



UvA-DARE (Digital Academic Repository)

The Sovereignty Test

Dijstelbloem, H.

DOI

[10.1080/14650045.2022.2047468](https://doi.org/10.1080/14650045.2022.2047468)

Publication date

2023

Document Version

Final published version

Published in

Geopolitics

License

CC BY-NC-ND

[Link to publication](#)

Citation for published version (APA):

Dijstelbloem, H. (2023). The Sovereignty Test. *Geopolitics*, 28(3), 1385-1390.
<https://doi.org/10.1080/14650045.2022.2047468>





General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Digitisation and Sovereignty in Humanitarian Space: Technologies, Territories and Tensions

Aaron Martin^a, Gargi Sharma^a, Siddharth Peter de Souza ^a, Linnet Taylor ^a,
Boudewijn van Eerd^a, Sean Martin McDonald^b, Massimo Marelli^c,
Margie Cheesman ^d, Stephan Scheel ^e, and Huub Dijstelbloem^f

^aTilburg Institute for Law, Technology, and Society, Tilburg University, Tilburg, Netherlands; ^bCenter for International Governance Innovation; ^cInternational Committee of the Red Cross, Geneva, Switzerland; ^dOxford Internet Institute, University of Oxford, Oxford, UK; ^eTransnational Cooperation and Migration Research, Institute of Sociology, University of Duisburg-Essen, Essen, Germany; ^fInstitute for Advanced Study, University of Amsterdam, Amsterdam, Netherlands

ABSTRACT

Debates are ongoing on the limits of – and possibilities for – sovereignty in the digital era. While most observers spotlight the implications of the Internet, cryptocurrencies, artificial intelligence/machine learning and advanced data analytics for the sovereignty of nation states, a critical yet under examined question concerns what digital innovations mean for authority, power and control in the humanitarian sphere in which different rules, values and expectations are thought to apply. This forum brings together practitioners and scholars to explore both conceptually and empirically how digitisation and datafication in aid are (re)shaping notions of sovereign power in humanitarian space. The forum's contributors challenge established understandings of sovereignty in new forms of digital humanitarian action. Among other focus areas, the forum draws attention to how cyber dependencies threaten international humanitarian organisations' purported digital sovereignty. It also contests the potential of technologies like blockchain to revolutionise notions of sovereignty in humanitarian assistance and hypothesises about the ineluctable parasitic qualities of humanitarian technology. The forum concludes by proposing that digital technologies deployed in migration contexts might be understood as 'sovereignty experiments'. We invite readers from scholarly, policy and practitioner communities alike to engage closely with these critical perspectives on digitisation and sovereignty in humanitarian space.

The Sovereignty Test

Huub Dijstelbloem

One of the fascinating aspects of studying borders, human mobility and humanitarian aid is that research in this field simultaneously engages with empirical and conceptual boundaries. Scholarship almost by definition studies the international mobility of social, technological, informational and political entities, as well as the circulation of the concepts they relate to. It is not only people, goods, finances, technologies and information that move across states' boundaries. The notions of territory, jurisdiction, authority, power and sovereignty, the conceptual container of nation-states, are movable entities as well – albeit not in symmetric ways. The contributions to this forum show that humanitarian space, data sovereignty and infrastructural sovereignty are emerging notions that come into being by the mobility of people and the

composition of socio-technical networks. Instead of hanging over human behaviour like a pristine blue sky, they move along with human traffic like turbulent weather conditions. Out of it arises a manoeuvring and transforming notion of power and state power that attempts to re-appear and make itself present again in different shapes at different locations.

Following, tracing and identifying forms of politics in the context of international migration requires a twofold approach that focuses on the material manifestations of politics, namely the technologies and organisations that carry it, and on the transforming meaning of politics, the changing load. Langdon Winner's (1980) famous question "Do artefacts have politics?" today therefore has a different meaning. Not only do we have to ask ourselves the question of where politics is to be found and through which forms and artefacts it speaks. Arguably more interesting than answering Winner's question with 'yes'/'no'/'it depends' is refining the question by directing it to issues of territory, jurisdiction, authority, power, sovereignty and technology. By doing so, we broaden the range of forms of technopolitics and the different modes in which they appear.

Today, Winner's question "Do artefacts have politics?" resonates in analyses of surveillance capitalism (Zuboff 2019, 219) and racism and discriminatory designs in digital worlds (Benjamin 2019, 90–92). Sprawl of digital technologies in the governance of international mobility and migration policies has all kinds of humanitarian and security consequences, varying from novel forms of visualisation and risk assessment (Amoore 2013; Ryan 2015) and issues of financial surveillance, data justice and privacy issues (Taylor 2016; Tazzioli 2017) to intense forms of profiling, selection, inclusion, exclusion and infrastructural violence (Heller and Pezzani 2016; Squire 2020; van Reekum 2019). Focusing on notions of territory, jurisdiction, authority, power and – perhaps most importantly in this regard – sovereignty, opens a way to analyse a specific aspect, namely the way sovereignty is reproduced and re-established via data infrastructures and 'mediated' through digital technologies.

