

Digital Solidarity and Ethical Tech for Refugees: Why We Need to Care More and Code Less

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Since 2015, the so-called refugee crisis has prompted an explosion of mobile applications and other initiatives aimed at helping refugees navigate the spaces of Fortress Europe, connect with useful resources, access opportunities, and integrate into the destination country. Guided by faith in the power of technologies to initiate change, different fringes of society—humanitarian organizations, private entrepreneurs, tech corporations, volunteers, and grassroots organizations—have increasingly relied on digital solutions to circulate solidarity across borders. This article reflects on the tensions that characterize cross-border digital solidarity by looking at how we can reconcile the ethics of “doing social good” with the more discriminatory practices of data collection that affect the refugee body. The article argues that attention needs to be paid to the implementation of *mindful filtering* practices as an alternative framework for more ethical uses of technology that center around care as a guiding principle and value.

Keywords: refugee crisis, digital solidarity, ethical technology, mindful filtering, care

Since 2015, the so-called migration or “refugee crisis”² has prompted an explosion of mobile applications and other tech-driven initiatives aimed at helping refugees navigate the convoluted spaces of Fortress Europe, connect with useful resources and networks, access opportunities, and integrate in the destination country. Guided by principles of innovation and faith in the power of technology to initiate change more rapidly and efficiently, different fringes of society—humanitarian organizations, private entrepreneurs, tech corporations, volunteers, digital humanitarians, and grassroots organizations—have increasingly relied

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¹ Some of the material used in this article has been published in Marino (2021).

² In this article, I place the word “crisis” inside double quotation marks to emphasize the linguistic, semiotic, and political tensions that characterize the adoption of this term by governments, border authorities, and media outlets to justify the use of exceptionally coercive measures against migrants and refugees. In adopting metaphors, frames, and discourses that locate the mobility of migrants and refugees as a “crisis” of unprecedented proportions, political and media authorities have actively and carefully created a state of general anxiety over the arrival of unwanted people, against whom the very idea of Europe and its social order had to be protected at all costs. The use of double quotation marks recognizes the ambiguities of this term and invites researchers to question the meanings associated with the adoption of this language.

on digital solutions to foster solidarity across borders. Under the umbrella term of “tech for social good,” nonprofit and for-profit organizations have harnessed the opportunities offered by the digital landscape to address some of the world’s most pressing challenges, including the decentralization of refugee governance, the crisis of the humanitarian sector, and the increasing securitization of borders operated by European governments to stop unwanted migration.

Described as highly mediatized (Marino, 2021) and as “the first of its kind in a fully digital age” (Ponzanesi, 2018, p. 1), the “refugee crisis” can indeed be seen as intensified by an infrastructure of global interconnectedness, where refugees’ use of smartphones and mobile applications intersect with more politicized and more humanitarian applications of technology (biometrics, artificial intelligent-driven verification systems, drones, and automated registration processes to name a few) to drive social change through mediated acts of collective solidarity. The complexity of this landscape cannot be fully accounted here, but important references can be found in relation to its political implications within Europe’s “migration machine” (Dijstelbloem & Meijer, 2011). Here, the convergence of military and sovereign powers, private security interests, and humanitarian networks has contributed to what Amoore calls the “spatial stretching” of the border (in Johnson et al., 2011) while signaling an extension of power above and beyond decision making at entry and exit points.

I argue that technologies are used in both a preemptive and performative manner (Marino, 2021). On the one hand, the transformation of migrant bodies into data that can be collected for identification, verification, and surveillance purposes (Haggerty & Ericson, 2000; Madianou, 2019; Marino, 2021) is justified by their portrayal as enemies of the state or as usurpers of opportunities they do not deserve. On the other hand, the urgency of the situation (the “we live in a state of emergency” narrative) is what gives state authorities the power to perform selective acts of exclusion at each and every border inspection.

