



**Selected Papers of #AoIR2025:
The 26th Annual Conference of the
Association of Internet Researchers**
Niterói, Brazil / 15 – 18 Oct 2025

DIGITAL IDENTITY, DATAFICATION AND EPIDERMALISATION IN A REFUGEE CAMP IN THE THAILAND-MYANMAR BORDER

Mirca Madianou
Goldsmiths, University of London

Charlotte Hill
Chiang Mai University

In the neighborhood grocery store in Section B of Mae La refugee camp, Naw Min shops for rice and cooking oil. Once she has finished, she approaches the front desk where the shopkeeper picks up his smartphone. He positions the phone in front of Naw Min's face to scan her facial features. When the scan reaches 70 per cent similarity with the image kept in the database, payment is deducted from Naw Min's monthly aid allowance so she can take the groceries home. Quite often, though, the scan doesn't work. Naw Min will then have to call her husband to walk over to the shop to scan his face. Naw Min will eventually arrange to return to the NGO office to have her face re-scanned and deposited in the system. 'There must be something wrong with my face', she told us.

Humanitarian cash transfers involving biometrics are becoming ubiquitous in the humanitarian sector. With over 100 million displaced people globally, biometrically supported digital identity systems are championed as solutions for the challenges humanitarian organisations face. This is because digital identity systems are assumed to address low-level fraud, provide clear audit trails and streamline the management of aid distributions (Jacobsen, 2015; Madianou, 2025).

In the absence of legal identity documents by refugees, the digital identification systems used for humanitarian cash transfers and ration distribution are often used as substitutes. Proof of biometric enrolment in a food distribution system can be used as evidence of status when no other legal documents are in place. Such developments are part of the popularity of 'digital identity' systems which are promoted as contributing to the UN Sustainable Goal 16.9 'a legal identity for all'.

Suggested Citation (APA): Madianou, M. and Hill, C. (2025, October). *Digital Identity, datafication and epidermalization in a refugee camp in the Thailand-Myanmar border*. Paper presented at AoIR2025: The 26th Annual Conference of the Association of Internet Researchers. Niterói, Brazil: AoIR. Retrieved from <http://spir.aoir.org>

The refugee camps in northern Thailand exemplify the digital identity trend. In 2014, UNHCR collected the biometric data of 110,000 refugees as part of a new digital identity pilot (UNHCR, 2015). Mae La, the largest refugee camp in Thailand, has been at the forefront of technological experiments involving biometric technologies. In 2018, the International Rescue Committee (IRC) and ID2020 (a private consortium) piloted a biometric programme to support Mae La's medical provision. Since 2023, the Border Consortium, the main organisation responsible for Mae La, uses face recognition technology for the distribution of monthly food assistance.

This paper examines biometric cash transfers and digital identity programmes from the point of view of Karen refugees in Mae La camp in Western Thailand. Mae La is one of nine camps along the border with Myanmar. The perspective of refugees is often left out from the debates around digital identity. Over 37,700 refugees live in Mae La, making it the largest camp in the border region which numbers over 106,000 refugees (The Border Consortium, 2024). We draw on an ongoing ethnographic project on digital identity practices in Mae La and in particular 174 interviews, group discussions, participatory action research involving art and poetry and participant observation. In addition, we have also conducted interviews with 26 expert interlocutors involved in the aid response in the Mae La.

The paper focuses on the introduction of a biometrically-enabled cash transfer system, which allows refugees to purchase groceries in designated stores via facial recognition. Known, in Mae La camp as the "food card" system, it was implemented by the camp's main NGO in partnership with a private company. The first iteration of "food card" launched in 2019 using a magnetic stripe card and a password. Concerns over fraud and the need for contactless transactions during COVID-19 led to the adoption of face recognition in 2023.

Our findings reveal that while digital identity systems offer some advantages, there are significant concerns with their implementation. To understand the face recognition system, we need to compare it with the old system where people collected food assistance through ration books. In the old system, people collected the same standard five items on a designated distribution day. This meant that people had to queue for hours and carry the whole month's provision of rice (approximately 25kg an average family) often over several kilometres. In the new system, rations can be collected at any time and in small quantities, avoiding queuing.