To analyse this re-enactment of sovereignty, I will elaborate on the notions of 'experiments' and 'experimentality'. The notions of experiments and experimentality have been attended to increasingly in the literature on border politics and technologies. By elaborating on the notion of experimentality (Murphy 2017; Aradau 2020) the discussion on experiments in border laboratories (Dijstelbloem 2021) can be connected to multiple forms of border politics and other forms of experimental politics in which science, technology and regimes of knowledge recompose socio-technical relations (Murphy 2017, 82; Aradau 2020, 16). The outcome of this discussion, I hope, will contribute to our understanding of the simultaneous movements that take place in the various situations and spaces this forum visits, such as 'humanitarian space' as defined by Collinson and Elhawary (2012) (see Martin, Sharma, de Souza, Taylor and van Eerd), the specific nature and modus operandi of humanitarian organisations and the ways

they are embedded in technological security landscapes (see the contributions by Cheesman, Marelli and McDonald), and the risks and pitfalls of the two-sided sword of digital humanitarianism (Scheel).

In order to discuss the relations between sovereignty, technology, borders and political power and the kind of experiments that take place in this context, the political-historical origins of the notion of sovereignty require attention. Attending to the genealogy of sovereignty is not only a means to avoid reproducing flawed images of the past, it may also shed some light on the various changes the notion has already seen and how it developed as a mediating concept. This is clarified in Darshan's Vigneswaran's (2020) article with the very Latourian title *Europe Has Never Been Modern: Recasting Historical Narratives of Migration Control*. Vigneswaran argues that literature on state formation, sovereignty, borders and migration is often based on two assumptions. The first assumption is that the modern form of state power and the relationship between nation states and borders has the European state, starting from the peace of Westphalia, as its birthplace. The second assumption is that this form of government and control of mobility has spread globally from the west. It holds that "the core institutions and practices of modern territorial sovereignty originated in Europe before being gradually extended to other parts of the globe" (Vigneswaran 2020, 2). In contrast, institutional-historical archival research by Vigneswaran on the development of international migration policy suggests that "extra-European actors played a significant role in both originating and defining the nature of European sovereign territorial and transnational mobility norms" (Vigneswaran 2020, 3). Territorial migration control also arose outside Europe and migration policy in European countries was more the result of international negotiations and exchanges than bearing a Westphalian mark.

Previously, other authors have pointed out that the picture of a coherent Westphalian package deal offering a contract between territory and sovereignty is misleading. Territory, as Elden (2013, 323) argues, "is not simply land . . . nor is it a narrowly political strategic question that is closer to a notion of terrain. Territory comprises techniques for measuring land and controlling terrain". Just like the notion of territory, the concept of a border has various meanings and implications. It does not only operate in political and geographical registers of sovereignty, authority and jurisdiction but also in legal, technical and economic ones. Territory and sovereignty are much more loosely related and come in more variegated combinations than is often assumed (Dijstelbloem 2021).

How then to prevent an overly modernist and/or Eurocentric view on the origin and relation between notions of territory, sovereignty and borders? Since the title of Vigneswaran (2020) unmistakably refers to Latour's (1993) *We Have Never Been Modern*, I suggest revisiting this original

proposal for a comparative anthropology of the relations between politics, technology and knowledge. This leads us to the direction of experiments. But what kind of experiments?

As Aradau (2020, 5) explains, in the literature on borders two notions of ‘laboratories’ and ‘experiments’ prevail: a governmentality approach and an STS one. “In a governmentality approach, all bordering practices have an experimental element. In an STS approach, experiments and laboratories have a more specific meaning emerging from the history of experiments in modern science” (Aradau 2020, 5). By revisiting Latour’s argument, we will see in more detail how an analysis of experiments in the history of modern science is intrinsically connected with questions of politics, and how this opens the way to link it with issues of governmentality.

One of Latour’s central arguments is based on the famous debate between Hobbes and Boyle on the existence of a vacuum and the possible conditions of political power (Shapin and Schaffer 1985). Latour’s argument holds that the notion of sovereignty partly emerged from a controversy in which the division between science and politics was re-established by a dispute over the existence of a vacuum and the application of a socio-politico-technological experiment, namely the air pump.

Latour’s interpretation of (Shapin and Schaffer’s interpretation) of the debate runs as follows. The debate is often pictured as one between a political philosopher (Hobbes) versus an experimental scientist (Boyle). However, both were interested in science, politics, nature and society and adhered to a king, a parliament, the church and mechanistic philosophy. The difference between the two is that they favoured different approaches: experiments (Boyle) versus mathematical proof (Hobbes) (de Vries 2016, 120). They were also concerned with different questions. Whereas Boyle was interested in the possible discovery (or ‘introduction’ in constructivist terms) of the vacuum, Hobbes was driven by the fear of religious wars and how to end them. For that reason, the possible existence of a vacuum created a metaphorical vacuum in his political theory. If the cosmic order allows empty spaces, there will always be room for something else than politics, that cannot be affected by political action and remains uncontrollable for a sovereign (the Leviathan). Therefore, Hobbes proposed a theory of ‘plenism’ and suggested the existence of aether instead.

