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Blockchain-driven digital nomadism in the Basque e-Diaspora

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ABSTRACT

E-diasporas are communities of diaspora members utilizing digital technologies and data platforms to establish connections among themselves and with their homelands. In response to the pandemic, governments worldwide have intensified efforts to reinforce e-diasporas. However, these endeavours often rely on social media extractivist Big Tech platforms, which are referred to as ‘hyperconnected diasporas’ in this article. This trend potentially poses a threat to institutional trust and data privacy. This article introduces *HanHemen* (ThereHere in Basque language, *Euskera*), an ongoing action research-driven e-diaspora platform facilitated by the Basque Government. *HanHemen* aims to ensure data privacy through experimentation with blockchain technologies and co-production with end-users via DAOs. This article reveals findings from an online survey completed by 419 Basque diasporic citizens ($N = 1,385$), who demonstrated support for digital nomadism (62%) and expressed concerns about data privacy (84%). These findings highlight the need to overcome the mainstream ‘hyperconnected diaspora’ trend through *HanHemen*.

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Introduction: hyperconnected diasporas

E-diasporas are communities of diasporic fellows who utilize digital technologies and data platforms to connect with each other and their homelands in datafied societies (Hintz et al., 2019; Ponzanesi, 2020). Within these datafied societies, there is a growing prevalence of digital platforms that provide global access to citizens’ digital identities (Gstrein & Kochenov, 2020; Sullivan, 2018; Sullivan & Burger, 2017; Tammppu & Masso, 2018). As a result, the identities of diasporic citizens hold significant importance within these societies. As individuals navigate online spaces and interact with each other, this interaction gives rise to new forms of social belonging, privilege, and exclusion. Concurrently, an increasing trend known as *digital nomadism* is unfolding (Cook, 2022; Ferreira, 2022; Holleran, 2022; Marquardt, 2021; Shachar, 2018). As described by Woldoff and Litchfield (2021, p. 1), digital nomads are primarily ‘professionals who actively seek a remote

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lifestyle of freedom, using technology to perform their jobs, traveling far and wide, and moving as often as they like’.

In response to the pandemic, governments worldwide have recently intensified their efforts to reinforce e-diasporas. However, these endeavours often rely on social media extractivist Big Tech platforms. This article refers to the extractivist effect of such platforms as ‘hyperconnected diasporas’, which pose a potential threat to institutional trust and the data privacy of digital nomads. Consequently, during and after the pandemic, data flows, transfers, migrations, and algorithmic disruptions have become commonplace, impacting citizens’ digital rights and undermining their data privacy (Spelliscy et al., 2023; Veliz, 2020). This mainstream data extractivism, extending across deep, biometric, and postpandemic borders, places diasporic citizens, in particular, at a greater risk of data privacy breaches (Calzada, 2021d, 2022e; Cheney-Lippold, 2016; Chouliaraki & Georgiou, 2022; Finck, 2018).

Data extractivism refers to the practice of collecting, analyzing, and commodifying large amounts of personal data from diasporic citizens and digital nomads without their explicit consent or control, often for commercial or political purposes (Sadowski, 2019). This practice involves using digital technologies, such as social media platforms, to gather personal data, including online behaviour, preferences, and demographic information, and converting it into an asset for companies and governments (O’Shea, 2021). Consequently, data extractivism poses a challenge to the ethical and democratic governance of datafied societies, emphasizing the imperative to protect the digital rights of diasporic citizens and digital nomads (Calzada et al., 2021).

In this article, the term ‘hyperconnected diasporas’ (Calzada, 2022c) is used to describe the prevailing trend of data governance in e-diasporic interactions, including those among governments, diasporic citizens, and digital nomads, as well as between them. Therefore, ‘hyperconnected diasporas’ are defined as follows: (i) the single techno-deterministic and hegemonic interpretation of global datafication processes driven by data-opolistic practices, which (ii) subsequently gives rise to data privacy risks for diasporic citizens and digital nomads who are (iii) unwittingly subjected to surveillance capitalism through continuous tracking by Big Tech social media platforms (Calzada, 2022c; Srivastava, 2021; Taplin, 2017; Zuboff, 2019). These digital risks for diasporic citizens and digital nomads encompass the lack of privacy, the loss of data ownership, and, consequently, the vulnerability of their digital rights when intensive Artificial Intelligence (AI)-driven biometric authentication is employed (Calzada, 2021d, 2022e, Calzada et al., 2021; Veliz, 2020). Thus, in various ways, the digital shift in public life has reneged on its progressive promises and become intertwined with the monopolistic appropriation of technologies and the control of infrastructure, resulting in a decline in the quality of democratic debate. Consequently, ‘hyperconnected diasporas’ could be seen as a dysfunctional attribution assigned to digitalization and datafication processes that accept the pitfalls and paradoxes related to the digital (un)sustainability of surveillance capitalism without question (Newport, 2019; Van Dijck, 2018).

While a substantial body of literature has delved into the intersections of diaspora studies (Godwin, 2022; Hirt & Mohammad, 2018; Jayasundara-Smits, 2022; Modi & Taylor, 2017; Moss, 2018), political geography (Agnew, 1994), migration and nomadic studies (Holleran, 2022), diplomacy studies (Ho & McConnell, 2017), transnational migration (Levitt & de la Dehesa, 2003), the rescaling of nation-states and international relations (Calzada, 2022d), and datafication (Van Dijck, 2018), there exists limited research focused on the changing state-citizenship e-diasporic relationships within datafied societies (Tammppu et al., 2022). The literature encompassing machine learning political orders (Amoore, 2022), blockchain (Al-Saqaf & Seidler, 2017; Atzori, 2017; Viano

et al., 2023; Werbach, 2019; Woodall & Ringel, 2020), digital nomads (Cook, 2020), digital citizenship (Hintz et al., 2019), citizenship by connection, and paradiplomacy (McHugh, 2015) serves as a few instances of the emerging scholarship that pertains to state-citizenship e-diasporic relationships within datafied societies.

Paradiplomacy refers to international relations and diplomatic activities conducted by regional governments through e-diaspora platforms, such as *HanHemen* (translated as ThereHere in the Basque language, *Euskera*; <https://www.hanhemen.eus/en/>), an ongoing action research-driven e-diaspora platform facilitated by the Basque Government. *HanHemen* aims to ensure data privacy through experimentation with blockchain technology and collaboration with end-users via Decentralized Autonomous Organizations (DAOs), and potentially through data co-operatives. As a result, *HanHemen* is being implemented with consideration for three emerging technologies: (i) blockchain, (ii) DAOs, and (iii) data co-operatives. (i) Blockchain is a software protocol that enables the secure transfer of money, assets, and information via the internet, eliminating the need for third-party intermediation by the state or corporate surveillance (Swan & De Filippi, 2017; Zook, 2023). (ii) DAOs are ‘community-led organizations with no formal central authority that utilize blockchain technology in various capacities, often to establish organizational rules, record and execute decisions made by members, or manage a treasury controlled by members’ (Spelliscy et al., 2023, p. 10). DAOs consist of groups of individuals who unite to establish self-governing communities, utilizing blockchain technology for decision-making (Nabben, 2022). Within the context of this article, DAOs may signify an evolutionary leap in the digital governance and data sovereignty of e-diasporic communities globally, enabling ‘digital nomadism’ (WEF, 2023; Zichichi et al., 2022). (iii) Data co-operatives, on the other hand, are ‘member-owned organizations that democratically manage and share data while empowering members to maintain control over their own data’ (Bühler et al., 2023b, p. 6). End-users of *HanHemen* can collaborate with developers to co-produce the e-Diaspora platform, leveraging these three emerging and decentralized technologies (Calzada, 2023; Zook, 2023).

Against this backdrop, Bucher (2012), Forestal (2020), and Taplin (2017) argue that Big Tech platforms, including Google and Facebook, employ obscurity through algorithms and opaque content moderation policies to determine the prioritization and promotion of content on their platforms. According to these critics, this practice has the potential to amplify misinformation and foster the creation of echo chambers. They further assert that such an approach obscures the true nature of the presented content, eroding public trust and intensifying the polarization of public opinion. On the contrary, proponents of these platforms contend that they prioritize free speech and user autonomy, while also recognizing the need to address concerns such as misinformation and harmful content. Veliz (2020) suggests that enhancing transparency and accountability in the algorithms and content moderation policies of these platforms could help alleviate these privacy concerns. However, Gorwa (2019) posits that the regulation of these platforms is a multifaceted and intricate issue, demanding a nuanced approach.

Taking into account the arguments and counter-arguments in this ongoing debate, an alternative and widespread reaction arises from crypto-libertarian or pseudo-anarchist perspectives, resulting in an emerging body of literature on decentralized systems in peer-to-peer interactions involving blockchain, DAOs, and data co-operatives (Bauwens et al., 2019; Buterin, 2022; Calzada, 2020; Mathew, 2016; Monsees, 2019; Rennie et al., 2022; Rodima-Taylor & Grimes, 2019). This alternative viewpoint suggests an unexplored research trajectory that could interweave blockchain, DAOs, e-diasporas, and digital nomads, potentially fuelling a post-identitarian mobility pattern (Inwood & Zappavigna, 2021). This pattern has been thoroughly theorized as ‘digital nomadism’

by Cook (2020, 2022), D’Andrea (2006), Kannisto (2016), Holleran (2022), Polson (2019), Sutherland (2014), and Wang et al. (2018). To gather further evidence supporting this alternative perspective, the author of this article is participating as a speaker in the two editions of the Stanford DAO Workshop in 2022 (<https://www.youtube.com/watch?v=F0481BEbMik>) and 2023 (<https://daoworkshop.notion.site/2023-Stanford-DAO-Workshop-ffdcc1e7ff7749a6afc1ee7b7bdc134c>; <https://www.youtube.com/watch?v=QZmrSOg Lia4>) at Stanford University (September 2022 and August 2023) as part of The Science of Blockchain Conference in 2022 (<https://cbr.stanford.edu/sbc22/>) and 2023 (<https://cbr.stanford.edu/sbc23/>). During these events, the author presented findings from this article alongside international case studies (Stanford DAO Workshops, 2022 and 2023, 2023). It is essential to acknowledge that this alternative stance, which currently advocates for blockchain and DAOs, has its origins in *The Crypto Anarchist Manifesto* launched in 1988 in Silicon Valley by Timothy May, as stated below (Nabben, 2022, p. 1):

Computer technology is on the verge of providing the ability for individuals and groups to communicate and interact with each other in a totally anonymous manner. Two persons may exchange messages, conduct business, and negotiate electronic contracts without ever knowing the True Name, or legal identity, of the other. Interactions over networks will be untraceable. These developments will completely alter the nature of government regulation, the ability to tax and control economic interactions, the ability to keep information secret, and will even alter the nature of trust and reputation.

While it may be premature to assess the impact of emerging literature and its associated practices on e-diaspora governance design involving blockchain, DAOs, and data co-operatives, action research methods can facilitate the determination of how decentralized futures are unfolding in contrast to the globalized hegemonic trend of ‘hyperconnected diasporas’. This article presents the initial hypothesis as a transition towards a deliberation process using the Basque e-diaspora platform *HanHemen* and shares the findings of a recent online survey. The survey explores the notion of ‘digital nomadism’ and the idea of returning to the Basque homeland, after providing an overview of the analytical features of diasporic and digital citizens actively contributing to the Basque e-diaspora in contemporary times.