A common complaint about the new cash-based system is that people report that they receive less food. As prices rise with inflation, the purchasing power of the monthly allowance decreases. Many of our interlocutors preferred the tangibility of fixed rations and the certainty that these produced. While food card shops offer 29 items (compared to the five previously distributed as aid-in-kind), the monthly allowance could only stretch to cover rice and cooking oil.

Apart from practical concerns, the new systems raise ethical and safeguarding concerns regarding the reusability of data of vulnerable populations (Jacobsen, 2022). Digital identity systems assume a 'universal refugee' and do not account for cultural

sensitivities, or gender differences (Shoemaker et al, 2021). Rather than being perfect identification systems, biometrics are known to discriminate in terms of race, gender, age and disability (Browne, 2015; Magnet, 2011). Several of our participants reported difficulties in getting their face successfully scanned while some experience this mismatch as a personal failure rather than a systemic error. Naw Min's quote in the opening paragraph exemplifies this. Other interlocutors referred to their face as 'not valid'. These are examples of 'digital epidermalization', a term that captures the internalisation of inferiority and how technologies impose race on othered bodies (Browne, 2015; Fanon, 1952). We observe that digital systems compound feelings of humiliation that are already present in situations of encampment.

These power asymmetries are most evident in the lack of meaningful consent when the refusal to register one's biometric data amounts to refusal to receive aid when there are no alternatives for survival. Most of our interlocutors reported that the various biometric systems were not explained to them. Participants expressed concerns that the face scanners could harm them, but they didn't have a chance to ask such questions during their registration. Crucially, our participants were not offered an alternative system in case they had concerns, nor were they offered a chance to opt out. Without full understanding of digital systems and without being given the possibility to opt out without detriment, consent is rendered meaningless (McStay, 2013).

Digital identification systems impose a binary logic (the scan outcome determines whether one is eligible for aid or not) which contradicts the moral economy of the camp which is based on solidarity. Yet, we observe that our participants find ways to navigate the binary logic and embed digital systems within their local values. This happens through sharing resources in order to 'make do' in everyday life.

Ultimately, the power asymmetries of humanitarianism shape digital systems such as biometric cash transfers. But we also observe that the datafication of identity transforms humanitarianism. How can the humanitarian principles of neutrality and humanity be maintained if aid becomes conditional on the sharing of biometric data? How can the principle of independence be upheld if private companies become major players in the delivery of aid and the handling sensitive data?

This paper concludes that digital identity is not simply a form of identity provided in digital format: the process of datafication has significant consequences for dignity, privacy and freedom. We end with a reflection on how the transactional system of digital identity systems cannot be a substitute for the UN SDG 16.9 'a legal identity for all'. Efforts to build responsible digital identity policies must respond to the Karen refugees' needs for equality, recognition and justice.

References

Browne, S. (2015). *Dark Matters: On the Surveillance of Blackness*. Durham: Duke University Press.

- Fanon, F. (1952) *Black Skin, White Masks*. London: Penguin.
- Jacobsen, K. L. (2015). *The Politics of Humanitarian Technology: Good Intentions, Unintended Consequences and Insecurity*. London: Routledge.
- Jacobsen, K. L. (2022). 'Biometric data flows and unintended consequences of counterterrorism', *International Review of the Red Cross*, 103: 619–52.
- Madianou, M. (2025). *Technocolonialism: when technology for good is harmful*. Cambridge: Polity
- Magnet, S. A. (2011). *When biometrics fail: Gender race and the technology of identity*. Durham: Duke University Press.
- McStay, A. (2013). 'I consent: An analysis of the Cookie Directive and its implications for UK behavioral advertising'. *New Media & Society*, 15(4): 596-611.
<https://doi.org/10.1177/1461444812458434>
- The Border Consortium. (2024). Refugee Camp Population: December 2024.
<https://www.theborderconsortium.org/wp-content/uploads/2025/01/2024-12-December-map-tbc-unhcr.jpg>
- Schoemaker, E., Baslan, D., Pon, B., & Dell, N. (2021). Identity at the margins: data justice and refugee experiences with digital identity systems in Lebanon, Jordan, and Uganda. *Information Technology for Development*, 27(1), 13-36.
- UNHCR (2015). 'UNHCR's new biometrics system helps verify 110,000 Myanmar refugees in Thailand'. <https://www.unhcr.org/uk/news/stories/unhcrs-new-biometrics-system-helps-verify-110000-myanmar-refugees-thailand>