Against this background, the famous experiment with the air pump takes place. Part of the experiment is a feather in a glass tube. If a vacuum does exist, the feather should remain unmoved. If it would move, it would support Hobbes’ thesis of the substance of aether streaming in and filling the void. As we now know, it did not and the existence of a vacuum was confirmed (Shapin and Schaffer 1985, 181; Latour 1993, 22).

Latour does not read this story in terms of a ‘victory’ of Boyle over Hobbes. Instead, he regards it as a history about the coming into being of a new division between science and politics. According to Latour, the controversy was not an epistemic controversy, but a political and ontological one that included questions on nature, God, the position of the sovereign and the nature of evidence and the role of witnesses and experiments. The controversy is a debate about the question of which actors and which nonhuman entities ought to be taken into account. It is not Hobbes or Boyle who won, but the technological assemblage of the experimental setting that redefined the place of politics and sovereign power.

The advantage of this view is that it allows for reconsidering the connection between institutional and infrastructural approaches. Whereas institutionalists focus on diplomacy, negotiations, conflicts, agreements, contracts and treaties between different actors, historians of technology have redescribed globalisation, colonisation and Europeanisation from the perspective of infrastructure development. Infrastructures for transportation, industry, agriculture, finance, security and warfare are part of the development of states and the creation and expansion of political power. Instead of describing the birth of borders, territory and sovereignty mainly in institutional terms, the infrastructural perspective emphasises the way communication networks, highways, railroads and tunnels unify or divide people in a socio-technological manner (see also Pelizza 2019).

So, what happens if we connect the institutional and infrastructural approach to further the relationship between sovereignty and technology? If we want to draw an analogy between the Hobbes-Boyle controversy and notions of sovereignty and territory in humanitarian and security infrastructures, a possible next step is to ask what counts as the air pump, and what as the vacuum? Perhaps, in this unusual comparison, it is the digital technologies that can be regarded as the instrument and the control over mobility as the vacuum – turning the latter into a proposition of sovereignty, tested experimentally by the former.

The provisional conclusion is that, if specific scientific experiments can be redefined as technopolitical experiments, not only concerned with the advancement of knowledge but with determining the space for political action and sovereign power, then digital humanitarian and security technologies concerned with monitoring movements can be considered as experiments, as sovereignty tests, which examine the space for political power to control human mobility.

All in all, the test we have at hand is a remarkable one. We are not witnessing the birth of sovereignty, but its re-arising. What is going on here is not a chick emerging from the egg, but the rebirth of a phoenix. Via the experimental setting, sovereignty is re-enacted and re-established.

Sovereignty is fabricated via what Aradau (2020) calls ‘experimentality’. As stated previously, according to Aradau the notion of experimentality “can be seen as an attempt to bridge . . . differences between scientific experiments and practices of governing” (Aradau 2020, 5). Experimentality is an experimental endeavour in three respects. It denotes practices, policies and political security programmes that tend to work without protocols, that aim at specific interventions and that operate with a neoliberal logic (Aradau 2020, 7). Aradau suggests this kind of experimentality directs the notion of sovereignty into the sphere of speculative futures. And indeed, digital technologies varying from databases to visual tools concerned with border surveillance and monitoring human mobility can be regarded as a test setup. The distinguishing feature of these kinds of experiments in border politics, we can add to this analysis, is that they not only concern people, data, information and technologies, but the concept of sovereignty itself, to test its presence in order to be able to fill technologically emerging political power vacuums. However, this re-enactment also modifies the notion of sovereignty and does not leave its meaning untouched. When concepts are transported, they are also transformed and translated. And when concepts emerge out of experimental settings, they are susceptible to interventions and manipulations. The application of surveillance systems and humanitarian technologies in this sense carries the risk of shifting the idea of sovereignty to terra incognita, where it becomes part not only of speculative futures, but also uncertain and arcane or downright ominous futures, that will test the room for humanitarian space to its limits.

Notes

5.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the European Research Council [757247].

