



An atlas to track Blockchain-colonialism. 0.01

By César Escudero Andaluz

An ideological, economic, technological and ecological analysis of how blockchain is used to cross borders and extract benefits from those most in need, including land, labor, data, privacy and other resources.¹

¹ Cover fig.1- Interpreted from: *Brain and Body*, from Alesha Sivartha, *The Book of Life: The Spiritual and Physical Constitution of Man*, 1896

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Contents

Introduction	-6-
Understanding Blockchain Colonialism	-10-
False promise of trust, truth and disintermediation	-14-
Privacy & surveillance	-17-
Surveillance philanthropy	-17-
Obscurantist paradigm	-23-
Code is law not economics	-29-
Crypto-giving scene	-32-
Refugees, apps, hackathons	
Humanitarianism	
Value, trust and utility	-35-
Climate	-38-
Indigenous	-31-
Labor	-40-
Mapping the land	-41-
Pacific	
Fiji Island	-45-
Vanuatu	-48-
Papua New Guinea	-50-
Satoshi Island, or Lataro Island	-51-
Republic of Palau	-51-
Indonesia	-51-
Thailand	-52-
Myanmar	-52-
Latin America	
Puerto Rico	-54-
El Salvador	-56-
Honduras	-59-
Venezuela	-60-
Middle East	
Syria	-62-
Lebanon	-63-

Malta	-63-
Africa	
Central Africa Republic	-64-
Zimbabwe	-64-
Senegal	-64-
Ethiopia	-64-
Seychelles	-64-
Morocco	-65-
Conclusions	-68-
Regarding illustrations	-71-
References	-72-

Introduction

To understand Blockchain, we must go beyond cryptocurrency investments, NFTs and metaverses to bring the user closer to a more objective reality. We need to investigate the relationships between planetary resources, energy consumption, human labour, economics, surveillance and privacy² in order to create an image of it. As human beings living on this planet we cannot distance ourselves from the magnitude of the problem. To be able to analyse it we must fragment it, deconstruct it and put it together in a schematic way to create a vision of it on a human scale.

Developing a map is a process of knowledge creation rather than knowledge revelation.³ Recently, artists and activists⁴ have begun creating maps and diagrams as method to explore hidden power structures, helping to understand dominant narratives of the world.

Understanding maps is a way to connect with the Earth. In the shortstory "On the Rigour of Science" the author José Luis Borges refers to the obsession of a full country to represent reality by creating a map with the same size as the empire it represents. This vast map, 1:1 scale proved useless for following generations so they let it be destroyed by inclement weather, sun and rain.

Our generation is still aware of the ecological, social and economic impact that technology has on the Earth. In this relationship, platforms, infrastructures, devices, sensors, data, corporations, governments and individuals create a complex picture difficult to be visualised with integrity. This project will evaluate books, scientific articles and papers developed to understand this technology, paying especial attention to the blockchain paradigm. Authors such as Mirka Madianou, Kate Crawford, Inte Gloerich, Oliver Jutel and Peter Howson will help us understand the colonial and extractive legacies, the promises of economic and governance alternatives imposed on fragile societies in the developing world. We will examine projects involving the acceptance of and reliance on crypto-nomads, taxing data on blockchain and beyond the reach of individuals and the state to create an atlas of sorts.

The objective of this atlas is to monitor how blockchain has been used by individuals corporations and governments in order to make more accessible the socio-political ecological and economical consequences of blockchain. This project will take two directions: a) *Illustrate the relationships between the called*

² Zuboff, Shoshana. *The age of surveillance capitalism: The fight for a human future at the new frontier of power: Barack Obama's books of 2019*. Profile books, 2019.

³ Dodge, Martin, and R. Kitchin. *ATLASOF CYBERSPACE*. London: Continuum, 2000.

⁴ Artists and activists such as Suzanne Treister, Mark Lombardi, Paolo Cirio, Bureau d'Etudes, ShareLab, Übermorgen, RYBN.



Fig. 2- Extracted from: José Luis Borges, *On the Rigour of Science*.

"Blockchain for Good" and its surveillance consequences, by monitoring and analysing corporations and governments; b) The relationships between planetary resources and energy consumption, – by creating a visual guide to track and trace the movement of bitcoin mining farms forced to move around the world looking for cheaper energy.⁵ Both directions will be supported by graphic materials such us maps, diagrams and timescales about corporations and players, biometric data extraction techniques and its forms of resource appropriation, including land, labour and data. For this reason this project use "the atlas" as a method of understanding how crypto-colonialism affects life on a planetary scale. Fact that could shape the values, judgements, culture, and historical and political understanding of its readers.

⁵ Due to the long duration of the research, this section is not included in this part of the project, but will be dealt with in the next edition, possibly as a new project.

Understanding Blockchain Colonialism

For the media professor at Goldsmiths University, Mirca Madianou⁶, it is important to understand the term colonialism not as a practice of domination involving the subjugation of people, but as a colonialism linked to the domination of Eurocentric knowledge and the codification of racial and social discrimination. What is ultimately understood as an extractivist, not imperialist, colonialism. The term crypto colonialism was coined in 2002 before blockchain by Michael Herzfeld, who used it to describe clandestine strategies used by the British to ensure that newly 'independent' countries remained strongly dependent on their colonial master, mainly through unfair trade agreements and debt.⁷

In the article "Toward the new mythologies of the DAO-plot. A reading of blockchain through the decolonial thought of Sylvia Wynter," The researcher Inte Gloerich⁸ examines the connection between historical colonialism and data colonialism in the framework of artistic and activist practices in the blockchain space. Gloerich emphasise that this connection has not been fully explored. Making reference to Patricia de Vries' concept of "plot work as artistic praxis", Gloerich investigates how artistic endeavours can create alternative spaces to challenge and resist dominant logics of exploitation. The aim is to visualise ways of undermining, resisting, de-centring or subverting the current situation in relation to blockchain technology and its potential to replicate colonial patterns, shedding light on the intersection of decolonial thinking, blockchain technology and artistic practices.⁹

In addition, behind the scenes, blockchain-colonialism is described by Peter Howson as experiments developed by companies and governments in order to extract economic benefits from those suffering the scars of historic colonial expansion in the Global South. As Howson argues, the developing world is a field of

⁶ Madianou, Mirca. "Technocolonialism: Digital innovation and data practices in the humanitarian response to refugee crises." In *Routledge handbook of humanitarian communication*, pp. 185-202. Routledge, 2021.

⁷ Herzfeld, Michael. "The Absent Presence: Discourses of Crypto-Colonialism." *South Atlantic Quarterly* 101, no. 4 (2002): 899-926.

⁸ Inte Gloerich. Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter,"2023. APRJA, URL: <https://aprja.net//article/view/140448>

⁹ Inte Gloerich. Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter,"2023. APRJA, URL: <https://aprja.net//article/view/140448>

economic experimentation, and a desire for technology-driven economic growth, joined by crypto-evangelists, NGOs and foreign developers who confuse blockchain's revolutionary potential with its governance. Fact that has created a new environment friendly for speculating. In this process, there have been attempts to adopt cryptocurrencies as legal tender, projects to establish a digital identity for discriminated groups, to create national blockchain registries, as well as the intention to distribute aid, supply chains and the tokenisation of carbon markets.¹⁰

According to Howson, this problem requires a multidisciplinary approach from critical geography, cultural studies, law, communications, anthropology, and science and technology studies. Which involves issues of power in blockchain architectures, the political economy of developing world technology, and the cultural imperialist power of blockchain's solutionist rhetoric.¹¹ A clear example is the World Food Programme's (WFP) Building Blocks initiative, which is helping the WFP to distribute food to Syrian refugees in Jordan. The Building Blocks platform monitors biometric data through iris scans of refugees in shops where Building Blocks tokens are spent. These personal data, entitlements and transaction records are stored on the Ethereum blockchain, providing a virtual bank account and identity document for each refugee. This sensitive information on vulnerable people is made accessible to other agencies, which inevitably introduces an increased risk of data breaches such as PassBase, Sempo and other for-profit start-ups.¹²

Moreover, Gloerich highlights how there is a historical link between the practices that led to enslaved individuals being humanised and exploited with data colonialism and capitalist extraction. Based on researchers Thatcher, O'Sullivan and Mahmoudi who argue that this logic of data colonialism is known as "digital frontierism." And it is during the process of tokenization on the blockchain, where all represented elements, such as votes, access rights and personal data, become tradable and controllable through distributed governance structures. Although blockchain is seen as an opportunity for democratisation, the reality shows a contrary effect especially in vulnerable communities such as refugees, where blockchain technology imposes and forces them to give up personal data in exchange for basic necessities, which may lead to unpredictable capitalisation in the future.¹³

¹⁰ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22.

¹¹ Inspired by: <https://www.frontiersin.org/research-topics/43010/blockchain-colonialism#overview>

¹² Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820. (P.10).

¹³ Inte Gloerich. Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter,"2023. APRJA, URL: <https://aprja.net/article/view/140448>. From (Howson "Climate crises" 4-5; Howson "Crypto-giving" 814-815)

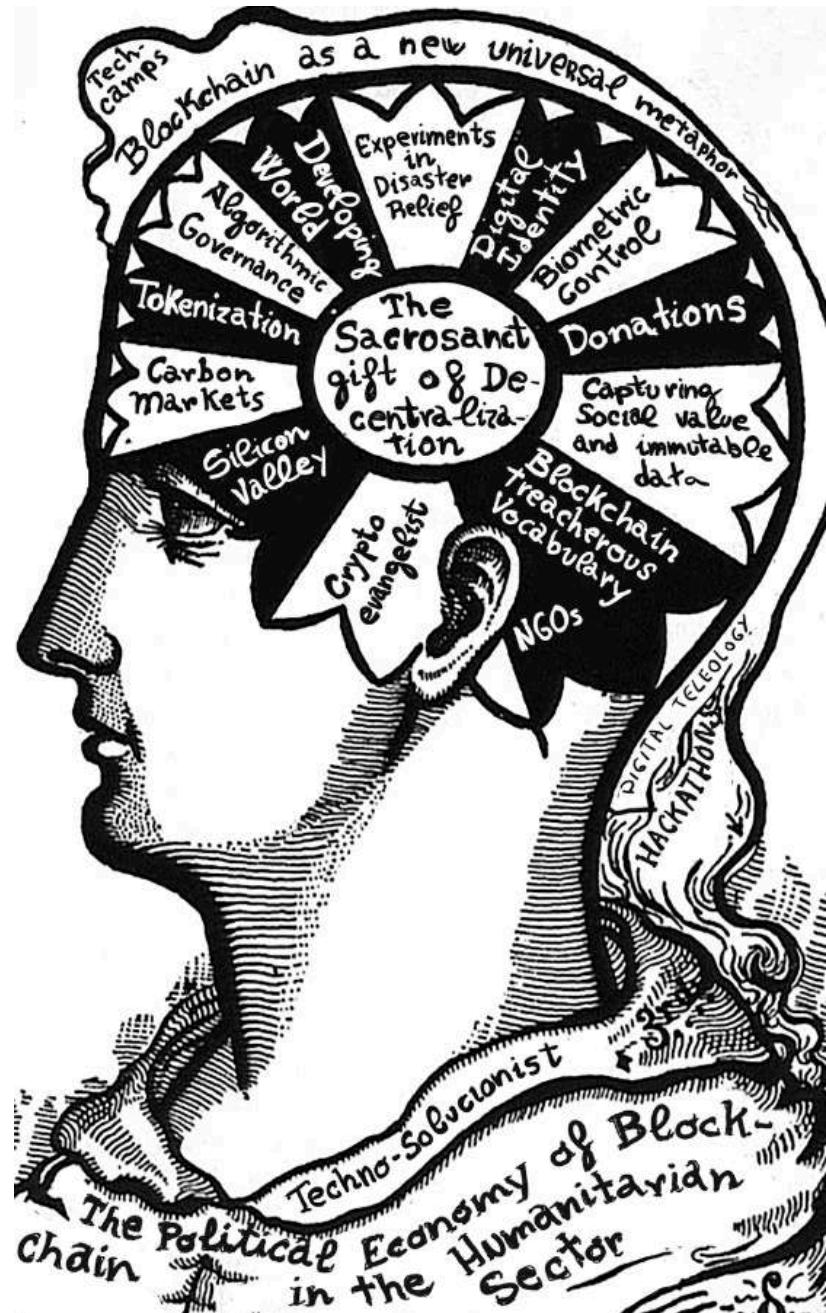


fig. 3- Interpreted from: *Brain and Body*, from Alesha Sivartha,
The Book of Life: The Spiritual and Physical Constitution of Man, 1896

False promise of trust, truth & disintermediation

Blockchain as one of the last grand narratives promises more than the simple expansion of digital property rights. In words of the Ethereum co-founder Joe Lubin, blockchain is a technology of immutable truth and pure mediation capable of ushering in a "trust revolution" (Lubin, 2019).¹⁴

In reality, Blockchain behaves as a proxy of the trust between people. It basically works through a cryptographic protocol to trust instead of trusting in each other.¹⁵ According to Otago's University professor Oliver Jutel, blockchain envisions a utopian future in which the subject is free from coercive mediating institutions, the state chief among them, wielding the certainty of data as a means of freedom and social transformation. Blockchain promises to democratise big data, finance and provide all kinds of governance solutions under principles such as transparency, disintermediation, accountability and efficiency which according to Jutel, fits perfectly to the NGO sector.¹⁶

For an evangelist like Lubin, the trust derived from encryption allows blockchain to serve as the place for "creativity and novel problem solving." In Jutel's words, Joe Lubin is the leading proponent of blockchain governance, as well as the founder of blockchain startup incubator ConsenSys, funded by Lubin's multi-billion dollar cryptocurrency fortune, which has a set of proprietary platforms and an academy to "develop the global blockchain ecosystem" in which ConsenSys programmers and community members act as emissaries for the business, government and NGO sectors. In Jutel's words, these blockchain governance projects disprove hierarchical digital ownership relationships that abstract from claims of disintermediation, data encryption and political significance. – A totalising vision of social transformation through encryption, aggregation and decentralisation of data, ideal that becomes utopian in its mediation with states. In this phase of growth rather than profit for ConsenSys, user acceptance is crucial for start-ups competing to become the "killer" blockchain platform that could generate monopoly profits.¹⁷ In conclusion, blockchain governance projects disprove hierarchical digital property relationships abstracted by claims of disintermediation, data encryption and policy transcendence.

¹⁴ Lubin J (2019) 2047: A retrospective from the other side of the trust revolution. ConSenSys, 27. Available at: <https://media.consensys.net/highlights-from-joe-lubins-ethereal-ny-keynote-2019-7683c65d6d95> (accessed July 2019).

