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SYMPOSIUM ON DIGITAL EVIDENCE

DIGITAL EVIDENCE IN REFUGEE STATUS DETERMINATION

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Digital evidence is rapidly emerging as a tool for migration authorities in refugee status determination (RSD)—the procedure for determining whether a person meets the criteria for protection as a "refugee." Its growing popularity may be seen as a response to the relative dearth of "hard" evidence in asylum procedures, where decisions often hinge exclusively on the applicant's personal narrative and assessment of her credibility. In this essay, we critically examine the growing use of digital evidence in RSD by authorities and the human rights concerns that arise from some of these practices. We then move to outline some examples of how digital evidence might also present new opportunities for scholars, practitioners, and asylum seekers themselves, helping to substantiate claims and document underlying inequities in existing RSD practices. In the process, we seek to navigate a balance between the *techno-solutionism* that hails digital evidence as a panacea and those *a priori* dismissing digitization as *techno-hype* and inherently problematic.

Digital evidence presents a particularly alluring prospect for RSD. It is widely recognized that the asylum process transpires under conditions of epistemic uncertainty where the risks of misjudgment are both legally and politically profound. The relative lack of tangible evidence for substantiating asylum claims can make authorities overly reliant on problematic circumstantial evidence, or worse, lead them to unduly formalize elements of the applicant's testimony by attempting to make it fit into categories that have little relation to the applicant's harm.[1] Decades of research have shown that RSD procedures are innately inter-subjective,[2] prone to forms of explicit and implicit bias,[3] and susceptible to cultural misrecognition,[4] gendering dynamics,[5] and power imbalances between applicants and decision makers.[6]

It has rightly been noted that, in principle, digitization could help develop a more "informed RSD process."[7] However, digitization has tended to enter legal frameworks as a form of *techno-solutionism*, the idea that

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[1] Rebecca Dowd et al., *Filling Gaps and Verifying Facts: Assumptions and Credibility Assessment in the Australian Refugee Review Tribunal*, 30 Int'l J. Refugee L. 71 (2018).

[2] Proof, Evidentiary Assessment and Credibility in Asylum Procedures (Gregor Noll ed., 2005).

[3] Fatma E. Marouf, *Implicit Bias and Immigration Courts*, 45 New Eng. L. Rev. 417 (2010).

[4] Edith Montgomery & Anders Foldspang, *Predictors of the Authorities' Decision to Grant Asylum in Denmark*, 18 J. Refugee Stud. 454 (2005).

[5] Jenni Millbank, *Gender, Sex and Visibility in Refugee Claims on the Basis of Sexual Orientation*, 18 Georgetown Immigr. L.J. 71 (2003).

[6] Jennifer Beard & Gregor Noll, *Parrhēsia and Credibility: The Sovereign of Refugee Status Determination*, 18 Soc. & L. Stud. 455 (2009).

[7] Rosemary Byrne, *The Protection Paradox: Why Hasn't the Arrival of New Media Transformed Refugee Status Determination?*, 27 Int'l J. Refugee L. 625 (2015).

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technological measures will somehow cure the fallibilities of human decision making.[8] At the same time, digitization is also frequently dismissed as *techno-hype* with arguments that any use of technology in legal decision making are innately problematic for rights-bearing subjects.[9] In this essay we posit that digital evidence may also have more transformative effects for legal process beyond its utility to authorities in a given instance. Reimagining evidence practices through digital means may not only help refugees to support their claims but also counter existing epistemic asymmetries in RSD, where resources are concentrated in the hands of the state and against asylum seekers.

Digital Evidence as a Panacea for RSD?

In legal discourse, digital evidence is usually conceived as "information stored or transmitted in binary form that may be relied on in court" or other types of legal proceedings.[10] Data can derive from devices such as computers, mobile telephones, applicant biometrics, or open-source information on the Internet. In accordance with standard rules of evidence, digital information will be treated as *legal* evidence if it is "reliable" and has "sufficient probative value."[11] There are of course other ways of thinking about digital evidence that are less state centric, but existing uses of digital evidence in RSD have been authority driven and aimed at assessing the veracity of asylum claims or testing the credibility of applicants.