ORCID

Siddharth Peter de Souza  <http://orcid.org/0000-0003-4299-4878>

Linnet Taylor  <http://orcid.org/0000-0001-7856-7611>

Margie Cheesman  <http://orcid.org/0000-0001-9521-4658>

Stephan Scheel  <http://orcid.org/0000-0002-5065-3726>

References

- Amoore, L. 2013. *The politics of possibility: Risk and uncertainty beyond probability*. Durham: Duke University Press.
- Andrada, N. October 16 2019. 8 digital principal issues with UNICEF's Ethereum cryptocurrency donations. *ICTworks* <https://www.ictworks.org/uncief-ethereum-cryptocurrency-donations/>
- Aradau, C. 2020. Experimentality, surplus data and the politics of debilitation in borderzones. *Geopolitics*. doi:10.1080/14650045.2020.1853103.
- Baradaran, M. 2015. *How the other half banks: Exclusion, exploitation, and the threat to democracy*. Cambridge Massachusetts: Harvard University Press.
- Baym, N., L. Swartz, and A. Alarcon. 2019. Convening technologies: Blockchain and the music industry. *International Journal of Communication* 13:402–21.
- Benjamin, R. 2019. *Race after technology*. Cambridge UK: Polity Press.
- Bhagat, A., & Roderick, L. (2020). Banking on refugees: Racialized expropriation in the fintech era. *Environment and Planning A*, 1–18. doi:10.1177/0308518X20904070.
- Big Brother Award. 2018. The Big Brother Award 2018 in the “public administration” category goes to Cevisio Software und Systeme GmbH in Torgau , Germany. <https://bigbrotherawards.de/en/2018/administration-cevisio-software-systeme-gmbh>
- Butler, J. 2004. *Precarious life: The powers of mourning and violence*. London: Verso.

- Canales, K. February 23 2021. US Senate grilled SolarWinds, Microsoft over cyberattack. *Business Insider* <https://www.businessinsider.com/watch-live-senate-hearing-solarwinds-microsoft-fireeye-crowdstrike-cyberattack-2021-2200C>
- Cevisio. 2016. Cevisio QMM. Die software zur zentralen erfassung von flüchtlingen zur verwaltung von flüchtlingsunterkünften [Cevisio QMM. The software for central registration of refugees and management of refugee accommodation]. Product Information Leaflet of Civisio. https://kipdf.com/die-software-zur-zentralen-erfassung-von-flchtlingen-zur-verwaltung-von-flchtlin_5aaff76e1723dd379cc33e3e.html
- Cheesman, M. 2020. Self-sovereignty for refugees? The contested horizons of digital identity. *Geopolitics*. doi:10.1080/14650045.2020.1823836.
- Cheesman, M., and A. Slavin. 2021. Self-sovereignty and forced migration: Slippery terms and the refugee data apparatus. In *Digital identity, virtual borders and social media: Panaceas for migration governance*, ed. E. Korkmaz, 10–32. Cheltenham UK: Edward Elgar Publishing.
- CISA. 2021 January 5. Joint statement by the Federal Bureau of Investigation (FBI), the Cybersecurity and Infrastructure Security Agency (CISA). *The Office of the Director of National Intelligence (ODNI), and the National Security Agency (NSA). Cybersecurity & Infrastructure Security Agency* <https://www.cisa.gov/news/2021/01/05/joint-statement-federal-bureau-investigation-fbi-cybersecurity-and-infrastructure>
- Collinson, S., and S. Elhawary. 2012. Humanitarian space: A review of trends and issues. *Humanitarian Policy Group* 32:1–36. <https://odi.org/en/publications/humanitarian-space-a-review-of-trends-and-issues/>.
- Connolly, W. 2007. The Complexities of Sovereignty. In *Giorgio Agamben: Sovereignty and life*, ed. M. Calarco and S. DeCaroli, 23–42. Stanford CA: Stanford University Press.
- Consensus. 2019. Project unblocked cash: Revolutionising humanitarian cash transfers in Vanuatu. <https://consensus.net/blockchain-use-cases/social-impact/project-unblocked-cash-case-study/>
- Coppi, G. 2021. Introduction to distributed ledger technologies for social, development, and humanitarian impact. In *Blockchain, law and governance*, ed. B. Cappiello and G. Carullo, 231–41. Cham: Springer. doi:10.1007/978-3-030-52722-8_17.
- Coppi, G., and L. Fast. February 28 2019. Blockchain and distributed ledger technologies in the humanitarian sector. *Humanitarian Policy Group* <https://odi.org/en/publications/blockchain-and-distributed-ledger-technologies-in-the-humanitarian-sector/>
- Couture, S., and S. Toupin. 2019. What does the notion of ‘sovereignty’ mean when referring to the digital? *New Media & Society* 21 (10):2305–22. doi:10.1177/1461444819865984.
- Currión, P. June 25 2018. Four lessons learned launching blockchain financial services for NGOs. *ICT Works* <https://www.ictworks.org/lessons-learned-blockchain-financial-services>
- Currión, P. February 22 2021. The consequences of cash-based aid. *The New Humanitarian* <https://www.thenewhumanitarian.org/opinion/2021/2/22/the-case-against-humanitarian-cash>
- De Genova, N., et al. 2021. Minor keywords of political theory: Migration as a critical standpoint. A collaborative project of collective writing. *Environment and Planning C: Politics and Space* 1–95. doi:10.1177/2399654420988563.
- Demchak, C., and P. Dombrowski. 2013. Cyber westphalia: Asserting state prerogatives in cyberspace. *Georgetown Journal of International Affairs* (2013):29–38. <https://www.jstor.org/stable/43134320>
- Development Aid. October 23 2020. The unblocked cash project: Oxfam Pacific scales blockchain solution to revolutionize humanitarian aid. <https://www.developmentaid.org/#!/news-stream/post/77034/the-unblocked-cash-project-oxfam-pacific-scales-blockchain-solution-to-revolutionize-humanitarian-aid>