¹⁵ Rachel O'Dwyer (left) and Stefan Heidenreich (right) during the discussion "Stop Making Money: Valuation and Non-Monetary Utopias" <https://2018.transmediale.de/content/stop-making-money-valuation-and-non-monetary-utopias> 33:00

¹⁶ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P12)

¹⁷ Ibid., 12

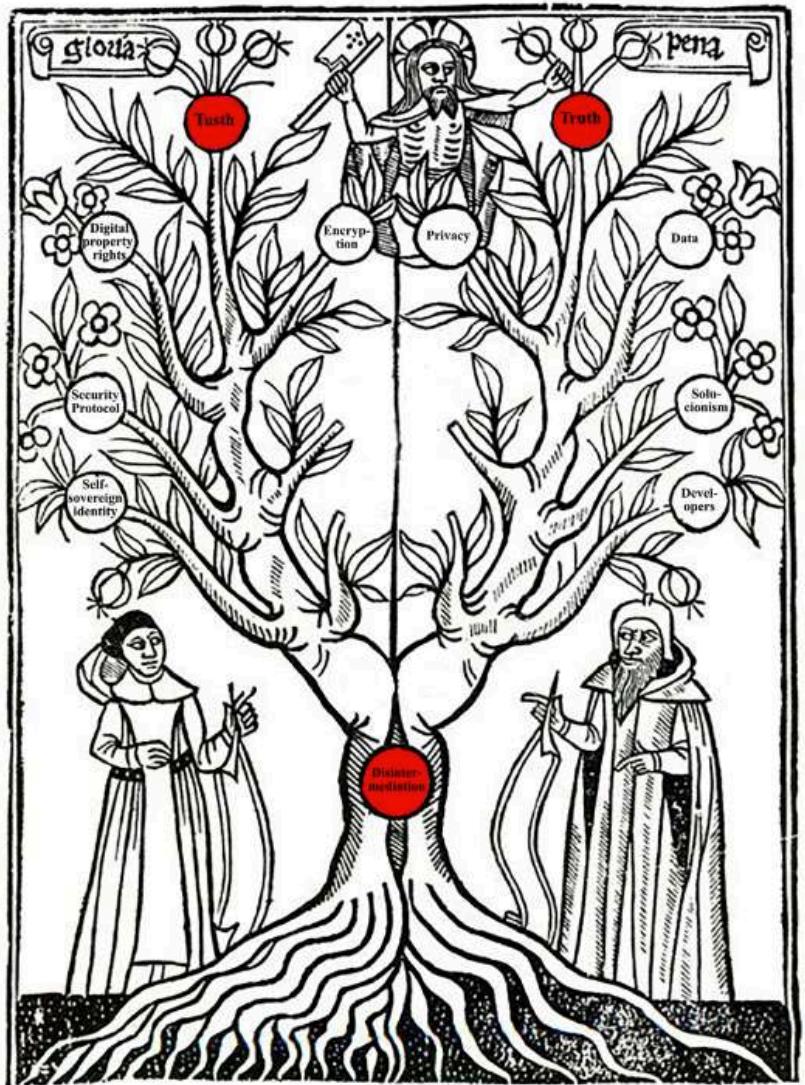


Fig. 5- Interpreted from: Arbor moralis (Moral tree), from Llull, Arbor scientiae venerabilis

Privacy & surveillance philanthropy

Blockchain extractive practices combine historical colonialism with internet-connected methods of computer quantification. What Shoshana Zuboff has defined as "surveillance capitalism", which captures human experience to be used as "behavioural data" for "predictive products"¹⁸.

Drawing on Zuboff's research, Howson argues that digital worlds are being hijacked by dishonest economic logic and this 'surveillance' combines private human experience, digital technology platforms and physical space, through smartphone networks and Internet of Things (IoT) devices. Once analyzed, the data is converted into predictive products used to influence user behavior for the benefit of the platform. With this analogy, the author coins the term "surveillance philanthropy," used here to explain how cryptocurrency platforms allow donors to influence nonprofits in a more open and restrictive way. According to Howson, this algorithmic surveillance ensures that project funding fully reflects the interests of donors, limiting the ability of non-profit organisations to meet the needs of project beneficiaries. Summarising, the author explains how blockchain technology encodes the oversight mechanisms in charitable donations.¹⁹

¹⁸ Zuboff, Shoshana. "Surveillance capitalism and the challenge of collective action." In *New labor forum*, vol. 28, no. 1, pp. 10-29. Sage CA: Los Angeles, CA: SAGE Publications, 2019.

¹⁹ Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820.



fig.6- Interpreted from: *Brain and Body*, from Alesha Sivartha,
The Book of Life: The Spiritual and Physical Constitution of Man, 1896

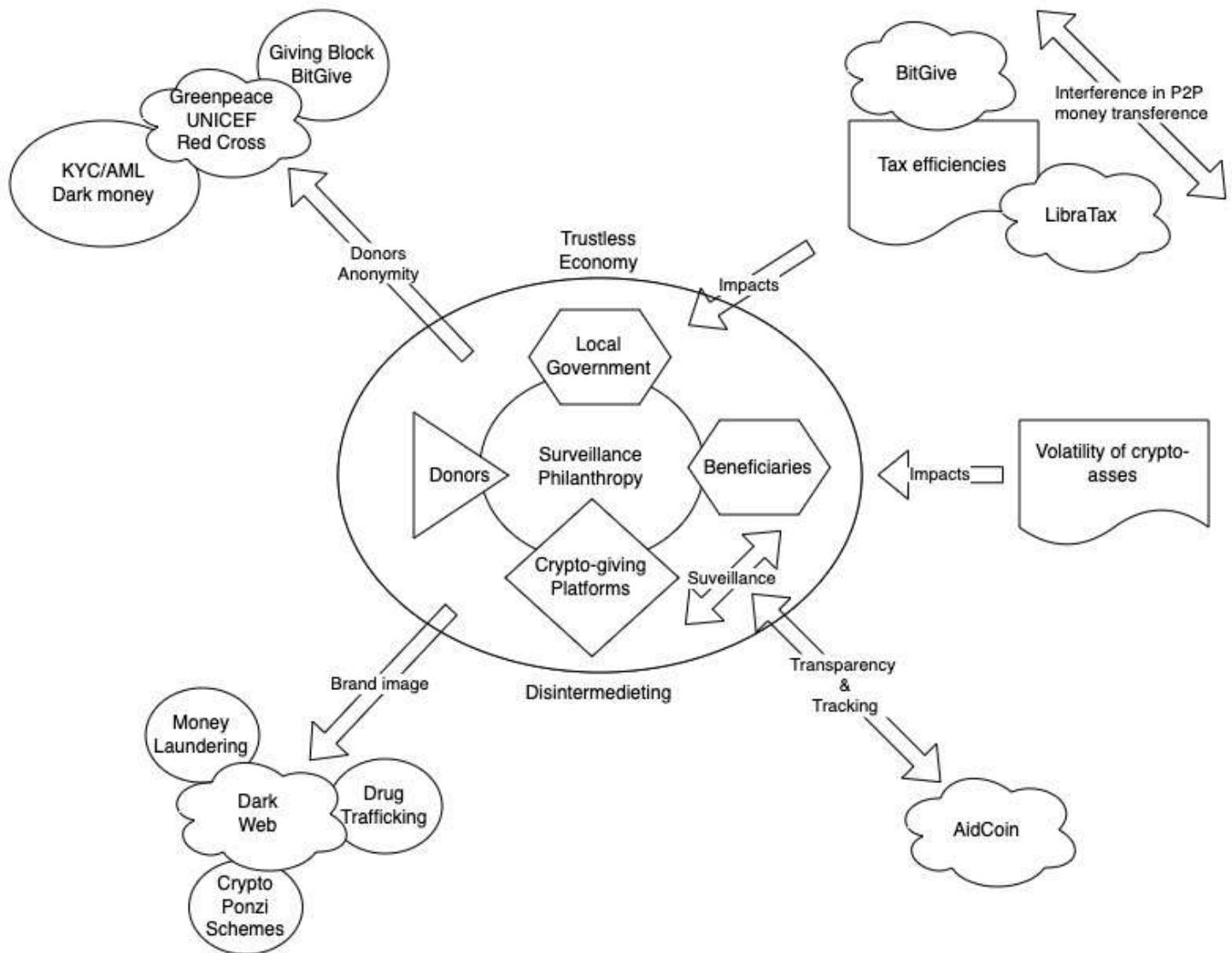


fig.7- Diagram behind fig 6: *Brain and Body*, from Alesha Sivartha,
The Book of Life: The Spiritual and Physical Constitution of Man, 1896

Refugees²⁰, Surveillance, Apps, Hackathons

The Professor on Media, Communications and Cultural Studies at Goldsmiths University Mirca Madianou comes with the term technocolonialism to explain how agencies are extracting value from refugee data for the benefit of various stakeholders; by materializing discrimination associated with colonial legacies; by justifying some of these practices under the context of "emergencies." By reproducing the power asymmetries of humanitarianism, data and innovation practices become constitutive of humanitarian crises themselves.²¹

This business model is inherited from social networks that is based on the provision of "free" services in exchange for the extraction of personal data, with the ability to influence behaviour.²² Also known as "digital colonialism." According to Madianou, there are more than 1,500 apps for migrants and refugees resulting from hackathons, most of which are barely used. In March 2018, the Vatican held a hackathon that brought together more than 120 engineers and scientists with the aim of finding solutions to social problems, including those of migrants and refugees. The hackathon, entitled VHacks, took place over 36h in a 15th century palace of the Holy See and was co-sponsored by tech giants such as Google and Microsoft. The winning proposal was a mobile app for refugees.²³

The app, which has been used in Cox's bazar (Bangladesh) as part of the Rohingya response, invites refugees to submit feedback or a short video regarding the aid they receive; this feedback is then uploaded through the app to a secure server. The questions are: Who owns the sensitive personal data? If the software used to collect and process data is privately owned, does the corporation own the data? The answer is Yes. The digitisation of extracted biometric data is combined with increasing commodification, professionalisation,

²⁰ European refugee crisis of 2015, which was largely driven by the aim to secure borders. With over 135 million people across the world needing assistance in 2018,

²¹ Madianou, Mirca. "Technocolonialism: Digital innovation and data practices in the humanitarian response to refugee crises." In *Routledge handbook of humanitarian communication*, pp. 185-202. Routledge, 2021. (P. 2).

²² Zuboff, Shoshana. "Surveillance capitalism and the challenge of collective action." In *New labor forum*, vol. 28, no. 1, pp. 10-29. Sage CA: Los Angeles, CA: SAGE Publications, 2019.

²³ Madianou, Mirca. "Technocolonialism: Digital innovation and data practices in the humanitarian response to refugee crises." In *Routledge handbook of humanitarian communication*, pp. 185-202. Routledge, 2021. (P. 1).

pressure for humanitarian accountability and, above all, the entry of the private sector into the humanitarian field.²⁴

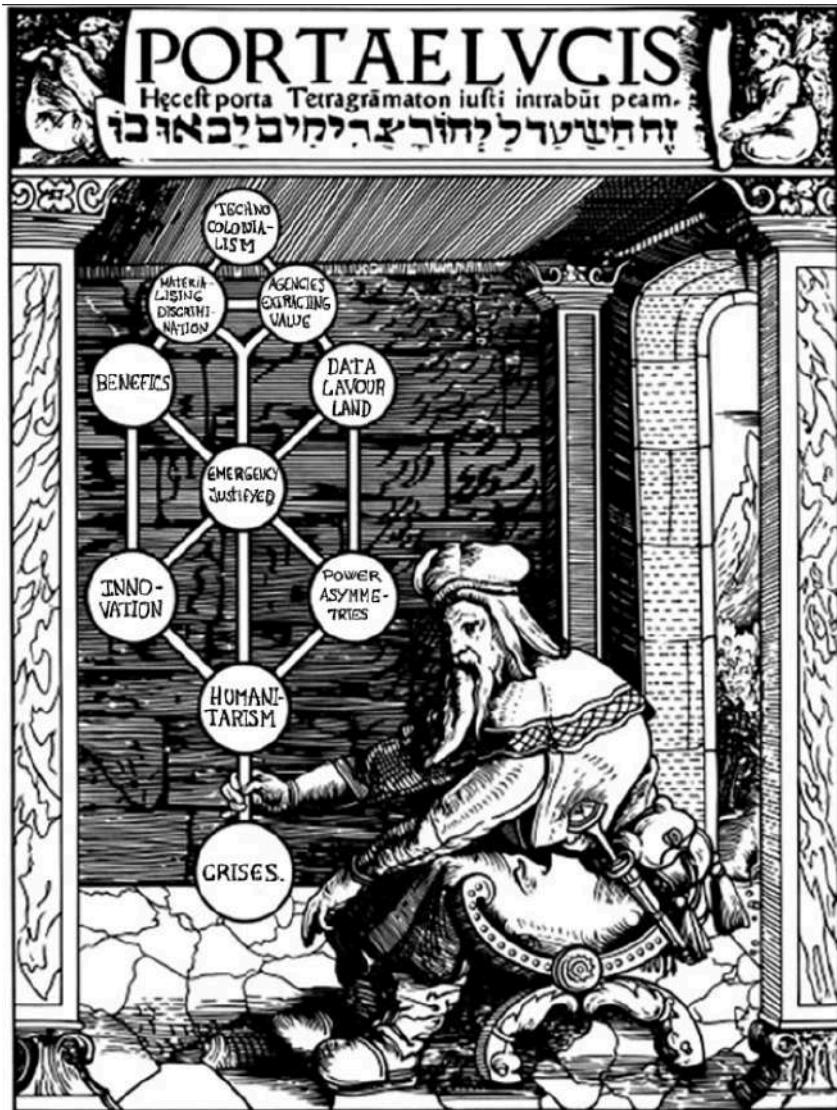


Fig. 8- Interpreted from: Sephirotic tree, from Paulus Riccius, *Portae lucis* (Doors of light), 1516

²⁴ Madianou, Mirca. "Technocolonialism: Digital innovation and data practices in the humanitarian response to refugee crises." In *Routledge handbook of humanitarian communication*, pp. 185-202. Routledge, 2021. (P. 8).

Consequently, this data is outsourced to private providers, and artificial intelligence (AI) is also used to track displaced people and predict population flows and future crises. Apart from data mined from social and mobile media, humanitarian organizations increasingly collect their own datasets often through dedicated software packages such as Kobo Toolbox.²⁵

According to Madianou, biometrics are increasingly used by states and governments to control borders and keep out "undesirable" populations. They have data-sharing agreements with intergovernmental bodies such as UNHCR (United Nations High Commissioner for Refugees).

"In February 2019, the United Nations World Food Programme (WFP) signed a US\$45 million partnership with Palantir Technologies, the US software firm known for its association with CIA and Cambridge Analytica and its work on predictive policing, advanced biometrics, and immigration enforcement."²⁶

Another example of surveillance through mobile apps is provided by Peter Howson, who explains that the World Food Programme's (WFP) Building Blocks initiative created to enable the distribution of aid in exchange for food. It is conducting iris scans on over 500,000 Syrian refugees in Jordan (Rugeviciute and Mehrpouya, 2019).