RSD decision making represents an important case study for the use of digital evidence for several reasons. First, the asylum process is typically an administrative or (quasi-)judicial process that incorporates elements of both inquisitorial and adversarial models of legal decision making, but it does not assume a fair balance between the parties. Second, existing approaches to evidence in RSD are fragmented because the issue is largely governed by national law, with few binding rules at the international level. Third, evidence practices are subject to higher indeterminacy than many other areas of law. It is rarely possible to rely on forensic evidence or witness testimony for refugees or migrants who flee alone, whilst other evidentiary procedures, such as radiological age determination, language tests, and torture assessments are all characterized by scientific uncertainty and possible bias.[12]

As a result, there is now a widespread scholarly consensus that refugee law suffers from a "fact-finding crisis"[13] where asylum seekers face problems producing evidence for procedures that are vested in foreign legal systems and difficult to navigate. As Luker notes:[14]

> [There is] reliance upon oral testimony that can rarely be corroborated; a cross-cultural context in which nearly all hearings are facilitated by an interpreter; the likelihood that applicants will have difficulty in speaking about experiences of trauma, persecution and violence; and the likelihood that there is a lengthy period between when relevant events occurred and the hearing of the claim.

[8] *See especially* Petra Molnar, The Walls Have Eyes: Surviving Migration in the Age of Artificial Intelligence (forthcoming 2024).

[9] Martina Tazzioli, *Counter-mapping the Techno-hype in Migration Research*, 18 Mobilities 920.

[10] Martin Novak, Jonathan Grier & Daniel Gonzales, *New Approaches to Digital Evidence Acquisition and Analysis*, 280 Nat'l Inst. Just. J. 1 (2019).

[11] *See, e.g.*, María de Arcos Tejerizo, *Digital Evidence and Fair Trial Rights at the International Criminal Court*, 36 Leiden J. Int'l L. 749 (2023).

[12] Gregor Noll, *Junk Science? Four Arguments Against the Radiological Age Assessment of Unaccompanied Minors Seeking Asylum*, 28 Int'l J. Refugee L. 234 (2016); Diana Eades, *Testing the Claims of Asylum Seekers: The Role of Language Analysis*, 6 Language Assessment Q. 30 (2009); Kenneth S. Pope, *Psychological Assessment of Torture Survivors: Essential Steps, Avoidable Errors, and Helpful Resources*, 35 Int'l J. L. & Psych. 418 (2012).

[13] Hilary Evans Cameron, Refugee Law's Fact-Finding Crisis Truth, Risk, and the Wrong Mistake (2018).

[14] Trish Luker, *Decision Making Conditioned by Radical Uncertainty: Credibility Assessment at the Australian Refugee Review Tribunal*, 25 Int'l J. Refugee L. 502, 533 (2013).

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For immigration authorities, new technologies have been welcomed as ways to assess the probative value of claims by opening up new sources of information and algorithmically assessing human behaviors traditionally used to ascertain credibility. For example, the EU's piloted "iBorderCtrl" project combines biometric verification, social media analysis, and risk assessment software, and features AI-based behavioral analysis to predict whether applicants are potentially lying when interviewed by a computer-animated border guard avatar. The Netherlands, Belgium, and France have used algorithmic verification technologies that classify certain features in documents as indications of potential fraud. Both Germany and Turkey have used dialectic recognition software in testimonial procedures during the 2015–2016 refugee crisis to test whether refugees had in fact come from Syria.[15]

Perhaps the most widespread use of digital evidence in RSD now is mobile phone data analysis. Germany, Denmark, Netherlands, Estonia, Croatia, Germany, Lithuania, and Norway have all adopted practices of confiscating asylum applicants' phones in the last five years. German legislation even requires that applicants who do not possess recognized identity documents provide their mobile phone for analysis, otherwise their asylum application will not be processed. Authorities may extract data on country codes of contacts and messages, login details for social media platforms, and geo-data linked to applications, in order to assess the applicant's identity and travel path, and in some cases also core elements of the asylum claim, such as an applicant's religion or whether the applicant has been involved in crimes that may preclude asylum.[16] Whilst some states have proven reluctant to use digital evidence in RSD in light of its inherent risks to applicants' privacy, the European Union more generally envisions sharing of biometric and other types of digital personal information as part of its strategy for coordinating data-management practices in relation to asylum, immigration, and border management.[17]