This digital infrastructure has transformed Europe into a techno-militarized architecture of power (Marino, 2021), where refugees’ digital media use (Alencar, Kondova, & Ribbens, 2018; Gillespie et al., 2016; Leurs & Ponzanesi, 2018) and the contradictory governmental techniques shaping and controlling migrants’ mobility (Garelli & Tazzioli, 2017) create an incredibly opaque geography of cracks and fractures. As a result, not only is the very meaning of Europe called into question (De Genova, 2017; Zaborowski & Georgiou, 2016), but also more dynamic performances of resistance to power can creep in, as this article intends to highlight.

Given the complexity of the topic, the present contribution specifically focuses on how the deterioration of governmental and humanitarian support for refugees has contributed to the proliferation of initiatives and networks using technology as a driving force and as an opportunity for growth in the areas of refugee integration and participation. Such opportunities include the proliferation of hackathons and tech hubs, coding schools and resources, digital initiatives, and mobile applications that since 2016 have popped up all around Europe with the usual speed and disruptive energy of the tech world (Benton & Glennie, 2016). The boost of initiatives was mainly driven by widespread sentiments of frustration within the tech community over the slow, inefficient, and somehow lethargic political response to the “crisis,” which demanded more pragmatic and innovative solutions to be implemented to help the displaced. Among the many initiatives that were born out of this call for action, one that is worth mentioning is Techfugees, a global movement

and impact-driven global organization founded by TechCrunch editor-at-large Mike Butcher in 2015 following a Facebook post that invited concerned individuals and organizations to share startup responses, digital initiatives, and tech solutions addressing the crisis. Built around the mission “to empower displaced people whilst supporting tech innovations designed by, with and for them,”³ Techfugees—and its immediate global reach—inspired me to delve deeper into the opportunities and challenges of digital innovation practices for refugees. Between 2016 and 2019, I interviewed UK and Silicon Valley-based entrepreneurs, startupper, volunteers, and digital humanitarians that I here refer to as members of the broader “tech for social good” community. This was done in an attempt to find out not just how they perceived the contribution of technologies as solutions to the “crisis” but also how they envisioned the collaboration between the humanitarian, the tech sector, and governments at large. More importantly, I was curious to understand the role of digital solidarity and tech for good activism in the context of Fortress Europe. Early findings, which I have discussed extensively elsewhere (Marino, 2021), pointed out to the range of incredible opportunities offered by digital social innovation in terms of crowdsourcing creativity, development of sustainable solutions to the practical challenges of displacement, and sharing of critical resources that can benefit refugees not just as they wait in refugee camps but also upon their arrival in Europe.

What remained open for discussion was how opportunities are counterbalanced by tensions mainly affecting the short- and long-term impact of these digital solutions, especially for what concerns the collection of data while doing social good in a context where the involvement of private actors and the civic tech can further complicate the already chaotic political-humanitarian landscape.

In considering these challenges, the article reflects on the ethics of doing social good and asks one key question. As social good is inspired by principles of social justice, how can we reconcile the ethics of data collection—one of the most problematic aspects of technologies for refugees—with the politics of justice and solidarity? To answer this question, I propose a conceptual framework that might offer a more productive understanding of the role of solidarity and collective action in times of crisis. This framework revolves around two key concepts: the notion of *ethical technology* and the notion of *mindful filtering*, which I will turn to in the second half of this article.

In outlining the meaning of these two concepts and reasons “why we should code less and care more” as the title of this article suggests, I adopt the Care Collective’s (2020) interpretation of care as “a social capacity and activity involving the nurturing of all that is necessary for the welfare and flourishing of life” (p. 5). It is hoped that framing the notion of ethics within a broader conceptualization of care might help to recaliber the hypes and hopes of deploying technological solutions in highly sensitive contexts. Although this is the first attempt at broadening the horizon of humanitarian innovation, it appears highly meaningful in this ever-transforming landscape. Before I bring the attention to ethics, however, let me first contextualize the contribution of tech for social good within the landscape of humanitarian innovation.