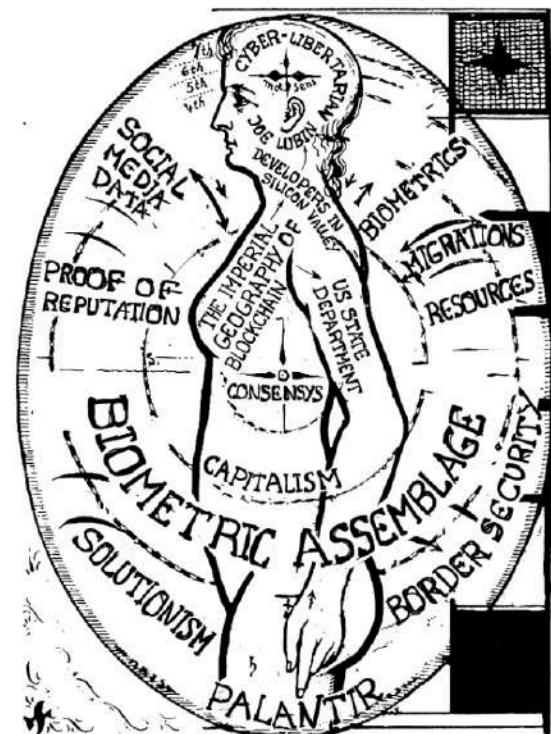


fig. 79 Interpreted from: *Brain and Body*, from Alesha Sivartha, *The Book of Life: The Spiritual and Physical Constitution of Man*, 1896

²⁵ Extracted from the web: "Making data collection accessible to everyone, everywhere. Kobo hosts and maintains KoboToolbox, a data collection, management, and visualization platform used globally for research and social good. Our mission is to support open source data systems and technology for humanitarian action, development, environmental protection, peacebuilding, and human rights. URL: <https://www.kobotoolbox.org/about-us/>

²⁶ NewUNDealWithDataMiningFirmPalantirRaisesProtection Concerns, URL: <https://www.irinnews.org/news/2019/02/05/un-palantir-deal-data-mining-protection-concerns-wfp>

This data is stored on the Ethereum blockchain, providing a virtual bank account and identity document for each refugee. This is done through the autonomous identification platform PassBase (2018) which uses government-issued documents, linked social media accounts and biometric signatures. PassBasse accesses personal information (including biometric data) of individuals in exchange for temporary assistance to meet their basic needs. According to Howson, this data could also be used in the future to make decisions about individuals, with far-reaching consequences, Howson argued. Some could face punitive restrictions based on decisions made by algorithms that calculate, for example, the risk of absconding or working without permission. Some may have difficulty accessing credit or insurance based on patterns in historical data sets. Wrongful convictions, incomplete medical records or errors regarding affiliations are immutable on a blockchain.²⁷

In this panorama, we find ethical initiatives such as, the MIT Media Lab's Digital Currency Initiative (DCI) which has played a pivotal role in banking the developing world. Or the adoption of blockchain by the World Food Programme for aid distribution and biometric identification, which has worked to both legitimise blockchains for social good and according to Oliver Jutel, to build the imperial geography of the blockchain. For example, the US state can ration resources or determine migration rights by combining biometric data, reputational evidence and social network data secured on the blockchain. This blockchain infrastructure of what Madianou calls "biometric assembly" is visualised thought the role of national security contractors such as Palantir managing world data to complete this infrastructure of control and mapping the developing world for resources."²⁸

²⁷ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22. (P. 17).

²⁸ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 23).

Obscurantist paradigm

Developing countries experiment with technologies that undermine the independence of developing world countries, to continue the colonial legacy of value extraction and contribute to the hype that is central to inflating cryptocurrencies. They seek to capture all forms of social value as immutable data. According to Oliver Jutel, it is the claims of algorithmic governance and pure mediation that make this technology obscurantist and difficult to disentangle from rhetoric and ideology. Jutel makes reference to Robert Herian who describes this phenomena as "the psychopolitics of the blockchain", in which fear of the social and pathological distrust of the other are overcome through this universal technological metaphor. Beyond experimentation in the humanitarian sector, this technology has enabled neo-colonial land grabs and forms of platform control that seek to impose blockchain as law in the developing world. Continue Jutel, who find the central premise of blockchain technology, the production of encrypted, distributed, and immutable data as a false universal governance principle capable of solving all manner of social issues. In this way, Blockchain can be thought of as an obscurantist paradigm in which a purity of purpose overrides the necessity for design grounded in an understanding of existing human systems. The author argues that blockchain represents the neoliberal, market-driven approach in the development sector, while at the same time presenting itself as a transcendent technology of empowerment.²⁹

Another clear example is the Worldcoin,³⁰ a startup created by OpenAI CEO Samuel Altman in 2019 which uses orbs to scan people's eyes in exchange for a digital identity card and cryptocurrencies. The Worldcoin.org website argues that "it is envisioned to become the world's largest privacy-preserving human identity and financial network, giving ownership to everyone. Worldcoin aims to provide universal access to the global economy regardless of country or background, establishing a place for all to benefit in the age of AI. Since its inception the controversies have been clear. Edward Snowden wrote on Twitter in response to Altman's post about Worldcoin in 2021. "Don't use biometrics for anything," "The human body is not a ticket-punch."³¹ As of early 2023, Worldcoin had over a million registered users, mainly in India, Indonesia, Kenya and Uganda.³²

In conclusion, Oliver Jutel argues that data encryption and decentralisation are universal blockchain principles that can solve human governance systems through self-executing code. Jutel highlights that the

²⁹ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022). (P. 3).

³⁰ Worldcoin, human biometric tracking <https://worldcoin.org/>

³¹ Dataconomy, URL: <https://dataconomy.com/2023/07/31/how-does-worldcoin-orb-work-eye-scan/>

³² Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023 (P.54).

aid and NGO sectors are an ideal testing ground for solutionist experimentation through the PPP (Public-Private Partnership) model. He mentions the combination of "platform philanthropy" and US State Department interactions with initiatives such as "Civil Society 2.0" and "Tech Camp", which contribute to creating a vision of empowerment and social transformation through Silicon Valley platforms. The author also mentions that hackathons, solutionist innovation and performative entrepreneurship have become ideal in this space, blurring the boundaries between the goals of NGOs and platform developers. The example of Oxfam's "Unblocked Cash" humanitarian aid blockchain is highlighted, including the launch of an innovation hub called "Oxlabs" inspired by the values of Silicon Valley disruption and collaboration with developers such as Sempo and ConsenSys.³³

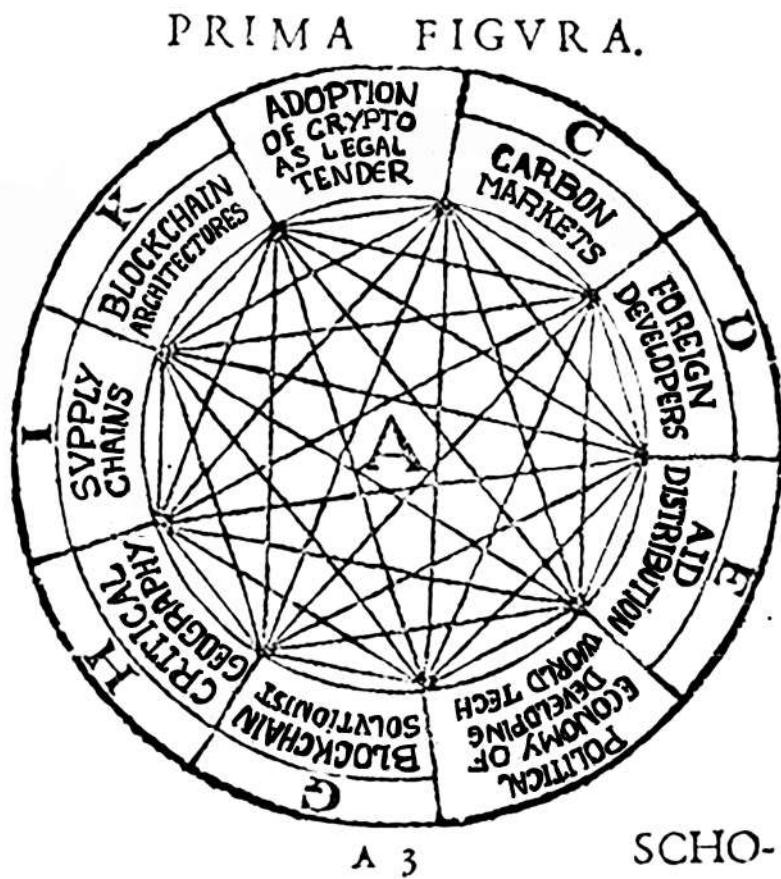


Fig. 10- Interpreted from: *Diagrams of Lull's intriguing combinatory-logic concepts*, from *Lull, Ars Brevis V.M.B. Raymundi Lullij Tertij Ord. S. Francisci, Doc. Illu.: mendis castigata, Capitibus Divisa, atque scholiis locupletata, 1669*

³³ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022). (P. 4).

Code is law not economics

All blockchain-backed applications, as well as smart contracts and web3 operate through designed protocols. This means they cannot operate outside the way they are coded. Consequently, programmers and corporations have greater agency in terms of the design of supply chains, logistics networks, transport systems and urban planning, which according to Mezzadra and Neilson, are linked to processes of extraction and financialisation.³⁴

Explained in the words of Peter Howson, this governance through blockchain establishes socio-spatial links, intertwining code and space that often requires third parties to orchestrate, including transnational market-based approaches to sustainable development, such as land appropriation for community development, biodiversity conservation, and climate change adaptation and mitigation. While blockchain has the potential to be decentralized, fair, and open, this technology is often used in ways that reproduce colonial power dynamics. On the other hand, the interesting part consist on encourage local participation and social movements with a focus on anti-colonial struggles, economic justice, and democratic participation. In works of Peter Howson: "If any project claims to be emancipatory, the foremost step is to deconstruct the rhetoric, and direct agency to local communities and trusted organizers to design and manage their own future, rather than having outside interests, or technologies themselves determine a future for them."³⁵

In this way, Julian Crandall, highlights how blockchain technology can be implemented in constructive ways using democratic participation and anti-colonial struggles in Puerto Rico. He argues that it is essential for Puerto Rican developers to participate in and lead these blockchain initiatives rather than being dependent on outsiders who might not fully appreciate the needs of the island.³⁶

In addition, Crandall introduces the therm "cryptoeconomics," which is a form of design through programming, coding, software development and digital architecture. Cryptoeconomics are based on game theory and mechanism design, a mathematical approach to design economic incentives in strategic scenarios where individuals are rational decision makers. According to the author, cryptoeconomics is about

³⁴ Crandall, Jillian. "Blockchains and the "Chains of Empire": Contextualizing blockchain, cryptocurrency, and neoliberalism in Puerto Rico." *Design and Culture* 11, no. 3 (2019): 279-300. (P. 8).

³⁵ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22. (P. 19).

³⁶ Crandall, Jillian. "Blockchains and the "Chains of Empire": Contextualizing blockchain, cryptocurrency, and neoliberalism in Puerto Rico." *Design and Culture* 11, no. 3 (2019): 279-300. (P. 13).

constructing systems that have certain desirable properties and using defined economic incentives within the system to encourage the desired properties to be maintained in the future.³⁷



fig. 11- Interpreted from: *Brain and Body*, from Alesha Sivartha,
The Book of Life: The Spiritual and Physical Constitution of Man, 1896

³⁷ Crandall, Jillian. "Blockchains and the "Chains of Empire": Contextualizing blockchain, cryptocurrency, and neoliberalism in Puerto Rico." *Design and Culture* 11, no. 3 (2019): 279-300. (P. 9).

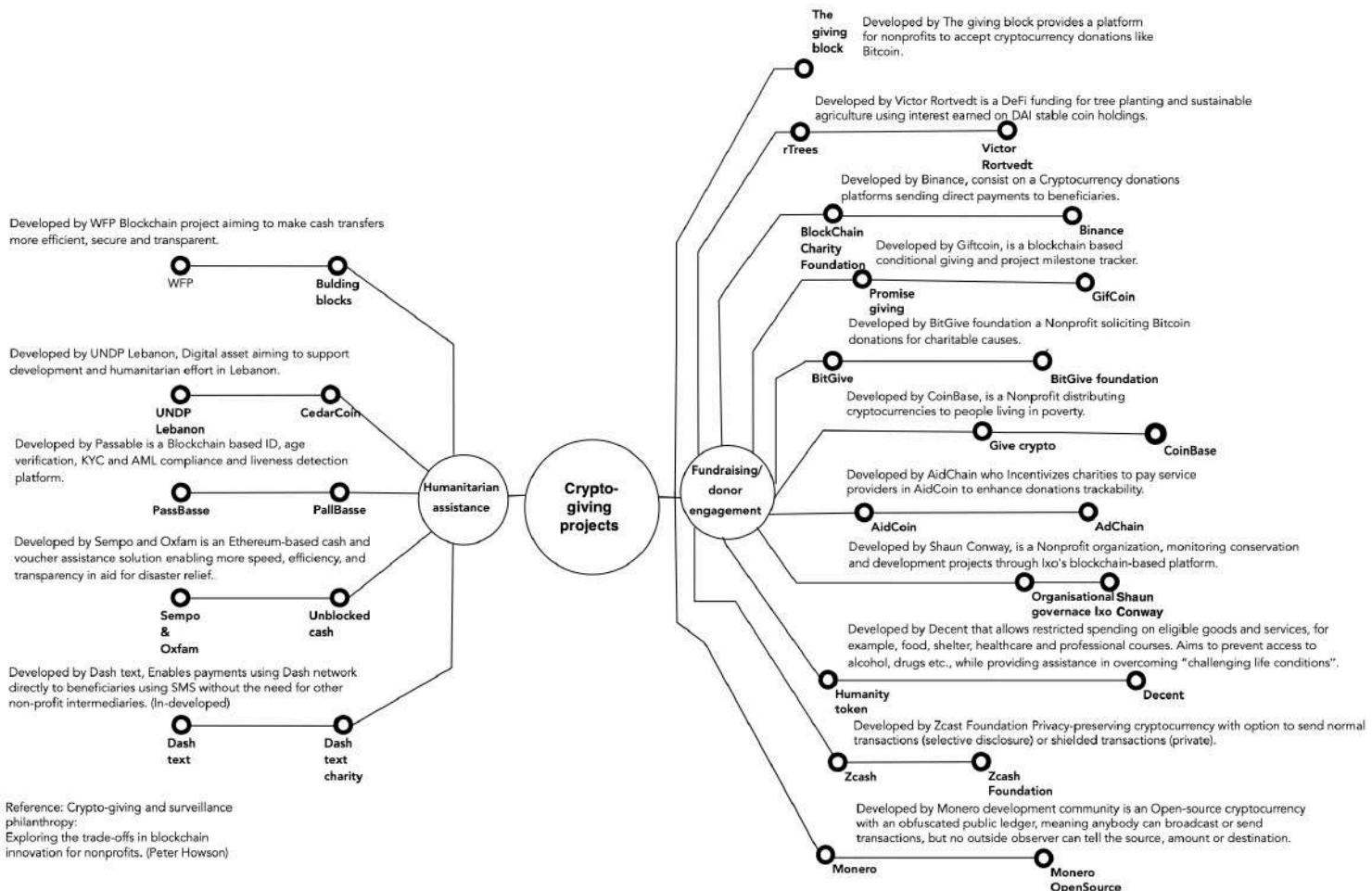
Crypto-giving scene

Donating and transmitting traceable digital assets through platforms such as BitGive can be more tax efficient than selling them. Some intermediaries, such as LibraTax, offer advisory services that enable donors to transmit digital assets with the lowest possible tax burden. These services displace undue and corrupt state interference in money transfers in the relationship between donors and beneficiaries. This framing of the state as a corrupt entity in the Global South has meant that many poorer countries are not raising enough tax revenue to fund even the most basic services, such as health and education. As the UK Tax Dialogue reports, "if we are to achieve the ambitious Sustainable Development Goals (SDGs), cryptocurrency platforms are ultimately an impediment to achieving those goals.³⁸

The following outline and diagram have been extracted from Howson's trade off analysis in his paper "Crypto-giving and surveillance philanthropy," taking into account realities such as; a) the volatility of cryptoasset prices which disproportionately affect local beneficiaries; b) fiscal efficiencies that affect local government spending in poorer countries; c) non-profit organisations losing flexibility to respond to the complex needs of beneficiaries; d) Crypto-donations that risk corroding the established brand image of non-profit organisations and that at the same time, it is difficult to guarantee the confidentiality of non-profit organisations. In addition, crypto-assets are less fungible for local beneficiaries and cryptocurrencies can compromise the privacy of vulnerable groups. Cryptocurrency platforms restrict the economic freedoms of vulnerable groups. In consequence, poorer communities are more vulnerable to surveillance and economic experimentation.³⁹

³⁸ Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820. (P. 5).