Scholars have rightly warned that such practices raise significant human rights concerns, not least due to their potential to impinge the right to privacy. German courts have recently ruled that the state's practice of mobile phone data analysis is unlawful because it did not meet requirements of necessity.[18] In 2021, the General Court of the European Union initially ruled that core documents related to the technical development of the iBorderCtrl project should be made openly available by the Commission, but earlier this year the European Court of Justice reversed the decision.[19] Beyond privacy concerns, a worrying aspect is moreover the extent to which current uses of digital evidence may further entrench biases in RSD: from a system that attempts to find truth in a story, toward one algorithmically designed to find faults or detect inconsistencies in the applicant's narrative.

Digital Evidence to Address Epistemic Injustice in RSD

Yet, there are other ways of thinking about digital evidence more targeted toward addressing the epistemic problems in existing RSD practices. Scholars, litigators, and non-governmental organizations (NGOs) are gradually embracing data-driven approaches as means to support migrant and refugee claims. The first potential

[15] For a recent overview of European practices, see Derya Ozkul, *Automating Immigration and Asylum: The Uses of New Technologies in Migration and Asylum Governance in Europe*, AFAR (2023).

[16] Trine Rask Nielsen, Thomas Gammeltoft-Hansen & Naja Holten Møller, *Mobile Phone Data Transforming Casework in Asylum Decision-making*, ACM 2023 (forthcoming 2024).

[17] See, in particular, Nicholas R. Micinski & Will Jones, *Digitization Without Digital Evidence: Technology and Sweden's Asylum System*, 35 J. Ref. Stud. 1011 (2022).

[18] *See* Francesca Palmiotto & Derya Ozkul, *"Like Handing My Whole Life Over": The German Federal Administrative Court's Landmark Ruling on Mobile Phone Data Extraction in Asylum Procedures*, Verfassungsblog (2023).

[19] Patrick Breyer v. European Research Executive Agency, T-158/19 (Gen. Ct. EU Dec. 15, 2021); Patrick Breyer v. European Research Executive Agency, C-135/22 P (Ct. Just. EU Sept. 7, 2023).

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application relates to new uses of big data and open-source information. For instance, researchers in Australia have used satellite imagery to evidence unsafe conditions for Rohingya refugees slated for return to Myanmar.[20] The NGOs Forensic Architecture and Forensic Oceanography have similarly employed data mining, geolocation, pattern analysis, and remote sensing to document incidents in refugee camps and pushbacks of migrant boats. These types of evidence are now increasingly used to document different aspects of migration claims at both the national and international levels. They further offer significant new opportunities for supporting RSD claims through evidence-sharing and extrapolation of evidence across multiple data sources, such as geodata, satellite imagery, ship positioning data, and qualitative testimony.

A second prospect arises in the use of computational legal analysis of existing RSD practice. Drawing on large datasets of national case law, a growing body of scholarship has documented patterns of inconsistency and bias in asylum decision making.[21] A key finding from this research has been the identification of individual decision-maker bias, with some judges having a recognition rate of close to zero across dozens, or even hundreds, of cases. Other findings suggest that decision makers may be biased *vis-à-vis* particular types of applicants, or unduly influenced by political factors, the outcomes of previous cases, or the availability of legal representation. Such analysis can be important evidence not only in concrete cases, but also when advocating for general reforms of asylum procedures. Researchers in Australia and Canada have thus publicized data to encourage judges and courts to audit their decision making and address cognitive and social biases.[22] Others have advocated for using AI as a means to calculate and resolve epistemic doubt in favor of the applicant.[23]