³ More information about Techfugees and its mission can be found here: <https://techfugees.com/about/>

Innovation in Humanitarian Practice: Hypes and Hopes

The Humanitarian Innovation Fund (HIF, 2015) defines innovation as the “process of creative problem solving” (p. 5), whereby new solutions are applied to “unfamiliar problems” (Miller & Rudnik, 2012, p. 21). As Guay and Rudnik (2017) point out, the field of humanitarian innovation is a relatively new research territory, since its formal recognition only came in 2009. Hence, the use of the word “innovation” in humanitarianism has been used with a lack of clarity over what innovation entails in practice (Betts & Bloom, 2014). Broadly speaking, the word “innovation” reveals the intricate links between the demands of contemporary systems of production and the expectations arising among customers and beneficiaries in terms of performance and fast delivery of products.

Driven by a problem-solving and risk-taking attitude, this newly found push for innovation witnessed across all sectors emphasizes a renewed attention to what is delivered (products and services) as well as how (process innovation), to whom (position innovation), and under what framework (paradigm innovation; Guay & Rudnik, 2017). Madianou (2019) describes innovation “as the result of a mutual shaping of social, political, and technological processes” (p. 3), largely supported by an over-reliance on technology to remain competitive and future-facing, another buzzword in the contemporary world.

Within the humanitarian landscape, one of the driving forces behind the adoption of innovative models and systems is the expectation that “through financing, innovation management, and partnership development” (HIF, 2015, p. 4), more pragmatic solutions to some of these complex challenges affecting today’s world can be found and implemented quickly and efficiently. Here, I am not simply referring to the ways in which digitalization in crisis-affected countries has transformed “the context in which humanitarian assistance is delivered and humanitarian aid providers operate” through technologies used to “detect humanitarian crises, biometric identification to facilitate humanitarian support, a shift to digital payments as relief provisions” (European Parliamentary Research Service [EPRS], 2019, p. 30). More broadly and importantly, I am referring to the evolution of an ecosystem in ways we have not seen before, where the delivery of aid becomes a very messy affair in a space characterized by “new partnerships with key actors from the academic, humanitarian and private sectors” (HIF, 2015, p. 4). Here, new stakeholders, agencies, and principles involving actors completely new to the humanitarian landscape are offering solutions and responses automatically adapted from the business world to more problematic areas of intervention. Examples of this changing landscape include the role of digitization and big data in responding to most recent crises, including the use of messaging apps to deliver public health information regarding the spread of Ebola in West Africa (Akhmatova & Akhmatova, 2020), the use of WhatsApp in Yemen by the International Committee of Red Cross to log security incidents and request assistance (Lunt, 2017), and the use of digital mapping to coordinate information sharing following the Nepal earthquake (Meier, 2015). As part of what Bloom and Betts (2013) call “the innovation turn,” we have witnessed two key trends evolving in the humanitarian field. The first of these trends is the adoption of a highly technical organizational language where words such as “impact,” “disruption,” “flexibility,” “test and learn,” “end users,” and “scalability” become imperative logics guiding the design and implementation of humanitarian solutions. The second of these trends is the expansion of the humanitarian ecosystem to include not just new alliances with corporations and multinationals providing governments and border authorities with innovative systems and

sophisticated devices⁴ but also the intervention of actors whose primary function is not limited to humanitarianism. This phenomenon, also called “digital social innovation” (Ozman & Gossart, 2017, para. 1), broadly defines the adoption of digital technologies to tackle social and environmental issues and to promote forms of collective actions oriented toward the social good. Digital social innovation thus encompasses different forms and labels of action, from tech for good to civic tech and social tech. The glue connecting these trends, I argue, is the belief in the transformational power of technology to act as enabler for a more democratic, healthier society where all voices can be heard, where emergencies can be solved relatively quickly by connecting victims to sources of help, and where a refugee with a smartphone is connected, empowered, and self-reliant. The situation, however, is way more problematic.