³⁹ Ibid., 11



Study cases // themes

Humanitarianism

Value, trust and utility.

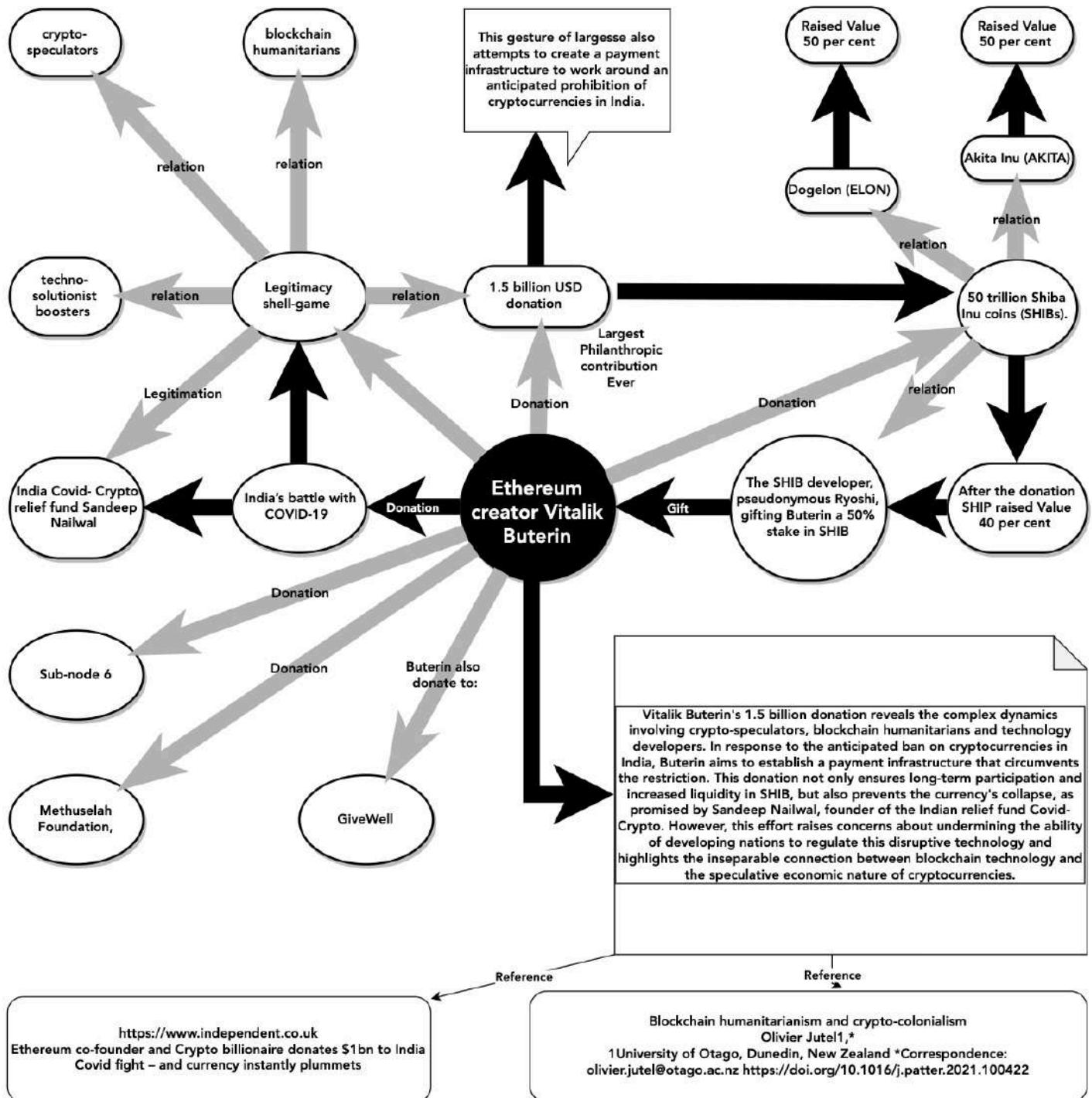
On 13 May 2020, Ethereum creator Vitalik Buterin donated USD 1.5 billion in cryptocurrency to India's fight against COVID-19. According to Jutel this was a demonstrative gesture of the legitimacy game that encompasses crypto-speculators, blockchain humanitarians and technology solution developers. The donation included 50 billion Shiba Inu coins (SHIB) created by the pseudonymous Ryoshi, who had previously gifted Buterin a 50% stake in SHIB. With this move, SHIB and Buterin are creating a payments infrastructure to circumvent the anticipated ban on cryptocurrencies in India, while ensuring a long-term stake and increased liquidity in SHIB, as the founder of Indian aid fund Covid- Crypto, Sandeep Nailwal, has pledged not to implode the currency.⁴⁰

This strategy to give cryptocurrencies value, trust and utility has been used as a driver for speculation also in other fields such as the art market, for example when in 2021 the image "Everydays: the First 5000 Days" created by Beeple was acquired for \$69 million by Indian-born entrepreneur popularly known as Metakovan. Metakovan is CEO at software technology company, Portkey Technologies and is the founder of a blockchain startup titled Lendroid. He also co-founded a cryptocurrency startup called BitAcces, which installed 100 Bitcoin ATMs in 18 countries between 2013 and 2015.⁴¹ In the words of Moxie Marlinspike (developer of Signal): "People have made money through cryptocurrency speculation, those people are interested in spending that cryptocurrency in ways that support their investment while offering additional returns, and so that defines the setting for the market of transfer of wealth...] [...] These people don't care about distributed trust models or payment mechanics, but they care about where the money is."⁴²

⁴⁰ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022). (P. 1).

⁴¹ Written By Priya Pareek <https://www.republicworld.com/entertainment-news/whats-viral/india-born-entrepreneur-identifies-himself-as-mystery-buyer-of-beeples-69-dollars-mn-artwork.html>

⁴² Marlinspike, Moxie, My first impressions of web3. URL: <https://moxie.org/2022/01/07/web3-first-impressions.html?s=09>



In summary Olivier Jutel, the author of the article "Blockchain humanitarianism and crypto-colonialism," analyses the application of blockchain in the humanitarian context, focusing on the Building Blocks project of the World Food Programme (WFP). Jutel states that this project adopts the PPP (Public-Private Partnership) model and Silicon Valley principles.⁴³ In the article Jutel argues that the humanitarian sector and non-governmental organisations (NGOs) have been used as a legitimisation mechanism for blockchain technology. Driven by the false promise of decentralisation and encrypted data. Jutel argues that humanitarian blockchain projects are tied to the politics of cryptoeconomics, proprietary platforms and a class of solutionists who espouse the cultural values of Silicon Valley where the obscurantism of blockchain technology, its governance logic and the political economy of cryptocurrencies prevent humanitarian projects from being ethically sound. In this way, projects in the developing world have embodied a colonial logic of techno-experimentation.⁴⁴

⁴³ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022). (P. 3).

⁴⁴ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022). (P. 1).

Climate

Appropriations of things, data, land should not be legitimised by the need for urgent climate action. In the article Climate Crises and Crypto-Colonialism: Conjuring Value on the Blockchain Frontiers of the Global South. The author Peter Howson analyses how climate crises are used to justify crypto-colonialism. First, through narratives of "green grabbing" in which local claims to resources are liquidated in exchange for green investments. Second, the technology perpetuates trade and investment inequalities between North and South, and third, it enables a new asymmetry of power through data colonialism and surveillance capitalism. In all of them, blockchain technology is used to extract economic benefits from those most in need. These benefits include land, labour, data and other resources.⁴⁵

In the section called GREEN GRIP FOR CRYPTOCURRENCY the author explain that Blockchain technology is being used to manage carbon offsets, such as reducing emissions from Deforestation and Forest Degradation (REDD+) created by the UN in 2007 and stop tropical forests from being cut down. Green grabbing involves the appropriation of land and resources with pro-environmental motives⁴⁶ in word of the author: "This form of appropriation includes the transfer of land as property, use rights and control over natural resources that were once publicly or communally owned – or not the subject of ownership – from marginalized groups into the hands of the powerful (Fairhead et al., 2012)." Examples of such projects include Infinite Earth's Veridium Labs, a Hong Kong-based private company working in partnership with IBM and Stellar, which are developing a platform to sell REDD+ carbon offsets as crypto-tokens. The value of Veridium's token, Verde, will be derived from the platform's ability to facilitate micropayments of carbon credits produced primarily in Infinte Earth's Rimba Raya forest in Central Kalimantan⁴⁷

Another cryptocurrency initiative, Impact Earth, has declared its intention to incentivise forest communities living in the Kariba Conservation Area in Zimbabwe by paying for its Ethereum-based Earth Token, but paradoxically Impact Earth does not allow any transfer of tokens and excludes investors from "high risk" jurisdictions. Or Athelia, a private fund based in the tax haven of Luxembourg, is providing carbon credits associated with the Cordillera Azul National Park to its strategic Maltese partner, Poseidon, for use on their Ocean platform. Poseidon's platform allows consumers and retailers to track and offset their carbon

⁴⁵ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22.

⁴⁶ Howson, Peter. "Slippery violence in the REDD+ forests of Central Kalimantan, Indonesia." *Conservation and Society* 16, no. 2 (2018): 136-146.

⁴⁷ Howson, Peter. "Tackling climate change with blockchain." *Nature Climate Change* 9, no. 9 (2019): 644-645.

footprints. The profits from these sales go to the private investors in the foreign-based projects, rather than to the local host communities. They do not directly incentivise any additional tree planting activities.⁴⁸

In the second section called BLOCKCHAIN FOR CLEAN DEVELOPMENT Howson states that: "Environmental assets (or natural capital) are a monetised representation of the services that natural systems provide for free." On a global scale, this means that companies located, for example, in the US can offset CO2 emissions by replacing tree cover in places where it is cheaper and more efficient, such as in the Global South. Thus, for-profit companies such as Adaptation Ledger, Climate Trade and Climate Futures have launched blockchain platforms for carbon offsetting, green finance and sustainable investments. According to the author, "The 1Planet" blockchain platform, developed by Climate Futures, enables the purchase of environmental assets from energy efficiency initiatives in Africa, Latin America and India. Individuals and companies can purchase carbon credits as blockchain tokens to reduce their net emissions by supporting, for example, the installation and distribution of energy-efficient cookstoves in Zambia.⁴⁹

In the other hand, The Nori Marketplace uses blockchain technology to incentivise landowners in the Global North. US farmers can receive premiums on Nori Removal Tonnes (NRTs) tokens. Nori Removal Tonnes (NRTs), which each represent one tonne of CO2 removed from the atmosphere for a minimum of 10 years. The removal of NRTs is immediate and generates a certificate that is permanently recorded on the Ethereum blockchain. According to the author Nori's verification methodology also requires the input of trusted third party intermediaries. Which begs the question, why to use a blockchain at all?⁵⁰

In the last section called DATA COLONIALISM AND CLIMATE REFUGEES the author argues that groups of climate displaced persons such as the Rohingya are often the subject of disputes, their bank accounts, passports, access to credit or insurance are restricted even when birthright citizenship exists. The blockchain development start-up, Rohingya Project aims to create a self-sustaining identification platform that does not rely on any state entity or any other third party intermediary to issue supporting documents. Users of the platform in Malaysia will be able to access credit and other services through a crypto-wallet to foster entrepreneurship and financial sustainability in the Rohingya community (Rohingya Project, 2020).⁵¹ In conclusion, Blockchain technology is used in social governance systems and in areas considered

⁴⁸ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22. (P,11).

⁴⁹ Ibid., 12.

⁵⁰ Ibid., 14.

⁵¹ Ibid., 17.

underdeveloped from a Western perspective, such as blockchain-based identification systems, supply chain transparency and consent applications.

Indigenous

Blockchain technology is often presented with lofty social goals, such as climate change solutions where projects like Nemus⁵² and Moss⁵³ tokenise parts of the Amazon rainforest to sell as NFTs. These projects continue the economy of rarity established by collectible NFTs, where unique features increase the value of land and are governed by stakeholders in a DAO.⁵⁴ However, as in historical colonialism, these symbolic representations are abstract assets that promise future income and care little for the survival of what they represent.⁵⁵ "The founder of Indigicoins, a Māori cryptocurrency, has explicitly claimed that 'we [indigenous people] were the original inventors of blockchain' (Dunn, 2019)"⁵⁶

Despite claims about climate change, rainforests only make sense in these DAOs if they generate monetary value for stakeholders. Hence, according to Gloerich, these projects exemplify how blockchain colonialism extends data colonialism by introducing new systems of governance more intrinsically embedded in the logic of economic exchange, further alienating nature and life.⁵⁷ To conclude, in Jute's words: "The 'problem' of land registration in need of a rational 'techno-solution' is the legacy of human resistance to colonial expropriation which has preserved indigenous lands."⁵⁸

⁵² Nemus, URL: <https://nemus.earth/>

⁵³ Moss, URL: <https://nft.moss.earth/>

⁵⁴ Inte Gloerich. "Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter," 2023. APRJA, URL: <https://aprja.net/article/view/140448>

⁵⁵ Juárez, Geraldine. "The Ghostchain.(or Taking Things for What They Are)." (2021).

⁵⁶ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249.

⁵⁷ Inte Gloerich. "Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter," 2023. APRJA, URL: <https://aprja.net/article/view/140448>

⁵⁸ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249.

Labor

The article, "Poor miners and empty e-wallets: Latin American experiences with cryptocurrencies in crisis." examines forms of political and economic precarity and exploitation, in particular, how cryptocurrencies are an added layer to the Latin American crisis. According to the authors, cryptocurrencies have the capacity to create potential niches for improvised economic survival, speculation and quick profit, while at the same time reproducing historical conditions of vulnerability, inequality, and economic exploitation.⁵⁹ Is the case of Venezuelan's "los mineros pobres" (the poor miners), called like this because they could not compete with these big bitcoin miners.⁶⁰

⁵⁹ Rosales, Antulio, Eva van Roekel, Peter Howson, and Coco Kanters. "Poor miners and empty e-wallets: Latin American experiences with cryptocurrencies in crisis." *Human Geography* (2023): 19427786231193985. (P. 1).

⁶⁰ *Ibid.*, 2

Mapping the Land

Blockchain colonialism in the developing world is advancing with a humanitarian face, argues Olivier Jutel, taking advantage of the desire for technological development and the regulatory weakness of developing world governments. Examples are the attempts to create and promote a national cryptocurrency in The Marshall Islands or El Salvador, where President Nayib Bukele, has wanted to grant Bitcoin the status of legal tender. Or the memorandum of understanding between the government of Papua New Guinea and Ledger Atlas, a company backed by Tim Draper, billionaire, Silicon Valley venture capitalist and Bitcoin evangelist, declaring the creation of a "virtual government platform"⁶¹

Pacific

In the article entitled "Blockchain Imperialism in the Pacific," the author Olivier Jute, explores projects emerging from Silicon Valley under the premise of economic development that blockchain technology promises in the Pacific Island nations. His analysis focuses on the platform architectures and political economy of information and communication, with the aim of identifying the presence of so-called blockchain imperialism.