Consequently, this article poses two research questions concerning ‘hyperconnected diasporas’, while examining the work-in-progress Basque e-diaspora *HanHemen* action research case as follows:

- (i) How are e-diaspora platforms shaped when the hegemonic global model of surveillance capitalism (Zuboff, 2019), embodied by Google, Amazon, Facebook, Apple, and Microsoft (GAFAM), relies on an extractive and centralized data governance model originating from the United States (Cancela, 2023; Echeverría, 1994; Morozov, 2022; O’Shea, 2021)?
- (ii) How can city-regional and local governments (i.e. the Basque Government) effectively engage e-diasporas in paradiplomacy by (ii.a) acknowledging the side effects and risks related to the lack of data privacy, ethics, ownership, and cybersecurity, and (ii.b) experimenting with data sovereignty-led platforms through decentralized digital architectures and cloud communities driven by blockchain, distributed ledgers, and eventually DAOs and data co-operatives (Bauwens et al., 2019; Buterin, 2022; Calzada, 2021b; Hubbard, 2023; Spelliscy et al., 2023)?

To address the two research questions, this article presents findings from an online survey conducted by the author of this study from February 1 to March 31, 2022. The study identified 1,385 potential users of the *HanHemen* platform and collected 419 responses from digital citizens of the

Basque e-diaspora around the world, resulting in a response rate of 30.25% (Andrade, 2020; Ball, 2019; Debell et al., 2021). As part of the action research fieldwork design and methodology, the online survey represents the second methodological step of a four-step design with two objectives: (i) to identify an active and necessary critical mass to facilitate a solid scale-up process using action research methodology and (ii) to gradually build the *HanHemen* platform through a webinar series using a hybrid format, locating the events in various locations worldwide by appointing *ambassadors* from the extensive network of Basque clubs worldwide (*Euskal Etxeak*; www.euskaletxeak.eus). This network has been actively nurtured, cultivated, and supported by the Basque Government for decades (Totoricagüena, 2006). The article will delve into greater detail on these methodological aspects in the third and fourth sections.

This article is structured as follows: the introduction establishes both research questions and elaborates on the digital risks and the uncritical adoption of hyperconnectivity for diasporic citizens and digital nomads regarding the hegemonic global trend presented as ‘hyperconnected diasporas’. Following this, a literature review on e-diasporas and blockchain-driven ‘digital nomadism’ will be presented. Subsequently, the article outlines the action research methodology as applied to the Basque e-diaspora. Since 2021, the Basque Government has been deeply involved in action research to learn from the past: In 2011, it launched the *Basque Global Network* (www.basqueglobalnetwork.eus), an institutional top-down and highly-centralized project based entirely on the ‘hyperconnected diaspora’ approach. However, in 2021, it rebranded and restructured the project from scratch to move towards *HanHemen*, which aims to involve 2,000 Basque digital and diasporic citizens by the end of the governmental mandate in 2024 (Eusko Jaurlaritza, 2022a, 2022b). Illustrating this transition through *HanHemen*, the fourth section presents the main results derived from the online survey. These results are categorized into six sections: (i) end-users; (ii) digital citizenship, languages, and maintaining ties with the homeland; (iii) social capital; (iv) Basque clubs (*Euskal Etxeak*) as diasporic settlements; (v) digitalization and privacy; and (vi) digital nomadism and return. Lastly, the article concludes by addressing both research questions, acknowledging limitations, and proposing avenues for future research.

Literature review: e-diasporas and blockchain-driven digital nomadism

In recent decades, globalization has led to the emergence of a new class of ‘world citizens’ (Arendt, 1958; Calzada, 2021a). However, the cosmopolitan rhetoric of borderless globalism has been significantly hindered by COVID-19, notably impacting the understanding of e-diasporas and their dependence on the potential of hyperconnected societies driven by AI, Big Data, and Machine Learning, along with other emerging digital technologies, tools, and devices (Fourcade, 2021).

Furthermore, this postpandemic era has likely established new global patterns of being digital citizens that have been defined as ‘pandemic citizenship’ (Bignami et al., 2022; Calzada, 2022a; Isin & Ruppert, 2015). Alongside these patterns, this scenario has been particularly characterized by a significant reliance on the concept of hegemonic *dataism*, often described as the religion of Big Data (Lohr, 2015), which originates from the extractive practices of commercial social media Big Tech platforms like GAFAM (Forestal, 2020; Kim et al., 2018; Srivastava, 2021; Taplin, 2017).

Many scholars have theorized the impact of digital transformation on the notion and institutions of citizenship, viewing it through the lens of the evolutionary nature of its classical concept or by drawing upon narratives about the democratizing risks and potential of the Internet (Bauböck, 2018; Brenda & Collins, 2022; Mossberger et al., 2007). In its early stages, the literature conceptualized ‘digital citizenship’ primarily as the ability to effectively participate in online society by using

the internet (Hintz et al., 2019). Although recent and emerging literature on decentralized developments and blockchain-driven digital nomadism might inspire and potentially aid in the restructuring of e-diasporas, this field and its underlying technologies are still in their early stages (Rennie et al., 2022; Rodima-Taylor & Grimes, 2019).

Against this backdrop, emerging digital citizenship regimes (Calzada, 2022b; Cheney-Lippold, 2016) are reshaping practices related to ‘e-Diasporas’ and significantly influencing the paradiplomatic initiatives of governments through cyberdiplomacy in the digital age (Barrinha & Renard, 2017). Consequently, the impact of COVID-19 has heightened digitalization, leading to the emergence of new academic literature focused on digital citizenship within the context of e-diasporas (Calzada, 2022a, 2022b). This literature encompasses various themes, including: (i) e-diasporas (Ponzanesi, 2020); (ii) digital deep borders (Amoore, 2021, 2022); (iii) blockchain technologies (Atzori, 2017; De Filippi et al., 2020; De Filippi & Lavyssi re, 2020; Dupont, 2017; Gstrein & Kochenov, 2020); (iv) algorithmic nations (Calzada, 2018; Calzada & Bustard, 2022; Cheney-Lippold, 2016); (v) cloud geographies (Orgad & Baub ock, 2018); (vi) digital and non-digital services (Lafleur & Vintila, 2020); (vii) public diplomacy and cyberdiplomacy (Bravo & De Moya, 2018; Manor, 2021; Manor & Adiku, 2021; Riordan, 2019); and (viii) digital nomadism (Cook, 2020; D’Andrea, 2006; Kannisto, 2016; Polson, 2019; Sutherland, 2014; Wang et al., 2018). Notably, public diplomacy and cyberdiplomacy indicate ongoing efforts by governments and embassies (constructed in the metaverse) to engage with e-diaspora communities through Web3 technologies (Bravo & De Moya, 2018). The Basque Government is currently undertaking paradiplomatic initiatives to connect with its diasporic citizens through digital technologies, exemplified by their development of *HanHemen*, which anticipates new migration and mobility trends shaping the worldwide Basque e-Diaspora.

There is no consensus on the definition of ‘e-diaspora’ because the concept has multiple disciplinary interpretations and media-specific variations, such as ‘digital diasporas’, ‘net-diasporas’, and ‘web-diasporas’. However, there is consensus on the profound ways in which digital connectivity has transformed the privileged aspects of spatiality, belonging, and self-identification (Ponzanesi, 2020). Thus, according to Ponzanesi (p. 977) ‘e-diasporas provide new possible cartographies to map the self in relation to increasingly complex patterns of globalization and localization, while avoiding closures and the negative effects of identity politics’. This notion of e-diaspora does not imply that the traditional (analog or face-to-face) concept of diaspora has been replaced by new digital diasporas. Instead, digital technologies facilitate, transform, and expand the possibilities for further diasporic affiliations, which are not exempt from, and in contrast, are clearly exposed to novel algorithmic and biometric disruptions characterized by ongoing digital global orders, data regulations, and cross-border transactions, including the General Data Protection Regulation (GDPR) (Finck, 2018), the California Consumer Privacy Act (CCPA), and the recent Chinese regulation called the Personal Information Protection Law (PIPL) (Calzada, 2022e).

As we observe, the notion of ‘e-diasporas’ remains valid in that it contributes to adding the digital layer to the emotional and analog layers. However, it is equally true that the digital-related risk narrative – not necessarily required to be dystopic – is largely absent in diaspora studies (Warf, 2021). Dataveillance or the loss of privacy for these diasporic affiliations is clearly not present when examining digital communications related to diasporic exchanges (Oiarzabal, 2012). Hence, the long-standing studies of e-diaspora probably need to adopt a critical data perspective and assess accordingly the cost of this massive exposure for users. Digital users are not only connected users; instead, social media platforms mediate between them, with no accountability and little scrutiny. It is necessary to grasp a timely postpandemic technopolitical notion that considers digital diasporas in a broader sense, including the side effects of hyperconnectivity and extreme

datafication. The concept of ‘e-diasporas’ questions and challenges differences and asymmetries that insidiously persist within the celebratory discourses on the abolition of digital frontiers. Furthermore, ‘e-diasporas’ goes further by suggesting that even the potential abolition of digital frontiers might present extra complexities and asymmetries around datafication and extractivism. Databases and biometrics monitor digital nomads, ensuring that national security is linked to migration and international terrorism.

Broadly speaking, the academic literature on ‘e-diasporas’ is extensive and covers a wide range of aspects. However, overall, the side-effects of the ‘hyperconnected diasporas’ are not even slightly addressed (Diminescu, 2012; Oiarzabal, 2012; Ponzanesi, 2020), nor is any alternative derived from the literature on the ‘network state’ (Srinivasan, 2022), ‘translocal geographies’ (Brickell & Datta, 2011), ‘the *diaspora* diaspora’ (Brubaker, 2005), ‘the society of algorithms’ (Burrell & Fourcade, 2021), ‘postpandemic technopolitical democracies’ (Calzada, 2022b), ‘jus algoritmi’ (Cheney-Lippold, 2016), ‘jus nexum’, ‘ordinal citizenship’ (Fourcade, 2021), ‘flexible citizenship’ (Ong, 1999), ‘DIY citizenship’ (Ratto & Boler, 2014), or ‘connectography’ (Khanna, 2016), envisioned thus far, even when e-diasporas necessitate the reshaping of digital citizenship to avoid forms of subtle surveillance, brittle dataism (Lohr, 2015) or pervasive dystopia (Isin & Ruppert, 2015; Mossberger et al., 2007).

Interestingly, however, the approach known as ‘coordinations’ or ‘network sovereignties’ (De Filippi & Schingler, 2023), which presents a perspective remarkably similar to the concept of ‘algorithmic nations’ (Calzada, 2018; Calzada & Bustard, 2022), could be considered as e-diasporic alternatives to the notion of the ‘network state’ aimed at replacing the nation-state. Furthermore, both ‘coordinations’ and ‘algorithmic nations’ – which clearly resonate with the way nation-states are currently being reshaped and rescaled through emerging digital citizenship regimes (Calzada, 2022d) – may raise compelling research questions for e-diaspora studies and, more broadly, for finding common ground in political and digital geography, as this article illustrates. Unlike the ‘network state’, ‘coordinations’ and ‘algorithmic nations’ do not seek to replace the institution of the ‘state’. Instead, they offer a fresh perspective on the existing concept of the ‘nation’, supporting and nurturing emergent networked identities. The nuanced distinction lies in the fact that ‘algorithmic nations’ prioritize participatory governance and decentralized decision-making within a self-contained domain that exists in parallel with the state. This approach leaves the opportunity open to implement the bottom up ‘right to decide’ process among community members, enabling the rescaling and alteration of the structure of the Westphalian nation-state’s fixed order and status quo. As a result, the Basque ‘algorithmic nation’ could be expanded through the *HanHemen* e-diasporic platform, as advocated by the ‘coordinations’ approach, by implementing ‘network sovereignties’ worldwide through digital nomads (Calzada, 2022f).