As Molnar (2020) acutely states, “the hubris of Big Tech and the allure of quick fixes do not address the systemic reasons why communities are marginalized and why people are forced to migrate in the first place” (p. 4). Similar critical accounts of digital innovation in humanitarian contexts have emphasized the limitations of crisis data and technologies (Crawford & Finn, 2015; Madianou, 2019), including the commodification of the social good (Marino, 2021), where refugees are seen as customers and where the delivery of impact-oriented and problem-focused solutions risks to further depoliticize displacement with little regard for the root causes of the “crisis.” This issue emerged with particular emphasis during my interview with F., the co-founder of a mobile application that facilitates the circulation of mutual aid, who told me how—in his opinion—crises are creating

a space for new products, new services, a space where we can think differently about these communities as customers. [. . .] I think the business model for humanitarian agencies is not suitable for the nature of the challenge. What we are trying to do is to build an organization that starts with the customer, and it’s focused on the customer, focused on the refugee or the displaced person, and build up. (personal communication, January 8, 2018)

The identification of refugees as customers points to other challenges that were clearly pinpointed by Ahmad, a refugee from Syria I have interviewed for my book:

One of the fears that I have is the treatment of refugees as customers. It is because the humanitarian field has failed miserably in the past that businesspeople are trying to take advantage of the dysfunction of the system. Sometimes they deliver fantastic services, but the commodification of humans, the importance of likes, numbers and comments might lose the human touch. This is a humanitarian crisis, these are humans, but it’s turning into charts, columns, figures, frames. [. . .] It’s very money-centered, is profit. Ethical guidelines are essential. (personal communication, December 7, 2017)

The need for ethical guidelines in digital innovation is picked up by Crawford and Finn (2015) among others in their study of Twitter and social media data uses in disaster areas, where forcing people in need

⁴ More examples of public-private partnerships can be found in the EPRS (2019) report available at [https://www.europarl.europa.eu/RegData/etudes/STUD/2019/634411/EPRS_STU\(2019\)634411_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2019/634411/EPRS_STU(2019)634411_EN.pdf)

to give consent to initiatives or solutions to use specific services is said to cause further harm. The authors criticize Tene and Polenetsky's (2012) argument that "where the benefits of prospective data use clearly outweigh privacy risks, the legitimacy of processing should be assumed even if individuals decline to consent" (p. 67) and suggest shifting the attention to the responsibility of handling and processing data in crisis settings, where the risks of big data cannot always be predicted or controlled. The HIF recognizes that humanitarian innovation practices can expose vulnerable populations to new risks and forms of discrimination. Therefore, informed consent should not be seen as a one-off event but should be recurrently negotiated as circumstances and needs change.⁵

Good intentions are not always sufficient when personal data, safety, and privacy of individuals are concerned, especially when it is almost impossible to understand how consent is obtained, at what stage refugees are asked for their consent, and whether organizations have put in place different stages of consent seeking depending on how data is used and for what purposes. Is collecting biometric (or any other kind of) data always in the best interests of refugees themselves? Similar concerns were voiced by Nima Karimi, responsible for tech and education in *Code Your Future*, one of the organizations I have contacted while working on my book. Interestingly, Nima mentioned the aspect of ethical coding as a necessary practice that all organizations should embed in their practices:

I have become more cynical in learning about different tech solutions. Think about ethical coding for example. We are trying to have guidelines, a sort of manifesto. For example, UNHCR just posted a technology project like an invitation and there was no mention to ethical coding. In fact, when we approached them, they said they didn't know any refugee who was going to help them. This should be embedded into recruitment, product design and service design. (personal communication, March 16, 2018)

Nima's words allow me to introduce the next segment of this article, which is mainly concerned with the notion of ethical technology (or ethical coding) and proposes the concept of mindful filtering to try unpacking some of the questions outlined at the beginning of this article.