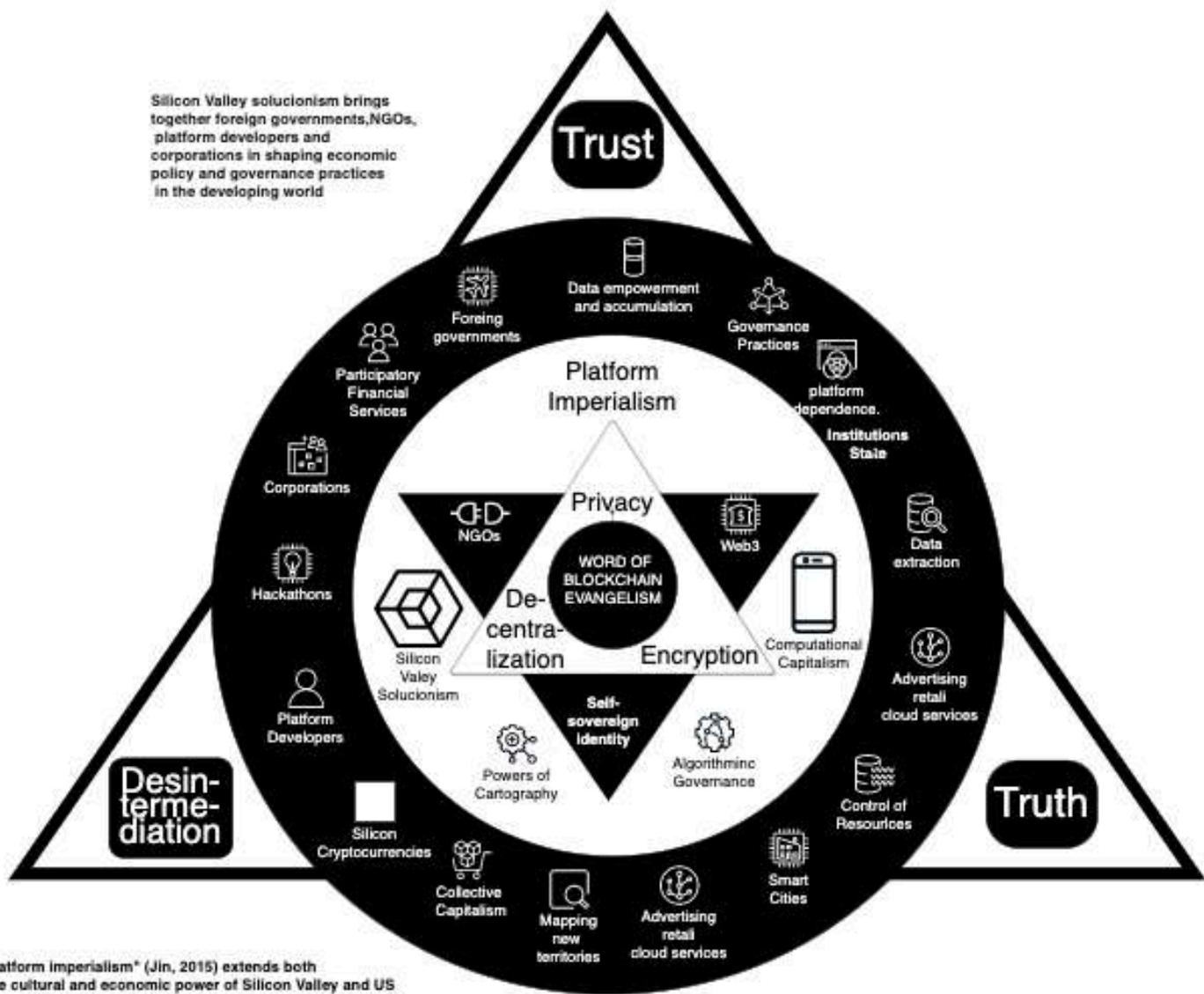
According to Jute, the development of blockchain in the Pacific is closely linked to historical technology claims that have supported US soft power and geopolitical interests. In this power play, the developing world serves as a testing ground for blockchain governance solutions. Their aim is to manage and map material resources outside the control of the state. Paradoxically, the anti-capital, anti-banking and anti-state ideals that accompanied the emergence of blockchain have turned and now it is the state that gives legitimacy to blockchain technology.⁶²

The term coined by Jin Dal Yong, Platform imperialism,⁶³ extends both, the cultural and economic power of Silicon Valley and the US geopolitical interests. This paradigm brings together foreign governments, NGOs, platform developers and corporations in shaping economic policy and governance practices in the developing world through initiatives such as "Civil Society 2.0" promoted by the US government and Silicon Valley in what new media theorist E. Morozov has called a culture of technosolutionism (Morozov, 2014). According to Jutel: "What is distinct about blockchain platform imperialism are its claims to algorithmic

⁶¹ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022). (P. 5).

⁶² Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 1).

⁶³ Jin YD Digital Platforms, Imperialism and Political Culture. London, UK: Routledge. Crossref. (2015)



Platform imperialism* (Jin, 2015) extends both the cultural and economic power of Silicon Valley and US geopolitical interests

governance and powers of cartography." To explain it, Jutel references the researchers Isin and Ruppert⁶⁴ using the term "data empire" where blockchain is implemented as a technology capable of controlling its own resources, while charting a new 'territory as an object of power and data mining by using code to lock down property relations, which can be defined as a techno-colonial act.⁶⁵

This cultural imperialist representation of the internet as a human-centred development tool is epitomised by the State Department's launch of the "Civil Society 2.02 initiative by the US State Department in 2019. It consists of a series of workshops, hackathons and forums operating under the banner of 'Tech Camp' which according to the author are solutionist practices in the development sector in the performative entrepreneurial style of Silicon Valley. According to Jutel, blockchain's distinguishing feature lies in its claims of universality, presenting itself as a platform that mediates all data. Consequently, blockchain's ambitions go beyond the realms of advertising, retail and cloud services; it aspires to influence governance systems for data production and platform dependency in the developing world. In this way, blockchain establishes a technological frontier, where the developing world's valuable resources become objects of utmost importance.⁶⁶

Fiji Island

In 2018, the U.S. Embassy in Fiji, hosted a blockchain conference at the University of the South Pacific (USP) under the Tech Camp and Blockchain@State banners. USP has hosted previous initiatives such as "civil society 2.0", and workshops on social media and digital journalism, as well as the "Fishackathon" event in 2016, considered the forerunner for the application of blockchain for tuna sourcing. The conference was attended by Information and Communication Technology (ICT) sector leaders from the region, blockchain entrepreneurs and Unblocked Cash leader Sandra Hart, Fiji's Permanent Secretary for Education and local developers.

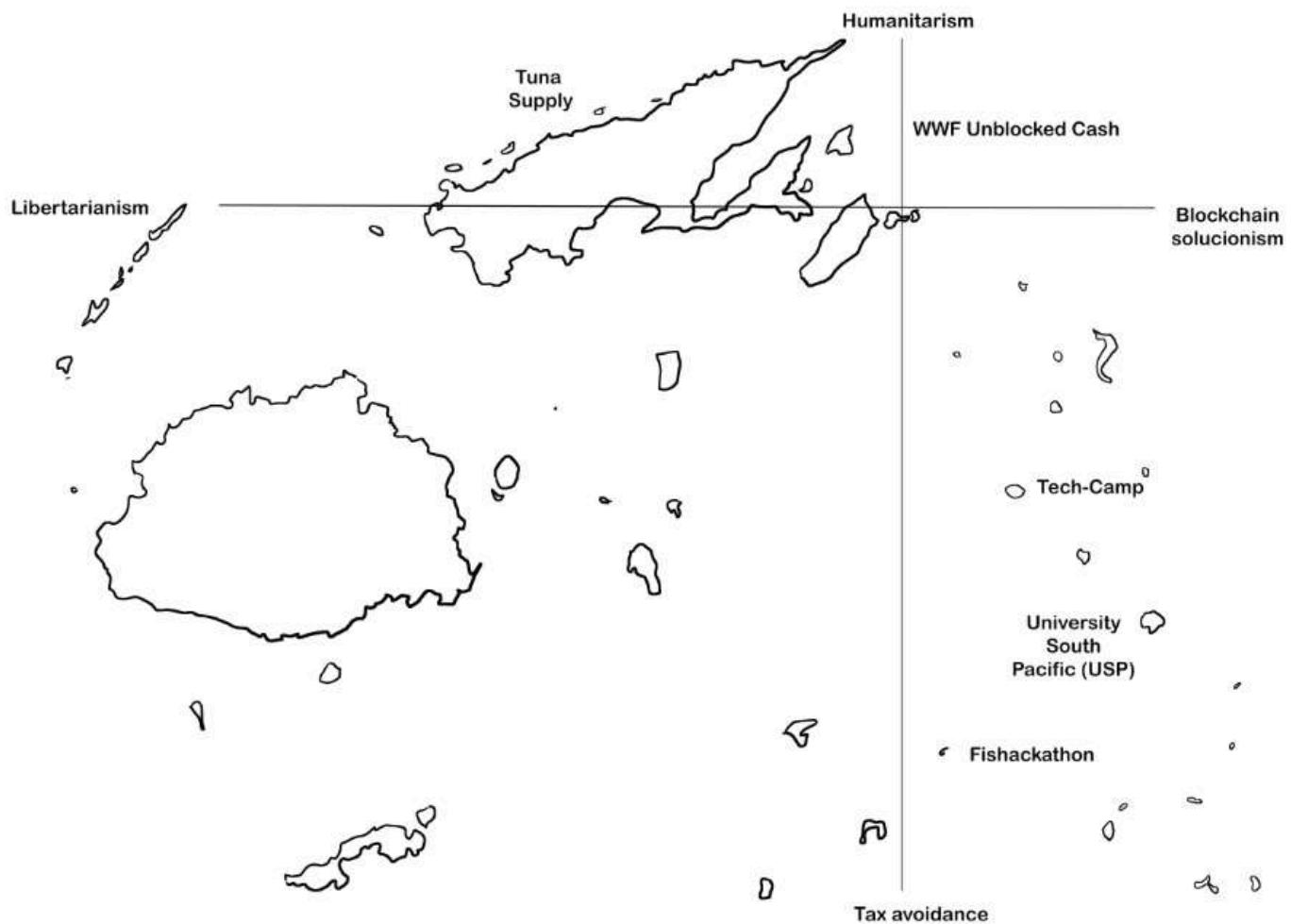
⁶⁴ Isin E, Ruppert E Data's empire: Postcolonial data politics. In: Bigo D, Isin E and Ruppert E (eds). *Data Politics: Worlds, Subjects, Rights*. London, UK: Routledge. (2019).

⁶⁵ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P.6).

⁶⁶ Ibid., 20.

The presence of the State Department's Blockchain Tech Camp in Fiji is due to the tuna supply blockchain pilot project, in partnership with WWF, Viant and TraSeable Solutions. Viant, a blockchain startup under the ConsenSys umbrella, has gained media notoriety thanks to its focus on "bait-to-plate" tuna traceability.⁶⁷

The partnership between WWF, Viant and TraSeable blockchain aims to eliminate unethically or illegally sourced products, add value to ethically sourced tuna through informed purchases and provide a single source of truth for traceability. Due to cost and connectivity issues, data from Fijian fishing fleets is recorded outside the blockchain via NFC tags on fish.



⁶⁷ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 20).

TraSeables and its founder Kenneth Katafona are the region's leading blockchain advocates and developers. In this environment, governments, NGOs, local developers and blockchain evangelists are channeling solutionist discourse and technological promise for development.⁶⁸

The value proposition of blockchain is based on the assumption of the inevitability of big data. However, where its value really lies is in the consumer experience, asserts Jutel, who perceives ethical certainty through QR codes and augmented reality to track product origin. While blockchain tuna may add value to Fiji's exports, the idea of data transparency at the core of blockchain does not demystify or transcend existing trade relationships, but is obscured under claims of a platform of absolute truth for the blockchain-empowered consumer. Importantly, this blockchain solution does not address the power imbalances in the global tuna trade, where domestic consumers are excluded from the price of their own natural resource and Fijian companies cannot compete with large-scale Chinese fishing fleets.⁶⁹

In closing, Jutel argues that this control of the platforms is more akin to an extractive imperial process in the form of blockchain land registries. In the Fiji Islands, anti-colonial resistance has ensured that 90% of the country's land remains under indigenous control. However, the Asian Development Bank is developing a blockchain market in the region. In this way, blockchain technology becomes the ideal mechanism for a neoliberal development model of property rights, bringing the resources of the developing world into the calculus of computational capitalism.⁷⁰

⁶⁸ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P.20).

⁶⁹ Ibid., 22.

⁷⁰ Ibid., 4.

Vanuatu

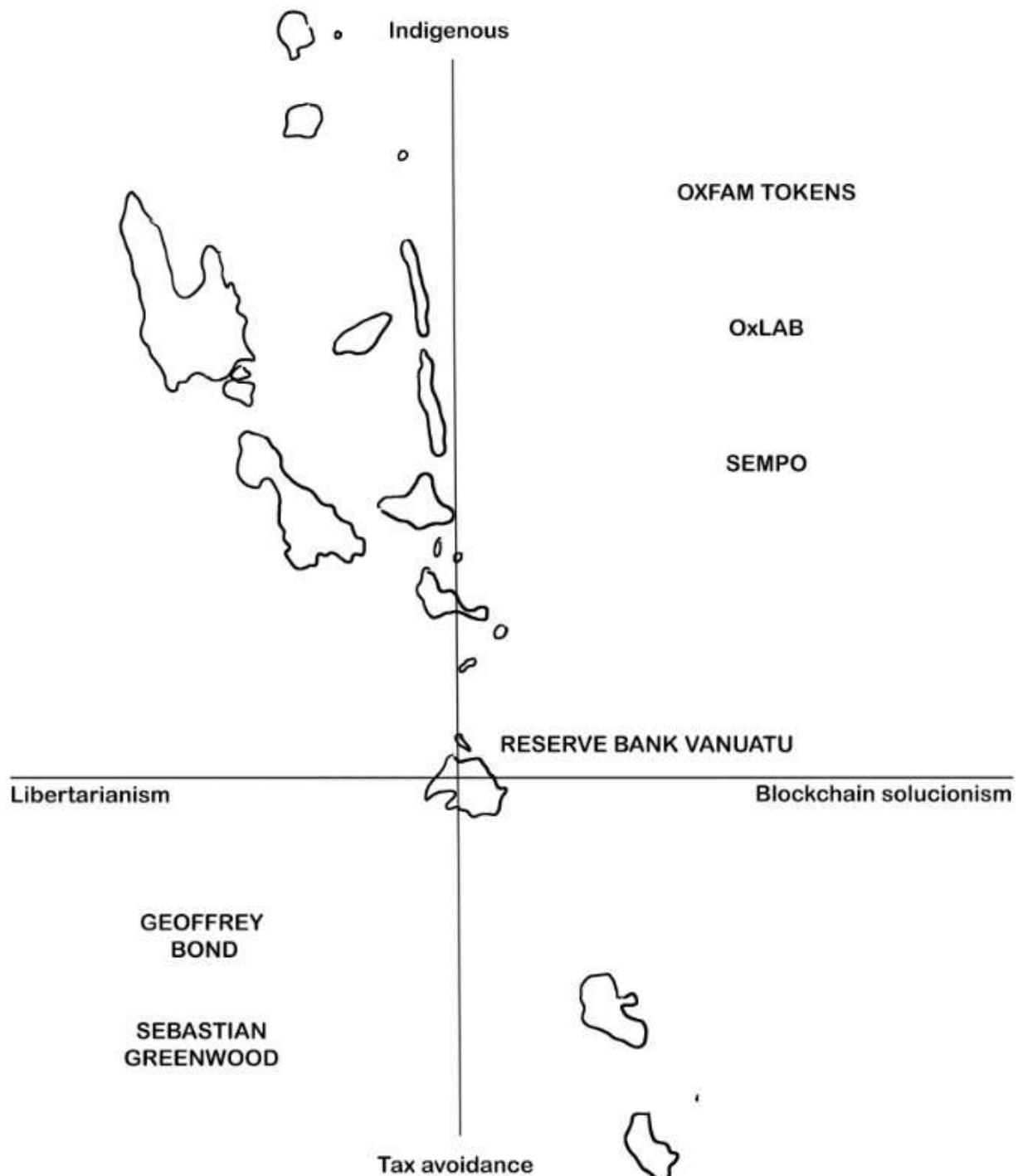
Vanuatu is one of the Pacific countries used as a product for Silicon Valley developers and governments trying to cash in. This is because it is an ideal location for cryptocurrency tax avoidance, passporting and experimentation with communities in the developing world. According to Oliver Jutel, it is clear here that blockchain solutionism circumvents the regulatory environment, the considerable technological deficits, the failures of disintermediation and the dependence of developers on for-profit platforms. One example of this developer alliance is OXFAM's Unblocked Cash project. An App designed to rapidly distribute cash aid, according to Jutel, this highly intermediated blockchain has burnished Oxfam's innovation credentials and the humanitarianism of the proprietary developers. Oxfam's Unblocked Cash has been one of the flagship humanitarian blockchain projects that has developed alongside the most unseemly elements of the cryptoeconomy, argues Oliver Jutel. Vanuatu's status as a tax haven with citizenship by investment has made a hub for wealth protection, crypto-scams and libertarian fantasies of a tax-free island paradise.⁷¹