Within the realm of academic literature, e-diaspora cases encompass examples such as the Tamil (Jayasundara-Smits, 2022), Eritrean (Hirt & Mohammad, 2018), and Indian e-diaspora in Africa (Modi & Taylor, 2017). Additionally, the Syrian e-diaspora (Moss, 2018) and influential Jewish and Vietnamese e-diasporas engaged in advocacy and transnational mobilizations (Godwin, 2022) contribute to this body of work. However, there have been limited attempts to analyze the utilization of Internet Communication Technologies (ICTs) from the perspective of datafication and dataism, which forms the focal point of this article. As Moss (2018, p. 265) notes, ‘ICTs enable diasporas to act transnationally by facilitating ties to their places of origin and providing low-cost ways to mobilize against home-country regimes’. While this assertion remains applicable to authoritarian regimes, which have undergone extensive examination, a scarcity of research exists addressing the potential ramifications of surveillance capitalism within e-diaspora initiatives in Western liberal democracies.

In contrast, websites like www.diasporafoundation.org, which have attracted millions of users, are beginning to flourish within the e-diaspora global landscape. These platforms advocate for techno-political awareness of data privacy, ownership, and ethics in e-diaspora initiatives. Two concerns are tightly intertwined within e-diaspora initiatives: (i) the privacy and security of personal data and (ii) the consolidation of power in the hands of data-opolies (Lohr, 2015), where a few entities control centralized systems.

Consequently, 'digital nomadism' might emerge as a digital citizenship regime characterized by an extreme pattern of mobility, in conjunction with the potential use of decentralized encrypted coding such as blockchain. This could effectively address data privacy and ownership issues that 'hyperconnected diasporas' may trigger among digital citizens' interactions. Thus, 'digital nomadism' is not solely about changes in spatial behaviour but also signifies radical shifts in the nature of work and libertarian values, enabling flexible, self-determined work forms using digital resources (Barlow, 1996). Indeed, due to the pandemic, an increasing number of digital citizens are choosing to embrace a location-independent, technology-enabled lifestyle that allows them to travel and work remotely (Woldoff & Litchfield, 2021). Examples like Plumia, which aims to establish an internet country for digital nomads and advocates for 'unlocking global mobility rights for everyone' (<https://plumia.org/>; Singh, 2019), align with initiatives like the e-Residence programme introduced by Estonia for virtual residents. Based on the information available on the Plumia website, it appears to be a digital nation or virtual community striving to offer an online platform for people to engage in a shared society and culture. The website asserts that Plumia intends to create a DAO governed by its members, making decisions through a democratic process using blockchain technology. This concept could serve as inspiration for *HanHemen*. It is evident that ongoing e-diaspora models are also influenced by recent advancements in Estonia's e-residence programme (Tammppu & Masso, 2018) stemming from digital nomadism (Cook, 2022; Holleran, 2022).

However, it is yet to be determined how 'digital nomadism' will take shape under these context-aware implications, encompassing (i) distinct forms of counter-hegemonic e-diaspora practices and lifestyles, (ii) its influence as a subculture on the paradiplomatic activities of regional governments, and (iii) its role as an ideological ethos rooted in libertarian values. Consequently, it could affect the mechanisms used in peer-to-peer e-diasporic interactions through decentralized platforms and tools such as blockchain.

There are various blockchain cases beyond the mainstream Bitcoin and Ethereum (Buterin, 2022), including Sovrin and Civic as digital identity platforms. However, blockchain is not an automatic blueprint to guarantee data sovereignty or protect digital nomads' data privacy (Hughes et al., 2019). As Mahula et al. concluded (2021), 'although blockchain does contribute to achieving self-sovereign identity, it is not the silver bullet for it' (p. 495). While decentralization, transparency, and immutability could be listed as benefits of using blockchain for e-diaspora platforms (Zook, 2023), scalability, complexity, regulation (Finck, 2018), and energy consumption are clear hindrances of such technology (Calzada, 2023; Kondova & Erbguth, 2020; Naik & Jenkins, 2020). Following the rationale presented in the insightful article by Mahula et al. (2021), *HanHemen* is currently being designed through an action research-driven early-adopters online workshop scheduled for April 25, 2023 (<https://preview.mailerlite.com/p7a2k6k8t0>). This process involves co-production with end-users, offering each of them a blockchain-driven wallet to establish varying levels of data privacy (<https://xd.adobe.com/view/9358fb5f-b8bf-4575-a69b-1c2044fe81b0-c60b/screen/a4020027-80ee-4cd7-8016-f647fa942bde/>). As a result, *HanHemen* end-users may progressively become part of a blockchain-driven DAO.

DAOs have the potential to transcend geographical limitations, rendering them pertinent to e-diaspora platforms for three key reasons: (i) DAOs enable decentralized decision-making and

governance. This signifies that members of the e-diaspora community could contribute to the platform's direction and decisions, rather than relying solely on a centralized authority. This enhances the platform's responsiveness to the community's needs and interests. (ii) DAOs can establish a transparent and secure approach to managing resources and transactions. Through the utilization of blockchain technology and smart contracts, DAOs can ensure the accuracy and transparency of transaction records, eliminating the need for intermediaries or third-party trust (Micheli et al., 2023). (iii) DAOs can facilitate collective action and coordination within e-diaspora communities. By pooling resources and expertise, DAO members can collaborate to achieve common goals and address shared challenges. Nevertheless, several challenges are being considered in the context of *HanHemen*, encompassing complexity (for end-users), governance challenges (related to a consensus-driven architecture), legal issues (due to the largely unregulated field), and security risks (Stanford DAO Workshop 2022 and 2023, 2023).

However, early DAOs are currently limited in their scope around 'e-diasporas', as they lack a community of digital nomads with shared values and identity. The hyper-individualistic, crypto-libertarian ethos of the DAO pioneers, as previously expressed in *The Crypto Anarchist Manifesto*, makes building such e-diasporic communities challenging, unless they have strong connections between regional governments and global civil society (Monsees, 2019). This might be the case for the Basque e-diaspora, as it is well-suited for adopting DAO governance through blockchain from scratch, aided by the strong co-operative ethos and high social capital in the Basque Country (Calzada, 2013; Calzada & Cobo, 2015). Consequently, recent developments related to data co-operatives could also inspire steering *HanHemen* towards configuration through blockchain and DAOs. Data co-operatives could emerge from the peer-to-peer (P2P) interactions (Bauwens et al., 2019; Bühler et al., 2023b; Calzada, 2020) among *HanHemen* end-users, eventually transforming them into participants in the data and token-driven activities facilitated by the platform.

In summary, the literature review highlights opportunities for e-diaspora initiatives like *HanHemen (HH)*¹ to operate on the blockchain, considering the following points: Blockchain platforms are decentralized networks that enable the development of applications, digital identity tools, and smart contracts, facilitating global data flows among digital nomads (De Filippi et al., 2020). Blockchain may offer three benefits for projects like *HanHemen (HH)* (WEF, 2023; Werbach, 2019; Woodall & Ringel, 2020; Zichichi et al., 2022): (i) digital authentication based on self-sovereign digital identity, (ii) privacy of personal data, and (iii) ownership and ethics surrounding these personal data. Nevertheless, a significant issue identified in *HH* is the lack of specialized technical talent who are equally knowledgeable about the e-diaspora phenomenon.

The literature review highlights that e-diaspora platforms possess the potential to utilize emerging opportunities from decentralized technologies (such as blockchain, DAOs, and data co-operatives) to surpass the traditional 'hyperconnected diaspora' trend. However, the insights gained from this review underscore the significance of adopting a dynamic action research methodology. This methodology is crucial for facilitating the transition from a top-down to a bottom-up architectural approach, as detailed in the subsequent section.

Action research methodology: a transition from the centralized Basque Global Network to the blockchain-driven decentralized approach of HanHemen

Several emerging blockchain-driven platforms are equipped with decentralized and non-proprietary data ownership protocols, challenging the overhyped model of GAFAM. However, it may be too early to anticipate whether e-diaspora initiatives can entirely rely on these emerging nascent

platforms or still need to prototype further protocols (Calzada, 2023). By challenging the extractivist model, paradoxically, blockchain runs the risk of becoming a cryptocurrency tool, which may not be entirely reliable if fiduciary functions are solely considered. Data co-operatives through data sovereignty may shed light on the needs of e-diaspora projects (Bühler et al., 2023a; Calzada, 2021b).

Transition from the Basque Global Network to HanHemen

Utilizing the robust historical legacy through widespread diasporic settlements of Basque clubs (*Euskal Etxeak* in the Basque language, *Euskera*; 2022) around the world, and paying particular attention to the West-Basque-American communities settled in California, Nevada, and Idaho, alongside its increasing online dimension (Calzada & Arranz, 2022), this section examines the para-diplomatic strategic reorientation that the Basque Government undertook in April 2021. This transition aimed at making an effective shift from the top-down project *Basque Global Network* to the ongoing initiative called *HanHemen*.

The creation of *HanHemen* was a response to two significant transitions taking place within the Basque diaspora (and likely in other global diasporas) in the digital age (Calzada, 2011). The first transition involves an ongoing shift from the geographically rooted, cohesive, ethnic-based, and community-driven notion of diaspora to a scattered and detached digital citizenship. These transitions are already shaping the e-diaspora experience in the United States (Calzada & Arranz, 2022). Consequently, a second transition stems from the first: new practices, meanings, and interactions are currently emerging from the folkloric and traditional revival-like approach to the construction of a novel, remixed Basque cultural identity in real-time, bridging the gap between *there* (diaspora) and *here* (homeland).

This section aims to enhance our understanding of how the concept of the ‘hyperconnected diaspora’ can be examined through para/proto-diplomatic initiatives (McHugh, 2015; Singh, 2019). It presents a case study of the e-diaspora policy implemented by the Basque Government within its recent internationalization policy framework and diaspora strategy titled *Euskadi Basque Country: 2025 External Action Plan* (Eusko Jaurlaritza, 2022a, 2022b). The reorientation of e-diaspora policies towards digital citizenship is progressing from the previous, unsuccessful, and highly centralized project known as the *Basque Global Network*, transitioning to the new blockchain-driven, action research project named *HanHemen*. This project ensures data privacy protection, data ownership through blockchain, and digital sovereign identity.

The Basque e-diaspora case stands out due to the regional government’s approach of drawing lessons from prior initiatives like the *Basque Global Network*, primarily, and *Eusko Sare*. This approach aims to establish a new diaspora engagement mechanism and propose an alternative to extractivist global models through the utilization of blockchain technology, known as *HanHemen*. *HanHemen* represents an emerging governmental initiative that relies entirely on its global civil society, manifested through an extensive network of *Euskal Etxeak* (Basque Clubs, in *Euskera*). ‘By the end of the governmental period in 2024, its objective is to connect 2,000 Basque diasporic, digital, and global citizens worldwide through a reliable and hybrid platform’ (Eusko Jaurlaritza, 2022b, p. 378).