Ethical Technology and Mindful Filtering

Bannister, Sniderman, and Buckley (2020) define "ethical technology" as encompassing a set of values that is not limited to or focused on any one technology, instead addressing the organization's approach to its use of technologies as a whole and the ways in which they are deployed to drive business strategy and operations. (p. 57)

Although not specific to the context investigated here, this definition seems to allude to a holistic observation of the relations between technology, its operational logics, and its practical outcomes. It invites us to go beyond the single device or dataset to consider the broader paradigms and frameworks where

⁵ An overview of humanitarian principles and ethics can be found in the Humanitarian Innovation Guide at <https://higuide.elrha.org/toolkits/get-started/principles-and-ethics/>.

technology is designed, made operative, and deployed. My notion of *mindful filtering*, which can also be described as *mindful coding*, invites us to rethink data collection and crisis data more holistically.

In thinking about how we can reconcile the ethics of data collection—one of most problematic aspects of technologies for refugees—with the politics of solidarity, I have developed the notion of *mindful filtering* to critically examine the role of digital innovation and data in humanitarian practice. The notion brings together two seemingly disparate practices: mindfulness and data filtering. On the one hand, we know that mindfulness as a lifestyle practice and meditation process implies acceptance and encourages people to live in the present moment. Data filtering, on the other hand, is a way of breaking down sets of data into smaller units of information to conduct specific analyses and investigations. How, then, can the two come together? Recent studies have observed how mindfulness can be used in refugee contexts to support recovery from traumatic experiences (Kalmanovitz & Ho, 2016), especially among unaccompanied minors (Gucht, Glas, De Haene, Kuppens, & Raes, 2019). The helpfulness of mindfulness practices has been observed in relation to the well-being of police officers and staff (Fitzhugh, Michaelides, Connolly, & Daniels, 2019), although to the best of my knowledge, never among border guards. Here, however, I am not really interested in looking at the implementation of mindfulness practices among humanitarian workers, tech entrepreneurs, digital volunteer networks, or indeed refugees. Rather, I want to think about how the philosophy behind mindfulness can call into question the discriminatory practices inherent in data collection and challenge the logics and functions of data filtering. This is of course just a starting point for a conversation that crucially demands more research into the challenges that mindfulness is facing in terms of shifting its focus from the individual to the collective, and from individual responsibilities to the role of institutional systems and structures. However, this preliminary analysis is meant to reveal and expand on the limits of our conversations on ethical technology and digital solidarity in refugee contexts.

As a practice, mindfulness cultivates awareness of what is being experienced without judgment; it encourages a holistic understanding of both body and mind as interrelated elements in a flexible manner and helps to develop empathy and acceptance of all emotions. Bearing this in mind, and as we consider the mechanisms of data filtering, we can see how the digitization of borders has affected the state of mind of refugees who are caught in between processes of deterritorialization and reterritorialization at each and every border inspection and, more pervasively and violently, has affected the transformation of refugee bodies into a repository of data for identification and verification purposes. This has gradually shifted the attention from bodies as an object of control into the very embodiment of what bordering means. The extent to which a refugee body can be datafied determines the degree to which that body can move, integrate, and beg for public recognition. In other words, the body that escapes from datafication cannot be recognized as such. Also, such a body cannot be subsumed under the ultimate logics of techno-humanitarianism (Garelli & Tazzioli, 2018) or the logics behind the securitization of migration. When the body can, in fact, be datafied, identity is reduced to smaller units of information that can be reproduced, stored, circulated, and shared with other organizations that are large repositories of unique (but not special) data.

How does mindfulness intersect with the politics of refugee identity? As a practice and philosophy that cultivates awareness, mindfulness demands a better recognition of the risks involved in collecting data without meaningful consent, not just in the short term as emergencies spread, but crucially in the long term. As mindfulness encourages self-reflexivity through a nonlinear and always open process of rediscovery, so

do data collection and filtering demand continuous stages of (re)negotiations of its initial premises and asking whether data collection is always necessary.