Each of these emerging practices offer new ways for thinking about digital evidence that are less court-centric but can help address evidential problems in RSD on a more systemic level. They also point to ways that digitization may reconstitute our understandings of what types of evidence are relevant for RSD as a process where human decision making is itself prone to significant bias and information gaps. In this context, digital evidence can support fact finding without lapsing into *techno-hype* or falling prey to blanket critiques of technology. Digitization of evidence, like all applications of technology, will always come with benefits and drawbacks. However, attention to the real root of the problem—decision making conditioned by asymmetric information—may help us to avoid quick-fix solutionism that only accentuates existing manifestations of epistemic injustice.

Conclusion

In the current political climate for refugee protection, a certain institutionalized disbelief against asylum seekers is unfortunately far too common. RSD is permeated by "testimonial injustice" that arises from the presence of systematic biases in regard to evidence in asylum decision making. But asylum seekers also suffer "hermeneutical injustice" that is no fault of any one person but arises because their subjective fear can never be fully understood by

[20] Elise Thomas, Nathan Ruser & Mali Walker, *Mapping Conditions in Rakhine State*, Austrl. Strategic Pol'y Inst. (July 24, 2019).

[21] Jaya Ramji-Nogales, Andrew I. Schoenholtz & Philip G. Schrag, Refugee Roulette: Disparities in Asylum Adjudication and Proposals For Reform (2011); Sean Rehaag, *Judicial Review of Refugee Determinations: The Luck of the Draw*, 38 Queens L.J. 1 (2012); Daniel Chen & Jess Eagel, *Can Machine Learning Help Predict the Outcome of Asylum Adjudications*, Proceedings of the 16th Edition of the International Conference on Artificial Intelligence and Law (2017); William Hamilton Byrne et al., *Data-Driven Futures of International Refugee Law*, J. Refugee Stud. 1 (2023).

[22] Daniel Ghezelbash, Keyvan Dorostkar & Shannon Walsh, *A Data Driven Approach to Evaluating and Improving Judicial Decision-Making: Statistical Analysis of the Judicial Review of Refugee Cases*, 45 U. New S. Wales L.J. 1085 (2022); Rehaag, *supra* note 21.

[23] Hilary Evans Cameron, Avi Goldfarb & Leah Morris, *Artificial Intelligence for a Reduction of False Denials in Refugee Claims*, 35 J. Refugee Stud. 493 (2021).

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an external decision maker.[24] RSD, in other words, is intrinsically prejudiced against asylum seekers—firstly, because the state has all the resources and the applicant has almost none, and secondly, because there are inherent limitations on what the system provides to facilitate applicants' evidential recollection of past sense data.

It is easy to see in this context why digital evidence presents such promises for RSD. But it is worth recalling that a central tendency of the datafication of society has been increasing epistemic inequality between powerful and vulnerable actors.[25] So far, digitization of RSD is showing signs of continuing this pattern. Perhaps the best way forward is for small-scale interventions that try to level the playing field. As Fleur Johns argues, a turn to data-driven evidence practices amongst scholars, NGOs, and litigators may serve to "probe inside some operations of power in action, rather than try to arrest or arraign those operations from afar"; it is about "infiltrating and overloading some systems going forward, rather than trying so insistently to dial them back toward some . . . supposedly neglected opportunity."[26] In this vein, digital evidence also represents a powerful tool for scholars and practitioners to intervene in harmful RSD practices, and could ultimately be leveraged to empower asylum seekers in the legal process.

[24] *See generally* Miranda Fricker, Epistemic Injustice: Power and the Ethics of Knowing (2007).

[25] Shoshana Zuboff, *Caveat Usor: Surveillance Capitalism as Epistemic Inequality*, *in* After the Digital Tornado: Networks, Algorithms and Humanity 174 (Kevin Werbach ed., 2020).

[26] Fleur Johns, *On Dead Circuits and Non-Events*, *in* Contingency in International Law: On the Possibility of Different Legal Histories 25, 41, 43 (Ingo Venzke & Kevin Jon Heller eds., 2021).

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