In the past, the *Basque Global Network* attempted to establish a social network under the banner Global Basque Community. This network aimed to interconnect different profiles of Basque citizens both abroad and in their homeland, bridging the gap in the diasporic experience and perception. However, this attempt was unsuccessful because it was built on a static and institutionally

driven rationale that failed to consider the social innovations necessary for such institutional-social dynamics. Consequently, this endeavour became a failed case study as the platform was entirely managed by an external consultancy through top-down assignments, with diasporic and digital citizens completely absent from participation and deliberation regarding the platform's activities. To overcome this limitation, a critical transition began on April 1, 2021, led by the External Affairs General Secretary of the Basque Government. This transition, as depicted in Table 1, highly prioritized liquid forms of data migration, such as 'digital nomadism'.

On Basque Diaspora Day, September 8, 2021, in Vitoria-Gasteiz, *Lehendakari* (President) Urkullu announced the launch of *HanHemen* as an inclusive initiative: 'As a new space for relationships, interaction, and collaboration, encompassing diverse experiences and placing people at the centre, *HanHemen* will ensure the inclusion of anyone who wishes to be part of the community'. The project aims 'to establish itself in the medium to long term' and underscores that it will require 'the involvement of the Global Basque Community'. The President deliberately mentioned communities as a significant legacy of the diaspora, embodied through *Euskal Etxeak*. While the Basque Government subtly acknowledges the importance of new migration patterns in the XXI century within *HanHemen*, it directly includes 'digital nomadism' as an e-diasporic pattern that may expand.

Table 1. Transition from the *Basque Global Network* to *HanHemen*.

Factors	Basque Global Network	<i>HanHemen</i>
Website	www.basqueglobalnetwork.eus	https://hanhemen.eus/en/
Period	2011–2021	2021<
Paradigm	Hyperconnected diasporas	e-Diasporas
Enabled by	Territorially rooted communities	Digital nomadism
Physical mobility	Low	High
Data migration	Weak	Intensive
Governance approach (Calzada, 2021c)	Top-down	Bottom-up
Push	Institutions	Grassroots
Focus	Institutional self-promotion	Peer-to-peer co-production
Agents	Institutions	Diasporic citizens
Institutional approach	Inward-looking	Outward-looking
Ownership of data	GAFAM	Data subjects
Privacy of data (GDPR)	Not protected	Protected
Orientation	Unidirectional	Multidirectional
Network Governance	Centralized	Decentralized
End-users	Data providers	Decision makers
Authentication/Digital ID	Third parties	Digital sovereign identity
Data flows	Data extractivism	Data sovereignty
Implementation methodology	Consultancy	Action Research
Design approach	Canvas	Prototyping
Communication	Propaganda	Dialogue
Content	Information	Experience
Foreign policy paradiplomatic practice	At the latest stage of the process only	From the beginning of the process
Paradiplomatic engagement by Global approach	Public institutions Particularism: institutional interest	Civil society Universalism: promotion of democracy and human rights
Rationale	Status quo	Change
Action driven by	Policy advocacy	Social entrepreneurship
Multistakeholder Policy Framework (Calzada & Cowie, 2017)	Triple/Quadruple Helixes	Penta Helix
Scale	Macro	Meso-Micro
Structures	Hierarchy	Networks
Data architecture	Commercial social media platforms	Blockchain-driven data interactions
Digital infrastructure	2.0 (Social media)	3.0 (DAOs/Data co-operatives)

Currently, *HanHemen* has made its appearance in the world through its website (available in English, Basque, and Spanish; <https://hanhemen.eus/en/>) and its temporary presence on the most significant social networks (*soft* identity/profile). These profiles will gradually evolve toward the digital sovereign identity of end-users (*hard* identity/profile), which will indeed form the core of the blockchain-driven platform that *HanHemen* aspires to become. The *HanHemen* platform has been developed within the framework of the *Internationalization Framework Strategy – Euskadi Basque Country: 2025 External Action Plan* (Eusko Jaurlaritzza, 2022a). This approach acknowledges the excessively institutional top-down nature of the preceding initiative, the *Basque Global Network*, which was inherited by the current Basque Government during its XII Legislative term (2020–2024), particularly by the External Affairs General Secretary, Directorate of Basque Community Abroad (Eusko Jaurlaritzza, 2022b).

Following this official announcement, as depicted in Table 2, the action research fieldwork design was developed accordingly, incorporating an online survey as a specific technique within a four-year action research project. This project was organized around four sequential and methodological steps per year: (i) design in 2021, (ii) implementation in 2022, (iii) monitoring in 2023, and (iv) evaluation in 2024. The primary quantitative objective of *HanHemen* is to gather 2,000 end-users, while the main qualitative target is to achieve this quantitative target by ensuring users' privacy and data ownership. This is why the project is currently experimenting with blockchain and engaging in co-production with end-users through DAOs (and potentially data co-operatives) via Early Adopters workshops throughout the 2023–2024 period.

Action research fieldwork design

Action research was defined by Lewin (1946, p. 35) as 'comparative research on the conditions and effects of various forms of social action and research leading to social action that uses a spiral of steps, each of which is composed of a circle of planning, action, and fact-finding about the result of the action'. Action research seeks transformative change through the simultaneous process of taking action and conducting research, which is linked through critical reflection (Bennett & Brunner, 2020; Calzada et al., 2021). This action research fieldwork has been conducted by the author of this article since April 2021 in close collaboration with the External Secretary of External Affairs of the Presidency of the Basque Government.

Consequently, the *HH* project has been designed as a transition from the *BGN* project by deeply undertaking action research during the first three sequential and methodological steps: design in 2021, implementation in 2022, and monitoring in 2023. This article presents the results of the online survey, which illustrates a representative understanding of *HH* end-users' descriptions, preferences, and expectations (i.e. digital and non-digital services; Laffleur & Vintila, 2020) and provides insights into the direction that *HH* should take in the forthcoming methodological step: evaluation in 2024. The questionnaire was designed with six dimensions and 21 questions (Q): (i) end-users; (ii) digital citizenship, languages, and maintaining ties with the homeland; (iii) social capital; (iv) Basque clubs (Euskal Etxeak) as diasporic settlements; (v) digitalization and privacy; and (vi) digital nomadism and return. These six dimensions elaborate a sequential narrative about the daily reality of Basque diasporic and digital nomads. It is noteworthy that a comprehensive understanding of respondents is necessary to fully explore the final dimension regarding digital nomadism, which gives the title to this article.

The online survey was conducted in two phases from October 2021 to January 2022. During the first phase, a sample of Basque digital and diasporic citizens was compiled from October to December 2021 by merging an established database from the *BGN* project with an intensive loyalty and

Table 2. Action research fieldwork design^a.

Duration	Functions	Methodological Sequential Steps	Timeframe	Tasks
9 Months	Transition	Design (2021)	1/4/2021-31/12/2021	<i>Inventarium</i> of BGN and rebranding with <i>HanHemen</i> (HH) Internal team facilitation: Diagnosis + focus groups External team recruitment: Blockchain developers + Communication experts
6 Months	Implementation	Implementation (2022)	1/1/2022-30/6/2022	Online Survey Design + Operationalization: (a) Sample: BGN + HH potential end-users identification. $N = 1,385$ (b) Questionnaire design (c) Pre-test (d) Emailing: $N = 1,385$ (e) Data collection: $n = 419$ respondents (f) Response-rate: 30.25% (g) Outcome dissemination: Video displaying online survey results in open access https://www.youtube.com/watch?v=N9aNI6yIx2A
6 Months			1/7/2022-31/12/2022	Webinar Series: (a) Fist Webinar. 5/7/2022: Presentation of Online Survey Results in hybrid event. Location: Homeland. Aretxabaleta (Basque Country– Spain) (b) Link to the event: https://hanhemen.eus/komunitate-globala-diaspora-biziberritzeko-prest/ (c) Second webinar. 5/11/2022: Enhancement of DAO community through hybrid event with Basque diasporic community in Kern County Basque Club (KCBC) sponsored by Fulbright Scholar-In-Residence Programme, US-UK Fulbright Commission, California State University, Bakersfield. (d) Location: Diaspora. Bakersfield (California – USA) (e) Link: https://wiserd.ac.uk/news/dr-igor-calzada-successfully-culminates-his-role-as-fulbright-scholar-in-residence-in-california/
2 Years		Monitoring (2023)	1/1/2023-31/12/2023	Blockchain-driven Digital ID development: (a) <i>Soft</i> : 2.0 identity by compiling with GDPR data privacy protection and digital rights through privacy wallet (Mahula et al., 2021). (b) Link to the Call for the Early Adopters events (25/04/2023–19/12/2023): https://preview.mailerlite.com/p7a2k6k8t0 (c) Link to the Beta version prototype of privacy wallet to be used in coproduction sessions with Early Adopters in April and December2023: (d) https://xd.adobe.com/view/9358fb5f-b8bf-4575-a69b-1c2044fe81b0-c60b/screen/a4020027-80ee-4cd7-8016-f647fa942bde/ (e) Prototyping session: https://app.preely.com/test/TH02uCz7mqRzFCQrGag8cEAaNjaeYW
		Evaluation (2024)	1/1/2024-31/12/2024	Blockchain-driven Digital ID development: (a) <i>Hard</i> : Blockchain-driven DAO identity to build DAO community based on BakQ digital identity/certificate issued by the Basque Government through the new Diaspora Law that will be released in 2024 that legitimize the establishment of a digital identity for diasporic/digital Basque citizens overseas.

^aThe abbreviations BGN and HH have been utilized for *Basque Global Network* and *HanHemen* respectively. These abbreviations will continue to be used throughout the article to enhance readability.

branding campaign that included direct emails in January 2022. As a result, a sample of 1385 (=N) Basque digital and diasporic citizens was established. In the second phase, data collection was carried out from February 1 to March 31, 2022. All data were accurately anonymized to comply with GDPR regulations and ensure the data privacy of all respondents. A total of 419 (=n) responses were received, resulting in a response rate of 30.25%.

So far, three action research fieldwork events have been organized: (i) The main findings of the online survey were presented on July 5, 2022, from the local village of Aretxabaleta through the first digital encounter of *HH*, bringing together Basque, digital, and diasporic citizens worldwide. (ii) On December 5, 2022, the author of this article, along with the Basque Government and California State University, Bakersfield (CSUB), organized a hybrid event with the Basque diasporic community in KCBC. (iii) *HH* Early Adopters events are scheduled for April 25 and December 19, 2023, to test the *beta* version of the blockchain-driven privacy wallet (Mahula et al., 2021) with a selected group of end-users worldwide, ensuring compliance with GDPR data privacy protection and digital rights. This event is referred to as *soft* and aims to test the feasibility of the on-boarding process and address log-in issues with Early Adopters. The next set of events will focus on DAO co-production in 2024 and will be called *hard*, gradually building the blockchain-driven DAO community using the official BakQ digital identity/certificate issued by the Basque Government. This framework is aligned with the new Diaspora Law that will be announced in 2024. Over time, data co-operatives could emerge from the peer-to-peer (P2P) data interactions, flows, and transfers among *HH* end-users and potential co-op members.

The action research fieldwork design was initiated on April 1, 2021, with two primary objectives: (i) To facilitate a strategic and operational transition from *BGN* to *HH*. (ii) To implement these changes using action research techniques, including: (ii.a) Rebranding; (ii.b) Conducting focus groups with civil servants; (ii.c) Establishing an external team; (ii.d) Designing and operationalizing an online survey; (ii.e) Designing and operationalizing a webinar series; (ii.f) Ensuring compliance of the 2.0 identity with data privacy (*soft* identity; privacy wallet); and (ii.g) Developing a blockchain-driven digital ID and building a DAO community (*hard* identity; BakQ) throughout the entire action research process.