Awareness also implies recognition of the other's perspective which is neither linear nor static. This is a crucial point. While we wholeheartedly agree that our identities are always liquid, always in motion, in permanent transitions through life experiences, connections, and relationships, we tend to be more reluctant in recognizing that the identity of refugees is also in constant motion. Against a culture of datafication that is based on extensive processes of social sorting and data accumulation, mindful filtering demands a better understanding of how identities change and how change can affect the type of data collected and the type of consent given. In its invitation to challenge the logics and functions of data collection, mindful filtering creates a space of self-reflection where refusal to give consent does not automatically obstruct the possibility of movement. This is something to bear in mind when attempting to help refugees by asking them to participate in innovation projects or to become testing ground for digital solutions: even when consent is asked through seemingly ethical procedures, we must remember that refugees might find consent forms highly problematic due to fears of identification and surveillance. This is especially problematic as the shelf life of digitized information is hard to predict or control in a context where multiple hands and eyes can easily access, leak, and reuse information for new purposes. Philo and Laurier (2020) describe consent as a "process" situated at the intersections of "divergent and convergent desires, intimacy, verbal and non-verbal proposals, acceptances and resistances, ambiguity and assumptions, and pleasing and displeasing others" (p. 34). Even if the scope of a technological intervention is to do good, attention needs to be paid to the context where that intervention is taking place and to the conflicts and tensions that can arise at any point of the innovation process. In observing the importance of ethics when working with vulnerable subjects, Darling (2020) proposes alternative forms of consent such as acquiring verbal rather than written consent or asking a neutral party to witness the determination of consent without the need to formerly identify the individual in paper or digital forms.

Especially in contexts deemed as highly vulnerable, the strict labelling of refugees as vulnerable subjects is incredibly problematic when it comes to the ethics of doing social good. Vulnerability, as Darling (2020) acutely observes, is context-specific and subject to change. For this reason, ethical considerations (and technological applications) should always be case-specific and contextual. A similar conclusion was reached by Luna (2009), who advocates for a more holistic account of vulnerability that considers different "layers" of vulnerability one might experience over time. In refugee contexts, mindful filtering invites organizations to consider the contextuality of personal narratives and needs that technologies reject as surplus data of no value. In making this point, I acknowledge the fact that the shift from a quantitative to a qualitative understanding of identity could potentially be subject to human errors and could slow down the valuation of asylum claims—the very reason why technologies were adopted by border authorities and governments in the first place. However, I believe that a more holistic and less technologically disruptive *sorting* of identities is required to counteract the deep discriminatory practices that remain in techno-mediated contexts. In fact, as mindfulness prepares individuals to recognize the interrelatedness of all things, the notion of mindful filtering could help uncover how the politics of data (infrastructures), and the politics in data (related interests) can lead to further discrimination and biases (Metcalfe & Dencik, 2019).

Finally, learning from an affective practice meant to develop acceptance and empathy, mindful filtering calls for a valorization of identities that cannot be reduced to binary logics. While I do not want to advocate for rejecting datafication altogether (the trend is, it seems, irreversible), I am arguing that a more ethical use of technologies should acknowledge the embodied affective power that makes the refugee bodies the repositories of intrinsic value. In more practical terms, mindful filtering calls for the creation of spaces of intervention where communities subject to this datafication can also be recognized as coparticipants and as the only voices that can speak for the trauma and deep emotional struggles experienced by refugees. It is in this space of coparticipation that I see the critical notion of care as especially compelling and fruitful. As I will explain in the following section, I am in fact convinced that by reimagining the notion of care and by reevaluating how care can and should be cultivated in practice—both privately and publicly—the aseptic and brutal datafication of refugee bodies can be resisted and critically disrupted from within.

In this respect, the motto “with not for” adopted by many humanitarians and tech for good communities I have interviewed can only make sense within this improved “digital infrastructure for global movement” (Latonero & Kift, 2018, p. 3). The idea then is to combine data collection/filtering and mindfulness as a pragmatic approach to ethical technologies as able to embody the “intersectional nature of vulnerabilities” (Darling, 2020, p. 168).