- Devidal, P. March 22 2021. Cashless cash: Financial inclusion or surveillance humanitarianism? *ICRC Humanitarian Law & Policy Blog* <https://blogs.icrc.org/law-and-policy/2021/03/02/cashless-cash/>
- Dijstelbloem, H. 2021. *Borders as infrastructure: The technopolitics of border control*. Cambridge MA: The MIT Press.
- Disberse. 2020. Our story. <https://www.disberse.com/>
- Donovan, K. P. 2018. Financial inclusion means your money isn't with you": Conflicts over social grants and financial services in South Africa. In *Money at the margins: Global perspectives on technology, financial inclusion, and design*, ed. B. Maurer, S. Musaraj, and I. V. Small, 155–78. New York: Berghahn Books. doi:10.2307/j.ctvw04bp0.
- Donovan, K. P., and E. Park. 2020. *Rentier infrastructure: Data, debt, and sovereignty in Kenya*. Presentation at Danish Institute for International Studies, Copenhagen. Accessed November 2021. <https://www.youtube.com/watch?v=AHdepHLItNo>
- Easterday, J. February 8 2019. Open letter to WFP re: Palantir agreement. *Responsible Data* <https://responsibledata.io/2019/02/08/open-letter-to-wfp-re-palantir-agreement/>
- The Economist. 2016 November 22. What is the "splinternet"? *The Economist* <https://www.economist.com/the-economist-explains/2016/11/22/what-is-the-splinternet>
- ECRE. 2019 July 19. Return policy: Desperately seeking evidence and balance. *European Council on Refugees and Exiles* <https://www.ecre.org/ecre-policy-note-return-policy-desperately-seeking-evidence-and-balance/>
- Elden, S. 2013. *The birth of territory*. Chicago: University of Chicago Press.
- Ellermann, A. 2010. Undocumented migrants and resistance in the liberal state. *Politics & Society* 38 (3):408–29. doi:10.1177/0032329210373072.
- The Engine Room. 2020. Understanding the lived effects of digital ID: A multi-country study. *The Engine Room* <https://www.theengineroom.org/understanding-the-lived-effects-of-digital-id-systems/>
- Fanselow, Y. 2018. Cashing in on crisis? The refugee eye scan experiment. Redfish documentary. <https://www.youtube.com/watch?v=oUtl8Hpg15w>
- Feuer, W. January 23 2020. Palantir CEO Alex Karp defends his company's relationship with government agencies. *CNBC* <https://www.cnbc.com/2020/01/23/palantir-ceo-alex-karp-defends-his-companys-work-for-the-government.html>
- Gabor, D., and S. Brooks. 2017. The digital revolution in financial inclusion: International development in the fintech era. *New Political Economy* 22 (4):423–36. doi:10.1080/13563467.2017.1259298.
- Gibney, M., and R. Hansen. 2003. Deportation and the liberal state: The forcible return of asylum seekers and unlawful migrants in Canada, Germany and the United Kingdom. *New Issues in Refugee Research* 77:1–21. <https://www.unhcr.org/research/working/3e59de764/deportation-liberal-state-forcible-return-asylum-seekers-unlawful-migrants.html>.
- Goering, L. November 26 2019. Red Cross boosts disaster-prone communities with blockchain 'cash'. *Reuters* <https://www.reuters.com/article/us-technology-aid-climate-change/red-cross-boosts-disaster-prone-communities-with-blockchain-cash-idUSKBN1Y01K1>
- Hallwright, J., and E. Carnaby. 2019. Complexities of implementation: Oxfam Australia's experience in piloting blockchain. *Frontiers in Blockchain* 2 (August):1–6. doi:10.3389/fbloc.2019.00010.
- Hamburg Bürgerschaft. 2017. *Schriftliche Kleine Anfrage Der Abgeordneten Christiane Schneider (DIE LINKE) Vom 27.0417 Und Antwort Des Senats Betr.: Quartiersmanagement in Flüchtlingsunterkünften II [Parliamentary Inquiry by Representative Christiane Schneider (The Left Party), Relating to: Accommodation Management in Housing for Refugees II]*. Bürgerschaft der Freien und Hansestadt Hamburg [Parliament of the Free and Hanseatic City of Hamburg].