The research design intentionally avoided incorporating political matters concerning the homeland within the online survey. This decision was based on the *HH* platform's inclusive nature, which accommodates various political preferences without differentiation, aiming to foster a common and cooperative environment among Basque diasporic/digital fellows. Notably, the Basque Government's guiding principle is *auzolan*, signifying community development. Aspects related to digital literacy were excluded from the survey due to their planned evaluation during Early Adopters online workshops in 2023. Accessibility and user experience were assessed during the second methodological sequential step, Implementation, through two workshops as detailed in Table 2. This approach aligns with the scalability and experimentation rationale inherent in action research (Bradbury, 2015), a guiding principle that *HH* seeks to embody through its platform.

Results and findings: *HanHemen* online survey

The six sections of the questionnaire provided a broad picture of the potential end-user experience of *HH* and how blockchain could be used through a gradual design of the DAO, allowing to some extent a digital nomadism-related emerging citizenship regime amid the Basque e-diaspora. This section describes the responses received from 419 respondents and the main findings presented in return to respondents on July 5, 2022, during the 1st Webinar Series (HanHemen, 2022).

End-users

While 67% of respondents lived outside the Basque Country,² 33% lived inside it. The results presented hereafter refer to the former as active digital, diasporic, and global Basque citizens, despite the fact that *HH* end-users will be those not only living outside the Basque Country (*handarrak*) but also those maintaining ties with the diaspora from within (*hemendarrak*): in fact, *HH* aims to bridge this global gap between *handarrak* and *hemendarrak*. The online survey identified those living in the diaspora (*handarrak*) across 28 countries, as depicted in [Figure 1](#). The largest concentration of them was found in Argentina, Spain, the United States, and Uruguay (Q1).³

When asked whether they feel a part of the Basque e-diaspora, an overwhelming majority of 70% agreed, while 18% disagreed, and 12% hesitated. This may suggest that several people did not feel directly or closely associated with the traditional values of the Basque diaspora as they have been promoted so far. *HH* aims to integrate all sensibilities in an inclusive manner without leaving anyone behind (Q2).

Digital citizenship, languages, and maintaining ties with the homeland

When asked whether they feel they are Basque global citizens, a large majority agreed (83%), whereas a small number disagreed (5%), and 12% indicated that they did not know exactly what a ‘global citizen’ means (Arendt, 1958). This might resonate with the need to embrace a plethora of experiences around the phenomenon of globalization, as elucidated in this article (Q3).

In a similar vein, the language habits of respondents were as follows: Spanish (98%), English (70%), Basque-*Euskera* (45%), French (26%), and Others (28%). It is remarkable that those living outside the Basque Country keep *Euskera* alive (Q4).

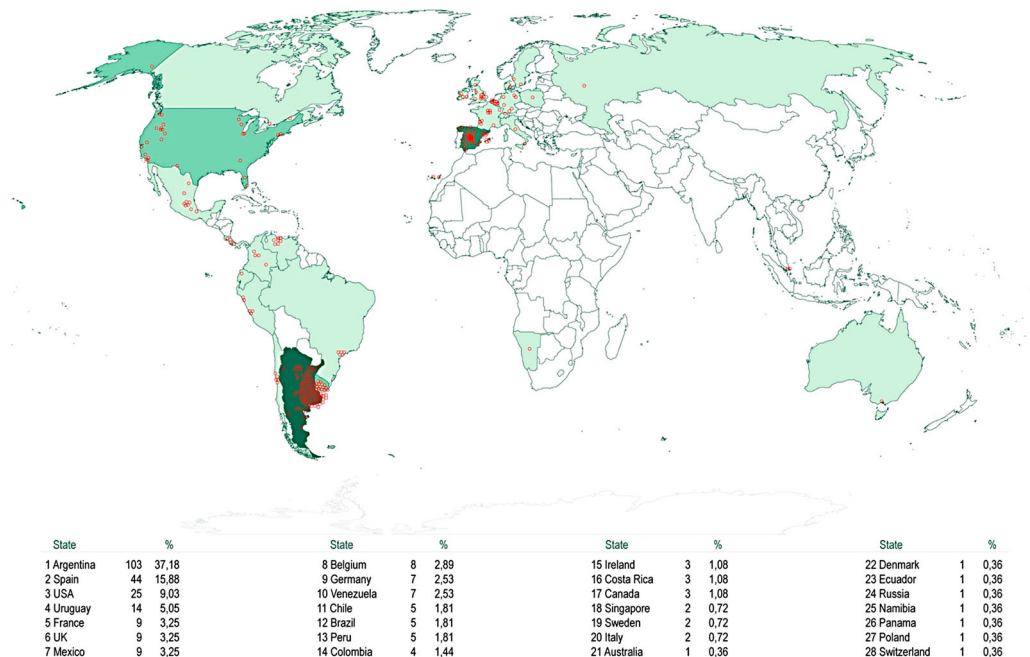


Figure 1. *HH* online survey respondents’ distribution in 28 countries.

When asked about their level of interest in maintaining ties with the homeland, 82% replied ‘very much’, 11% ‘sometimes’, and 7% ‘depending on the context’; almost nobody responded, ‘No, I have no interest at all’, which indicates an existing critical mass to articulate *HH* as a decentralized network (Q5).

Social capital

Regarding the Basque Government’s facilitation of the e-diaspora through nurturing social capital and trust among diasporic fellow citizens, respondents indicated their perceived support abroad as follows: Strong (28%), Moderate (40%), Weak (22%), and No support at all (10%). Social capital from the Basque Government should be reinforced through *HH*. Respondents suggested webinar series and hybrid events facilitated by the Basque Government as a means to strengthen social capital, utilizing encrypted protocols driven by blockchain and digital sovereign ID (Mahula et al., 2021; *hard* profile/identity), and gradually establishing deliberative protocols through tokens, and setting up a DAO (WEF, 2023) (Q6).

Among the respondents, 63% follow the news and remain consistently connected with events in the Basque homeland, while 29% responded ‘sometimes’, 2% ‘depending on the topic’, and 6% ‘not at all’ (Q7).

Respondents selected gastronomy and community life as the primary activities they miss when abroad. Significantly, these two activities are among those more commonly replicated as part of a folkloric revival through Basque clubs (www.euskaletxeak.eus; Calzada, 2011) (Q8).

Basque clubs (*Euskal Etxeak*) as diasporic settlements

Given that *HH* aims to facilitate peer-to-peer interaction while safeguarding the personal data privacy of end-users (Calzada, 2022e), the online survey explored the modes of interaction among diasporic citizens.

When asked whether they maintain contact with other Basque citizens abroad, almost 50% responded ‘a lot’ (more than 5 people in their network), 37% ‘sometimes’ (between 1 to 5 people in their network), and 13% ‘not at all’ (without contacts). As observed, Basque diasporic citizens abroad tend to maintain existing connections and establish new ones, with Basque clubs inevitably playing a crucial role in fostering community cohesion (Q9).

When asked if they were located near a Basque club, 65% answered ‘yes’, while 28% responded with ‘no’, and 7% were unaware of any nearby Basque clubs. As a result, Basque clubs, through their existing website (www.euskaletxeak.eus), will be integrated and more effectively linked at <https://hanhemen.eus/en/>. While each platform has a distinct scope, the former could contribute to the latter by serving as *ambassadors* and administrators of regional tokens through the DAO (Q10).

Among those who have a Basque club nearby, 50% tend to visit regularly (three times a year), while the remaining 50% visit very infrequently. The pandemic has inevitably altered the socializing habits of many people, leading to a shift in the role of Basque clubs from exclusively offline events to hybrid and even entirely online activities (Q11).

The online survey inquired whether respondents would be willing to participate in a decentralized platform that protects their personal data through blockchain and offers various digital services, similar to the e-Residence programme of Estonia (Tammppu & Masso, 2018). In other words, would they be willing to join a DAO, retaining control over their personal data and interactions, and determining which data to share with third parties like GAFAM? 70% responded ‘yes’

while only 1% responded ‘no’. Unsurprisingly, the remaining 29% answered ‘depending on the context’. In conclusion, this response indicates significant support for scaling up the action research project as designed (Q12).

In response to the query ‘depending on the context’, the answers included ‘for secure interactions’, ‘seeking contacts’, ‘project proposals’, and ‘being part of a community’ (Q13).

Digitalization and privacy

The online survey revealed a significant finding regarding how respondents perceived the impact of the postpandemic era on digitalization (Calzada, 2022b), particularly their preferences for online, offline, or hybrid events: 42% favoured hybrid events, while 37% preferred online events over offline events, and nearly 21% favoured offline events over online events. Consequently, *HH* has been established as a hybrid but predominantly online format (79%), as evidenced by the first digital encounter that took place on July 5, 2022, and the upcoming webinar series scheduled for December 2023 (Q14).

However, when queried about their preferences (Lafleur & Vintila, 2020), Basque culture and customs were clearly evident in respondents’ primary choice of face-to-face interaction (43%), followed by hybrid (40%), online only (9%), and any format (8%) (Q15).

When questioned about the impact of the COVID-19 pandemic on habits related to digital formats and social media, 61% of respondents clearly indicated that there has been an increase in digitalization and datafication following the pandemic. In contrast, 37% responded that their usage of digital formats remained similar to before, and only 2% reported consuming ‘less’ digital and data formats (Q16).

It is important to note that we recently experienced a pandemic that limited physical contact, leading to an accelerated adoption of online spaces. This surge primarily arose from the utilization of social media due to the diverse offerings they provide, along with the extensive and intensive data extraction they employ. Respondents primarily used WhatsApp, Facebook, Twitter, Instagram, and LinkedIn. However, the majority of end-users clearly perceived commercial and proprietary-owned GAFAM social media platforms to be untrustworthy. Consequently, the *HH* platform needs to ensure security to encourage proactive engagement from end-users (Q17).

In terms of privacy, the online survey yielded clear findings that directly impact *HH*. The citizens of the Basque e-diaspora made it unequivocally evident that they are unwilling to share their personal data with third parties under any circumstances. A significant 84% emphasized their concerns about data privacy (Veliz, 2020), which itself serves as substantial validation for this study. Keeping this in mind, *HH* must be constructed with robust elements that facilitate decentralization through blockchain and encrypted digital ID, ensuring its digital sustainability (Zook, 2023). The issue of privacy becomes even more pronounced for Basque diasporic citizens (Q18).

Regarding data privacy and decentralized architecture, respondents expressed a demand for ‘keeping their data secure and private’, ‘refraining from selling personal data to third parties’, and ‘utilizing blockchain privacy wallets to maintain a sovereign digital identity’ (Mahula et al., 2021) (Q19).

In summary, the key to success may lie in implementing a simple authentication system (*hard* profile/identity), coupled with a moderate and cautious approach to the use of social media (*soft* profile/identity).

Digital nomadism and return patterns

In relation to their mobility patterns, participants were asked about their self-perception concerning the concept of digital nomads (individuals who change their place of living every two years; Cook, 2020). Among the respondents, 62% answered 'yes', 23% responded with 'no', and 15% were unfamiliar with this term. This outcome should be viewed as the initial point for a potential trend towards 'digital nomadism' among Basque e-citizens. Traditionally, Basque culture and traditions have encouraged citizens to remain deeply rooted in the land. Given that 50% of digital citizens are well-connected with each other (Q9) and 84% expressed concerns about data privacy (Q18), the fact that 62% may be changing their place of living every two years signifies a notable development in considering 'digital nomadism' as a growing digital citizenship paradigm within the Basque e-diaspora. Consequently, data interconnect individuals aspiring to lead a placeless lifestyle through digital transactions, creating new forms of 'citizenship by connection' directly related to 'digital nomadism'.