To certain extents, humanitarian innovation projects seem to embrace these guidelines, at least in principle. As the HIF (2015) notes, the adoption of a “systems approach” that understands the environment and its effect is key to success. This implies mapping existing solutions and reframing problems to get more clarity over what is needed and how, an issue we have witnessed in many innovation projects and solutions for refugees, where the duplication of efforts and the often-biased interpretation of needs led to “the app cemetery” according to Shelley Taylor, the creator of RefAid (MacGregor, 2018, para. 7). But there is a fundamental problem that no entrepreneur or humanitarian seems to credit amid all the good words about impact, user-centered design, managing expectations with flexible approaches, and strategic collaboration. The fundamental problem is the lack of attention toward the integration of “caring capacities, practices and imaginations” that the Care Collective (2020) manifesto locates at “the very center of life” (p. 5).

Why we Need to Code Less and Care More

The Care Manifesto’s (2020) compelling account defines care as the “individual and common ability to provide the political, social, material, and emotional conditions that allow the vast majority of people and living creatures on this planet to thrive” (p. 6). According to the Care Collective,⁶ the lack of shared responsibilities when “caring for one another” derives from the “refusal to recognize our shared vulnerabilities and interconnectedness” (p. 13) against the imperatives of the neoliberal market that wants all of us as self-reliant, as self-sufficient, and as little dependent from the state as possible, always networked and always productive. This attitude can be contextualized as one of the root causes that have affected the humanitarian system over the last two decades following the neoliberal reforms adopted by the Western world, namely, the gradual withdrawal of nation states from service provision (Madianou,

⁶ The Care Manifesto was created by the Care Collective members Andreas Chatzidakis, Jamie Hakim, Jo Littler, Catherine Rottenberg, and Lynne Segal.

Longboan, & Ong, 2015), the marketization of the field with added competition for funding (Chouliaraki, 2013), and the incursion of neoliberal rationalities including the logic of profit (Bruns, 2019). The transformation of the humanitarian field into a quasimarket structure populated by typical and atypical humanitarian actors, such as private donors and corporations, has generated three main effects: the emphasis on impact factors to justify funding, the use of corporate language, and the identification of sustainable development as mainly guided by entrepreneurial principles and business cases (Parrish, 2010). These trends are well embodied in the United Nations Office for the Coordination of Humanitarian definition of innovation as “means of adaptation and improvement through finding and scaling solutions to problems, in the form of products, processes or wider business models” (as cited in Betts & Bloom, 2014, p. 5). I am arguing that the focus on responding to problems through the adoption of critical and creative thinking is fundamentally limited and limiting, especially in the context here observed. To proceed ethically—a challenge of many organizations within and beyond the tech for social good sector—we *need to introduce the notion of care as a guiding principle and norm*.

Far from being a naïve desire, this proposition can be achieved by “reclaiming forms of genuinely collective and communal life [. . .] restoring, invigorating and radically deepening our welfare states; and, finally, mobilizing and cultivating radical cosmopolitan conviviality” (the Care Collective, 2020, p. 20) across borders. Care is extensive, and it does not end at the entrance of a refugee camp or in the middle of the sea, where migrants keep dying because of the lack of caring states and authorities. It does not stop because a border says so, or because a wall has been built and it is easier to keep it up than to tear it down. Adopting care as a guiding principle and norm means “cultivating and prioritizing the social, institutional and political facilities that enable and enhance our capacities to care for each other and to restore and nurture” (The Care Collective, Chatzidakis, Hakim, Litter, Rottenberg, & Segal, 2020, p. 26).

Outside these, digital social innovation for refugees remains a solitary adventure in the hands of the few and at the disadvantage of the many, whose voices remain silenced, ignored, marginalized, or abused by non-ethical technology uses and policies. How can we become more caring communities outside this idea that technologies can fix all things wrong in society? The Care Collective anticipates four core features of caring communities: mutual support, public space, shared resources, and local democracy. I am arguing that we are still behind in creating the conditions for caring communities to become a reality. Firstly, the circulation of support is prevented by the siloed practices of solidarity currently taking place in Europe, where humanitarian organizations are being failed by governments and need to rely on private companies to sustain themselves. The emphasis on impact and the lack of state support prevents any caring pathway from forming in those very arenas where refugees should be accepted not as victims or criminals or vulnerable subjects but as human beings with a voice, an agency, and a story to tell.