- Hansen, T. B., and F. Stepputat. 2006. Sovereignty revisited. *Annual Review of Anthropology* 35 (1):295–315. doi:10.1146/annurev.anthro.35.081705.123317.
- Heath, A. January 31 2022. Zuckerberg's dream of launching a cryptocurrency is officially over. *The Verge* <https://www.theverge.com/2022/1/31/22911426/meta-diem-cryptocurrency-confirms-sale>
- Heller, C., and L. Pezzani. March 2016. Ebbing and flowing: The EU's shifting practices of (non-)assistance and bordering in a time of crisis. *Near Futures Online* <http://nearfuturesonline.org/ebbing-and-flowing-the-eus-shifting-practices-of-non-assistance-and-bordering-in-a-time-of-crisis/>
- Hope, A. 2021. Cloud services from major providers including Amazon and Microsoft vulnerable to the widespread SolarWinds hack. *CPO Magazine*, January 4. <https://www.cpomagazine.com/cyber-security/cloud-services-from-major-providers-including-amazon-and-microsoft-vulnerable-to-the-widespread-solarwinds-hack>
- Huillet, M. November 26 2019. Red Cross deploys blockchain to boost communities' economic resilience. *Coin Telegraph* <https://cointelegraph.com/news/red-cross-deploys-blockchain-to-boost-communities-economic-resilience>
- Hummel, P., M. Braun, M. Tretter, and P. Dabrock. 2021. Data sovereignty: A review. *Big Data & Society* January-June:1–17. doi:10.1177/2053951720982012.
- Husain, S. O., A. Franklin, and D. Roep. 2020. The political imaginaries of blockchain projects: Discerning the expressions of an emerging ecosystem. *Sustainability Science* 15 (2):379–94. doi:10.1007/s11625-020-00786-x.
- Hutten, M. (2018). The Soft Spot of Hard Code: Blockchain Technology, Network Governance, and Pitfalls of Technological Utopianism. *Global Networks*, 19(3). doi:10.1111/glob.12217.
- IASC. 2016. About the grand bargain. *Inter-Agency Standing Committee*. <https://interagencystandingcommittee.org/about-the-grand-bargain>
- IFRC. 2018 October 5. Blockchain open loop cash transfer pilot project. *International Federation of Red Cross and Red Crescent Societies* <https://preparecenter.org/resource/blockchain-open-loop-cash-transfer-pilot-project>
- Insureblocks. 2020 January 10. UN World Food Programme on the blockchain. *Insureblocks* <https://insureblocks.com/ep-143-un-world-food-programme-on-the-blockchain/>
- Jacobsen, K. 2015. Experimentation in humanitarian locations: UNHCR and biometric registration of afghan refugees. *Security Dialogue* 46 (2):144–64. doi:10.1177/0967010614552545.
- Jacobsen, K. L., and K. B. Sandvik. 2018. UNHCR and the pursuit of international protection: Accountability through technology? *Third World Quarterly* 39 (8):1508–24. doi:10.1080/01436597.2018.1432346.
- Jibilian, I., and K. Canales. April 15 2021. What is the SolarWinds hack and why is it a big deal? *Business Insider* <https://www.businessinsider.com/solarwinds-hack-explained-government-agencies-cyber-security-2020-12>
- Jutel, O. 2021 January-June. Blockchain imperialism in the Pacific. *Big Data & Society* 1–14. doi:10.1177/2053951720985249.
- Kaurin, D. July 8 2019. Why Libra needs a humanitarian fig leaf. *Berkman Klein Center Medium Collection* <https://medium.com/berkman-klein-center/why-libra-needs-a-humanitarian-fig-leaf-79ae6a463c8>
- Keating, J. February 26 2008. How to start your own country in four easy steps. *Foreign Policy* <https://foreignpolicy.com/2008/02/26/how-to-start-your-own-country-in-four-easy-steps/>
- Kilcullen, D. 2020. *The dragons and the snakes: How the rest learned to fight the west*. New York NY: Oxford University Press.
- Kramer, A. E. June 6 2019. Huawei, shunned by U.S. Government, is welcomed in Russia. *The New York Times* <https://www.nytimes.com/2019/06/06/business/huawei-russia-5g.html>