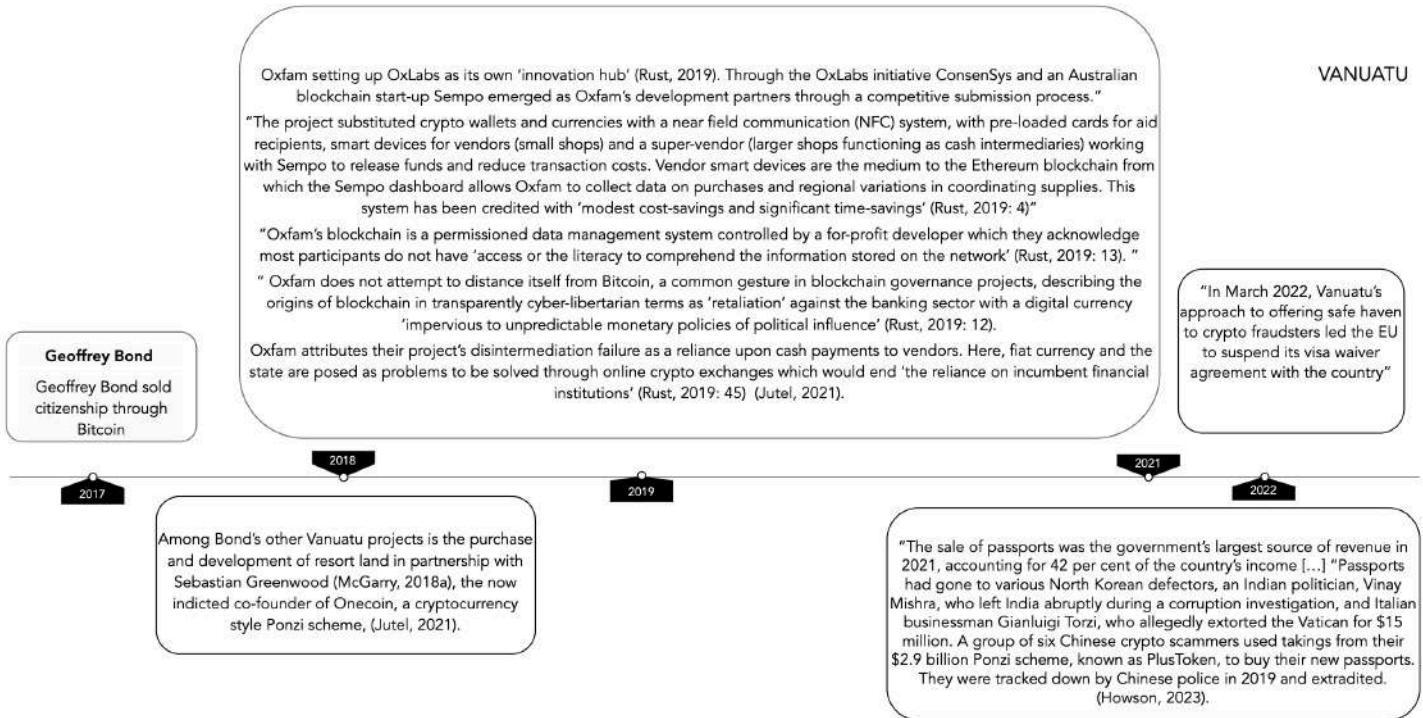
"Vanuatu's lack of corporate, income, capital gains or estate taxes, as well citizenship by investment laws, has made it an ideal spot for crypto entrepreneurs. Geoffrey Bond, a passport broker for the Vanuatu Information Centre, garnered significant attention in international financial media in claiming Vanuatu as the first country to sell passports in exchange for Bitcoin (Bach, 2017)."⁷² In addition, Geoffrey Bond sold citizenship through Bitcoin, Bond would also buy land for a resort in Vanuatu with Sebastien Greenwood, the accused co-founder of Onecoin, a cryptocurrency-style multi-level marketing (MLM) and Ponzi scheme that defrauded users of billions, especially in the developing world.

Vanuatu has also provided citizenship to the creators of the multi-billion dollar Africrypt scam, and the sale of Vanuatu's Pacific Private Bank allowed Lithuanian cryptocurrency Bankera to acquire a banking licence, something they were denied in their home country. From its Vanuatu headquarters, Bankera claimed to be a blockchain-powered digital bank and raised \$150 million in what amounted to a conventional initial coin offering, with its value plummeting almost immediately. These developments were not welcome in light of the Vanuatu government's efforts to comply with the Financial Action Task Force's anti-money laundering rules, Jutel argues.

⁷¹ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 15).

⁷² Ibid., 16





Satoshi Island, or Lataro Island

With three square kilometers and 90% virgin jungle, Satoshi Island was put up for sale in 2017 for \$12 million. In order for Bitcoin enthusiasts to live there, the purchase of a citizenship NFT was enabled. 21,000 of which were issued and minted by the project developers. To own land on the island also required one of the 21,000 NFT of land. ⁷³

Papua New Guinea

"Similarly, back in 2018, Papua New Guinea signed an agreement with Ledger Atlas, a company backed by Silicon Valley venture capitalist and Bitcoiner, Tim Draper. ", "Palau's programme soon attracted a similar clientele. Bernadette Carreon, a local journalist with Organized Crime and Corruption Reporting Project

⁷³ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023. (P.64).

(OCCRP) explained, "Chinese organised crime groups were moving in, building illicit online business empires, and laundering money using cryptocurrency."⁷⁴

Republic of Palau

According to Howson, as early as 2017 there were signs of crypto-token scams linked to local politicians and the PalauCoin digital currency.⁷⁵ But it was in February 2022 when Palau President Surangel S. Whipps met with Brock Pierce to start selling digital ID cards associated with the Ripple cryptocurrency suite, Binance and Palo Alto blockchain developers Cryptic Labs. Palau launched "a digital residency system known as the Root Name System." For \$248, anyone from anywhere could apply for a limited-edition NFT identity card that allowed them to use a Palau business address, apply for a legal name change certificate and open online accounts to trade cryptocurrencies.⁷⁶

Indonesia

Veridium's token, Verde, is used to facilitate micropayments of carbon credits produced primarily in Infinte Earth's Rimba Raya forest in Central Kalimantan.⁷⁷ Stellar is a cryptocurrency used by companies to US and European corporate buyers in the Indonesian countryside, where indigenous Dayak communities had lost their forests to oil palm plantations.⁷⁸

⁷⁴ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023. (P.83).

⁷⁵ Ibid., 66

⁷⁶ decrypt.co URL: <https://decrypt.co/90243/why-island-nation-palau-going-crypto>

⁷⁷ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): (P. 22).

⁷⁸ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023. (P. 7).

Thailand

Patri Friedman - grandson of Milton Friedman (Chicago boys) - and Bitcoin billionaire Peter Thiel created the Seasteading movement. According to The Guardian, "Seasteading (floating islands in international waters) represents Silicon Valley's latest approach to governance, conceiving of society as a technology that can be hacked and innovated as simply as an operating system.⁷⁹ It is based on the idea that creating tax-free libertarian countries should be as easy as creating new businesses. Following this idea, American Bitcoin traders Chad Elwartowski and Supranee Thepdet built a floating seastead on a small concrete canopy in the Andaman Sea, twelve miles off the coast of Thailand⁸⁰

Myanmar

Rohingya are displaced by climatic phenomena and are often legally considered "stateless" The blockchain development start-up, Rohingya Project, aims to create a self-sustaining identification platform that does not rely on any state entity or other third party intermediary to issue supporting documents. Users of the platform in Malaysia will be able to access credit and other services through a crypto-wallet to foster entrepreneurship and financial sustainability in the Rohingya community (Rohingya Project, 2020). Data shared by some of the most persecuted people on a blockchain, highlights the clear need for a stronger regulatory framework to effectively mitigate risks associated with data protection, privacy and human rights.⁸¹

⁷⁹ <https://www.theguardian.com/environment/2020/jun/24/seasteading-a-vanity-project-for-the-rich-or-the-future-of-humanity>

⁸⁰ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023. (P.83).

⁸¹ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22. (P.17).



Latin America

Puerto rico

Since the advent of blockchain, Puerto Rico's neoliberal policies have incentivised the cryptocurrency and blockchain techno-capitalist industries. Jillian Crandall⁸² explains that cryptocurrency investors and blockchain companies have moved to Puerto Rico, aiming to design their own future on the island, a "crypto-utopia" after hurricanes Irma and María, a so-called "disaster capitalism" in words of Naomi Klein, designed to "strip colonised peoples of their culture, trust and power." However, in Crandall's words, what is missing is an examination of the varied groups of Puerto Ricans who are actively engaging with cryptocurrency and blockchain with different ideological positions and design approaches. According to Crandall, for private companies and investors, crisis is used in narratives of benevolent capital. "In Puerto Rico there are three main groups and design approaches: (1) businesses and tech startups; (2) governments; and (3) individual investors. For businesses and tech startups, the design of blockchain systems is linked with rhetoric around "innovation" and "entrepreneurship."⁸³

According to Oliver Jutel, Brock Pierce, president of the Bitcoin foundation and founder of the stablecoin Tether, has exemplified the imperial politics of this island fantasy in attempting to transform Puerto Rico in the aftermath of Hurricane Maria into a 'crypto-utopia [...]'. Pierce's crypto-colonialism in Puerto Rico is exemplary of an imperialist appropriation of indigenous values.⁸⁴

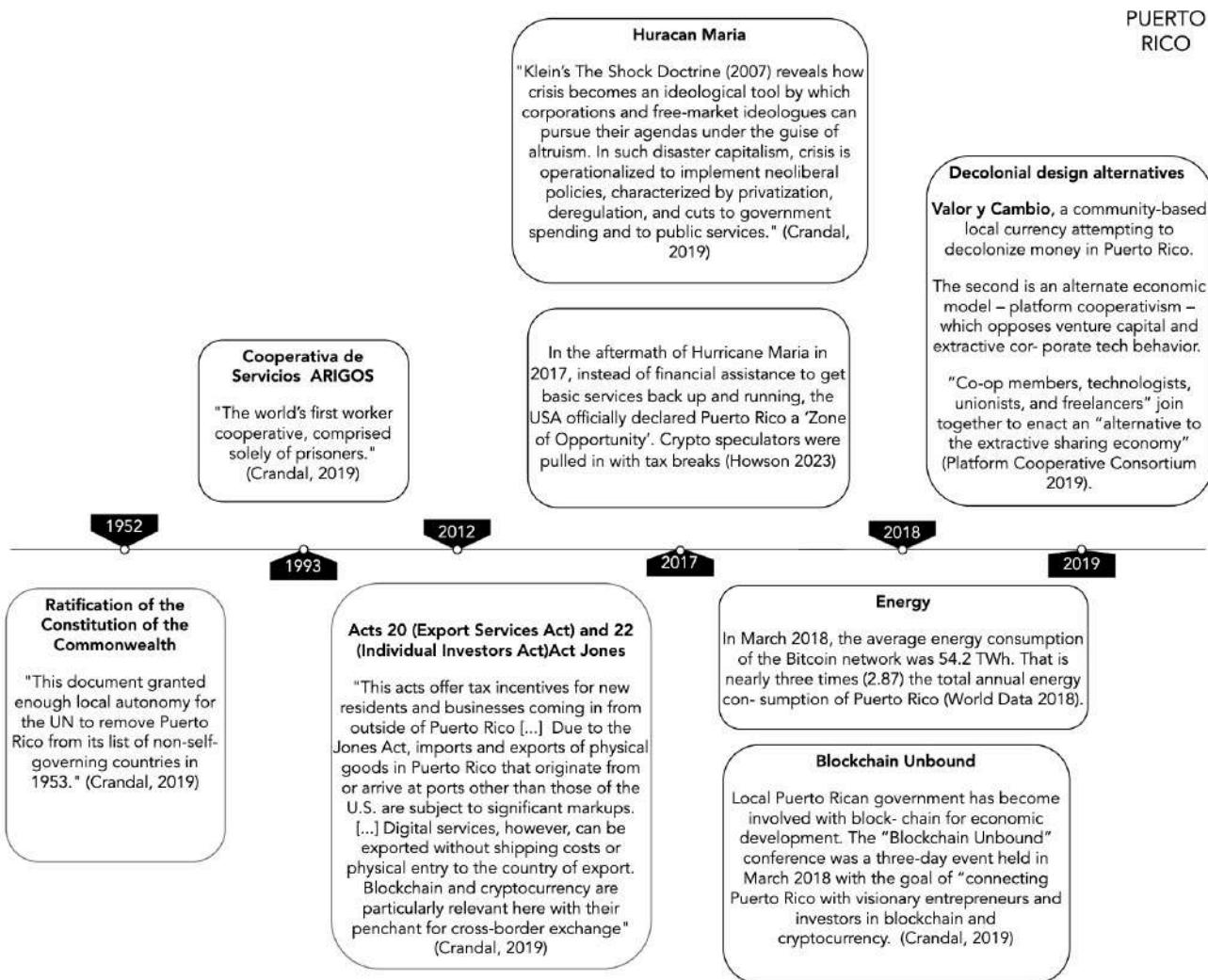
Jillian Crandall describes two decolonial design alternatives in Puerto Rico:

- 1) **Valor y Cambio (Value and Change):** This is a community-based local currency attempting to decolonize money in Puerto Rico. The project includes a new local currency called the peso that can be obtained by users at a "Valor y Cambio" machine in exchange for recording a short video about what they value in life. The design of the bills features iconic Puerto Rican figures, and a QR code on the back allows users to learn more about their history. The pesos are meant to be exchanged at participating businesses to promote a local economy.