Secondly, while digital innovation projects can be extremely beneficial in addressing specific problems in the short term, the lack of clear policy frameworks that would give these interventions the support they deserve in the public space and not just in the individual sphere of “caring for the other” is the reason why Europe is in profound crisis as a stable social, political, and humanitarian project. Shared resources are needed to ensure the convergence of social justice and social good. More porous borders and welcoming paths of integration that refuse nationalisms and ban xenophobia while strengthening democratic

practices at all levels are critical to ensure that refugees are not simply seen as coparticipants, consumers, or beneficiaries, but as human beings first and foremost.

This implies the nurturing of affective relations of care above and beyond digital and nondigital circuits of solidarity, where the adoption of ethical technology departs from the following critical questions: "Is it coding always necessary? Is data collection always in the best interest of the people we want to help? Who are we doing this for?" Such questions can and should generate networks of belonging where the ethics of doing social good are revamped not only when a "crisis" is dictated by the news, but all the time, everywhere, and with everyone.

Let me conclude this section by connecting these thoughts to Gilroy's (2004) understanding of conviviality as "the recognition of mutual worth, dignity and essential similarity" (p. 4). Far from being a contemporary issue, the failure at recognizing our unique interconnectedness has created more borders, walls, and fences that we care to acknowledge, and yet lessons are still to be learned. As we keep fighting each other while finding increasingly techno-sophisticated ways to protect us from an exotic danger, mitigation strategies need to be cultivated to alleviate the often-indiscriminate accumulation of mass of data that transforms human value into a digit. This applies to all technology uses, including those for the purposes of social good.

Concluding Notes

The title of this article, "Digital Solidarity and Ethical Tech for Refugees: Why We Need to Care More and Code Less," is not an invite for stopping technology altogether. While it is fundamental to pay attention to the limitations of digital social innovation, it is also important to recognize the benefits and advantages of innovating the ways in which we care for each other. The title is a provocation meant to reconcile the politics of solidarity with the ethics of data collection. Can the two coexist? The answer is, as predictable, incredibly complex and open to constant negotiations. In researching the ways in which digital solidarity circulates across and despite borders, I wanted to flag how in this current climate of rising insecurities and the weakening of social structures, we need to revisit what change and innovation mean today. By harnessing the power of digital innovation as a collaborative, networked, and problem-oriented resource, a more human-centered and "caring" use of technologies can effectively encourage the strengthening of principles of social justice, sustainability, and inclusivity. For technologies to be used ethically and caringly, collaboration needs to happen horizontally and vertically, in a spirit of mutual sharing of political, economic, cultural, and affective resources across all sectors of society and not as independent initiatives.

Mindful filtering invites the tech for social good community, humanitarians, and political actors to critically think about the usefulness of data accumulation at the expense of the most vulnerable. Mitigation strategies need to be identified in respect to the transformation of identities into binary logics, the use of corporate language that refers to refugees as assets, and the notion of consent within short-term and long-term scenarios. It is crucial to evaluate both the immediate and long-term impacts of digital social innovation practices. What happens to the data we collect? What alternative uses might be expose them to? How can

we make sure that digital innovation is truly innovating rather than duplicating ideas? How are we going to monitor these initiatives?

In times where solidarity is said to be collapsing under capitalist forces that require fast disruption and high levels of performance, we need to reinforce the value of dialogue and of affective cosmopolitanism by reinforcing the “caring capacities, practices and imaginations” identified by the Care Collective (2020, p. 14). Conviviality is about recognizing our mutual responsibilities, weaknesses, and strengths. It demands empathy and requires affective citizenship: a practice of social responsibility where all identities are seen as performative not because of the role they play in our economy but because of their intrinsic human value; where the ability to act differently is also recognized as a resource and not as a threat to political consensus; where political membership is built and rebuilt in negotiation with each other but is never defined once and for all. Crucial to solidarity—digital or non—is the ability to listen beyond, despite, and across borders.

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