- Kshetri, N. 2017. Potential roles of blockchain in fighting poverty and reducing financial exclusion in the Global South. *Journal of Global Information Technology Management* 20 (4):201–04. doi:10.1080/1097198X.2017.1391370.
- Kukutai, T., and J. Taylor. 2016. *Indigenous data sovereignty: Towards an agenda*. Canberra: Australian National University Press.
- Lakshmanan, R. December 31 2020. Microsoft says SolarWinds hackers accessed some of its source code. *The Hacker News* <https://thehackernews.com/2020/12/microsoft-says-solarwinds-hackers.html>
- Latour, B. 1993. *We have never been modern*. Cambridge MA: Harvard University Press.
- Lukes, S. 1974. *Power: A radical view*. London and Basingstoke: The MacMillan Press.
- Madianou, M. 2019. Technocolonialism: Digital innovation and data practices in the humanitarian response to refugee crises. *Social Media + Society* 5 (3):1–13. doi:10.1177/2056305119863146.
- Manski, S., and M. Bauwens. 2020. Reimagining new socio-technical economics through the application of distributed ledger technologies. *Frontiers in Blockchain* 2 (January):1–17. doi:10.3389/fbloc.2019.00029.
- Marelli, M. 2020. Hacking humanitarians: Defining the cyber perimeter and developing a cyber security strategy for international humanitarian organizations in digital transformation. *International Review of the Red Cross* 102 (913):367–87. doi:10.1017/S1816383121000151.
- Marrow, A., and D. Antonov. July 22 2021. Russia disconnects from internet in tests as it bolsters security. *Reuters* <https://www.reuters.com/article/russia-internet-idCNL1N2OY13C>
- Martin, A., and L. Taylor. 2021. Exclusion and inclusion in identification: Regulation, displacement and data justice. *Information Technology for Development* 27 (1):50–66. doi:10.1080/02681102.2020.1811943.
- McDonald, S. 2019 August 15. Space to supply chains: A plan for humanitarian data governance. *SSRN Electronic Journal*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3436179
- McDonald, S. M. April 8 2021. A humanitarian duty to integrity. *ICRC Humanitarian Law & Policy Blog* <https://blogs.icrc.org/law-and-policy/2021/04/08/humanitarian-duty-to-integrity>
- McDonald, S., and A. X. Mina. February 26 2019. The war-torn web. *Foreign Policy* <https://foreignpolicy.com/2018/12/19/the-war-torn-web-internet-warring-states-cyber-espionage>
- Murphy, M. 2017. *The economization of life*. Durham, NC: Duke University Press.
- ODI. 2015 September 14. Doing cash differently: How cash transfers can transform humanitarian aid. *Overseas Development Institute* <https://odi.org/en/publications/doing-cash-differently-how-cash-transfers-can-transform-humanitarian-aid/>
- Oxfam Pacific. October 22 2020. The unblocked cash project: Oxfam Pacific scales blockchain solution to revolutionize humanitarian aid. <https://medium.com/unblockedcash/unblocked-cash-oxfam-pacific-scales-blockchain-solution-to-revolutionize-humanitarian-aid-4fb7f2a14f6b>
- Parker, B., and A. Slemrod. June 17 2019. UN gives ultimatum to Yemen rebels over reports of aid theft. *The New Humanitarian* <https://www.thenewhumanitarian.org/news/2019/06/17/un-yemen-rebels-aid-theft-biometrics>
- Pasquale, F. 2018. Digital capitalism: How to tame the platform juggernauts. *Friedrich-Ebert-Stiftung - Division for Economic and Social Policy* 1–4. <https://www.fes.de/en/digital-capitalism-how-to-tame-the-platform-juggernauts>
- Pelizza, A. 2019. Processing alterity, enacting Europe: Migrant registration and identification as co-construction of individuals and polities. *Science, Technology & Human Values* 45 (2):1–27. doi:10.1177/0162243919827927.

- Peter, F. April 24 2017. Political legitimacy. *The Stanford Encyclopedia of Philosophy* <https://plato.stanford.edu/archives/sum2017/entries/legitimacy/>
- Pohle, J., and T. Thiel. 2020. Digital sovereignty. *Internet Policy Review* 9 (4):4. doi:10.14763/2020.4.1532.
- Rahman, Z. June 21 2021. The UN's refugee data shame. *The New Humanitarian* <https://www.thenewhumanitarian.org/opinion/2021/6/21/rohingya-data-protection-and-UN-betrayal>
- Rodenhäuser, T. March 16 2020. Hacking Humanitarians? IHL and the protection of humanitarian organizations against cyber operations. *EJIL:Talk! Blog of the European Journal of International Law* <https://www.ejiltalk.org/hacking-humanitarians-ihl-and-the-protection-of-humanitarian-organizations-against-cyber-operations/>
- Rodriguez, S. November 30 2021. Facebook's executive in charge of cryptocurrency is leaving the company. *CNBC* <https://www.cnbc.com/2021/11/30/metasp-head-of-cryptocurrency-david-marcus-resigns.html>
- Ryan, B. 2015. Security Spheres: A phenomenology of maritime spatial practices. *Security Dialogue* 46 (6):568–84. doi:10.1177/0967010615598049.
- Salesforce. 2019. First do no (digital) harm: Protecting the humanitarian mission with the cloud. <https://www.salesforce.com/blog/first-do-no-digital-harm-protecting-the-humanitarian-mission-with-the-cloud/>
- Sandvik, K. B. 2019. Making wearables in aid: Digital bodies, data and gifts. *Journal of Humanitarian Affairs* 1 (3):33–41. doi:10.7227/JHA.023.
- Scheel, S. 2021. The politics of (non)knowledge in the (un)making of migration. *Journal of Migration Studies* 1 (2):1–33. doi:10.48439/zmf.v1i2.113.
- Scott-Smith, T. 2016. Humanitarian neophilia: The 'innovation turn' and its implications. *Third World Quarterly* 37 (12):2229–51. doi:10.1080/01436597.2016.1176856.
- Serres, M. 2007. *The parasite*. Minneapolis and London: University of Minnesota Press.
- Shapin, S., and S. Schaffer. 1985. *Leviathan and the Air-Pump: Hobbes, Boyle, and the experimental life*. Princeton: Princeton University Press.
- Squire, V. 2020. *Europe's Migration Crisis: Border deaths and human dignity*. Cambridge UK: Cambridge University Press.
- Stacey, K., and H. Murphy. April 17 2020. How Facebook's Libra went from world changer to just another PayPal. *Financial Times* <https://www.ft.com/content/79376464-72b5-41fa-8f14-9f308acaf83b>
- Staton, B. May 18 2016. Eye spy: Biometric aid system trials in Jordan. *The New Humanitarian* <https://www.thenewhumanitarian.org/analysis/2016/05/18/eye-spy-biometric-aid-system-trials-jordan>
- Sturm, C. 2017. Reflections on the anthropology of sovereignty and settler colonialism: Lessons from native North America. *Cultural Anthropology* 32 (3):340–48. doi:10.14506/ca32.3.03.
- Swartz, L. 2017. Blockchain dreams: Imagining economic alternatives after bitcoin. In *Another economy is possible: culture and economy in a time of crisis*, ed. M. Castells, 82–105. Cambridge UK: Polity Press.
- Swartz, L. 2020. *New money: How payment became social media*. New Haven and London: Yale University Press.
- Taylor, L. 2016. No place to hide? The ethics and analytics of tracking mobility using mobile phone data. *Environment and Planning. D, Society & Space* 34 (2):319–36. doi:10.1177/0263775815608851.
- Tazzioli, M. September 25 2017. The circuits of financial-humanitarianism in the Greek migration laboratory. *Border Criminologies Blog* <https://www.law.ox.ac.uk/research-subject-groups/centre-criminology/centreborder-criminologies/blog/2017/09/circuits>