⁸² Crandall, Jillian. "Blockchains and the "Chains of Empire": Contextualizing blockchain, cryptocurrency, and neoliberalism in Puerto Rico." *Design and Culture* 11, no. 3 (2019): 279-300. (P. 4).

⁸³ Ibid., 5

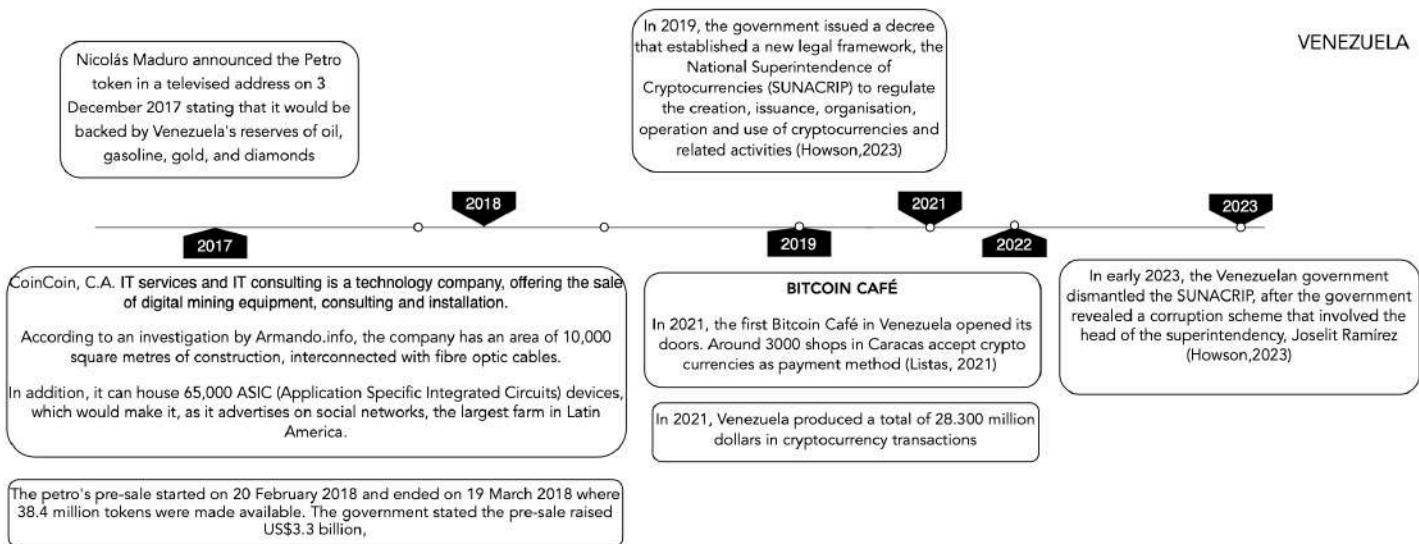
⁸⁴ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 14).



2) Platform Cooperativism: This alternate economic model opposes venture capital and extractive corporate tech behavior. It is based on a model of cooperative ownership and not-for-profit structuring. This type of initiative has been implemented in Puerto Rico by Beneficial State Bank, a CDFI based in Oakland, California. They have partnered with Foundation for Puerto Rico and numerous local organizations in a Community Asset Fund, designed to specifically support cooperatively-owned businesses as well as nonprofits.⁸⁵

⁸⁵ Crandall, Jillian. "Blockchains and the "Chains of Empire": Contextualizing blockchain, cryptocurrency, and neoliberalism in Puerto Rico." *Design and Culture* 11, no. 3 (2019): 279-300. (P. 14).

In conclusion, Crandall argues that designing futures for the marginalized will require more than a belief in



the emancipatory potential of technology, it will require structural change and a shift in decision-making power. The trend toward technocratic governance and building blockchain architectures on top of existing unequal digital infrastructures will have to be challenged. Crandall asserts that for any project to be emancipatory, the most important step is to deconstruct the rhetoric and direct agency towards local communities and trusted organizers to design and manage their own future, rather than letting outside interests, or the technologies themselves, determine a future for them.⁸⁶

El Salvador

El Salvador is another example of how the crisis of political discourse combined with Blockchain solutionism has affected everyday economic life, human geography and cultural anthropology. These techno-obscurantist initiatives, instead of providing solutions, have accentuated the forms of precariousness and political and economic exploitation that have been a drag on the development of all countries. Within this disruption,

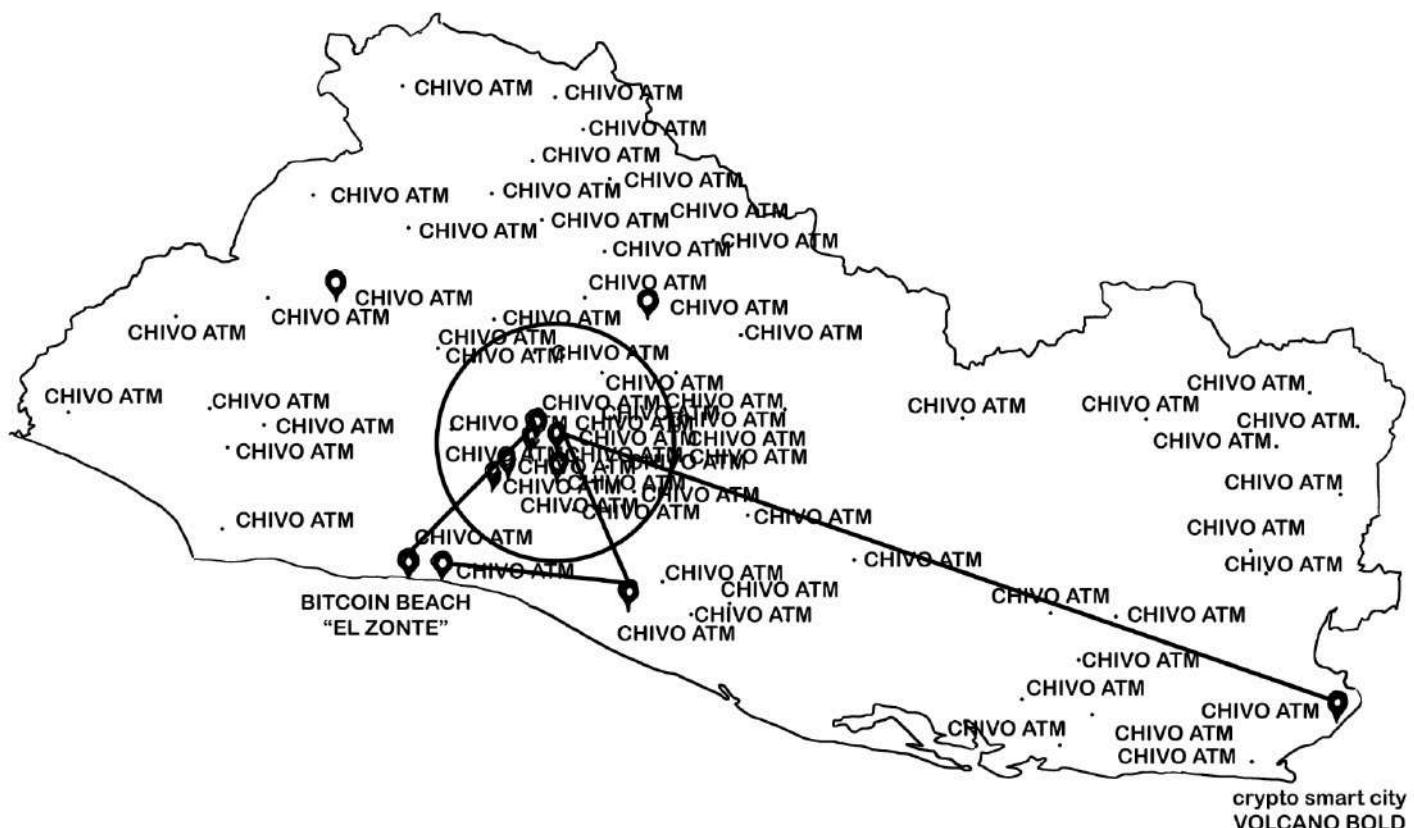
⁸⁶ Crandall, Jillian. "Blockchains and the "Chains of Empire": Contextualizing blockchain, cryptocurrency, and neoliberalism in . Rico." *Design and Culture* 11, no. 3 (2019): 279-300. (P. 17).

where El Salvador is a major player, cryptocurrencies have emerged and expanded rapidly, especially during periods of economic and political crisis, and have been accelerated through the use of supposedly apolitical "metanarratives" and discourses of "algorithmic trust" disseminated by the Blockchain idiosyncrasy.

This change does not come alone, in June 2021 the president of El Salvador, Nayib Bukele, declared bitcoin as legal tender. The criptoentrepreneur who had taken an interest in El Salvador's "bitcoin beach" in El Zonte, a cryptocurrency project funded by a bitcoin angel investor in connection with local charities."

The bulk of bitcoin policy in El Salvador has been run by El Chivo (company in charge of rolling out the country's bitcoin policy). Initially, the government requested a USD 200 million credit from parliament to fund the creation of a national wallet, through which a USD 30 incentive would be given to each Salvadoran citizen

BLOCKCHAIN-COLONIALISM GEOGRAPHIC MAP, 2024 EL SALVADOR, BLOCKCHAIN SOLUTIONISM



EL SALVADOR



2019

2021

2023

CHIVO WALLET

The president of El Salvador, Nayib Bukele, declared bitcoin a legal tender in June of 2021

Chivo Wallet launches on Sept. 7

On Sept. 6, El Salvador President Nayib Bukele announced on Twitter that the country held 400 Bitcoin tokens

The government initially requested a \$200 million US credit to Parliament to finance the creation of a national wallet, through which a \$30 US incentive would be given to every Salvadoran citizen who downloaded the app

Some 200 Chivo ATMs have been placed throughout the country, as well as in Salvadoran consulates in the United States. In a study by Central American University, it was found that 67.9 percent of Salvadorans that were surveyed either disagreed or strongly disagreed with Bitcoin being used as a legal tender. The surveys also showed that nine out of 10 people don't fully understand Bitcoin (Rosales, Antulio, Eva van Roekel, Peter Howson, and Coco Kanters.)

El Salvador plans to build a Bitcoin city at the base of a volcano

The disinterest of most Salvadorans in Bitcoin saved them from a crashing crypto market. But the government's pocketbook was looking less rosy. Its 2,381 Bitcoins were, as of early 2023, worth less than half their purchase price, losing the Salvadoran taxpayer around \$50 million

As of March 2023, there were no signs of heavy machinery or Bitcoin mining at the proposed Bitcoin City site, suggesting that the dream of full-scale crypto colonialism – for now at least – was yet another failed Bitcoin fantasy (Howson, 2023)

who downloaded the app. A trust fund of USD 150 million was created to allow automatic convertibility between bitcoin and dollars for those who bought and exchanged funds between the two. Another part of these funds was used to establish the technology and infrastructure for the measure, as well as to fund public

awareness and education about the technology. Some 200 Chivo ATMs⁸⁷ have been installed throughout the country, as well as in Salvadoran consulates in the United States. More than 100 million US dollars have also been invested in bitcoin purchases by the president. The document states that "when Salvadorans convert their Bitcoin to dollars, they do not receive dollars in the digital wallet. Instead, they become holders of stable dollar coins, which are just a claim on real dollars."⁸⁸

One of Bukele's plans for bitcoin settlement was to issue a "volcano bond" to finance the construction of another "smart crypto-city" on the fringes of the Conchagua volcano that would use geothermal energy to power bitcoin mining. All this considering that by the end of 2022, El Salvador was importing 25% of its electricity from fossil fuel power plants located elsewhere in the region.⁸⁹

Honduras

2013 law enabling the creation of special economic zones known as 'ZEDEs'. With the same libertarian spirit as the Seasteaders, crypto evangelists Peter Thiel, Marc Andreessen, and Brock Pierce drove the exclusive crypto-city project called Prospera on the Honduran island of Roatán, which began construction in 2020. With its own laws designed to inspire tax-free, cryptocurrency-friendly innovation. This came on the heels of an amendment to the country's constitution in 2013 that allowed many more foreign companies to create autonomous cities. This further exacerbated land disputes, Howson says. In addition, Prospera hoped to become a mecca for medical trials that are often too expensive in countries where cumbersome regulations apply. Among other residents of the island was the biotech company Minicircle. It was conducting gene therapy trials.

⁸⁷ <https://www.chivowallet.com/>

⁸⁸ Rosales, Antulio, Eva van Roekel, Peter Howson, and Coco Kanters. "Poor miners and empty e-wallets: Latin American experiences with cryptocurrencies in crisis." *Human Geography* (2023): 19427786231193985. (P. 6).

⁸⁹ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023 (P.73).

Venezuela

The economic collapse and extreme volatility of economic life opened the back door to cryptocurrencies in Venezuela. In this case, cryptocurrency mining and trading emerged alongside high levels of inflation and the erosion of legal tender as a medium of exchange. In addition to dollarisation, the rapid shift towards cryptocurrencies and private investment by new elites has provided ways to circumvent the crisis and the economic sanctions imposed by the US and the EU to overthrow the increasingly authoritarian regime led by Nicolás Maduro.

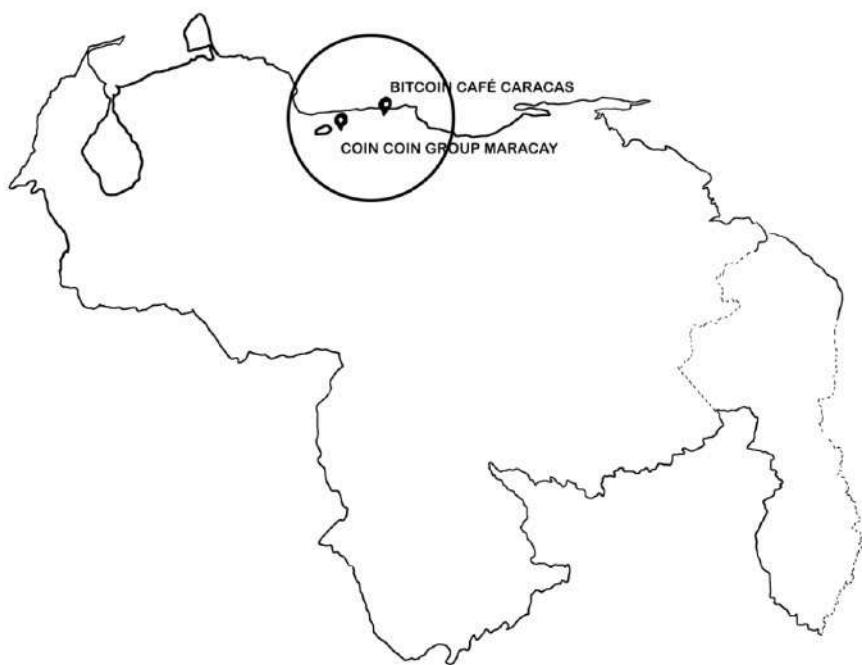
The use of a crumbling energy infrastructure, historically subsidised by a petro-state, served as a profitable mechanism for bitcoin mining and trading to expand rapidly. This fact moved individuals into cryptocurrency mining to earn extra money. A desperate movement that they called as "poor miners", because they could not compete with these big bitcoin miners.⁹⁰

In summary, the Venezuela's attempts of autonomy and freedom from centralised control has been actively exploited by national governments as part of their economic policy agenda.⁹¹ In the middle of these attempts to thrive economically, there was some ideas such as the Dash Text pilot project, a non-profit cryptocurrency and donation platform for schoolchildren in Venezuela. However, in words of Peter Howson, "if scaled up, this approach to humanitarian aid could dissolve local expertise, as projects would connect directly to international cryptocurrency monitoring networks without mediation".⁹²

⁹⁰ Rosales, Antulio, Eva van Roekel, Peter Howson, and Coco Kanders. "Poor miners and empty e-wallets: Latin American experiences with cryptocurrencies in crisis." *Human Geography* (2023): 19427786231193985. (P. 2).