Furthermore, upon examining their global mobility itineraries⁴ over the past two years (Q20), the trend of 'digital nomadism' becomes even more apparent.

Finally, when asked about returning, 64% stated, 'Yes, depending on opportunities', whereas 25% hesitated and 11% responded, 'No, I will not return'. Consequently, *HH* should establish bridges and reinforce peer-to-peer interactions (Q21).

Conclusions

This article has presented the findings of an online survey conducted as part of a broader action research project initiated on April 1, 2021, known as *HH*, with the aim of replacing the unsuccessful *BGN* project. The online survey has shed light on the preliminary identification of potential end-users for *HH*. The results currently guide the development of *HH*, a blockchain-driven e-diaspora platform that seeks to leverage the full potential of a DAO and address the privacy implications of the mainstream model through 'hyperconnected diasporas'. This article has demonstrated the ongoing transition towards *HH* by discussing the pros and cons of the continued experimentation with blockchain, DAOs, and potentially data co-operatives.

Grounded in the findings of the online survey, this article outlines two strategies for challenging 'hyperconnected diasporas' through e-diaspora initiatives like *HH*. Firstly, the results of Q18 revealed that 'hyperconnected diasporas' relying solely on Big Tech social media platforms can undermine trust and diasporic social capital among governments and fellow digital citizens. Respondents clearly expressed privacy concerns in their diasporic interactions with peers and institutions: 84% indicated data privacy concerns. Secondly, drawing from insights gained in previous projects like *BGN*, the launch of the *HH* action research project became feasible. This project employs blockchain (via DAOs) to ensure data privacy and ownership in diaspora engagement and paradiplomatic activities. The ongoing process has already successfully identified a critical mass of 1,395 potential users and 419 confirmed end-users for *HH*.

While e-diasporas are not novel phenomena, this article concludes that they may have been reshaped due to three primary contextual conditions over the past few years: postpandemic circumstances, digitalization, and new modes of interaction among peer diasporic communities (Calzada, 2022b). Over the course of decades, the Basque diaspora has solidified into a translocal community, becoming institutionalized on the American continent through an extensive network of Basque clubs. With this in mind, the Basque Government began identifying a new wave of global, highly

mobile, and almost-nomadic emerging digital and diasporic citizens who are not necessarily tied to a specific territorially rooted community. As a result, 62% of respondents in the online survey considered ‘digital nomadism’ a viable option, indicating that the findings are persuasive regarding the necessity for *HH*. Alongside this potential ‘digital nomadism’ pattern, it is noteworthy that these individuals are well-connected and deeply concerned about data privacy. Therefore, the rationale behind *HH* received strong support from respondents, and the foundations and the work-in-progress action research methodology could be well-positioned, driven by blockchain, and eventually implemented as a DAO (while also establishing data co-operatives).

The literature review revealed three context-aware implications regarding ‘digital nomadism’. The results and findings from the online survey respond to them as follows: (i) The *HH* e-diaspora platform may enable counter-hegemonic e-diaspora practices and lifestyles among end-users; (ii) Given these decentralized logics and their P2P practices, regional government paradiplomatic activities will be noticeably influenced towards more liquid forms of collaborative governance (Anshell & Gash, 2008). (iii) In the context of *HH*, ‘digital nomadism’ may primarily stem from talent-driven managerial policies, despite the possibility of it being underpinned by an original ideological ethos rooted in libertarian values. The *HH* online survey thus confirmed that the practice of ‘digital nomadism’ can be expanded alongside peer-to-peer e-diasporic interactions through decentralized platforms and tools such as blockchain that ensure data privacy, allowing for the establishment of DAOs and the creation of data-cooperatives among *HH* end-users and members.

This article responds as follows to both research questions:

- (i) *HH* is paving the way toward digital ID authentication channelled through blockchain to further avoid privacy issues and data ownership dispossession from third parties. Drawing on insights and caveats presented by Mahula et al. (2021) regarding blockchain, the *HH* platform is striving to fully comply with data privacy policies outlined in the GDPR. This includes testing privacy wallets for self-sovereign identity as proposed by Naik and Jenkins (2020) and Kondova and Erbguth (2020). However, Finck (2018, p. 88) firmly argues that ‘applying the GDPR to blockchain-based applications’ raises issues related to both centralization and decentralization. In doing so, blockchain (in the near future DAOs) could manage hard ID authentication through a wallet that will be owned by each *HH* end-user, while social media will be moderately used (not being the key element of the platform) without sharing personal data with third parties, namely GAFAM. Therefore, *HH* aims to establish a community of Basque digital and diasporic citizens who can share personal data in an environment that protects users’ privacy, data ownership, digital rights, and data sovereignty (Zhang & Morris, 2023). According to De Filippi et al. (2020), blockchain and DAOs (eventually data co-operatives too; Bühler et al., 2023a, 2023b) are promising digital software and protocols to ensure confidence, reinforce trust, and tackle the challenge for regional governments such as the Basque Government to establish and facilitate peer-to-peer platforms like *HH*. Consequently, ‘digital nomadism’ could be fostered without being trapped in the risky environment of ‘hyperconnected diasporas’. Furthermore, this approach may indeed serve to establish paradiplomatic activities of the Basque Country understood as an ‘algorithmic nation’, which may aim to foster ‘coordi-nations’ and ‘networked sovereignties’ with data subjects globally (Calzada, 2018; De Filippi & Schingler, 2023).
- (ii) Paradiplomacy should be driven by trusted networks of peer diasporic citizens, rather than large-scale campaigns and slogans. Furthermore, online survey results support the preference of end-users for ensuring their data privacy and embracing digital nomadism. However, current advancements in DAOs (and data co-operatives) are limited and focused on activities that are not related to

e-diaspora yet (<https://daostack.io/>). Although these activities will likely advance the emergence of e-diasporic platforms like *HH*, actively benchmarking the horizon is a necessary task.

This article acknowledges limitations associated with the nascent technological developments around blockchain, DAOs, and data co-operatives but equally suggests several lines of action through the *HH* project (Calzada, 2023). Consequently, new research avenues around the *translocated* phenomenon of e-diasporas should merge notions around digital nomadism and the technopolitics of data from a transdisciplinary perspective by resulting in a set of case studies driven by blockchain, DAOs, and data co-operatives.

Notes

1. The abbreviations BGN and HH have been utilized for Basque Global Network and HanHemen respectively. These abbreviations will continue to be used throughout the article to enhance readability.
2. Basque Country in the questionnaire was defined as the Basque Autonomous Community, Navarre Chartered Community, and French Pays Basque (Calzada, 2018).
3. Q means question number, this is a just methodological note.
4. Digital citizens combined very diverse global itineraries: Spain/Germany/Netherlands, UK/France/Emirates/USA, UK/Spain/USA, Singapore/Malaysia, France/Canada, Canada/Russia/Lithuania/Senegal/France, Chile/Argentina/Ireland, Mexico/Colombia/Singapore/Panama, China/UK/Belgium, Guatemala/Costa Rica/Belgium/Netherlands/Switzerland, USA/Italy/Philippines, among others.

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References

- Agnew, J. (1994). The territorial trap: The geographical assumptions of international relations theory. *Review of International Political Economy*, 1(1), 53–80. <https://doi.org/10.1080/09692299408434268>
- Al-Saqaf, W., & Seidler, N. (2017). Blockchain technology for social impact: Opportunities and challenges ahead. *Journal of Cyber Policy*, 2(3), 338–354. <https://doi.org/10.1080/23738871.2017.1400084>
- Amoore, L. (2021). The deep border. *Political Geography*. <https://doi.org/10.1016/j.polgeo.2021.102547>
- Amoore, L. (2022). Machine learning political orders. *Review of International Studies*, 49, 20–36. <https://doi.org/10.1017/S0260210522000031>
- Andrade, C. (2020). The limitations of online surveys. *Indian Journal of Psychological Medicine*, 42(6), 575–576. <https://doi.org/10.1177/0253717620957496>
- Anshell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Arendt, H. (1958). *The human condition*. University of Chicago Press.
- Atzori, M. (2017). Blockchain technology and decentralized governance: Is the state still necessary? *Journal of Governance and Regulation*, 6(1), 45–62. https://doi.org/10.22495/jgr_v6_i1_p5
- Ball, H. L. (2019). Conducting online surveys. *Journal of Human Lactation*, 35(3), 413–417. <https://doi.org/10.1177/0890334419848734>
- Barlow, J. P. (1996). *A declaration of the independence of cyberspace*. <https://vimeo.com/111576518?ref=tw-v-share>
- Barrinha, A., & Renard, T. (2017). Cyber-diplomacy: The making of an international society in the digital age. *Global Affairs*, 3(4-5), 353–364. <https://doi.org/10.1080/23340460.2017.1414924>
- Bauböck, R. (2018). *Debating transformations of national citizenship*. Springer International Publishing.