- Tazzioli, M. 2019. Refugees' debit cards, subjectivities, and data circuits: Financial-humanitarianism in the Greek migration laboratory. *International Political Sociology* 13 (4):392–408. doi:10.1093/ips/olz014.
- UNICEF. 2020 June 19. UNICEF cryptocurrency fund announces its largest investment of start-ups in developing and emerging economies. *UNICEF* <https://www.unicef.org/press-releases/unicef-cryptocurrency-fund-announces-its-largest-investment-startups-developing-and>
- UNOCHA. 2012 June. OCHA on message: Humanitarian principles. *UNOCHA* https://www.unocha.org/sites/dms/Documents/OOM-humanitarianprinciples_eng_June12.pdf
- UNOCHA. 2020 December 1. Global humanitarian review 2021. *ReliefWeb* <https://reliefweb.int/report/world/global-humanitarian-overview-2021-enarfres>
- van Reekum, R. 2018. Patrols, records and pictures: Demonstrations of Europe in the midst of migration's crisis. *Environment and Planning. D, Society & Space* 37 (4):625–43. doi:10.1177/0263775818792269.
- Vigneswaran, D. 2020. Europe has never been modern: Recasting historical narratives of migration control. *International Political Sociology* 14 (1):2–21. doi:10.1093/ips/olz025.
- De Vries, Gerard. 2016. Bruno Latour. Cambridge: Polity Press.
- Weitzberg, K., M. Cheesman, A. Martin, and E. Schoemaker. 2021. Between surveillance and recognition: Rethinking digital identity in aid. *Big Data & Society* January-June:1–7. doi:10.1177/20539517211006744.
- WFP. 2019a February 5. Palantir and WFP partner to help transform global humanitarian delivery. *World Food Programme* <https://www.wfp.org/news/palantir-and-wfp-partner-help-transform-global-humanitarian-delivery>
- WFP. 2019b June 20. World Food Programme begins partial suspension of aid in Yemen. *ReliefWeb* <https://reliefweb.int/report/yemen/world-food-programme-begins-partial-suspension-aid-yemen>
- WFP. 2020. Building blocks project overview. *World Food Programme Innovation Accelerator*. <https://innovation.wfp.org/project/building-blocks>.
- Winner, L. 1980. Do artifacts have politics? *Daedalus* 109 (1):121–36.
- World Vision/Nepal Innovation Lab. 2018. *Sikka: A digital asset transfer platform designed for the financially marginalized*, 1–11. Nepal: World Vision international.
- Zetter, K. 2014. *Countdown to zero day: Stuxnet and the launch of the world's first digital weapon*. New York: Crown Publishing Group.
- Zook, M., and J. Blankenship. 2018. New spaces of disruption? The failures of Bitcoin and the rhetorical power of algorithmic governance. *Geoforum* 96 (August):248–55. doi:10.1016/j.geoforum.2018.08.023.
- Zook, M., and M. Graham. 2018. Hacking code/space: Confounding the code of global capitalism. *Transactions of the Institute of British Geographers* 43 (3):390–404. doi:10.1111/tran.12228.
- Zuboff, S. 2019. *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. New York: Public Affairs.