extracting and commodifying health data from individuals not in a position to consent is contentious—and inevitably becomes part of a cultural history of colonial medical experimentation on the subaltern dead, and of ongoing painful contestations over the custody and return of human remains. The third and final issue is the problem of ‘surveillance activism’ and whether human rights actors are able and willing to do the necessary due diligence to respectfully

maintain, cyber-safeguard and responsibly engage in digital dead body management in politically volatile contexts. The problem here is a familiar one: if you have the data, your adversary has it too (Sandvik and Raymond 2017).

To critically articulate and pursue a human rights research agenda on DDBM, we need more empirical research that carefully describes the capabilities and frameworks of existing data platforms, how the data is passed on and how different actors deal with dead users and their data, as well as empirical and conceptual work on how ideas and practices around digital death and the ethics of DDBM as a responsibility for organizations continue to evolve. We must consider how, for how long, and to what end ‘digital dead bodies’ are preserved—and how and for how long they should be preserved. We must carefully interrogate what rights the dead have to their digital selves in the context of conflict and fragile settings. We must also reflect on the circle of stakeholders who should be able to access their digital bodies and for what purposes. Finally, human rights practitioners must engage in a debate about what kind of ethical norms and principles should guide the use of dead people’s data, including the appropriation of data across sectors.

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