- Bauwens, M., Kostakis, V., & Pazaitis, A. (2019). *Peer to peer: The commons manifesto*. University of Westminster Press.
- Bennett, H., & Brunner, R. (2020). Nurturing the buffer zone: Conducting collaborative action research in contemporary contexts. *Qualitative Research*, 22(1), 74–92. <https://doi.org/10.1177/1468794120965373>
- Bignami, F., Calzada, I., Hanakata, N., & Tomasello, F. (2022). Data-driven citizenship regimes in contemporary urban scenarios: An introduction. *Citizenship Studies*, 27(2), 145–159. <https://doi.org/10.1080/13621025.2022.2147262>
- Bradbury, H. (2015). *The SAGE handbook of action research*. SAGE.
- Bravo, V., & De Moya, M. (2018). Mexico's public diplomacy efforts to engage its diaspora across the border: Case study of the programs, messages, and strategies employed by the Mexican Embassy in the United States. *Public Diplomacy of Rising and Regional Powers*, 3(3), 173–193.
- Brenda, S. A. Y., & Collins, F. L. (2022). *Handbook on transnationalism*. Edward Elgar.
- Brickell, K., & Datta, A. (2011). *Translocal geographies: Spaces, places, connections*. Routledge.
- Brubaker, R. (2005). The 'diaspora' diaspora. *Ethnic and Racial Studies*, 28(1), 1–19. <https://doi.org/10.1080/0141987042000289997>
- Bucher, T. (2012). Want to be on top? Algorithmic power and the threat of invisibility on Facebook. *New Media & Society*, 14(7), 1164–1180. <https://doi.org/10.1177/1461444812440159>
- Bühler, M. M., Calzada, I., Cane, I., Jelinek, T., Kapoor, A., Mannan, M., Mehta, S., Mookerjee, V., Nübel, K., Pentland, A., Scholz, T., Siddarth, D., Tait, J., Vaitla, B., & Zhu, J. (2023a). Unlocking the power of digital commons: Data cooperatives as a pathway for data sovereign, innovative and equitable digital communities. *Digital*, 3(3), 146–171. <https://doi.org/10.3390/digital3030011>
- Bühler, M. M., Calzada, I., Cane, I., Jelinek, T., Kapoor, A., Mannan, M., Mehta, S., Mookerjee, V. S., Nübel, K., Pentland, A., Scholz, T., Siddarth, D., Tait, J., Vaitla, B., & Zhu, J. (2023b). Harnessing Digital Federation Platforms and Data Cooperatives to Empower SMEs and Local Communities. TF-2: Our Common Digital Future: Affordable, Accessible, and Inclusive Digital Public Infrastructure. G20/T20 Policy Brief. <https://doi.org/10.13140/RG.2.2.22347.98083/1>
- Burrell, J., & Fourcade, M. (2021). The society of algorithms. *Annual Review of Sociology*, 47(1), 213–237. <https://doi.org/10.1146/annurev-soc-090820-020800>
- Buterin, V. (2022). *Proof of stake: The making of Ethereum and the philosophy of blockchains*. Seven Stories.
- Calzada, I. (2011). *¿Hacia una Ciudad Vasca-Euskal Hiria? Aproximación desde la Innovación Social*. Servicio de Publicaciones del Gobierno Vasco.
- Calzada, I. (2013). Knowledge building & organizational behaviour: Mondragon case. In F. Moulaert, D. MacCallum, A. Mehmood, & A. Hamdouch (Eds.), *International handbook of social innovation. Social innovation: Collective action, social learning and transdisciplinary research* (pp. 219–229). Edward Elgar (UK) Publishing. <https://doi.org/10.13140/RG.2.2.30748.69766>. ISBN: 978 1 78254 559 0.
- Calzada, I. (2018). 'Algorithmic nations': Seeing like a city-regional and techno-political conceptual assemblage. *Regional Studies, Regional Science*, 5(1), 267–289. <https://doi.org/10.1080/21681376.2018.1507754>
- Calzada, I. (2020). Platform and data co-operatives Amidst European pandemic citizenship. *Sustainability*, 12(20), 8309. <https://doi.org/10.3390/su12208309>
- Calzada, I. (2021a). Pandemic citizenship: Will COVID-19 reinforce nation-states' borders and liquify citizens? *Academia Letters*, Article 910. <https://doi.org/10.2935/AL910>
- Calzada, I. (2021b). Data Co-operatives through data sovereignty. *Smart Cities*, 4(3), 1158–1172. <https://doi.org/10.3390/smartcities4030062>
- Calzada, I. (2021c). *Smart city citizenship*. Elsevier. ISBN: 978-0-12-815300-0. <https://doi.org/10.1016/c2017-0-02973-7>
- Calzada, I. (2021d). The right to have digital rights in smart cities. *Sustainability*, 13(20), 11438. <https://doi.org/10.3390/su132011438>
- Calzada, I. (2022a). Emerging digital citizenship regimes: Pandemic, algorithmic, liquid, metropolitan, and stateless citizenships. *Citizenship Studies*, 27(2), 160–188. <https://doi.org/10.1080/13621025.2021.2012312>
- Calzada, I. (2022b). *Emerging digital citizenship regimes: Postpandemic technopolitical democracies*. Emerald. ISBN: 9781803823324. <https://doi.org/10.1108/9781803823317>
- Calzada, I. (2022c). Hyperconnected diasporas. *AEMI Journal*, 2021/2022, 49–68. <https://doi.org/10.13140/RG.2.2.23399.73127/1>

- Calzada, I. (2022d). How digital citizenship regimes are rescaling European nation-states. *Space and Polity*, 26(1), 44–52. <https://doi.org/10.1080/13562576.2022.2072197>
- Calzada, I. (2022e). Citizens' data privacy in China: The state-of-the-art of the Personal Information Protection Law (PIPL). *Smart Cities*, 5(3), 1129–1150. <https://doi.org/10.3390/smartcities5030057>
- Calzada, I. (2022f). Postpandemic technopolitical democracy: Algorithmic nations, data sovereignty, digital rights, and data cooperatives. In J. Zabalo, I. Filibi, & L. Escacedo (Eds.), *Made-to-Measure future(s) for democracy? Views from the Basque Atalaia* (pp. 97–117). Springer. ISBN: 978-3-031-08607-6. Online ISBN: 978-3-031-08608-3. https://doi.org/10.1007/978-3-031-08608-3_6.
- Calzada, I. (2023). Disruptive technologies for e-diasporas: Blockchain, DAOs, Data Cooperatives, Metaverse, and ChatGPT. *Futures*, 154(C), 103258. <https://doi.org/10.1016/j.futures.2023.103258>
- Calzada, I., & Arranz, I. (2022). Western US Basque-American e-diaspora: Action research in California, Idaho, and Nevada. *Societies*, 12(6), 153. <https://doi.org/10.3390/soc12060153>
- Calzada, I., & Bustard, J. (2022). The dilemmas around digital citizenship in a post-brexit and post-pandemic Northern Ireland: Towards an algorithmic nation? *Citizenship Studies*, 27(2), 271–292. <https://doi.org/10.1080/13621025.2022.2026565>
- Calzada, I., & Cobo, C. (2015). Unplugging: Deconstructing the smart city. *Journal of Urban Technology*, 22(1), 23–43. <https://doi.org/10.1080/10630732.2014.971535>
- Calzada, I., & Cowie, P. (2017). Beyond smart and data-driven city-regions? Rethinking stakeholder-helices strategies. *Regions Magazine*, 308(4), 25–28. <https://doi.org/10.1080/13673882.2017.11958675>
- Calzada, I., Pérez-Battle, M., & Battle-Montserrat, J. (2021). People-Centered smart cities: An exploratory action research on the cities' coalition for digital rights. *Journal of Urban Affairs*, 45(10), 1537–1562. <https://doi.org/10.1080/07352166.2021.1994861>
- Cancela, E. (2023). *Utopías digitales: Imaginar el Fin del capitalismo*. Verso.
- Cheney-Lippold, J. (2016). Jus algoritmi: How the national security agency remade citizenship. *International Journal of Communication*, 10(2016), 1721–1742.
- Chouliaraki, L., & Georgiou, M. (2022). *The digital border: Migration, technology, power*. NYC Press.
- Cook, D. (2020). The freedom trap: Digital nomads and the use of disciplining practices to manage work/leisure boundaries. *Information Technology & Tourism*, 22(3), 355–390. <https://doi.org/10.1007/s40558-020-00172-4>
- Cook, D. (2022). Breaking the contract: Digital nomads and the state. *Critique of Anthropology*, 42(3), 304–323. <https://doi.org/10.1177/0308275X221120172>
- D'Andrea, A. (2006). Neo-nomadism: A theory of post-identitarian mobility in the global Age. *Mobilities*, 1(1), 95–119. <https://doi.org/10.1080/17450100500489148>
- Debell, M., Wilson, C., Jackman, S., & Figueroa, L. (2021). Optimal response formats for online surveys: Branch, grid, or single item? *Journal of Survey Statistics and Methodology*, 9(1), 1–24. <https://doi.org/10.1093/jssam/smz039>
- De Filippi, P., & Lavayssi re, X. (2020). *Blockchain technology: Toward a decentralized governance of digital platforms? The great awakening: New modes of life amidst capitalist ruins*. Punctum Book.
- De Filippi, P., Mannan, M., & Reijers, W. (2020). Blockchain as a confidence machine: The problem of trust & challenges of governance. *Technology in Society*, 62(101284), 101284–14. <https://doi.org/10.1016/j.techsoc.2020.101284>
- De Filippi, P., & Schingler, J. K. (2023). *Coordi-nations: A new institutional structure for global cooperation*. <https://jessykate.medium.com/coordi-nations-a-new-institutional-structure-for-global-cooperation-3ef38d6e2cfa>
- Diminescu, D. (2012). Introduction: Digital methods for the exploration, analysis, and mapping of e-diasporas. *Social Science Information*, 51(4), 451–458. <https://doi.org/10.1177/0539018412456918>
- Dupont, Q. (2017). Blockchain identities: Notational technologies for control and management of abstracted entities. *Metaphilosophy*, 48(5), 634–653. <https://doi.org/10.1111/meta.12267>
- Echeverr a, J. (1994). *Tel polis*. Destino.
- Eusko Jaurlaritza. (2022a). *Internationalisation framework strategy – Euskadi Basque Country: 2025 external action plan*. Servicio Central de Publicaciones del Gobierno Vasco.
- Eusko Jaurlaritza. (2022b). *Legislatura XII: 2020-2024*. <https://www.euskadi.eus/planificacion-de-la-xii-legislatura/web01-s1leheko/es/>

- Ferreira, S. (2022). *Welcome to digital Nomadland*. <https://www.wired.com/story/digital-nomad-village-madeira-portugal/>
- Finck, M. (2018). *Blockchain regulation and governance in Europe*. Cambridge University Press.
- Forestal, J. (2020). Constructing digital democracies: Facebook, Arendt, and the Politics of Design. *Political Studies*, 69(1), 26–44. <https://doi.org/10.1177/0032321719890807>
- Fourcade, M. (2021). Ordinal citizenship. *The British Journal of Sociology*, 72(2), 154–173. <https://doi.org/10.1111/1468-4446.12839>
- Godwin, M. (2022). ‘Let my people go’: Diaspora mobilization for the human rights of political prisoners. *Globalizations*, 19(2), 322–336. <https://doi.org/10.1080/14747731.2021.1884328>
- Gorwa, R. (2019). What is platform governance? *Information, Communication & Society*, 22(6), 854–871. <https://doi.org/10.1080/1369118X.2019.1573914>
- Gstrein, O. J., & Kochenov, D. (2020). Digital identity and distributed ledger technology: Paving the way to a neo-feudal brave new world? *Frontiers in Blockchain*, 3(10). <https://doi.org/10.3389/fbloc.2020.00010>
- HanHemen. (2022). Video presented on 5th May 2022 in the First Digital Encounter of HanHemen. <https://www.youtube.com/watch?v=N9aNI6ylx2A>; Press Note: <https://hanhemen.eus/es/euskal-komunitate-globala-diaspora-biziberritzeko-prest/>
- Hintz, A., Dencik, L., & Wahl-Jorgensen, K. (2019). *Digital citizenship in a datafied society*. Polity.
- Hirt, N., & Mohammad, A. S. (2018). By way of patriotism, coercion, or instrumentalization: How the Eritrean regime makes use of the diaspora to stabilize its rule. *Globalizations*, 15(2), 232–247. <https://doi.org/10.1080/14747731.2017.1294752>
- Ho, E. L. E., & McConnell, F. (2017). Conceptualizing ‘diaspora diplomacy’: Territory and populations betwixt the domestic and foreign. *Progress in Human Geography*, 43, 235–255. <https://doi.org/10.1177/0309132517740217>
- Holleran, M. (2022). Pandemics and geoarbitrage: Digital nomadism before and after COVID-19. *City*, 26(5–6), 831–847. <https://doi.org/10.1080/13604813.2022.2124713>
- Hubbard, S. (2023). *Decentralized autonomous organizations and policy considerations in the United States*. Belfer Center, Harvard.
- Hughes, L., Dwivedi, Y. K., & Misra, S. K. (2019). Blockchain research, practice, and policy: Applications, benefits, limitations, emerging research themes and research agenda. *International Journal of Information Management*, 49, 114–129. <https://doi.org/10.1016/j.ijinfomgt.2019.02.005>
- Inwood, O., & Zappavigna, M. (2021). Ideology, attitudinal positioning, and the blockchain: A social semiotic approach to understanding the values construed in the whitepapers of blockchain start-ups. *Social Semiotics*, 33(0), 451–469. <https://doi.org/10.1080/10350330.2021.1877995>
- Isin, E., & Ruppert, E. (2015). *Being digital citizens*. Rowman & Littlefield.
- Jayasundara-Smits, S. (2022). Tamil diaspora activism in the post-liberal international order: Navigating politics and norms. *Globalizations*, 19(1), 81–101. <https://doi.org/10.1080/14747731.2020.1850403>
- Kannisto, P. (2016). *Global nomads and extreme mobilities*. Routledge.
- Khanna, P. (2016). *Connectography: Mapping the global network revolution*. Weidenfeld & Nicholson.
- Kim, Y. M., Hsu, J., Neiman, D., Kou, C., Bankston, L., Kim, S. Y., Heinrich, R., Baragwanath, R., & Raskutti, G. (2018). The stealth media? Groups and targets behind divisive issue campaigns on Facebook. *Political Communication*, 35(4), 515–541. <https://doi.org/10.1080/10584609.2018.1476425>
- Kondova, G., & Erbguth, J. (2020). *Self-Sovereign identity on public blockchains and the GDPR*. Proceedings of ACM SAC conference, Brno, Czech Republic, March 30 – April 3, 2020. <https://doi.org/10.1145/3341105.3374066>
- Lafleur, J. M., & Vintila, D. (2020). *Migration and social protection in Europe and beyond (volume 1). comparing access to welfare entitlements*. Springer. <https://doi.org/10.1007/978-3-030-51241-5>
- Levitt, P., & de la Dehesa, R. (2003). Transnational migration and the redefinition of the state: Variations and explanations. *Ethnic and Racial Studies*, 26(4), 587–611. <https://doi.org/10.1080/0141987032000087325>
- Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2(4), 34–46. <https://doi.org/10.1111/j.1540-4560.1946.tb02295.x>
- Lohr, S. (2015). *Data-ism: The revolution transforming decision making, consumer behavior, and almost everything else*. OneWorld.
- Mahula, S., Tan, E., & Crompvoets, J. (2021). With blockchain or not? Opportunities and challenges of self-sovereign identity implementation in public administration: Lessons from the Belgian case. DG.O2021:

- The 22nd Annual International Conference on Digital Government Research Omaha, NE, USA 2021. Association for Computing Machinery. <https://doi.org/10.1145/3463677.3463705>
- Manor, I. (2021). *The digitalization of public diplomacy*. Palgrave Macmillan.
- Manor, I., & Adiku, G. A. (2021). From ‘traitors’ to ‘saviours’: A longitudinal analysis of Ethiopian, Kenyan and Rwandan embassies’ practices of digital diaspora diplomacy. *South African Journal of International Affairs*, 28(3), 403–427. <https://doi.org/10.1080/10220461.2021.1948915>
- Marquardt, F. (2021). *The new nomads: How the migration revolution is making the world a better place*. Simon & Schuster.
- Mathew, A. J. (2016). The myth of the decentralised internet. *Internet Policy Review*, 5(3). <https://policyreview.info/articles/analysis/myth-decentralised-internet>
- McHugh, J. T. (2015). Paradiplomacy, protodiplomacy, and the foreign policy aspirations of Quebec and other Canadian provinces. *Canadian Foreign Policy Journal*, 21(3), 238–256. <https://doi.org/10.1080/11926422.2015.1031261>
- Micheli, M., Farrell, E., Carballa Smichowski, B., Sanchez, M., Signorelli, S., & Vespe, M. (2023). *Mapping the landscape of data intermediaries*. Publications Office of the European Union. <https://doi.org/10.2760/8943.JRC133988>.
- Modi, R., & Taylor, I. (2017). The Indian diaspora in Africa: The commodification of Hindu Rashtra. *Globalizations*, 14(6), 911–929. <https://doi.org/10.1080/14747731.2017.1287451>
- Monsees, L. (2019). *Crypto-Politics: Encryption and democratic practices in the digital era*. Routledge.
- Morozov, E. (2022). Critique of techno-feudal reason. *New Left Review*, 133–134, 89–126.
- Moss, D. M. (2018). The ties that bind: Internet communication technologies, networked authoritarianism, and ‘voice’ in the Syrian diaspora. *Globalizations*, 15(2), 265–282. <https://doi.org/10.1080/14747731.2016.1263079>
- Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2007). *Digital citizenship: The internet, society, and participation*. MIT Press.
- Nabben, K. (2022). *A political history of DAOs*. <https://www.fwb.help/wip/cypherpunks-to-social-daos>
- Naik, N., & Jenkins, P. (2020). Self-sovereign identity specifications: Govern your identity through your digital wallet using Blockchain technology. In *Proceedings – 2020 8th IEEE conference on mobile cloud computing, services, and engineering* (pp. 90–95). MobileCloud. <https://doi.org/10.1109/MobileCloud48802.2020.00021>
- Newport, C. (2019). *Digital minimalism: Choosing a focused life in a noisy world*. Penguin.
- Oiarzabal, P. J. (2012). Diaspora basques and online social networks: An analysis of users of basque institutional diaspora groups on Facebook. *Journal of Ethnic and Migration Studies*, 38(9), 1469–1485. <https://doi.org/10.1080/1369183X.2012.698216>
- Ong, A. (1999). *Flexible citizenship: The cultural logics of transnationality*. Duke University Press.
- Orgad, L., & Bauböck, R. (2018). *Cloud communities: The Dawn of global citizenship?* EUI.
- O’Shea, L. (2021). *Future histories: What Ada Lovelace, Tom Paine, and the Paris Commune can teach us about digital technology*. Verso.
- Polson, E. (2019). The aspirational class ‘mobility’ of digital nomads. In E. Polson, L. Schofield Clark, & R. Gajjala (Eds.), *The Routledge companion to media and class* (pp. 168–179). Routledge.
- Ponzanesi, S. (2020). Digital diasporas: Postcoloniality, media and affect. *Interventions*, 22(8), 977–993. <https://doi.org/10.1080/1369801X.2020.1718537>
- Ratto, M., & Boler, M. (Eds.). (2014). *DIY citizenship. Critical making and socialmedia*. MIT Press.
- Rennie, E., Zargham, M., Tan, J., Miller, L., Abbott, J., Nabben, K., & De Filippi, P. (2022). Toward a participatory digital ethnography of blockchain governance. *Qualitative Inquiry*, 28(7), 837–847. <https://doi.org/10.1177/10778004221097056>
- Riordan, S. (2019). *Cyberdiplomacy: Managing security and governance online*. Wiley.
- Rodima-Taylor, D., & Grimes, W. W. (2019). Virtualizing diaspora: New digital technologies in the emerging transnational space. *Global Networks*, 19(3), 349–370. <https://doi.org/10.1111/glob.12221>
- Sadowski, J. (2019). When data is capital: Datafication, accumulation, and extraction. *Big Data & Society*, 6(1), 1–12. <https://doi.org/10.1177/2053951718820549>
- Shachar, A. (2018). The marketization of citizenship in an age of restrictionism. *Ethics & International Affairs*, 32(1), 3–13. <https://doi.org/10.1017/S0892679418000059>

- Singh, R. (2019). Give me a database and I will raise the nation-state. *South Asia: Journal of South Asian Studies*, 42(3), 501–518. <https://doi.org/10.1080/00856401.2019.1602810>
- Spelliscy, C., Hubbard, S., Schneider, N., & Vance-Law, S. (2023). *Toward equitable ownership and governance in the digital public sphere*. Belfer Center, Harvard.
- Srinivasan, B. (2022). *The network state: How to start a new country*. www.thenetworkstate.com
- Srivastava, S. (2021). *Algorithmic governance and the international politics of Big Tech*. Cambridge University Press.
- Stanford DAO Workshops 2022 and 2023. (2023). *Frances C. Arrillaga Alumni Center at Stanford University*. DAO Research Collective, Megagov, Smart Contract Research Forum, and Stanford Center for Blockchain Research. <https://daocollective.xyz/>
- Sullivan, C. (2018). Digital identity – from emergent legal concept to new reality. *Computer Law & Security Review*, 34(4), 723–731. <https://doi.org/10.1016/j.clsr.2018.05.015>
- Sullivan, C., & Burger, E. (2017). E-residency and blockchain. *Computer Law & Security Review*, 33(4), 470–481. <https://doi.org/10.1016/j.clsr.2017.03.016>
- Sutherland, T. (2014). Intensive mobilities: Figurations of the nomad in contemporary theory. *Environment and Planning D: Society and Space*, 32(5), 935–950. <https://doi.org/10.1068/d14027p>
- Swan, M., & De Filippi, P. (2017). Toward a philosophy of blockchain: A symposium: Introduction. *Metaphilosophy*, 48(5), 603–619. <https://doi.org/10.1111/meta.12270>
- Tammppu, P., & Masso, A. (2018). ‘Welcome to the virtual state’: Estonian e-residency and the digitalised state as a commodity. *European Journal of Cultural Studies*, 21(5), 543–560. <https://doi.org/10.1177/1367549417751148>
- Tammppu, P., Masso, A., Ibrahim, M., & Abaku, T. (2022). Estonian e-residency and conceptions of platform-based state-individual relationship. *Trames. Journal of the Humanities and Social Sciences*, 26(76/71), 3–21. <https://doi.org/10.3176/tr.2022.1.01>
- Taplin, J. (2017). *Move fast and break things: How Facebook, Google, and Amazon have cornered culture and what it means for all of us*. Little Brown.
- Toticagüena, G. (2006). Diasporas as non-central government actors in foreign policy: The trajectory of Basque Paradiplomacy. *Nationalism and Ethnic Politics*, 11(2), 265–287. <https://doi.org/10.1080/13537110591005757>
- Van Dijck, J. (2018). *The platform society: Public values in a connective world*. Oxford University Press.
- Veliz, C. (2020). *Privacy is power: Why and how you should take back control of your data*. Corgi.
- Viano, C., Avanzo, S., Boella, G., Schifanella, C., & Giorgino, V. (2023). Civic Blockchain: Making Blockchains accessible for social collaborative economies. *Journal of Responsible Technology*, 15, 100066. <https://doi.org/10.1016/j.jrt.2023.100066>.
- Wang, B., Schlagwein, D., Cecez-Kecmanovic, D., & Cahalane, M. C. (2018, December 3). *Digital work and high-tech wanderers: Three theoretical framings and a research agenda for digital nomadism*. Australasian conference on Information Systems, Sydney (Australia).
- Warf, B. (2021). *Geographies of cosmopolitanism*. Edward Elgar.
- WEF. (2023). *Decentralized autonomous organization (DAO) toolkit*.
- Werbach, K. (2019). *The blockchain and the new architecture of trust*. MIT Press. <https://doi.org/10.7551/mitpress/11449.001.0001>.
- Woldoff, R. A., & Litchfield, R. C. (2021). *Digital nomads: In search of freedom, community, and meaningful work in the new economy*. Oxford University Press.
- Woodall, A., & Ringel, S. (2020). Blockchain archival discourse: Trust and the imaginaries of digital preservation. *New Media & Society*, 22(12), 2200–2217. <https://doi.org/10.1177/1461444819888756>
- Zhang, C., & Morris, C. (2023). Borders, bordering and sovereignty in digital space. *Territory, Politics, Governance*, 11(6), 1051–1058. <https://doi.org/10.1080/21622671.2023.2216737>
- Zichichi, M., Ferretti, S., & Rodríguez-Doncel, V. (2022). Decentralized personal data marketplaces: How participation in a DAO can support the production of citizen-generated data. *Sensors*, 22(16), 6260. <https://doi.org/10.3390/s22166260>
- Zook, M. (2023). Platforms, blockchains and the challenges of decentralization. *Cambridge Journal of Regions, Economy and Society*, XX, 1–6. <https://doi.org/10.1093/cjres/rsad008>
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Profile.