⁹¹ Ibid., 5

⁹² Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820. (P. 11).



Middle East

Syria

The Building Blocks program uses an Ethereum application for cash aid in Syria. Aid recipients register using a retina scanner that creates a unique digital identity, from which they can access their balance and make payments. Building Blocks is a database disguised as a blockchain, as there is no mining algorithm or consensus algorithm assures Oliver Jutel. Jutel argues that the recipients of the aid are not the subjects liberated by the blockchain, but test subjects of an enterprise software that seeks to innovate. The slogan of innovation, according to Jutel, pushes the ethical premises of technohumanitarianism and public-private partnership to absurdity, especially in the case of the partnership between the WFP and Palantir, a CIA-funded national security contractor known for its lack of transparency.⁹³

In addition, Jutel notes that the blockchain's immutable data governance ideal creates technological opportunities for entrenched geopolitical interests, bureaucratic intermediaries and the private intelligence world, which can inspect and intervene in conflict zones and developing countries. Scaling up and integrating projects such as Building Blocks is presented as a flexible governance solution that uses algorithmic trust to address perceived institutional dysfunctions or weaknesses in developing countries.⁹⁴

In this context, refugees are seen as the main beneficiaries of a portable identity system stored on the blockchain, which includes biometric data, official documents and social network data. These technologies promise to improve identity management and humanitarian assistance, but raise ethical and privacy issues that need to be carefully considered.⁹⁵

⁹³ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022). URL: [https://www.cell.com/patterns/fulltext/S2666-3899\(21\)00305-6?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2666389921003056%3Fshowall%3Dtrue](https://www.cell.com/patterns/fulltext/S2666-3899(21)00305-6?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2666389921003056%3Fshowall%3Dtrue)

⁹⁴ Ibid.

⁹⁵ Ibid.

Lebanon

The UNDP's AltFinLab have developed a blockchain crowdfunding initiative, connecting Lebanese diaspora to sustainable development projects at home through a cryptocurrency called CedarCoin (Moonyoung, 2019).⁹⁶

Malta

The Republic of Malta, a tax haven that has declared itself a "blockchain island," has pledged to help develop Vanuatu's legal framework for blockchain.⁹⁷ Athelia, a private fund based in the tax haven of Luxembourg, is providing carbon credits associated with the Cordillera Azul National Park to its strategic Maltese partner, Poseidon, for use on their Ocean platform. Poseidon's platform allows consumers and retailers to track and offset their carbon footprints.⁹⁸ The profits from these sales accrue to the private investors in the foreign-based projects, rather than to the local host communities. They do not directly incentivise any additional tree planting activities or carbon 'additionality'. As Lang (2018a) points out⁹⁹ Binance was initially based in China, then moved to Japan shortly before the Chinese government restricted cryptocurrency companies. Binance subsequently left Japan for Malta.

⁹⁶ Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820. (P. 10).

⁹⁷ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 16).

⁹⁸ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22. (P. 10).

Africa

Central African Republic (CAR)

To maintain control, the CAR government relied entirely on foreign military aid from the Wagner Group, a private military security contractor controlled by Yevgeny Prigozhin, a Russian oligarch with close ties to Vladimir Putin. According to the European Platform for Democratic Elections, cryptocurrencies such as ZCash and Monero have been essential to Russian soft power diplomacy in the CAR, allowing Russia to fund covert operations anywhere despite sanctions. This is carried by Mara, one of African blockchain startups funded by U.S. cryptocurrency giants such as Coinbase and FTX.

Paradoxically, the Mara app was also used by Sustainability International in Nigeria to onboard illiterate women to part with their real money. Mara included the sale of citizenship by investment packages and a smart crypto-city. There was also a vague plan to connect all of the country's precious minerals, diamonds and hydrocarbons to a specifically created token backed by a cryptocurrency called Sango, facilitating passport packages that could only be purchased using the Sango token. According to Howson, CAR expected to sell about 20,000 Sango citizenships.⁹⁹

Zimbabwe

Another cryptocurrency initiative, Impact Earth, has declared its intention to incentivise forest communities living in the Kariba Conservation Area in Zimbabwe by paying for its Ethereum-based Earth Token but paradoxically Impact Earth does not allow any transfer of tokens and excludes investors from "high risk" jurisdictions.¹⁰⁰

⁹⁹ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023 (P. 70).

¹⁰⁰ Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22.

Senegal

The Trees for the Future initiative uses the blockchain app rTrees to fund tree planting and sustainable agriculture.¹⁰¹ also, artist Akon pledged the creation of a \$6 billion crypto smart city in Senegal. ¹⁰²

Ethiopia

The Cardano cryptocurrency plan for Ethiopia was to develop the blockchain architecture from scratch based on centralized monitoring and digital IDs intended for the country's educational records systems (digital tracking of students' grades and academic performance across the country) and various supply chain management tools.¹⁰³

Charles Hoskinson's (co-founder of Ethereum) Ethiopia partnership pushed Cardano's ADA token. "Cardano launched a training and apprenticeship programme exclusively for Ethiopian women and girls who would be trained in Cardano's niche programming language, Haskell. The best candidates were to be offered full-time jobs as Haskell developers.²² Cardano's coders were set to work building centralised surveillance and automated conditions to be encoded into the country's digital IDs and educational record systems, as well as various supply chain management tools. The initial plan was for Cardano's blockchain applications to be used to digitally track students' grades and academic performance across the country."¹⁰⁴

¹⁰¹ Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820. (P. 13).

¹⁰² Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023. (P. 82).

¹⁰³ Ibid., 75

¹⁰⁴ Ibid., 48

Seychelles

BitMEX is a cryptocurrency exchange and derivative trading platform. It is owned and operated by HDR Global Trading Limited, which is registered in the Seychelles. "After registering BitMEX in the Seychelles tax haven, Delo was indicted and pled guilty to US Bank Secrecy Act violations, receiving a 30-month probation sentence and a \$10 million fine." ¹⁰⁵

Nigeria

"Jack Dorsey had been flogging his crypto businesses in Nigeria since 2019.³⁵ Trusted global charities such as Mercy Corp were pushing Ejara, 'a unique savings offer for Africa's unbanked and underbanked populations'. The Ejara scheme encouraged poor people to drop their life savings into a high-risk collateralised crypto bond with a \$1,600 minimum deposit.³⁶ Crypto-related charities were hard at work funding initiatives such as Nigeria's Bitcoin Village, who were building schools using crypto donations."¹⁰⁶

Sudan

"Those escaping the chaos in Tigray as refugees into Sudan and Eritrea were far from safe, thanks to other misplaced crypto fantasies. Meron Estefanos was a Sweden-based Bitcoin activist. She claimed to help families to send cryptocurrencies in order to pay ransom demands for kidnapped refugees. "¹⁰⁷

Morocco

¹⁰⁵ Ibid., 123

¹⁰⁶ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023 (P. 49).

¹⁰⁷ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023 (P. 48).

In 2021 Morocco gave the green light to the US crypto company Soluna for developing a massive 900 megawatt energy plant and Bitcoin-mining operation in Dakhla.¹⁰⁸

¹⁰⁸ Howson, Peter "Let Them Eat Crypto" Pluto Press. 2023. (P. 151).

Conclusions

The false promise of blockchain is the production of encrypted, distributed and immutable data as principle of universal governance capable of solving all kinds of social problems. Furthermore, blockchain behaves as a substitute for trust between people, it promises to democratise big data offering all kinds of governance solutions under principles such as transparency, disintermediation, accountability and efficiency.¹⁰⁹

Blockchain colonialism encompasses economic experiments driven by foreign governments, software developers and crypto-evangelists, which have used emblems such as encryption, security and trust to extract benefits from those most in need.

This has been possible through different processes like the adoption of cryptocurrencies as legal tender, the creation of national blockchain registries, the use of cryptocurrencies to package debt products, the tokenization of digital assets or the development of projects to establish a digital identity for discriminated groups.

In addition, this process have been combined with social governance systems in areas considered underdeveloped from a Western perspective in fields such as supply chain transparency, consent applications, logistics networks, identification and transportation systems, urban planning and for carbon markets tokenization.

Silicon Valley's solutionist innovation, performative entrepreneurship and Hackathons have blurred the boundaries between NGOs and platform developers that have combined extractive practices with Internet-connected computer quantification methods to analyze data and turn them into predictive products, justifying some of these practices in the context of "emergencies." Where artificial intelligence (AI) is used, among other things, to track displaced people and predict population flows. As a consequence, blockchain colonialism is creating risks for non-profit organisations such as WWF, Oxfam and UNICEF.¹¹⁰

In addition, in vulnerable communities such as refugees, blockchain projects impose and force them to give up personal data in exchange for basic needs, which can lead to unpredictable capitalisation in the future.¹¹¹

¹⁰⁹ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 8).

¹¹⁰ Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820. (P. 13).

¹¹¹ Inte Gleroich. Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter,"2023. APRJA, URL: <https://aprja.net/article/view/140448>. From (Howson "Climate crises" 4-5; Howson "Crypto-giving" 814-815)

According to Howson, this data could also be used in the future to make decisions about individuals, with far-reaching consequences.¹¹² For example, the US state could ration resources or determine migration rights by combining biometric data, reputational evidence and social network data secured on the blockchain.¹¹³ In addition, Mirca Madianou argues that states and governments are increasingly using biometrics to control borders and keep out "undesirable" populations.

Other fields of action used to justify crypto-colonialism are more related to transnational approaches and sustainable development, such as biodiversity conservation, climate change adaptation and mitigation, to manage carbon offsets. For example Projects like Nemus¹¹⁴ and Moss¹¹⁵ tokenise parts of the Amazon rainforest to sell as NFTs. These projects continue the economy of rarity established by collectible NFTs, where unique features increase the value of land and are governed by stakeholders in a DAO.¹¹⁶ However, as in historical colonialism, these symbolic representations are abstract assets that promise future income and care little for the survival of what they represent.¹¹⁷

Other practices have been to donate and transmit traceable digital assets through platforms such as BitGive, which is more tax efficient than selling them.¹¹⁸ All of these blockchain-backed applications, as well as smart contracts and the web3 operate through engineered protocols. This means that they cannot operate outside the way they are coded. Consequently, programmers and corporations have greater agency. In addition, blockchain technology encrypts oversight mechanisms in charitable giving.¹¹⁹

¹¹² Howson, Peter. "Climate crises and Crypto-Colonialism: Conjuring value on the Blockchain frontiers of the global South." *Frontiers in Blockchain* 3 (2020): 22.

¹¹³ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249.

¹¹⁴ Nemus, URL: <https://nemus.earth/>

¹¹⁵ Moss, URL: <https://nft.moss.earth/>

¹¹⁶ Inte Gloerich. Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter,"2023. APRJA, URL: <https://aprja.net//article/view/140448>

¹¹⁷ Juárez, Geraldine. "The Ghostchain.(or Taking Things for What They Are)." (2021).

¹¹⁸ Jutel, Olivier. "Blockchain humanitarianism and crypto-colonialism." *Patterns* 3, no. 1 (2022).URL: [https://www.cell.com/patterns/fulltext/S2666-3899\(21\)00305-6?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2666389921003056%3Fshowall%3Dtrue](https://www.cell.com/patterns/fulltext/S2666-3899(21)00305-6?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2666389921003056%3Fshowall%3Dtrue)

¹¹⁹ Howson, Peter. "Crypto-giving and surveillance philanthropy: Exploring the trade-offs in blockchain innovation for nonprofits." *Nonprofit Management and Leadership* 31, no. 4 (2021): 805-820. (P. 7).

According to Jutel, blockchain's distinguishing feature lies in its claims of universality, presenting itself as a platform that mediates all data. Consequently, blockchain's ambitions go beyond the realms of advertising, retail and cloud services; it aspires to influence governance systems for data production and platform dependency in the developing world. In this way, blockchain establishes a technological frontier, where the developing world's valuable resources become objects of utmost importance.¹²⁰ This form of appropriation includes the transfer of land as property, use rights and control over natural resources that were previously publicly or communally owned.

To find a more coherent way forward, Inte Gloerich argues that it is important to create alternative spaces that challenge and resist dominant logics of exploitation in order to envision ways to undermine, resist, de-centre or subvert the current situation, shedding light on the intersection of decolonial thinking, blockchain technology and artistic practices.¹²¹ On the other hand, Julian Crandall stresses that blockchain technology can be constructively applied through democratic participation and anti-colonial struggles and that it is essential that local developers participate in these blockchain initiatives rather than relying on outsiders.¹²²

¹²⁰ Jutel, Olivier. "Blockchain imperialism in the Pacific." *Big Data & Society* 8, no. 1 (2021): 2053951720985249. (P. 7).

¹²¹ Inte Gloerich. Towards DAOs of Difference Reading Blockchain Through the Decolonial Thought of Sylvia Wynter,"2023. APRJA, URL: <https://aprja.net/article/view/140448>

¹²² Crandall, Jillian. "Blockchains and the "Chains of Empire": Contextualizing blockchain, cryptocurrency, and neoliberalism in Puerto Rico." *Design and Culture* 11, no. 3 (2019): 279-300. (P. 15).

Regarding illustrations

Maps, diagrams and cartographies are not objective or neutral artefacts. They offer a personal perspective on the ways in which information is constructed and transmitted, providing particular impressions which are capable of shaping viewers. But at the same time they provide a better understanding of complex systems, social and political forces. Probably, some of these aspects inspired the poem "The Hunting of the Snark." Where the author Lewis Carroll looked for order and simplicity by removing any reference to the land and the Equator to design the most perfect sea-map.

There are two sources of inspiration, the first are diagrams by the philosopher Ramón Llull, created to visualise his invention "Ars Magna," the first known computational machine described around 1300. A machine provides with a series of circles inscribed with words. When a question was posed, the mechanism was activated and in a combinatorial way made a series of letters that formed the answer appear. It was a system that attempts to reduce human knowledge to a brief number of principles in order to mathematically solve all kinds of questions from a series of fundamental concepts that everyone would accept as true. Llull's machine was intended to be a means of showing new statements, an interface system for communicating with God. One of Llull's intentions with the machine in 1307 was to reveal Christian truth and convert Muslims.

The second Dr. Alesha Sivartha expounds his unique blend of science, sociology, mysticism and spiritual religion in *The Book of Life: The Spiritual and Physical Constitution of Man*. A work from 1896 that visually resulted in a series of intricate diagrams. In each of these brain maps, Sivartha breaks down the matter into different sections, as well as looking at other parts of the body such as the hands and the nervous system as a whole. A peculiar map of the body. Like Sivartha, there have been others brimming with complex, esoteric and misguided ideas who have attempted to map knowledge to create reality. Blockchain, as part of our history is no different, in blockchain an "elite" or "class" mainly male, is attempting to create and destroy norms, laws, society, culture, economy, privacy, resources and people under evangelistic doctrines of obscure and dubious provenance. Blockchain joins this tradition of failure in which I exemplify on the following pages.

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